

# **WIN-PAK**

**Power Meets Simplicity**

## **User Guide**



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# Welcome

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**WIN-PAK** is state-of-the-art access control software that was specifically designed to run on Windows 2003 Server, Windows 2000 & Windows XP operating systems.

**WIN-PAK** allows the programming of card and card holder information, the design and creation of badges, and easy monitoring of alarms, cameras and DVRs.

**WIN-PAK** software functions are separated into three applications: Database Server, Communications Server and User Interface. These applications can run on the same computer or on multiple computers, allowing great flexibility in configuring a networked system.

**WIN-PAK** is a three-tier client/server application based on Microsoft tools and standards. It is ODBC (Open Database Connectivity) compliant and uses Microsoft SQL Server 8.0/MSDE 2000 as its database engine. This provides a reliable, flexible and robust system.

**WIN-PAK** is designed to meet the needs and viewpoint of the installer as well as the end user. The Device Map displays the access control system from the viewpoint of equipment and connections. The Access Map and Control Map, along with the Floor Plan view, allow the user to define and use the system from the viewpoint of the facility.

## Contact Us

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Many technical documents are available from our website at <http://www.honeywellaccess.com>.

## About This Guide

The WIN-PAK User Guide has been organized into the following chapters:

### Chapter 1: Introduction

The introduction explains key software concepts and many of the features of WIN-PAK.

### Chapter 2: Installation

The Installation chapter contains system requirements, installation instructions, and registration information.

### Chapter 3: User Overview

The User Overview chapter includes the following:

The User Interface section of this chapter covers the basic conventions used throughout the graphical user interface, including an overview of the GUI menus and toolbar options, how to work with database windows, and how to log-in to the system.

The System Settings section of this chapter explains how to set up operators and operator levels, how to configure workstations, and how to set certain system defaults.

The Daily Operations section provides details on the features and functions used on a daily basis to monitor and maintain your access control system.

### Chapter 4: Programming

The Programming chapter is a guide to programming your access control system. This chapter provides an outline to use as a guide while planning your system setup.

Included in the Programming chapter are sections on configuring servers, panels, and readers, as well as creating floor plans, setting time zones, and defining control, access, and tracking areas.

**Chapter 5: Badging**

The Badging chapter contains the information necessary to create custom badge designs, and include areas for card holder photos and signatures on those badges, as well as magnetic stripe encoding, barcodes, and a variety of artwork.

**Chapter 6: Card Holders**

Within the WIN-PAK System, a card is typically a combination of a card holder record and a badge template. Chapter 6 shows you how to set up card holder templates, and include customized note fields on the templates, as well as associating a card holder with a card and a badge.

**Chapter 7: Translation**

WIN-PAK allows the translation of the User Interface. This chapter explains how to use a language text file to translate the User Interface, and how to create your own language file. Additionally, procedures are outlined showing how to change dialog and menu text into another language or into terminology that better suits your needs.

**Chapter 8: Reports**

To assist in your operations and system maintenance, WIN-PAK allows you to generate a variety of reports that can be exported, viewed on screen or printed.

**Chapter 9: Database Maintenance**

Database Maintenance provides tools for removing unused information from databases.



## Conventions

Within the WIN-PAK System there is often more than one way to perform a task. For example, you can open the Card Holder database by clicking the Card Holder toolbar button or by selecting Card Holder from the Card menu.

Wherever available, this guide describes the menu method of performing tasks.

Throughout the manual, parenthetical material is enclosed in parentheses ( ) or blocks [ ]. Material in parentheses is clarifying information. Material in blocks is more emphatic, or contrasting, clarifying information.

Other conventions are listed in the following table.

<b>Convention</b>	<b>Method</b>
<b>Bold</b>	In procedures, indicates the name of a screen object (such as a button or menu command).
<b>Click</b>	Refers to quickly clicking the primary mouse button (usually the left) once. Typically used to make a selection.
<b>Double-click</b>	Refers to quickly clicking the primary mouse button (usually the left) twice.
<b>Right-click</b>	Refers to clicking the secondary mouse button (usually the right) once.

## Online Help

In addition to this manual, WIN-PAK has online Help, organized into functional sections, which should make it easy to find the information you need. Help is designed to be viewed in the Microsoft HTML Help Window. If you do not have the HTML Help components installed on your computer, Help will be viewed in your default browser.

Use the Table of Contents, Index, or Search function to locate the information you need.

- In the left pane, click the tab for Table of Contents, Index, or Search to find the information you need.
- Press F1 to get context-sensitive help at a dialog box or window. You can also click a dialog box **Help** button to access context-sensitive help.
- When viewing help, you can maximize or resize the help window to suit your requirements.
- Click the **Hide** or **Show** navigation icons to view or hide the Table of Contents, Index, and Search tabs.
- Click **Back** to return to the previously viewed topic. Click **Forward** to go to the next topic.
- Click **Print** to print the current topic.
- The Options menu provides additional browse and navigation controls.

Many topics include a Related Topics control at the end of the text that displays a pop-up menu of related topics.

# **Introduction**

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**Access Control with WIN-PAK**

**WIN-PAK Features**

**Software Concepts**



## Access Control with WIN-PAK

Access control is computerized control over entry into any area that can be secured with a lock and key. Entry is only allowed to authorized people at authorized times. Control of who is allowed to come and go is easily maintained.

The weakness of a lock and key security system is the physical key. The key is readily duplicated and gives access to anyone who holds it. There is no control of when a key is used and no record of its use. The risk of lost or stolen keys, with the expense of changing locks, is a costly problem.

Access control is an effective and affordable solution to this problem. With access control, each person receives a card or keycode which restricts access to authorized areas at authorized times. A small, programmable control panel allows or denies access. If a card is lost or stolen, the control panel can be reprogrammed quickly and easily.

Many additional functions are available when access control is combined with today's powerful computer networks. The system integrates with DVR devices and can also control and monitor CCTV equipment. It can track and provide reports of all card and keycode activity, a history of system events and database reports.

In addition, the access control system can store and manage basic information on thousands of employees at multiple sites. Employee photo ID imaging and badging are now an important feature of access control systems.

## WIN-PAK Features

WIN-PAK is state-of-the-art access control software that was specifically designed to run under the Windows 2000/Windows XP operating systems. This makes it possible for WIN-PAK to take full advantage of the speed, flexibility, and reliability of networked computers.

WIN-PAK has features designed to handle large and complex installations. The WIN-PAK environment can be set up so that it is easy to use by the people who are monitoring alarms, issuing cards, and carrying out other day to day functions.

WIN-PAK supports Tracking and Muster Reporting to indicate the location of people for security or safety reasons.

WIN-PAK allows Guard Tours defined by reader and alarm points, that can be timed or random tours and schedule to start automatically.

WIN-PAK provides CCTV control with live monitor view, supporting interfaces with Burle, Dedicated Micros, Fusion, Geutebruck, Javelin, MaxCom, MaxPro, NCI CCTV, Panasonic, Pelco, Vicon and VideoBlox.

## Database Management

WIN-PAK uses Microsoft SQL Server 8.0/MSDE 2000 as its database engine for robust transaction processing even in heavy traffic situations.

WIN-PAK supports alarm partitioning by operator, making it possible to control which alarms a particular operator monitors. Highly detailed operator definitions (down to the level of individual points, readers, and note fields), allow the protection of confidential information, while making needed information available.

WIN-PAK database information is easily edited, searched, and sorted. A wide variety of reports can be exported, viewed on screen or printed. Saved report templates can be printed or emailed on a schedule.

## **Access Control Management**

WIN-PAK uses Floor Plan views to monitor and control many of the daily functions of access control. The floor plan provides a graphic representation of devices including doors, panels, inputs, outputs and CCTV equipment.

Representations of system devices (abstract devices or ADVs) signal the state of system hardware and give the user control over these devices. For example, a door can be locked or unlocked from an ADV on the floor plan, a CCTV camera view can be switched from one monitor to another, and information can be sent to a control panel.

Control Map are defined by adding devices to a Control Area, which provides another way to control the devices.

Separate Event and Alarm views display alarms and other system information in list form. Alarms can be acknowledged and cleared from either the Control Map, Floor Plan or Alarm view.

## **Badging**

WIN-PAK gives you the tools to create high-quality photo IDs. Badge designs can be created incorporating photos, signatures, barcodes, magnetic-stripe encoding and logos or other art work. These can be printed on access control cards, incorporating two security measures into one.

WIN-PAK includes a full-featured badge layout utility for the design, creation and printing of badges. This includes two-sided printing and bulk printing of badges. Magnetic stripe encoding [up to three tracks], barcoding, multiple images, and signatures can be placed on a badge. Video images can be captured in real time or imported from another source. High resolution digital images, photo cropping and ghosting of images are all supported.

### **Cards and Card Holders**

WIN-PAK allows the programming of card and card holder information. Forty user-defined note fields are available for entering information into the Card holder database. The note fields are arranged on user-defined tabs, so that the information can be organized to suit the user's particular needs. Multiple photos, signatures, and cards can be used for Human Resources, asset tracking, or other purposes.

Multiple cards can be assigned to a single card holder. For example, a long range radio frequency tag may be issued for drive-in entry through a security gate, and a proximity card might be used for entry into and within the building. A spouse or child may need his or her own card for access to a building as well.

Card Holders can be moved between accounts by changing the Account selection.

### **Flexible Views and Control Features**

Floor plan views are user configured. They provide both monitoring and control capability for panels, doors, alarms, inputs and outputs, and other system devices. Multiple floor plans can be viewed simultaneously, while links can open other floor plans at the click of a mouse. The pan, tilt, zoom and switching of CCTV and DVR cameras can also be controlled from the floor plan view.



The Control Map provides another user-configured means of controlling devices. The user defines the Control Map by adding devices to a branching tree structure in Control Area. Devices can be controlled from the Control Map view.

Other on-screen views include live CCTV monitoring, Digital Video and Auto Card Lookup, which automatically displays a picture and information about a card holder when their card is presented at a designated reader.

## **Communications**

WIN-PAK offers a wide variety of communications options to allow the greatest flexibility in setting up an access control system. It supports up to 255 serial communications ports. Remote locations can be supported by dial-in and dial-out configurations.

## **Software Concepts**

### **User Interface**

Operators log in to the User Interface and then connect with the database server which is already running. All of the interaction between the end users and the access control system takes place through the User Interface.

The User Interface can be installed on the same PC as the Database Server and the Communication Server or it can reside on another machine on the network. With the purchase of appropriate licenses, numerous copies of the User Interface can be running and logged into the Database Server at the same time.

## Abstract Devices

An abstract device (ADV) is a logical representation of a physical device (e.g., a communication server, control panel, door or CCTV switcher). Similar in appearance to an icon, an ADV is associated with an actual device in your access control system.

ADV's provide an interface for monitoring the status and controlling the actions of a physical device from the Control Map, Floor Plan or Alarm View. Enhanced ADV's are placed on a Floor Plan Background.

WIN-PAK is designed to combine many hardware devices, with different functions and features, into a seamless access control system. The abstract device plays an important role in this design. The ADV provides a user interface for controlling different hardware, without concerning the end user with the details of the hardware configuration.

For example, when placed on a floor plan, the ADV door object allows the user to lock, unlock, shunt, un-shunt, return to time zone, pulse or send a programmable pulse to the door relay. From the user's point of view, it does not matter if the door device is from an PW-2000 panel or another controller.

In operation on the floor plan, the ADV signals the state or status of its device by blinking and changing color. A sound file can also be associated with the ADV to signal a change in state. Each ADV has a control menu that allows the user to execute functions available for that device. Right-clicking the ADV opens the control menu. Drag and drop functionality is available in some cases. For example, a camera object can be dragged and dropped onto a monitor object to initiate a switch.

The ADV's color, blinking and other properties can be edited. They can also be re-sized and rotated in the Floor Plan Definition utility.

## Floor Plan View

Floor Plans provide a user interface for controlling and monitoring the system. The Floor Plan views can be tailored to the specific needs of your access control system. Multiple Floor Plans can be opened and viewed simultaneously. Floor plans can contain links to other floor plans for a different or more detailed view. In addition, the Floor Plan view can contain links to Alarm and Event views, as well as a special field for text information.

Floor plans are made up of a reusable, static background and ADVs associated with hardware devices. The background can be the floor plan of the building or area where the hardware is located. It can also be a loop wiring diagram, a simple grid, or a picture of the area where the hardware is located. Background files must be supplied as Windows metafiles (.wmf).

The ADVs can be associated with any hardware device, including communication interfaces, panels, alarm points, entrances, and CCTV equipment. The ADVs signal events by changing color and blinking. Right-clicking an ADV opens a control menu for the device.

## Data Trees

WIN-PAK uses a graphical tree to organize and display some of its database information. The tree allows information to be organized into logical or geographical groups. Each tree is created as you program your access control system, therefore it is tailored to meet the needs of your access control system.

Except for the device tree, the tree defines the hierarchy of resources, not the resources themselves. For example, an Access Level is defined as a list of readers. But rather than being displayed in a standard list, the readers are mapped on a data tree. The highest level branch can be defined as an entire office complex. Branching off from the office complex is the President's suite, the Accounting Department, the Production Area, and the Distribution Center. The appropriate entrances are then added to each branch. The entrances that are included in a given access level are shown in green. A quick look at the tree gives a clear picture as to which entrances are included in this access level.

The Device Map is displayed on a tree, but unlike the other tree structures, devices are defined as they are added to the Device Map.

## Multiple Server Design

WIN-PAK is a true 32-bit application that is designed to operate in a Windows 2000/Windows XP environments. The server modules load as services in Windows 2000/Windows XP.

WIN-PAK is a three-tier client/server application based on Microsoft tools and standards. This design provides a robust, reliable, and flexible program. Because it is ODBC (Open Database Connectivity) compliant, existing databases can be converted for use with WIN-PAK.

WIN-PAK is comprised of three primary modules:

- Database Server,
- Communications Server
- Client Workstation.

These modules can be installed on one computer or on different machines on a network.

Communications are handled by one or more communication servers; the databases can be handled by the database server on a separate computer; and the user interface can be installed on one or more computers that serve as workstations.

This provides a distribution of system activities and processes among the defined computers, thereby improving system performance significantly.

### **Database Server**

The Database Server stores, organizes and retrieves the information in the WIN-PAK database tables. It makes this information available to other system components and allows the retrieval of information for editing and report generation. The Database Server can be used at the same time by a communication server and multiple client workstations.

The Database Server can be installed on the same PC as the User Interface or it can reside on another machine on the network.

### **Communication Servers**

The Communication Server controls communication to and from the control panels and the Database Server. It assigns priorities and resolves conflicts as information is routed from the various panel loops and devices to the Database Server, and the WIN-PAK User Interface.

The Communication Server can be installed on the same PC as the client workstation or it can reside on another machine on the network.

## **Command File, Guard Tour, Muster and Schedule Servers**

In addition to the three main program modules, WIN-PAK has four other servers: the Command File Server, Guard Tour Server, Muster Server and the Schedule Server. These servers are normally installed on the same machine as the Database Server.

In Windows 2000/XP they run as services and are transparent to the end user. They are launched on start-up and their task bar buttons are not visible. The operation of these servers is more or less transparent to the operator.

The Command File, Guard Tour, Muster and Schedule functions are accessed through the WIN-PAK user interface in the same manner as other databases.

## **Chapter 2**

# **Installation**

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**System Requirements**

**WIN-PAK Installation**

**Licensing and Registration**





## System Requirements

### Operating System

WIN-PAK is a 32-bit application designed to run in a Windows 2000/Windows XP environment.

It is recommended that WIN-PAK run on a Windows 2000 platform because of the security and stability provided by that operating system. However, WIN-PAK can run in a mixed environment, where some networked computers are running Windows 2000 and some are running Windows XP. Supported operating systems are: Windows 2003 Server SP1, Windows 2000 Server SP4, Windows 2000 Professional SP4 and Windows XP Professional SP2.

### Hardware Basics

#### Minimum Requirement Configuration

This setup is sufficient for small systems with 1 to 10 readers, up to 250 cards, and 2 communication ports. While this is a good configuration for a small standalone system or workstation, it is not sufficient for use as a server.

Pentium III-1Ghz CPU

256 megabytes of RAM

2.1 gigabyte min free hard disk space

1 serial communication ports

Tape or CD burner for backups

1 printer port for reports (2 if badging)

2 button mouse 15" SVGA color monitor (1024 x 768, 256 color)

Microsoft Windows 2000 Professional SP4 or Windows XP Professional SP2

**Recommended Configuration**

This is the recommended hardware configuration for basic access control, including badging, for systems with 1 to 100 readers, up to 5,000 cards, and up to 8 communication ports or IP “Loops”. It can be used for a stand-alone system, a workstation or a server\*. Additional RAM will improve performance.

Pentium IV-2.8Ghz CPU

512 megabytes of RAM

40 gigabyte SATA hard disk or 36 gigabyte 10krpm SCSI

2 serial communication ports

Tape or DVD burner for backups

1 printer port (2 if badging)

17" 1024 x 768 true color monitor

2 button mouse with scroll (PS/2 mouse preferred)

Microsoft Windows 2000 Professional SP4 or Windows XP Professional SP2

**Performance Configuration**

This configuration is recommended for systems using more than 16 communication ports or IP “Loops”. It is suitable for systems using up to the system capacity for readers, up to 50,000 cards, and 255 communication ports. It is suitable for a stand-alone system or a server.

4 - Xeon, 3.0GHz CPUs

8 gigabytes of RAM

5- 36 gigabyte 15krpm SCSI hard disk in a RAID 5 configuration

Serial communication ports and network card(s) as required

DLT or DAT tape backup

19" 1280 x 1024 true color monitor

2 button mouse with scroll

SQL Server 2000

Microsoft Windows 2003 Server SP1 or Windows 2000 Server SP4

\* Refer to the Architecture – Networked Systems section for more information

### **Video Capture Card**

A video capture card is required when interfacing to a CCTV system where the video output from the video switcher is fed into the WIN-PAK computer for on screen viewing and control. Video badging may also use a video capture card. Only one video capture card per computer is supported. If both CCTV and badging are required on the same computer, the badging camera signal will have to go the CCTV switcher and then routed back to the WIN-PAK computer. The recommend video capture card is the PBVP15.

### **Modems and Communication Ports**

Modems and communication ports are those that are supported by the Windows operating systems, including both internal and dial-up modems. Supported communication ports and devices, including modems (internal or external), are any devices supported by the Windows 2000/XP operating system.

### **Badging Printers**

Any badge printer that is supported by the Windows operating system can be used for most badge printing. However, for two-sided PVC encoding or magnetic stripe encoding, the PBVP35 series (Ultra Rio or Tango) printer is required.

### **Report Printers**

For page printing, any printer that is installed in the Windows operating system can be used. For single line printing, a dot-matrix printer, such as the PB-PRINTER is required.

### **Panel Firmware**

The PW-2000 or N-1000 family of control panels must have at least version 8.02 firmware. The NS2+ and P-Series panels do not require firmware upgrades.

## **Installation Overview**

Given the complex nature of networked computer environments, a turnkey system from Honeywell Access Systems provides the simplest installation process. These systems are delivered with software and hardware components installed on computer systems that meet the necessary requirements for running WIN-PAK.

However, when WIN-PAK software is purchased for installation by the customer, the hardware and software components must be properly installed and configured.

### **Architecture**

WIN-PAK is a multi-part, client-server application, comprised of three primary modules: the Database Server, Communications Server, and User Interface. These modules can be installed on different PCs, be networked and connected via RPC and LPC. This architecture allows extremely flexible WIN-PAK program components run as full services in Windows 2000/XP. No window is present in their normal operation. Debugging versions of the services, which provide a console output window, are also shipped with WIN-PAK.

However, their use is reserved for error isolation, and should not be used in everyday applications.

WIN-PAK provides a utility [the System Manager] to access the connection information. The System Manager directs the User Interface and other remote servers to the Database Server.

## System Setup

### Standalone Systems

BEFORE installing WIN-PAK for the first time ensure that the following conditions are met:

- Install Windows 2000 with Service Pack 4 or greater / Windows XP Professional has Service Pack 2 installed.
- If Microsoft SQL Server 2000 is to be used as the database engine, it should be installed on the same PC on which the Database Server will be installed.
- Install a video capture card or digital camera on the PC that will serve as the badging workstation.
- Install printer and printer drivers.
- Disable all energy management from both the BIOS and Operating System, as this can adversely affect the installation and operation of WIN-PAK.
- Internet Explorer 5.5 is required for WIN-PAK to work properly. If an older version than IE 5.50.4522.1800IC already installed, WIN-PAK will install IE 5.5. This ensures that the HTML Help system will be displayed properly.

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**NOTE:** Some software applications may not function properly on different versions of IE.

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- Before beginning installation, make a note of the CD Key inside the cover of the WIN-PAK Quick Reference Guide. You will need this number during installation and while registering the software.
- Read the release notes on the WIN-PAK CD. Additional installation information plus last minute updates may be contained therein.
- TCP/IP protocol must be installed for the MSDE to work properly. A network card doesn't have to be installed. Use Microsoft Loopback adaptor or Dialup adapter, depending on the OS used.

### **Networked Systems**

BEFORE installing WIN-PAK for the first time ensure that conditions listed under Standalone Systems and the following listed conditions are met.

- Install network cards on PCs that are used in a networked system. (Any standard Windows-compatible network card can be used.)
- Ensure that machine names use only alphanumeric characters without spaces, and that the first character is always alpha (i.e. standard UNC connections).
- Ensure that networked computers are communicating with one another. The workstations need to be electronically visible to each other. If the computers can communicate, you can ping both ways: client-to-server and vice-versa. Any firewalls, proxies, routers, etc. between workstations could cause problems, unless a clear, unrestricted, permanent path can be established.

### **Upgrades**

WIN-PAK supports upgrading from WIN-PAK 2.0 Release 3, WIN-PAK 2.0 Release 4, WIN-PAK PRO Release 3, WIN-PAK PRO Release 4 and NStar. Before upgrading, make a backup copy of your database files. When prompted by the installation program, DO NOT overwrite your existing database. Also make backup copies of your Floor Plan backgrounds, card holder photos and signatures.

### **Automatically Installed Microsoft Components**

The WIN-PAK installation program installs several utility upgrades during the normal installation session. These are supplied as redistributable Microsoft packages and are deployed automatically based on the installed options.

Each of these components is installed by a separate installation program that runs directly from the WIN-PAK CD.

If prompted by the program, always keep the latest drivers. Never overwrite a new driver with an old driver.

When operating under Windows 2000/XP, WIN-PAK requires the following external components to be installed:

### **MDAC: Microsoft Data Access Components**

Used for the DB server interface to the MDB file, and by the System Manager. Your installation may require MDAC, or Microsoft Data Access Components be installed. MDAC is installed by default in all Operating Systems.

The MDAC components are considered part of the operating system, and therefore are never removed, even when a full uninstall is performed.

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**NOTE:** Without IE 5.5, WIN-PAK will not be installed.

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#### **Sentinel: The Sentinel Hardware Lock Drivers**

These are installed on all operating systems when the Database Server is installed.

#### **CrypKey: The CrypKey Licensing Drivers**

These are installed on all operating systems when the Database Server is installed.

#### **Foreign Language Installation**

Currently, the WIN-PAK installation provides these Microsoft modules in English only. The English versions are not compatible with other language versions of the Windows operating system and can cause problems.

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**Note:** For support on Foreign Language, contact the Tech Support.

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## **WIN-PAK Installation**

There are several types of installations available when setting up WIN-PAK:

#### **Complete Installation**

Select **Complete** installation when setting up a stand-alone system [an access control system installed on one computer], or if you are installing the Database Server for a networked system.

#### **Database Server Only**

Select **Database Server Only** installation when installing on a networked system, with only the Database Server located on a separate PC.

#### **User Interface Only**

Select **User Interface Only** installation when you are installing a workstation on a networked system.



### User Interface and Comm Server

Select **User Interface and Comm Server** installation when you are installing additional communication servers on a networked system and the PC may also be used as a workstation.

### Communication Server Only

Select the **Comm Server Only** installation when you are installing the communication server on a networked system.

---

**NOTE:** To optimize resources in high use systems, use the System Manager to disable unused system modules (e.g. the Guard Tour Server or the Muster Server).

---

## Installation Procedure

WIN-PAK software is distributed on an autorun CD, along with the CD release notes, and other technical documents. This procedure describes the Complete Installation option. The User Interface Only option is described later. The procedure is the same for both up to Step 6, where the user is given the option of choosing which type of installation is desired.

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**NOTE:** During installation, you may be asked if you want to overwrite existing files. Keep your existing .dll files. Whenever asked "Do you want to keep this file?", click **Yes**.

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**NOTE:** If you are running SQL maintenance plans without stopping the Database Server service prior to running the plan, it may cause a data loss within the WIN-PAK system. Please refer to Database Maintenance (Chapter 9) for further details.

---

Depending on the computer and OS, one or more screens displayed in this procedure may or may not appear.

Allow approximately 10-20 minutes for a first-time [not upgrade] installation. Click continue to initiate installation. Or, navigate to the WIN-PAK directory on the CD and select the Setup executable. The WIN-PAK logo screen will appear temporarily until the initial Welcome screen appears.

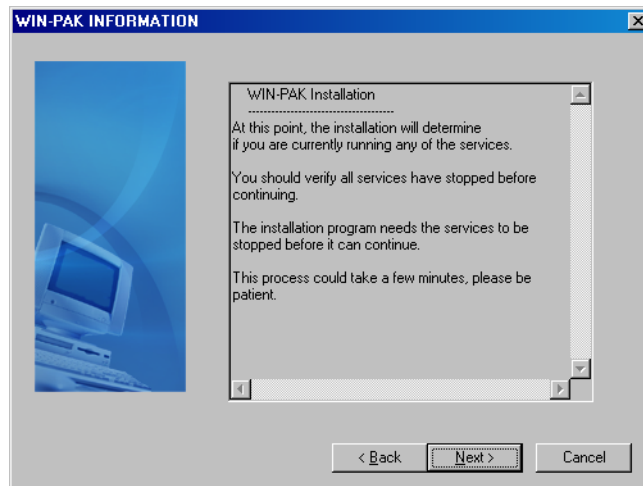
- 1 Exit any Windows programs that may be running. Insert the WIN-PAK CD into the CD drive. An installation browser opens. If the browser does not open, run the **Launch.exe** file from the CD.

The first installation screen will appear. Navigate through the initial installation screens and select **Install Software**.

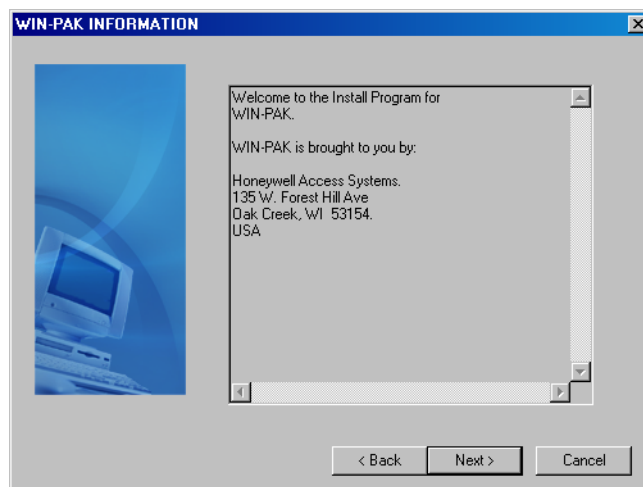
If an older version than IE 5.50.4134.0600 is installed, the WIN-PAK program will prompt the operator to upgrade (first illustration below). Click **Yes**, to upgrade. If the correct version of IE is detected, the first Welcome screen to WIN-PAK (second illustration below) will appear.



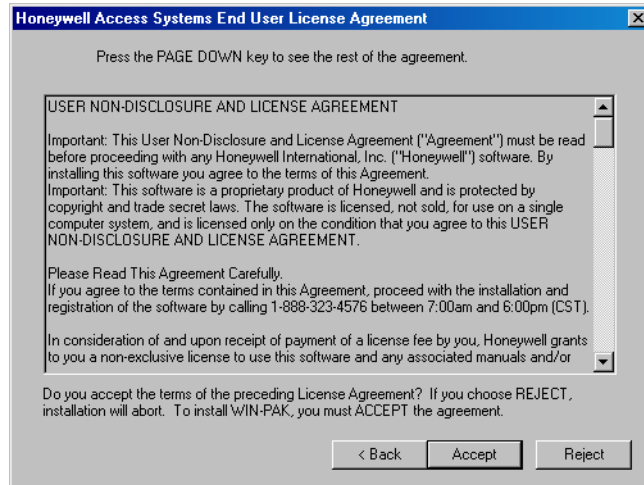
- 2 Click **Next** to advance to the next screen in the setup process. The information screen is displayed (next illustration) while the program verifies that all the services are stopped.



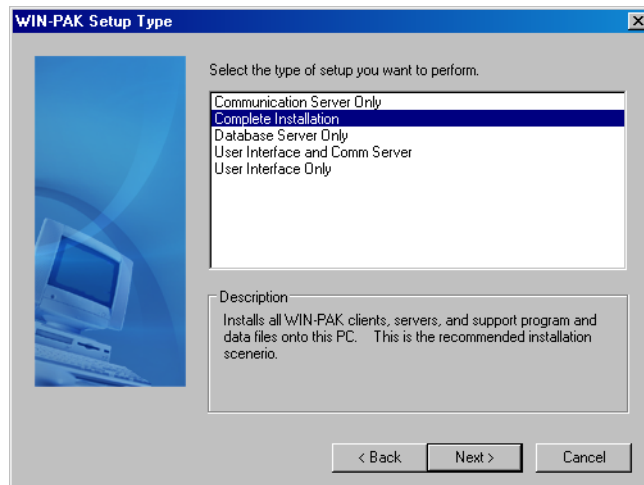
- 3 Click **Next** to continue installation. The second Welcome screen will be displayed.



- 4 Click **Next** and the User License Agreement window is displayed (next illustration).

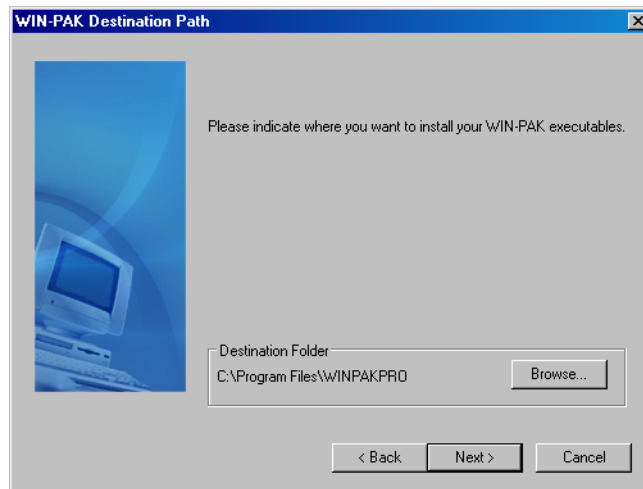


- 5 Click **Accept** to acknowledge that you understand and agree to the terms. The Setup Type screen will appear, from which the operator can select the type of setup (or installation) desired.

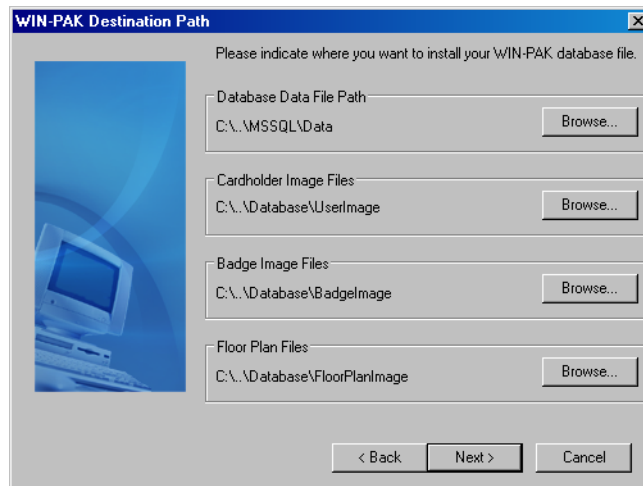


- 6 For the purpose of illustrating the Complete Installation option, select **Complete Installation** then click **Next** to continue. The Destination Location screen will appear (next illustration).

**NOTE:** Further on, the User Interface Only option is described in the “Installing User Interface Only” section. If it is desired to install this option, choose **User Interface Only** and refer to that section.



- 7 Click **Next** to accept the default location or click **Browse** and specify a different location.



---

**NOTE:** In certain applications it may be referable to place the database files on a different drive partition to protect them from operating system failure, or to place them on a separate hard drive to isolate them from the database server. Refer to the “Limits and Capacities” section of Chapter 9.

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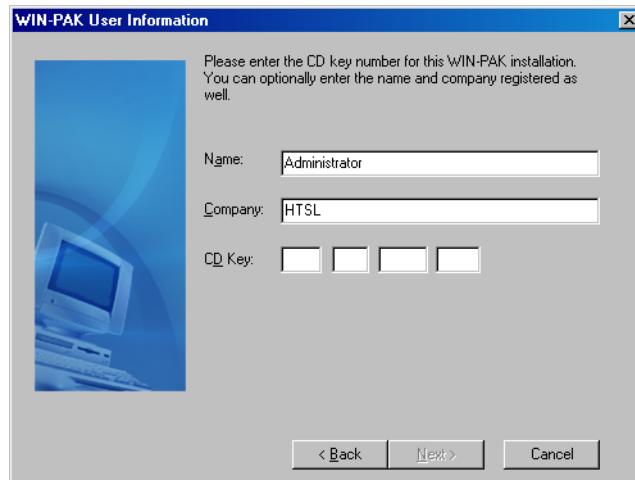
**NOTE:** It is recommended to install the database file on the same computer as the database server in order to benefit from the WIN-PAK backup and restore utility.

---

**NOTE:** The previous installation screen will allow the installer to define destination of specific database files.

---

- 8 Click **Next** to accept the default location for the floor plan files, or click **Browse** and specify a different location. The User Information screen will appear (next illustration).

The image shows a Windows-style dialog box titled "WIN-PAK User Information". On the left is a blue graphic of a computer monitor and keyboard. The main text area contains the instruction: "Please enter the CD key number for this WIN-PAK installation. You can optionally enter the name and company registered as well." Below this are three input fields: "Name:" with the text "Administrator", "Company:" with the text "HTSL", and "CD Key:" with four empty text boxes. At the bottom are three buttons: "< Back", "Next >", and "Cancel".

WIN-PAK User Information

Please enter the CD key number for this WIN-PAK installation. You can optionally enter the name and company registered as well.

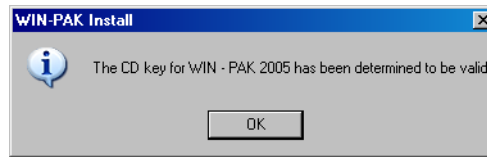
Name: Administrator

Company: HTSL

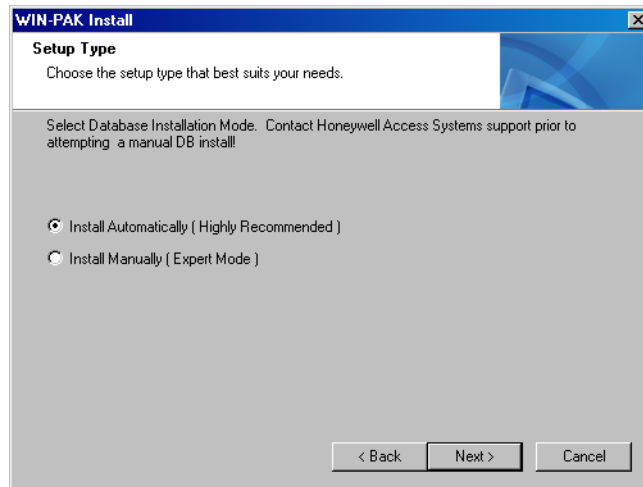
CD Key:

< Back Next > Cancel

- 9 Fill in the User Information, then click **Next** to continue. The Name and CD Key windows must be filled in. The Company window is optional. The CD Key number is located on inside front cover of the WIN-PAK Quick Reference Guide.

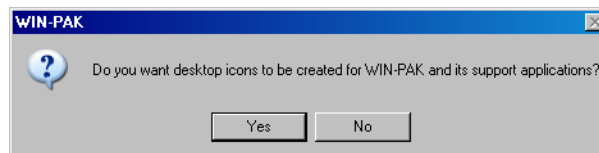


10 Click **OK**.



11 Select the database installation mode. Honeywell always recommends you to choose the “Install Automatically” option.

After finishing the User Information screen, a pop-up window querying the operator whether to create desktop icons for WIN-PAK appears .



- 12 Click **Yes** or **No** to install desktop icons or not. The MSDE database will be installed. The installation will take several minutes.

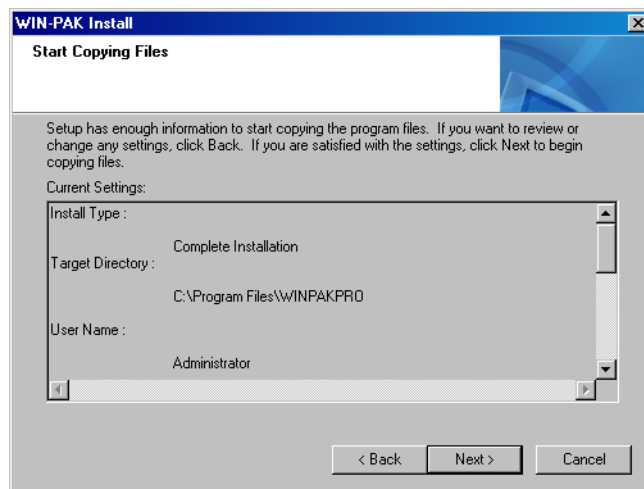
The Select Components screen will appear later (next illustration), from which the operator can choose whether to connect the database engine to the database file automatically or manually.

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**NOTE:** Unless you are a software expert, it is highly recommended to choose the automatic installation option.

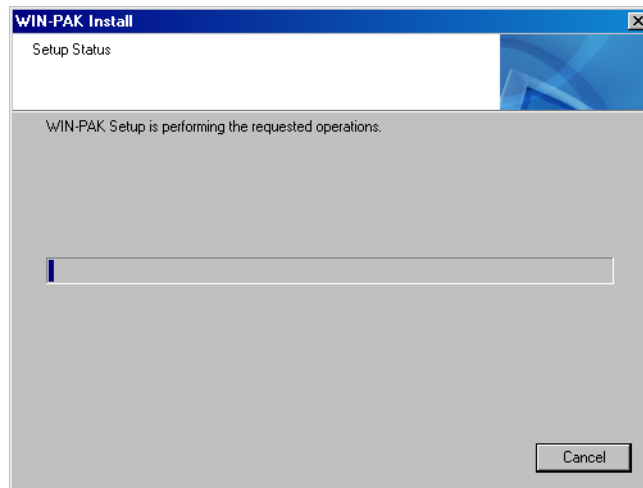
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- 13 Click **Next** to continue.

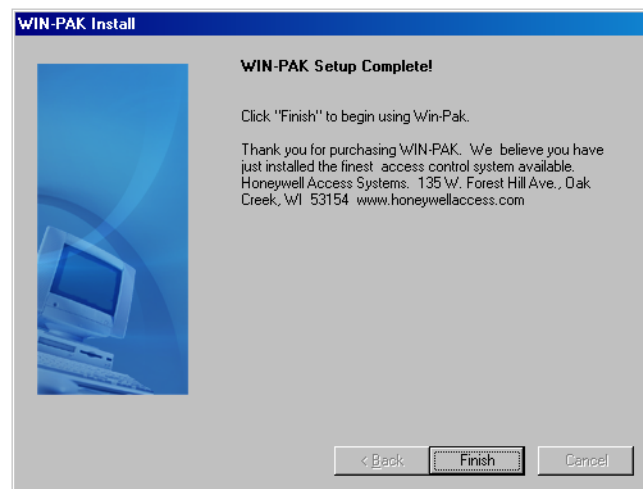


- 14 Click **Next** to start the installation.





- 15 After the installation is complete, the Setup Complete window will be displayed. Click **Finish** to complete the installation process.



## First Log In

All services should be running, but if not, double-click the WIN-PAK Services icon and start all services.

Double-click the WIN-PAK User Interface icon. The User Interface opens and the Connect to Server window is displayed:



Enter Admin as the default operator **Name**.

---

**NOTE:** No password is required for the initial log in, but you should add a password in order to insure the security of your system.

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## Installing User Interface Only

Select the **User Interface Only** installation for workstations on networked systems. The User Interface can be installed from the CD at each workstation or it can be installed across the LAN.

---

**INSTALLATION NOTE:** When installing over a LAN, make sure the install directory resides on a drive that is shared and mapped in the target system. If this is not the case, the install will fail when the system reboots and attempts to reestablish the connection to the host directory.

---

To install WIN-PAK User Interface, exit any Windows programs that are running, and insert the WIN-PAK CD into your CD drive. The installation program begins, and runs as described in the "Installation Procedure" section of this chapter.

When prompted, select the **User Interface Only** installation to install only the User Interface.

---

**NOTE:** During installation, you may be asked if you want to overwrite existing .dll files. Keep your existing dlls. When asked "Do you want to keep this file?" click **Yes**.

---

A number of Windows components may be installed. The software may reboot your computer after each of these components is installed. This is normal.

When installation is complete, you will be prompted to reboot your computer again. When the installation is completed successfully, the message WIN-PAK **Setup Complete** appears. Select **Yes, I want to restart my computer now** and then click **Finish**.

The install program will automatically restart your computer.

### Connecting Networked WIN-PAK Modules

The WIN-PAK System Manager allows the WIN-PAK PRO modules to locate one another by tracking their machine names and RPC Endpoints. After a **Full** install has been performed on the WIN-PAK file server, confirm that the servers and user interface are properly operating on this system.

Complete a User Interface installation on a second workstation. Enter the necessary information in the System Manager, so that the new User Interface can communicate with the Database Server.

#### From the WIN-PAK Server

- 1 After installation of WIN-PAK on the server machine, run the System Manager.
- 2 Select the **Database Server** tab.
- 3 Write down the RPC endpoint. This is the same as a TCP/IP port address. It should be 5555. Do not change this number unless you have another service using TCP/IP port address 5555.
- 4 Select the **Database Archive Server** tab.
- 5 Write down the RPC endpoint. This is the same thing as a TCP/IP port address. It should be 5556. Do not change this number unless you have another service using TCP/IP port address 5556.
- 6 Close the System Manager.
- 7 Get the computer name: Click the **Windows** Start button, point to **Settings**, and then click **Control Panel**. Double-click the **Network** icon, and then click the **Identification** tab.
- 8 Close the Service Manager.

### User Interface Workstation

- 1 If the User Interface is running, exit it.
- 2 Run the System Manager on the client PC.
- 3 Select the **User Interface** tab.
- 4 Click the **Add** button
- 5 In the **Display Name** text box, type a descriptive name to identify the database server in the list.
- 6 In the **Database Server Node Name** text box, type the machine name of the server machine. If you wish, you can put the IP address in place of the machine name.
- 7 Verify that the RPC Endpoint is the same as the one you wrote down in step 3 of the Server setup.
- 8 In the **Database Archive Server Node Name** text box, type the machine name of the server machine. If you wish, you can put the IP address in place of the name.
- 9 Verify the RPC Endpoint is the same as the one you wrote down in step 5 of the Server setup.
- 10 Click **OK**.
- 11 Click **OK**.

At this point you're ready to start up the User Interface with the new database server.

- 1 Run the WIN-PAK User Interface.
- 2 Type in your **Login Name** and **Password**.
- 3 If displayed, select the server from the drop down list in the **Server Name** area.
- 4 Click **Connect**.
- 5 Click **OK**.

### Concurrent Connections

Now your system has the capability to have two concurrent User Interfaces. More can be added until you reach the maximum specified by your licensing limit. You can verify your client licenses in the User Interface by clicking Help|License. Contact your Honeywell Access Systems Sales Representative for additional licenses. When you reach your licensing limit on clients, you will not be able to open more on that database server.

EXAMPLE: If you have five client licenses, you can have five clients running simultaneously. If you open a sixth client, WIN-PAK will notify you that you have exceeded your licensing and will not allow access to the database server. You can install any number of clients, but you can only log five clients on to the database server at any given time.

### Communication Server

WIN-PAK supports the use of multiple communication servers installed across a network.

After the Database Server and a User Interface have been installed, multiple Comm Servers can be installed up to the maximum specified by your licensing limit.

- 1 Exit any Windows programs that may be running. Insert the WIN-PAK CD into the CD drive. The installation program is self-activating. Select **Install Software**.
- 2 Select the **Install Software** option from the browser.
- 3 When prompted, enter your name, company name and CD-Key. Click **Next**.

- 4 A User License Agreement appears. Click **Yes**, to acknowledge that you understand and agree to the terms.
- 5 When prompted, select **Comm Server Only** installation to install the Communication Server. Click **Next**.
- 6 When prompted, select the path and file name for your executable program files, or accept the default settings.

---

**NOTE:** During installation, you may be asked if you want to overwrite existing .dll files. Keep your existing dlls. When asked "Do you want to keep this file?" click **Yes**.

---

- 7 When the install has been completed successfully, the message WIN-PAK **Setup Complete** appears. Select **Yes, I want to restart my Computer Now** and click **Finish**. The install program will automatically restart your computer.

---

**NOTE:** A number of Windows components may be installed. The software may reboot your computer after each of these components is installed. This is normal. When installation is complete, you will be prompted to reboot your computer again. Reboot the computer at this time.

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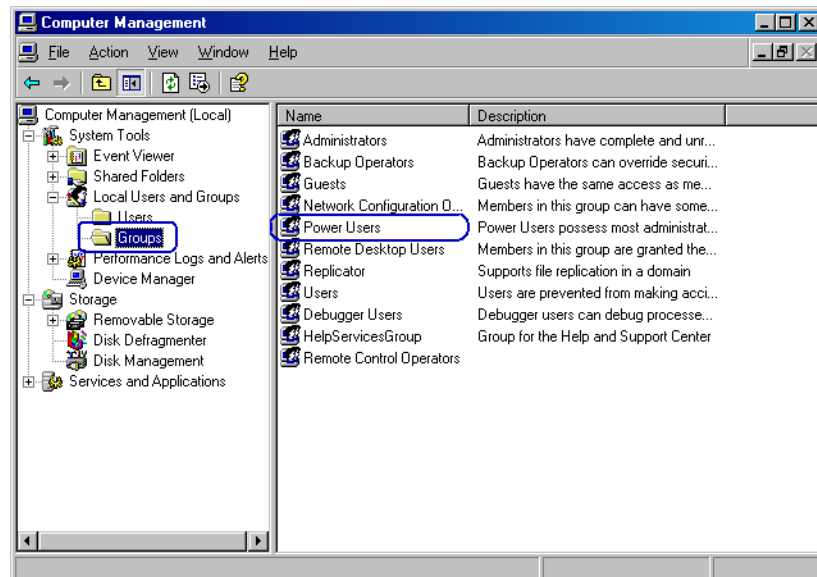
## Preparing Domain User to start WIN-PAK Servers (Services)

### Creating Domain Users

- 1 Login to the system as Administrator where WIN-PAK Servers are installed.
- 2 Open Computer Management window through *Control Panel -> Administrative Tools -> Computer Management*.

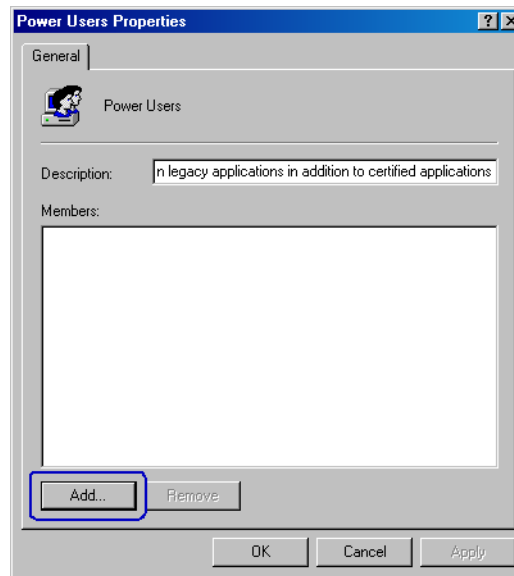
Note: In case you have installed 2003/XP Operating System, switch to Windows Classic view in for control panel option.

- 3 Select Groups from System Tools->Local Users and Groups folder and open Power Users properties.

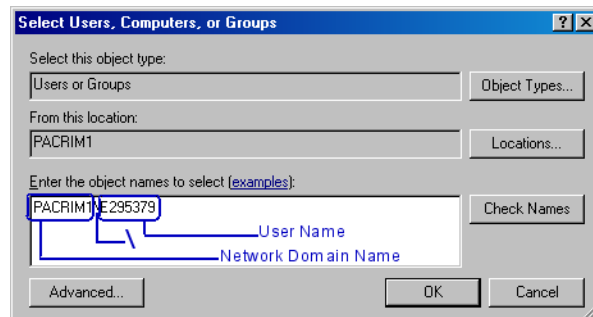


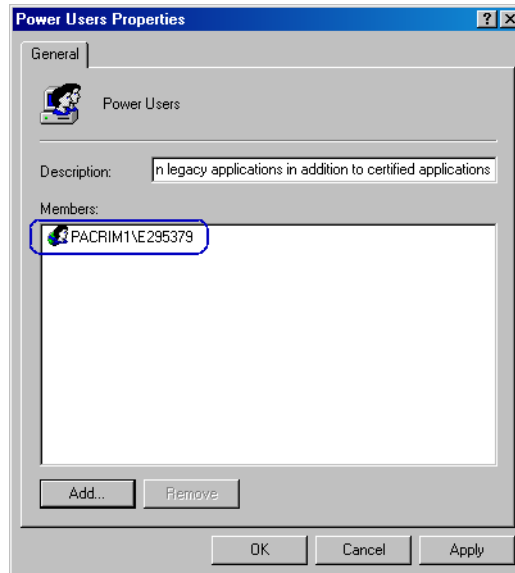


- 4 Click 'Add' button to add Domain user to groups.



- 5 Enter Domain & User Name in the format '**DOMAIN\USER NAME**' and click OK button.





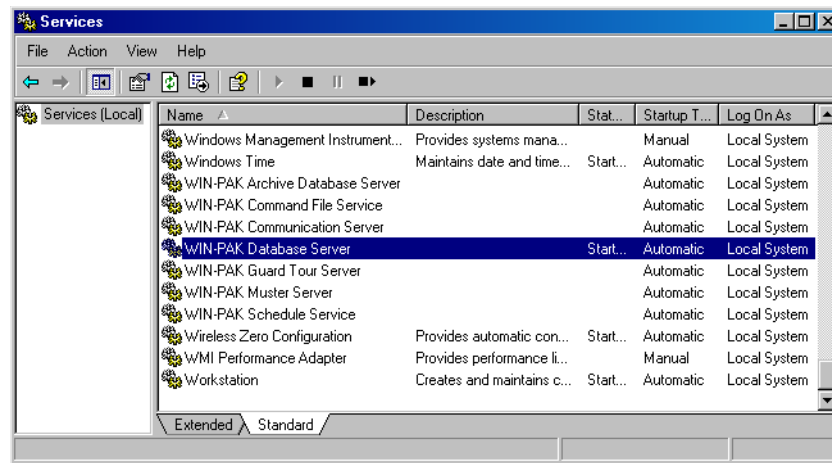
- 6 Click **OK** to save changes.

### Setting up WIN-PAK Server Log On Settings

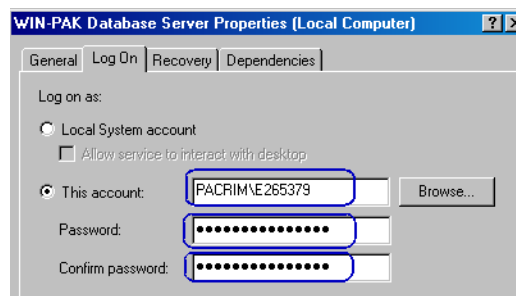
After adding domain user to local system Administrator or Power User group.

- 1 Open Services window from *Control Panel -> Administrative Tools -> Computer Management -> Services and Application*.

By default, WIN-PAK Servers 'Log On As' property will be Local System.



- 2 To set WIN-PAK Server Log On property double click the required server from right side pane of services window.
- 3 In Server Properties window, select 'Log On' tab.
- 4 In this tab 'Log On As' property will be set to 'Local System Account'. Set this to 'This account' and give Domain user account, which was added previously to System Administrator/Power user group and enter the password.



- 5 Click OK to save changes.
- 6 Follow these steps to set Log On As property of all other WIN-PAK Servers.
- 7 Restart the System to affect changes.

---

**Note:** User can login to WIN-PAK System using any account either local or domain.

---

---

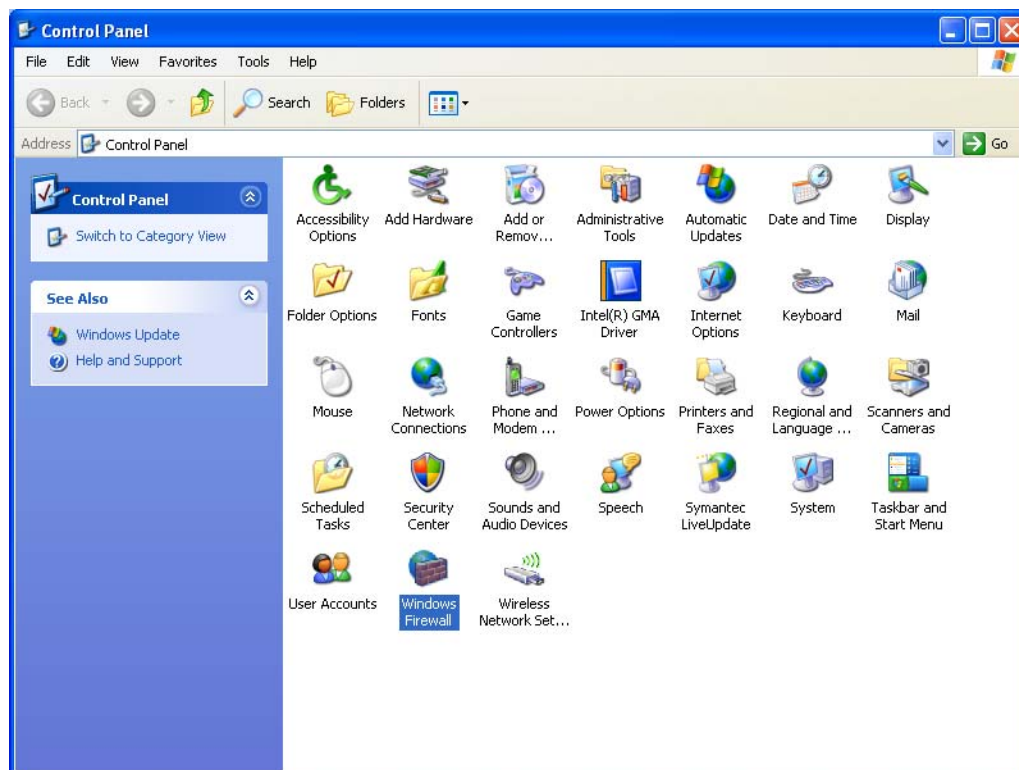
**Note:** The Client-System should be logged in with domain user account.

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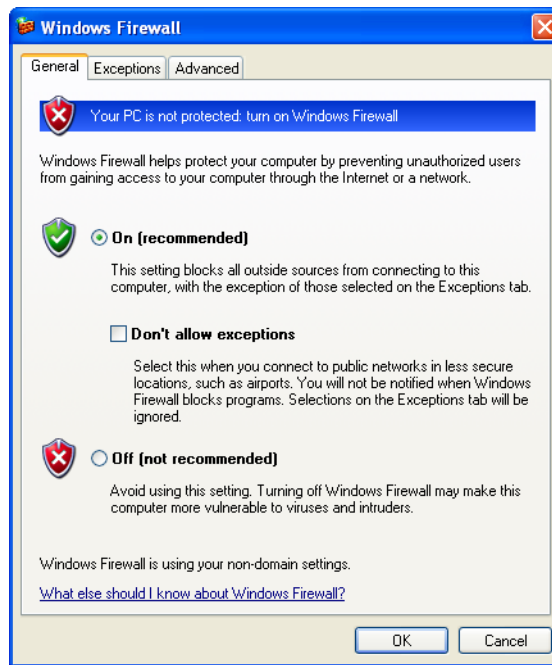
## Unblocking the WIN-PAK services on Windows XP SP2

**WIN-PAK** service should be unblocked only if the status of *Windows Firewall* is '**On**'. You can check this setting in the Windows Firewall dialog.

1. Open the **Control Panel** window through *Start->Setting->Control Panel* and select 'Windows Firewall'.

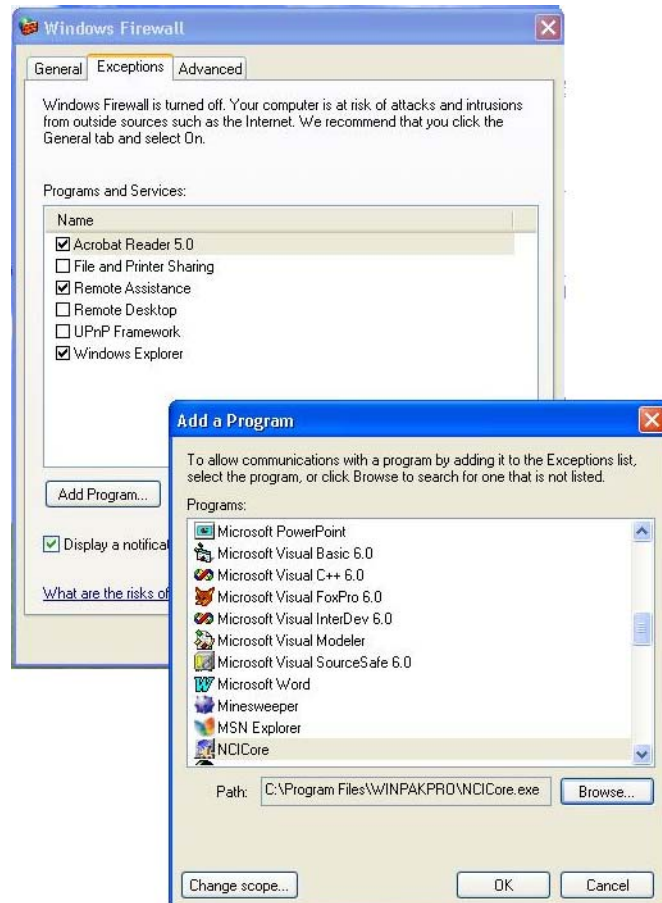


3. Check the status of 'Windows Firewall' through *Windows Firewall dialog->General* tab.

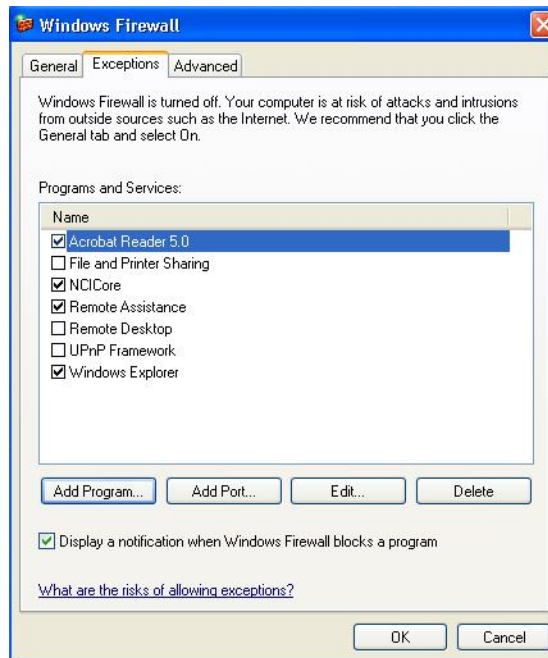


4. Select 'Exceptions' tab from 'Windows Firewall' dialog and click 'Add Program...' button to add WIN-PAK services to Exceptions tab.

The illustration below displays the procedure of adding WIN-PAK Database server (NCICore.exe) to Exceptions tab.

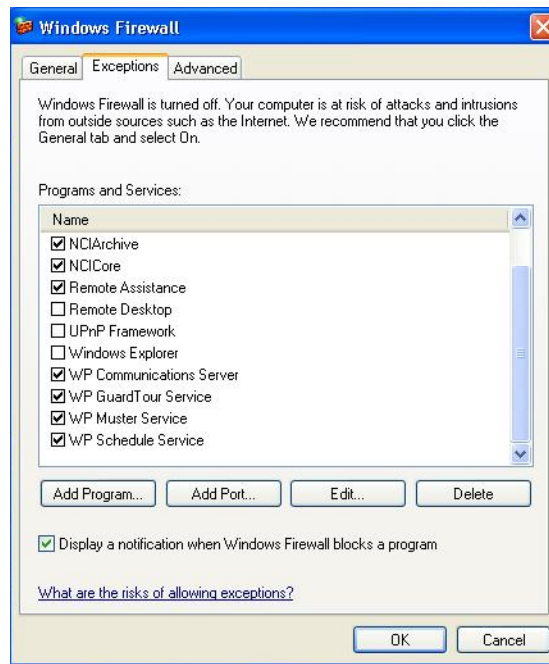


5. Select the required program by browsing the location in 'Add a Program' dialog and click **OK**. The service will now be available in the Exceptions Tab.



6. Select the 'NCICore' checkbox to Unblock the WIN-PAK Database Server.
7. Repeat Steps 2 to 4 to unblock all other WIN-PAK Services running on the current system.





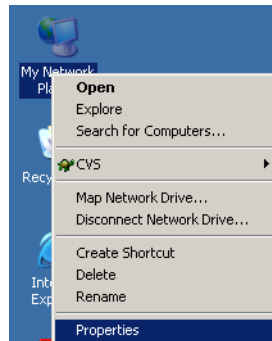
6. Click **OK** to save changes.
7. Restart all Services once if required.

## Disabling the Firewall in 2003 Server

To access **WIN-PAK** services, the *Windows Firewall* should be disabled. You can check this setting in the Windows Firewall dialog.

### Steps to Disable Windows Firewall settings

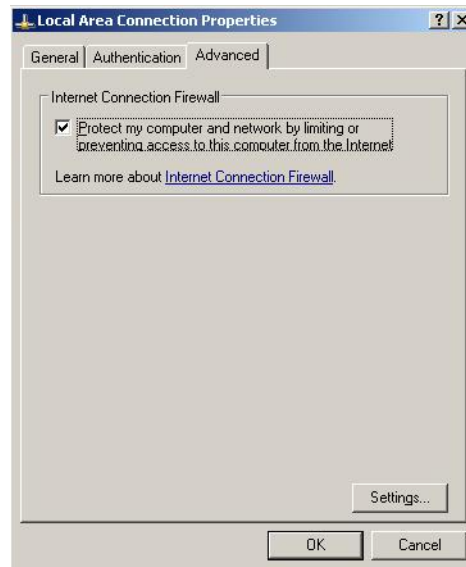
1. Right-click 'My Network Places' -> Properties to view the Local Area Connection.



2. Right-click the 'Local Area Connection'. The Local Area Connection Properties window appears.



3. Select the 'Advanced' tab from Local Area Connection Properties window.



4. Deselect the Internet Connection Firewall checkbox from Advanced tab to disable the Firewall.



## Uninstalling WIN-PAK

To uninstall WIN-PAK, verify that all WIN-PAK servers have been stopped, then use the Windows **Add/Remove Programs** tool. This tool is found by going to Start/Settings/Control Panel/Add/Remove Programs. Select the **Install/Uninstall** tab and scroll to the WIN-PAK entry and click on that item. Click the **Add/Remove** button to uninstall the software.

When the Remove Shared Files [or Resources] window appears, select **Yes to all** to remove all shared files if the purpose of removal is to reinstall the WIN-PAK program because some files have become corrupted. Select **No to all** if the WIN-PAK program will not be reinstalled on the computer.

Reboot your PC after completing the removal process and before reinstalling WIN-PAK or any other software.

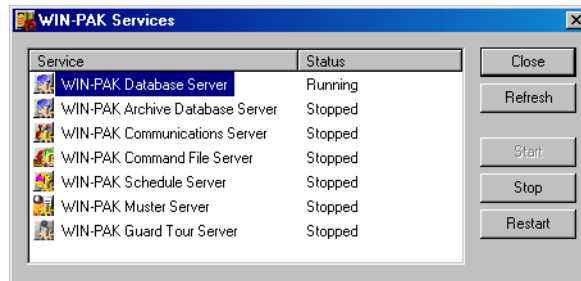
The Uninstall program does not remove database information. It only uninstalls the program. You will need to manually delete the WIN-PAK directory to recover hard drive space. The default location will be on the C:\Program Files directory unless changed during the installation.

## Service Manager

The WIN-PAK Service Manager is a utility which allows the administrator or operator to easily start and stop the software services.

Open the WIN-PAK Services window by double-clicking the shortcut icon on your desktop, or by selecting it from the Windows Program menu, Honeywell Access Systems group.

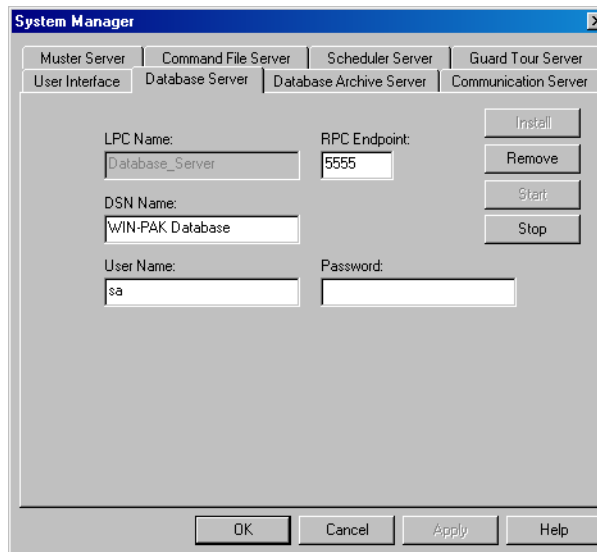
The installed program components are listed, and the Status column indicates whether each server is running or not.



Select the service or services. Click on **Stop** or **Restart** as necessary.

## System Manager

The System Manager is a utility used by WIN-PAK to locate its various software components. The machine name and protocol endpoint for each program component is displayed in the System Manager. Generally, none of the settings on the System Manager should be changed.



Open the System Manager by double-clicking the shortcut icon on your desktop, or by selecting it from the Start menu, Programs, Honeywell Access Systems.

## Licensing and Registration

WIN-PAK has a demo mode of operation with no expiration time.

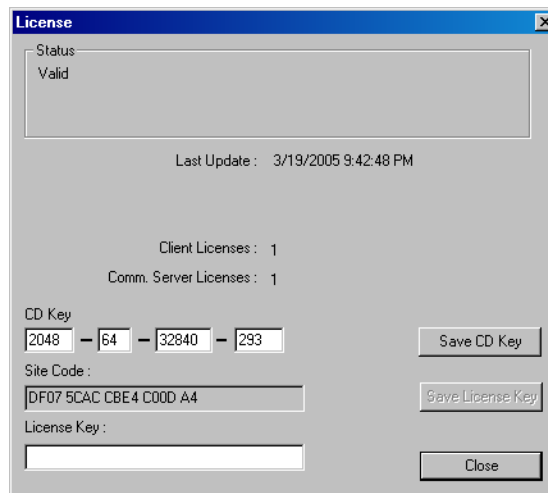
For evaluation purposes, the software can be installed and used with the following restrictions: 10 card number database; no bulk card add functions; no badge printing (preview allowed). To remove the demo mode of operation the software must be registered.

WIN-PAK software has a CD Key found inside the cover of the user guide. Make a note of this number.

### Registering Software

Before beginning software registration, select the **License** option from the WIN-PAK Help menu.

When the License window is displayed, note the **Site Code**. This is a unique number that identifies your computer.



The screenshot shows a window titled "License" with a blue title bar and a close button (X). The window contains the following information and controls:

- Status:** A text box displaying "Valid".
- Last Update:** A text box displaying "3/19/2005 9:42:48 PM".
- Client Licenses:** A text box displaying "1".
- Comm. Server Licenses:** A text box displaying "1".
- CD Key:** A text box displaying "2048 - 64 - 32840 - 293". To the right of this box is a button labeled "Save CD Key".
- Site Code:** A text box displaying "DF07 5CAC CBE4 C00D A4". To the right of this box is a button labeled "Save License Key".
- License Key:** An empty text box. To the right of this box is a button labeled "Close".

## Registering Software Online

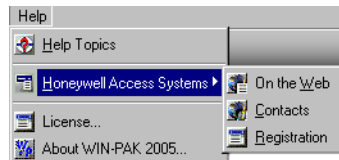
You can register your WIN-PAK software 24hours a day 7 days a week by visiting the Honeywell Access Systems web site at:

[www.honeywellaccess.com](http://www.honeywellaccess.com)

Or, select Registration from the Honeywell Access Systems option on the WIN-PAK Help menu. Internet Explorer will open at the registration site.

You will be given a Site Key. Enter this number in the **Site Key** field, activating the license for your software.

The number of clients and number of servers licensed for your system is now displayed in the License dialog. A new Site Code appears in the Site Code field.



## License Files

The encryption software writes files to your hard drive as part of the licensing. You must take care not to move or damage these files, or your license will be invalidated and you will not be able to access your system.

---

**NOTE:** The license files cannot be moved. There is no License Transfer utility.

---

**NOTE:** It is recommended to obtain a WIN-PAK hardware key(WP2KEY) for multi-drive RAID configuration computers to avoid licensing problems if one of the drives needs to be replaced.

---

## Norton Speed Disk Utility

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**CAUTION:** Using Norton Speed Disk can invalidate your license. Do Not use Norton Speed Disk before making changes to the utility indicated below.

---

Speed Disk is the defragmentation utility included in Symantec's Norton Utilities. To prevent losing license files:

- 1 Open Speed Disk and select **Options/Customize**, and then **Unmovable Files** from the File menu.
- 2 Specify that the \*.ent, \*.key, and \*.rst files cannot be moved.
- 3 Save the new profile by selecting **Files/Options/Optimization/Save**. Speed Disk can now be run without affecting your license files.



## **Chapter 3**

# **User Overview**

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**Operator Guide Overview**

**User Interface**

**System Settings**

**Daily Operations**



## Operator Guide Overview

The User Interface section of this chapter covers the basic conventions used throughout the graphical user interface, including an overview of the GUI menus and toolbar options, how to work with database windows, and how to log in to the system.

The System Settings section of this chapter explains how to set up operators and operator levels, how to configure workstations, and how to set certain system defaults.

The Daily Operations section provides details on the features and functions used on a daily basis to monitor and maintain your access control system.

## User Interface

The WIN-PAK graphical user interface allows you to easily and logically set up, monitor, and maintain all aspects of your access control system.

### The WIN-PAK Window

WIN-PAK employs a typical GUI to provide access to the system.



### Toolbar Buttons

Toolbar buttons along the top of the WIN-PAK window provide shortcuts to some of the more frequently-used options.



**Log In:** Logs the user out of WIN-PAK

(after a prompt), and reopens the log-in window, allowing the user to log in again, and reconnect to the database server.



**Select Account:** Calls the Account Select dialog, allowing an authorized operator to select an account.



**Dynamic Alarm View and Acknowledge:** Opens the Alarm View window, from which incoming alarms can be viewed, acknowledged, and cleared.



**View Events:** Opens the Events View window, which displays current system activity in real-time.



**Control Map:** Opens the Control Map in order to control devices. Also provides an alternate means of acknowledging and clearing alarms.



**Run Command File:** Calls the Run a Command File dialog, allowing the user to run text files containing device instructions stored in the Command Files database.



**Open Floor Plan:** Opens the Floor Plan database window, allowing the operator to open selected floor plans.



**Locate Last Card Holder/Card Holder Transaction:** Opens the Locate dialog, allowing the operator to search [by card holder name or card number] for the last time and place a card was used.



**Card:** Opens the main Card database window, allowing the operator to search and sort the card list and to add, edit, or delete cards.



**Card Holder Database:** Opens the Card Holder database window, allowing the operator to search and sort the cardholder list and to add, edit, or delete card holders.



**Run Reports:** Opens the Reports database window, allowing the user to generate, view, and print reports.



**Help Topics:** Opens the Help menu, providing access to on-line help files.



**Log Out:** Logs the operator out of the user interface and logs the client out of all servers.

**File Menu**

---

Log In  
Log Out  
Configure Badge Printer  
Reports  
Workstation Defaults  
System Defaults  
Database Maintenance  
Database Limits/Capacities  
Exit

**View Menu**

---

Select Language  
Toolbar  
Status Bar

**Account Menu**

---

Select  
Edit  
Configure

Badge Layout Utility  
Card Holder Tab Layout  
Note Field Template

**Operations Menu**

---

Locate  
System Events  
Events  
Alarms  
AutoCard Lookup  
Live Monitor  
Floor Plan  
Control Map  
Command File  
Guard Tour  
Tracking and Mustering  
Digital Video

**Card Menu**

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Card  
Card Holder  
Access Level  
Bulk Card Add  
Bulk Card Delete

---

**System Menu**

Operator  
 Operator Level  
 Workstation Defaults  
 System Defaults

---

**Reports Menu**

Reports  
 Report Templates

---

**Configuration Menu**

Define	Access Areas Tracking Areas Control Areas
Device	Device Map Abstract Device (ADV) Action Group
Time Management	Time Zone Schedule Holiday Group Daylight Saving Group
Quick-Start Wizard	
Card Holder	Configure AutoCard Lookup Note Field Template Card Holder Tab Layout
Badge	Configure Badge Printer Badge Layout Utility Badge DLL's
Select Language	
Translate	Available Languages Dialogs Menus Other Text
Command File	
Guard Tour	
Floor Plan Definition	

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**Window Menu**

Arrange Icons

---

**Help Menu**

Help Topics

Honeywell Access Systems

On the Web

Contacts

Registration

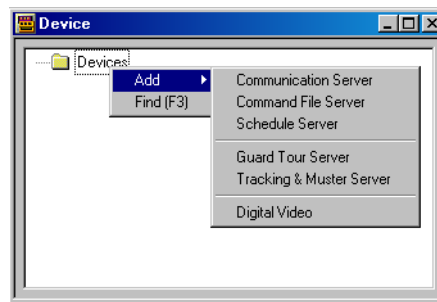
License

About WIN-PAK

## Right-Click Menus

You can right-click many items in the WIN-PAK User Interface to display a set of options specific to that item.

For example, right-click the Devices folder in the Device Map and a submenu (or Control menu) is displayed containing the Add command. Using the Add menu options, you can add servers to the Device Map, as shown in the following illustration.



Right-click on a communication server in the Device Map, and a different menu is displayed, allowing you to add, modify, or remove devices from the communication server.

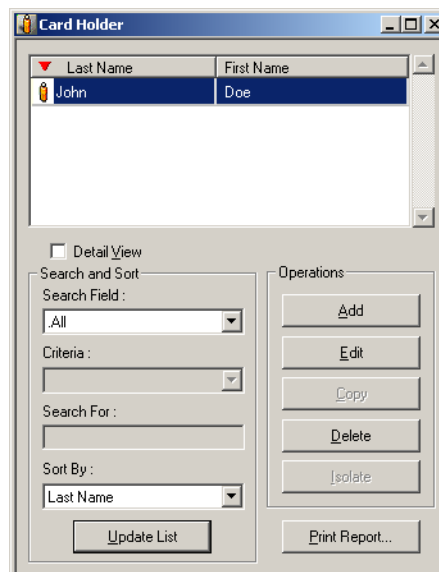
WIN-PAK makes extensive use of right-click menus. The options available on a right-click menu depend upon your location within the system.

## Database Windows

WIN-PAK runs off a series of databases configured specifically for your system. These databases include:

- Card
- Card Holder
- Holiday Group
- DayLight Saving Group
- Time Zone
- Operator
- Operator Levels
- Floor Plan
- Abstract Device
- Guard Tour
- Badge Layouts
- Schedule
- Command File
- Action Groups
- Note Field Template

Most of the WIN-PAK databases are accessed through a main database window, shown as follows:





### Database Record Lists

Below the title bar in database windows is a list of database records. Use the scroll bars to move through the list and data fields. Typically all records in the database are displayed in the list, while the default sort order varies depending on the database. For example, Card Holders are displayed alphabetically by last name.

Search and Sort fields allow you to sort the list in a particular order, or to search for records with a particular characteristic. The search results are displayed in the list. Select records in the database list by highlighting them.

A range of records can be selected in some databases by holding down the SHIFT key on your keyboard while clicking the first and last record in the range. Multiple, non-contiguous records can be selected by holding down the CTRL key on your keyboard and clicking on each record desired.

### Viewing Detail Database Records

Select the **Detail View** check box at the bottom of a database list (in the middle of the window) to open the detailed view of a selected database record.

The Detail View can also be activated by highlighting a record in the list and clicking the Edit button on the database window. When accessed via the Edit button, a database record can actually be edited (as opposed to merely viewed).

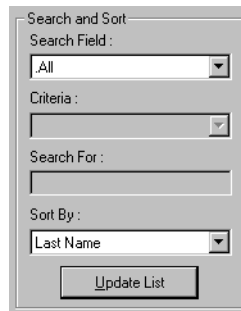
### Searching and Sorting Database Lists

Use the **Search and Sort** area of the database window to indicate search characteristics to be applied to the records list.

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**NOTE:** The number of records returned from the result of your search is restricted by the value set in your Workstation Defaults, Defaults tab: Maximum Records returned from the Database Find List. Refer to “Workstation Defaults” in this chapter for additional information.

---



The image shows a 'Search and Sort' dialog box. It has a title bar 'Search and Sort'. Inside, there are four labeled fields: 'Search Field:' with a dropdown menu showing 'All'; 'Criteria:' with a dropdown menu showing an arrow; 'Search For:' with a text input field; and 'Sort By:' with a dropdown menu showing 'Last Name'. At the bottom center is a button labeled 'Update List'.

**Search Field:** Select the name of the field for which you want to search.

**Criteria:** Choose one of the operators from this list. The available options vary depending on the database in which you are working, but typically include Greater Than, Less Than, and Equal To.

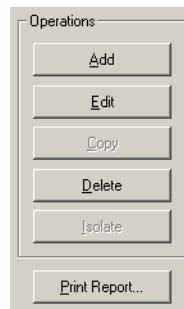
**Search For:** Type in a letter, word, phrase, or numeric expression that you want to search for.

**Sort By:** This selection designates the order in which the search results are displayed, (e.g. cards can be displayed by card number or last name).

**Update List:** This button initiates a search based on the information entered in the **Search and Sort** fields.

### Database Operations

The action buttons on the right side of the Search and Sort area allows you to perform a number of operations on the database records.



**Add:** Opens a blank record window for entry of a new record.

**Edit:** Opens an editable view of the selected record, allowing the record to be changed.

**Delete:** Removes the selected record from the database.

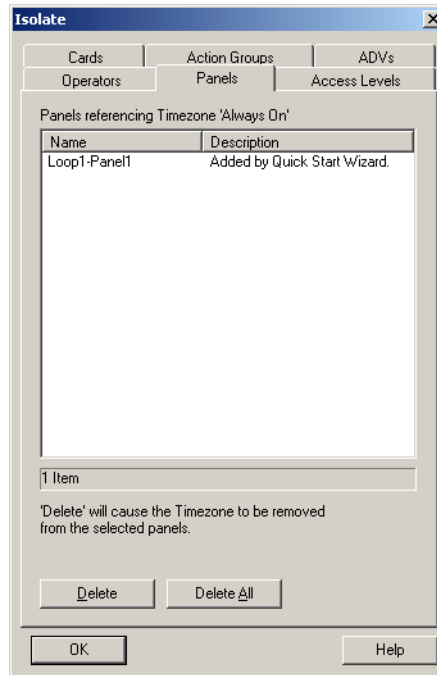
### Isolating Database Records

Many databases have an **Isolate** function, which is essential when deleting database records, as WIN-PAK does not allow the deletion of an item that is in use.

The Isolate function allows you to view an item's usage and reassign elements without searching through all the possible areas where the element might be in use.

For example, in order to delete a time zone you must first remove it from any panels, access levels, cards,

Clicking the Isolate button on a database window calls the Isolate window.



Tabs across the top of the window show you where the item is used. In each instance of the item's usage, you can remove it or reassign it, depending on where it is being used.

When this process is complete, click **OK** to return to the main database window. Now the item (in this case the time zone) can be deleted by selecting it from the database list and clicking Delete.

### Copying Database Records

Some databases (e.g. Badge Layouts and Action Groups) have a Copy function. Select a record and click the Copy button to make a duplicate which can be renamed and edited.

## Printing Database Reports

Click the **Print Report** button at the bottom of a database window to view and print a report on the current database. Generally, a filter dialog opens, allowing you to select settings for the report.

## Detail Database Record Windows

Many WIN-PAK databases have both a main database window and a secondary (or detail) window. The secondary window is sometimes called the Record view, as it shows information on a particular database record.

Highlight a database record from the list in the main window, and select the **Detail View** check box. The detail view of the database record opens. This new window shows information on the currently selected record.

The following illustration shows the detail view of a Card database record. Notice the two tabs displayed along the top of the window used to display different types of information.

The screenshot shows a window titled "Card Record" with two tabs: "Card Properties" and "Badge". The "Card Properties" tab is active. The window contains the following fields and controls:

- Card Number:** Text box containing "30695".
- Status:** Dropdown menu showing "Active".
- Issue:** Text box containing "0".
- Card Holder:** Text box containing "MANDOVI, birla".
- Access Level:** Dropdown menu showing "Master".
- PIN:** Text box.
- Description:** Text box.
- Account:** Dropdown menu showing "Account1".
- P-Series Trigger Control:** Section containing a "User Level" dropdown menu showing "0".
- Custom Access Level:** Button labeled "Add...".
- Action Group:** Text box showing "None" and a "View.." button.
- Activation Date:** Section containing "Change" and "Clear" buttons, and a text box showing "11/5/2004".
- Expiration Date:** Section containing "Change" and "Clear" buttons, and an empty text box.

At the bottom of the window are four buttons: "OK", "Cancel", "Apply", and "Help".

You can activate the detail view by selecting a record from the main database window and clicking the Edit button. At this point, the detail view becomes active and the selected record can be edited.

Clicking Add on the main window opens a blank record dialog, allowing a new database record to be entered.

---

**NOTE:** Workstation Defaults can be set so that the Detail View opens whenever a database is opened. To enable this option, select **Workstation Defaults** on the **System** menu. Click the **Always show record view** check box on the **Defaults** tab.

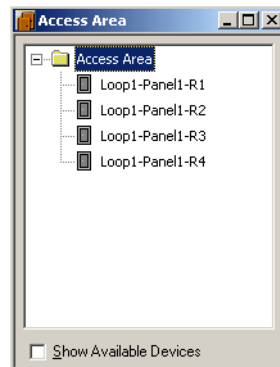
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## Tree Structures

Several WIN-PAK features use trees to display information. Trees allow information to be organized into logical or geographical groups. The tree structure is created as you program your access control system, therefore it is tailored to meet your specific needs.

There are six tree structures used within the WIN-PAK System: Device Map, Control Map, Control Area, Access Area Map, Operator Level and Tracking Area Map. The Device Map is unique in that devices are actually defined as they are added to the tree structure. The other trees define the hierarchy or relationship of the resources, not the resources themselves.

For example, Access Areas are defined by a lists of entrances. The Access Area tree shown here provides a way to view the data.



The tree can be collapsed so that only the top level of information is displayed. By clicking the plus sign (+) to the left of a folder, the tree structure can be expanded, one level at a time, to show all branches and subbranches.

On some trees, whole branches can be copied or moved.

## Logging In to WIN-PAK

Open the WIN-PAK Connect To Server window by double-clicking the WIN-PAK icon on your desktop.

If the WIN-PAK window is already open on your desktop, you can log in by clicking the Log In toolbar button or by selecting Log In from the WIN-PAK File menu:



Enter your user **Name** and **Password** on the Connect To Server window (next illustration).



Press the Enter key on your keyboard, or click the **Connect** button to log on to WIN-PAK.

## System Settings

This section explains how to set up operators and operator levels, how to configure a workstation, and how to set certain system defaults such as alarm handling.

---

**NOTE:** Operator levels should be defined after the access control hardware has been defined in the Control Map.

---

## Operator Levels and Operators

Operators are individuals with defined rights and privileges to view and/or change parts of the system. Operator privileges can be very broad or they can be greatly restricted [e.g. a workstation can be set up to view alarms from just one door]. An administrator can view and edit all devices, databases, and all parts of the user interface.

Operators are defined by Operator Level and Time Zone. Operator Level defines the system components to which the Operator has access and the Time Zone defines when the operator can log in to the system.



Operator access is password protected, and proper password security must be maintained. Once WIN-PAK is installed, a password should be defined and used for each operator. This is critical to the security of the entire system.

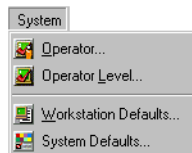
## Operator Level Database

The Operator Level database contains information on existing Operator Levels. These levels define what a given operator or group of operators can see and do within the system.

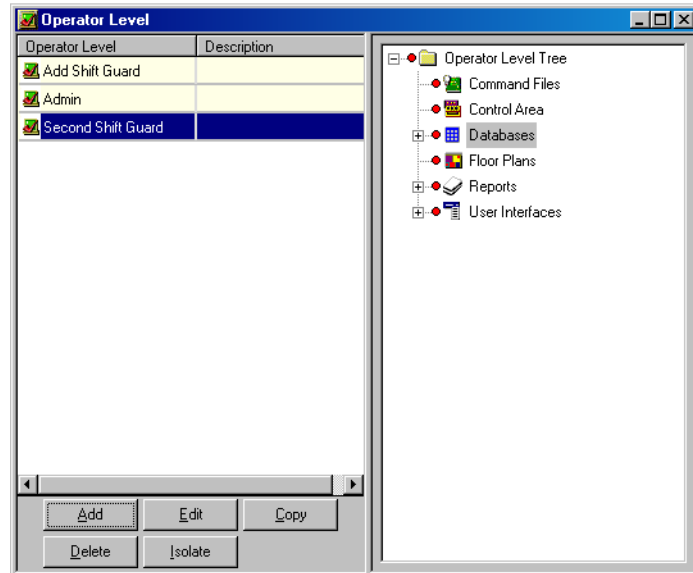
The Operator Level database opens as a two-pane window. On the left is a list of existing Operator Levels. On the right is the Operator Level tree. The Operator Level tree consists of control area devices, along with databases, and user interface elements. Individual operator levels are defined by assigning rights to branches or individual items on the tree.

### Adding an Operator Level

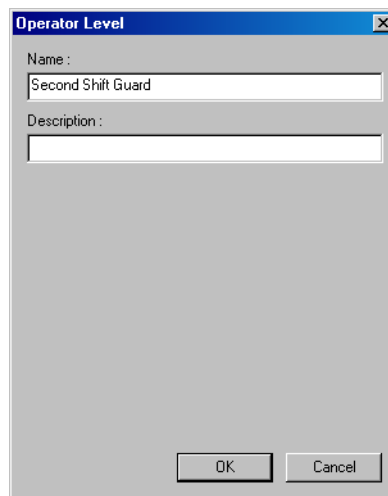
- 1 Select **Operator Level** from the WIN-PAK System menu.



The main Operator Level database window is displayed.



- 2 Click **Add** to open the Operator Level dialog.



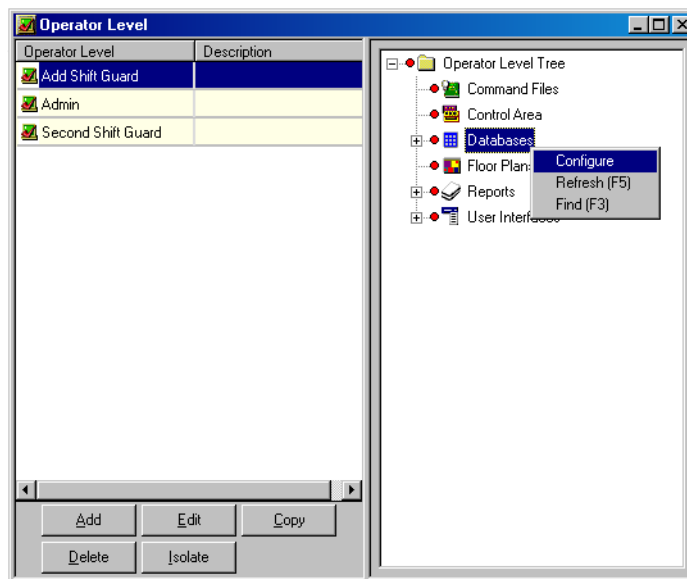
- 3 Enter a **Name** for the Operator Level (with up to 30 characters). This is a required field.

- 4 Enter a **Description** for the Operator Level (with up to 60 characters). This field is optional.
- 5 Click **OK** to save the entry and return to the main Operator Level database window.

### Configuring Operator Levels

After Operator Levels are added to the system, it is necessary to configure each level for access to specific control areas.

Operator Level access for control area devices, databases, and the WIN-PAK System itself [User Interface] are configured on the right pane of the Operator Level window.



- 1 Select an **Operator Level** from the list on the left side of the window.

- 2 In the right pane of the Operator Level window right-click on the control area device, database, or user interface element you want to configure.
- 3 Configure rights for an entire branch, an individual device, or an individual database.

### Configuring Rights for an Entire Branch

All the devices contained in one branch can be configured at once by right-clicking on the main branch [without opening the sub-branches], and selecting Configure. The Configure Rights dialog is displayed:

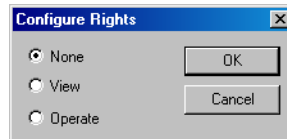


Indicate the rights configuration you want for the Operator Level by selecting the appropriate radio button.

### Configuring Rights for an Individual Device

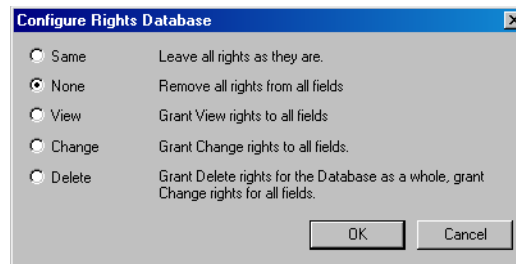
When sub-branches of the Operator Level tree are open, an individual device can be selected for configuration. Simply right-click on the device and select **Configure**.

An abbreviated version of the Configure Rights dialog is displayed.

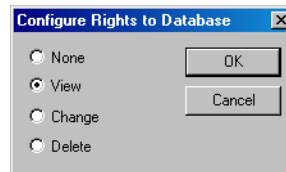


## Configuring Rights for Databases

If you right-click an individual database in the Operator level tree that has sub-branches and select **Configure**, yet another Configure Rights dialog is presented:



An individual branch provides an abbreviated version of the Configure Rights to database:



---

**NOTE:** Each device, database, and user interface element in the control tree is color-coded, based on the right assigned to it: Red = no rights, Yellow = view rights, Green = operate rights (view and edit), White = delete rights.

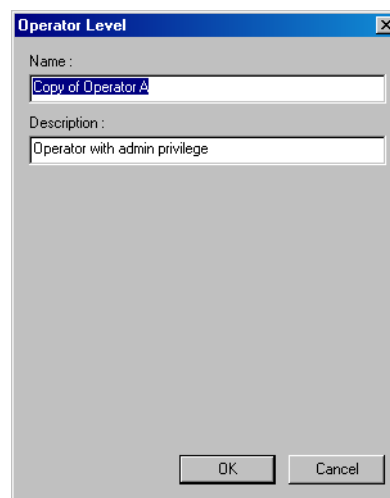
---



### Copying an Operator Level

You may, on occasion, find it necessary to create operator levels that are similar to each other, but with a few minor differences. To save time, you can copy an existing operator level, and make changes to the copy.

- 1 Select (highlight) the operator level you want to copy in the main Operator Level database window.
- 2 Click **Copy**. The Operator Level dialog is displayed, as shown here:

The image shows a dialog box titled "Operator Level" with a standard Windows-style title bar (blue with a close button). Inside the dialog, there are two text input fields. The first field is labeled "Name:" and contains the text "Copy of Operator A". The second field is labeled "Description:" and contains the text "Operator with admin privilege". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

- 3 Enter a new **Name** for the Operator Level (with up to 30 characters).

---

**NOTE:** The default name of the copy is the same as the original with the prefix "Copy of..." The default description is the same as the original.

---

- 4 If desired, enter a new **Description** for the Operator Level (up to 60 characters in length).

- 5 Click **OK** to save the new Operator Level and return to the main Operator Level database window.

### Editing Operator Levels

Editing Operator Levels is as simple as configuring them.

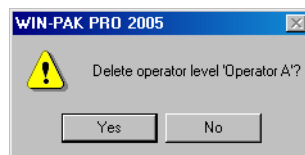
To edit the name or description of an Operator Level, select it from the Operator Level database list, and click the **Edit** button.

The Operator Level dialog used for the name and description is displayed. Enter the new name and/or description, and click **OK** when finished.

To edit the access level of an Operator Level, select it from the Operator Level database window and make changes to either a main or sub-branch of the Operator Level Tree (in the right pane). Refer to “Adding an Operator Level” for details.

### Isolating and Deleting an Operator Level

Deleting an Operator Level not in use is just a matter of selecting it from the Operator Level database list and clicking the Delete button. A deletion prompt is displayed:



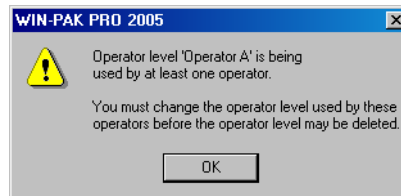
Click **Yes** to remove the Operator Level from the system.



### Isolating an Operator Level

An Operator Level cannot be deleted if it is used by one or more Operator definitions. Use the **Isolate** function to determine which operators are assigned to the selected Operator Level, and to reassign those users to other levels.

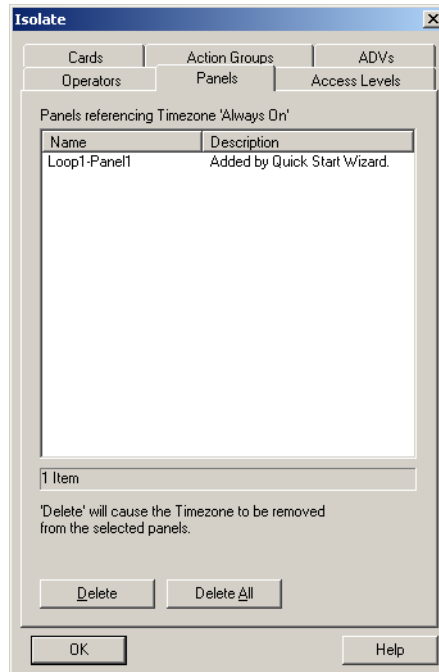
When attempting to delete an Operator Level that needs to be isolated, the following prompt is displayed:



Click **OK** to return to the Operator Level list and isolate the level.

### Viewing and Reassigning Operators Assigned to an Operator Level

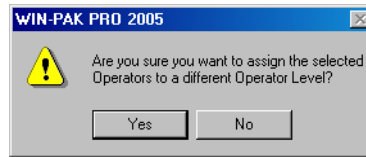
- 1 Select the Operator Level you wish to isolate from the Operator Level database window.
- 2 Click **Isolate**. The Isolate window is displayed (next illustration), containing a list of all operators assigned to the selected operator level.



- 3 Highlight the operator(s) you wish to reassign.

**NOTE:** Select multiple, contiguous users by holding down the **Shift** key while clicking on the first and last operator to be selected. Select **multiple, noncontiguous users** by holding down the **Ctrl** key and clicking on each operator.

- 4 Use the drop-down list at the bottom of the window to select the Operator Level to which you wish to reassign the selected operator(s). Click **Reassign**. A confirmation screen appears:



- 5 Click **Yes** to reassign operator(s) or **No** to abort the operation.

---

**NOTE:** To reassign all the operators in an Operator Level, click **Reassign All** instead of **Reassign**.

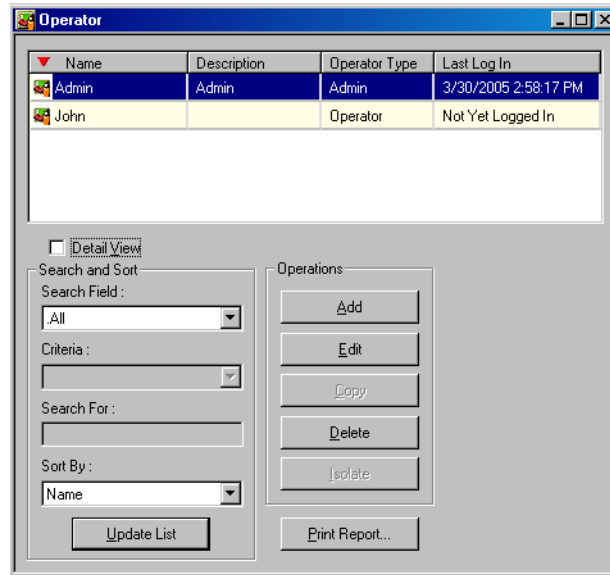
---

- 6 When finished, click **OK** to close the Isolate window.
- 7 Highlight the operator level in the database list and click **Delete**.

### Operator Database

The Operator Database contains information on all WIN-PAK operators. Operators can view and/or change various parts of the WIN-PAK System, based on their operator level and the rights assigned to that level.

Existing Operators are displayed in the Operator database list, accessed via the Operator option on the System menu.



If the Detail View check box is selected, the Detail View Operator window is also displayed.

Clicking either the Add or Edit button activates the Detail View Operator window, allowing information to be added or edited.

### Searching and Sorting the Operator Database List

The Operator list can be sorted by Operator Description, Last Log In, Name, or Operator Type using the Search and Sort features.

#### Search Field

Define your search using the following options found in the Search Field drop-down list:

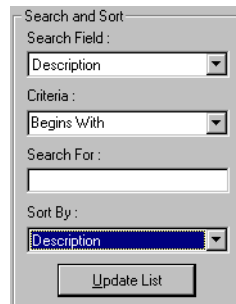
**All:** Shows every operator in the system.

**Description:** As written in the description field within each operator record.

**Last Log In:** The last recorded time the operator logged into the system.

**Name:** The operator name, which does not necessarily correspond to a card holder name.

**Operator Type:** Select either operator or admin.

A screenshot of a 'Search and Sort' dialog box. It contains a 'Search Field' dropdown menu with 'Description' selected. Below it is a 'Criteria' dropdown menu with 'Begins With' selected. There is a 'Search For' text input field. Below that is a 'Sort By' dropdown menu with 'Description' selected. At the bottom is an 'Update List' button.

### Search Field

Define your search using the following options found in the Search Field drop-down list.

**All:** Shows every operator in the system.

**Description:** As written in the description field within each operator record.

**Last Log In:** The last recorded time the operator logged into the system.

**Name:** The operator name, which does not necessarily correspond to a card holder name.

**Operator Type:** Select either operator or admin.

### Criteria

If any Search Field other than All is being used, you must select one of the following by which to define the search Criteria:

**Begins With:** Select this criteria if you know the first letter(s) or number(s) of the field on which you are searching.

**Equals:** Select Equals when searching for an exact match.

**Greater Than:** Use this criteria when you are searching for a range or group, and need to narrow the search in ascending order. Refer to the following “Search For” section.

**Less Than:** Select this criteria if you are searching for a range or group, and need to narrow the search in descending order. Refer to the following “Search For” section.

### **Search For**

When using the Begins With criteria, enter the first element of the item for which you are searching in the **Search For** field.

When using the Greater Than criteria, enter the first element of the range for which you are searching in the **Search For** field.

For example, to search for every operator whose name begins with any letter in the range M - Z, enter "M" in the Search For field. The search will return every operator whose name begins with any letter from M through Z. Greater Than searches are sorted in ascending order.

Less Than searches work in the same manner as Greater Than searches, except in the reverse order

For example, to search for every operator whose name begins with any letter in the range A - L, enter "L" in the Search For field. The search returns every operator whose name begins with any letter between L and A.

### **Sort By**

Select one of the Sort By options to determine how the list of operators should be organized when the search is complete.

### Searching by Last Log in

To search for operators by a Last Log in date or range:

- 1 Select **Last Log in** as the Search Field.

Search and Sort

Search Field :  
Last Log In

Criteria :  
On

Search For :  
3/30/2005

Sort By :  
Last Log In

Update List

- 2 Select **Before**, **After**, or **On** as the Criteria.
- 3 Click the **Search for** button. The Select Date calendar window is displayed:

Select Date

March 2005

Su	Mo	Tu	We	Th	Fr	Sa
27	28	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

OK  
Cancel  
Today

- 4 Select the date you want to use for this search, and click **OK**.
- 5 On returning to the Operator window, click **Update List**. The Operators matching the criteria are displayed in the list.

---

**NOTE:** To identify operators who have “Not Yet Logged In”, select **Search Field All** and **Sort by Last Log In**.

---

### Adding Operators

Click the **Add** button on the main Operator database window to make additions to the Operator database. The Operator Record window appears, with tabs allowing you to configure the information specifically for this operator.

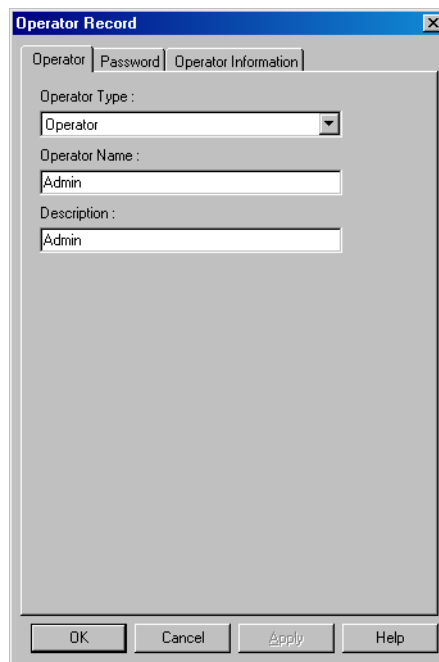
---

**NOTE:** Clicking the OK button saves the data entered, and deactivates the Operator Record window. The Apply button saves the data but keeps the window active.

---

### Operator Type Information

Use the Operator tab of the Operator Record window to set the operator type, name and description.



The screenshot shows the 'Operator Record' dialog box with the 'Operator Information' tab selected. The dialog has three tabs: 'Operator', 'Password', and 'Operator Information'. The 'Operator Information' tab contains the following fields:

- Operator Type :** A dropdown menu with 'Operator' selected.
- Operator Name :** A text box containing 'Admin'.
- Description :** A text box containing 'Admin'.

At the bottom of the dialog are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

- 1 Use the **Operator Type** list to select a type:  
**Operator:** Assigned an operator level.



**Admin:** Has global rights. May view, edit and delete any and every part of the system. Does not need to be assigned an operator level.

- 2 Enter an **Operator Name**. This is a required field and can be up to 30 characters in length.
- 3 If desired, enter a **Description** for the operator (up to 60 characters).

### Setting Operator Passwords

Operator passwords are set on the Password tab of the Operator Record.

The image shows a screenshot of a software window titled "Operator Record". It has three tabs: "Operator", "Password", and "Operator Information". The "Password" tab is currently selected. Inside the window, there is a label "Type in a new password and confirm it". Below this label are two text input fields. The first field is labeled "New Password:" and the second is labeled "Confirm New Password:". Both fields contain a series of asterisks to mask the input. At the bottom of the window, there are four buttons: "OK", "Cancel", "Apply", and "Help".

- 1 Enter the operator's **New Password**.  
Passwords can be up to 20 alphanumeric characters in length and are case sensitive.
- 2 Re-enter the password in the **Confirm New Password** field.

### Working with Passwords

A good strategy for choosing a password that is both easy to remember, but hard to decode, is to pick a simple phrase preceded or followed by one or more numbers. Enter it without spaces and capitalize each word. Such a password cannot be easily decoded either by a random number generator or by a dictionary decoder.

For the greatest security, use a combination of both letters and numbers. Avoid familiar terms such as your company name, initials, birth dates, etc.

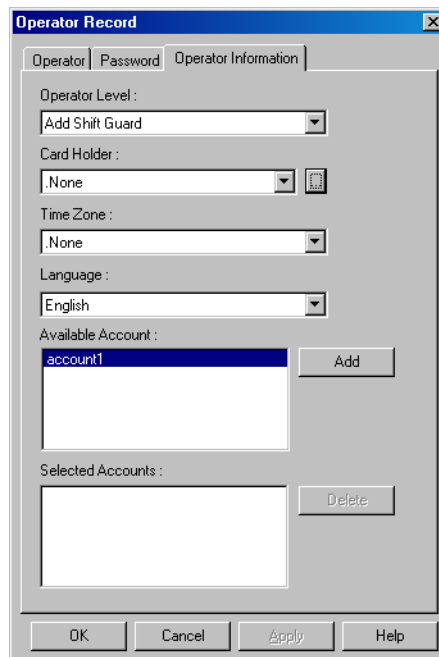
---

**!WARNING!** Passwords are case sensitive. When choosing a password, remember whether the letters are capitalized or not.

---

### Operator Information

Use the Operator Information tab of the Operator Record window to set more specific details for this particular operator.



The screenshot shows the 'Operator Record' window with the 'Operator Information' tab selected. The window contains several fields and buttons:

- Operator Level:** A dropdown menu with 'Add Shift Guard' selected.
- Card Holder:** A dropdown menu with 'None' selected, and a small 'PIN' button to its right.
- Time Zone:** A dropdown menu with 'None' selected.
- Language:** A dropdown menu with 'English' selected.
- Available Account:** A list box containing 'account1', with an 'Add' button to its right.
- Selected Accounts:** An empty list box, with a 'Delete' button to its right.

At the bottom of the window are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

- 1 Use the **Operator Level** list to associate an Operator Level with this operator.
- 2 If the operator is also a Card Holder, use the list (or browse button) to locate them and add them to the Operator Information window.

---

**NOTE:** Operators do not necessarily have to be card holders. For example, an operator can simply be Guard.

---

- 3 Indicate the **Time Zone** during which the operator will be able to log on to the system.

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**NOTE:** If no time zone is assigned to an operator, there is no time restriction on his/her log-in rights.

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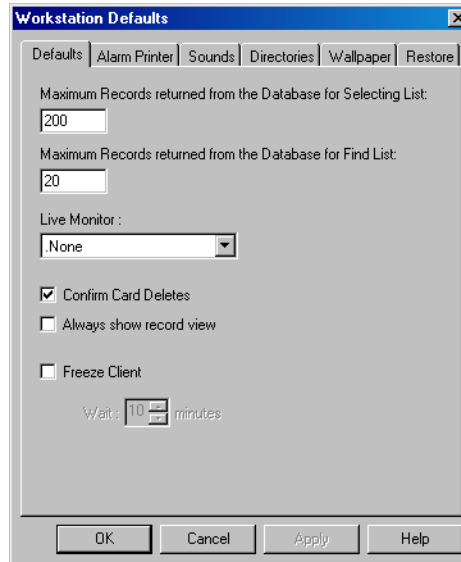
- 4 If necessary make an adjustment to the operator's **Language**.
- 5 Use the Account area of the window to indicate the account (or accounts) to which the operator should have access. WIN-PAK allows only one account.

Highlight an **Available Account** and click the **Add** button to transfer the account to the **Selected Accounts**.

Use the **Delete** button to move accounts from Selected Accounts to Available Accounts.

## Workstation Defaults

Selecting Workstation Defaults from the WIN-PAK System menu allows you to change workstation settings, including settings for the alarm printer, search results lists, system sounds, even the wallpaper used for the user interface.



Use the **Defaults** tab to set the following:

**Maximum Records returned from the Database for Selecting List:** This is the number of records retrieved from a database for display in selection lists. The default for this field is 200. A range from 20 to 2000 can be specified.

**Maximum Records returned from the Database for Find List:** The number of records retrieved from a database when a "Find" is conducted. The default for this field is 20. A range from 1 to 1000 can be specified.

---

**Record Retrieval and Performance**

Maximum Record settings can be used to adjust performance. For example, if a small number of records is retrieved at one time, the wait time is quite short. However, if a large number of records is selected, as you scroll through the list of records, you may have to wait again as the next group of records is retrieved. A small number of records means the result is returned quicker but the records must be retrieved more often for longer displays. The default of twenty (20) for Find lists has been selected as a general optimum value but that can change depending on the types of database searches and the speed of the computer being used.

**Live Monitor:** Use the list of defined CCTV monitors to select the monitor output to be connected to the video capture card, allowing the video signal to be displayed when a live monitor view is selected.

**Confirm Card Deletes:** If this option is selected, you are prompted to confirm a card deletion before it is removed from the database.

**Always Show Record View:** This check box, when selected, opens the record [or detail] view whenever a database window is displayed.

**Freeze Client/Wait \_\_ Minutes:** Freezes access to the Client Workstation after a set period [from 1 to 60 minutes] of operator inactivity. The operator is required to log back into the system when frozen out. When selected, the Default setting is 10 minutes.

**Alarm Printer**

Use the **Alarm Printer** tab of the Workstation Defaults window to set parameters for printing alarms.

---

**NOTE:** When printing to a port, do not use the same rinter for alarms and reports. Since alarm messages bypass the spooling queues, alarm messages may appear in the middle of a report.

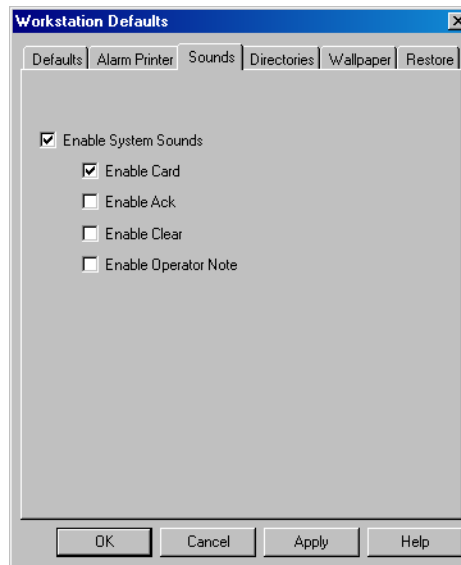
---

**Port Name:** Select the port to which your printer is connected.

**Lines per page:** Indicate the number of lines per page. 66 is the default.

### Sounds

Use the **Sounds** tab to indicate instances when you may want sound files to run when an alarm is triggered.

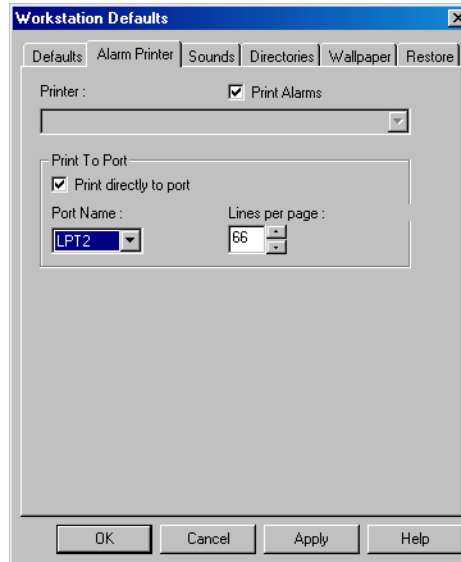


Click the **Enable System Sounds** check box to enable sound files triggered by system events. Select each of the options where you want sound files to be activated.

---

**NOTE:** The sound card must be present in the operating system to enable the sounds option.

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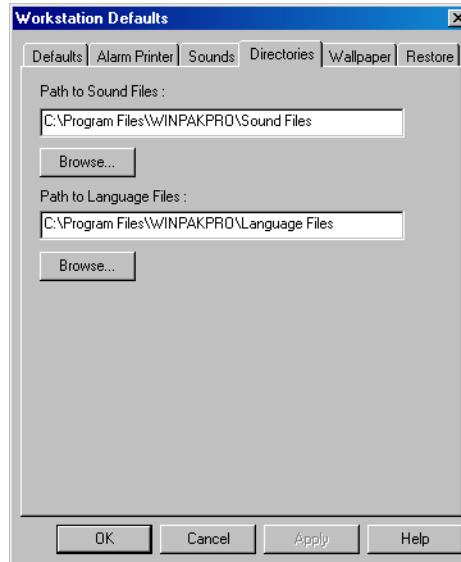
**Print Alarms:** Select this option to enable the sending of alarms to a printer.

**Printer:** Any printer installed on your operating system can be selected from the Printer drop-down list. Alarms print one page at a time.

**Print directly to port:** Select this check box to print events in real time, one event at a time. You must use a dot matrix printer to view the printed event immediately. If you choose to use a laser printer, the alarms will print one page at a time (a page being defined by the number of lines in the **Lines Per Page** field).

### Directories

The Directories tab of the Workstation Defaults window is used to indicate the path to the Sound and Language files.



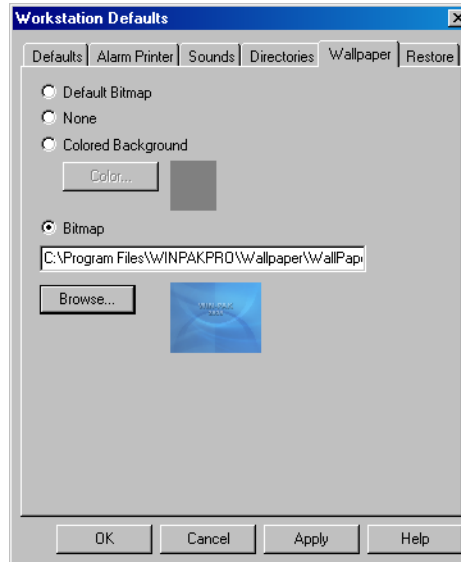
**Path to Sound Files:** The current path for sound files is displayed. Additional sound files can be copied into this folder. To select a new location for the sound files, type in the new path or click the **Browse** button and locate the desired directory. When the correct path is entered in this field, click **Apply** to save the new directory setting.

**Path to Language Files:** The current path for language files is displayed. Additional language files can be copied into this folder. To select a new location for the language files, type in the new path or click the **Browse** button and locate the desired directory. When the correct path is displayed in this field, click **Apply** to save the new directory setting.

### Wallpaper

Customize the wallpaper of the main WIN-PAK window, using options on the Wallpaper tab of the Workstation Defaults window.





**Default Bitmap:** Use the default bitmap loaded in the system as the wallpaper.

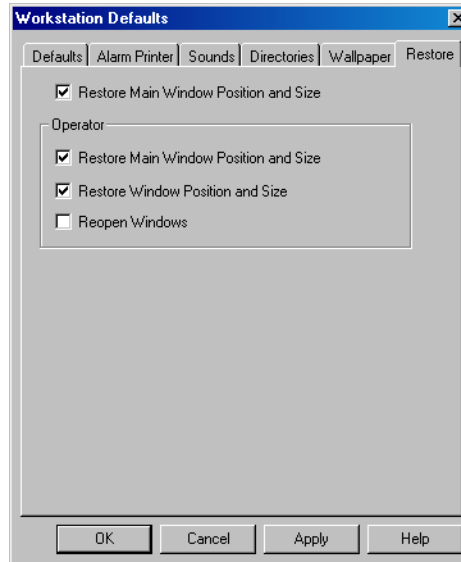
**None:** Applies a gray background to the WIN-PAK desktop.

**Colored Background:** Click the **Color** button and choose from a selection of standard colors, or create a custom color of your choice. Click **OK** to return to the Wallpaper tab. Your color selection is displayed on the tab.

**Bitmap:** Use a bitmap of your choice. Type in the path and file name of the bitmap or click the **Browse** button and select the desired bitmap. Click **Open** to return to the Wallpaper tab and click **Apply** to save the new settings.

### Restore

Restore options relate to the positioning and opening of windows on the WIN-PAK desktop.



**Restore Main Window Position and Size:** Saves the size and position of the main User Interface window as it appears prior to a user login.

#### Operator

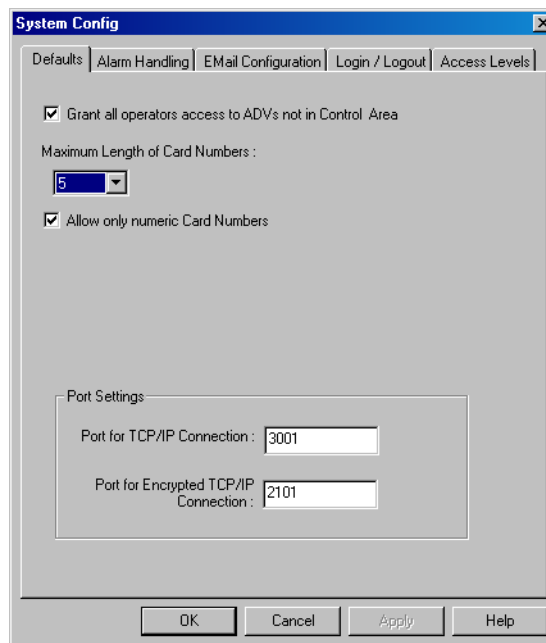
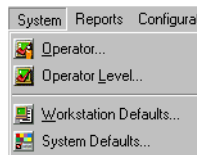
**Restore Main Window Position and Size:** Saves the size and position settings of the main WIN-PAK window for the operator.

**Restore Window Position and Size:** Saves each operator's settings for the secondary windows (e.g. main database windows, floor plan views, and control maps). At login, secondary windows return to the size and position set when a given operator logged out.

**Reopen Windows:** At logon, Reopen Windows reopens any windows that were open when the operator last logged out.

## System Defaults

Selecting System Defaults from the WIN-PAK System menu allows you to change certain system settings relating to ADV access, card number length, alarm handling, Email configuration, and type of access levels.



Use the **Defaults** tab to set the following defaults:

**Grant all operators access to ADVs not in Control Tree:** All ADVs that are not added to the Control Areas are available to all operators.

Normally, only ADVs that are added to Control Areas and configured for an operator's level are available. This could cause a problem if an operator creates an ADV. An administrator would be required to add the ADV to the Control Areas, and provide access to the new ADV in the operator level.

Selecting the **Grant all operators...** option means an operator can create an ADV and then use it in the system. Once an ADV is added to the Control Areas, those settings override the global access.

**Maximum Length of Card Numbers:** Use the drop-down list to indicate if the maximum length of card numbers is 5, 12, or 16. This setting determines the largest card number handled by the software. The setting does not affect the control panel.

Allow only numeric Card Numbers: Prevents alpha characters from being entered into the card number field of the card database.

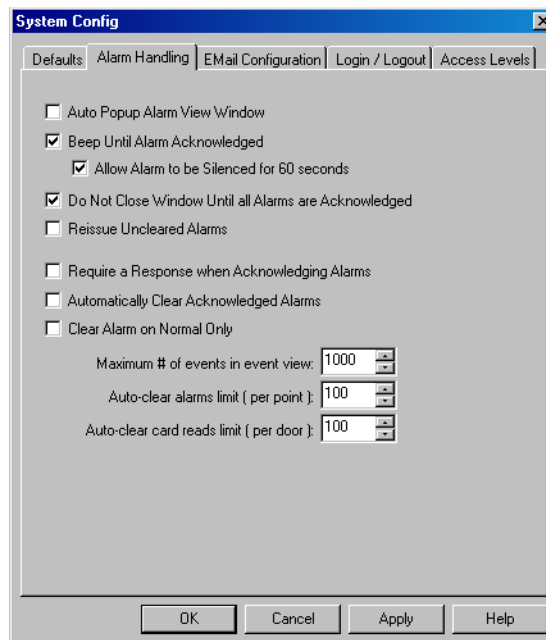
### **Port Settings**

**Port for TCP/IP Connection:** Enter the port number for TCP/IP Connection on which the Communication Server will talk to the TCP/IP Panles.

**Port for Encrypted TCP/IP Connection:** Enter the encrypted port number for Encrypted TCP/IP Connection on which the Communication Server will talk to the TCP/IP Panles.

### **Alarm Handling**

The Alarm Handling tab of the System Defaults window is used to indicate how alarms should be handled within the system.



**Auto Popup Alarm View Window:** Allows the Alarm View to open or restore view [if minimized] when a new alarm is received and displayed in the Alarm View. The Digital Video Popup window will open if an event has a digital video camera associated to it.

**Beep Until Alarm Acknowledged:** This setting ensures that an alarm will beep until it is acknowledged.

The beep is emitted from the PC's speaker and is not a sound file. Therefore, it works independently from the computer's multimedia, audio settings and independently from WIN-PAK workstation sound settings.

**Allow Alarm to be Silenced for 60 seconds:** Used in conjunction with the "Beep until..." option, this setting allows the operator to silence a beeping alarm for sixty seconds, without actually acknowledging the alarm.

**Do Not Close Window Until all Alarms are Acknowledged:** Requires the operator to acknowledge all alarms before closing the Alarm View window.

**Reissue Uncleared Alarms:** Selected alarms that are acknowledged but not cleared will be reissued. Example: An alarm that is first received appears in the top pane of the Alarm Monitor view. When the alarm is acknowledged it will be sent to the lower pane of the Alarm Monitor view and is left uncleared. If that uncleared alarm goes to the Normal condition, it remains in the lower pane. If the alarm returns to the Alarm state, it will be reissued, that is, it will jump to the top pane, requiring the operator to acknowledge this new alarm.

---

**Note:** Administrators are not affected by this option.

---

**Require a Response when Acknowledging Alarms:** Requires the operator to add a note before acknowledging an alarm.

**Automatically Clear Acknowledged Alarms:** Automatically clears alarms when they are acknowledged.

**Clear Alarm on Normal Only:** Alarms can only be cleared when the source of the alarm returns to a normal state.

---

**Note:** Administrators are not affected by this option.

---

**Maximum # of events in view:** The default setting allows for 1,000 of the most recent events to be displayed in the event viewer. Once the limit is achieved, the oldest event is discarded as the new event is received. A range of 10 to 32,000 events can be set.

---

**NOTE:** To optimize system performance, minimize the number of events being viewed and limits being set.

---

**Auto-clear alarm limit (per point):** The default setting allows for 100 of the most recent alarm events per point to be displayed in the Alarm View. Once the limit is achieved, the oldest alarm event is automatically cleared as the new alarm event is received. An alarm acknowledgement can only be performed by the operator and is logged into the history file accordingly. The Auto-clear is logged into the history using the operator that is logged in at the time. A range of 10 to 500 alarm events can be set in situations where no user is logged in.

---

**NOTE:** The alarm view "Cnt" (alarm count) will display the entire count independently of the limit setting. The count will be zeroed out when the operator clears the alarm.

---

**Auto-clear card reads limit (per door):** The default setting allows for 100 of the most recent card events per door to be displayed in the alarm view. Once the limit is achieved, the oldest card event is automatically acknowledged and cleared as the new card event is received. The automatic acknowledgement and clearing of the card event is logged into the history using no operator name. Only when the operator manually acknowledges or clears the card event is the operator name logged into the history with the action. A range of 10 to 500 card events can be set.

---

**NOTE:** The Reader/Point Cnt will only show a value of one for each card read. The Auto-clear limit will clear from the Alarm View card reads from the Reader that have exceeded the card read limit.

---

## Email Configuration

The EMail Configuration tab of the System Defaults window is used to configure mails for reporting alarms to the selected users. On this tab, you can specify the sender authentication, the mail server information, and the email IDs.

**Authentication Method:** Use the drop-down list to select the required authentication method.

**Username:** Enter user name for email authentication.

**Password:** Enter user password for email authentication.

**HostName:** Enter the mail server name or IP address.

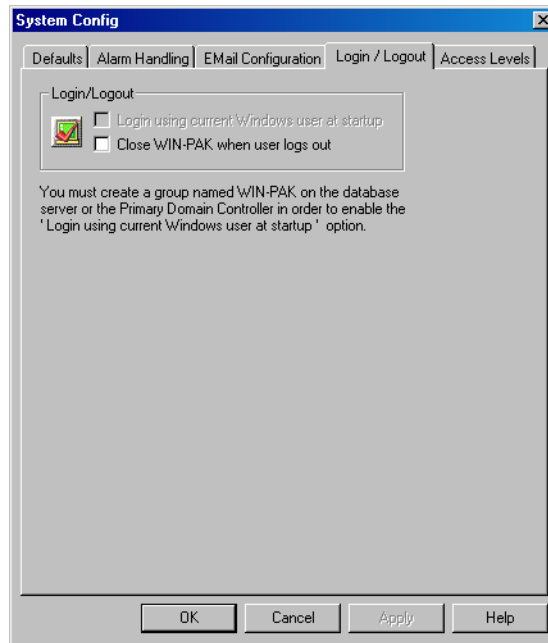
**Port Number:** Enter the port number for the main server.

**Encoding:** Select the encoding format from the drop-down list.

**Configure Email IDs:** Click this button to configure the desired mail ID details. On the Configuration-Email Ids dialog, enter the source (sender) and destination (receiver) mail ID in the respective fields. Use CC or BCC field to copy mails to more users, if applicable. You can enter multiple mail IDs separated by semicolon.

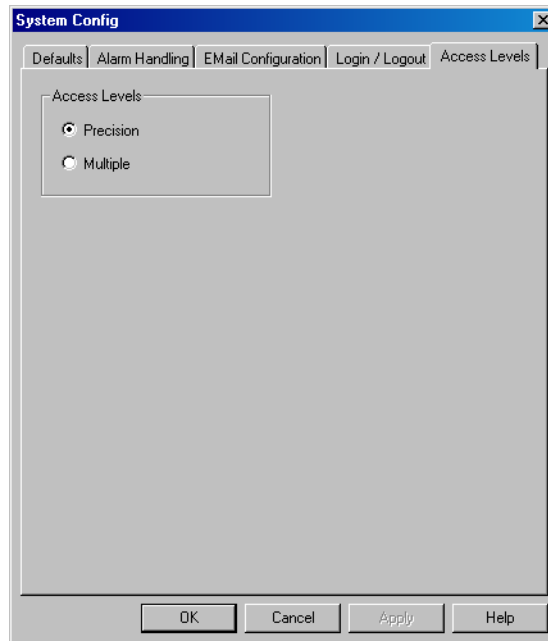


## Login/Logout



The Login/Logout tab of the System Defaults window is used to indicate if the user should be able to log in automatically to WIN-PAK at startup, and if WIN-PAK should be closed when the user logs out.

## Access Levels

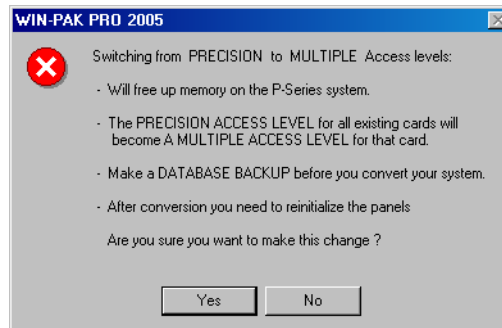


Indicate of the **Access Levels** within the system are **Precision** or **Multiple**.

**Precision Access Levels:** Only one access level can be assigned per card. Precision access levels take up more memory in P-Series.

**Multiple Access Levels:** Up to six access levels can be assigned per card.

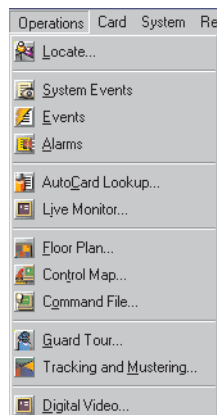
When switching from Multiple to Precision access levels, the following warning window is displayed.



## Operations

This Daily Operations section provides details on the features and functions you may use on a daily basis to monitor and maintain your access control system.

Most of the options covered here are available on WIN-PAK Operations menu.



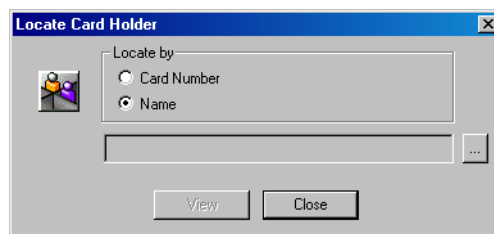
## Locate Card Holder




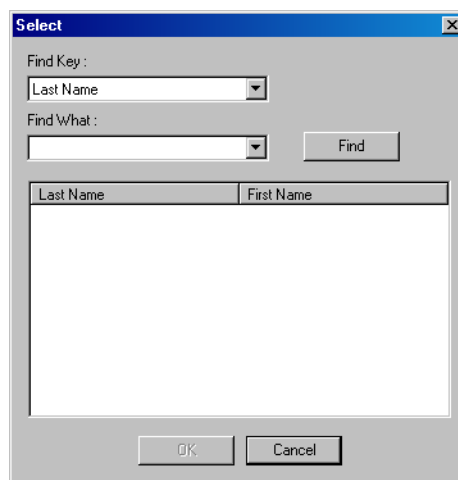
The Locate Card Holder function reports when and where a card was last used in the system.

### Locating a Card's Last Use

- 1 Select **Locate** from the Operations menu. The Locate dialog is displayed.



- 2 Indicate if you wish to search by **Card Number** or **Name** by selecting the appropriate radio button.
- 3 Click the **Browse**  button to open the Select dialog.



### Searching by Card Number

When searching by Card Number, it is not necessary to make a selection from the Find Key field [Card Number defaults into the field].

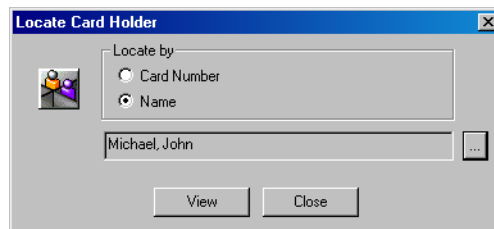
If the card number is known, enter it in the Find What field. If the card number is unknown, enter one or more of the beginning digits of the number in the Find What field, and click the **Find** button. A list of all cards matching the criteria is displayed.

### Searching by Name

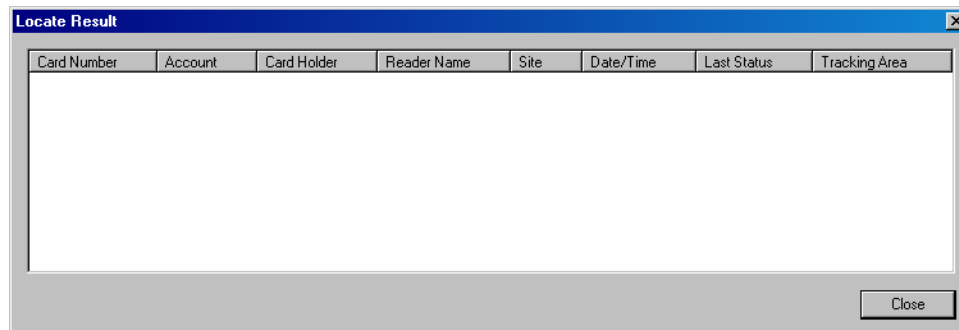
When searching by name, select either Last Name or First Name from the Find Key drop-down list.

Enter the name [if known] or one or more of the first few letters of the name in the Find What field, and click the **Find** button. A list of all card holders with names matching the criteria is returned.

Highlight the desired entry and click the **OK** button. You are returned to the Locate dialog, where the entry you selected is now displayed in the text field.



Click the **View** button to locate the card holder and view the results.

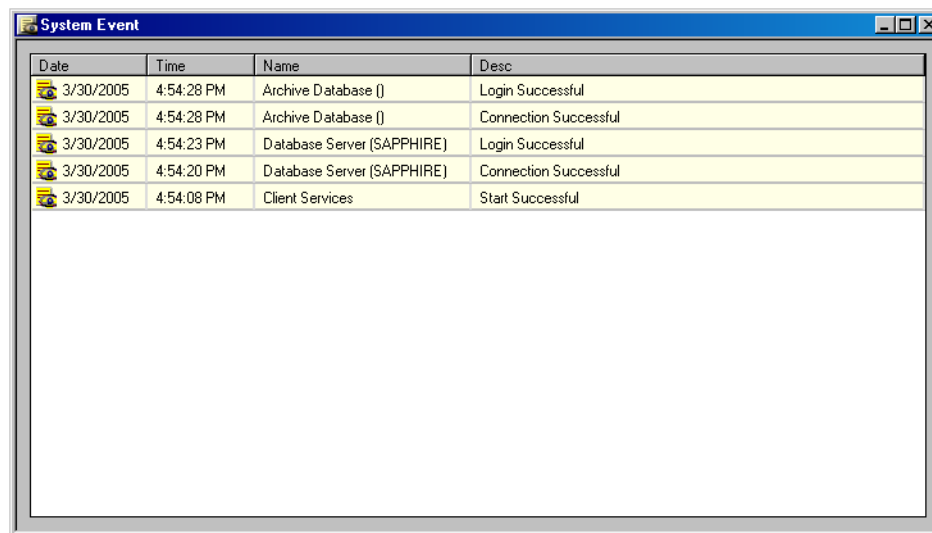


## System Events

The System Event window displays the name, time, and date of WIN-PAK System (software) activity. This includes a record of successful and unsuccessful server connections, logins, and server disconnections. If there is a problem communicating with a server, the information in the System Event view can help locate the source of the problem.

### Viewing System Events

Select **System Events** from the WIN-PAK Operations menu. The System Event window is displayed.



If desired, the System Event window can remain open and minimized during normal operations.

---

**NOTE:** System Events should not be confused with the Events view (also accessed from the Operations menu) which displays access control activity, including card reads, alarms, and operator activity such as the acknowledging and clearing of alarms.

---

## Event View



Event View displays a real-time record of access system events, including card reads, alarms, logins, and logouts.

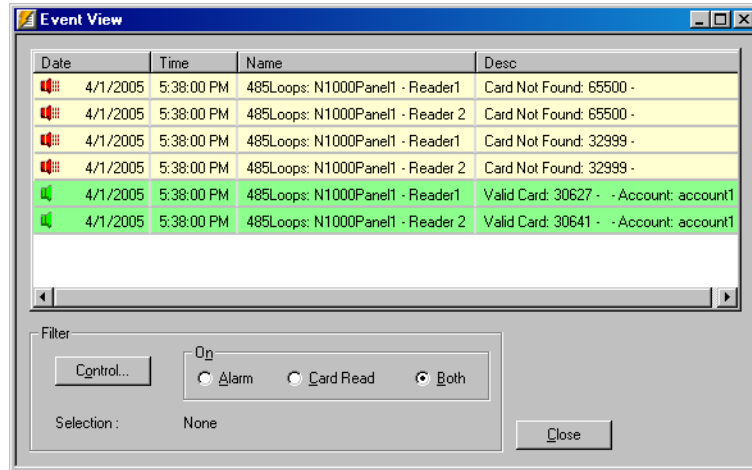
The Event View window has an event capacity as defined in the alarm handling section of the System Default menu. Once Event View reaches capacity, the oldest entries are replaced by newer ones.

The Event View window displays events that occur while it is open. The window can be opened and minimized during normal operations.

Events can be filtered to show only events from selected areas or devices.

### Opening Event View

Select **Events** from the WIN-PAK Operations menu. The Event View window is displayed.

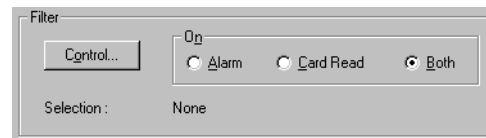


### Filtering Event Views

To view only selected events, the messages appearing in the Event View window can be filtered. Once these views are closed, the filter selections are cleared. To save the control filter selection, refer to the next section, "Linking Event View with a Floor Plan".

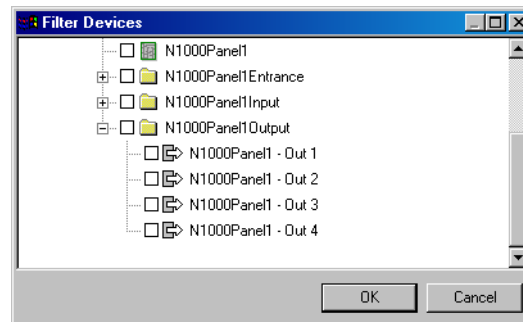
When a new Event View window is opened, the original default settings are restored [both alarms and card reads from all devices].

- 1 In the Filter area of the Event View window, select **Alarm**, **Card Read**, or **Both**, depending on which messages you want to view.



- 2 To further narrow the information coming in, click the **Control** button. The Filter Devices window is displayed.





- 3 Expand the tree by clicking the plus signs.
- 4 Select the branch or individual devices you want to monitor. To view events from a particular branch, right-click on it and choose "Select to include all devices in this area."

---

**NOTE:** To view events from a particular device, right click on it and choose **Invert Selection Status**.

---

Now only messages from the selected devices are sent to the Event View. You can choose as many or as few devices as you wish.

### Linking Event View with a Floor Plan

While Event View filter selections cannot be saved on the main Event View window, you can create an Event View link (with the filter selections you need) on a floor plan definition.

With a floor plan definition open, create an Event View link with the filter selections you want. Refer to the "Floor Plan" section of the chapter 4 for details on adding an Event View link to a floor plan.

When you open an Event View window from the floor plan link, the filter properties you selected are applied. These filter settings cannot be changed from the Event View window, only from the floor plan definition

## Alarm View

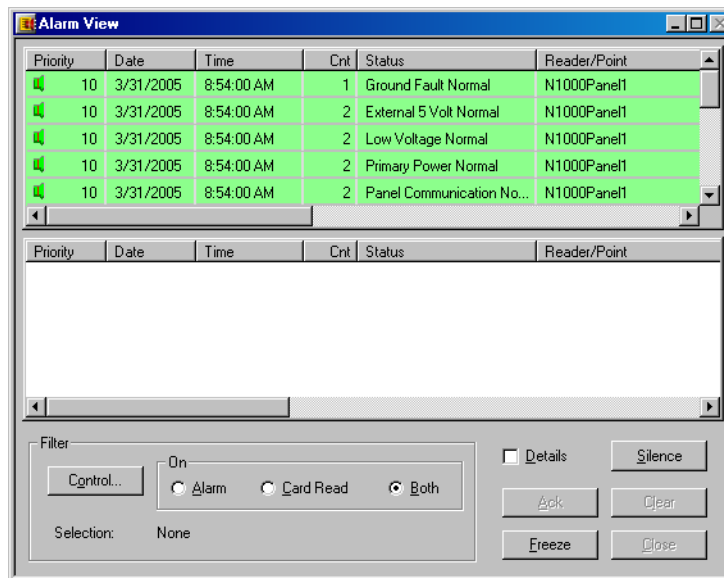


Alarm View provides a monitoring tool to be used in addition to the Floor Plan View and Control View. Alarm View displays alarm and reader activity as it happens.

The Alarm View window is divided into two horizontal panes. Incoming alarms are displayed in the upper pane according to priority and time. The highest priority transactions are at the top of the list. Transactions with the same priority are shown with the most recent first.

The color of incoming messages indicates the type of event.

- Red indicates an Alarm
- Green indicates Normal
- Yellow indicates Trouble



**NOTE:** An N-1000/PW-2000 panel can only detect a trouble condition when an AEP-5 board is used.

Once a point goes into alarm or trouble, the color will not return to green. For example, if the first message from a point or card is Normal, subsequent Alarm or Trouble conditions change the alarm to red or yellow.

After that, even if the point returns to a Normal state, the message stays red (or alternates between yellow and red). It does not return to green on a Normal state.

The Count column on the Alarm View window shows the number of times a point changes state. Once this message is acknowledged, new Normal messages are displayed in green.

### Using the Alarm View Command Buttons

A set of buttons on the Alarm View window allow you to easily handle basic, routine alarms tasks.

**Acknowledge (Ack):** To acknowledge an alarm, select it from the list of incoming alarms and click the **Ack** button. When the alarm is acknowledged, it moves to the list in the lower pane of the Alarm View window, unless the auto-clear option is selected from System Defaults. The background color of the transaction is now grey and the color of the alarm text changes as well: green for normal, yellow for trouble, and red for alarm. This color changes with each new condition. Transactions remain in the Acknowledged Alarm section of the window until they are cleared.

**Silence:** Allows operator to silence the alarm for 60 seconds without actually acknowledging it. This feature is enabled in the Alarms Handling section of the System Default Configuration.

**Clear:** To clear one or more transactions, select them from the list and click the **Clear** button.

**Freeze:** To temporarily stop the display of incoming messages, click the **Freeze** button. When the Freeze button is clicked, the button text changes to **Release**. Freezing stops the screen from scrolling as new information appears. Click the **Release** button to return the Alarm View to its normal functions.

**Close:** To exit Alarm View, click the **Close** button.

---

**NOTE:** When acknowledging or clearing alarms, you can select multiple, contiguous alarms by holding down the **SHIFT** key on your keyboard and clicking the first and last alarms in the range. Select multiple, noncontiguous items in the list by holding down the **CTRL** (control) key while selecting each individual alarm.

---

### Alarm View Right-Click Menus

Right-click on any event in the upper pane of the Alarm View window, and a control menu is made available. The list of available commands depends on the type of alarm selected.

For example, when working with inputs, doors, readers, and panels, you can acknowledge or clear an alarm, open a default floor plan, or add a note. When working with a door alarm there are multiple ways to lock and unlock the door or restore time zone control to the door.

### Filtering Alarm View

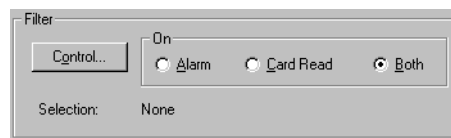
It is often impossible to monitor all card reads or alarms from one view, therefore WIN-PAK has several ways to filter events that appear in Alarm View. You can select either card reads, alarms, or both.

Additionally, by appropriately defining the Control Area, you can select which devices are monitored in a given instance of the Alarm View.

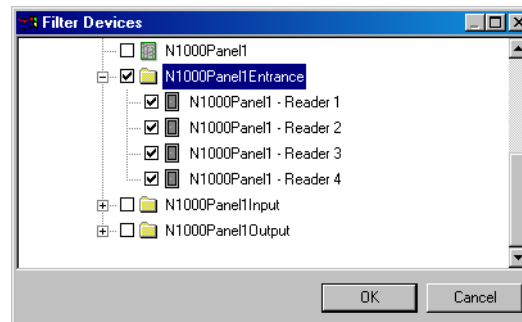
Multiple Alarm windows can be open at one time, each with its own filter selections. Once these views are closed, the filter selections are cleared. To save the control filter selection, refer to the next section, "Linking Alarm View with a Floor Plan".

When a new Alarm View window is opened, the default Filter Control settings [both alarms and card reads from all devices] are restored with no restrictions.

- 1 In the Filters area of the Alarm View window select **Alarm**, **Card Read**, or **Both**, depending on which messages you want displayed.



- 2 To further narrow the information coming to this Alarm View, click the **Control** button. The Filter Devices window is displayed.



- 3 Expand the tree by clicking on the plus signs.

- 4 Select the branch or individual devices you want to monitor. To view alarms from a particular branch, right-click on it and choose "Select to include all devices in this area."

At this point, only events from the selected devices are sent to the Alarm View. You can choose as many or as few devices as you wish. Filtering could be very useful for example, if a particular guard station needs to monitor the loading dock. An Alarm View can be defined that only receives messages from the loading dock doors.

More than one Alarm View can be defined and open at the same time. Thus, the same guard station could have an Alarm View monitoring the loading dock doors and another showing card reads and alarms from the computer room.

### **Linking Alarm View with a Floor Plan**

While Alarm View filter selections cannot be saved on the main Alarm View window, you can create an Alarm View link (with the filter selections you need) on a floor plan definition.

With a floor plan definition open, create an Alarm View link with the filter selections desired. Refer to the "Floor Plans" section of the "Configuration" chapter for details on adding an Alarm View link to a floor plan.

When you open an Alarm View window from the floor plan link, the filter properties you selected are applied. These filter settings cannot be changed from the Alarm View window, only from the floor plan definition.

### Alarm View Details

Select the **Details** check box in the Alarm View window to open a detailed view of any alarm selected from the list.

Included in the Alarm Details are the name of the reader, input or output point, the date and time of the alarm, and the state of the reader or point. The Alarm Details window also indicates if the alarm has been acknowledged or cleared, and the name of the operator.

The screenshot shows a window titled "Alarm Details" with a close button (X) in the top right corner. Inside the window, there is a label "Reader/Point :" followed by a text box containing "N1000Panel1 - Reader 3". Below this is a table with three columns: "Date", "Time", and "State". The table contains two rows of data. Below the table is a label "Operator Name :" followed by a text box. Underneath that is a label "Message :" followed by a text area containing the message "The door is in the alarm mode due to invalid entry.". At the bottom of the window, there are four buttons: "Ack", "Clear", "Add Note", and "Close".

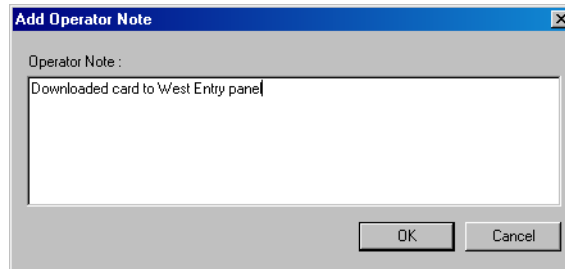
Date	Time	State
3/31/2005	8:54:00 AM	Door Forced Open
3/31/2005	8:54:00 AM	Door Forced Open

The operator can acknowledge the selected alarm from the Alarm Details window by clicking the Ack button, and can clear the alarm by selecting it and clicking Clear. A note can be added to an alarm before it is cleared.

The message box displays any notes added by the operator plus messages associated with the alarm state.

### Adding a Note to an Alarm

- 1 Select the alarm from the Alarm Details list, and click the **Add Note** button. The Add Operator Note dialog is displayed:



- 2 Type a message in the Operator Note, free-form text area.
- 3 Click **OK**. These notes are included in history and can be printed with the History report.

---

**NOTE:** You can also add a note by right-clicking on the alarm in the main Alarm View window, and selecting Add Note from the subsequent control menu.

---

### AutoCard Lookup

The AutoCard Lookup feature of WIN-PAK automatically looks up cards from designated readers or card reads with a status priority higher than a designated threshold. When activated, AutoCard Lookup opens a lookup window that can be left open while other views are monitored. The window can be resized by positioning the mouse pointer over the window borders. When the pointer changes to double arrows, click and drag the mouse to resize the window.

If the lookup screen is minimized and a card read is received, the AutoCard Lookup window automatically pops up.



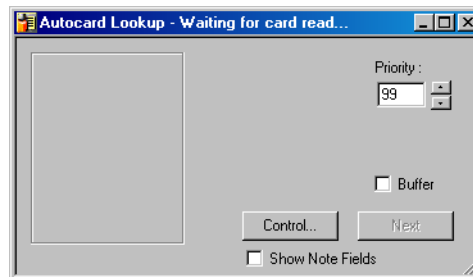
If a picture is on file, the lookup window displays the card holder picture, including the card holder name, card number, time, date, reader name, and the status of the card read. If the Note Fields check box is selected, certain note field information is also displayed. Note fields are selected in the Configure AutoCard Lookup utility in the Configuration menu.

The lookup feature is filtered both by priority of card read event and by selecting readers on the control map. Using the Control Area filter, you can choose to monitor as many or as few devices as you wish. The filter can be very useful for example, if a particular guard station is monitoring the computer room. An AutoCard Lookup view can be defined which receives events only from the computer room readers.

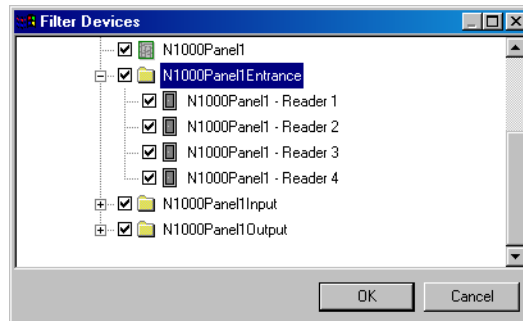
The Buffer check box on the AutoCard Lookup window freezes the current card on the lookup screen, while saving any subsequent card reads in memory. Deselecting the Buffer check box removes all stored information and continues with the next card presented.

### Activating AutoCard Lookup

- 1 Select **AutoCard Lookup** from the WIN-PAK Operations menu. The AutoCard Lookup-Waiting for card read... window is displayed.



- 2 Set the **Priority** threshold. All reads that have a higher priority [lower number] than this threshold, will display card information on the lookup window. The status of a given card read event is set in the reader's Action Group.
- 3 To further narrow the number of card reads which produce a card lookup, click the **Control** button to open the Filter Devices window.



- 4 Expand the tree by clicking on the plus signs.
- 5 Right-click the readers you want to monitor and select "Invert Selection Status."
- 6 Click **OK** to return to the Waiting for Card Read... window.



As a card meeting the specifications you have set is presented at a reader, the AutoCard Lookup window displays the appropriate information.

- 7 Select the **Buffer** check box to freeze the current card on the lookup screen, while saving any subsequent card reads in memory.
- 8 Click the **Next** button to display the next card read results, while remaining in the buffer mode. Deselecting the Buffer check box removes all stored information and continues with the next card presented.

---

**NOTE:** Multiple lookup windows can be open at the same time, and each can have its own filter selections.

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## Live Monitor View

The Live Monitor view displays information from a selected CCTV camera in real-time. Controls to adjust the Iris, Zoom, and Focus are located to the right of the viewing screen, along with controls to pan and tilt the camera. Individual frames from the video can be captured and saved for later viewing.

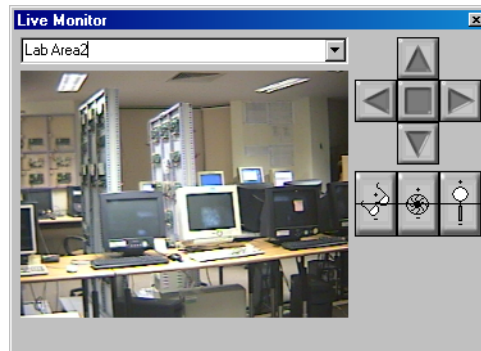
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**NOTE:** For Live Monitor viewing, your PC must be equipped with a video capture card. Connect the CCTV Switcher to the video capture card. Cameras and monitors must be properly defined on the Device Map. Select the CCTV Switcher monitor for Live Monitor view in Workstation Defaults (System menu, **Workstation Defaults** option, **Defaults** tab). Select the desired monitor from the **Live Monitor** list.

---

## Opening Live Monitor View

- 1 Select **Live Monitor** from the WIN-PAK Operations menu. The Live Monitor window opens on your desktop.



- 2 Drag the Live Monitor window to the desired location on your desktop, and enlarge or reduce it as desired, by dragging a corner of the window.
- 3 Click the arrow to the right of the text field at the top of the window to open a drop-down list of cameras. Select the camera you want to view.

### Capturing a Frame from the Live Monitor View

Freeze a view by right-clicking anywhere in live view area, and select **Live**.

Right-click again and select **Save**. Select a path, enter a filename and click **Save**. The image is saved as a .jpg file.

### Controlling the Camera

As long as the switcher and cameras support focus, aperture adjustment, zoom, pan and tilt, and homing presets, these features can be controlled remotely from a WIN-PAK workstation.

Refer to the CCTV equipment manual to verify that title and time and date features are supported. If so, the title of the camera viewed on the appropriate monitor by right-clicking in the live view area, and selecting Send Camera Titles. This will display titles on the camera view being monitored.

The Time and Date can also be viewed on the screen by right-clicking in the live view area and selecting Send Time and Date.



### Adjusting Focus

Click and hold the upper half of the Focus In/Focus Out button to slowly focus on closer objects. Click and hold the lower half of the button to slowly focus on distant objects.



### Adjusting Aperture

Click and hold the top half of the Iris In/Iris Out button to slowly increase the aperture [opening] of the camera iris, allowing more light in. Click and hold the bottom half of the button to slowly decrease the aperture of the camera iris, letting in less light.



### Adjusting Zoom

Click and hold the upper half of the Zoom In/Zoom Out button to slowly zoom the camera in. Click and hold the lower half of the button to slowly zoom the camera out.



### Camera Pan and Tilt Control

The control arrows on the Live Monitor window pan the camera left and right, and tilt it up and down. Click and hold the camera control arrows to move the camera. The left arrow pans to the left. The right arrow pans to the right. The up arrow tilts the camera up, while the down arrow tilts the camera down. If the cursor is moved over the live viewing area, arrows appear. Clicking these cursor arrows has the same effect as the control arrow buttons.

### Setting Pan and Tilt Limits

Limits should be set on the panning and tilting actions of each camera. Limits ensure a camera does not tilt or pan to a point that is stressful on the hardware. Limits also keep the camera's view to that which is useful. The following steps demonstrate how to set the upward tilt limit for a camera. Repeat these steps for downward tilt, left pan, and right pan on each camera.

- 1 Use the up and down arrows to tilt the camera to the highest point needed.
- 2 Right-click on the up arrow and select **Set Limit** from the control menu displayed.

### Clearing Limits

To clear limits, right-click on the arrow with the limit you want to clear, and select **Clear Limit** from the control menu.



### Setting Home Position

A Home Position is the most utilized camera view. Home Position can be set for each camera so that it will return to its home position with the correct focus, aperture, and zoom settings when the Home button [located in the center of the pan/tilt arrows] is clicked. The Home button is a square button, located among the the pan/tilt arrows.

The following steps outline setting a home position:

- 1 Adjust the pan, tilt, and aperture settings for the view that you want to make your home position.
- 2 Right-click the **Home** button and click **Set Home**.

Now your camera will return to this view anytime you click the Home button.

## WIN-PAK CCTV Options

Brand	Switch	Camera Title	Time Date	Pan Tilt	Zoom	Iris	Pan Tilt Limit	Zoom Limit	Focus Limit	Iris Limit	Seek Home	Set Home	Select Monitor
Burle	x	x	x	x	x	x	o	o	o	o	x	x	o
Dedicated Micros	x	x	x	x	x	o	o	o	o	o	o	o	o
Geutebruk	x	o	x	x	x	x	o	o	o	o	x	x	o
Javelin	x	x	x	x	x	x	x	x	x	x	x	x	o
NCI CCTV	x	x	x	x	x	x	x	x	x	x	x	x	o
Panasonic	x	o	o	x	x	x	o	o	o	o	x	o	o
Pelco	x	o	o	x	x	x	o	o	o	o	x	x	x
Vicon	x	o	x	x	x	x	o	o	o	o	x	x	x

X = option is available and usable through WIN-PAK  
 O = option either not available or not supported by WIN-PAK

## Floor Plan View



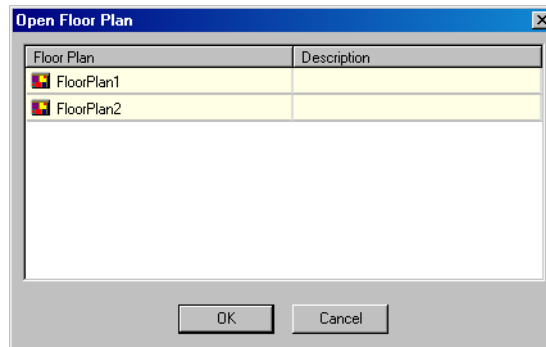
Floor plan views can be used to both monitor and control devices in the access control system. The design of your access control system dictates the size and layout of the floor plan views. Any given workstation can monitor one or more floor plans.

### Floor Plan Control Functions

Devices can be controlled from the floor plan view. Right-click on an ADV to open its control menu, then select a command. The commands available depend on the type of object selected.

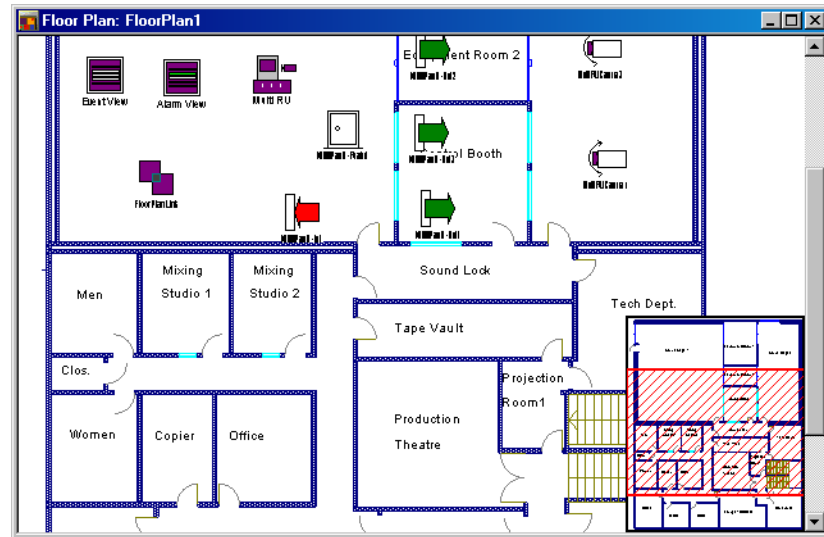
### Opening a Floor Plan View

Select **Floor Plan** from the WIN-PAK Operations menu.



When the Open Floorplan window is displayed, select a floor plan and click the **OK** button. The selected floor plan opens in a separate window (next illustration), identified by its title bar.





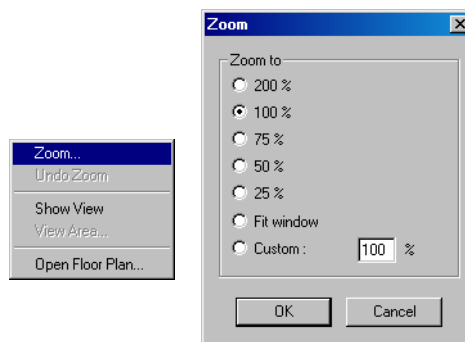
The window can be resized or repositioned to meet your needs. Resize the window by clicking and dragging on the window edge until it is the desired size. Reposition the window by clicking and holding in the title bar and dragging the window to the desired position.

## Changing the Floor Plan View

Several right-click (control) options allow you to change the floor plan view to best suit your needs.

### Zoom

Right-click in the floor plan view [but not on an ADV] and click **Zoom**.



Select a preset **Zoom to** option, or indicate a **Custom** percentage. The floor plan is automatically enlarged or reduced within the viewing window.

### Show View and View Area

When working with a large floor plan, you can right-click in the floor plan and select the **Show View** option.

A smaller window opens inside the floor plan view, showing the location of the enlarged detail on the total floor plan.

To adjust the size of the location detail area [in relation to the total floor plan view] select the **View Area** option from the right-click menu. The Change View Area dialog is displayed, allowing you to indicate what percentage of the Floor Plan View window should accommodate the location detail.



Following is a list of typical ADVs and their control functions.

<b>ADV</b>	<b>Control Functions</b>
Alarm View	Open
CCTV Switcher	Send Time & Date, Send Camera Titles, Camera to Monitor Switch, Acknowledge All Alarms, Clear All Alarms
Comm Server	Acknowledge All Alarms, Clear All Alarms
Command File Server	Run Command File
C-100 LocalConnection	Buffer All Panels, Unbuffer All Panels, Set Retry Count, Set Command Timeout, Acknowledge All Alarms, Clear All Alarms
C-100 RemoteConnection	Buffer All Panels, Unbuffer All Panels, Set Retry Count, Set Command Timeout, Acknowledge All Alarms, Clear All Alarms, Connect Remote, Disconnect Remote
Doors	Unlock, Lock, Shunt, Unshunt, Pulse, Timed Pulse, Restore to Time Zone, Acknowledge All Alarms, Clear All Alarms
Event View	Open
Input Points	Acknowledge all Alarms, Clear all Alarms, Shunt, Unshunt, Restore to Time Zone
Links	Open
Modem Pool	Hang-Up Modem, Reset Modem, Acknowledge All Alarms, Clear All Alarms
CCTV Monitor	Acknowledge All Alarms, Clear All Alarms
N-485 Remote Dialup	Buffer All Panels, Unbuffer All Panels, Set Retry Count, Set Command Timeout, Connect Remote, Disconnect Remote, Acknowledge All Alarms, Clear All Alarms
N-485 Local Connection	Buffer All Panels, Unbuffer All Panels, Set Retry Count, Set Command Timeout, Acknowledge All Alarms, Clear All Alarms
Output Points & Groups	Energize, De-energize, Pulse, Timed Pulse, Restore to Time Zone, Acknowledge All Alarms, Clear All Alarms
Panel	Initialize, Cancel Initialization, Buffer, UnBuffer, Acknowledge All Alarms, Clear All Alarms
Pan / Tilt Camera	Acknowledge All Alarms, Clear All Alarms
Readers	Acknowledge All Alarms, Clear All Alarms
SIO Boards	Acknowledge All Alarms, Clear All Alarms
Stat Camera	Acknowledge All Alarms, Clear All Alarms

## Panel Buffer Commands

When a panel is buffered, transactions are stored in the panel RAM memory. When a panel is unbuffered, it transmits stored information to a computer, then continues to transmit ongoing access transactions to that computer in the unbuffered mode of operation.

A buffer command can be either hard or soft. Normally, when an unbuffered panel receives a buffer command, it switches to the buffered mode.

When the buffered panel receives an unbuffer command, it switches back. However, if a panel receives multiple soft buffer or unbuffer commands, it does not switch modes until it receives the same number of unbuffer or buffer commands.

An example of this would be to buffer [soft buffer] certain panels in the system while leaving other panels unbuffered, then shutting down the computer. If the communication server is set to buffer on exiting the database server, another buffer [soft buffer] command is sent to all panels. When restarting the computer, the services are started, and based on communication server settings, the panels are sent an unbuffered command [soft unbuffer]. The previous panels that received two soft buffer commands remain buffered, according to their setting before shutting down the computer.

A hard buffer or unbuffer command overrides any number of soft commands. When a panel receives a hard buffer or unbuffer command it switches state, regardless of how many soft buffer or unbuffer commands have been received.

## Control Map




The Control Map provides another means of monitoring, acknowledging and clearing alarms, and controlling devices.

### Status Symbols

One of three status symbols may appear before an ADV icon on the Control Map screen.

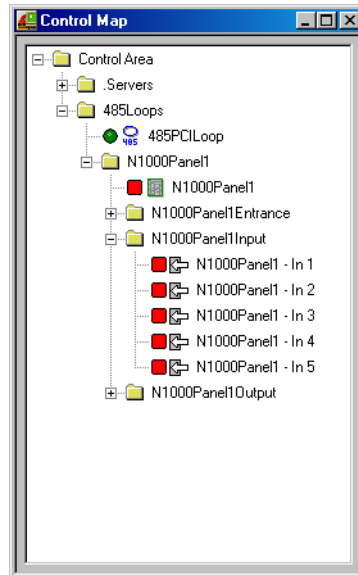
- Red square = alarm
- Green circle = normal
- Yellow triangle = trouble
- Purple question = unknown

The status symbols will darken after their respective conditions have been acknowledged and cleared. A forbidden symbol  overlayed over a status symbol indicates that the corresponding point is shunted.

Placing the mouse over the status symbols will bringup a textual description of the status for each ADV.

## Managing Devices from the Control Map

- 1 Select **Control Map** from the WIN-PAK Operations menu.



- 2 Expand the tree by clicking the plus signs to display the devices that you want to control.
- 3 Right-click any device to open its control menu, then select the desired command.
- 4 The tool tip is provided for loops and CCTV switchers to know the com port or IP address to which the devices are configured.

## Command Files



Text files containing device instructions are stored in the Command File database, and run from the Command File option on the WIN-PAK Operations menu.

Command Files are defined by assigning a name and description to one or more commands, then saving it as a Command File.

A designated command file can be activated manually or when an event takes place. For example, a Command File can be activated automatically on receiving, acknowledging, or clearing an alarm, as defined in the Action Group.

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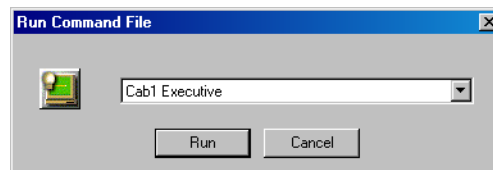
**NOTE:** Specific command files may be restricted by operator level rights.

---

Command Files are defined in the Command File database, and a Command File Server must be defined on the Device Map. The Command File Server must be running in order for Command Files to be executed.

## Running Command Files

- 1 Select **Command File** from the WIN-PAK Operations menu. The Run a Command File dialog is displayed:



- 2 Use the drop-down list to select the **Command File** to run.
- 3 Click **Run** to start the Command File.



## Guard Tour

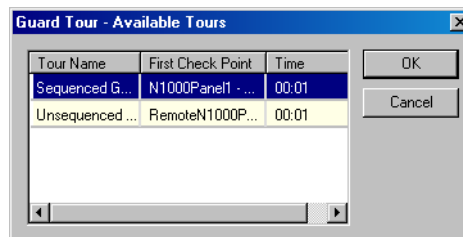
A Guard Tour is a defined series of check points a guard must activate within a given amount of time. Usually the check points are readers where the guard presents a card, but they can also be input points attached to other devices, such as an egress button. The check points can be sequenced (i.e. they must be activated in the specified order) or unsequenced (activated in any order).

Guard tours are defined in the Guard Tour database. The tour definition sets the amount of time the guard has to get from one check point to the next. Alarms can be defined and priorities set for early arrival, late arrival, or missed check points. These alarms are defined in the Guard Tour database and can be edited there or in the Action Group database. A Guard Tour Server must be defined on the Device Map.

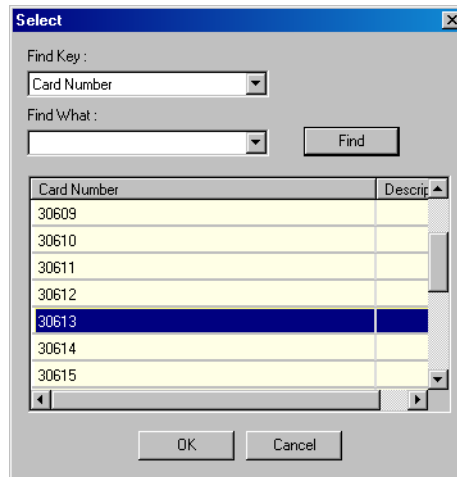
## Starting a Guard Tour

To start a guard tour, the Guard Tour Server must be running.

- 1 Select **Guard Tour** from the WIN-PAK Operations menu. The Guard Tour window is displayed.
- 2 Click the **Start** button to open a list of Available Guard Tours.



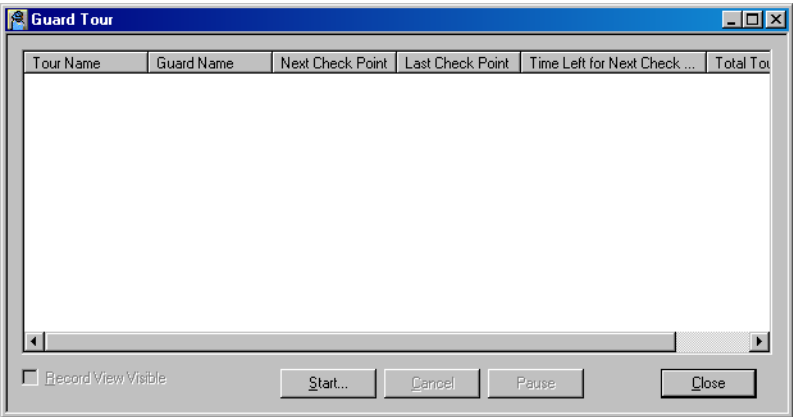
- 3 Select the Guard Tour to be started, and click the **OK** button. The tour is now shown in the main Guard Tour window, and the Select window is automatically presented.



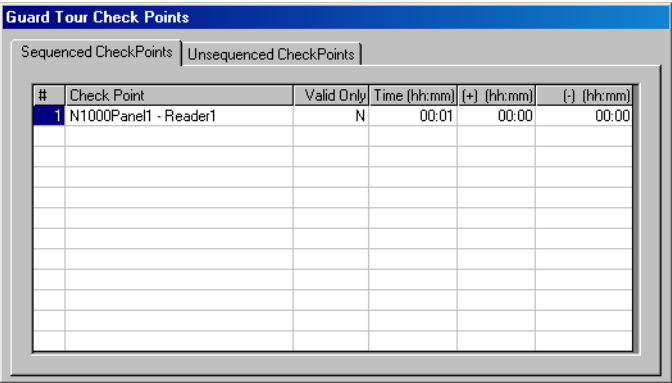
- 4 Use the **Select** window to indicate the card being used to validate the reader check points. If the first check point is a reader, the tour can begin when the card is presented at the first check point.

Select the **Card Number** to be used, and click the **OK** button. You are returned to the main Guard Tour window where the tour selected is now displayed in the list.

Select **Cancel** if the card number is not known. A guard tour can be started by the check point or reader. When a card is not specified, the first qualified read at the reader, once the tour is started, is considered the card to be monitored by the tour.



- 5 Select the **Record View Visible** check box to see the required check points for the tour chosen. Sequenced and unsequenced check points are listed on separate tabs.



As the tour progresses, the main Guard Tour window reports the tour progress, indicating each check point as it is validated, along with the time between check points, and the total time elapsed.

If a point is missed, it changes to red in the list and an alarm is displayed in the Alarm view.

**NOTE:** To pause the tour, click the **Pause** button. Late or missed check point alarms are not generated while a tour is paused. To restart the tour, click **Pause** again.

## Tracking and Muster

Tracking and Muster reporting allows card holders to be located in the event of an emergency. People are required to present their card to tracking readers when entering or leaving tracking areas.

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**NOTE:** If a card holder has more than one card (one for the building and another for a vehicle), the card holder is tracked, not the card number.

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In an emergency situation, a muster is declared, and people go to the muster readers to present their cards.

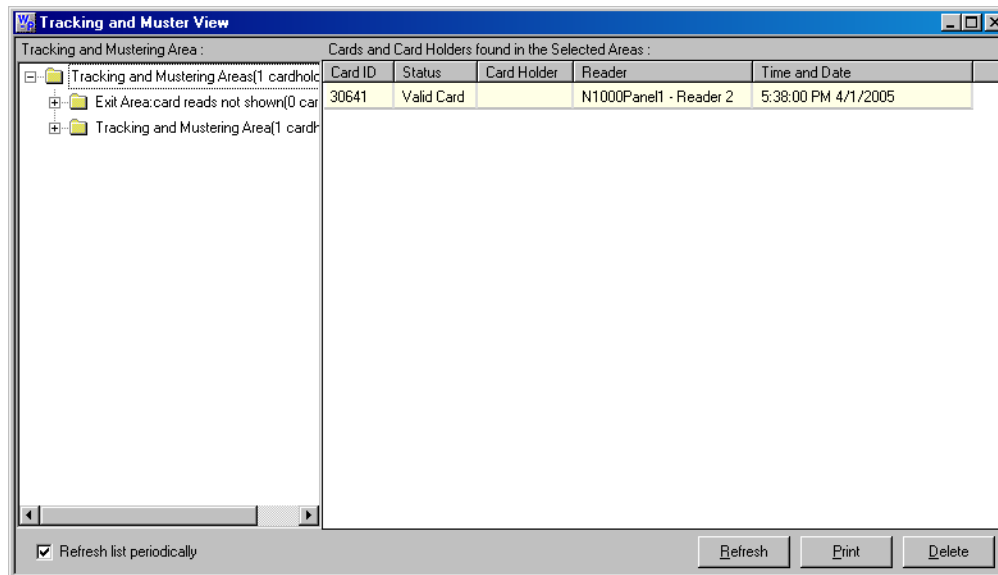
When the Muster View opens, information is loaded from history, showing card reads for the past eight hours (or as defined in Tracking and Muster Server Configuration). Make sure the **Refresh List Periodically** check box is selected, so that the list displayed is current. The list refreshes approximately every three seconds.

The Muster View opens in a two-paned window. The left pane displays the Tracking and Muster areas with their readers. The right pane reports information on the cards and card holders in the tracking areas, including Card ID, Status, Card Holder (if any), Reader, Time and Date.

Tracking and muster areas are defined by Tracking Areas. A muster server must be defined on the Device Map.

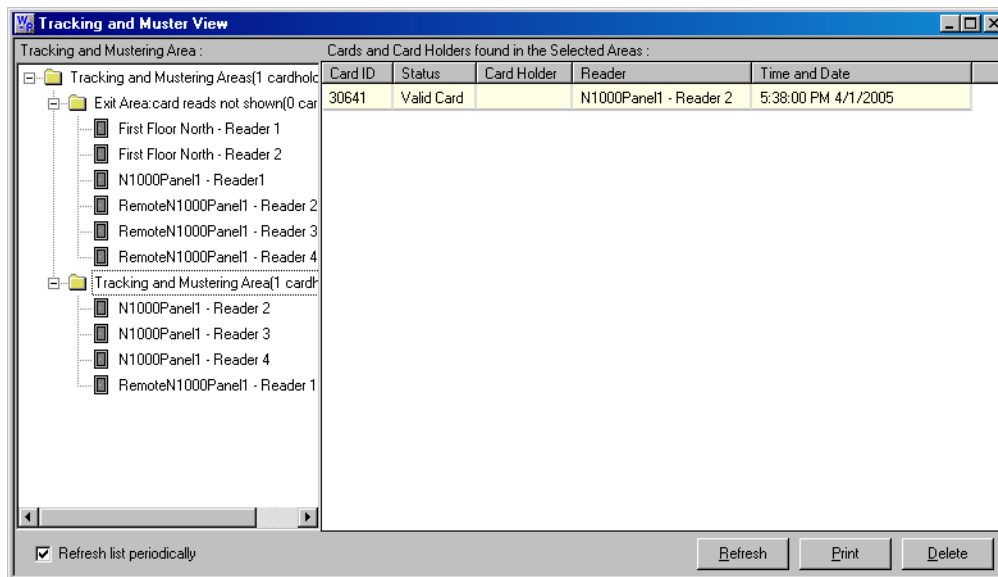
## Monitoring the Tracking and Muster View

- 1 Select **Tracking and Mustering** from the WIN-PAK Operations menu. The Muster View window is displayed.



- 2 Expand the tree to show the tracking and muster areas, then click the top-level branch to display all tracking and muster areas. The right pane displays all the cards and card holders that have been presented at a tracking or muster reader, along with the reader name, the time, and the date of the card read. The muster view sorts the reads in alphabetical order by card holder with last name first.
- 3 To display a specific area, click the branch representing it. Only valid card reads from the readers in the selected area are displayed. If one of these cards is presented at a tracking reader in another area, it is removed from the first area and added to the most recent area.

- 4 Select the **Muster Reader** to show all the cards which have been presented at the muster readers. As cards are presented at muster readers, they are removed from the tracking areas. Both valid and invalid cards are displayed at the muster reader.



### Refreshing the Muster View

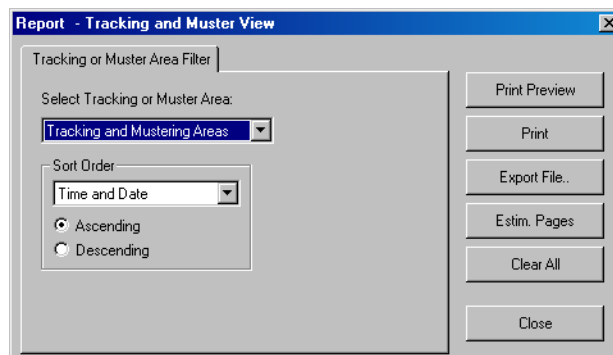
Select the **Refresh List Periodically** check box to update the list every few seconds. If you wish to freeze the list temporarily, deselect this box.

### Deleting Events from the Muster List

Events can be deleted from the Muster list. Select an event and click the **Delete** button. Delete a range of events by holding down the SHIFT key while clicking on the first and last event in the range to be deleted. When all the desired events are selected, click the **Delete** button.

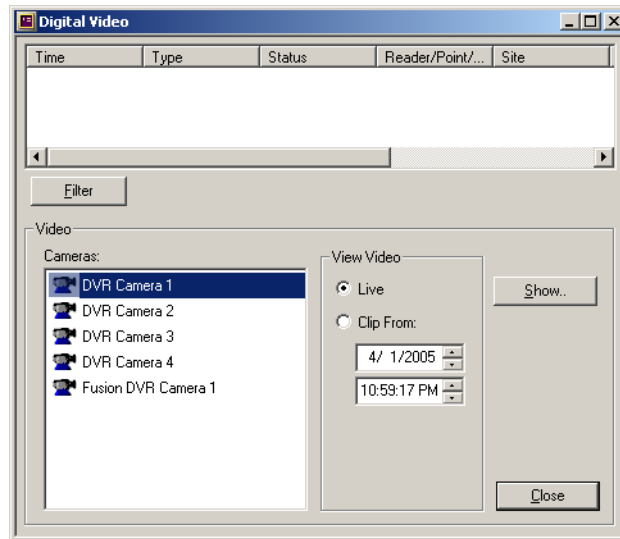
### Printing a Muster Report

Click the **Print** button on the bottom of the Muster View window to produce a Muster Report. A filter dialog is displayed (below), allowing you to filter and sort the results.



Use the **Select Tracking or Muster Area** drop-down list to indicate the area on which to report. Select the **Sort Order** and whether **Ascending** or **Descending**. Click the **Print** button. A standard print dialog is presented. Indicate the printer to which the report should be sent.

## Digital Video



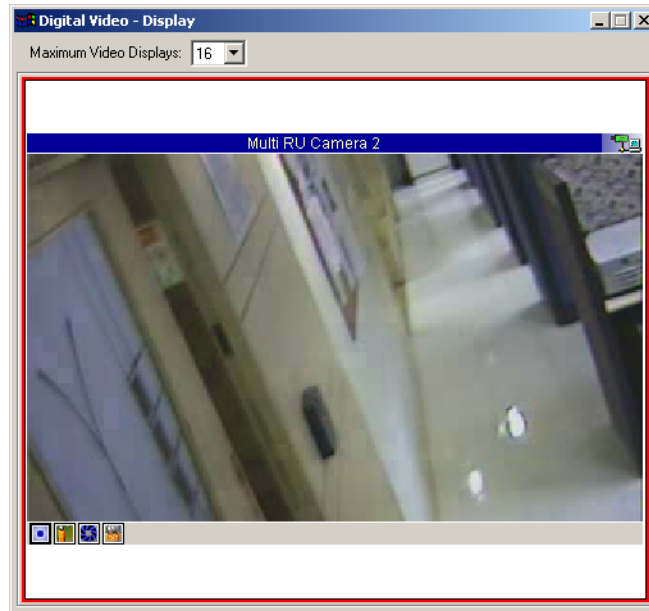
### Digital Video Controls

- 1 Select **Digital Video** from the **Operations** menu to open the **Digital Video** window (shown above).
- 2 In the Digital Video window, select a desired camera.
- 3 Select whether to view live video or recorded video [Clip From] in the View Video section of the window, then click **Show** to operate the desired camera or display recorded video from the camera.

### Retrieval View Controls

Depending on the selection, either the Digital Video Retrieved window [for recorded video] or the Digital Video-Display [for live video] will open (next illustration).





The recorded video will be displayed for the time selected in the View Video section of Digital Video window. For live video, use the camera controls in the lower left portion of the digital display window to adjust the camera as required. See Digital Camera.

- 4 Repeat the above steps to display additional camera views.

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**NOTE:** Multiple cameras can be selected by using the Shift or Control keys while selecting cameras.

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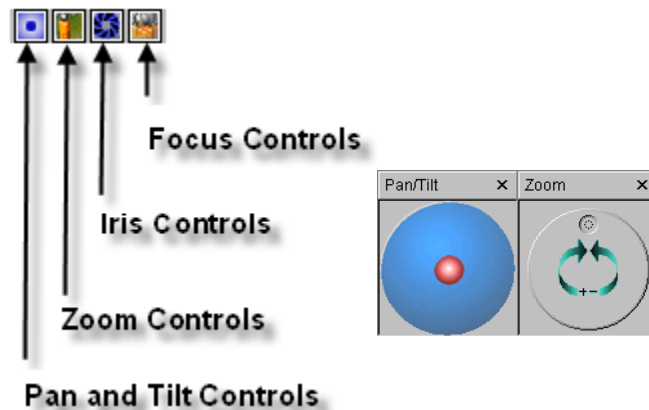
## Filter Control

- 1 Click the **Filter** button to open the Event Filter window.
- 2 Click on the Event Filter tabs to define which events to display in the Digital Video window. Defined events will subsequently be displayed in the Digital Video window.

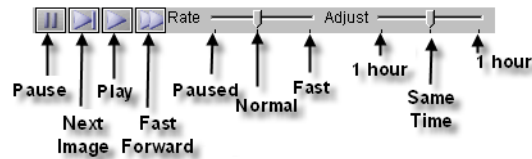
Events associated with a digital camera will be displayed with either a fixed camera icon or a PTZ (pan tilt zoom) camera icon, represented with a zoom lens. Selecting one of these events will automatically select its associated camera and recorded video clip for display. Clicking Show will display the associated recorded video clip, unless live video is selected, in which case the associated camera will display live video.

## Digital Camera Controls

### Live View Controls



To adjust Pan/Tilt, click on the control button, then in the Pan/Tilt adjustment window [shown at right above], click within the blue circle and drag the mouse in the desired direction. The camera position will change accordingly. To adjust Zoom, Iris or Focus, click the corresponding control button, then in the subsequent adjustment window click on the indented circle [between the arrows] and drag the circle to adjust.



When Pause is activated, it's button will be graphically grayed out. Slide the Rate control to adjust the video play-back speed. Slide the Adjust control to adjust the time of the recorded video up to an hour before or after the current time being viewed.

### Right-Click Menu Options



Right-clicking on the live video display will open a menu of additional control options.

**Show Title:** Checked by default, the title bar is shown above the live display with the ADV name and status icon. If unchecked, the title bar is removed.

**Show Controls:** Checked by default, the camera controls are available below the live display. If unchecked, the controls are removed.

**Auto Focus:** Camera automatically focuses on subject, provided camera is auto-focus camera.

**Auto Iris:** Camera automatically adjust for brightness, provided camera has automatic-iris control.

**Pan/Tilt speed:** Controls speed at which the camera pans and tilts. Three speed options are available: Slow, Medium, Fast.

**Network speed:** Controls speed at which pan/tilt command is sent to the camera. Three speed options are available: Dial-up connection, Slow LAN, Fast LAN.

**Set Preset:** Allows operator to set up to eight preset controls for a PTZ camera.

**Goto Preset:** Allows operator to select from eight previously defined preset PTZ camera controls.

**Close:** This option allows the operator to close an individual camera display without closing the camera display window.

The right-click menu options for retrieved video are limited to Show Title, Show Controls and Close.

# **Programming**

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**Programming Overview**

**Quick -Start Wizard**

**Time Management**

**Device Map**

**Defining Access, Tracking  
& Control Areas**

**Floor Plans**

**Guard Tours**

**Command File Database**



## Programming Overview

A great deal of planning is advised when setting up any access control system, even one that is rather simple. Use the following outline as a guide while planning your system and gathering the necessary information before you begin configuring your system.

Databases in WIN-PAK store, organize, and retrieve information for your access control system. They are interrelated and while programming sequences can vary, there are certain dependencies. In other words, some data cannot be entered until other information is already in place.

The following Programming Order summarizes the information that needs to be entered in the system, and provides a recommended order for entering that information. Of course, the order can be adjusted to fit your particular needs.

The tasks and items summarized here are detailed in the following sections.

## Programming Order

Your setup order will vary depending on the type and complexity of your access control system. All systems require planning before configuration can begin. Review this chapter carefully, then assemble all the necessary information before you begin.

To begin setup, you must have information about the basic hardware and especially the communications servers, adapters, network addresses and modems. What follows is a broad overview of the programming order for a simple access control system.

### 1 - Password Protect the Admin Operator

The **Admin** Operator is used to set up the system, and the security of the system should be protected by giving the Admin Operator a password.

See “Passwords” section further ahead in this chapter for instructions on password-protecting your Admin password.

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**!WARNING!** Failure to change the manufacturer’s default password greatly compromises the security of your system! It is also recommended to delete/change the Admin Operator name.

---

### 2 - Create Accounts

WIN-PAK PRO organizes card and cardholder information by accounts. Even if there is only one account in an access control system, that account must be defined. The Card menu and sub-menus are only available when an account is selected. You must create at least one account in order to begin system configuration. Then additional accounts can be added immediately or later.

### 3 - Define Time Zones and Holiday Groups

**Time Zones** are named, defined time periods used to determine when actions will happen. Actions, like card access, can be allowed or restricted during a time zone. Set up a master time zone of 24 hours a day, 8 days per week, Sunday through Saturday plus holidays. Designate additional time zones to meet the needs of your facilities, for example day shift, second shift, third shift, etc. Holiday time blocks can be included in any time zone.

**Holiday Groups** are established because holidays are often treated differently than other days. For example, only certain employees may have access on these days, or doors that are normally unlocked during business hours might be locked on holidays.



A Holiday Group is a selection of days designated as holidays. They must be defined in the Holiday database, then be selected in the time zone definition of the appropriate control panel.

#### 4 - Define the Device Map

Devices must be defined and added to the system via the Device Map. It is not necessary to have all the devices operational before they are defined.

Devices include communication hardware, servers, panels, readers, and CCTV equipment.



Following is an overview of device types that must be added to the Device Map.

**Communication Servers** are branches on the Device Map which defines your operating system, active communication ports, and any multi-port boards. Information you need to know when setting up Communication Servers include the machine name, the operating system (Windows 2000/XP), and the available communication ports.

**Communication Loops** branch off the Communication Server. Once you have a Communication Server defined, communication loops can be added to it.

You will enter a definition for the type of communication the loop uses (e.g., RS-232 or RS-485), and the communication settings for your com ports or TCP/IP address. Once a loop is added to a Communication Server, panels can be added to the loop.

**Panels** are added to communication loops. The panel definition includes basic information on the type of panel (e.g., NS2+, N-1000 series, PW-2000 series or P-Series), the card format it accepts, time zones, inputs, outputs, groups, and readers. Interlocking of input points and output points, as well as shunt times and similar details, are entered in the panel definition.

**Servers** configured on the Device Map allow communication and control between various WIN-PAK devices and databases, including the Command File Server, Communication Servers, Guard Tour Server, Schedule Server, and Tracking and Muster Server.

**ADV**s (abstract devices) should be created as each device is defined. The ADV can be assigned to an object placed on floor plans or control map that have both monitoring and control functions.

**Digital Video** is a branch on the device map which defines the digital video recorder system. For each Digital Video connected to WIN-PAK, a separate device is added to the device map.

## **5 - Define Access Areas, Tracking Areas and Control Areas**

**Access Areas** are defined by adding entrances [doors and readers from the control panels] to a tree structure. Access Areas list entrances and indicate where they are located. The Access Areas are then used to define Access Levels.

**Control Areas** are used to partition devices for Operator Level definitions. Communication server, loops, panels, input points, output points, groups, and readers are added to Control Areas by placing them on a tree structure (which is eventually used to create the Control Map).

**Tracking Areas** are sections of a facility defined by selecting designated readers. Card reads within this area are recorded and can be seen in the Tracking and Muster view. In case of an emergency, card holders are instructed to go to a muster area and present their cards to a muster reader. The operator can then tell if everyone has exited the Tracking Areas, and if not, where they last presented their card. Tracking Areas are defined by mapping them on a tree structure.

## 6 - Create Floor Plan Views

**Floor Plans** are constructed by placing ADVs on a static background after your devices have been defined. Monitoring and control functions are accessed from the floor plan view.

**Floor Plan Backgrounds** are static graphics, imported as Windows Metafiles (.wmf). The graphic can be a map, a loop wiring diagram or even a simple grid. Links to other floor plans can be added.

**ADV**s, which can be selected from a graphical toolbox, are placed on the floor plan background creating both a monitoring and control view. The ADVs signal alarms and other events by changing color, blinking, and emitting audible signals.

## 7 - Guard Tour

A Sequenced Guard Tour is a defined series of check points (card readers and/or alarm points) that a guard must activate within a given amount of time.

The Guard Tour definition sets the amount of time the guard has to get from one check point to the next. Alarms can be defined and priorities set for early arrival, late arrival, unsequenced, or missed check points.

An Unsequenced Guard Tour is defined as a series of check points that must be activated without required time or sequencing.

### 8 - Command File Database

Text files containing device instructions are stored in the Command File database. Command Files are defined by assigning a name and description to one or more commands. This file is then saved as a Command File.

In setting up an ADV Action Group, Command Files can be used to set up dependencies. In other words, when a particular event takes place, a designated command file is activated. Sending out a text string to the attached device (control panel, CCTV switcher or other external devices connected by RS232 or TCP/IP connection.

## Passwords

WIN-PAK passwords are set in the Operator database (which is accessible via the System menu).

---

**NOTE:** Operator access is password protected. Once WIN-PAK is installed, a password should be defined and used. This is critical to the security of your entire system. Always replace the default password with your own secure password.

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**CAUTION:** Failure to change the manufacturer's default password greatly compromises the security of your system!

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Keep the following in mind when setting up passwords:

- Passwords can be up to 20 characters length, and are case sensitive
- For the greatest security, use a combination of both letters and numbers for your password
- Do not use familiar terms such as your company name, your name, initials, or birth date

A simple strategy for choosing a password that is both easy to remember, but hard to decode is to pick a simple phrase preceded or followed by one or more numbers. Enter the password without spaces and capitalize each word.

Such a password cannot be easily decoded either by a random number generator or by dictionary decoder. Yet the person who knows the phrase can remember it without writing it down.

### **Admin Password**

The **Admin** Operator is used to set up your access control system, and the system security should be protected by giving the Admin Operator a password.

Other operators may be defined to meet the needs of monitoring and maintaining the system at a later date, as needed.

Log out and log in again using the new **Admin** password to verify that your new password has been entered properly. Then proceed with your setup.

## Working with Accounts

At least one account must be created in order to begin setting up your access control system. This account must be selected before you can access the card and card holder features of system. WIN-PAK PRO supports multiple accounts.

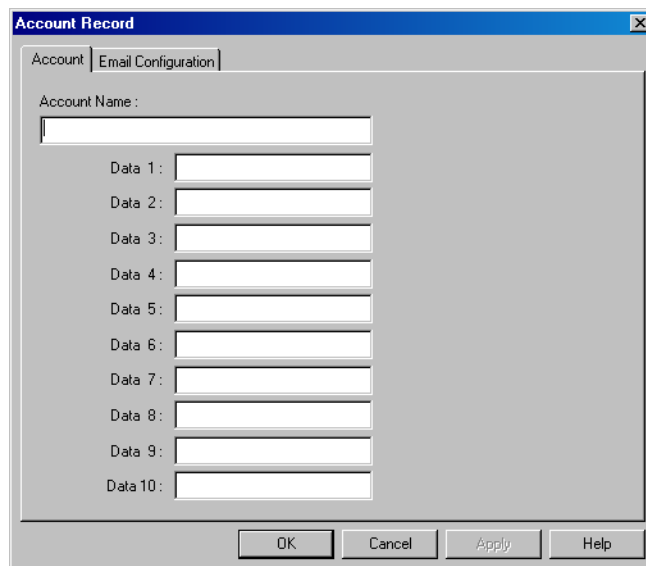
You can create multiple accounts by repeating the following procedures for each account you want to add.

### Defining Accounts

- 1 Select **Edit** from the **Account** menu.



- 2 Click the **Add** button on the main Account database window to open the **Account Record**.

A screenshot of a dialog box titled 'Account Record'. It has two tabs: 'Account' (selected) and 'Email Configuration'. Under the 'Account' tab, there is a label 'Account Name:' followed by a text input field. Below this, there are ten labels from 'Data 1:' to 'Data 10:', each followed by a text input field. At the bottom of the dialog, there are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

- 3 Enter the **Account Name**, using up to 30 alpha umeric characters. This is the only required field on the dialog.
- 4 **Data Fields** are included on the Account Record dialog in order for you to enter specific account information if desired.

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**NOTE:** Refer to the Translation chapter of this manual for the procedures involved in applying specific names to these fields.

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- 5 Click **OK** to save the account information and return to the Account window.

Repeat this procedure for multiple Accounts.

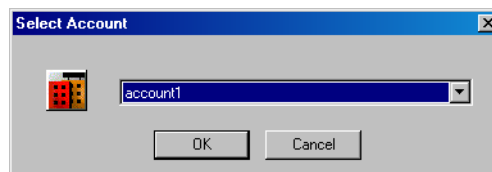
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**NOTE:** Before entering account sensitive information, including cards, card holders, note fields, note field tabs, and badge layouts, select the desired account.

---

## Selecting an Account

- 1 Click **Select** from the WIN-PAK Account menu.
- 2 Click the drop-down arrow, and select the desired account from the list.
- 3 Click **OK**.



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**NOTE:** The **Account** menu and command button are unavailable when the Card or Card Holder database windows are open. You cannot change the Account selection until you close all databases that are account sensitive.

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### Adding or Editing Accounts

To add or edit an account, simply select **Edit** from the WIN-PAK Account menu. Click **Add** to add a new account or select the account from the Account database window, and click the **Edit** button to change the information.

The Account Record window is displayed, allowing you to make changes to the Account Name, Data fields, or Email configuration.

### Deleting Accounts

To delete the existing account, select the account from the Account database window, and click the **Delete** button.



## Quick-Start Wizard

### Overview

After logging in to WIN-PAK for the first time on the communication server, the Quick Start Wizard window will appear. The communication server is on a standalone computer where a complete installation has been performed or in a networked system, it is generally located on the WIN-PAK database server.

Since the wizard requires access to several WIN-PAK databases, it is only available to operators with administrator permissions. The wizard can be set to not appear at each log in. The administrator can also launch the wizard from the configuration menu.

The function of the Quick Start Wizard is to provide a simple method using general system defaults along with user-defined fields to create a basic functional system.

Information is provided at each step to guide the administrator through the process. Cards, panels and readers can be added using the wizard. The cards are given a default permission to be valid at all times and for all readers in the system. Changes to the cards can be made at the operator's convenience.

When you are done using the wizard, click on Finish and initialize the panels that were just added. To initialize the panel(s) click on Operations, Control Map and click on the + by Quick Start Control Area to open up the branch. Right click on the panel that was added and select Initialize, Select All and click OK.

A panel initialization status window will display the initialization progress. Repeat the procedure for as many panels as were added to the system. Multiple panels can be initialized at the same time on an RS-485 line. If C-100 is being used, initialize one panel at a time.

If this is the first time the wizard was run and there were no previously defined WIN-PAK communication ports, then the communication server needs to be restarted. Restart the communication server by stopping it from the WIN-PAK Service Manager and then start it. An error indicating that the communication server is not responding will appear [if the WIN-PAK User Interface is open]. Click OK. When the communication server is started, another message will appear several seconds later indicating that it is now working. This procedure only needs to be done once, the first time. All other additions made by the wizard will become available immediately after the wizard is finished.

It is normal to receive alarm activities from the panel during the beginning of the initialization process. These alarms will be displayed on the Alarm View window. To acknowledge the alarms, click on the first event and then hold the shift key down and select the last event. [You may use the scroll bars to reach the end of the list.] Then click on Ack, which will acknowledge the alarms. Use the same process to select the acknowledged alarms, then click on Clear to clear the alarms.

Your system is now operational. Refer to the rest of this manual to learn how to further customize your WIN-PAK system.

## Procedure

Quick Start Wizard steps the user through setting up a basic configuration of WIN-PAK. To use the Wizard, simply follow the prompts indicated on the screens.

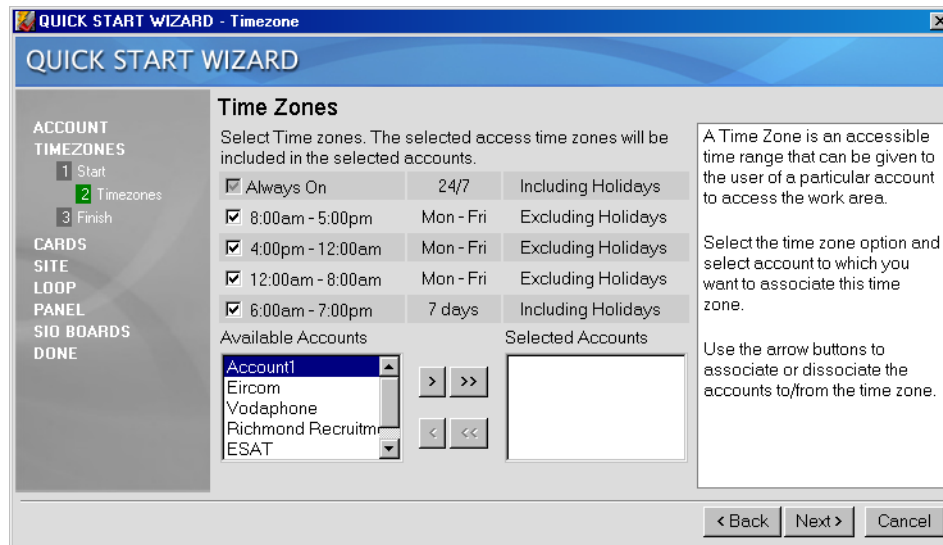
The initial screen is brought up automatically after logging in with “administrator” authority.



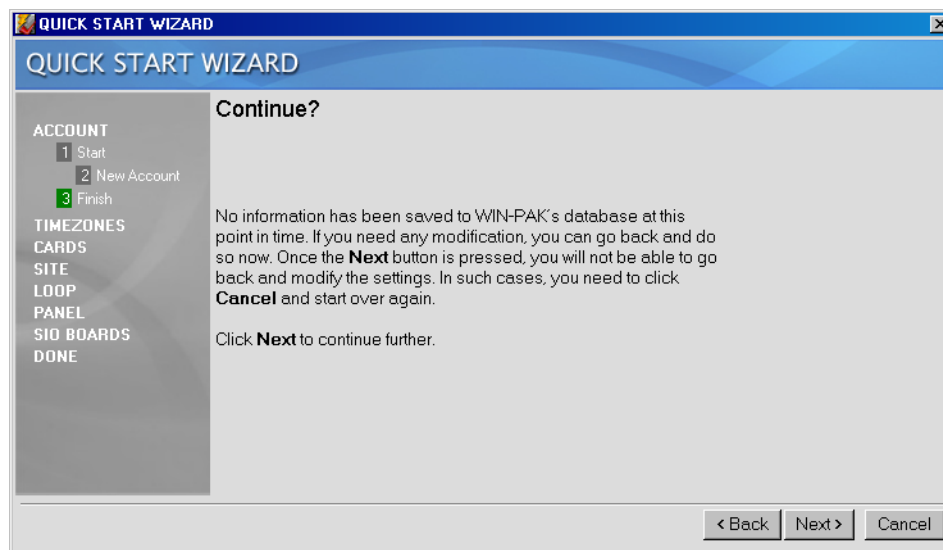
- 1 Click **Next** to proceed with configuration. The Configure screen appears.



- 2 Select "Add Time Zones" and click Next to create and assign the time zone to the account. This will take you to the page displaying time zone options.



- 3 All time zones are selected by default. Deselect any that are not required, then click **Next** to continue. You will see the confirmation message on the next page for any modification in the time zone before you proceed.



- 4 Select "Add Cards to existing Account" option to add cards to the selected account. Select this option and select the account from existing list. Click Next. This will take you to the Cards page to configure cards.

QUICK START WIZARD - Cards

QUICK START WIZARD

ACCOUNT  
TIMEZONES  
CARDS  
1 Start  
2 Cards  
3 Finish  
SITE  
LOOP  
PANEL  
SIO BOARDS  
DONE

**Cards**

Add cards to account Account1

First card number in the range

Last card number in the range

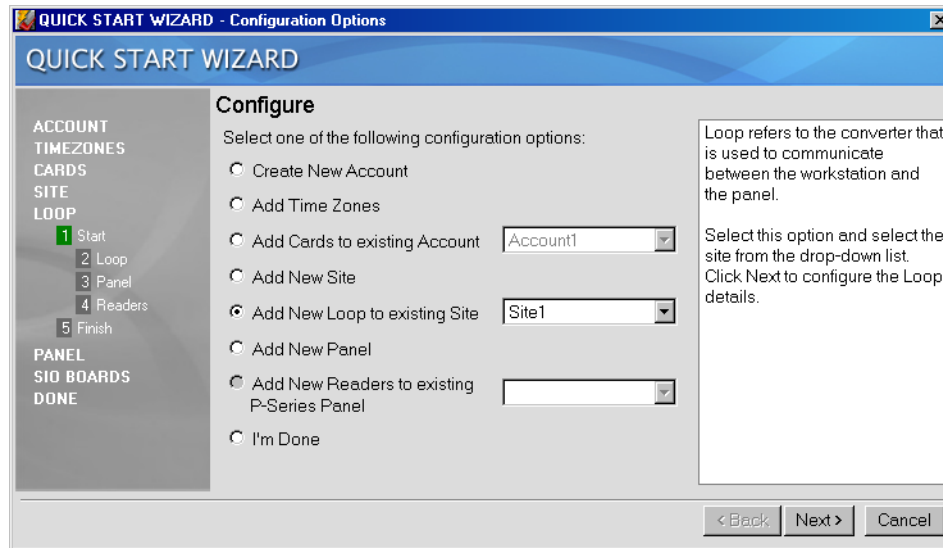
Expiration Date

Enter the Start card number and the End card number in the respective fields.

Choose the expiration date for the new cards using the calendar icon. This indicates that the cards will not have access after this expiration date. The activation date is same as the date of card creation.

< Back Next > Cancel

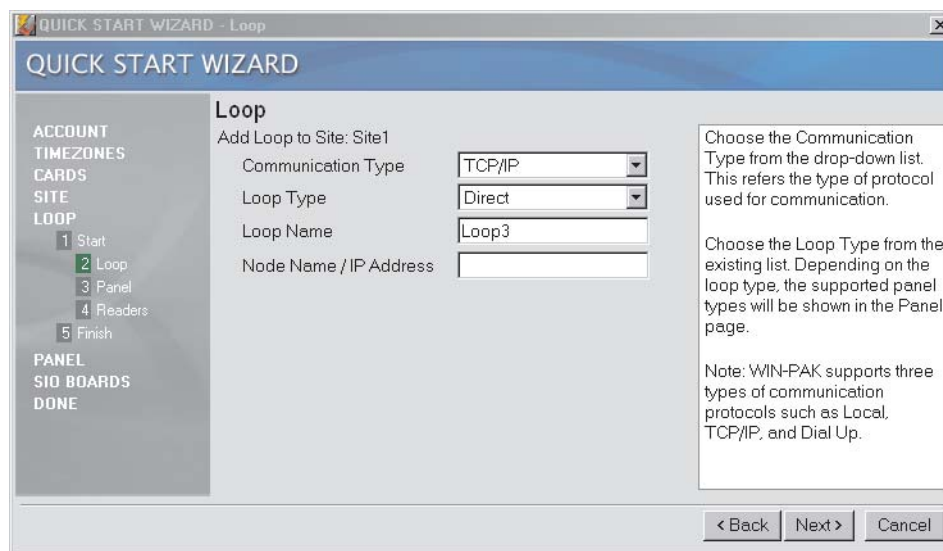
- 5 Select the desired configuration, then click **Next** to continue. For first-time configuration, select **Add new loop**. The Confirmation of Operating System screen appears.



- 6 Select the communication port that will be connected to the panel loop, then click **Next** to continue.

This selection is for direct connection. TCP/ IP and dial-up configurations require manual setups.

The Loop screen appears:



- 7 If desired, type a different name than the default name, then click **Next** to continue. The Panel screen will appear.

**QUICK START WIZARD - Panel**

**QUICK START WIZARD**

ACCOUNT  
TIMEZONES  
CARDS  
SITE  
LOOP  
PANEL  
1 Start  
2 Panel  
3 Readers  
4 Finish  
SIO BOARDS  
DONE

**Panel**

Panel Type: NS2+  
Panel Name: Swords-Panel3  
Loop Name: Priory Park  
Panel Address: 3

Add a new panel by configuring the following:  
Select the panel type, panel name, loop name, panel address from the drop-down list.

**Note:** Each panel on a communication loop must have a unique address. The address must correspond with the address which is set using DIP switches on the panel.

< Back   Next >   Cancel

- 8 From the Panel screen click **Next** to continue. The Reader screen appears.

**QUICK START WIZARD - Readers**

**QUICK START WIZARD**

ACCOUNT  
TIMEZONES  
CARDS  
SITE  
LOOP  
PANEL  
1 Start  
2 Panel  
3 Readers  
4 Finish  
SIO BOARDS  
DONE

**Readers**  
Add readers to panel: Swords-Panel3

#	Name	Time Zone	Pulse time
1	Swords-Panel3-R1	None	10 Sec
2	Swords-Panel3-R2	None	10 Sec

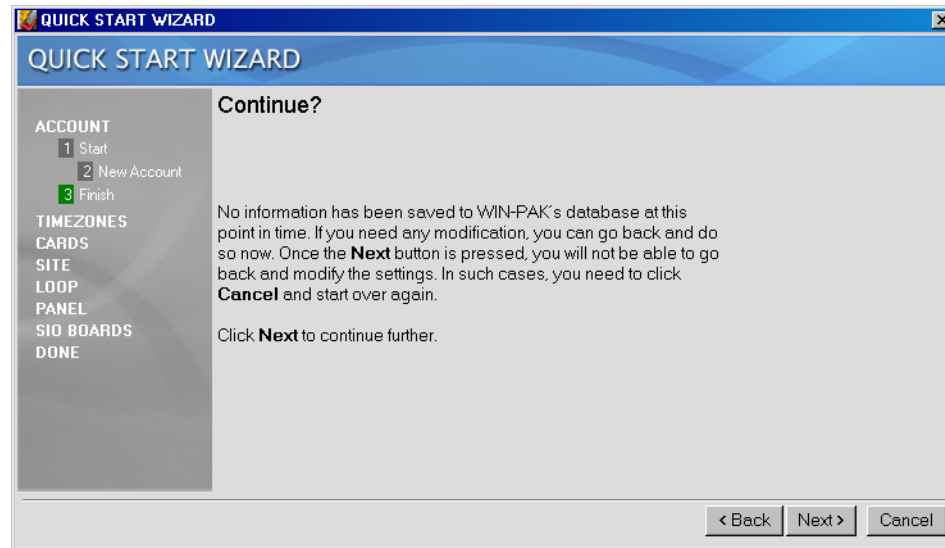
Readers provide an access to cardholders.

The number of readers shown in the Readers page depends on the panel type selected. Specify the time zone and the pulse time for each reader and click **Next**.

< Back   Next >   Cancel



- 9 If desired, type different names than the default names. Then click **Next** to continue. The Continue? screen appears.

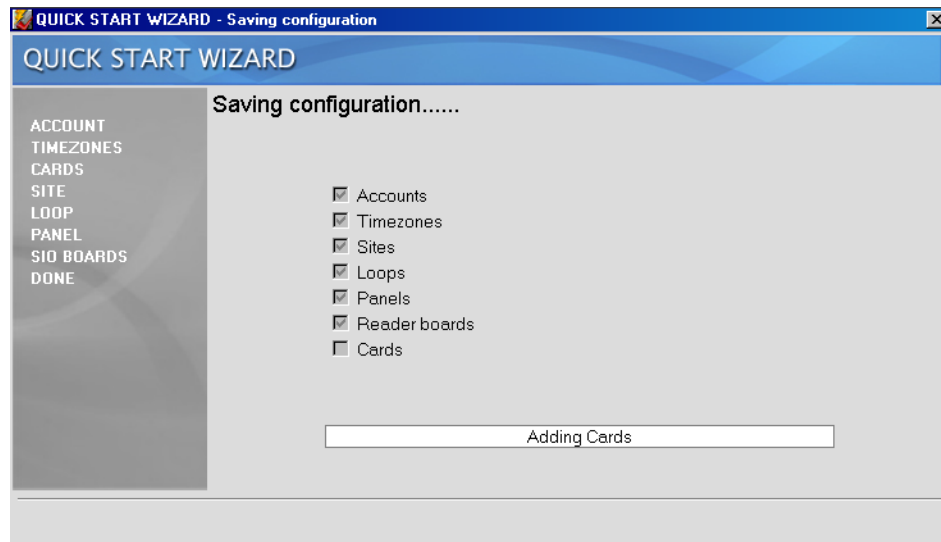


The user is given the option to go back and edit the configuration before saving it, or save the configuration and continue.

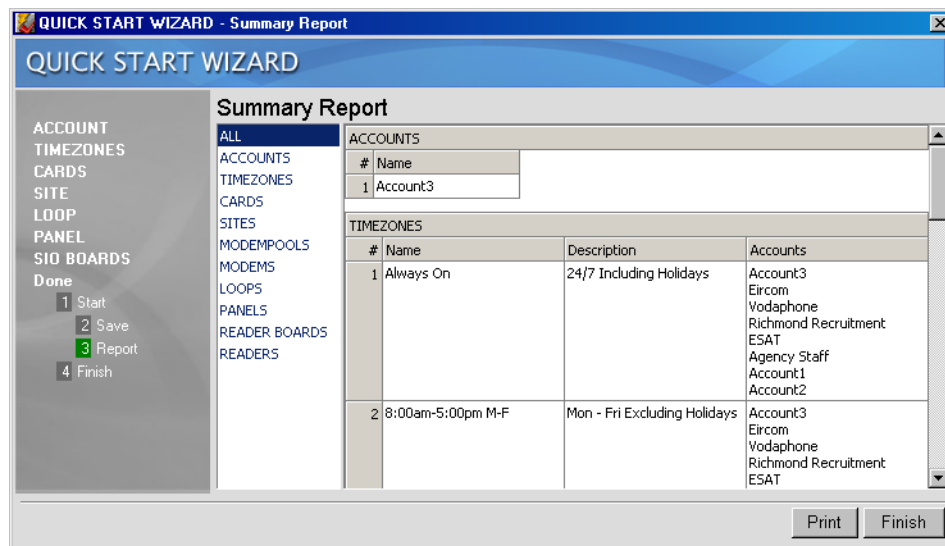
- 10 Click **Back** to go back and edit the configuration, or click **Next** to save what is configured thus far and continue with configuration.

Click **Next** to continue further. This will take you to the configure page.

- 11 Select “I’m Done” after you complete the required configuration on Quick Start Wizard.



This action will save all the current configuration and displays the Summary Report.



- 12 Click **Print** to print the summary, or click **Finish** to exit the Wizard. If necessary, scroll down to access the Print and Finish buttons.

When you are done using the wizard, initialize the panel(s) that were just added. To initialize the panel(s) click on **Operations** then **Control Map** and click on the plus sign (+) by Quick Start Control Area to open up the branch. Right click on the panel that was added and select Initialize, Select All and click OK. A panel initialization status window will display the initialization progress. Repeat the procedure for as many panels as were added to the system. Multiple panels can be initialized at the same time on an RS-485 line, if C-100 is being used, initialize one panel at a time.

If this is a first time the wizard was run and there were no previously defined WIN-PAK communication ports, then the communication server needs to be restarted. Restart the communication server by stopping it from the WIN-PAK Service manager and then start it. An error indicating that communication server is not responding will appear [if the WIN-PAK User Interface is open]. Click OK.

When the communication server is started, another message will appear several seconds later indicating that it is now working. This procedure only needs to be done once, the first time. All other additions made by the wizard will become available immediately after the wizard is finished.

## Time Management

### WIN-PAK Time Zones

Within the WIN-PAK System, a Time Zone is a range of hours and days that is given a name. These named time periods are used to define when actions [such as doors unlocking or cards are valid] are allowed in the access control system. For example, when a panel is configured, you choose which time zones are available at the panel.

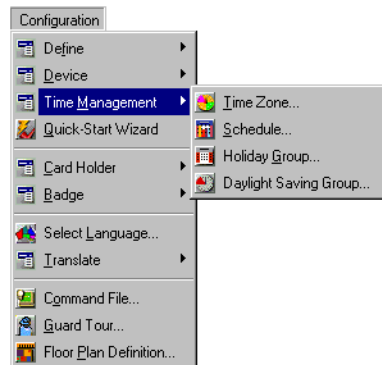
Time Zones are made up of blocks of time or slots: a start time, and end time, and days on which the Time Zone is valid. Since a given Time Zone may contain more than one block of time, the number of blocks is indicated when the Time Zone is created. There is no limit on the number of Time Zones that can be created, however, a maximum of 63 time slots can be downloaded to a PW-2000 series panel and 255 blocks of time can be downloaded to a PRO-2200 Intelligent Controller.

WIN-PAK keeps track of the number of slots applied to a given panel and signals if you exceed the limit.

Time Zones are combined with definitions of physical devices to create access levels. An access level then determines when and where access is allowed.

A list of defined Time Zones can be viewed in the Time Zone Database. You can search the list of Time Zones and view details, or you can add, edit, or delete the Time Zones in the database.

Time Zones are maintained via the **Time Management** option on the Configuration menu.

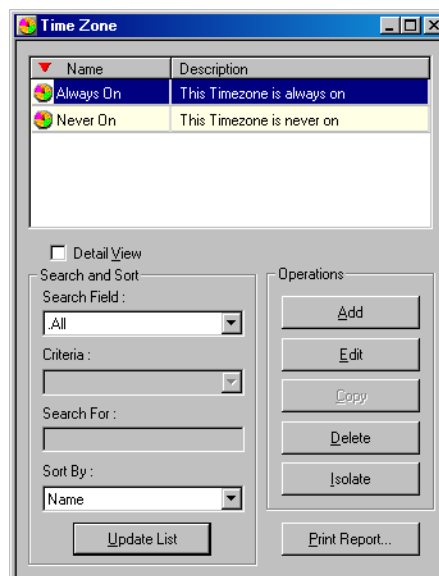


## Time Zone Database

Open the Time Zone Database by selecting **Time Zone** from the **Time Management** option on the Configuration menu.

The main Time Zone Database window is displayed, and existing Time Zones are listed.

This list can be searched and sorted by name and/or description.



Select the **Detail View** check box to open a detailed, view-only record of the selected Time Zone.

Search and Sort fields on the Time Zone Database window allow you to search the database based on the Time Zone name and/or description.

Use the action buttons on the right side of the database window to perform maintenance functions on the database, including adding, editing, copying, deleting, and isolating Time Zones. These functions are described on the following pages.

The Print Report button opens the report filter dialog, from which a Time Zone Report can be generated, exported, viewed or printed.

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**NOTE:** Refer to the “User Interface” section of chapter 3 of this manual for details on working with database window elements.

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## Adding Time Zones

- 1 Click the **Add** button on the Time Zone database window. The detail window becomes active, allowing you to define a new Time Zone.

- 2 Enter a **Time Zone** name and brief **Description**.
- 3 Using your mouse, drag the time line to encompass the hours making up the Time Zone.

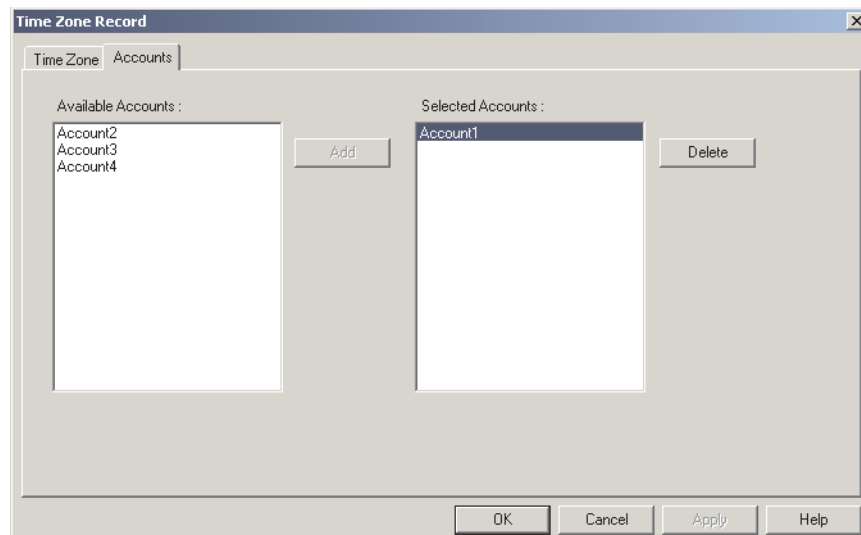
The Snap Time option allows you to set the time to snap to increments of 60, 30, 15, or 0 minutes. Selecting 0 minutes allows the time to be set to the minute.

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**NOTE:** A Mouse Time box is located below the Military Time check box. The time displayed is either the range that the mouse is on or the time that the mouse is pointing to when not on a time line. An alternate method of defining Start Time and End Time or deleting a time line can be displayed by selecting a time line and right clicking the mouse. Time set in this manner must be in Military time format.

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- 4 Once a range of time is entered for Monday, it can be copied to the other weekdays by clicking the Copy Monday to Weekdays button. Otherwise, a time line can be created for each day separately.
- 5 Create a time range for Saturday, Sunday, and Holidays (if desired).
- 6 Use the **Accounts** tab to indicate the account [or accounts] to which the time zone should be available. Highlight an **Available Account** and click **Add** to transfer the account to the **Selected Accounts**.



Use the **Delete** button to move accounts from **Selected Accounts** to **Available Accounts**.

- 7 Click **OK** to save the Time Zone. Clicking Cancel returns to the main database window without saving the Time Zone definition.



### Editing Time Zones

Editing a Time Zone is simply a matter of selecting it from the Time Zone database window, and clicking the Edit button.

The detail window becomes active, allowing changes to be made. When you have made all the necessary edits, click **OK** to return to the Time Zone database window.

### Isolating and Deleting Time Zones

Time Zones are used in many places throughout the access control system.

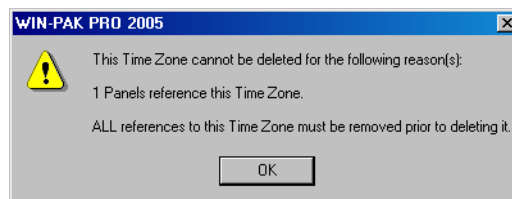
Deleting a Time Zone not in use anywhere in the system is just a matter of selecting it from the Time Zone database list and clicking the Delete button.

If the Time Zone is used elsewhere, it can not be deleted until it is isolated from its other connections.

### Isolating Time Zones

Use the **Isolate** function to determine where the Time Zone is being used, and to reassign those devices to other Time Zones.

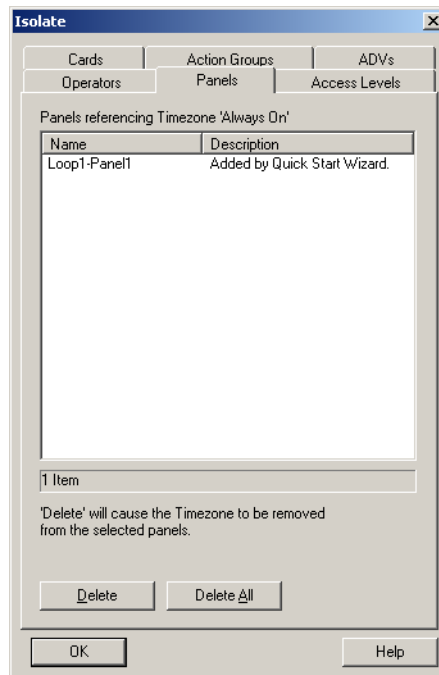
When attempting to delete a Time Zone that needs to be isolated, the following prompt indicates the type of device and number currently using the Time Zone.



Click **OK** to return to the Time Zone database list and isolate the Time Zone.

## Viewing, Removing and Reassigning Time Zones

- 1 Select the Time Zone you wish to isolate from the database list.
- 2 Click **Isolate**. The Isolate window is displayed, containing a list of all instances where the selected Time Zone is being used.



- 3 Check each tab for Time Zone usage and assign a new Time Zone or delete the Time Zone from a device where necessary.
- 4 Click **OK** to return to the main Time Zone database window.
- 5 Click **Delete** to remove the selected Time Zone.

## Scheduler

The Schedule Server performs events on a pre-determined time table. These events are managed via the Schedule database.

Schedule events can be one-time events, hourly, daily, weekly, once every two weeks, or monthly. There is also a Never option, to define an event without knowing when it will need to be sent.

Event types include: Activate and Deactivate Cards, Dial Remote Area, Run Command File, Send Date and Time, and Update Custom Access Level.

If Dial Remote Area is selected, a number of other options become available.

The Run Command File option allows you to run any of the command files that you defined. See “Command File Database”.

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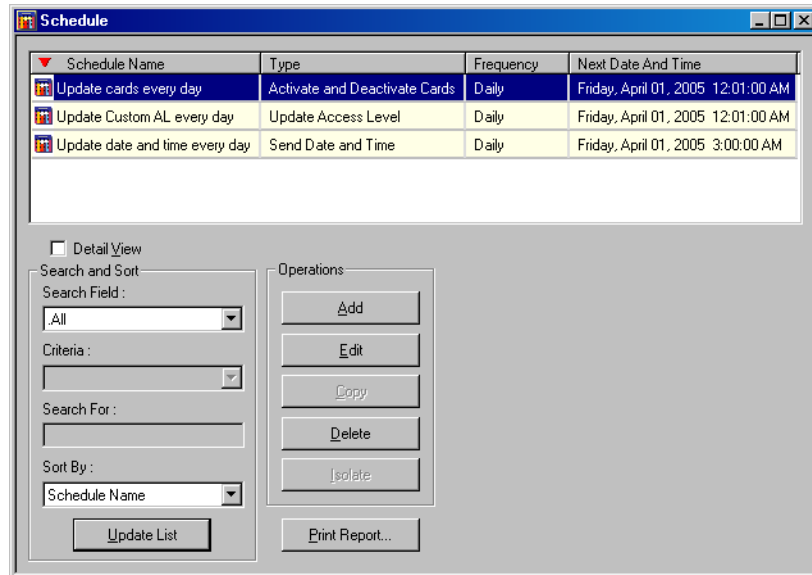
**NOTE:** Refer to the “User Interface” section of chapter 3 of this manual for details on working with database window elements.

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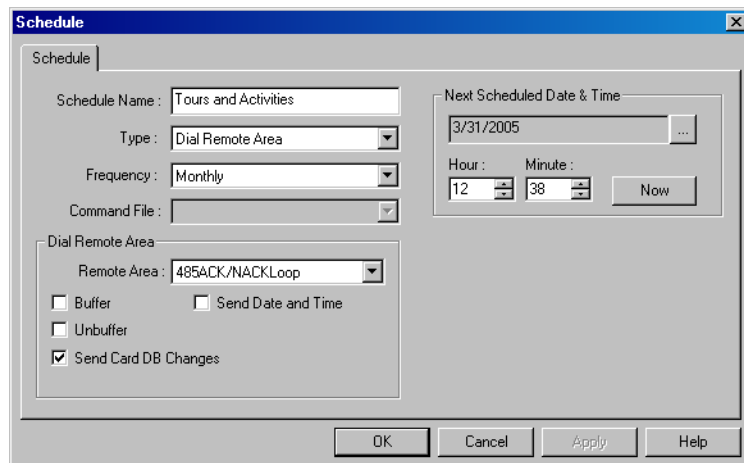
## Scheduling an Event

Open the Schedule window by selecting **Schedule** from the **Time Management** option on the Configuration menu.

The main Schedule window is displayed, listing events that have already been scheduled and defined.



- 1 Click **Add**. The Schedule Record window is displayed.



- 2 Enter a **Schedule Name** for the event.
- 3 Select an event **Type**. Other options on the window may be activated, depending on the type selected. Schedule types include:
  - Activate and Deactivate Cards
  - Dial Remote Area
  - Run Command File
  - Send Date and Time
  - Update Custom Access Level

### Dial Remote Area

If Dial Remote Area is selected as the event type [as indicated in previous illustration], fields in the Dial Remote Area of the window should be defined. Select a **Remote Area** from the drop-down list. Indicate the action to take place upon dial up [Buffer, Unbuffer, Send Card DB Changes or Send Date and Time].

### Run Command Files

If Run Command File is selected as the event type (above), the Command File field is active, and a selection should be made.

- 4 Indicate the **Frequency** with which the event is to occur.
- 5 In the **Next Scheduled Date & Time** area of the window, indicate the date and time at which the event should occur. Click the **Now** button to reset the date and time fields to the current date and time. Selecting Now does not implement the schedule.

- 6 If the Card Frequency Report is selected in the Type field, click Configure under Card Frequency Report Configuration.

The Report – Card Frequency Report Configuration dialog appears. Refer Card Frequency Report to configure the page.

Select the Print Report check box to print the report after configuration.

- 8 If the Run Guard Tour is selected in the Type field, select Guard Tour under Guard Tour Configuration using the drop-down list.

Click Browse next to the Card field to select the card. This selection is optional. If nothing is selected, then the first card read after the Guard Tour is started will be considered as default card.

Select the Print Report check box to print the report after configuration.

After you select the card, click OK to return to the Schedule dialog.

- 9 If the Run Report is selected in the Type field, Select Report Type under Configure Reports using the drop-down list.

Select the Report Template, as necessary.

Select the Print Report check box to print the report after configuration.

Select the E-Mail Report check box to send the report through e-mail.

Click E-Mail IDs to select the email IDs.

Select the E-mail Ids of the report recipients to receive the schedule reports.

After you select the IDs, click OK to return to the Schedule dialog.

- 10 Click **OK** to save the schedule definition and return to the **Schedule** database window.

### **To Delete a Schedule**

On the Schedule database window, select the Schedule to be deleted, then click Delete. The Schedule will be removed from the database.

## Holiday Groups

A Holiday Group is a collection of holiday definitions. Some holidays [like New Year's Day] occur on the same date every year, while others occur on a different date each year. In the course of defining Holiday Groups, you can indicate if a holiday occurs on the same date every year.

### Holiday Groups and Panels

Once a holiday group has been defined, it is associated with a panel to allow for a change in access on holidays. If you have Time Zones in a panel that have holidays defined, you must have a Holiday Group assigned to that panel.

For example, doors that are normally open between 8 a.m. and 5 p.m. Monday through Friday [excluding holidays], could be locked during those same hours on holidays defined as January 1, July 4 and December 25.

More than one Holiday Group can be defined, with different groups being associated with different panels. For example, in a retail business, some departments may close on holidays while others remain open. In such a case, define different Holiday Groups for each department and associate them with the appropriate panels.

### Holiday Groups and Time Zones

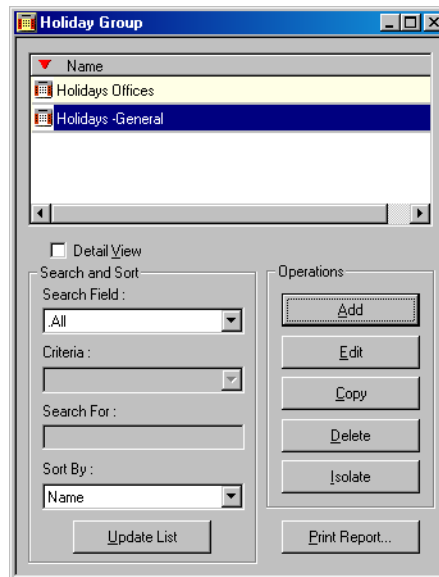
If a holiday time block is included in a Time Zone assigned to a card, a person using that card is allowed access on a holiday. If there is no holiday time block in the assigned Time Zone, the person cannot gain access.



## Defining Holiday Groups

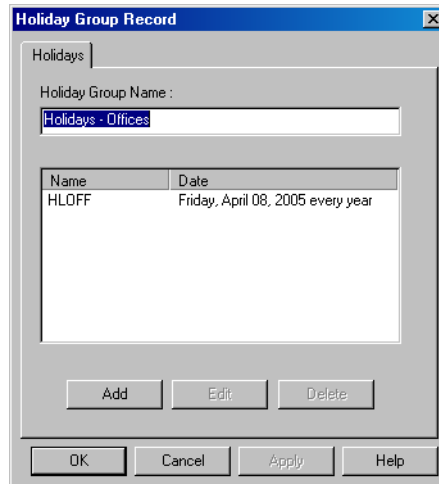
- 1 Open the Holiday Group window by selecting **Holiday Group** from the **Time Management** option on the Configuration menu.

The main Holiday Group window is displayed, listing groups that have already been defined.

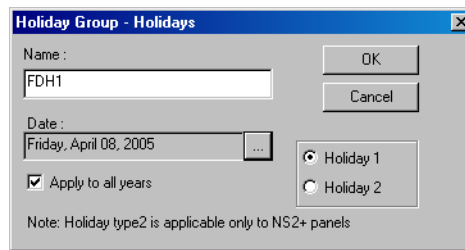


**NOTE:** Refer to the “User Interface” section of chapter 3 of this manual for details on working with database window elements.

- 2 Click **Add** to open the Holiday Group Record dialog (next illustration).



3 Enter the **Holiday Group Name**.



- 4 Click **Add** to enter the first Holiday for the group.
- 5 Enter the Holiday **Name**.
- 6 Click the browse button to the right of the **Date** field to open the Calendar.
- 7 Select the date for the holiday you are adding, and click **OK** to return to the **Holidays** dialog.
- 8 Select the **Apply to All Years** check box if this is a recurring holiday, that falls on the same date each year.
- 9 Click **OK**. The holiday is added to the new Holiday Group being created.

Add up to 32 holidays per Holiday Group record.  
When you finish, click **OK** to return to the  
Holiday Group database window.

## Editing a Holiday Group

To make changes to a Holiday Group record, select it from the Holiday Group database window and click the **Edit** button. The Holiday Group Record window (below) is displayed, with all holidays for the selected group listed.

Name	Date
------	------

Click **Add** to include additional holidays in the group.

Highlight any holiday needing to be changed, and click the **Edit** button. The Holiday window opens, allowing you to edit the holiday.

To delete a holiday, selected it from the list and click the **Delete** button. The holiday is instantly deleted, no prompt or warning is displayed.

## Isolating and Deleting a Holiday Group

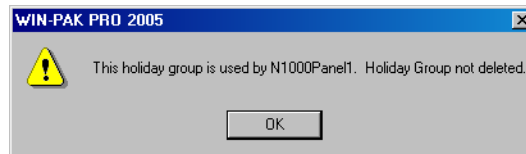
Holiday Groups are attached to panels within the access control system. Deleting a Holiday Group not in use is simply a matter of selecting it and clicking the Delete button on the main Holiday Group database window.

If the Holiday Group is assigned to a control panel, it can not be deleted until it is isolated from the panel.

### Isolating Holiday Groups

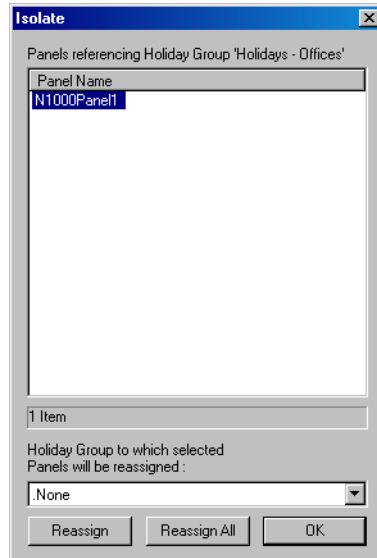
Use the **Isolate** function to determine where the Holiday Group is being used, and to assign other Holiday Groups to those panels.

When attempting to delete a Holiday Group that needs to be isolated, the following prompt indicates the group is in use.



Click **OK** to return to the Holiday Group database window and isolate the Holiday Group.

- 1 Select the Holiday Group to be deleted, and click the **Isolate** button. The Isolate window is displayed, indicating the panels using the Holiday Group.



- 2 Use the drop-down list at the bottom of the window to assign a different Holiday Group to each affected panel.
- 3 Click **OK** to return to the Holiday Group database window.
- 4 Click **Delete** to remove the selected Holiday Group from the database.

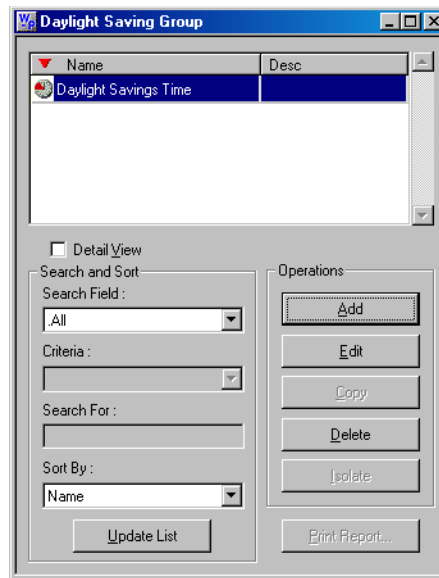
## Daylight Savings Groups

If your access control system encompasses locations that use other than standard Daylight Savings settings, you establish a special Daylight Savings group to handle those locations.

**NOTE:** Refer to the “User Interface” section of chapter 3 of this manual for details on working with database window elements.

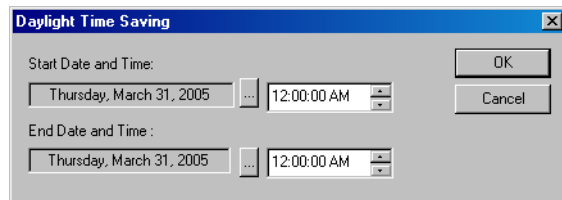
### Defining a Daylight Savings Group

- 1 Select **Daylight Saving Group** from the **Time Management** option on the Configuration menu. The main Daylight Saving Group window is displayed, listing groups that have already been defined.

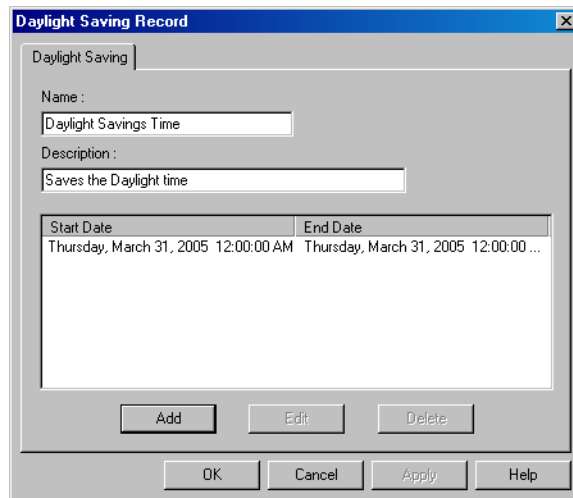


- 2 Click **Add** to define a Daylight Saving Group. The Daylight Saving Record window is displayed.

- 3 Enter the **Name** of the group. Geographic references are recommended.
- 4 Enter a short **Description** of the group.
- 5 Click the **Add** button to enter dates for the group. The Daylight Time Saving dialog is displayed.



- 6 Use the **Start** and **End Date and Time** fields to set the beginning and ending parameters for the group. The browse button to the right of the date fields pops up a calendar to use in selecting dates.
- 7 Click **OK** to return to the **Daylight Saving Record** window, where the new parameters are now displayed.



- 8 Click **OK** to save the group parameters and return to the main Daylight Saving Group database window.

### Editing a Daylight Saving Group

Make changes to a Daylight Saving Group by selecting it from the database window and clicking the Edit button.

The Daylight Saving Record window is displayed, from which the Name and Description can be changed. Edit individual group parameters by selecting them from the **Start** and **End Date** list, and clicking the **Edit** button to open the **Daylight Time Saving** dialog.

### Isolating and Deleting Daylight Saving Groups

Daylight Saving Groups are attached to panels within the access control system. Deleting a group not in use is simply a matter of selecting it and clicking the **Delete** button on the main Daylight Saving Group database window.

However, deleting a group, without first cleaning up all the locations where it is used, could leave the system with undefined states of operation.

Fortunately WIN-PAK provides an Isolate tool to make this cleanup easy. Clicking the Isolate button [with the appropriate Daylight Saving Group selected in the Daylight Saving Group window produces a dialog that displays which panels reference this Daylight Saving Group.

This dialog also allows you to make adjustments in the panel definitions to remove the need for this group. After the Daylight Saving Group has been isolated it can be deleted.



## Device Map

The Device Map [accessed from the WIN-PAK Configuration menu] allows you to view the physical devices that make up your access control system and shows how they are connected to one another.

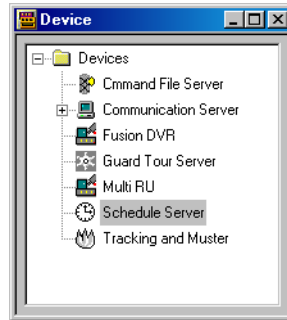
### Physical Devices and Abstract Devices

Access control system devices are identified by adding them to the device tree. As each physical device [e.g. a panel or a modem pool] is added to the Device Map, a logical representation known as an ADV (abstract device) should be created for it. ADVs are hardware independent devices, allowing a management layer between the hardware, WIN-PAK software, and the database. These ADVs are then used on floor plans and control maps to monitor and control the devices.

Each ADV is associated with an Action Group, which determines system actions such as activating a command file or playing a sound file in reaction to transactions from the device. An Action Group can be edited from the Action Group database to make global changes in all ADVs associated with a particular action group.

## Using the Device Map

The Device Map is set up in a graphical tree structure representing the physical connections of



The highest level in the Device Map is the Devices folder. Servers, including the Communication Server, are added at this level.

- CCTV switchers and various types of panel loops are added to the Communication Server.
- Panels are then added to the panel loops, and CCTV cameras and monitors are added to the CCTV switchers.
- Card readers and keypads, input points and output points are defined in the panel configuration.

Once these devices have been added to the Device Map, and corresponding ADVs defined, they can be used in the definition of Access Areas, Control Areas, and Tracking and Muster Areas.

## Device Maintenance

Device configurations and ADV definitions can be edited from the Device Map: Right-click any device, and select **Configure** from the menu.

Devices can also be deleted from the system by deleting them from the Device Map: Right-click a device, and click **Delete**. However, you cannot delete devices which have ADVs that are in use. The Isolate option lets you identify where a device is used [e.g. operator level, floor plan, control map] and change its usage so that it can be deleted.

## Abstract Devices

An ADV is a logical representation of a physical device. ADVs represent all the system hardware and services available for viewing and/or control.

Similar to an icon, an ADV is associated with an actual device in your access control system, such as a panel or alarm. ADVs provide a graphic interface for monitoring the status and controlling the actions of a physical device. ADVs can be placed on Floor Plans for monitoring and controlling the WIN-PAK system.

In operation, the ADV signals the state or status of the object by blinking and/or changing color. A sound file can also be associated with the ADV to signal a change in state.

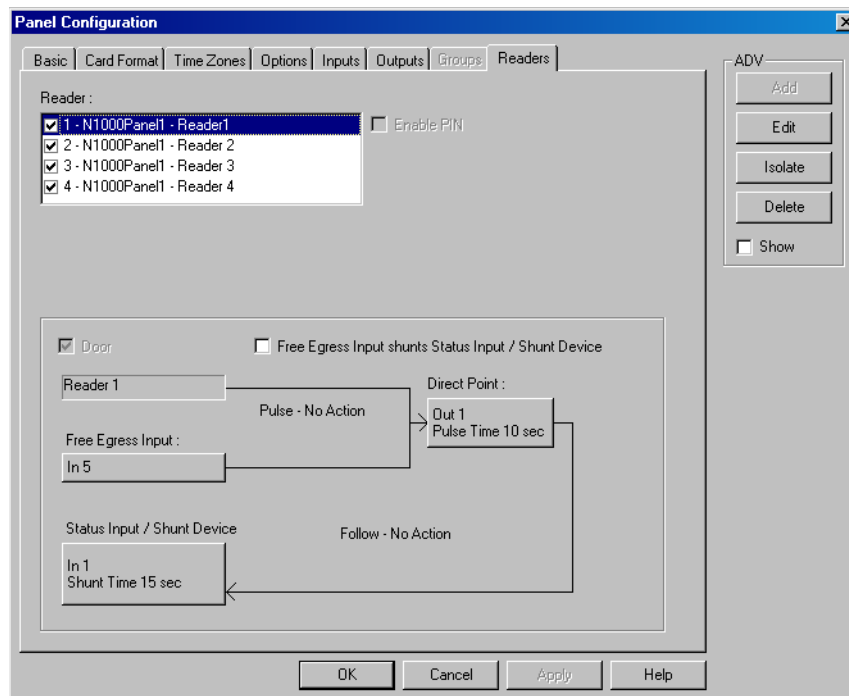
Each ADV has a control user interface that allows the user to execute functions available for that object. Right-clicking the ADV opens the control menu. Drag and drop functionality is available in some cases. For example a camera object can be selected, then clicked and dropped onto a monitor object to initiate a switch.

Colors, blinking, and other ADV properties can be edited, and the ADV can be resized and rotated in the Floor Plan Definition utility.

Each ADV is associated with an Action Group, which defines the priority of a given event related to the device, as well as any actions that should take place in response to an event. When an Action Group is edited, all ADVs associated with it are changed, globally.

### Abstract Device Definitions

Abstract Devices (ADVs) are created through the Device Map. Each device configuration window has an ADV section in the upper right corner.



Clicking **Add** to create or **Edit** to modify will open the **Abstract Device** record configuration window. The Show box allows the ADV to be viewed. The general format for all ADVs is the same. However, the available Actions vary, depending on the type of device with which the ADV is associated.

## Setting Up ADVs

Abstract Device Record configuration windows contain the following.

The screenshot shows a configuration window titled "Abstract Device Record - Entrance". It contains several sections for configuring an Abstract Device (ADV):

- ADV Section:** Includes fields for "Name" (containing "P1 R3"), "Description", and a "Default Floor Plan" dropdown menu (set to "None").
- Action Group Section:** Includes a "Name" dropdown menu (set to "Door") and buttons for "Add", "Rename", and "Delete".
- Actions Section:** Includes a dropdown for "Action" (set to "Anti-Passback Violation"), a "Priority" spinner (set to 30), a "Send Email" checkbox (unchecked), a "Time Zone" dropdown (set to "Always On"), a "Write to History" checkbox (checked), and a "Print on alarm printer" checkbox (unchecked).
- Command File on Section:** Includes dropdowns for "Receive", "Acknowledge", and "Clear", all set to "None".
- Sound File:** A text field with a browse button ("...").
- Digital Video Camera:** A dropdown menu set to "None".
- Alarm Detail View Message:** A text area containing the message: "Card was denied entry because it has already been used going in/out with out properly going out/in."
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

- 1 The ADV Name default is based on the type of device being configured. For example, if a Communication Server is being added, the server name is placed in this field. The Name field holds up to 40 characters. Alphanumeric and special characters, as well as spaces can be used, and can be changed.

While not required, it is recommended that a Description be entered as well. The Description field can hold up to 60 characters. This description will be helpful in attempting to select this ADV when setting up other aspects of your access control system.

- 2 Select a **Default Floorplan** to be associated with the device (optional). The floor plan specified here can be opened from an Alarm View by right-clicking a message from this device and selecting Floor Plan.
- 3 If other ADVs of this type have been defined, select an existing **Action Group** from the drop-down list. All the properties of the selected Action Group are applied to this ADV.

If this is the first ADV of its type, click **Add** (just beneath the Action Group field). Enter a name for the Action Group, and press the ENTER key on your keyboard.

Define the priorities, command files, and other properties for the selected action under the Action Group. These become part of the Action Group and are available for other ADVs of this type. Any changes made to this Action Group are applied to all associated ADVs using this Action Group name.

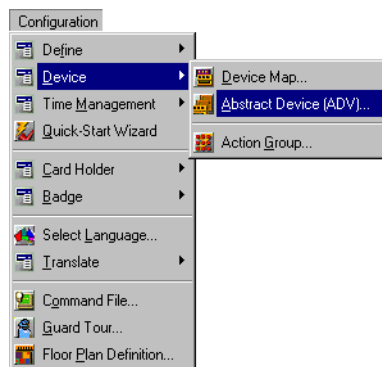
If you want to define a unique action group for this ADV, then select ".Custom" for the Action Group and define the priorities, command files, and other properties.

- 4 Select an **Action** from the list (e.g. Server OK, or Server Trouble). This list varies depending on the type of device being configured. Refer to the "ADV Action Groups" section of this chapter for examples. Each action [Alarm, Normal, Trouble etc] requires a priority setting to be viewed in the Alarm monitor.
- 5 Set the **Priority** you want assigned to the selected Action. If the priority is 0, the action state will not be displayed in the Alarm monitor, Control Map or Floor Plan view. [1 is the highest priority, 99 is the lowest.]
- 6 Select the **Time Zone** during which you want the Action Group activated. The default setting is Always, meaning the defined actions take effect regardless of the time.
- 7 Select the **Write to History** option if you want the event written to the history file.
- 8 Select the **Print** option if you want this event printed on the alarm printer.
- 9 Select any **Command Files** you want activated in response to the selected Action. A command file must be created to perform the CCTV camera/monitor switching.
- 10 If a Sound File is to be activated in response to the Action, it is selected here. Sounds will only play if the event is displayed in the Alarm View.
- 11 Insert the **Message** you want sent to the Alarm Details window in response to the Action.

## Abstract Device Database

The Abstract Device database contains information on all Abstract Devices (ADV) that have been defined for your access control system.

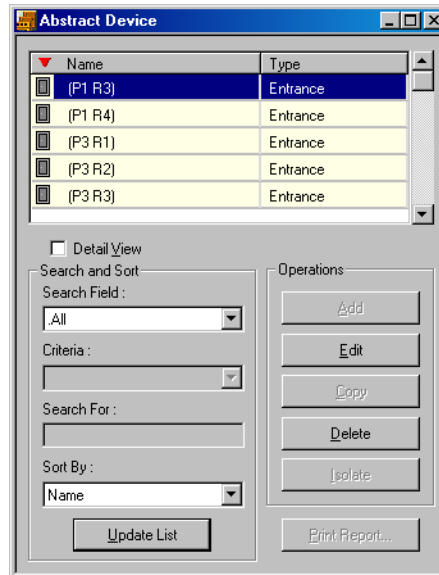
Open the Abstract Device Database by selecting **Abstract Device (ADV)** from the **Device** option on the Configuration menu.



The main database window (next illustration) opens, listing all existing ADVs.

This list can be searched and sorted by Name and Type.





ADV's can be edited by selecting them from the database list and clicking **Edit**. However, they can only be created and deleted from within the Device Map.

## Action Groups

An Action Group is a set of actions assigned to a device when its ADV is defined. The Action Group defines what will happen in response to a given event.

For example, a Loop Action Group definition defines what happens when the state of a communication loop changes from OK to Trouble, or from Trouble back to OK.

Responses can include sending a command file [when an event is received, acknowledged, or cleared] and/or the activation of a sound file. Additionally, a message can be attached which appears in the Alarm Details view when the initiating action occurs.

The list of trigger events available depends on the type of device being configured. For example, a supervised input point Action Group will include three sets of Actions triggered when the state of the point is Active, Normal, and Trouble. Each state is assigned a priority and a Time Zone during which the actions apply. [If a state is assigned a priority of zero, no actions apply. The Time Zone defaults to Always, meaning the action is always applicable.]

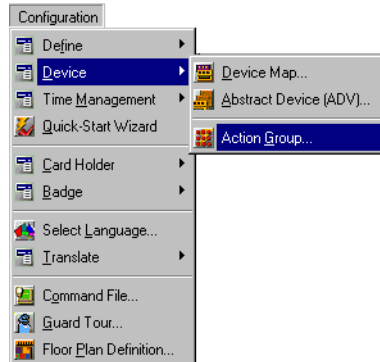
Command files and sound files can be associated with an event. The event can be written to a file and can be printed. If a message is associated with the event, the message appears in the Details window, opened from the Alarm View window.

An Action Group can be edited from the Action Group database to make global changes to all ADVs associated with a particular Action Group.

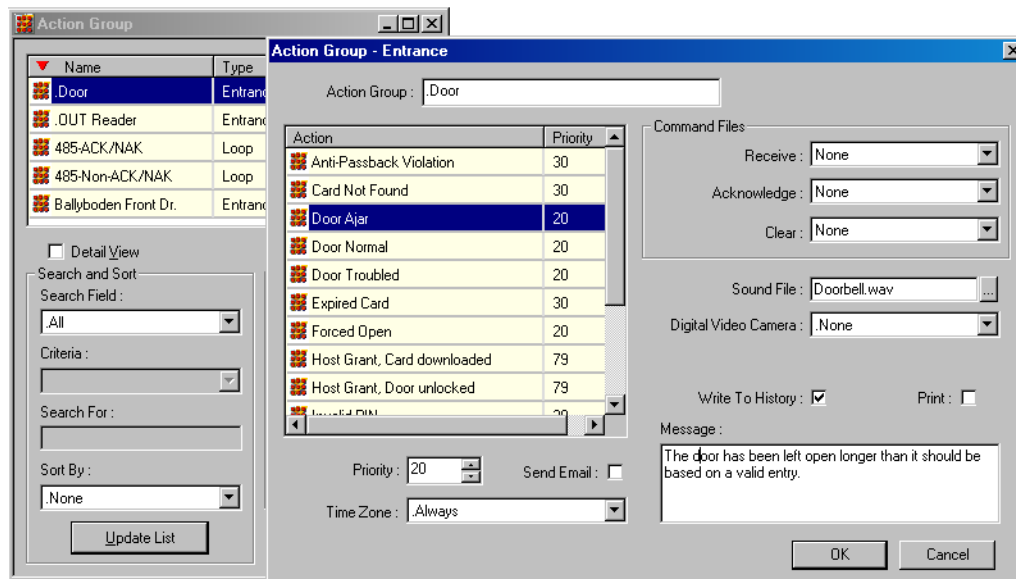
If you wish to change an Action Group feature for a single ADV, you must open the device from the Device Map, rename the Action Group Template or choose ".Custom" and then edit the new template.

Once an Action Group [except ".Custom"] has been created, it can be used as a template for other devices of the same type.

The Action Group database is available by selecting **Action Group** from the **Device** option on the Configuration menu.



- 1 Select an **Action Group** from the database window and click the **Edit** button to open the Action Group detail view (next illustration).



- 2 Set the **Priority** you want assigned to the selected Action. If the priority is 0, the action state will not be displayed in the Alarm Monitor, Control Map or Floor Plan View. [1 is the highest priority, 99 is the lowest.]
- 3 Select the **Time Zone** during which you want the action group activated. The default setting is Always, meaning the defined actions take effect regardless of the time.
- 4 Select any **Command Files** you want activated in response to the selected Action. A command file must be created to perform CCTV camera/monitor switching.
- 5 If a Sound File is to be activated in response to the action, it is selected here.
- 6 Select the **Write to History** option if you want the action written to the history file.  
  
Select the **Print** option if you want this action printed on the alarm printer.
- 7 Insert the **Message** you want sent to the Alarm Detail view in response to the action.
- 8 Click **OK** to save the Action Group settings and return to the Action Group database window.

## ADV Action Groups

To view a list of all actions available for a particular type of device, open the **Action Group** database from the **Device** option on the WIN-PAK Configuration menu.

Within each Action Group, you can view the specific actions assigned to the group by selecting the **Detail View** check box.

When the detail view of the Action Group is displayed, each Action assigned to the group is shown. Highlight an Action to see its related specifics, including a Priority (if one is assigned), Command Files, Sound File, Message, and Time Zone.

Though not all-inclusive, the following lists give you an idea of the types of actions defined for different ADVs used in the WIN-PAK System.

### **485-ACK/NAK and 485-Non-ACK/NAK (Loop) Action Groups**

<b>Action</b>	<b>Message/Description</b>
Loop OK	The N-485 is working properly.
Loop RemoteFailed Dial-up Failed	The host computer was not able to connect via dialup to the control panel.
Loop RemoteDial-up OK	The host computer was able to connect via dialup to the control panel.
Loop Trouble	The N-485 is NOT working properly.

### **Guard Tour Sequenced Action Groups**

<b>Action</b>	<b>Message/Description</b>
Early Arrival	The guard arrived early at the checkpoint.
Late Arrival	The guard arrived late at the checkpoint.
Missed	The guard missed the checkpoint.
Out of Sequence	The guard is out of sequence.

### **C-100 (Loop) Action Group**

<b>Action</b>	<b>Message/Description</b>
Loop OK	The C-100 is working properly.
Loop Remote	The host computer was unable to connect via dial-upDial-up Failed to the control panel.
Loop Remote dial-	The host computer was able to connect via up Dial-up OK to the control panel.
Loop Trouble	The C-100 is NOT working properly.

### Camera (CCTV Camera) Action Group

Action	Message/Description
CCTV Camera OK	The camera is working properly.
CCTV Camera Trouble	The camera is NOT working properly.

### Camera P/T (CCTV Camera) Action Group

Action	Message/Description
CCTV Camera OK	The pan tilt camera is working properly.
CCTV Camera Trouble	The pan tilt camera is NOT working properly.

### Cards (Entrance Reader) Action Group

Action	Message/Description
Anti-Passback Violation already	A card was denied entry because it has been used going in/out without properly going in/out.
Card Not Found	A card was denied entry because it was unknown to the reader.
Expired Card	A card was denied entry because it has been expired by date.
Host Grant Card	Access was granted to the user if event is within two minutes of downloaded of computer time. The control panel was updated with valid card information.
Host Grant Door	Access was granted to the user if event is within two minutes of computer time. The control panel was not updated with valid card information.
Invalid PIN	A card was denied entry because it was used with an invalid PIN.
Invalid Site Code	A card was denied entry because it did not have a proper site code.
Invalid Time Zone	A card was denied entry because it was used outside its time period.
Trace Card	A card that is being traced was used and entry was granted.
Valid Card	A valid card had been used and entry was granted.

### Command File Server Action Group

Action	Message/Description
Server OK	The command file server is working properly.
Server Trouble	The command file server is NOT working properly. Verify that the "WIN-PAK Command File Server" is running in the WIN-PAK Service Manager.

### Communication Server Action Group

Action	Message/Description
Server OK	The communication server is working properly.
Server Trouble	The communication server is NOT working properly. Verify that "WIN-PAK Communication Server" is running in the WIN-PAK Service Manager.

### Door (Entrance) Action Group

Action	Message/Description
Anti-Passback Violation	A card was denied entry because it has already been used going in/out without properly going out/in.
Card Not Found	A card was denied entry because it was unknown to the reader.
Door Ajar	The door has been left open longer than it should be based on a valid entry.
Door Normal	The door position is now closed.
Door Troubled	The door status cannot be accurately displayed due to tampering.
Expired Card	A card was denied entry because it has been expired by date.
Forced Open	The door is in the alarm mode due to invalid entry.
Host Grant Card	Access was granted to the user if event is within two minutes downloaded of computer time. The control panel was updated with valid card information.
Host Grant Door	Access was granted to the user if event is within two minutes unlocked of computer time. The control panel was not updated with valid card information.
Invalid PIN	A card was denied entry because it was used with an invalid PIN.

Invalid Site Code	A card was denied entry because it did not have a proper facility code.
Invalid Time Zone	A card was denied entry because it was used outside its time period.
Trace Card	A card that is being traced was used and entry was granted.
Valid Card	A valid card has been used and entry was granted.

### Door Output Action Group

Action	Message/Description
De-energized	The output of the door is not energized.
Energized	The output of the door is energized.
Trouble	The output of the door is not responding.

### Group Action Group

Action	Message/Description
De-energized	The group of relays is not energized.
Energized	The group of relays is energized.

### Guard Tour Sequenced Group

Action	Message/Description
Early Arrival	The guard arrived early at the designated check point reader.
Late Arrival	The guard arrived late at the designated check point reader.
Missed	The guard missed the designated check point reader.
Out of Sequence	The guard is out of sequence.

### Guard Tour Server Group

Action	Message/Description
Server OK	The Guard Tour server is working properly.
Server Trouble	The Guard Tour server is NOT working properly. Verify that "WIN-PAK Guard Tour Server" is running in the WIN-PAK Service Manager.



**Guard Tour Unsequenced Action Group**

Action	Message/Description
Checked	The guard has checked the required input/ reader.

**Input Alarm Point (Input Supervised) Action Group**

Action	Message/Description
Input Active	The input is in the alarm state
Input Normal	The input is in the normal state.
Input Trouble	The status can not be accurately displayed due to tampering.

**Modem Pool Ack/NAK Action Group**

Action	Message/Description
Modem Pool OK	Modem pool is working properly.
Modem Pool Trouble	Modem pool is NOT working properly.

**Monitor (CCTV Monitor) Action Group**

Action	Message/Description
CCTV Monitor OK	Monitor is working properly.
CCTV Monitor Trouble	Monitor is NOT working properly.

### NS2+ Action Group

Action	Message/Description
Auxilliary Port Failure	The auxilliary communication port is not cation port is
External 5 Volt Normal	The 5 Volt reader power is normal.
External 5 Volt Alarm	The 5 Volt reader power is shorted.
Ground Fault Alarm	An input point or reader is shorted to earth ground causing a ground fault.
Ground Fault Normal	An input point or reader that caused the ground fault has returned to normal.
Low Voltage Alarm	Battery voltage is low.
Panel Communication Alarm	Communication with the control panel has been lost.
Panel Communication Normal	Communication with the control panel has been restored.
Panel Reset	The control panel has been reset.
Poll Response Alarm	The control panel is NOT responding to computer polling.
Poll Response Normal	The control panel is responding normallyto computer polling.
Primary Power Failure	Control panel primary power has been lost.
Primary Power Normal stored.	Control panel primary power has been re-stored.
Tamper Switch Alarm	The control panel service door is open.
Tamper Switch Normal	The control panel service door is closed.

### PW-2000-II Panel (Panel PW-2000-II) Action Group

Action	Message/Description
Auxiliary Port Failure	The auxiliary communication port is not working.
Auxiliary Port Normal	The auxiliary communication port is working.
Panel Communication Alarm	Communication with the control panel has been lost.
Panel Communication Normal	Communication with the control panel has been restored.
Panel Reset	The control panel has been reset.
Poll Response Alarm	The control panel is NOT responding to computer polling.
Poll Response Normal	The control panel is responding normally to computer polling.
Primary Power Failure	Control panel primary power has been lost.
Primary Power Normal	Control panel primary power has been restored.

### PW-2000-III and PW-2000- IV (Panel PW-2000-III/IV) Action Groups

Action	Message/Description
Auxiliary Port Failure	The auxiliary communication port is not working.
Auxiliary Port Normal	The auxiliary communication port is working.
External 5 Volt Alarm	The 5 volt reader power is shorted.
External 5 Volt Normal	The 5 volt reader power is normal.
Ground Fault Alarm	An input point is shorted to earth ground causing a ground fault.
Ground Fault Normal	An input point that caused the ground fault has returned to normal.
Low Voltage Alarm	Battery voltage is low.
Low Voltage Normal	Battery voltage is normal.
Panel Communication Alarm	Communication with the control panel has been lost.
Panel Communication Normal	Communication with the control panel has been restored.
Panel Reset	The control panel has been reset.
Poll Response Alarm	The control panel is not responding to computer polling.

Poll Response Normal	The control panel is responding normally to computer polling.
Tamper Switch Alarm	The control panel service door is open.
Tamper Switch Normal	The control panel service door is closed.

### PRO-2200 SIO Board Action Group

Action	Message/Description
Primary Power Failure	Primary power is down. Make a service call.
Primary Power Normal	You have about 2 hours of backup power.
Tamper Switch Alarm	The PRO-2200 enclosure is open. Check to see if service is being done or dispatch security as needed.  Note: The tamper switch is a Norther Computers switch. When the door to the enclosure is opened (switch open), the firmware reports a Tamper Switch Alarm immediately, which is also shown at the same time as a Tamper Switch Alarm in the Alarm View of WIN-PAK.
Tamper Switch Normal	The PRO-2200 enclosure is now closed.  Note: When the door to the enclosure is closed (switch closed), the firmware reports a Tamper Switch Normal after approximately 3 seconds, which is also shown at that time as a Tamper Switch Normal in the Alarm View of WIN-PAK.

### PRO-2200 Direct Connect and PRO-2200 (Panel PRO-2200) Action Groups

Action	Message/Description
Incorrect Password	An incorrect password attempt was made to access the controller.
Panel Configuration Error	An error was generated by an incorrect panel configuration.
Poll Response Alarm	The panel has failed to respond to a poll.
Poll Response Normal	The panel has returned a normal response to a poll.
Primary Power Failure	Primary power is down. Make a service call. You have about 2 hours of backup power.
Primary Power Normal	Primary power has been restored.
Tamper Switch Alarm	The PRO-2200 enclosure is open. Check to see if service is being done or dispatch security as needed.

### PRO-2200 Reader Action Group

Action	Message/Description
Anti-Passback Violation	A card was denied entry because it has already been used going in/out without properly going out/in.
Anti-Passback Violation, door not used	
Anti-Passback Violation, door used	
Card Not Found	A card was denied entry because it was unknown to the reader.
Door Ajar	
Door Locked	
Door Normal	The door position is now closed.
Door Trouble	
Door Unlocked	
Duress, request denied	
Duress, door not used	
Duress, door used	
Forced Open because of invalid entry.	The door is in the alarm mode
Host Grant, card downloaded	
Host Grant, door unlocked	
Invalid Format	
Invalid Format, reverse read	
Invalid PIN	A card was denied entry because it was used with an invalid PIN.
Invalid Site Code	A card was denied entry because it did not have a proper facility code.
Invalid Time Zone	A card was denied entry because it was used outside its time report.
Issue Code	
Never allowed at this door	
No second card presented	

**Issue Code**

Never allowed at  
this door

No second card  
presented

Site Code Verified,  
door not used

Site Code Verified,  
door used  
Trace Card

A card that is being traced was used and entry  
was granted.

Valid Card,  
door not used

Valid Card, door used

A valid card has been used and entry was  
granted.

### **PRO-2200 Input–Generic (Input PRO-2200 Supervised) Action Group**

<b>Action</b>	<b>Message/Description</b>
Input Active	The input is in the alarm state.
Input Normal	The input is in the normal state.
Input Troubled	The status can not be accurately displayed because of tampering.

### **RS-232 Action Group**

<b>Action</b>	<b>Message/Description</b>
RS-232 Link OK	The RS-232 port is communicating properly.
RS-232 Link Trouble	The RS-232 port is NOT communicating properly.

**RS-232 Port (Single Panel) Action Group**

Action	Message/Description
Loop Alarm	The RS-232 Port (Single Panel) is NOT working properly.
Loop OK	The RS-232 Port (Single Panel) is working properly.

**Schedule Server Action Group**

Action	Message/Description
Server OK	The Schedule Server is operating normally.
Server Trouble	The Schedule Server is not operating properly. Verify that the WIN-PAK Schedule Server is running in the WIN-PAK Service Manager.

**Tracking Server Action Group**

Action	Message/Description
Server OK	The Tracking Server is working
Server Trouble	The Tracking and Muster server is not working properly. Verify that the WIN-PAK Muster Server is running in the WIN-PAK Service Manager.

**Video Switcher (CCTV Switcher) Action Group**

Action	Message/Description
CCTV Switcher OK	The video switcher is working properly.
CCTV Switcher Trouble	The video switcher is NOT working properly.

## Servers

A series of servers configured on the Device Map allow communication and control between various WIN-PAK devices and databases.

This section explains how to set up the Command File Server, Communication Server, Guard Tour Server, Schedule Server, and Tracking and Muster Server.

### Communication Server

In order to communicate with system devices, including panel loops, panels, and CCTV switchers, you must configure a Communication Server. WIN-PAK supports one or more Communication Servers depending on the type of license.

During installation of the WIN-PAK software, a communication server module is installed on a designated PC. This can be the same machine as the Database Server or another computer in the system.

Communication Servers are defined by adding them to the Device Map and creating an ADV. When creating multiple communication servers, you can define one and then copy it, making any necessary changes for the subsequent servers.

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**NOTE:** When a server is added to the Device Map, you must log out and log in again before the change takes effect.

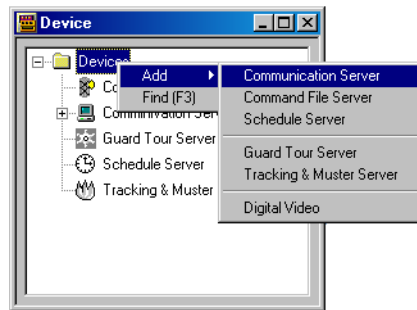
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#### Configuring a Communication Server

- 1 Open the **Device Map** [from the Device option on the Configuration menu], and right-click on the **Devices** folder.



- 2 Select **Add** from the control menu, then select **Communication Server** from the subsequent list.



The Com Server Configuration - Basic Information window is displayed.

### Com Server Configuration - Basic Information

A screenshot of a window titled 'Com Server Configuration - Basic Information'. The window contains several input fields and buttons. On the left, there are labels for 'Name:', 'Description:', 'Machine name:', 'Protocol end point:', 'Alarm Priority for notification:', and 'Alarm Priority for required acknowledgement:'. The corresponding input fields contain 'Communication Server', an empty field, 'SAPPHIRE', '5566', '80', and '50' respectively. Below these is a checkbox labeled 'Write Transactions to file?' which is unchecked. At the bottom left, it says 'Operating System: © Windows NT 4.0, Windows 2000, or XP'. On the right side, there is a vertical stack of buttons: 'Add', 'Edit', 'Isolate', 'Delete', and a 'Show' checkbox. At the bottom of the window, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- 1 Enter a unique **Name** for the Communication Server using up to 30 alphanumeric characters.
- 2 Enter a **Description** of the Communication Server that helps you further identify it (using up to 60 characters).

- 3 The Machine Name can be found in the Windows Control Panel by activating the Network application and looking at the Identification tab.
- 4 It is generally not necessary to change the Protocol End Point. However, there are multiple servers [Command File, Guard Tour, Scheduler, Tracking and Muster], and each must have a unique protocol end point [which can be any number from 1024 through 9999]. Select a number that is not used by another device on the network and enter it into this field. The default should work fine. Change this only if duplicate protocol points exist.
- 5 Alarms with a higher priority (lower number) than the setting entered in the Alarm Priority for Notification field appear in the Event view.
- 6 Alarms with a higher priority (lower number) than the Alarm Priority for required acknowledgment setting appear in the Alarm view and must be acknowledged before being cleared.
- 7 Select the **Write Transactions to file** check box if you want a record of the server transactions written to a file:

(C:\Program Files\WINPAK PRO\RSDUMP)

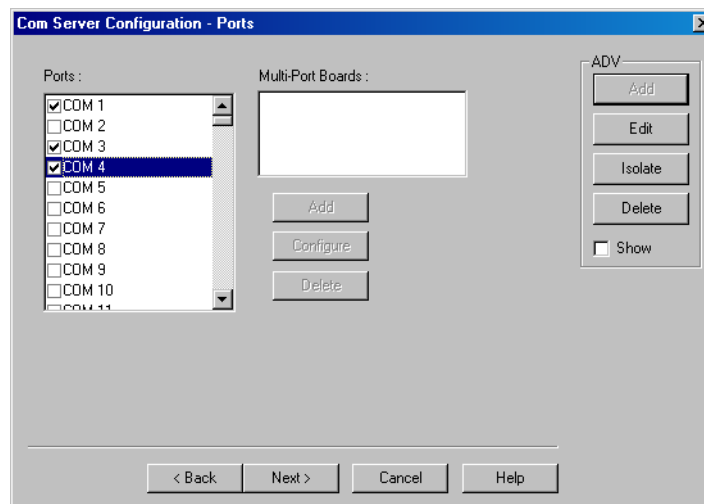
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**!WARNING!** This option should only be selected and used for diagnostic purposes. Deselect the **Write Transactions to file** check box after use.

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- 8 Indicate the **Operating System** used by the server.
- 9 Create an **ADV** for the Communication Server, by clicking the **Add** button in the ADV area of the window.
- 10 Click the **Next** button to continue. The Com Server Configuration - Ports window will be displayed (next illustration).

### Com Server Configuration - Ports

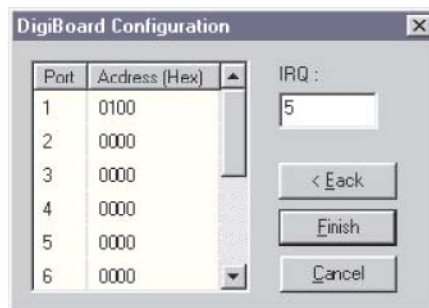


- 1 Select the check boxes indicating the **Ports** on this server that are used for the access control system.
- 2 If the server has a multi-port board, click **Add** under the Multi-Port Board field. A list of compatible multi-port boards opens. Select and configure the correct definition.



**NOTE:** The multi-port option in the Com Serve Configuration-Ports dialog is used to implement a multi-port support driver. When running Windows 2000 or XP, WIN-PAK makes use of the standard NT drivers and therefore, does not need this extra definition step.

- 3 Click the dropdown arrow in the **Board Type** field, then select the correct multi-port board. Supported multi-port boards for Windows 98/95 include: Boca BB1004, Boca BB1008, Boca BB2016, Digiboard PC/4, Digiboard PC/8 and Digiboard PC/16.
- 4 Click **Next**. The Board Configuration window appears. Enter the required information in the appropriate fields.



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**NOTE:** You must enter the address and IRQ setting for each port. Consult the board manufacturer's documentation for further information.

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- 5 Click **Next**. Then click **Finish**.

## Command File Server

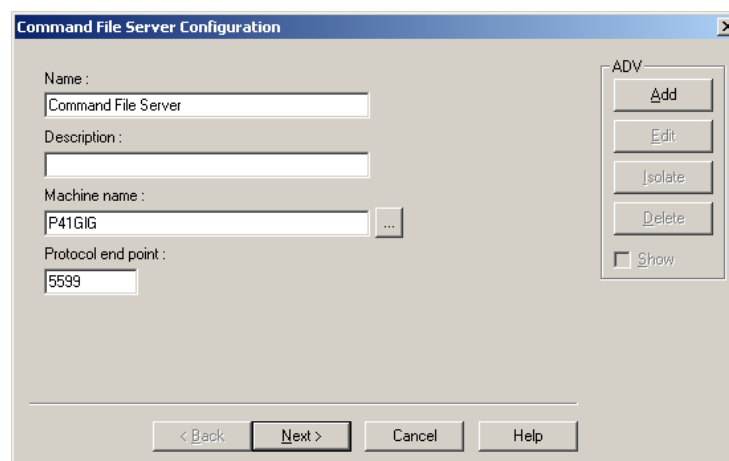
In order to use the Command File functions, a Command File Server must be configured on the Device Map. Normally the Command File Server is located on the same machine as the Database Server.

### Configuring the Command File Server

- 1 Open the **Device Map** [from the Device option on the Configuration menu] and right-click on the **Devices** folder.
- 2 Select **Add** from the control menu, and select **Command File Server** from the subsequent list.



The Command File Server Configuration window is displayed.



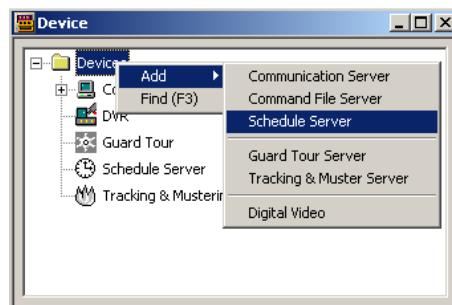
- 3 Enter a unique **Name** for the Command File Server, using up to 30 characters.
- 4 If desired, enter a **Description** of the Command File Server, using up to 60 characters.
- 5 Enter the **Machine Name** where the server is located. This is usually the same machine as the Database Server.
- 6 It is generally not necessary to change the Protocol End Point. However, there are multiple servers [Communication, Guard Tour, Scheduler, Tracking and Muster], and each must have a unique protocol end point [which can be any number from 1024 through 9999]. Select a number that is not used by another device on the network and enter it into this field. The default should work fine. Change this only if duplicate protocol points exist.
- 7 Create an ADV for the Command File Server, by clicking the **Add** button in the ADV area of the window (upper right corner).
- 8 When you have completed the ADV, click **OK** to return to the Command File Server Configuration window.
- 9 Click **Next**. Then click **Finish** to add the server to your Device Map.

## Schedule Server

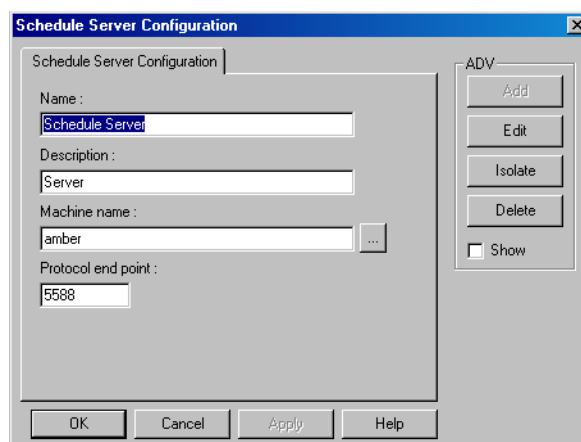
In order to use the Schedule functions, a Schedule Server must be configured on the Device Map. Normally the Schedule Server is located on the same machine as the Database Server.

### Configuring a Schedule Server

- 1 Open the **Device Map** [from the **Device** option on the Configuration menu] and right-click on the **Devices** folder.
- 2 Select **Add** from the control menu, and select **Schedule Server** from the subsequent list.



The Schedule **Server Configuration** window is displayed.



- 3 Enter a unique **Name** for the Schedule Server using up to 30 characters. This is a required field.
- 4 If desired, enter a **Description** of the Schedule Server, using up to 60 characters.
- 5 Enter the **Machine Name** where the server is located. This is usually the same machine as the Database Server.
- 6 It is generally not necessary to change the Protocol End Point. However, there are multiple servers [Communication, Command File, Guard Tour, Tracking and Muster], and each must have a unique protocol end point, [which can be any number from 1024 through 9999]. Select a number that is not used by another device on the network and enter it into this field. The default should work fine. Change this only if duplicate protocol points exist.
- 7 Create an ADV for the Schedule Server, by clicking the **Add** button in the ADV area of the window (upper right corner).
- 8 When you have completed the ADV, click **OK** to return to the Schedule Server Configuration window.
- 9 Click **Next**. Then click **Finish** to add the Schedule Server to the Device Map.



## Guard Tour Server

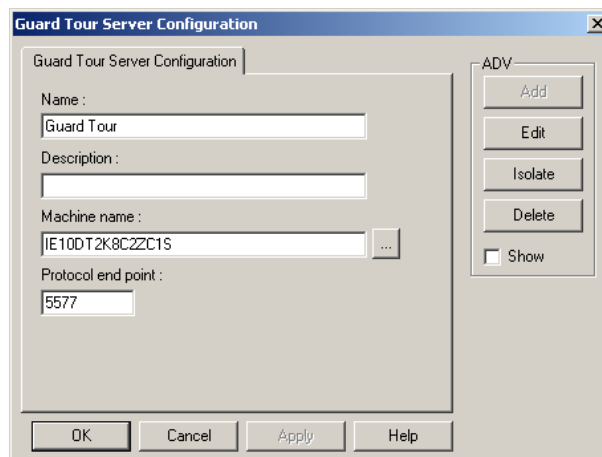
In order to use the Guard Tour functions, a Guard Tour Server must be configured on the Device Map. Normally the Guard Tour Server is located on the same machine as the Database Server.

### Configuring the Guard Tour Server

- 1 Open the **Device Map** [from the Device option on the Configuration menu], and right-click on the **Devices** folder.
- 2 Select **Add** from the control menu, and select **Guard Tour Server** from the subsequent list.



The Guard Tour **Server Configuration** window is displayed.



- 3 Enter a unique **Name** for the Guard Tour server using up to 30 characters.
- 4 If desired, enter a **Description** of the Guard Tour Server using up to 60 characters.
- 5 Enter the **Machine Name** where the server is located. This is usually the same machine as the Database Server.
- 6 It is generally not necessary to change the **Protocol End Point**. However, there are multiple servers [Communication, Command File, Scheduler, Tracking and Muster], and each must have a unique protocol end point [which can be any number from 1024 through 9999]. Select a number that is not used by another device on the network and enter it into this field. The default should work fine. Change this only if duplicate protocol points exist.
- 7 Create an ADV for the Guard Tour Server, by clicking the **Add** button in the ADV area of the window (upper right corner).
- 8 When you have completed the ADV, click **OK** to return to the Guard Tour Server Configuration window.
- 9 Click **Next**. Then click **Finish** to add the server to your Device Map.

---

**NOTE:** When a server is added to the Device Map, you must logout and then login again before the changes take effect.

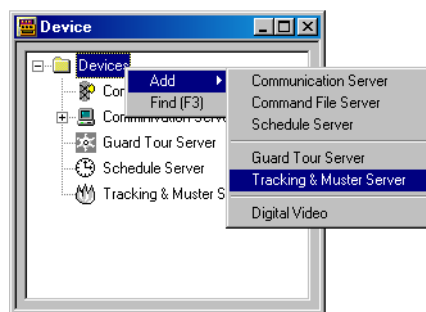
---

## Tracking and Muster Server

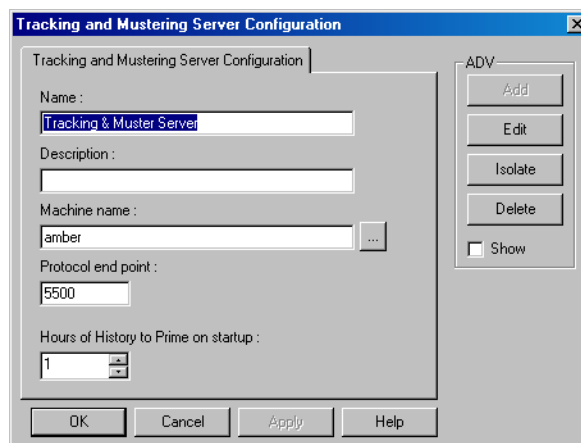
In order to use the Tracking and Muster functions, a Tracking and Muster Server must be configured on the Device Map. Normally it is located on the same machine as the Database Server.

### Configuring a Tracking and Muster Server

- 1 Open the **Device Map** [from the Device option on the Configuration menu], and right-click on the **Devices** folder.
- 2 Select **Add** from the control menu, and select **Tracking & Muster Server** from the subsequent list.



The Tracking & Mustering Server Configuration window is displayed.



- 3 Enter a unique **Name** for the Tracking and Mustering Server, using up to 30 characters.
- 4 If desired, enter a **Description** of the Tracking and Muster Server, using up to 60 characters.
- 5 Enter the **Machine Name** where the server is located. This is usually the same machine as the Database Server.
- 6 It is generally not necessary to change the Protocol End Point. However, there are multiple servers [Communication, Command File, Scheduler], and each must have a unique protocol end point [which can be any number from 1024 through 9999]. Select a number that is not used by another device on the network and enter it into this field. The default should work fine. Change this only if duplicate protocol points exist.
- 7 Use the **Hours of History to Prime on startup** field to select how many hours of tracking history are processed and displayed when the Muster View is opened. Select from 0 to 99 hours. The default setting is 8 hours.
- 8 Create an ADV for the server by clicking the **Add** button in the ADV area (upper right corner).
- 9 When you have completed the ADV, click **OK** to return to the Tracking and Muster Server Configuration window.

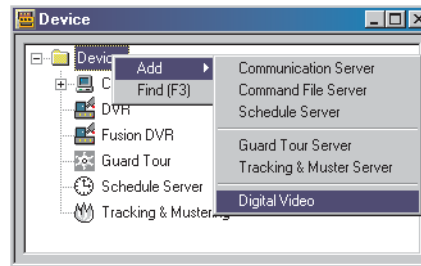
## Access DVPRO

To use **Access DVPRO**, a Digital Video must be configured on the Device Map.

**Note:** For Access DVPRO, RapidEye Admin/View Software needs to be installed on the machine from where it has to be viewed.

### Configuring Access DVPRO

- 1 On the Configuration menu, select Device > Device Map to open the Device window.



- 2 On the Device window, right-click on the Devices folder and select Add > Digital Video. The Digital View Configuration window appears.

A screenshot of the 'Digital Video Configuration' window. It contains several input fields and buttons. On the left, there are fields for 'Name', 'Description', 'Type' (a dropdown menu currently showing 'Access DVPRO'), 'User', and 'Password'. On the right, there is a group box labeled 'ADV' containing buttons for 'Add', 'Edit', 'Isolate', 'Delete', and a 'Show' checkbox. At the bottom of the window, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- 3 In the Type list, select Access DVPRO.
- 4 Type in the Name, User and Password parameters. The Description parameter is optional.

---

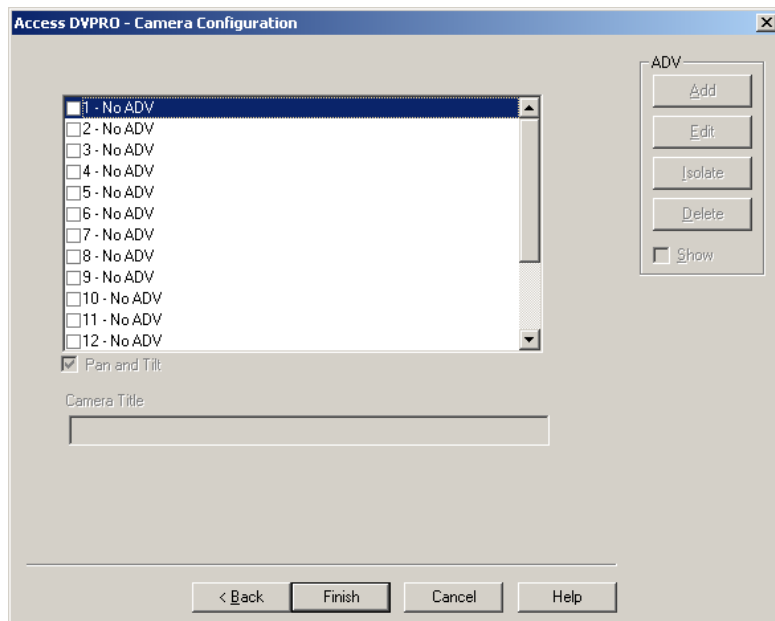
**NOTE:** The Access DVPRO name must be identical to the RapidEye Site name.

---

**NOTE:** To control a digital video device, the User and Password must be identical to the User and Password defined in the RapidEye unit software.

---

- 5 Click **Next**.



6. On the Access DVPRO dialog box, for each of the camera defined in the Access DVPRO system, select a camera ADV, and then click **Add**. The sequential order of the ADVs corresponds to the sequential order of the Access DVPRO cameras. Selecting the Pan and Tilt option defines a camera as a PTZ (pan tilt zoom) camera. Clearing the Pan and Tilt option defines the camera as a stationary camera.

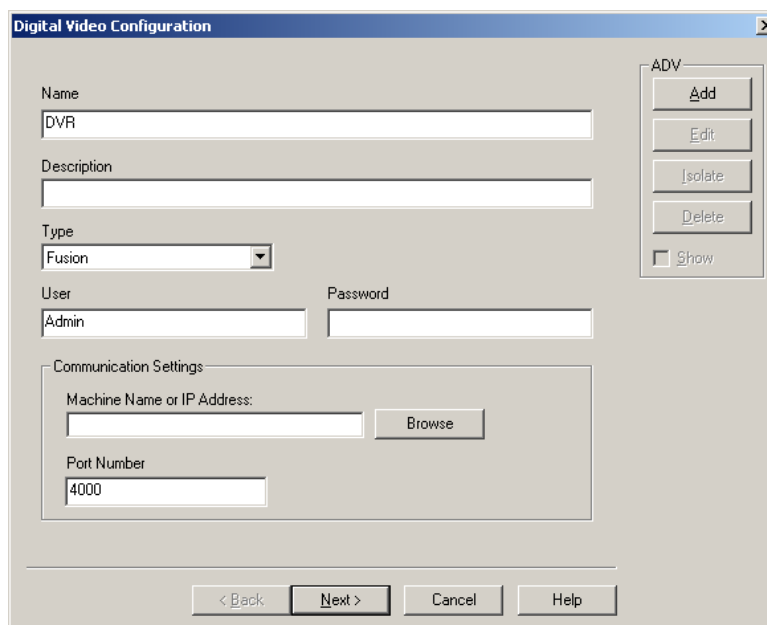
- 7 Click **Finish**. The Device window displays the newly defined Access DVPRO devices.

## Fusion

To use **Fusion**, a Digital Video must be configured.

### Configuring Fusion

- 1 On the Configuration menu, select Device > Device Map. The Device dialog box appears. (Refer Configuring Access DVPRO section).
- 2 Right-click the Devices folder and select Add > Digital Video. The Digital View Configuration window appears.



The image shows a 'Digital Video Configuration' dialog box. It has a title bar with a close button. The main area contains several fields: 'Name' with the value 'DVR', 'Description' (empty), 'Type' with a dropdown menu showing 'Fusion', 'User' with the value 'Admin', and 'Password' (empty). To the right of these fields is a vertical stack of buttons: 'Add', 'Edit', 'Isolate', 'Delete', and a 'Show' checkbox. Below the main fields is a 'Communication Settings' section with a 'Machine Name or IP Address' field and a 'Browse' button, and a 'Port Number' field with the value '4000'. At the bottom are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- 3 In Type list, select **Fusion**.

- 4 Type in the Name, User and Password parameters. The Description parameter is optional.

---

**NOTE:** To control a digital video device, the User and Password must be identical to the User and Password defined in the Fusion software.

---

- 5 Click the Browse button or specify the Machine Name or IP Address of the Fusion DVR.
- 6 Specify the Port Number. It should be the same as configured in Fusion DVR.

---

**NOTE:** Default Port Number, is recommended.

---

- 7 On the Fusion dialog box, for each camera defined in the Fusion system, select a camera ADV, then click **Add**. The sequential order of the ADVs corresponds directly to the sequential order of the Fusion DVR cameras. Selecting the Pan and Tilt option defines a camera as a PTZ (pan tilt zoom) camera. Clearing the Pan and Tilt option defines the camera as a stationary camera.
- 8 After defining cameras, click **Finish**. The Device window displays the newly defined Fusion devices.



## Communication Loops

Communication interfaces are programmed by adding them to an existing communication server on the Device Map. You must have an available communication port for each communication interface being added.

To add an interface, open the **Device Map** [from the Device option on the WIN-PAK Configuration menu].

Right-click the Communication Server that you are connecting to, select **Add**, then select the interface of your choice from the pick list.

With the help of a configuration wizard, WIN-PAK leads you through a series of dialogs and windows so that the information necessary to configure the communication interface can be entered.

Although the dialogs presented may vary depending on the exact loop [or other communication connection] being added, typically, you select or enter information on each dialog, and click the **Next** button to advance to the next window.

The Back buttons on the dialogs allow you to review or edit information. Click the **Cancel** button to exit the setup process without saving any information entered.

System documentation is available via the Help button. When you have finished all of the dialogs, the Next button text changes to read Finish, allowing you to save your entries and complete the setup process.

---

**NOTE:**Create an ADV for your communication interface when you program it, so the ADV is available when you set up your Floor Plan Definition.

---

## Adding C-100 Panel Loop

A C-100 Panel Loop represents a configuration of one or more N-1000 panels. A loop requires only one communication port on a communication server, and there can be up to 63 panels per loop. With the Device Map open, right-click the Communication Server that you are connecting to, select **Add**, then select **Panel Loop (C-100)** from the pick list. The Loop Configuration - Basic Information window is displayed:

### Loop Configuration - Basic Information

The screenshot shows the 'C-100 Loop Configuration - Basic Information' dialog box. It has a title bar with a close button. The main area contains several fields and controls: 'Name' with a text box containing 'C-100'; 'Description' with an empty text box; 'Loop Verification Interval (Sec)' with a spin box set to '60'; two checkboxes, 'Buffer all panels on exit' and 'Unbuffer all panels on startup', both unchecked; 'Time Zone' with a dropdown menu showing '(GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi'; a 'Panel Defaults' section with 'I/O Poll Interval' (spin box at '60' Sec), 'Panel CMD Retry Count' (spin box at '3'), and 'Panel CMD Time Out' (spin box at '5' Sec); an 'ADV' section with 'Add', 'Edit', 'Isolate', 'Delete', and 'Show' buttons; and a 'Show' checkbox. At the bottom are '< Back', 'Next >', 'Cancel', and 'Help' buttons.

- 1 Enter a unique **Name** for the panel loop using up to 30 characters. This is a required field.
- 2 If desired, enter a **Description** to further identify the panel loop. This field is optional, and holds up to 60 characters.

- 3 Set the **Loop Verification Interval**. This determines how often a test signal is sent through the communication loop verifying the loop's integrity. The loop's data bandwidth will be reduced if the test interval is shortened or the loop's data bandwidth can be increased if the test interval is lengthened. The test signal is a relatively short signal, and using the default value of 60 seconds is an optimum setting. If the test signal is not received within the defined time interval a Loop Trouble alarm is generated.
- 4 Select either (or both) buffer check boxes [**Buffer all panels on exit** and **Unbuffer all panels on startup**] to apply buffering instructions.

Select **Buffer on Exit** to automatically buffer all panels when the communication server is stopped. Select **Unbuffer on Startup** to automatically unbuffer all panels when the communication server is started.

---

**NOTE:** Logging in or out of the database server doesn't affect the communication server. The communication server runs until it is shut down (either manually or by shutting down the operating system).

---

- 5 Indicate the **Time Zone** in which the loop is located.
- 6 Set the **Panel Defaults**:

**I/O Poll Interval:** [defaults to 60 seconds] Sets the frequency for the signal sent to the panel to verify communication and to check the panel's input and output states.

The loop's data bandwidth will be reduced if the test interval is shortened or the loop's data bandwidth can be increased if the test interval is lengthened.

The test signal is a relatively short signal and using the default value of 60 seconds is an optimum setting. If the test signal is not received within the defined time interval a Loop Trouble alarm is generated.

**Panel CMD Retry Count:** [defaults to 3 seconds] Sets the number of times a command will be resent if the panel does not respond to the command.

**Panel CMD Time Out:** [defaults to 5 seconds] Sets the amount of time allowed for sending a command before timing out.

- 7 Click **Next** to advance to the Loop Configuration - Port Settings window:

## Loop Configuration - Port Settings

The screenshot shows the 'Loop Configuration' dialog box with the 'Port Settings' tab selected. The 'Port' dropdown is set to 'COM 1'. The 'Bits per Second' is set to '9600', 'Data Bits' to '8', 'Parity' to 'None', and 'Stop Bits' to '1'. There are input fields for 'IP-Address or Node name' and 'Encryption Password'. On the right side, there is an 'ADV' section with buttons for 'Add', 'Edit', 'Isolate', 'Delete', and a 'Show' checkbox. At the bottom are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

Field	Value
Port	COM 1
Bits per Second	9600
Data Bits	8
Parity	None
Stop Bits	1
IP-Address or Node name	
Encryption Password	

- 8 Select the **Port** to which the loop is connected.

---

**NOTE:** Select the TCP/IP port only for N-485-PCI with ACK/NAK enabled. It is not recommended to use TCP/IP for other devices that do not use an ACK/NAK protocol.

---

- 9 Enter the **Bits per Second** communication rate for the loop. The default for a C-100 is 1200, which allows maximum cable runs in the C-100 loop. Baud rates up to 4800 can be used on shorter communication loops.

The Data Bits, Parity, and Stop Bits fields default based on the loop and port.

### Adding 485/PCI (Multiple Dropline) Panel Loops

485 Panel Loops represent a configuration of one or more N-1000 panels and support NS2+ panels. A loop requires only one communication port on a communication server, and there can be up to 31 panels per loop.

With the Device Map open, right-click the Communication Server and select **Add**, then select **Panel Loop (485/PCI)** from the pick list.

The Loop Configuration - Basic Information window is displayed (next illustration).

### Loop Configuration - Basic Information

**485/PCI Loop Configuration - Basic Information**

Name :

Description :

ACK/NAK : ☒

☒ Buffer all panels on exit

☒ Unbuffer all panels on startup

Time Zone :

Remote Phone Number :

Modem :

**Panel Defaults**

I/O Poll Interval :  Sec

Panel CMD Retry Count :

Panel CMD Time Out :  Sec

**ADV**

☐ Show

- 1 Enter a unique **Name** for the panel loop using up to 30 characters. This is a required field.
- 2 If desired, enter a **Description** to further identify the panel loop. This field is optional, and holds up to 60 characters.
- 3 ACK/NAK provides a means of ensuring that data is not being lost over electrical noisy communication lines. ACK/NAK should be enabled for normal operations.
- 4 Select either (or both) buffer check boxes **[Buffer all panels on exit and Unbuffer all panels on startup]** to apply buffering instructions.

Select Buffer on Exit to automatically buffer all panels when the communication server is exited. Select Unbuffer on Startup to automatically unbuffer all panels when the communication server is started.

---

**NOTE:** Logging in or out of the database server doesn't affect the communication server. The communication server runs until it is shut down (either manually or by shutting down the operating system).

---

- 5 Indicate the **Time Zone** in which the loop is located.
- 6 Set the **Panel Defaults**:

**I/O Poll Interval:** [defaults to 60 seconds] Sets the frequency for the signal sent to the panel to verify communication and to check the panel's input and output states.

**Panel CMD Retry Count:** [defaults to 3 seconds] Sets the number of times a command will be resent if the panel does not respond to the command.

**Panel CMD Time Out:** [defaults to 5 seconds] Sets the amount of time allowed for sending a command before timing out.

- 7 Click **Next** to advance to the Loop Configuration -Port Settings window (next illustration).

### Loop Configuration - Port Settings

The screenshot shows a dialog box titled "Loop Configuration" with two tabs: "Basic Information" and "Port Settings". The "Port Settings" tab is active. It contains several input fields and a list of actions on the right.

**Port Settings Tab:**

- Port:** A dropdown menu showing "TCP/IP Encrypted Connection".
- Bits per Second:** A dropdown menu showing "19200".
- Data Bits:** A dropdown menu showing "8".
- Parity:** A dropdown menu showing "None".
- Stop Bits:** A dropdown menu showing "1".
- IP-Address or Node name:** A text input field.
- Encryption Password:** A text input field.
- Port No:** A text input field showing "2101".

**ADV (Advanced) Section:**

- Add** button
- Edit** button
- Isolate** button
- Delete** button
- ☐ **Show** checkbox

**Buttons:** OK, Cancel, Apply, Help.

- 8 Select the **Port** to which the loop is connected.

---

**NOTE:** Select the TCP/IP port only for N-485-PCI with ACK/NAK enabled. It is not recommended to use TCP/IP for other devices that do not use an ACK/NAK protocol.

---

- 9 Enter the **Bits per Second** communication rate for the loop. For optimum performance the 485/PCI should be set for 19200 (19.2 K). This baud rate must match the 485/PCI's baud setting. The Data Bits, Parity, and Stop Bits fields default based on the loop and port.

#### IP Address

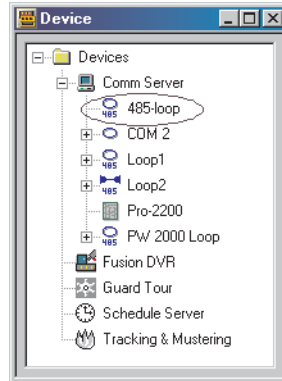
If TCP/IP Connection is selected as the Port, the IP Address or Node name field must be filled in.

#### Encryption Password

If TCP/IP Encrypted Connection is selected as the Port, the Encryption Password field must be filled in with the exact [case sensitive] password used when the LAN hardware was installed.

- 10 Create an ADV for the communication loop.  
Click **Add** in the ADV section of the window (upper right corner) to open the ADV window for the loop. Follow the procedures outlined in "Setting up ADVs" (earlier in this chapter) to set up the loop ADV.
- 11 Click **OK** to return to the Port Settings window.  
The Loop becomes available on the Device Map.





### Adding a PRO-2200 Panel Loop

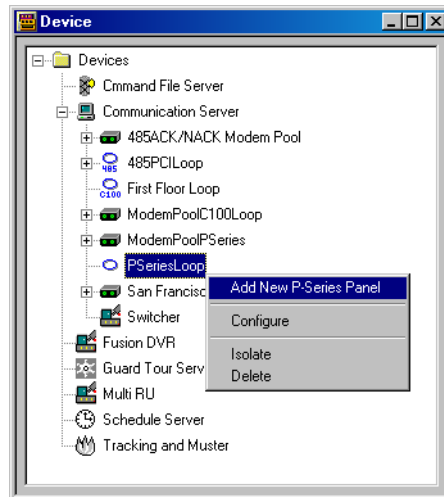
A PRO-2200 Panel Loop represents a configuration of more than one PRO-2200 Intelligent Controller. A loop requires only one communication port on a communication server. There can be up to eight Intelligent Controllers per loop, and up to 8 SIO Boards per Intelligent Controller.

---

**NOTE:** Be aware, when using a panel loop, that traffic on the communication port increases with each Intelligent Controller and SIO Board added to the loop.

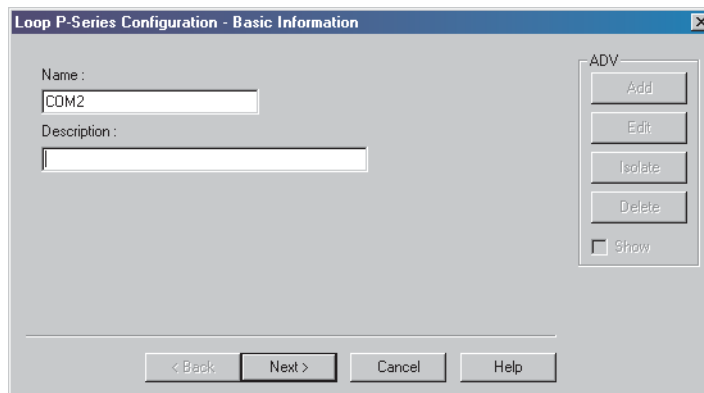
---

Right click on the Communication Server to which the loop is being added, then click **Add**. Select **Panel Loop (PRO-2200)** from the pick list.



The Loop PRO-2200 Configuration - Basic Information window is displayed.

#### Loop PRO-2200 Configuration - Basic Information



- 1 Enter a unique **Name** for the panel loop, using up to 30 alphanumeric characters. This is a required field.
- 2 A Description of the panel loop can be added. The description is optional, and can be up to 60 alphanumeric characters in length.

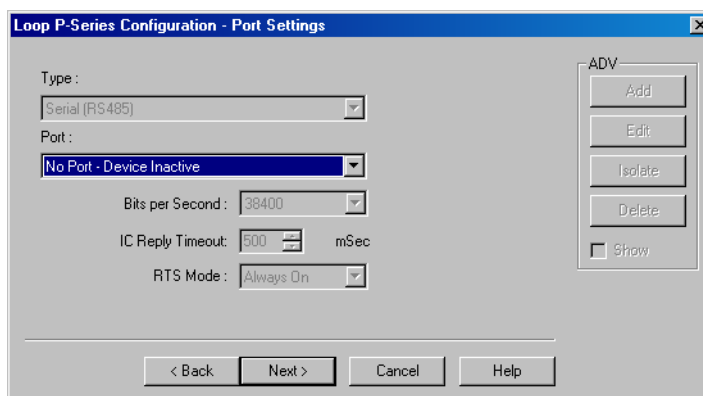
- 3 Click the **Next** button to advance to the Port Settings window (next illustration).

---

**NOTE:** An ADV cannot be created for the PRO-2200 panel loop.

---

### Loop PRO-2200 Configuration - Port Settings



- 4 Serial RS485 defaults into the Type field. When establishing a PRO-2200 panel loop, RS485 is the only type applicable.
- 5 Select the **Port** to which the loop is connected.
- 6 The communication rate for the loop is indicated in the Bits per Second field. This field defaults to 38400 but can be set at 9600 or 19200 as well when using RS-485 communication.

---

**NOTE:** An RS-232 to RS-485 converter is required (Part # PRO22CVT1).

---

- 7 IC Reply Timeout is the duration the Host PC (DLL) will wait for an acknowledgment after it has sent an outgoing packet. If acknowledgment is not received within the specified time, the Host PC (DLL) will re-send the packet. The host will retry according to the Host Retry Count set in the panel.

- 8 The RTS Mode (Request to Send) allows the device on the other end to know the Intelligent Controller is ready to send information. The RTS Mode defaults to "Always On."

The "Toggle" RTS Mode applies when there is an RS-485 to RS-232 converter that requires a handshake. The RS-485 converter needs to know when it is sending and when it is receiving. Toggle allows you to control the direction on an external converter. The converter specified by Honeywell Access Systems has handshaking turned off, so the RTS Mode should not be set to Toggle.

- 9 Click the **Next** button to advance to the Finish window.
- 10 Click the **Finish** button to save your configuration entries and complete the panel loop setup process.

### Adding a CCTV Switcher

WIN-PAK supports a variety of CCTV switchers. They are added to a communication server on the Device Map in the same way other communication interfaces are added. You must have an available communication port for each switcher.

With the Device Map open, right-click the Communication Server to which the CCTV Switcher is being added, and select **Add**. Select **CCTV Switcher** from the list.

The CCTV Switcher Configuration - Basic Information window is displayed (next illustration).

## CCTV Switcher Configuration - Basic Information

The screenshot shows a Windows-style dialog box titled "CCTV Switcher Configuration - Basic Information". The dialog has a grey background and a blue title bar. On the right side, there is a vertical panel labeled "ADV" containing buttons for "Add", "Edit", "Isolate", "Delete", and a checkbox labeled "Show". The main area of the dialog contains several input fields and dropdown menus. At the top, there is a "Name:" label followed by a text box containing "CCTV Switcher". Below that is a "Description:" label followed by a text box containing "CCTV Camera". Then, there is a "Type:" label followed by a dropdown menu showing "Burle". Below this is a "Port:" label followed by a dropdown menu showing "COM 1". A "Port Settings" section is enclosed in a rounded rectangle and contains four dropdown menus: "Bits per Second:" (9600), "Data Bits:" (8), "Parity:" (None), and "Stop Bits:" (1). Below the "Port Settings" section are two text boxes: "IP-Address or Node name:" and "Encryption Password:". At the bottom of the dialog, there are four buttons: "< Back", "Next >", "Cancel", and "Help".

- 1 Enter a unique **Name** for the CCTV Switcher using up to 30 alphanumeric characters. This is a required field.
- 2 Enter a **Description** of the CCTV Switcher if desired. This field holds up to 60 alphanumeric characters.
- 3 Select a CCTV Switcher **Type** from the list. Typical options include:
  - Burle
  - Geutebruck
  - MAXPRO
  - NCI CCTV
  - Pelco
  - VideoBlox
  - Dedicated Micros
  - Javelin
  - MAXCOM
  - Panasonic
  - Vicon

- 4 Select the **Port** to which the CCTV Switcher is connected.
- 5 Make changes if necessary to the default **Port Settings**.

Default Port Settings

**Bits per second:** 9600

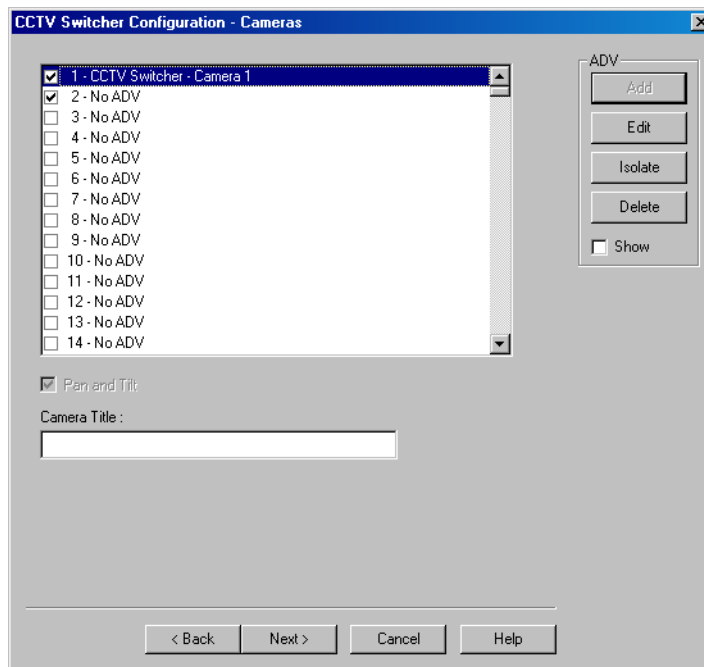
**Data Bits:** 8

**Parity:** None

**Stop Bits:** 1

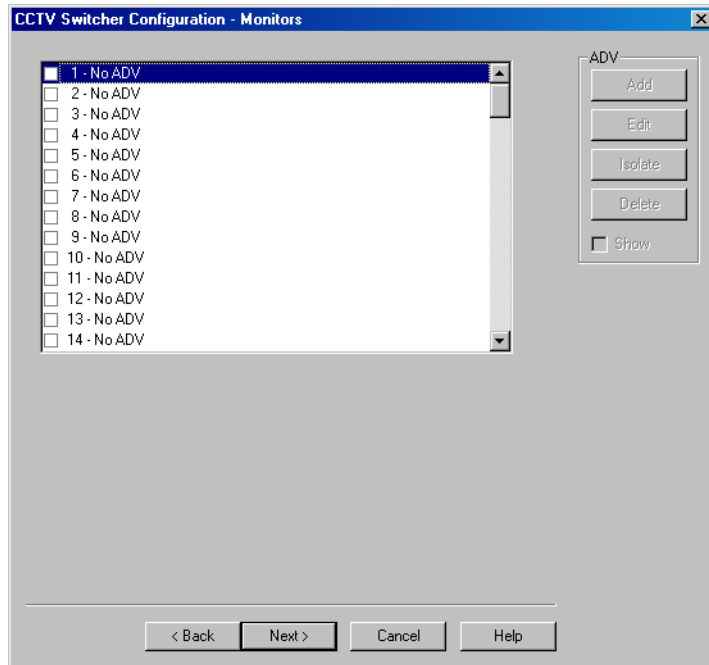
- 6 Set up an ADV for the CCTV Switcher. Click the **Add** button in the ADV area of the window (upper right corner). Once an ADV is established for the switcher, the type cannot be changed.
- 7 On returning to the Basic Information window [after setting up the ADV], click **Next** to advance to the CCTV Switcher Configuration - Cameras window.

### CCTV Switcher Configuration - Cameras



- 8 Select the check boxes next to the cameras to be controlled by the CCTV Switcher.
- 9 Select the **Pan and Tilt** check box if the camera supports pan and tilt functions.
- 10 Enter a unique **Camera Title** for the camera.
- 10 Enter a unique **Camera Title** for the camera.
- 11 An ADV should be configured for each camera selected. Click the **Add** button in the ADV area of the window (upper right corner). Once an ADV is established for the camera, the Pan and Tilt option cannot be changed.
- 12 After selecting all the cameras needed, and setting up ADVs for each, click the **Next** button to advance to the CCTV Switcher.

### CCTV Switcher Configuration - Monitors



- 13 Select the check boxes next to the monitors to be controlled by the CCTV Switcher.
- 14 Create an ADV for each monitor selected. Click the **Add** button in the ADV area of the window (upper right corner).
- 15 On returning to the CCTV Switcher Configuration window, click the **Next** button, then click **Finish** on the final configuration window to save the new switcher and the ADVs for the switcher, cameras, and monitors.



## Adding an RS-232 Connection

An RS-232 connection is defined by adding it to the Device Map. The communication server must have a port available for each communication interface in your system.

With the Device Map open, right-click the Communication Server to which you are connecting, and select **Add**. Select **RS-232 Connection** from the pick list.

The RS-232 Connection Configuration - Basic Information window is displayed:

### RS-232 Connection Configuration - Basic Information

The screenshot shows a dialog box titled "RS-232 Connection Configuration - Basic Information". It contains the following fields and controls:

- Name :** A text box containing "Basement".
- Description :** A text box containing "Basement Room".
- Port Settings:** A group box containing:
  - Port :** A dropdown menu showing "COM 2".
  - Bits per Second :** A dropdown menu showing "9600".
  - Data Bits :** A dropdown menu showing "8".
  - Parity :** A dropdown menu showing "None".
  - Stop Bits :** A dropdown menu showing "1".
- IP-Address or Node name :** An empty text box.
- Encryption Password :** An empty text box.
- ADV:** A vertical stack of buttons: "Add", "Edit", "Isolate", "Delete", and a "Show" checkbox.
- Navigation:** At the bottom, there are four buttons: "< Back", "Next >", "Cancel", and "Help".

- 1 Enter a unique **Name** for the RS-232 Connection, using up to 30 alphanumeric characters. This is a required field.
- 2 Enter a **Description** of the RS-232 Connection if desired. This field holds up to 60 alphanumeric characters.

- 3 Select the **Port** for the RS-232 Connection.
- 4 If necessary, make changes to the default **Port Settings**.

Default Port Settings

**Bits per second:** 9600

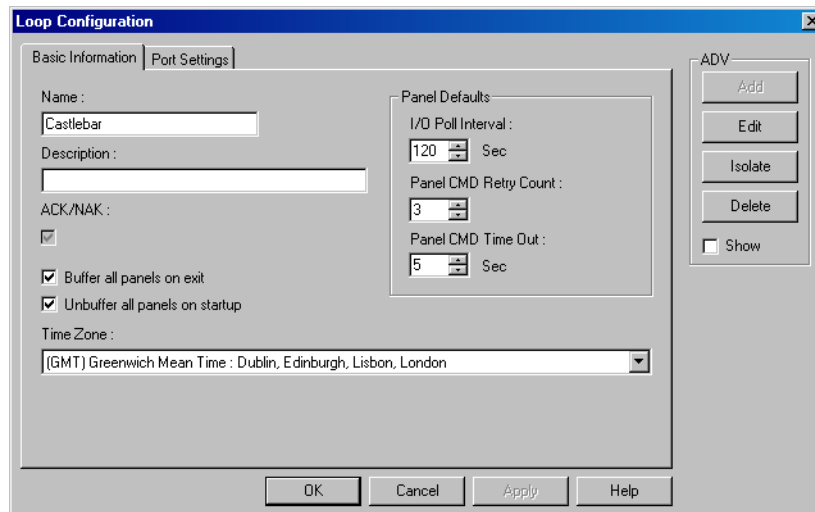
**Data Bits:** 8

**Parity:** None

**Stop Bits:** 1

- 5 Set up an ADV for the RS-232 Connection, by clicking the **Add** button in the ADV area of the window (upper right corner).
- 6 On returning to the Basic Information window [after setting up the ADV], click **Next**. Click **Finish** on the subsequent window to complete the connection setup.

### Editing Panel Loops



To edit a panel loop, right-click on the loop from the Device Map, and select **Configure** from the task menu. The Loop Configuration window is displayed.

Use the tabs at the top of the window to access any configuration information you wish to change.

---

**NOTE:** The illustration above shows the Loop Configuration window for a 485/PCI loop. The PRO-2200 Panel Loop Configuration window has fewer options than shown here.

---

## Modem Pools

Modem connections can be used to communicate with panel loops at remote sites by first defining the modem pool [which can have one or more modems], and then defining communication loops to place in the modem pool.

Modems can be used to communicate with the PRO-2200 Intelligent Controller as well as the following:

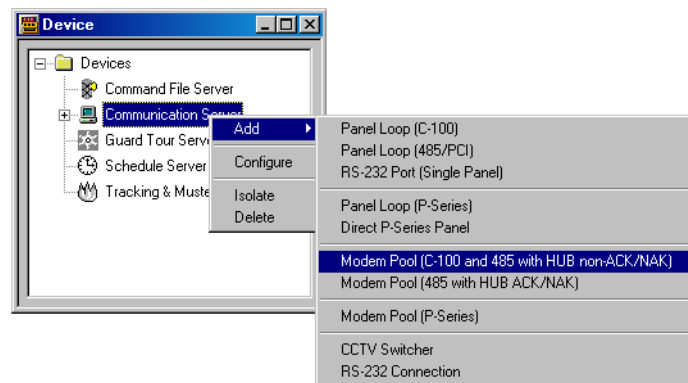
- C-100 loops
- 485 with a HUB (non-ACK-NAK) loops
- 485 with a HUB (ACK-NAK) loops

For each type of panel configuration, the options available are the same as for local panel loops. For an explanation of the options refer to the proceeding sections.

Modem pools, like other communication connections, are defined by adding them to the Device Map. You must have a communication server with an available communication port for each modem you are adding.

Once the pool is defined, the panel loops or panels are added to the modem pool, rather than directly to the communication server, as is the case with local loops.

Modem pools are added from the Device Map. With the Device Map open, right-click the Communication Server to which the modem pool is to be added. Select a modem pool option from the pick list (next illustration).

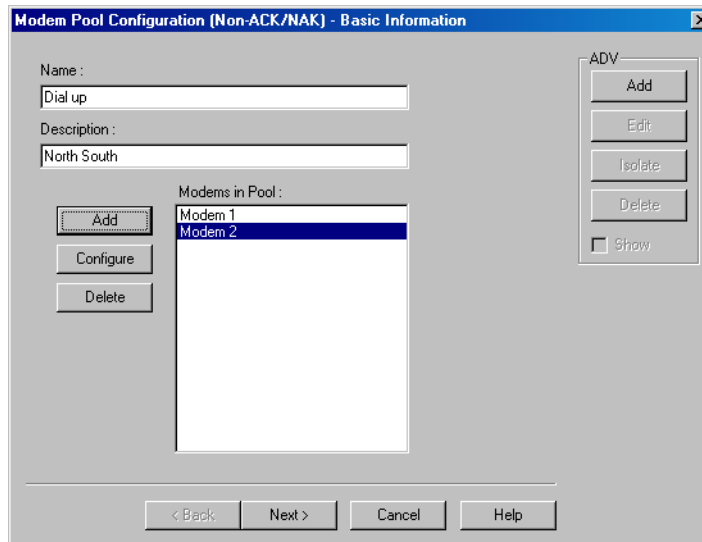


### C-100 & 485 with HUB (non ACK/NAK) Modem Pools

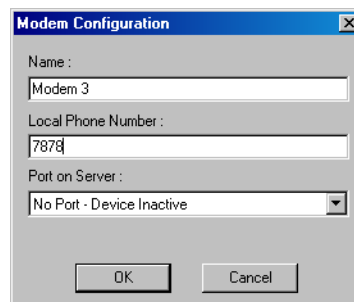
Select **Modem Pool (C-100 and 485 with HUB non-ACK/NAK)** from the **Add** menu pick list [available by right-clicking the Communication Server to which the modem pool is being added].

The Modem Pool Configuration window is displayed.

### Modem Pool Configuration - Basic Information



- 1 Enter a unique **Name** for the Modem Pool using up to 30 alphanumeric characters. This is a required field.
- 2 If desired, enter a **Description** of the Modem Pool, using up to 60 alphanumeric characters.
- 3 Click **Add** (in the **Modems in Pool** area of the window) to open the Modem Configuration dialog:



- 4 Enter the **Name** of the modem being added to the Modem Pool. The name Modem # defaults into the field.
- 5 Enter the modem's **Local Phone Number**. Include the area code and dialing prefix if they are required to dial in from the remote site.
- 6 Use the **Port on Server** list to select the port to which the modem is connected.
- 7 Click **OK**.

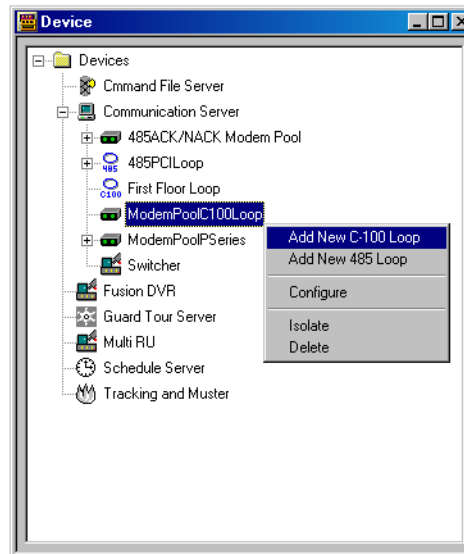
Repeat this procedure for each modem in the pool.

- 8 Create an ADV for the Modem Pool. [Click **Add** in the ADV area of the configuration window.]
- 9 On returning to the Modem Pool Configuration window [after setting up the ADV], click **Next**, then click **Finish** on the final configuration window.

Next, loops are added to the modem pool in order to complete its configuration.

#### **Setting Up a C-100 or 485 Loop on a Modem Pool**

- 1 Once the Modem Pool has been defined, right-click it, and select either **Add New C-100 Loop** or **Add New 485 Loop** (next illustration) to open the **Loop Configuration - Basic Information** window.



## Loop Configuration - Basic Information

A screenshot of a dialog box titled "C-100 Loop Configuration - Basic Information". The dialog has several input fields and sections. On the left, there are fields for "Name:" (containing "C-100LoopSecondFloor"), "Description:" (containing "NorthandSouth"), "Loop Verification Interval (Sec):" (a spinner set to 60), and "Time Zone:" (a dropdown menu showing "(GMT+05:30) Calcutta, Chennai, Mumbai, New Delhi"). Below these are two checkboxes: "Buffer all panels on exit" and "Unbuffer all panels on startup". At the bottom left is a "Remote Phone Number:" field containing "1232321". On the right, there is a "Panel Defaults" section with three settings: "I/O Poll Interval:" (a spinner set to 60), "Panel CMD Retry Count:" (a spinner set to 3), and "Panel CMD Time Out:" (a spinner set to 5). To the right of the "Panel Defaults" section is an "ADV" section with four buttons: "Add", "Edit", "Isolate", and "Delete", and a "Show" checkbox. At the bottom of the dialog are four buttons: "< Back", "Next >", "Cancel", and "Help".

- 2 Enter a unique **Name** for the panel loop (required), using up to 30 alphanumeric characters.

- 3 Use the **Description** field to further identify the panel loop (optional), using up to 60 alphanumeric characters.

#### Loop Verification Interval or ACK/NAK

- 4 For C-100 Setup: Indicate the **Loop Verification Interval** (in seconds). This is the amount of time between verification attempts. Decreasing the interval shortens the time until a lost loop is detected. Increasing the interval improves the bandwidth. The default of 60 seconds is an optimum based on experience.

For 485/PCI Multiple Dropline Setup: The ACK/NAK check box is grayed out, since this modem pool only accepts non-ACK/NAK 485 panels.

- 5 Select either or both buffer check boxes [**Buffer all panels on exit** and **Unbuffer all panels on startup**] to apply buffering instructions.

Select Buffer on Exit to automatically buffer all panels when the communication server is exited. Select Unbuffer on Startup to automatically unbuffer all panels when the communication server is started.

- 6 Indicate the **Time Zone** in which the loop is located.

#### Panel Defaults

- 7 Make any desired adjustments in the **Panel Default** settings.

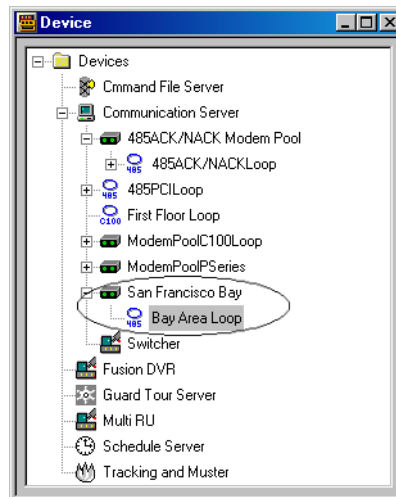
**I/O Poll Interval:** Defaults to 60 seconds. Sets the frequency for the signal sent to the panel to verify communication and check the panel's input and output states.



**Panel CMD Retry Count:** Defaults to 3 seconds. Sets the number of times a command file is resent if the panel does not respond to the command.

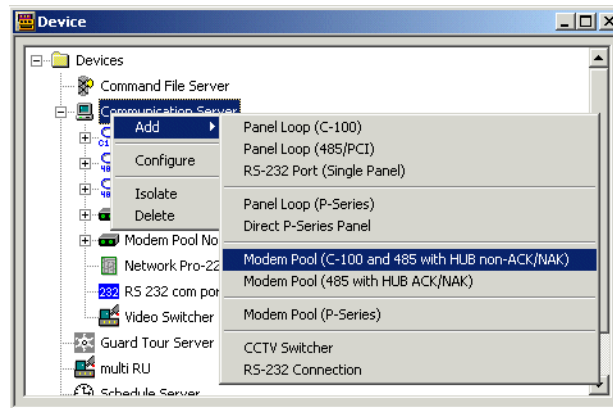
**Panel CMD Time Out:** Defaults to 5 seconds. Sets the amount of time allowed for sending a command file before timing out.

- 8 Enter the **Remote Phone Number** for the loop.
- 9 Select the **Modem** (in the pool) to which the panel is connected.
- 10 Click **Next** to advance to the Finish window. Click **Finish** and the new panel loop is added to the modem pool in the Device Map.



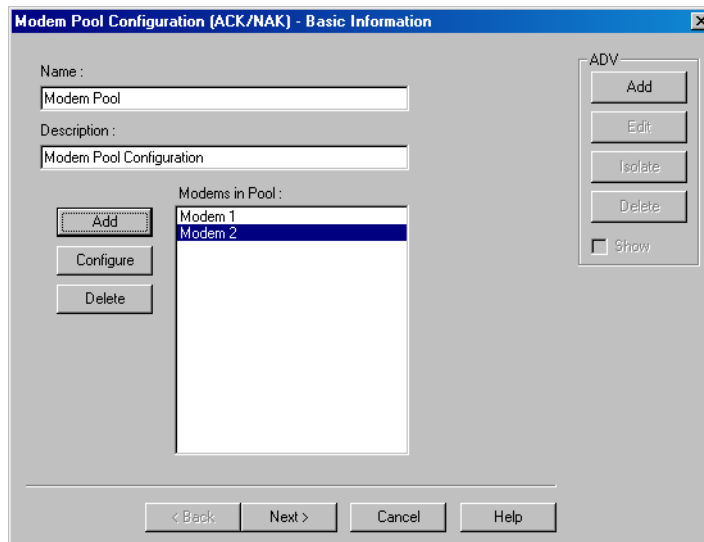
## 485 with HUB ACK/NAK Modem Pool Configuration

Select **Modem Pool (485 with HUB ACK/NAK)** from the Communication Server **Add** menu pick list [available by right-clicking the Communication Server to which the modem pool is being added].

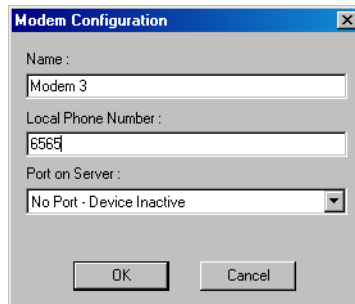


The Modem Pool Configuration window is displayed. (next illustration).

### Modem Pool Configuration



- 1 Enter a unique **Name** for the Modem Pool, using up to 30 alphanumeric characters. This is a required field.
- 2 Enter a **Description** of the Modem Pool (optional), using up to 60 alphanumeric characters.
- 3 Click **Add** (in the **Modems in Pool** area of the window) to open the Modem Configuration dialog:



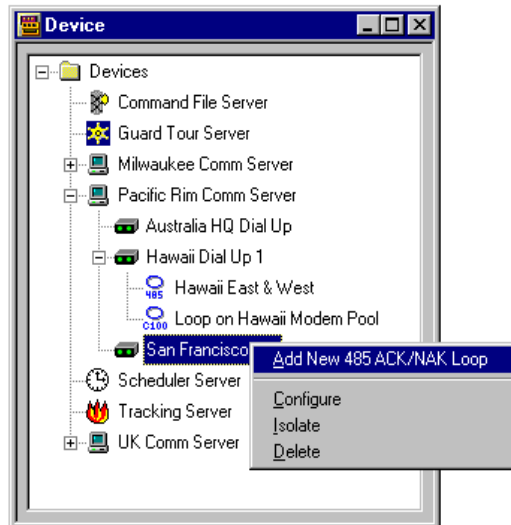
- 4 Enter the **Name** of the modem being added to the Modem Pool. The name Modem # defaults into the field.
- 5 Enter the modem's **Local Phone Number**. Include the area code and dialing prefix if they are required to dial in from the remote site.
- 6 Use the **Port on Server** list to select the port to which the modem is connected.
- 7 Click **OK**.  
Repeat this procedure for each modem in the pool.
- 8 Create an ADV for the Modem Pool. [Click **Add** in the ADV section of the configuration window.]

- 9 On returning to the Modem Pool Configuration window [after setting up the ADV], click **Next**, then click **Finish** on the final configuration window.

Next, loops are added to the modem pool in order to complete its configuration.

### Setting Up a 485/PCI Loop on the Modem Pool

Once the Modem Pool has been defined, right-click it, and select **Add New 485 ACK/NAK Loop** to open the **Loop Configuration - Basic Information** window. (next illustration).



## Loop Configuration - Basic Information

485/PCI Loop Configuration - Basic Information

Name : BayArea

Description : SF, Oakland

ACK/NAK : ☒

☒ Buffer all panels on exit

☒ Unbuffer all panels on startup

Time Zone : (GMT-08:00) Pacific Time (US & Canada); Tijuana

Remote Phone Number : 235333

Modem : Modem 1

Panel Defaults

I/O Poll Interval : 60 Sec

Panel CMD Retry Count : 3

Panel CMD Time Out : 5 Sec

ADV

Add

Edit

Isolate

Delete

☐ Show

< Back Next > Cancel Help

- 10 Enter a unique **Name** for the communication loop, using up to 30 alphanumeric characters. This is a required field.
- 11 Use the **Description** field to further identify the panel loop (optional), using up to 60 alphanumeric characters.
- 12 The ACK/NAK check box is grayed out, since this modem pool only accepts ACK/NAK panels
- 13 Select either or both buffer check boxes [**Buffer all panels on exit** and **Unbuffer all panels on startup**] to apply buffering instructions.

Select Buffer on Exit to automatically buffer all panels when the communication server is exited. Select Unbuffer on Startup to automatically unbuffer all panels when the communication server is started.
- 14 Indicate the **Time Zone** in which the loop is located.

**Panel Defaults**

- 15 Make any desired adjustments in the **Panel Default** settings.

**I/O Poll Interval:** Defaults to 60 seconds. Sets the frequency for the signal sent to the panel to verify communication and check the panel's input and output states.

**Panel CMD Retry Count:** Defaults to 3 seconds. Sets the number of times a command file will be resent if the panel does not respond to the command.

**Panel CMD Time Out:** Defaults to 5 seconds. Sets the amount of time allowed for sending a command file before timing out.

- 16 Enter the **Remote Phone Number** for the loop.
- 17 Select the **Modem** (in the pool) to which the panel is connected.
- 18 Set up the default ADV for the panel by clicking the **Add** button in the ADV area of the window.
- 19 After setting up the ADV, click **Next** on the Configuration window to advance to the 485/PCI Loop Configuration - HUB Settings window.

### 485/PCI Loop Configuration - HUB Settings

The screenshot shows a Windows-style dialog box titled "485/PCI Loop Configuration - Hub Settings". It contains several configuration fields: "Delay For Connection" (0 Sec), "Number of Redial Attempts" (3), "Wait Time for Disconnect" (5 Sec), "Delay before Next Attempt" (60 Sec), "Modem Initialization Command" (ATE0Q0V1&K0&C1&D0S0=1&W), "Dial Prefix" (ATDT), and "Call In Option" (Never). A "Set New Site ID and Password" button is located below these fields. On the right side, there is an "ADV" section with buttons for "Add", "Edit", "Isolate", "Delete", and a "Show" checkbox. At the bottom, there are navigation buttons: "< Back", "Next >", "Cancel", and "Help".

These settings are available only if 485/ACK-NAK is selected. Leave the default settings, or make any desired changes. The options are explained below.

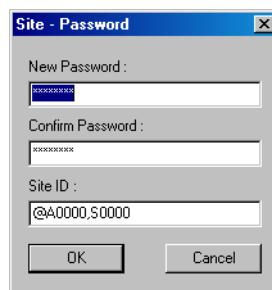
- 20 Enter a value in the **Delay for Connection** field if a pause is required between dialing the prefix and dialing the phone number.
- 21 Indicate the **Number of Redial Attempts**. The default is 3, but any number between 0 - 50 can be entered in this field.
- 22 Enter the **Wait Time for Disconnect** [the amount of time allowed before disconnecting]. This number can be between 1 to 999 seconds. The default is 5 seconds.
- 23 The amount of time allowed between dialing attempts should be entered in the Delay before Next Attempt field. Any number between 1 and 999 can be entered in this field. The default is 60 seconds.

- 24 Enter the remote **Modem Initialization String** as:

ATEØQØV1&KØ&C1&DØSØ=1&W

Refer to your modem documentation for further information.

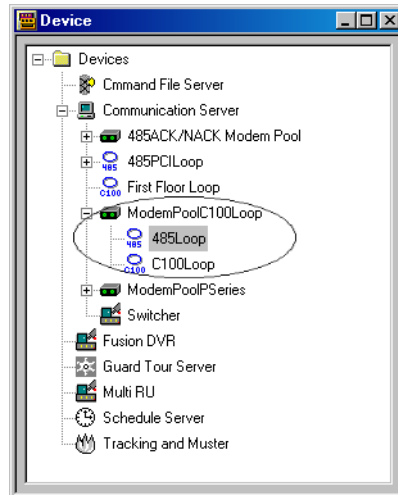
- 25 In most cases, the Dial Prefix is ATDT, which is set as the default.
- 26 Select a **Call In Option** [either **On Invalid Transaction** or **Never**].
- 27 Click the **Set New Site ID and Password** button.



- 28 Enter a **New Password**. The password can be comprised of up to 16 alphanumeric characters.
- 29 Reenter the password in the **Confirm Password** field.
- 30 Enter the **Site ID** using the following format:
- @A [unique 4-digit number],  
S [unique 4-digit number]
- For example @A0002, S0003 is area 2 site 3.
- 31 Click **OK** to return to the HUB Settings window.
- 32 Click **Next** to advance to the Finish window, then click **Finish**.



The new loop is now displayed on the modem pool in the Device Map.



## Setting Up an RS-232 Loop

A control panel using RS-232 communications can be connected directly to the WIN-PAK system using a 9-pin to RJ45 cable. The RS-232 connection is defined by adding it to the Device Map.

### To Add an RS-232 Port

- 1 From the Configuration menu, point to Device and then click Device Map.
- 2 Right-click the communication server, point to Add, and then select RS-232 Port (single panel).
- 3 In the Basic Information window, enter the name (required) and a description (optional).
- 4 Create an ADV. (Click Add in the ADV section, located in the upper right of the configuration window.)

RS-232 Port (Single Panel) Configuration - Basic Information

Name : RS232

Description : Added by Quick Start Wizard

Loop Verification Interval (Sec) : 60

☐ Buffer all panels on exit

☐ Unbuffer all panels on startup

Time Zone : (GMT+05:30) Calcutta, Chennai, Mumbai, New Delhi

Panel Defaults

I/O Poll Interval : 60 Sec

Panel CMD Retry Count : 3

Panel CMD Time Out : 5 Sec

ADV

Add

Edit

Isolate

Delete

☐ Show

< Back Next > Cancel Help

**Name:** Enter a descriptive name. Use up to 30 alphabetic and numeric characters (required).

**Description:** Enter a description. Use up to 60 alphabetic and numeric characters (optional).

**Loop Verification Interval (Sec.):** WIN-PAK verifies that the panel is responding. Select the interval (in seconds) between verification attempts. Decreasing the interval shortens the time until a lost panel is detected.

**Buffer all panels on exit:** Select to automatically buffer the panel when the communication server is exited.

**Un-buffer all panels on startup:** Select to automatically un-buffer the panel when the communication server is started. (These options apply to the Communication Server.)

**Time Zone:** Select the geographical time zone in which the panel is located.

### Panel Defaults

**I/O Poll Interval:** 60 seconds (default); set the frequency that a signal is sent to the panel to verify communication and check the panel's input and output states.

**Panel CMD Retry Count:** 3 (default); set the number of times a command will be resent if the panel does not respond to the command.

**Panel CMD Time Out:** 5 seconds (default); set the amount of time allowed for sending a command before timing out.

### RS-232 Port (single panel) Configuration - Port Settings

The screenshot shows a software window titled "RS-232 Port (Single Panel) Configuration - Port Settings". The window has a blue title bar and a grey background. On the left, there are several configuration fields: "Port:" with a dropdown menu showing "COM 1"; "Bits per Second:" with a dropdown menu showing "57600"; "Data Bits:" with a dropdown menu showing "8"; "Parity:" with a dropdown menu showing "None"; "Stop Bits:" with a dropdown menu showing "1"; "IP-Address or Node name:" with a text input field; and "Encryption Password:" with a text input field. On the right side, there is a vertical panel labeled "ADV" containing five buttons: "Add", "Edit", "Isolate", "Delete", and a checkbox labeled "Show". At the bottom of the window, there are four buttons: "< Back", "Next >", "Cancel", and "Help".

**Port:** Select the port that the panel is connected to.

**Bits per second:** Select the communication rate.

**Data Bits:** 8 (default).

**Parity:** 1 (default).

**Stop Bits:** None (default).

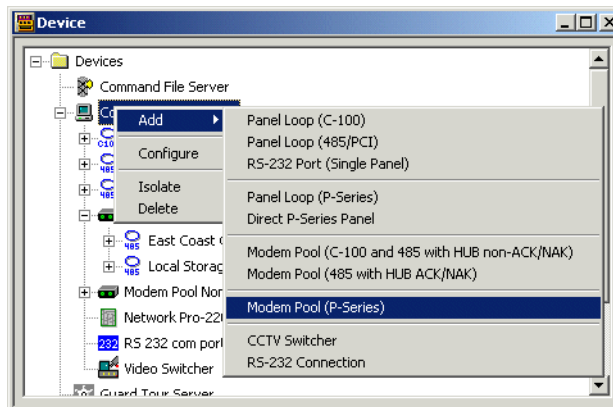
**IP-Address or Node Name** - active if TCP/IP Connection is selected as the Port.

**Encryption Password** - active if TCP/IP Encrypted Connection is selected as the Port.

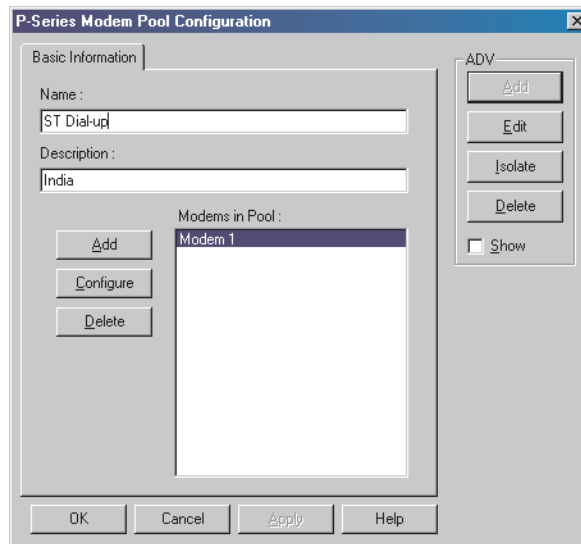
NOTE: For TCP/IP type connections it is recommended to use the 485/PCI with ACK/NAK enabled.

## PRO-2200 Modem Pool

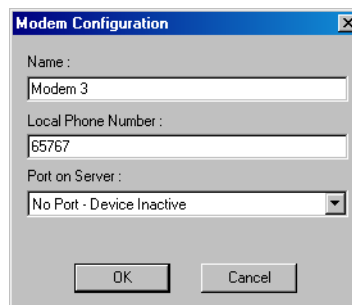
Select **Modem Pool (PRO-2200)** from the Communication Server **Add** menu pick list [available by right-clicking the Communication Server to which the Modem Pool is being added].



The Modem Pool Configuration window is displayed.



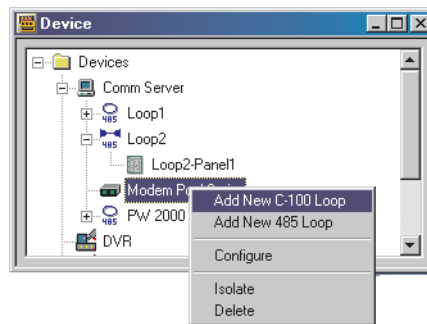
- 1 Enter a unique **Name** for the modem pool, using up to 30 alphanumeric characters. This is a required field.
- 2 A Description of the modem pool can be added. The description is optional, and can be up to 60 alphanumeric characters in length.
- 3 Click the **Add** button in the Modems in Pool area to open the Modem Configuration window.



- 4 Enter the **Name** of the modem being added.
- 5 Use the **Local Phone Number** field to enter the modem phone number. Include the area code and dialing prefix if they are required to call from the remote site.
- 6 Select the **Port on Server** to which the modem is connected.
- 7 Click **OK**.
- 8 Set up the default ADV for this modem pool by clicking the **Add** button in the ADV area of the window (upper right corner).
- 9 On returning to the PRO-2200 Modem Pool Configuration window, click the **Next** button to continue.
- 10 Click the **Finish** button to save your configuration entries and complete the modem pool setup process. The modem pool is now available on the Device Map.

## Adding an Intelligent Controller to the Modem Pool

Once a PRO-2200 Modem Pool is defined, you can add control panels to it by right-clicking on the modem pool icon [in the Device Map], and selecting **Add New PRO-2200 Panel** from the pick list.



Refer to "Configuring a PRO-2200 Intelligent Controller", later in this chapter for panel configuration details.

## Panels

Planning is essential when configuring panels. The accumulation and understanding of a great deal of information about the setup of your access control system is required. This includes card formats, the type of readers and keypads used, and numerous options for input and output points.

### Using the Configuration Wizard

With the help of a configuration wizard, WIN-PAK leads you through a series of dialogs and windows that guide you through the panel definition process. At each step in the setup process simply select or enter the information that applies to your system and is necessary to configure the specific communication interface being set up.

Although the dialogs presented may vary slightly depending upon certain selections made, typically, you select or enter information on each dialog, and click the Next button to move to the next window.

The Back buttons on the dialogs allow you to review or edit information you have already added. Click the Cancel button to exit the setup process without saving any information entered. System documentation is available via the Help button.

When you have finished all of the dialogs the Next button text changes to read Finish, allowing you to save your entries and complete the setup process.

Because of the amount of information and the number of options, adding panels to a large system can be very time consuming. There are a few shortcuts that can speed up the process. First of all, note that once a panel has been defined, it can be copied and then edited, if necessary. Second, action groups act as templates: once an action group is defined, it can be used in defining all ADVs of the same type.



In addition, action groups can be copied and then edited, allowing you to quickly create a variety of action groups to choose from.

Panel definitions are added to the Device Map. They can be copied by right-clicking, and then dragging and dropping them onto a communication interface on the Device Map. Similarly, whole branches on the Device Map can be copied.

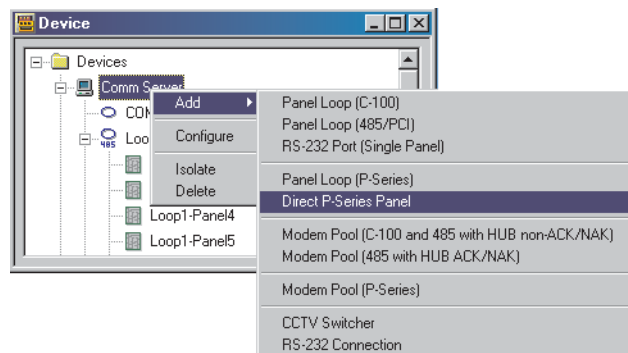
For example, if you define a C-100 loop with four panels, you can right-click and drag the C-100 to a communication server, click copy, and a new loop plus panels is added to your system.

## Adding Panels in WIN-PAK

Three families of control panels are available for use with WIN-PAK: the P-Series [PRO-2200 Intelligent Controller (a modular system) and PW-5000 panels], PW-2000/N-1000 Series panels, and NS2+ panels.

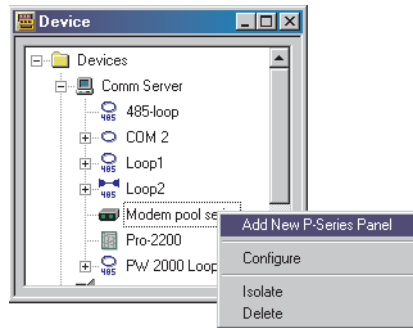
### Adding PRO-2200 Intelligent Controller Direct Connections

A PRO-2200 Intelligent Controller can be added directly to a Communication Server. Select the **Direct PRO-2200 Controller** option from the Communication Server **Add** menu (shown in next illustration).



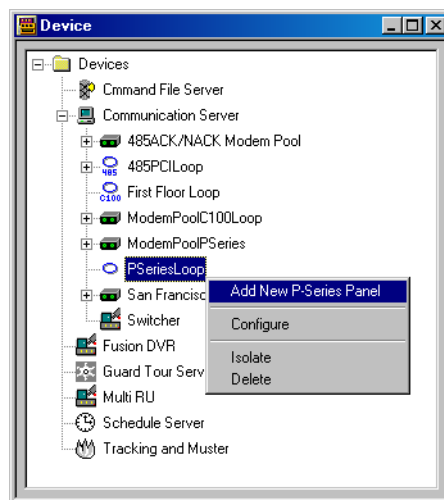
## Adding PRO-2200 Intelligent Controllers to Modem Pools

A PRO-2200 Intelligent Controller can be added to a PRO-2200 Modem Pool by selecting the Add New PRO-2200 Panel option from the modem pool's right-click menu.



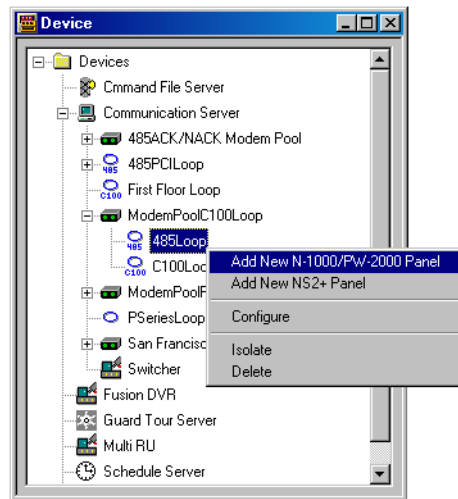
## Adding PRO-2200 Intelligent Controllers to Panel Loops

A PRO-2200 Intelligent Controller can be added to a PRO-2200 Panel Loop by selecting the Add New PRO-2200 Controller option from the panel loop's right-click menu.

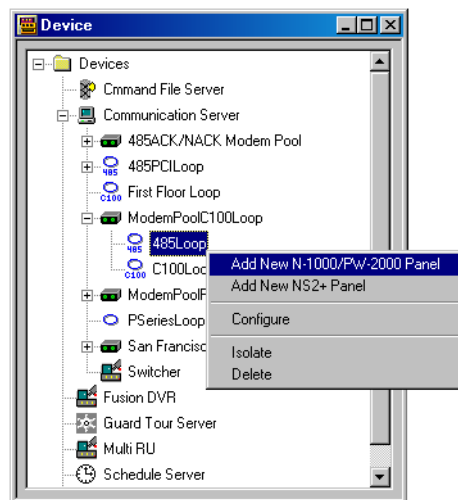


## Adding PW-2000 Panels

A PW-2000 panel can be added to a C-100 or 485 Panel Loop by selecting the Add New PW-2000 Panel option from the loop's right-click menu.



## Configuring PW-2000 Panels

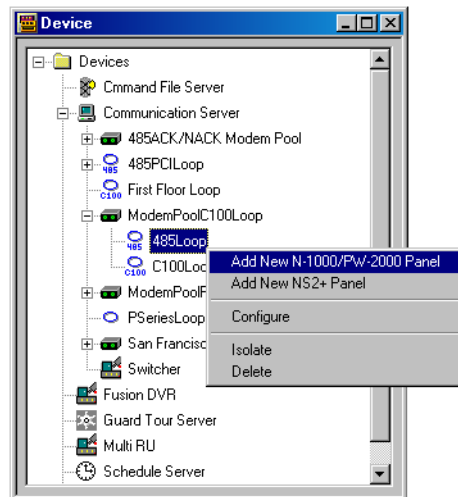


The panel configuration includes information on a number of system features. The card format, anti-passback, groups, and readers, are all configured at the panel.

### Adding a PW-2000 Panel to a C-100 or 485 Loop

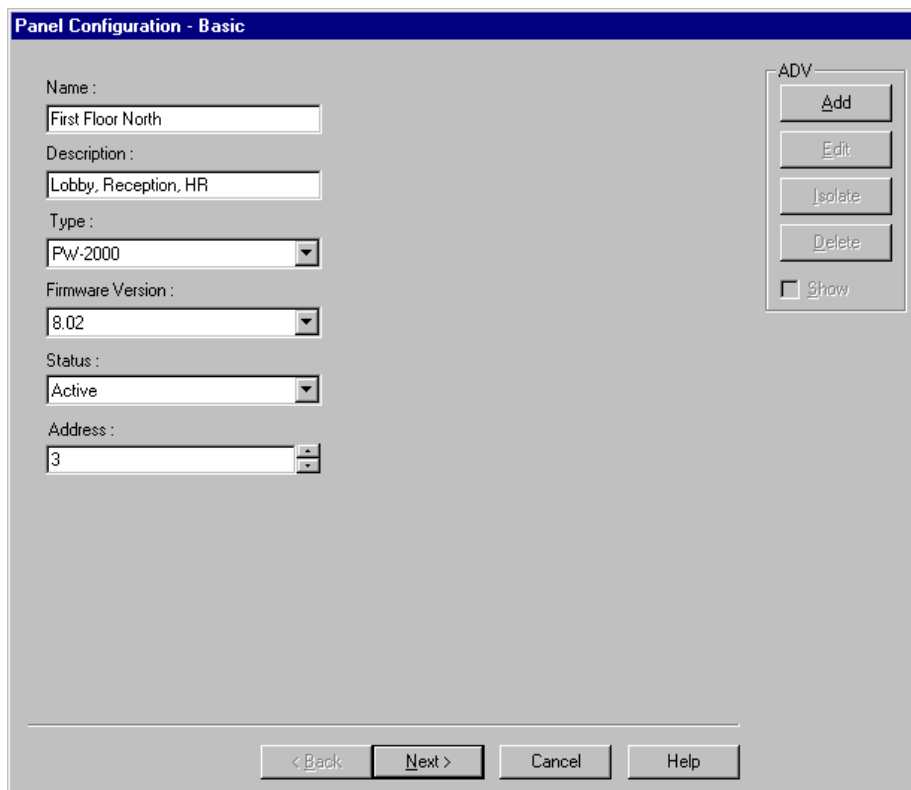
Panel definitions are added to the Device Map.

With the Device Map open (next illustration), right-click on a C-100 or 485 panel loop, and select **Add New PW-2000 Panel** from the options.



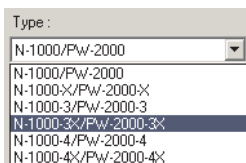
The Panel Configuration - Basic window is displayed (next illustration).

## Panel Configuration – Basic



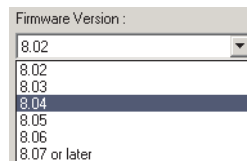
The image shows a 'Panel Configuration - Basic' dialog box. It contains several input fields: 'Name' (text box with 'First Floor North'), 'Description' (text box with 'Lobby, Reception, HR'), 'Type' (dropdown menu with 'PW-2000'), 'Firmware Version' (dropdown menu with '8.02'), 'Status' (dropdown menu with 'Active'), and 'Address' (text box with '3'). On the right side, there is a group box labeled 'ADV' containing buttons for 'Add', 'Edit', 'Isolate', 'Delete', and a checkbox for 'Show'. At the bottom, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- 1 Enter a unique **Name** for the panel, using up to 30 alphanumeric characters. This is a required field.
- 2 Enter a **Description** of the panel, if desired. This field holds up to 60 alphanumeric characters.
- 3 Select the **Type** of panel being added.



The image shows a 'Type' dropdown menu. The selected item is 'N-1000-3/Pw-2000-3X'. The list of items includes: 'N-1000/Pw-2000', 'N-1000-X/Pw-2000-X', 'N-1000-3/Pw-2000-3', 'N-1000-3X/Pw-2000-3X', 'N-1000-4/Pw-2000-4', and 'N-1000-4X/Pw-2000-4X'.

- 4 Select the **Firmware Version** being used in the panel.



This refers to the version of firmware of the PROM chip in your PW-2000 panel. The default is 8.2. If your panel has a different firmware version, enter the number here. Different panel options are available, depending on which firmware version is being used.

- 5 Indicate the **Status** of the panel.

Active is used when a panel is configured and present.

Inactive should be used for a panel that is present but temporarily disconnected for maintenance.

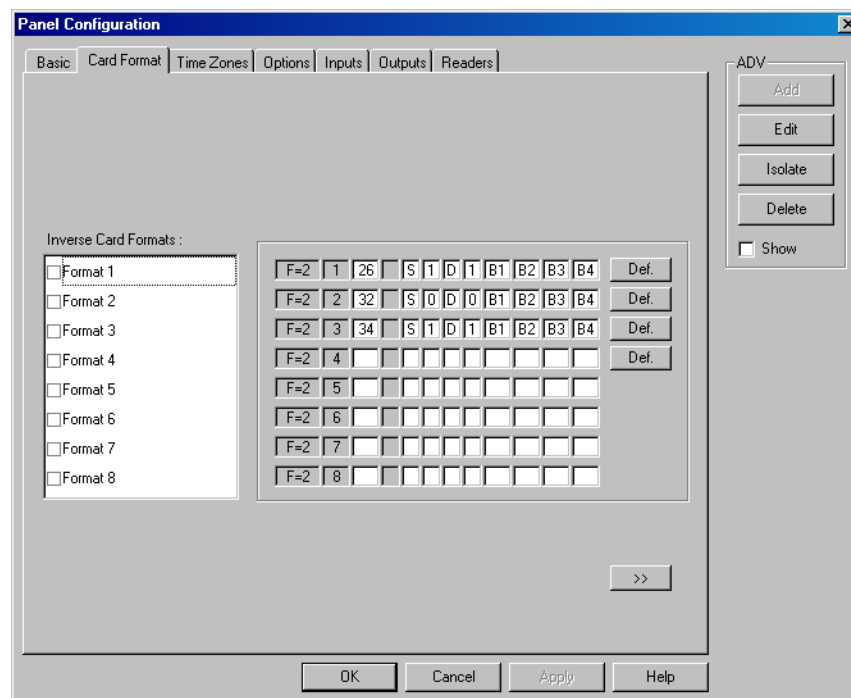
Not Present allows a system to be defined before the physical installation is complete.

Card additions or deletions sent to an Inactive panel are saved until the panel is made active. If the panel is marked Not Present, no transactions are saved.

- 6 Enter the panel's hardware **Address**. This address corresponds to the DIP Switch setting on the control panel and falls within the range of one to eight. Consult the PW-2000 Installation Manual for details.

- 7 Create an ADV for the panel, by clicking the **Add** button in the ADV section (upper right corner) of the configuration window.
- 8 On returning to the Panel Configuration - Basic window [after creating the ADV], click the **Next** button to advance to the Panel Configuration - Card Format window (next illustration).

### Panel Configuration – Card Format



Select either **ABA** or **Wiegand** as the card type.

These default values will rarely need to be changed. If in doubt, accept the Wiegand default, as this is the most common application.

### ABA Card Format

If ABA is selected as the card type, 12-digit, 16-digit, or a user defined card format can be selected.

### Wiegand Card Formats

If Wiegand is selected as the card type, the fields in the lower area of the window are active, and show Wiegand formats.

The panel address is followed by a format slot number (*fsn*).

Default formats for slots 1, 2, and 3 respectively are CR-1 Wiegand Card Swipe Reader, NR-1 Magstripe Swipe Reader, and PR-2 Hughes/IDI Proximity Reader.

These defaults can be edited and other Wiegand card formats can be entered in the remaining slots.

Following is a list of Wiegand card formats valid with the PW-2000.

#### CR-1 Wiegand Card Swipe

`_F=pn_fsn_26_S_1_D_1_B1_B2_B3_B4`

#### NR-1 Magstripe Swipe

`_F=pn_fsn_32_S_Ø_D_Ø_B1_B2_B3_B4`

#### PR-2 Hughes/IDI Proximity

`_F=pn_fsn_34_S_1_D_1_B1_B2_B3_B4`

#### CI-1 Wiegand Card Insert

`_F=pn_fsn_26_I_1_D_1_B1_B2_B3_B4`

#### PR-1-280 Cotag Proximity

`_F=pn_fsn_32_S_Ø_D_Ø_B1_B2_B3_B4`



**HG-1 Hand Geometry**

*\_F=pn\_fsn\_32\_S\_Ø\_D\_Ø\_B1\_B2\_B3\_B4*

**5 Conductor Keypad**

*\_F=pn\_fsn\_32\_S\_Ø\_D\_Ø\_B1\_B2\_B3\_B4*

**Dorado Magstripe Cards**

*\_F=pn\_fsn\_34\_S\_1\_D\_Ø\_B1\_B2\_B3\_B4*

**Sielox Wiegand Cards**

*\_F=pn\_fsn\_34\_S\_1\_D\_1\_B1\_B2\_B3\_B4*

**Sielox Proximity Cards**

*\_F=pn\_fsn\_32\_S\_Ø\_D\_Ø\_B1\_B2\_B3\_B4*

**NCS 25-Bit Cards**

*\_F=pn\_fsn\_25\_S\_1\_D\_1\_B1\_B4\_B2\_B3*

**NCS 29-Bit Cards**

*\_F=pn\_fsn\_29\_S\_1\_D\_1\_B1\_B4\_B2\_B3*

**Kidde Cards**

*\_F=pn\_fsn\_31\_S\_1\_BØ\_B2\_B3\_B4*

**Continental 36-Bit Cards**

*\_F=pn\_fsn\_36\_S\_3\_D\_2\_B1\_B2\_B3\_B4*

**Continental 37-Bit Cards**

*\_F=pn\_fsn\_37\_S\_3\_D\_2\_B1\_B2\_B3\_B4*

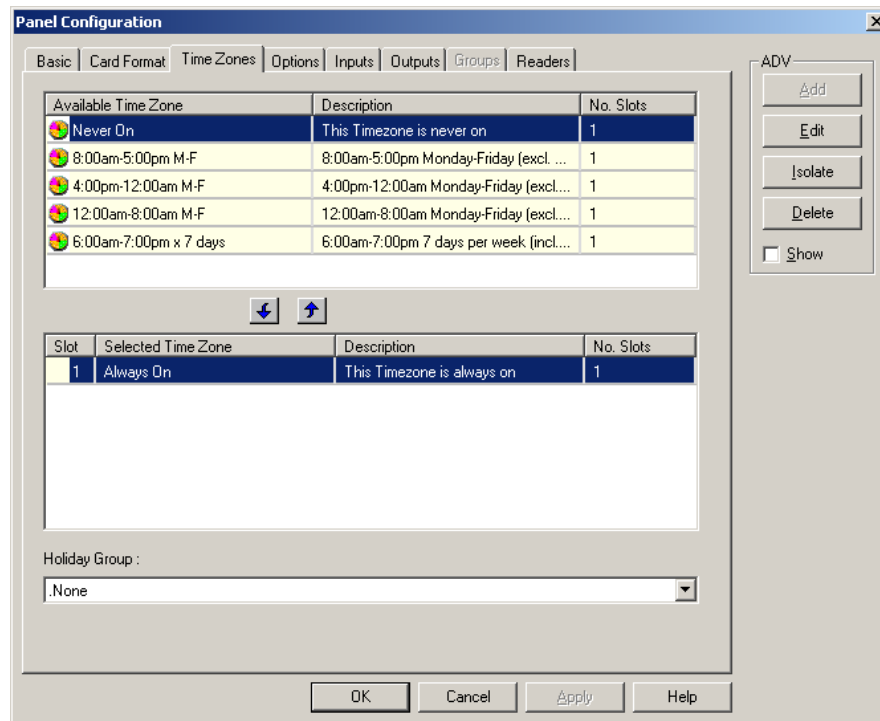
**Casi Rusco Format**

*\_F=pn\_fsn\_40\_D\_1\_S\_1\_B1\_B2\_B3\_B4*

[Requires 8.05 firmware version and OL option enabled.]

After setting the card format, click the **Next** button to advance to the Panel Configuration - Time Zones window (below).

## Panel Configuration – Time Zones



Use the Panel Configuration Time Zones window to indicate the time zones and holiday groups valid with the panel.

Time Zones which apply to a given panel must be added to the panel's definition. Up to 63 time zones can be downloaded to the panel.

**NOTE:** Time Zones are set up via the Time Management option on the WIN-PAK Configuration menu. Until a Time Zone is established, it cannot be added to the panel.

With the Time Zones window displayed, you can select the Time Zones and Holiday groups you want to use with the PW-2000 panel being installed.

The Available Time Zone list shows the time zone name and Description as set up in Time Management. The Number of Slots column shows how many slots on the panel this time zone requires.

Likewise, the Selected Time Zone list shows the time zone name and Description, the Number of Slots the time zone requires, and the Slot the time zone occupies on the panel.

- 1 Select a Time Zone from the **Available Time Zone** list and click the down-arrow to move it to the **Selected Time Zone** list.

Double-clicking items in either list box will move them to the other list [with the exception of the Always/Never On options].

- 2 If you are using holiday overrides, select the **Holiday Group** that applies to this panel.
- 3 Click **Next** to advance to the Panel Configuration Options window (next illustration).

---

**NOTE:** The PW-2000 panel has 63 time zone slots, so it is possible that, in a very large system, the number of time zones could exceed the number of available slots. In that case, it would be necessary to select only the time zones that apply to a given panel. To help the user determine the number of slots available, the number of slots used is displayed for each time zone.

---

## Panel Configuration – Options

**Panel Configuration**

Basic | Card Format | Time Zones | **Options** | Inputs | Outputs | Groups | Readers

☒ Anti-Passback    ☐ Forgiveness

☒ Groups    ☐ All readers use the same group

☒ Keypads    ☒ PIN

Time Zone for PIN :  
Always On

☒ Continuous Card Reads

☒ Reverse Read LEDs

☒ Split Time Zone

Command File :  
Cab1 Executive

Initialization Command :  
B M A I K P G Z O

Host Grant :  
Open Door and Update Panel

Site Codes :

Slot	Site Code
1	0
2	0
3	0
4	0
5	0
6	0

Hardware Options :

☐ AEP-3 (Additional Outputs)

☐ AEP-3 Second

☐ AEP-5 (Supervised Inputs)

☐ ERB (Additional Outputs)

Advanced...

ADV

Add

Edit

Isolate

Delete

☐ Show

OK Cancel Apply Help

Enable or disable options as desired. Refer to the descriptions of the options below.

### Anti-Passback

Select the **Anti-Passback** check box to enable Anti-Passback, which discourages users from entering with others without using their own cards. Cards must be used at a designated In reader, then at a designated Out reader before the card can be read in again. If the in/out/in pattern is broken, an anti-passback violation occurs and access is denied. A reader is required on each side of the door for this option.

If anti-passback is selected for any panel in a given area, the result is global anti-passback where the card must be presented at any out reader before it can be read in again without a violation.

The PW-2000-II and PW-2000-III support two readers. Reader 1 is the In reader and reader 2 is the Out reader.

The PW-2000-IV (X) supports four readers. Readers 1 and 3 are considered the In readers, while readers 2 and 4 are considered the Out readers.

### Forgiveness

Anti-passback can be used with or without Forgiveness. With Forgiveness turned on, all cards are reset at midnight so that if card users leave the building in the evening without using anti-passback out readers, they are allowed normal entry the next morning. Without forgiveness, an anti-passback violation occurs in this instance also. Forgiveness is not available unless anti-passback is selected.

---

**NOTE:** If the Anti-passback option is not selected, WIN-PAK defaults to a *free egress* configuration. A card is not required to exit. Instead, the door can be activated by a button, motion detector, or other device. For example, with an PW-2000-II panel, Card Reader 1 activates one door, and Card Reader 2 activates a different door. Inputs 3 and 4 are reserved for the exit devices for these two doors which releases locks just like a valid card read.

---

### Groups

Select the **Groups** check box if you want to create output relay groups. Output relay groups allow a card read to activate more than one output relay for applications such as elevator control.

When the Groups option is used, a valid card read on Reader 1 pulses the group, while a valid card read on Reader 2 pulses Relay 2.

For a valid card read on any reader to pulse the group, select the **All readers use the same group** option.

Groups must be selected to access the AEP-3 in the Hardware Options section of this window.

### Keypads

Select the **Keypads** option if matrix style (11-wire) keypads are used with the panel. If using Wiegand style (5-wire) keypads, the keypad is treated as a reader and this option should not be selected.

### PIN and Time Zone for PIN

These options are available only if the Keypad option is selected. Select **PIN** (personal identification number) if a keycode must be entered before presenting a card to gain access. Do not select this option if the panel is using keypads without readers.

From the **Time Zone for PIN** list, select the time zone during which a PIN is required.

### Continuous Card Reads

Select this option to allow card readers to read cards continuously, independent of output pulse time. If the option is not selected, card readers do not recognize valid cards while the corresponding output is energized.

For example, without the Continuous Card Reads option selected and Output 1 assigned a 10 second pulse time, a valid card read at Reader 1 causes Output 1 to energize for 10 seconds, during which time the card reader does not recognize any other valid cards.

**Reverse Read LEDs**

Select this option to reverse the standard LED operation of the reader. If this option is selected, a reader that normally changes from green to red on a valid card read, will change from red to green.

**Split Time Zone**

The Split Time Zone option is not available when adding a PW-2000 panel.

**Command File**

Provides the name of the defined command files that contain special programming for the control panel. A command file must be defined before it can be selected.

**Initialization Command**

The Initialization Command field displays the command string sent to the panel at initialization, based on the Advanced Options selected. Note that as an option is selected or deselected, a corresponding string in the Initialization Command field is added or removed.

**Site Codes**

Enter up to 8 site codes in this section. Site codes are encoded on cards, along with a card number, to ensure that cards belong to the facility where access is attempted. Click any space in the table to enter a site code. If no site code is defined, then site code checking is not performed.

---

**NOTE:** When the system is set up for 12-digit card number (ABA card formats), Site Codes cannot be entered.

---

### Hardware Options

The available hardware options vary depending on the type of panel selected. The AEP-5 (supervised input board) and ERB (Expanded Relay Board) are only used with PW-2000-II panels.

If the Groups option is selected, you can select one or two AEP-3 Output Expansion Boards. Each board adds eight output relays to a panel.

### Host Grant

Host Grant options provide fault tolerance should a card not be found in the panel. Host Grant options are used when, for example, the total number of cards that are to be valid at a panel exceeds the panel capacity or if the card update scheduler is used and the card is presented before the scheduled update has occurred.

There are three modes of operation of Host Grant.

**Disabled:** The card number must exist at the panel for access to be granted. The Host (WIN-PAK 2.0) computer will not grant any access.

**Open Door:** If a card is received as an alarm event from the N-1000, with Host Grant set to the OpenDoor mode, the event will be checked against the WIN-PAK 2.0 database. If the card is valid for access at that door and time, then a pulse (door open) command is sent and the event is treated as a normal card event in history. The Event View will show it as "Host Grant – Door unlocked" along with card-holder name and other related event information. If the event occurs outside the two minute time limit, it is processed as an alarm event and access is not granted.



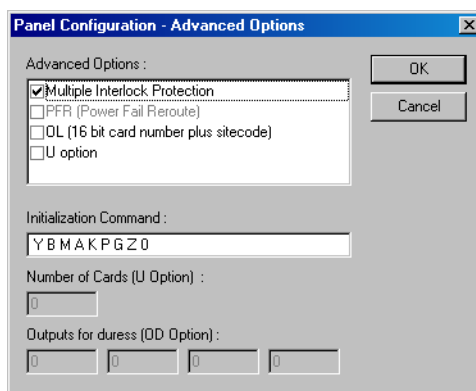
**Open Door and Update Panel:** Same as Open or mode except the validated card is updated to the panel. The event viewer will display "Host Grant – Card downloaded" along with card-holder name and other related event information. If outside the two minute time limit, the door is not unlocked but the card is updated at the panel so the next time the card is used at the panel it will be treated as a valid card at the panel.

The Host must receive "Alarm" card events within two minutes to be processed. This two minute time limit is enforced in the event that a panel may be buffered or offline (remote location) for a period that exceeds two minutes, therefore preventing any unauthorized door openings.

### Advanced Options

Click the **Advanced** button to further define the panel configuration. The Panel Configuration - Advanced Options window is displayed.

#### Panel Configuration – Advanced Options



The screenshot shows a dialog box titled "Panel Configuration - Advanced Options". It contains several configuration options:

- Advanced Options :**
  - ☒ Multiple Interlock Protection
  - ☐ PFR (Power Fail Reroute)
  - ☐ OL (16 bit card number plus sitecode)
  - ☐ U option
- Initialization Command :**  
Y B M A K P G Z 0
- Number of Cards (U Option) :**  
0
- Outputs for duress (OD Option) :**  
Four input fields, each containing 0.

Buttons for "OK" and "Cancel" are located in the top right corner.

- 1 Enable or disable the Advanced Options as necessary for your panel configuration. Items listed in the Advanced Options area of the window are dependent upon selections made earlier in the configuration process.
- 2 When you have selected all desired **Advanced Options** [explained in the following section], click **OK** to return to the Options window.
- 3 Click **Next** to advance to the Panel Configuration - Inputs window (next illustration). Description of Options

**Multiple Interlock Protection (MIP):** Available with all PW-2000 series panels. Requires that all input points tied to a single output return to a normal state before the output is de-energized. Without MIP, just one input returning to the normal state de-energizes the output.

**PFR (Power Fail Reroute):** Only available with the PW-2000-II using AEP-5. Allows Input 8 [Primary Power] to be rerouted to Input 9 [Primary Power - System Alarm] freeing up Input 8 on the AEP-5 to be used as a standard/supervised input point.

**OL (16 bit card number plus site code):** Available with all PW-2000 series panels. Creates Wiegand card numbers by concatenating the site code with the card numbers. The result is transmitted as a 12-digit number. Do Not add site codes to the panel with this option.

The OJ and OL options are mutually exclusive. They cannot be used at the same time.

**OJ (20 bit card number plus site code):** Only available with 8.03 firmware or higher. Sets the format for 20 bit card numbers. The first 12 bits are interpreted as the site code and the last 8 as the card number. The card number is sent to the head end software as a 12-digit number.

**U option:** Available with all PW-2000 series panels. Allows the user to change the number of cards the panel supports. Selecting more cards reduces the number of buffers available to store events when the panel is not online with the computer [or heavy traffic prevents immediate transmission of all events].

**OH (25 bit card number plus site code):**

Available for use with firmware later than 8.03.  
Allows special card format applications.

**Initialization Command**

The Initialization Command field displays the command string sent to the panel at initialization, based on the Advanced Options selected. Note that as an option is selected or deselected, a corresponding string in the Initialization Command field is added or removed.

**Number of Cards (U Option)**

The Number of Cards option allows you to enter the number of cards for the panel, if the U advanced option is selected.

**Outputs for Duress**

The Outputs for Duress (Duress Option) is only available with the PW-2000 with 8.03 firmware. When configured for PIN operation, if a PIN is used with a value that is one number different from the valid PIN, then the output defined in Outputs for Duress will pulse. When configured with firmware later than 8.03, then 2 outputs can be selected.

## Panel Configuration – Inputs

The panel input points are configured on this Inputs window. All input points available on the current panel are shown in the Name list.

- 1 In the **Name** list, select the check box for each input point you want to activate. Once an input point is selected, other options on the window become available.

WIN-PAK sets some input points as active and may assign them an interlock value. These default settings vary depending on the type of panel and whether or not you have chosen the anti-passback option. All these settings can be edited.

- 2 Use the **Time Zone** drop-down list to attach a time zone to an input point.

For example, to shunt [deactivate] an input point during a particular time zone, select that time zone from the list. The Time Zone defaults to None.

- 3 Shunt Time only comes into play when an event [an interlock, or manual shunt, for example] is applied to the input point. Enter a value in the **Shunt Time** field to set the amount of time that the input point is deactivated [shunted] when triggered. This can be set in seconds, minutes, or hours using the radio buttons directly above the option.

The field defaults to 15 seconds, but can be set from 0 to 63 seconds, 0 to 63 minutes, 0 to 63 hours.

Shunt Time cannot be applied to door status or door inputs.

- 4 Debounce Time sets the amount of time [in seconds] that an input must be in a changed state before that change is reported. In other words, a debounce cycle instructs the system to ignore an alarm for a specific period of time. For example, an input point with a debounce time of 4 [the default] must be in an alarm state for four cycles before it is reported as an alarm. The same is true when it returns to normal condition. The input point will not report as normal until it is in the normal state for the debounce period. Debounce time can be set from 0 to 255 seconds.
- 5 In the case of input points, Interlocking refers to linking the changing state of the input to either another input point, an output point, or a group of outputs. Refer to the following section, "Enabling Interlocking for Inputs" for details on interlocking.
- 6 All PW-2000 alarm input points default to normally closed, non-supervised circuits used to monitor changes of state.

The inputs on an PW-2000 with an AEP-5 default to normally closed, supervised circuit to monitor changes of state.

PW-2000-III/IV inputs can also be configured for normally open circuits and 3-state supervised circuits.

Select the **Supervised** check box to configure the selected input point as supervised. Then select either the **Normally Open**, or **Normally Closed** radio button.

- 7 If the selected input point is unsupervised, you can choose to Report Alarms Never or Always. If the input point is supervised, the Trouble option is also available, which reports only Trouble conditions.
- 8 Create an **ADV** for each input point. Click the **Add** button in the upper right corner of the Inputs window, and set priorities for each state you want to monitor.
- 9 On returning to the Inputs window [after creating ADVs for the input points to be monitored] click **Next** to advance to the Panel Configuration - Outputs window.

### Enabling Interlocking for Inputs

Interlocking allows you to interlock a selected input point with another input point, an output point, or a group of output points.

When an input point is interlocked to an output point, and there is a change of status in the input point, the system performs the operation specified.

- 1 Highlight an input and then select the **Interlocking** check box.
- 2 Choose either the Input (**I**), Output (**O**), or Group (**G**), radio button to indicate the point type with which to interlock.

- 3 Select the interlocking **Point** from drop-down list.

---

**NOTE:** Only input points, output points or groups that have already been activated appear on this list. If the point you need is not listed, go to the correct dialog and activate the point, then return to this window.

---

- 4 Select the **Alarm Action** for the interlocked point. This is the action that the second point will take when the initial input becomes active.

Alarm and Normal Actions include:

- No Action      • De-Energize
- Energize              • Pulse Off
- Pulse              • Invert Follow
- Follow

- 5 Indicate the **Normal Action** for the interlocked point. This is the action the second point will take when the initial point returns to normal status.

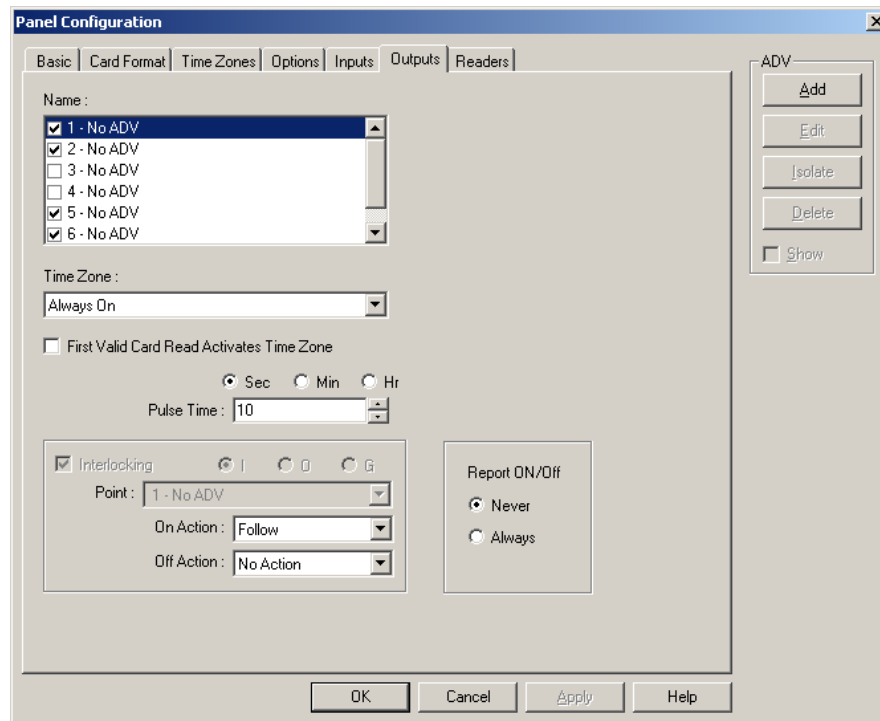
### Default Panel Input Definitions

The following list shows typical input point defaults.

Input	PW-2000-II	PW-2000-III	PW-2000-IV
1	Door 1 State	Door 1 State	Door 1 State
2	Door 2 State	Door 2 State	Door 2 State
3	Egress 1	General Alarm	Door 3 State
4	Egress 2	General Alarm	Door 4 State
5	General Alarm	Egress 1	Egress 1
6	General Alarm	Egress 2	Egress 2
7	General Alarm	General Alarm	Egress 3
8	Primary Power	General Alarm	Egress 4
9-11	General Alarm*	General Alarm	General Alarm
12	Tamper	General Alarm	General Alarm
13-16	General Alarm*	General Alarm	General Alarm

\* May be used as matrix keypad inputs when the keypad option is enabled.

## Panel Configuration – Outputs



- 1 From the **Name** list on the Outputs window, select the check box to the left of each output point you want to activate. Once an output point is selected, other options on the window become available.

WIN-PAK sets some output points as active and may assign them an interlock value. These default settings vary depending on the type of panel and whether or not you have chosen the anti-passback option. All of these settings can be edited.



- 2 Use the **Time Zone** drop-down list to attach a time zone to each output point. For example, to shunt [deactivate] an output point during a particular time zone, select that time zone from the list. The Time Zone defaults to None.
- 3 Enter a value in the **Pulse Time** field to set the amount of time that the output point is energized when triggered. The field defaults to 0, but can be set from 0 to 63 seconds, 0 to 63 minutes, or 0 to 63 hours.
- 4 linking the changing state of the output point to either another output point, an input point, or a group of outputs. Refer to the following section, "Enabling Interlocking for Outputs" for details on setting up interlocking.
- 5 Create ADVs as needed for system control. For example, the output ADV is used on the floor plan definition to monitor the state of the output point [Energized, De-energized, Trouble].
- 6 On returning to the Outputs window [after creating an ADV for each output point], click the **Next** button to advance to the Panel Configuration - Groups window.

#### Enabling Interlocking for Outputs

- 1 Highlight an output point. Select the **Interlocking** check box.
- 2 Select either the Input (**I**), Output (**O**), or Group (**G**), radio button to indicate the point type with which to interlock.
- 3 Choose the interlocking **Point** from drop-down list.

---

**NOTE:** Only input points, output points or groups that have already been activated appear on this list. If the point you need is not listed, go to the correct dialog and activate the point, then return to this window.

---

- 4 Select the **On Action** for the interlocked point. This is the action that the second point will take when the initial input goes on.

On and Off Actions include:

- No Action
- De-Energize
- Pulse Off
- Invert Follow
- Energize
- Pulse
- Follow

- 5 Indicate the **Off Action** for the interlocked point. This is the action the second point will take when the initial point goes off.

### Default Panel Output Definitions

The following list shows typical output point defaults.

Output	PW-2000-II	PW-2000-III	PW-2000-IV
1	Door 1	Door 1	Door 1
2	Door 2	Door 2	Door 2
3	Aux	Aux	Door 3
4	Aux	Aux	Door 4
5-8	Aux	Aux	Aux
(X ver) 9	ERB option relay 9-not available with AEP-3	N/A	N/A
10	ERB option relay 10-not available with AEP-3	N/A	N/A
11	ERB option relay 11-not available with AEP-3	Rdv 1 LED	Rdr 1 LED
12	ERB option relay 12-not available with AEP-3	Rdv 2 LED	Rdr 2 LED

13	Rdr 1 LED	N/A	Rdr 3 LED
14	Rdr 2 LED	N/A	Rdr 4 LED
15	TTL-output		
16	used for AEP Opsy	N/A	N/A
17-24	AEP-3 Brd 1	AEP-3 Brd 1	AEP-3 Brd 1
25-32	AEP-3 Brd 2	AEP-3 Brd 2	AEP-3 Brd 2

### Panel Configuration – Groups

A Group is two or more active output points that are joined together. As many as 32 groups can be defined per panel.

Groups are created on the Panel Configuration - Groups window.

The Groups option must be selected in the Options tab in order for the Groups window to display.

**Panel Configuration - Groups**

Name :

- ☒ 1 - loop - Grp 1
- ☒ 2 - loop - Grp 2
- ☒ 3 - loop - Grp 3
- ☐ 4 - No ADV
- ☐ 5 - No ADV
- ☐ 6 - No ADV
- ☐ 7 - No ADV

Time Zone :

None

☒ Sec ☐ Min ☐ Hr

Pulse Time : 0

☒ Interlocking ☐ I ☐ O ☐ G

Point : 1 - loop - In 1

On Action : No Action

Off Action : No Action

Available Outputs

Out 2  
Out 3  
Out 13  
Out 14

Selected Outputs

Out 1

ADV

Add  
Edit  
Isolate  
Delete  
☒ Show

Move To 'Selected'

Select All De-Select All

Move To 'Available'

Select All De-Select All

< Back Next > Cancel Help

- 1 In the **Name** list select the check the box to the left of each group being defined. As selections are made, the Available Outputs from each group are displayed.
- 2 Highlight an output point in the Available Outputs list and click the **Move to 'Selected'** button to move it to the **Selected Outputs** list. Or, click **Select All**, and then click **Move to 'Selected'** to add all of the available outputs to the group.
- 3 Use the **Time Zone** drop-down list to attach a time zone to output group.
- 4 Enter a value in the **Pulse Time** field to set the amount of time that the output group is energized when triggered. The field defaults to 0, but can be set from 0 to 63 seconds, 0 to 63 minutes, or 0 to 63 hours.
- 5 In the case of output groups, Interlocking refers to linking the changing state of the output group to either another output group, an input point, or an output point. Refer to the following section, "Enabling Interlocking for Output Groups" for details on setting up interlocking.
- 6 Create ADVs as needed for the output groups. The ADVs are used to control and monitor the output groups on the floor plan definition.
- 7 On returning to the Groups window [after creating an ADV for each output group], click the **Next** button to advance to the Panel Configuration - Readers window.

**Enabling Interlocking for Output Groups**

- 8 Highlight an output group and click the check box to activate the **Interlocking** options.
- 9 Select either the Input (**I**), Output (**O**), or Group (**G**), radio button to indicate the point type with which to interlock.
- 10 Choose the interlocking **Point**.

---

**NOTE:** Only input points, output points, or groups that have already been activated appear on this list. If the point you need is not listed, go to the correct dialog and activate the point, then return to this window.

---

- 11 Select the **On Action** for the interlocked point. This is the action that the second point will take when the initial input goes on.

On and Off Actions include:

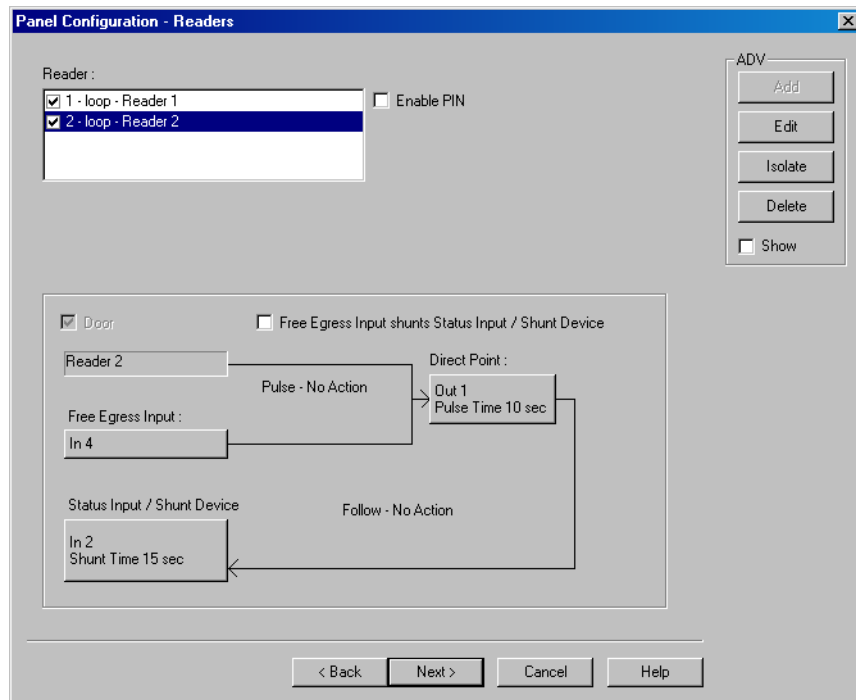
- No Action
- Energize
- De-Energize
- Pulse
- Pulse Off
- Follow
- Invert Follow

- 12 Indicate the **Off Action** for the interlocked point. This is the action the second point will take when the initial point goes off.

### Panel Configuration – Readers

Individual readers for the current panel are defined in the Readers configuration window. The number of readers available depends on the type of panel being defined.

By default all available readers are active. Also by default, the Door option is selected, which provides the basic free egress interlocking [if anti-passback is not selected]. If anti-passback is selected [on the Options window], the readers default to anti-passback settings.



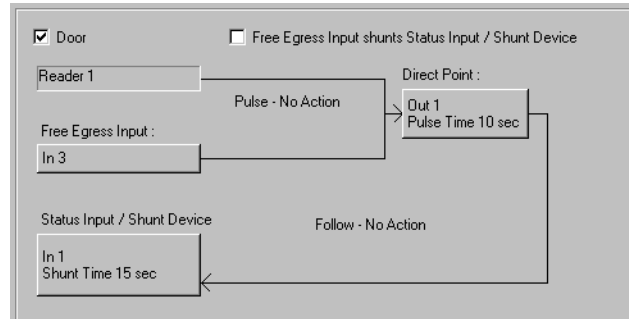
- 1 Create an ADV for each **Reader**. Select the check box to the left of reader and click the **Add** button in the ADV area of the window.

If the Door option is selected, additional actions are available [for example, door normal, door ajar, etc].

- 2 If the PIN option was selected on the Configuration - Options window, you can deselect the **Enable PIN**, thus setting the reader so that it does not require a PIN.
- 3 The lower portion of the Reader window illustrates certain door and input point relationships. Refer to "Interpreting Door Interlocks" (next section) for details.
- 4 Click the **Next** button to advance to the Panel Configuration - Finish window.

### Interpreting Door Interlocks

With the **Door** check box selected, the following door interlock input and output relationships for this reader are shown.

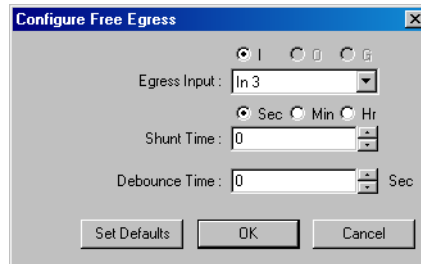


With the Free Egress Input shunts Status Input check box selected, the following reader relationships are displayed.

### Free Egress Input

Free Egress Input is used to indicate which input will be used for the Free Egress device, and to configure a door's free egress point. Free Egress input can only be linked to an input point.

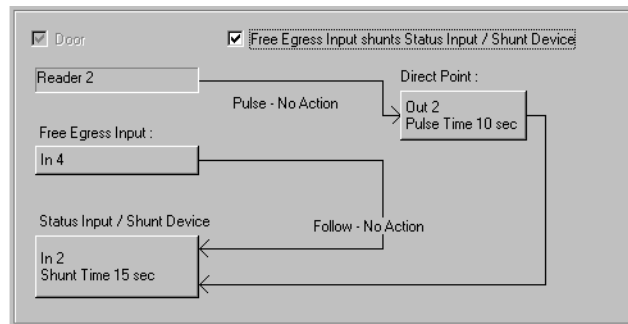
Click the **Free Egress Input** button on the Readers window. The Configure Free Egress dialog is displayed:



Only input points can be associated with a Free Egress Input point, therefore the input (I) point radio button is automatically selected (and the other two options are grayed out) on this dialog.

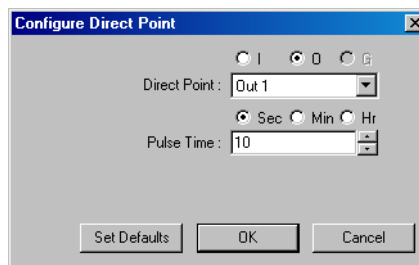
- 1 Select an **Egress Input** point that you want to utilize as the Free Egress Input. Only active input points that have not been added as ADVs appear in this list.
- 2 Enter the **Shunt Time** for the Egress Point. This is the amount of time the input point is shunted [deactivated] when triggered [such as upon a valid card read].
- 3 Enter the **Debounce Time** for the Egress Point. This is the amount of time that an input must be in alarm condition [or return to normal] before it is recognized as an alarm [normal]. For example, an input with a debounce time of five must be in alarm condition for five seconds before it is reported as an alarm. The same is true when returning to normal condition.





### Direct Point

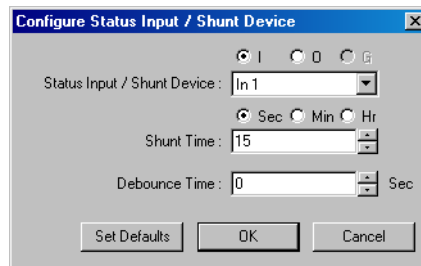
The Direct Point indicates the output that will be directly controlled by the reader. Click the **Direct Point** button to open the Configure Direct Point dialog.



- 1 Indicate if the point being configured is an input (**I**) point, output (**O**) point, or output (**G**) group.
- 2 Select the input, output, or group to be used as the **Direct Point**.
- 3 Set the **Pulse Time** for the point.
- 4 Click **OK** to return to the Readers window.

### Status Input

Status Input indicates the status of the door. Click the **Status Input** button on the Readers window to open the Configure Status Input dialog.

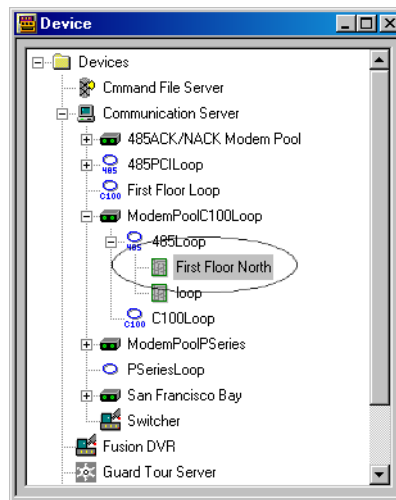


- 1 Select the **Status Input** point that will be used as the status point for the door. Only active input points that have not been added as ADVs appear in this list.
- 2 Enter the **Shunt Time** for the Status Input Point. This is the amount of time the input point is shunted [deactivated] when triggered [such as upon a valid card read].
- 3 Enter the **Debounce Time** for the Status Input Point. This is the amount of time that an input must be in alarm condition [or return to normal] before it is recognized as an alarm [or normal]. For example, an input with a debounce time of five must be in alarm condition for five seconds before it is reported as an alarm. The same is true when returning to normal condition.
- 4 Click **OK** to return to the Readers window.

### Panel Configuration – Finish

Click the **Finish** button to complete the configuration process.

The PW-2000 panel is now added to the communication loop.



### Interlocking Input and Output Points

The interlocking feature allows an input point or output point to take a specified action based on the change of state of another input point or output point. In an interlock sequence, an action on one point causes a reaction from a second point.

Interlocks initiated by an input point change of state are defined on the Panel Configuration Inputs window. To edit input interlocking, expand the **Device Map**, and right-click the panel you want to edit. Select **Configure** and click the **Inputs** tab.

Interlocks initiated by an output point change of state are defined on the Panel Configuration Outputs window. To edit output interlocking, expand the **Device Map**, and right-click the panel you want to edit. Select **Configure** and click the **Outputs** tab.

### Component A

From the **Name** list on the Inputs or Outputs window select the check box to indicate the input or output point that will initiate the interlock sequence. This point will be called (for the purposes of this explanation) Component A. A change of state on Component A causes a reaction from Component B.

Select the **Interlocking** check box to activate the **Interlocking** area of the window.

### Component B

Select **I**, **O** or **G** for an input point, output point or group, respectively, then select the **Point** to react to a change of state of Component A. This point will be Component B.

**Action 1:** Specify the action Component B takes when Component A goes into an active state [input] or on [output].

**Action 2:** Specify the action for Component B to take when Component A returns to a normal state [input] or off [output].

The actions available are as follows:

**Energize:** Turn the point on.

**De-Energize:** Turn the point off.

**Pulse:** Energize the point for a set amount of time.

**Pulse Off:** Turn off a point currently being pulsed. When relay is energized, it will Pulse Off and then return to Energized state. (This is rarely used and must be used in addition to a command file.)

**No Action:** No change of state.

**Component A:** Output 1, door strike relay

**Component B:** Input 1, door status switch

**Action 1:** Follow

**Action 2:** No action

When a valid card read or egress causes Output 1 to energize, Input 1 is shunted for the defined shunt time. Input 1 follows the state of Output 1.

## Adding NS2+ Panels

A NS2+ panel can be added to a RS-232 (single panel) or 485 Panel Loop by selecting the Add New NS2+ Panel option from the loop's right-click menu.

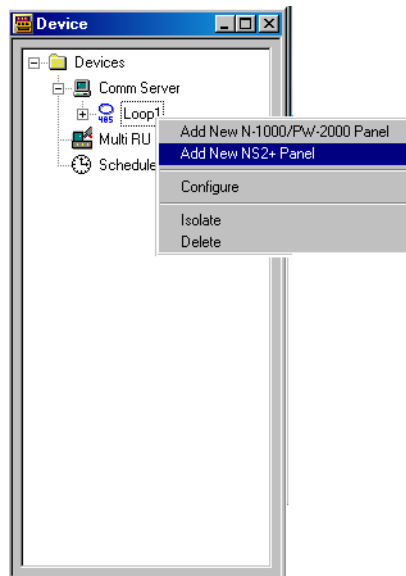
## Configuring NS2+ Panels

The panel configuration includes information on a number of system features. The card format, anti-passback, groups, and readers, are all configured at the panel.

### Adding a NS2+ Panel to a RS-232 or 485 Loop

Panel definitions are added to the Device Map.

With the Device Map open (next illustration), right-click on a RS-232 or 485 panel loop, and select **Add New NS2+ Panel** from the options.



The Panel Configuration - Basic window is displayed.

### Panel Configuration – Basic

Panel Configuration

Basic | Card Format | Time Zones | Options | Inputs | Outputs | Readers

Name :  
NS2+Panel1

Description :

Type :  
NS2+

Firmware Version :  
1.0 or later

Status :  
Active

Address :  
2

ADV

Add  
Edit  
Isolate  
Delete  
☐ Show

OK Cancel Apply Help

- 1 Enter a unique **Name** for the panel, using up to 30 alphanumeric characters. This is a required field.
- 2 Enter a **Description** of the panel, if desired. This field holds up to 60 alphanumeric characters.
- 3 Select the **Type** of panel being added.

- 4 Select the **Firmware Version** being used in the panel.

This refers to the version of firmware of the PROM chip in your NS2+ panel. The default is 1.0 or later. If your panel has a different firmware version, enter the number here.

- 5 Indicate the **Status** of the panel.

Active is used when a panel is configured and present.

Inactive should be used for a panel that is present but temporarily disconnected for maintenance.

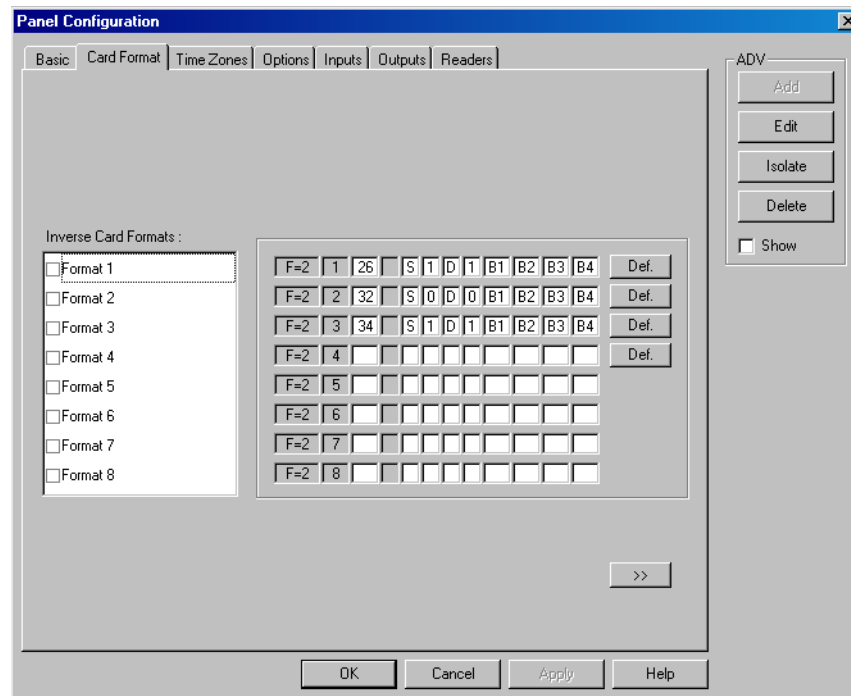
Not Present allows a system to be defined before the physical installation is complete.

Card additions or deletions sent to an Inactive panel are saved until the panel is made active. If the panel is marked Not Present, no transactions are saved.

- 6 Enter the panel's hardware **Address**. This address corresponds to the DIP Switch setting on the control panel and falls within the range of 1 to 31. Consult the NS2+ Installation Manual for details.
- 7 Create an ADV for the panel, by clicking the **Add** button in the ADV section (upper right corner) of the configuration window.
- 8 On returning to the Panel Configuration - Basic window [after creating the ADV], click the **Next** button to advance to the Panel Configuration - Card Format window (next illustration).



## Panel Configuration – Card Format

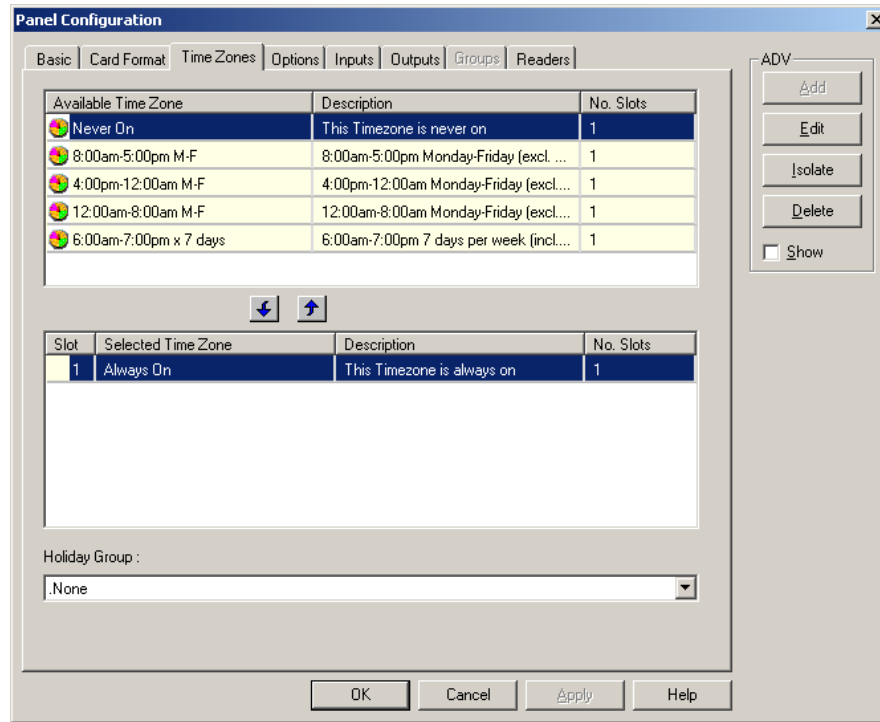


## Wiegand Card Formats

Reader/Card	Format
CR-1 Wiegand Card Swipe/26 bit-generic	$\_F=pn\_fsn\_26\_S\_1\_D\_1\_B1\_B2\_B3\_B4$
NR-1 Magstripe Swipe, NR5/32 bit	$\_F=pn\_fsn\_32\_S\_0\_D\_0\_B1\_B2\_B3\_B4$
HID/34 bit	$\_F=pn\_fsn\_34\_S\_1\_D\_1\_B1\_B2\_B3\_B4$
CI-1 Wiegand Card Insert/26 bit	$\_F=pn\_fsn\_26\_I\_1\_D\_1\_B1\_B2\_B3\_B4$
PR-1-280 Cotag Proximity/32 bit	$\_F=pn\_fsn\_32\_S\_0\_D\_0\_B1\_B2\_B3\_B4$
HG-1 Hand Geometry/32 bit	$\_F=pn\_fsn\_32\_S\_0\_D\_0\_B1\_B2\_B3\_B4$
5 Conductor Keypad/32 bit	$\_F=pn\_fsn\_32\_S\_0\_D\_0\_B1\_B2\_B3\_B4$
Dorado Magstripe Cards/34 bit	$\_F=pn\_fsn\_34\_S\_1\_D\_0\_B1\_B2\_B3\_B4$
Sielox Wiegand Cards/34 bit	$\_F=pn\_fsn\_34\_S\_1\_D\_1\_B1\_B2\_B3\_B4$
Sielox Proximity Cards/32 bit	$\_F=pn\_fsn\_32\_S\_0\_D\_0\_B1\_B2\_B3\_B4$

Where  $pn$  = panel address number and  $fsn$  = format slot number.

## Panel Configuration – Time Zones



Use the Panel Configuration Time Zones window to indicate the time zones and holiday groups valid with the panel.

Time Zones which apply to a given panel must be added to the panel's definition. Up to 63 time zones can be downloaded to the panel.

**NOTE:** Time Zones are set up via the Time Management option on the WIN-PAK Configuration menu. Until a Time Zone is established, it cannot be added to the panel.

With the Time Zones window displayed, you can select the Time Zones and Holiday groups you want to use with the NS2+ panel being installed.

The Available Time Zone list shows the time zone name and Description as set up in Time Management. The Number of Slots column shows how many slots on the panel this time zone requires.

Likewise, the Selected Time Zone list shows the time zone name and Description, the Number of Slots the time zone requires, and the Slot the time zone occupies on the panel.

- 1 Select a Time Zone from the Available Time Zone list and click the down-arrow to move it to the **Selected Time Zone list**.

Double-clicking items in either list box will **move them to the other** list [with the exception of the Always/Never On options].

- 2 If you are using holiday overrides, select the Holiday Group that applies to this panel.
- 3 Click Next to advance to the **Panel Configuration Options** window (next illustration).

---

**NOTE:** The NS2+ panel has 63 time zone slots, so it is possible that, in a very large system, the number of time zones could exceed the number of available slots. In that case, it would be necessary to select only the time zones that apply to a given panel. To help the user determine the number of slots available, the number of slots used is displayed for each time zone.

---

## Panel Configuration – Options

Panel Configuration

Basic | Card Format | Time Zones | Options | Inputs | Outputs | Readers

☒ Global Anti-Passback ☐ Forgiveness

☐ Keypads ☐ PIN

☒ Continuous Card Reads  
☒ Reverse Read LEDs  
☒ Split Time Zone

Command File :  
None

Advanced...

Initialization Command :  
B M A I Z O

Host Grant :  
Open Door and Update Panel

Site Codes :

Slot	Site Code
1	0
2	0
3	0
4	0
5	0
6	0

ADV  
Add  
Edit  
Isolate  
Delete  
Show

OK Cancel Apply Help

Enable or disable options as desired. Refer to the descriptions of the options below.

### Global Anti-Passback

Select the **Global Anti-Passback** check box to enable the **Global Anti-Passback** feature. It ensures that a card must be presented at any Out reader before it can be read In again. The cards must be used at a designated In reader, then at a designated Out reader before the card can be read In again. If this in/out/in pattern is broken, an anti-passback violation occurs and access is denied. A reader is required on each side of the door for this option. **Global Anti-Passback** applies for all the readers of the panels connected in the same loop.

### Forgiveness

Global Anti-passback can be used with or without Forgiveness. With Forgiveness turned on, all cards are reset at midnight so that if card users leave the building in the evening without using Global Anti-passback out readers, they are allowed normal entry the next morning. Without forgiveness, Global Anti-Passback violation occurs in this instance also. Forgiveness is not available unless Global Anti-Passback is selected.

---

**NOTE:** If the Global Anti-passback option is not selected, WIN-PAK defaults to a *free egress* configuration. A card is not required to exit. Instead, the door can be activated by a button, motion detector, or other device.

---

### Keypads

Select the **Keypads** option if matrix style (11-wire) keypads are used with the panel. If using Wiegand style (5-wire) keypads, the keypad is treated as a reader and this option should not be selected.

### Continuous Card Reads

Select this option to allow card readers to read cards continuously, independent of output pulse time. If the option is not selected, card readers do not recognize valid cards while the corresponding output is energized.

For example, without the Continuous Card Reads option selected and Output 1 assigned a 10 second pulse time, a valid card read at Reader 1 causes Output 1 to energize for 10 seconds, during which time the card reader does not recognize any other

**Reverse Read LEDs**

Select this option to reverse the standard LED operation of the reader. If this option is selected, a reader that normally changes from green to red on a valid card read, will change from red to green.

**Split Time Zone**

The Split Time Zone option is not available when adding a NS2+ panel.

**Initialization Command**

The Initialization Command field displays the command string sent to the panel at initialization, based on the Advanced Options selected. Note that as an option is selected or deselected, a corresponding string in the Initialization Command field is added or removed.

**Site Codes**

Enter up to 8 site codes in this section. Site codes are encoded on cards, along with a card number, to ensure that cards belong to the facility where access is attempted. Click any space in the table to enter a site code. If no site code is defined, then site code checking is not performed.

**Host Grant**

Host Grant options provide fault tolerance should a card not be found in the panel. Host Grant options are used when, for example, the total number of cards that are to be valid at a panel exceeds the panel capacity or if the card update scheduler is used and the card is presented before the scheduled update has occurred.

There are three modes of operation of Host Grant.

**Disabled:** The card number must exist at the panel for access to be granted. The Host (WIN-PAK 2.0) computer will not grant any access.

**Open Door:** If a card is received as an alarm event from the NS2+, with Host Grant set to the Open Door mode, the event will be checked against the WIN-PAK database. If the card is valid for access at that door and time, then a pulse (door open) command is sent and the event is treated as a normal card event in history. The Event View will show it as "Host Grant – Door unlocked" along with card-holder name and other related event information. If the event occurs outside the two minute time limit, it is processed as an alarm event and access is not granted.

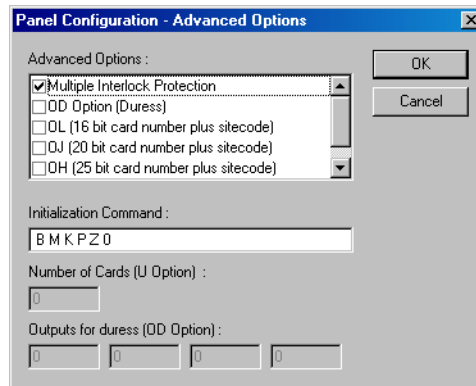
**Open Door and Update Panel:** Same as Open or mode except the validated card is updated to the panel. The event viewer will display "Host Grant – Card downloaded" along with card-holder name and other related event information. If outside the two minute time limit, the door is not unlocked but the card is updated at the panel so the next time the card is used at the panel it will be treated as a valid card at the panel.

The Host must receive "Alarm" card events within two minutes to be processed. This two minute time limit is enforced in the event that a panel may be buffered or offline (remote location) for a period that exceeds two minutes, therefore preventing any unauthorized door openings.

### Advanced Options

Click the **Advanced** button to further define the panel configuration. The Panel Configuration - Advanced Options window is displayed.

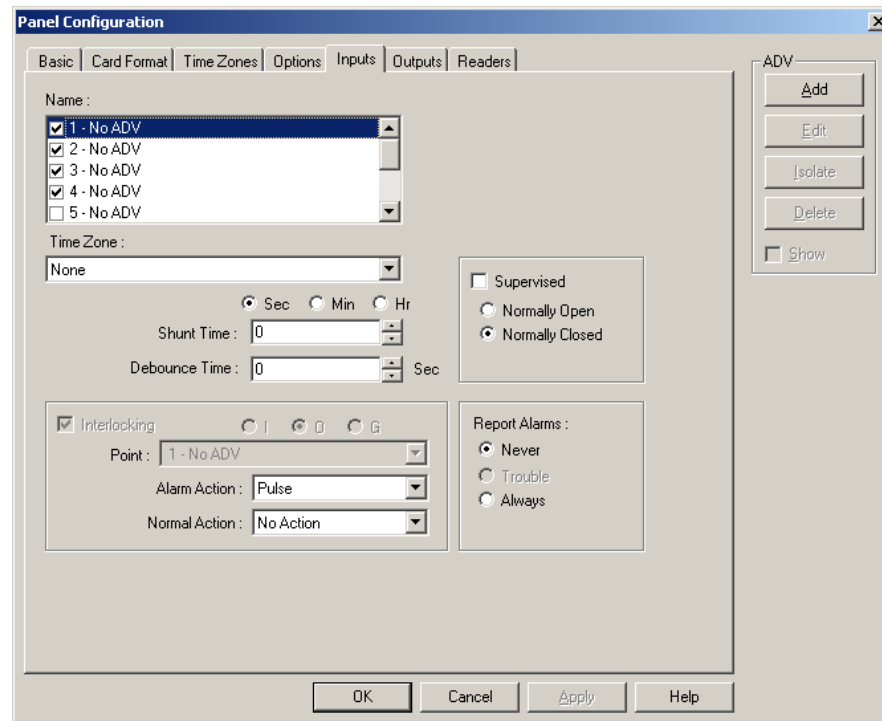
### Panel Configuration – Advanced Options



- 1 Enable or disable the Advanced Options as necessary for your panel configuration. Items listed in the Advanced Options area of the window are dependent upon selections made earlier in the configuration process.
- 2 When you have selected all desired **Advanced Options** [explained in the following section], click **OK** to return to the Options window.
- 3 Click **Next** to advance to the Panel Configuration - Inputs window (next illustration).



## Panel Configuration - Inputs



The image shows a software dialog box titled "Panel Configuration" with a tabbed interface. The "Inputs" tab is selected. The dialog contains several sections for configuring input points. On the left, a list of input points is shown, each with a checkbox and a name: "1 - No ADV", "2 - No ADV", "3 - No ADV", "4 - No ADV", and "5 - No ADV". The first four are checked. Below this list are fields for "Time Zone" (set to "None"), "Shunt Time" (0), and "Debounce Time" (0). There are also radio buttons for "Sec", "Min", and "Hr". To the right of these fields are checkboxes for "Supervised", "Normally Open", and "Normally Closed". Below the "Supervised" checkbox is a section for "Report Alarms" with radio buttons for "Never", "Trouble", and "Always". At the bottom left, there is an "Interlocking" checkbox and a "Point" dropdown menu set to "1 - No ADV". Below this are "Alarm Action" (set to "Pulse") and "Normal Action" (set to "No Action") dropdown menus. On the far right, there is an "ADV" section with buttons for "Add", "Edit", "Isolate", "Delete", and a "Show" checkbox. At the bottom of the dialog are "OK", "Cancel", "Apply", and "Help" buttons.

The panel input points are configured in this dialog box. All the input points available on the current panel are listed. To make an input point active, select its check box. This will make other settings available for that input point.

WIN-PAK sets some input points as active and may assign them an interlock value. All of these settings can be edited.

As each input point is selected, define an ADV for it. A quick method is to double-click the field to the right of the checked box and typing the name, then pressing the Enter key. For more advanced users:

Click Add in the ADV area (upper right). In the ADV definition, set up priorities for each input state you wish to monitor. When the ADV is completed, click OK to return to the panel dialogs and complete the panel definition.

When an active input point is selected, the following options are available:

**Time Zone:** To shunt (deactivate) an input point during a particular time zone, select that time zone from the list.

**Shunt Time:** Enter a value (0 to 63) to set the amount of time that the input point is deactivated (shunted) when triggered. This can be set in seconds, minutes or hours by using the selection buttons directly above the option.

**Debounce Time:** Enter a value (0 to 255) to set the amount of time, in seconds, that an input must be in a changed state before that change is reported. For example, an input point with a debounce time of 5 must be in active condition for five seconds before it is reported as an alarm. The same is true when returning to normal condition. The point would not report as normal until it was in the normal state for five seconds. If the value is set to zero, the debounce time is a minimum of .33 seconds on events going to normal, but alarms are reported immediately (debounce time is 0 seconds on alarm).

**Supervised:** All alarm input points default to normally closed, non-supervised circuits used to monitor changes of state. Inputs can also be configured for normally open circuits and 3-state supervised circuits. Select this check box to configure the selected input point as supervised, and then select your choice of Normally Open, or Normally Closed

**Report Alarms:** If the selected input point is unsupervised, you can choose from Never or Always. If the input point is supervised, the Trouble option is also available, which would report only Trouble conditions (typically to detect tampering).

**Interlocking:** In the case of input points, interlocking is linking the changing state of the input to either another input, an output.

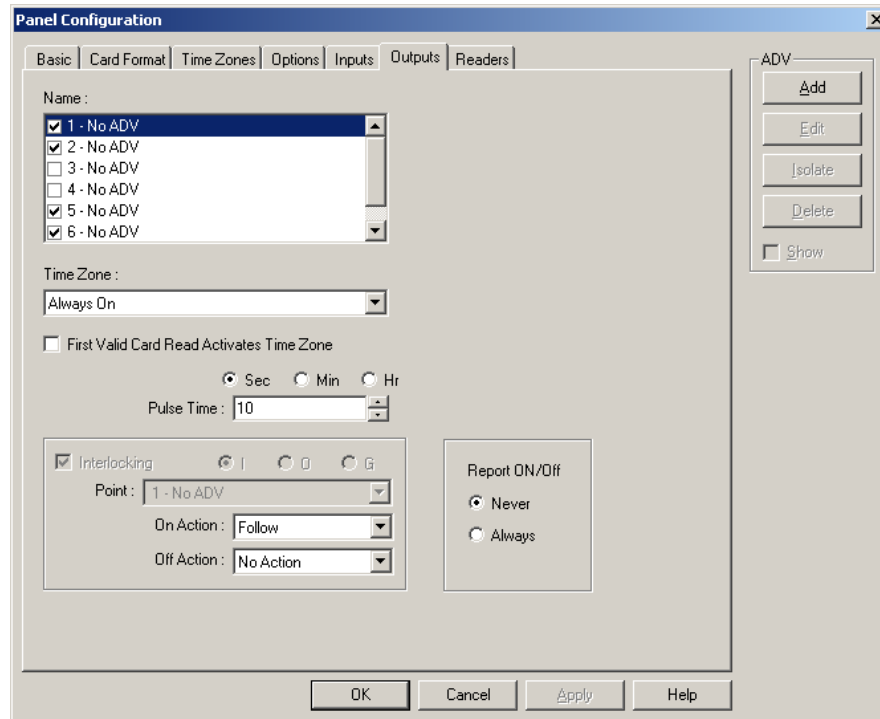
### Enabling Interlocking for Inputs

Interlocking allows you to interlock a selected input point with another input point, an output point, or a group of output points.

When an input point is interlocked to an output point, and there is a change of status in the input point, the system performs the operation specified.

- 1 Highlight an input and then select the **Interlocking** check box.
- 2 Choose either the Input (**I**), Output (**O**), or Group (**G**), radio button to indicate the point type with which to interlock.
- 3 Select the interlocking point from the Point: list. (Only input points or output points that have already been activated appear on this list. If the point you need is not listed, go to the correct dialog and activate the point, then return to this screen).
- 4 Select the Alarm Action for the interlocked point. This is the action that the second point will take when the initial input becomes active. The choices for both Normal and Active actions are No Action, Energize, De-energize, Pulse, Follow.
- 5 Select the Normal Action for the interlocked point. This is the action the second point will take when the initial point returns to normal status.

## Panel Configuration - Outputs



The image shows the 'Panel Configuration' dialog box with the 'Outputs' tab selected. The dialog has several tabs: Basic, Card Format, Time Zones, Options, Inputs, Outputs, and Readers. The 'Outputs' tab is active, showing a list of output points with checkboxes. The first six points are checked: '1 - No ADV', '2 - No ADV', '3 - No ADV', '4 - No ADV', '5 - No ADV', and '6 - No ADV'. Below the list, there is a 'Time Zone' dropdown set to 'Always On' and a checkbox for 'First Valid Card Read Activates Time Zone'. There are also radio buttons for 'Sec', 'Min', and 'Hr', with 'Sec' selected, and a 'Pulse Time' field set to '10'. An 'Interlocking' section has a checkbox checked and a 'Point' dropdown set to '1 - No ADV', with 'On Action' set to 'Follow' and 'Off Action' set to 'No Action'. A 'Report ON/Off' section has radio buttons for 'Never' and 'Always', with 'Never' selected. On the right side, there is an 'ADV' section with buttons for 'Add', 'Edit', 'Isolate', 'Delete', and a 'Show' checkbox. At the bottom, there are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

Panel output points are configured in this dialog. There are check boxes for all of the output points available on the panel that you are defining.

To make an output point active, select its check box. This will make other settings available for that output point.

WIN-PAK sets some output points as active and may assign an interlock value. All of these settings can be edited.

As each output point is selected, define an ADV for it. A quick method is to double-click the field to the right of the checked box and typing the name, then pressing the Enter key. For more advanced users:

Click Add in the ADV area (upper right) and enter the necessary information. When the ADV is completed, click OK to return to the panel dialogs and complete the panel definition. The ADV name is now assigned to the output.

---

**Note:** In the ADV definition, there are three states listed for an output point: energized, de-energized, and trouble. In the case of an output point, trouble means that WIN-PAK cannot determine if the output is energized or de-energized.

---

When an active output point is selected the following options are available:

**Time Zone:** To turn an output point on during a particular time zone, select that time zone from this list.

**First Valid Read Activates Time Zone:** This feature ensures that the Output does not turn on at the beginning of the Time Zone but on the first valid card used thereafter. At the end of the Time Zone, the output will turn off automatically (E.g. Snow day). Selecting a Time Zone for the output enables this feature.

**Pulse Time:** Enter a value here (in seconds, minutes or hours) to set the amount of time that the output point is energized when triggered. This can be any value from 0 to 63.

**Interlocking:** In the case of output points, interlocking is linking the changing state of the output to either an input, another output.

### Enabling Interlocking for Outputs

- 1 Select an output from the output point Name: list, and then select the Interlocking check box.
- 2 Select I or above the Point: option, to indicate input point or output point respectively.

- 3 Select the interlocking point from the Point: list. (Only input points or output points that have already been activated appear on this list. If the point you need is not listed, go to the correct dialog and activate the point, then return to this screen).
- 4 Select the On Action for the interlocked point. This is the action that the second point will take when the initial output goes on. The choices for both On and Off actions are No Action, Energize, De-energize, Pulse, Follow.
- 5 Select the Off Action for the interlocked point. This is the action the second point will take when the initial point goes off.

### Panel Configuration - Readers

**Panel Configuration**

Basic | Card Format | Time Zones | Options | Inputs | Outputs | **Readers**

Reader :  
☒ 1 - No ADV  
☒ 2 - No ADV

Card+PIN Time Zone: None  
 PIN Only Time Zone: None

☐ Anti-Passback  
☐ In ☐ Out ☐ Hard ☐ Soft

☒ Door ☐ Free Egress Input shunts Status Input / Shunt Device

Reader 1: Pulse - No Action → Out 1 Pulse Time 10 sec

Free Egress Input: In 1 → Follow - No Action → In 2 Shunt Time 15 sec

Status Input / Shunt Device: In 2 Shunt Time 15 sec

ADV: Add, Edit, Isolate, Delete, Show

OK Cancel Apply Help

Individual readers for the current panel are defined in the Readers dialog. WIN-PAK automatically adds readers to the panel. By default all available readers are active and are defined as doors.

If you have not selected the Anti-Passback option, the readers are set for a free egress configuration. If the Anti-Passback option is selected, the reader settings are changed to Anti-Passback settings. All of these settings can be edited.

---

**NOTE :** If Anti-passback option is selected without selecting the **Global Anti-Passback** option for a specific panel, then the local Anti-Passback option works locally for this panel.

---

**NOTE :** If both Anti-Passback and Global Anti-Passback options are selected then, Global Anti-Passback is applicable across the panels.

---

Select a reader from the list to view its settings. The Reader dialog displays the Direct Point (the point that is pulsed on a valid card read), Pulse Time, Status Input/Shunt Device and Shunt Time, and Free Egress Input.

By clicking Direct Point you can change which output is pulsed on a valid card read. You can also change the pulse time. Changes to the pulse time are reflected automatically in the appropriate input or output. Make any desired adjustments in the settings for interlock, pulse/shunt time, debounce or restore factory defaults from this screen. First Valid Card Read Activates Time Zone option can be activated or deactivated here. Changes made here are reflected in the Input or Output tabs. Use the same procedure to change the Free Egress Input and Status Input/Shunt Device if desired.

Door: When selected, treats reader as a door; when not selected treats reader as a reader (i.e., no door contacts).

Define an ADV for each reader. A quick method is to double-click the field to the right of the checked box and typing the name, then pressing the Enter key. For more advanced users:

Select the reader, and then click Add in the ADV area (upper right) and enter the necessary information. When the ADV is completed, click OK to return to the panel dialogs and complete the panel definition. The ADV name is now assigned to the reader.

**Card and PIN Time Zone:** Selects the time period when both card and PIN must be used. (The panel options tab must have Keypads and PIN checked for Card PIN operation.)

**PIN only Time Zone:** Selects the time period when PIN only is required and a card can not be used. (The panel options tab must have Keypads and PIN checked for Card PIN operation.)

**Anti-passback:** When selected, the reader can be configured as an In or Out reader and if hard or soft anti-passback rules shall be applied.

**Free Egress Input Shunts Status Input/Shunt Device:** When checked, the egress device shunts the door status. A typical application is a door strike and motion or PIR (touchless) egress device. This prevents the door from unlocking when a person may just walk by the egress sensor.

---

**Note:** In the ADV definition the following states are for card reads for all readers: Valid, Trace, Invalid Time Zones, Card Not Found, Invalid PIN, Invalid Site Code, Expired Card, Anti-passback, Host Grant-Card downloaded and Host Grant-Door unlocked.

---



Additionally, Door Normal, Forced Open, Door Ajar, Door Trouble are available the reader is defined as a door.

**Defining Door ADVs**

If you set priorities for any actions for an input ADV that is also used as part of the door ADV (such as a door status switch), an extra alarm message is generated when the door changes state.

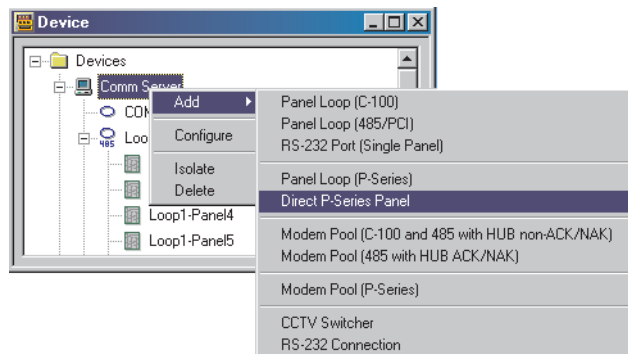
## Configuring a PRO-2200 Intelligent Controller

A PRO-2200 Intelligent Controller can be added to a PRO-2200 Loop, a PRO-2200 Modem Pool, or directly to a Communication Server.

A direct connection to the Intelligent Controller allows the Host PC to communicate directly with the PRO-2200 panel via a direct RS-232 connection from the Host PC to the Intelligent Controller. Or, network connectivity can be utilized by attaching a TCP/IP board to the Intelligent Controller (Part # PRO22EN).

## Setting Up a Direct Connection

With the Device Map open, right-click on a Communication Server and select **Direct PRO-2200 Controller** from the menu.



The PRO-2200 Configuration - Basic window is displayed (next illustration).

### PRO-2200 Configuration – Basic

Use the PRO-2200 Configuration Basic window to name and describe the panel, indicate the controller address on the panel, and set the retry and timeout options.

The screenshot shows the 'P-Series Configuration' window with the 'Basic' tab selected. The window has a title bar with a close button. Below the title bar is a tabbed interface with tabs for 'Basic', 'Connection Settings', 'System', 'Card Formats', 'Time Zones', 'SIO Boards', and 'Triggers and Procedures'. The 'Basic' tab contains the following fields and controls:

- Name :** A text input field containing 'P1'.
- Description :** An empty text input field.
- IC Address :** A numeric input field with a spinner, showing '1'.
- Host Retry Count :** A numeric input field with a spinner, showing '3'.
- Time to IC Offline :** A numeric input field with a spinner, showing '15', followed by the text 'Second(s)'.

On the right side of the window, there is a vertical panel labeled 'ADV' containing the following buttons: 'Add', 'Edit', 'Isolate', 'Delete', and a checkbox labeled 'Show'. At the bottom of the window, there are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

Name and describe the control panel as appropriate. The names and descriptions that you use are not operationally important, as long as you are able to identify them when setting up access levels later.

- 1 Enter a unique **Name** for the panel, using up to 30 alphanumeric characters. Typically, the panel location is used for the name [Lobby, for example]. This is a required field.
- 2 A Description of the panel can be added. The description is optional, and can be up to 60 alphanumeric characters in length.

- 3 Enter the **Controller Address** [also known as the Panel Address]. This corresponds to the DIP Switch setting on the control panel and falls within the range of one to eight. See the PRO-2200 Intelligent Controller Installation Manual for details.
- 4 The **Host Retry Count** is the number of times the controller will try to make contact with the panel before sending an alarm indicating it is offline.

For example, if the Host Retry Count is set to 3 and the DLL receives a bad packet [or does not get an answer from the Intelligent Controller] then the DLL will send the packet three more times.

Host Retry Counts can be set from 2 to 10 [with 3 as the default]. A range of 2 to 4 is recommended for most applications. Retry counts above 4 would indicate extreme circumstances.

- 5 The **Time to Controller Offline** is monitored and kept within the Intelligent Controller. If the Intelligent Controller receives neither a poll nor a message [for example, if it loses communication with the DLL], it waits the programmed time then declares that communications with the DLL have been lost.

The Time to Controller Offline can be set from 10 to 65 seconds [with 15 seconds as the default]. A range of 10 to 30 seconds is recommended for most applications.

### Setup the Panel ADV

- 6 Set up the default ADV for panel by clicking the **Add** button in the ADV area of the window (upper right corner).

The panel name defaults as the ADV **Name**. Select each **Action**, set its **Priority**, and make any other changes necessary on the ADV window.

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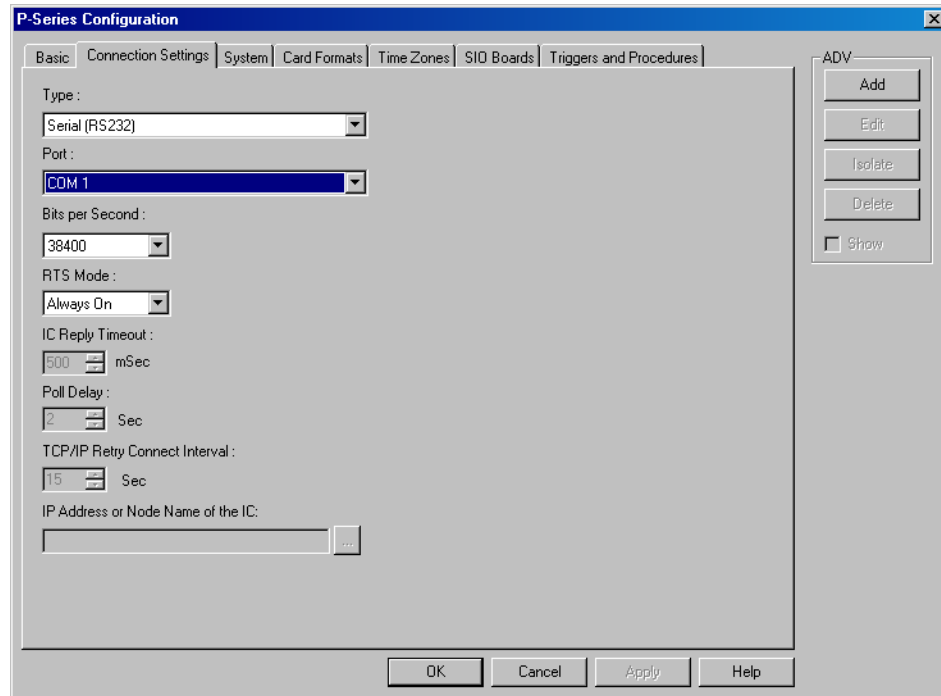
**NOTE:** Refer to the "Abstract Devices" section of this chapter for details on setting up ADVs.

---

- 7 When you complete the ADV setup for the panel, click the **OK** button to return to the Basic window.
- 8 Click the **Next** button to continue.

### **PRO-2200 Configuration – Connection Settings**

After entering Basic information and clicking the Next button, the Connection Settings window is displayed. The Connection Settings window requires you to further specify your panel settings based on the type of connection being used. Essentially, at this point, the WIN-PAK System is looking for either an RS-232 or a TCP/IP type connection.



Select the connection **Type** being used [either Serial RS232 or TCP/IP].

### Serial RS232 Options

These options are only available when Serial (RS232) is selected as the Connection Type.

- 1 Specify the communication **Port** to which the Intelligent Controller is connected (on the host PC).
- 2 The **Bits per Second** field indicates the communication rate for the panel. This field defaults to 38400, but can be set at 9600 or 19200 as well, dependent upon the baud set on the Intelligent Controller.

- 3 The **RTS Mode** (Request to Send) allows the device on the other end to know the Intelligent Controller is ready to send information. The RTS Mode defaults to "Always On."

The "Toggle" RTS Mode applies when there is an RS-485 to RS-232 converter that requires a handshake. The Toggle option is never used for a direct connection.

- 4 Click **Next** to advance to the System window.

### TCP/IP Options

The following options are only available if a network card is installed on the PC, and the PRO-2200 Intelligent Controller is being configured for a TCP/IP connection.

- 5 The **Controller Reply Timeout** is the duration the Host PC (DLL) will wait for an acknowledgment after it has sent an outgoing packet.

If acknowledgment is not received within the specified time, the Host PC (DLL) will resend the packet. The host will retry according to the Host Retry Count set in the panel. The timeout defaults to 500 mSec but can be set from 200 to 1500 mSec. 400 to 600 mSec is a reasonable setting for network connections. The setting should be higher for a WAN.

- 6 The **Poll Delay** [which only affects incoming communication] allows the system to delay polling to avoid loading down the network if there is no activity. The default for the Poll Delay is 2 seconds, but can range from zero to 5.

Poll Delay is used only if the communications channel type is set to TCP/IP (meaning that this value is ignored for Serial Port communication channel types, and DialUps).

There is no delay if there is something to be sent from the software, or if the panel has more to report. For example:

Outgoing commands posted by the application are not delayed.

No delay is applied if the panel signals, via a reply, that it has unreported transactions. Reply headers have a "poll-me" flag.

- 7 The **TCP/IP Retry Connect Interval** is the amount of time the system waits to reopen a socket after a connection to the network is lost and the socket is closed. The system waits this amount of time then tries to determine if there is a device at the other end of the socket. If a device is found, a new socket is opened. The default for this interval is 15 seconds, but it can be set from 5 to 30 seconds.
- 8 When a TCP/IP connection is being established, the IP address configured for the LAN card must be entered in the **Controller IP Address or Node Name** field. Use the browse button to the right of the field to locate the IP address or node name.
- 9 Click **Next** to advance to the System window [or the Remote window if the panel is being attached to a modem pool].



### PRO-2200 Configuration – Remote (for Panels on Modem Pools)

When configuring a PRO-2200 panel on a Modem Pool, the Remote window is displayed between the Basic and System windows. The Remote window requires you to specify the panel phone number, host modem, and call-in options. Additionally, a password can be added to the connection if desired.

P-Series Configuration - Remote

Panel Phone Number : 2333

Host Modem : Modem 1

New Password : XXXX

Confirm Password : XXXX

Call In Option : Buffer Full

Delay Before Connect : 0 Sec

Number of Redial Attempts : 3

Redial Delay : 60 Sec

Wait Time for Disconnect : 30 Sec

ADV

Add

Edit

Isolate

Delete

☐ Show

< Back Next > Cancel Help

- 1 In the **Panel Phone Number** field, enter the phone number for the remote site. Enter the number just as it would be dialed, including any required prefix or area code. This is the phone number the system uses to connect to the panel.
- 2 Make a **Host Modem** selection. The options in this field are those previously entered in the Modem Pool when the interface was set up.

- 3 WIN-PAK offers the option of requiring a password for remote dialups. The password can be up to 16 alphanumeric characters in length. Enter the password in the **New Password** field. The system will prompt you to **Confirm Password**. Refer to the PRO-2200 Intelligent Controller Installation Manual for details on setting the password switch.
- 4 **Call In Options** are events that determine when (or if) the remote panel should call in to the communication server.
- 5 Enter a value in the **Delay Before Connect** field if a pause is required between the dialing prefix and the phone number.
- 6 The default **Number of Redial Attempts** is 3 but can be up to 50.
- 7 The amount of time allowed between dial attempts should be entered in the **Redial Delay** field. This field defaults to 60 seconds, but can be anywhere in the range 5 to 120 seconds.
- 8 The default **Wait Time for Disconnect** is 30 seconds but can be 1– 30 seconds. This is the amount of time allowed before disconnecting.
- 9 Click **Next** to advance to the System window.

### PRO-2200 Configuration – System

Several broad operating parameters are set using the System window (next illustration), including those dealing with the PRO-2200 Intelligent Controller board capabilities, as well as the Time Zone in which it operates.

**P-Series Configuration - System**

Time Zone :  
(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London

Daylight Savings :  
None

No. of Card Holders :  
5000  
☐ Enable card user levels for trigger control

No. of Transactions to hold when offline:  
10000

No. of Transactions to accumulate before dialup :  
7000

Host Grant :  
Open Door and Update Panel

ADV  
Add  
Edit  
Isolate  
Delete  
☐ Show

< Back   Next >   Cancel   Help

- 1 Use the **Time Zone** drop-down list to indicate where the panel is located. The default for this field depends on the time set in the local system.
- 2 **Daylight Savings** defaults to None, unless Daylight Savings Groups have been set up using the WIN-PAK Time Management feature [found on the Configuration menu]. Make sure a group is created and selected here when appropriate.
- 3 The **Number of Card Holders** field indicates the maximum number of card holders possible based on the memory available in the board. This field defaults to 5000.
- 4 The **Number of Transactions** to hold when offline defaults to 10,000 [but can be decreased to 1000 or increased to 100,000].

This number can be decreased or increased to provide more or less memory for cards if necessary.

1 transaction = 16 bytes (so 100,000 transactions takes up 1.6 MB of memory).

1 card record = between 20 to 80 bytes. This depends upon the use of precision access levels vs. multiple access levels, and the number of card readers per Intelligent Controller.

Adding an extended memory board to the Intelligent Controller will provide more memory to work with.

- 5 Host Grant options provide fault tolerance should a card not be found in the panel database. See "Host Grant Options and Descriptions" (below) for more information.

### Host Grant Options and Descriptions

#### Open Door

The Open Door option tells the system to open the door only when the card is found in the database, and when that card has access to the particular reader (or reader on the panel) with the Host Grant feature enabled. The card does not have to be present in the panel in order to grant a cardholder access when the Host Grant "Open Door" feature is enabled. For example: Card 12345 is swiped at a door reader. WIN-PAK immediately checks the card database to see if the card should have access at that door. If so, WIN-PAK pulses the door lock output so the cardholder is granted access. The card read appears in Alarm View as Host Grant, Door Unlocked. Card 12345 remains in the WIN-PAK card database, however it is not downloaded to the panel database until that panel has been initialized with cards. If the panel has not been initialized with cards and the same card swipe comes in again, the door again opens and the card reports as Host Grant, Door Unlocked. If the panel has been initialized with cards and the same card swipe comes in, the door opens and the card reports as a Valid Card.

---

### Open Door and Update Panel

Not all cards have to be present in the panel in order to grant a cardholder access when the Host Grant "Open Door and Update Panel" feature is enabled. For example: Card 12345 is swiped at a door reader. WIN-PAK immediately checks the card database to see if the card should have access at that door. If so, WIN-PAK pulses the door lock output so the cardholder is granted access and also downloads the card to that particular panel database. The card read appears in Alarm View as Host Grant, Card downloaded. After the card has been downloaded, when it is again swiped at that panel, the card read now reports as a Valid Card.

---

### Disable

Disable deactivates the Host Grant feature altogether. All cards have to be present in the panel in order for access to be granted.

- 6 Click the **Next** button to advance to the Card Formats window.

---

NOTE: For remote configuration, the System tab will include an additional field "No of Transactions to accumulate before dialup."

---

## PRO-2200 Configuration – Card Formats

The Card Formats window is used to program the panel to understand the card formats that will be used. Up to eight different card formats can be used for each PRO-2200 Intelligent Controller.

WIN-PAK and the PRO-2200 allow you to set up to eight different card Formats. The fields on the Card Formats window are active (or grayed out) depending on the card option selected (Not Used, Default, Custom).

For example, if you select the Custom option, and Wiegand as the format type, the field in the lower left area of the window require configuration, as shown in the next illustration. Each of the options is explained in this section.

- 1 Use the **Format #** drop-down list to indicate the format number being configured. There can be up to eight card formats per panel.
- 2 In the **Option** area, indicate whether the selected format is Not Used, a predefined Default format, or a Custom format.

Naturally, any format (1–8) not being used, defaults to the **Not Used** option. When a format is designated as Not Used, none of the remaining fields on the window are available.

The **Default** option allows you to select from among three predefined card formats: 26 Bit Wiegand, 32 Bit Northern, or 34 Bit Northern.

The **Custom** option allows you to indicate a format type and configure the card format specs.

explained in this section.

- 3 **Format Types** include Wiegand [five-digit cards] and ABA [12-digit cards]. Format Types are only available if Custom is selected as the option (above).
- 4 **Site Codes** are additional codes included in the cards and can be used for extra security whenever needed. When a site code is entered, the panel has to validate both the card number and the site code. If no site code is entered on the Card Formats window, the site code on a card is ignored and all cards with the correct card number will generate a valid read.

Since only a limited number of formats and site codes (eight) can be stored in each panel, it is recommended that additional/replacement cards be ordered in larger batches. If this cannot be done, you may order cards manufactured with a specific site code.

- 5 The **Card ID Offset** number (defaults to zero) allows you to use cards with different formats, but the same number (duplicate card numbers) within a system. This is done by adding the specified offset number to the designated format's card number. Card ID Offsets can be programmed in each of the eight formats possible on the PRO-2200 Intelligent Controller.

For example: An organization has two sets of cards, both numbered from 1 to 500, for a total of 1000 cards.

One set of cards is 26-bit Wiegand. The other is 12-digit ABA.

Format 1 would be designated as 26-bit Wiegand. The offset would be left as zero. Cards 1 to 500 are then added to the card database. Any 26-bit formatted cards numbered 1 to 500

that are swiped will now work dependent upon each card's access level.

To add the batch of 12-digit cards numbered 1 to 500, a new format is created, set up as an ABA format type. The card offset can then be set to 1000, and this offset number will be added to all the 12-digit cards.

Instead of programming card numbers 1 to 500, which already exists in the database, the user will need to program in the 12-digit cards as 1001 to 1500. When any of the 12-digit cards are swiped they will come in with the offset number added to the original card number, and grant access where appropriate.

- 6 Three **Default Formats** have been developed and predefined in the WIN-PAK system: 26 Bit Wiegand, 32 Bit Northern, or 34 Bit Northern.
- 7 Click the **Next** button to advance to the Time Zones window.

### Formatting Wiegand Cards

Choose the Wiegand Format Type radio button if your system connects to a Wiegand, or Wiegand-compatible reader. Most Proximity cards [and other card types as well] and Biometrics readers fall into the Wiegand category.

When Wiegand is selected as the Format Type, the text fields used to program custom Wiegand cards become active, as shown here:



The screenshot shows a configuration window for a Wiegand card. At the top, there is a 'Format Type' section with two radio buttons: 'Wiegand' (selected) and 'ABA'. Below this is a '# of bits on card' field containing the value '5'. To the right of this field are two columns of input fields labeled 'Start bit :' and 'No. of :'. The rows are as follows:

	Start bit :	No. of :
Bits to sum for even parity :	1	3
Bits to sum for odd parity :	1	0
Site code bits :	1	11
Cardholder ID bits :	1	0
Issue code bits :	1	0

- 1 Indicate the number of bits on the card [**# of bits on card** field].
- 2 Enter the **Bits to sum for even parity** (indicating an even number of ones in a block of binary code), and the **Bits to sum for odd parity**. Parity helps in determining if the numbers coming into the reader are correctly formatted. For example: with a 26-bit Wiegand, the even parity start bit is 1, and the number of bits is 13. The start bit for odd parity is 14, and the number of bits is 13.
- 3 **Site code bits** typically start at 2 and contain 8 bits.
- 4 In a standard 26-bit Wiegand-formatted card, the **Cardholder ID bits** begin at 10 and contain 25 bits.
- 5 **Issue code bits** are not used with standard a 26-bit Wiegand-formatted cards, however some card manufacturers, allow a two or three bit code in addition to the site code.

### Formatting ABA (American Banking Association) Cards

Choose the ABA Format Type radio button if your system connects to a Magnetic stripe reader. ABA cards typically include magnetic stripes or barcodes.

ABA cards are formatted using digits. Each digit is actually a group of five bits. Four of the bits are used for the number, and the fifth is a parity bit for that group of bits.

In addition to the bit groups making up the actual card number, ABA formats contain a preamble made up of zeros, a hex B used as a start sentinel, and hex Ds used as field separators.

When ABA is selected as the Format Type, the text fields used to program custom ABA cards become active, as shown here:

The screenshot shows a configuration window for ABA card formatting. It contains several input fields for defining card parameters:

- Minimum # of digits on card :** Input field with value 0.
- Maximum # of digits on card:** Input field with value 12.
- Start digit :** Input field with value 1.
- No. of :** Input field with value 5.
- Site code digits :** Input field with value 1.
- Cardholder ID digits:** Input field with value 1.
- Issue code digits:** Input field with value 1.

- 1 Because the amount of data contained on an ABA-formatted card can vary, it is necessary to indicate the **Minimum** and **Maximum number of digits on card**.
- 2 Enter the start point for the **Site code digits**, as well as the number of digits making up the site code.

- 3 Enter the start point for the **Cardholder ID digits**, as well as the number of digits making up the cardholder ID.
- 4 If desired, enter the start point for the **Issue code digits**, as well as the number of digits making up the issue code.

### Panel Configuration – Time Zones

Although a number of Time Zones can be established for your WIN-PAK System, chances are not all of them are necessary for configuring your Intelligent Controller panel, along with its associated Input, Output, and Reader boards. Use the Panel Configuration Time Zones window to indicate the time zones and holiday groups valid with the PRO-2200 Intelligent Controller being installed.

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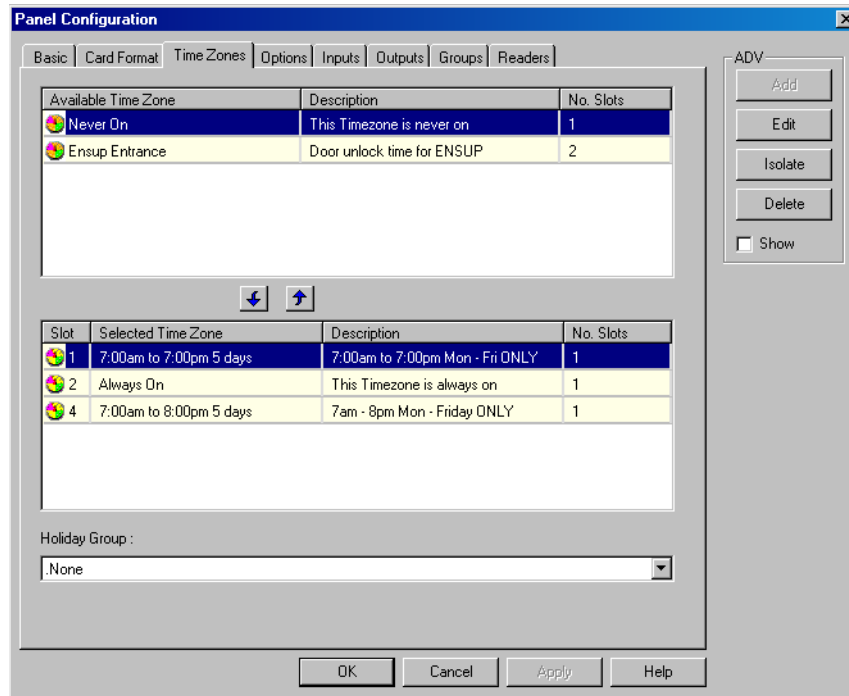
**NOTE:** Time Zones are set up using the Time Management option on the Configuration menu. Until a Time Zone is established, it cannot be added to the panel.

---

Time Zones which apply to a given panel must be added to the panel's definition.

Up to 255 time zones can be downloaded to the panel.

With the Time Zones window displayed, you can select the Time Zones and Holiday groups you want to use with the PRO-2200 Intelligent Controller panel being installed.



The Available Time Zone list displays the name and Description of time zones that have been defined for your WIN-PAK System, but which are not currently selected for this panel. The **Number of Slots** column shows how many slots on the panel this time zone requires.

Likewise, the Selected Time Zone list shows the time zone name and Description, the Number of Slots the time zone requires, and the Slot that the time zone occupies on the panel. The Intelligent Controller board requires that the two default time zones, Always On and Never On always be present.

---

**NOTE:** There are 255 slots available per panel.

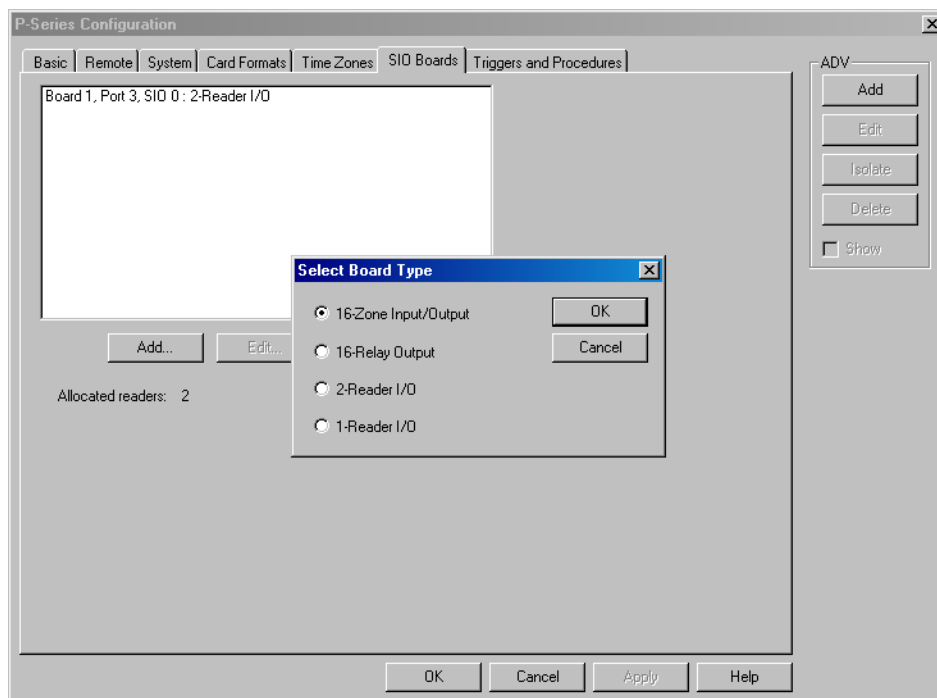
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- 1 Select a Time Zone from the **Available Time Zone** list and click the down-pointing arrow to move it to the **Selected Time Zone** list.

Double-clicking items in either of these list boxes will move them to the other list [with the exception of the Always/Never On options].

- 2 If you are using holiday overrides, select the **Holiday Group** (or groups) that applies to this panel.
- 3 Click **Next** to advance to the SIO window.

### PRO-2200 Configuration – SIO Boards

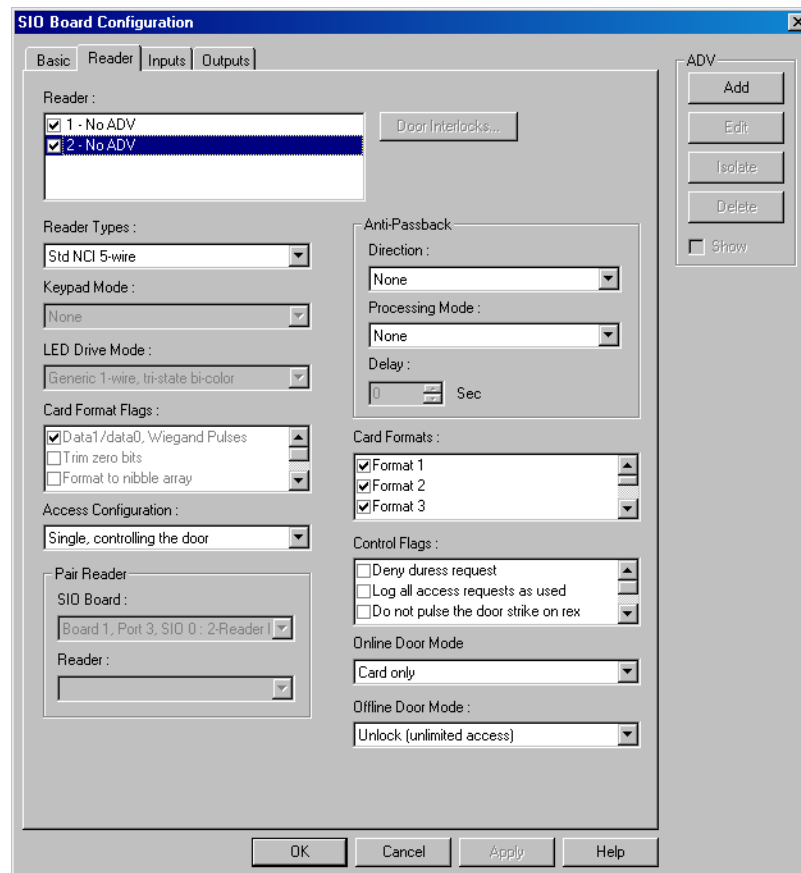


A number of PRO-2200 Series SIO Boards (System Input/Output) can be added to your Intelligent Controller panel, depending on the needs of your organization, including:

- 16-Zone Input/Output
- 16-Relay Output
- 2-Reader I/O
- 1-Reader I/O

Each of these modules is configured via the WIN-PAK PRO-2200 Configuration SIO Boards window. During setup of a new PRO-2200 Direct Connection, the configuration wizard automatically presents the tabbed SIO Boards windows to use.

The module selected determines the subsequent information you must supply. For example, the Reader tab (illustration below) is only displayed when a Reader board is selected for configuration:



- 1 Use the **Basic** tab of the SIO Board Configuration window to indicate the controller address on the panel. This tab is also used to set the port from which the board communications to the Intelligent Controller, and set the number of errors before going offline.

- 2 Individual readers for the panel being configured are defined on the Reader tab of the SIO Board Configuration window.
- 3 Inputs are status points within the system...door contact inputs, window status inputs, motion sensors, etc. Panel input points are configured using the Inputs tab which lists all the input points available on the current panel.
- 4 Output points are control points within the system, such as door locks, parking gates, etc.
- 5 An ADV must be created for each SIO Board, and for each input monitor point, output point, or reader supported by the board.

Refer to "Setting Up Reader Boards" (next section) for specific procedures to be followed when configuring a PRO-2200 Intelligent Controller SIO Board.

The newly defined procedure is shown in the Procedures list. By expanding the Procedure Actions tree, you can see a detailed view of each action defined for this procedure.

### Setting Up Reader Boards

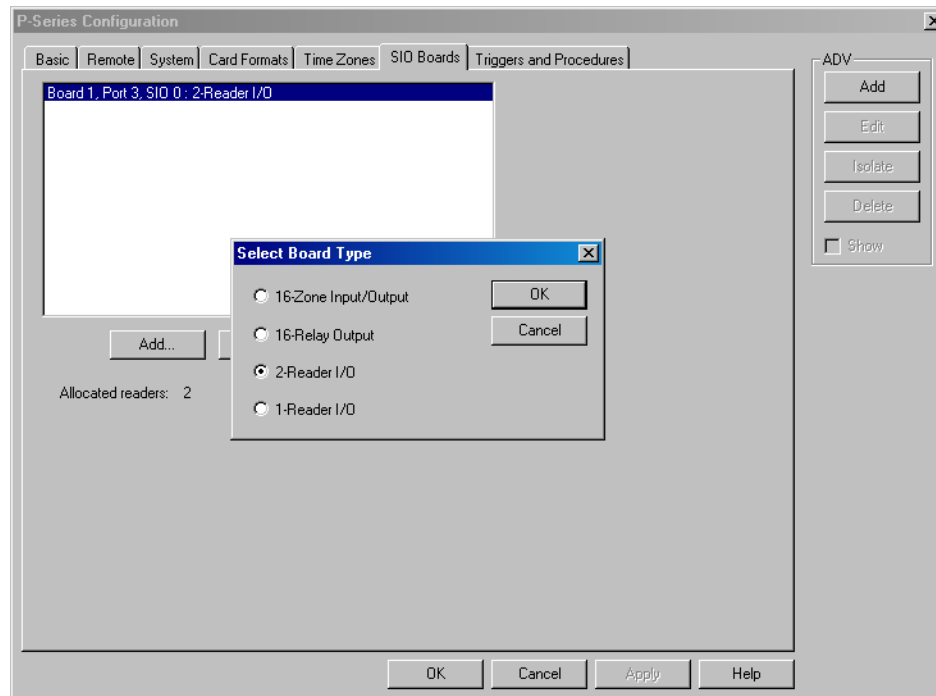
The PRO-2200 Series Dual and Single Reader Modules interface with the Intelligent Controller, to provide I/O support for card readers. Reader boards are connected to the PRO-2200 Intelligent Controller through a supervised RS-485 bus at 38,400 bps.

- The Dual Reader Module provides two Wiegand-style reader ports, up to eight supervised inputs and up to six relay outputs.
- The Single Reader Module provides one Wiegand-style reader port, two supervised inputs and two relay outputs.



The Reader Modules are set up using the PRO-2200 Configuration – SIO Boards window.

When configuring a new direct connection, the SIO Boards window is empty when first displayed. Click the **Add** button to select a board type.



**NOTE:** If you select the 2-Reader I/O option, then two readers are available for configuration on this board. Likewise, if you select the 1-Reader I/O board type, only one reader is included on the board.

Individual readers for the current panel are defined on the Reader tab of the SIO Board Configuration window. The number of readers available depends on the type of panel that is being defined.

Select either the 2-Reader I/O or 1-Reader I/O option and click the **OK** button.

A tabbed window is presented for use in setting up the reader.

### SIO Board Configuration – Basic Information

- 1 On the Basic tab of the SIO Board Configuration window, indicate the board's hardware **Address**. The default value for this field is "1".

**NOTE:** The address corresponds to the DIP Switch setting on the panel (1–8). Each board on a panel must have a unique address. Consult the PRO-2200 Input Module Installation Manual for further information.

The screenshot shows the 'SIO Board Configuration' window with the 'Basic' tab selected. The window has a title bar with 'SIO Board Configuration' and a close button. Below the title bar are four tabs: 'Basic', 'Reader', 'Inputs', and 'Outputs'. The 'Basic' tab is active. The main area contains the following fields and controls:

- Address :** A text box containing the value '1'.
- Port :** A dropdown menu showing '3'.
- No of errors before going off-line :** A text box containing the value '3'.
- ☒ **Enable Communication with SIO**
- ☒ **Reverse I/O poll sequence**

On the right side of the window, there is a vertical panel labeled 'ADV' containing the following buttons: 'Add', 'Edit', 'Isolate', 'Delete', and a checkbox labeled 'Show'. At the bottom of the window are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

- 2 The **Port** field is used to indicate the port on the Intelligent Controller where this reader board is located. The default Port is 6, but it can be set to 3, 4, or 5 as well.
- 3 Use the **Number of Errors before Going Off-Line** field to indicate the number of tries the panel should make to "talk" to the communication server [without receiving an understandable answer] before tripping the offline trigger. This field defaults to 3.
- 4 Select the **Enable Communication with SIO** check box only when the board is installed (not before). The default for this box is selected.

#### Create an ADV for the Reader Module

- 5 Click the **Add** ADV button to call the Abstract Device Record – SIO Board window.
- 6 The designation "SIO Board #" is appended to the Intelligent Controller Name. If more than one SIO Board is configured for the Intelligent Controller, the board numbers increment automatically, to make each name unique. This name can be changed.
- 7 Select each **Action** for the Reader Module, set its **Priority**, and make any other changes necessary on the ADV window.

---

**NOTE:** Refer to the "Abstract Devices" section of this chapter for details on setting up ADVs.

---

- 8 Click the **OK** button to save the ADV and return to the Basic tab.

### SIO Board Configuration – Reader Tab

Individual readers for the current panel are defined on the Reader tab of the SIO Board Configuration window. The number of readers available depends on the type of panel that is being defined.

Use the Reader tab of the SIO Board Configuration window to describe each reader that you will be using. Check to make sure that the reader is interlocked to the correct inputs and outputs.

The screenshot shows the 'SIO Board Configuration' window with the 'Reader' tab selected. The window has a title bar and a menu bar with 'Basic', 'Reader', 'Inputs', and 'Outputs'. The 'Reader' tab contains several sections:

- Reader :** A list box showing two entries: '1 - No ADV' and '2 - No ADV'. A 'Door Interlocks...' button is to the right.
- Reader Types :** A dropdown menu set to 'Std NCI 5-wire'.
- Keypad Mode :** A dropdown menu set to 'None'.
- LED Drive Mode :** A dropdown menu set to 'Generic 1-wire, tri-state bi-color'.
- Card Format Flags :** A list box with 'Data1/data0, Wiegand Pulses' selected, and 'Trim zero bits' and 'Format to nibble array' as options.
- Access Configuration :** A dropdown menu set to 'Single, controlling the door'.
- Pair Reader :** A section with 'SIO Board : Board 1, Port 3, SIO 0 : 2-Reader 1' and a 'Reader :' dropdown menu.
- Anti-Passback :** A section with 'Direction : None', 'Processing Mode : None', and 'Delay : 0 Sec'.
- Card Formats :** A list box with 'Format 1', 'Format 2', and 'Format 3' all selected.
- Control Flags :** A list box with 'Deny duress request', 'Log all access requests as used', and 'Do not pulse the door strike on rex' as options.
- Online Door Mode :** A dropdown menu set to 'Card only'.
- Offline Door Mode :** A dropdown menu set to 'Unlock (unlimited access)'.

On the right side of the window, there is an 'ADV' section with buttons for 'Add', 'Edit', 'Isolate', 'Delete', and a 'Show' checkbox. At the bottom of the window are buttons for 'OK', 'Cancel', 'Apply', and 'Help'.

- 1 The **Reader** list displays an entry for all readers available, and shows them as active [the check box is selected], with No ADV. The number of readers available depends on the type of panel being defined [either single or dual reader]. Remember, any reader you intend to use will require an ADV.
- 2 The **Reader Types** drop-down list allows you to indicate the type of reader you have [and defaults to Custom]. If Std NCI 5-Wire, Std Motorola, Std Mercury, or Std HID is selected, the Keypad Mode, LED Drive Mode, and Card Format Flags default to predefined settings.
- 3 When Custom is selected as the reader type, a **Keypad Mode** may be specified. This field defaults to None [which must be selected if a keypad is not used], but includes the following selections:
  - MR-20 8-bit with (or without) tamper support, which represents a Mercury Magstripe reader with keypad attached
  - Hughes ID 4-bit
  - Motorola/Indala, (sends an 8-bit key code)
- 4 Indicate the **LED Drive Mode** for the reader. The default is "Generic 1-wire, tri-state bi-color," with the alternate choice of "Separate red and green, no buzzer" but the selection is dependent upon the physical reader itself.
- 5 The **Card Format Flags** list presents the following options for defining how the reader should interpret the access card to be used. More than one option can be selected. The following list shows Card Format Flags and their definitions.

## Card Format Flags & Definitions

### Data1/data0, Wiegand Pulses

---

This flag indicates how Wiegand lines will be read (if a Wiegand-style card format is used).

### Trim zero bits

---

Used to trim off leading zeros if desired. You may want to use when reading ABA magnetic formats.

### Format to nibble array

---

Takes a mag card and formats it to an array of BCD and Hex (start and end characters). You may want to use this card format flag when reading ABA mag format cards.

### Allow bi-dir mag decode

---

Allows the data to be interpreted bi-directionally. You may want to set this flag when reading ABA mag format cards (dependent on the reader manufacturer).

### Allow NCI mag decode

---

Allows NCI cards to be read by certain magnetic stripe readers. The reader makes an interpretation of the data and sends out numbers in a Wiegand format. Do not enable this flag when using NR-1.

If anything other than Custom is selected as the Reader Type, the Card Format Flags are grayed out.

- 6 The **Access Configuration** option allows you to set up a two-card read for access. Following is a list of Access Configuration definitions.

## Access Configurations and Descriptions

### Single, controlling the door

---

Single reader/one door (default).

### Paired, primary reader

---

Designates the defined reader as the primary reader. Both primary and secondary readers control the primary reader door output.

### Paired, secondary reader

---

Whatever one reader does, the other reader does also. Selecting this option deactivates the Door Interlocks button.

- 7 The Pair Reader area of the window is only active if one of the Paired options is selected as the Access Configuration. Pair Reader options allow you to establish an interlock of sorts, by selecting an SIO Board and a Reader.
- 8 Anti-Passback discourages users from entering with others, without using their own cards. Cards must be used at a designated In reader, then at a designated Out reader before the card can be read *in* again. Consult your local fire regulations before using Anti-Passback.
- 9 Direction allows you to specify if the reader is in or out. [Defaults to None.]
- 10 The Processing Mode indicates whether the reader, the card, or the panel will remember the sequencing, and whether or not access is granted if a violation occurs. The default is None.

Following is a list of Processing Modes and results.

### Processing Mode and Results

#### None

---

**No Anti-Passback in effect.**

#### Soft

---

Upon an Anti-Passback violation, the card is still granted access and reports [in the Alarm View] either: Anti-Passback violation, door used -or- Anti-Passback violation, door not used. Example: A card is swiped for the first time at an Anti-Passback reader. The card is valid and is granted access [Alarm View shows "Valid card, door used"0]. If the cardholder decides not to open the door and go through, the second time their card is swiped at the same Anti-Passback reader, the card is again granted access, but this time Alarm View shows "Anti-Passback violation, door used."

**Hard**

Upon an Anti-Passback violation, the card is not granted access and Alarm View reports, "Anti-Passback violation, door not used." Example: A card is swiped for the first time at an Anti-Passback reader. The card is valid and is granted access (Alarm View shows "Valid card, door used"). If the cardholder decides not to open the door and go through, the second time their card is swiped at the same Anti-Passback reader, the card is denied access, and Alarm View shows "Anti-Passback violation, door not used."

**Reader Based Time APB (Anti-Passback)**

If this option is enabled, a card cannot be swiped twice at the same Anti-Passback reader without waiting the amount of time selected for the delay. Example: Reader 1 is designated as an In reader. The processing mode is set to Reader Based Timed APB, and the delay is set to 30 seconds. A card is swiped for the first time at Reader 1. The card is valid and is granted access. If the cardholder swipes the same card a second time at Reader 1, before the 30 second delay has expired, the card will not grant access and will be reported as an "Anti-Passback violation, door not used," in Alarm View.

**Card Based Time APB**

If this option is enabled, a card cannot be swiped twice anywhere in the system within the amount of time selected for the delay. Example: Reader 1 is designated as the In reader. The processing mode is set to Card Based Timed APB, and the delay is set to 30 seconds. A card is swiped at Reader 1. If the card is swiped at any reader on the system before the 30-second delay is reached, Alarm View reports an Anti-Passback violation.

**Panel Based Time APB**

If this option is enabled, a card cannot be swiped twice at the same panel within the amount of time selected for the delay. Example: Reader 1 is designated as the In reader. The processing mode is set to Panel Based Timed APB, and the delay is set to 30 seconds. A card is swiped at Reader 1. If the card is swiped at any reader on this panel before the 30-second delay is reached, Alarm View reports an Anti-Passback violation.



- 11 The Delay field is only active if one of the Timed options is selected as the Processing Mode. The default for Reader, Card, or Panel Based Timed APB is zero seconds. This time can be set from zero to 32,767 seconds.
- 12 The Card Formats available are dependent upon which cards were configured for the Intelligent Controller [on the Card Format tabs]. Up to eight card formats can be selected for each reader.
- 13 Control Flags are special options that can be set for the reader, and include:

### **Control Flags and Results**

#### **Set to deny a duress request**

---

Works in a card and PIN mode only. Unless this option is selected, duress is always enabled. Notify the monitoring station you are under duress. Always one number higher than the PIN code.

#### **Log all access requests as used**

---

If selected, logs all card reads as "door used," without actually determining if the door is used. If unchecked, logs all card reads, but waits until the door times out, or the door is opened, to report. Deselect this option when using anti-passback.

#### **Do not pulse the door strike on rex**

---

Door strike does not pulse upon free egress, however door contact still gets shunted.

#### **Filter CosDoor transaction**

---

Throughout the door cycle the IC generates about 4 to 5 messages (door strike relay on, door strike relay off, door opening, etc.). If more message are needed, this feature can be disabled.

#### **Require two-card control at this reader**

---

Needs 2 valid cards within a 20 second window to grant access. Used in vaults, high security areas.

- 14 The Online Door Mode indicates the mode in which the Intelligent Controller is operating. Select the appropriate option. For lower security applications, Card or PIN are good choices.

Following is a list of Door Modes descriptions.

#### Door Modes and Descriptions

Disable the Reader	Locked down.
Unlock (unlimited access)	No card needed (unlimited access).
Locked (no access, Egress Active)	Locked (no access). No card needed to exit
Facility code only	Site code only is read from the card for access.
Card only (default)	Reader requires only a card for access.
PIN only	Reader requires only a PIN for access.
Card and PIN	Reader requires both a card and PIN for access.
Card or PIN	Reader requires either a card or PIN for access.

- 15 The Offline Door Mode indicates the mode in which the SIO Reader board will run if the system goes offline. The options [Disable the reader, Unlock, Locked, and Facility code only] have the same definition as shown above [in the Online Door Mode table].

#### Create an ADV for the Reader Board

- 16 Click the **Add** ADV button to call the Abstract Device Record – Entrance window.

---

**NOTE:** Within the Abstract Device Records, readers are considered "Entrances". Input points are considered "Monitor Points" and output points are considered "Control Points."

---

- 17 The designation "Read #" is appended to the Intelligent Controller Name, to make each name unique. If more than one Reader is configured for the panel, the reader numbers increment automatically. The name used here is displayed on the main Reader tab when you complete the ADV setup.
- 18 Select each **Action**, set its **Priority**, and make any other changes necessary on the ADV window.

Abstract Device Record - Entrance

ADV

Name : P1-Reader1

Description :

Default Floor Plan : None

Action Group

Name : Door

Add Rename Delete

Actions

Action : Anti-Passback Violation

Priority : 30

Send Email : ☐

Time Zone : Always

Write to History : ☒ Print on alarm printer : ☐

Command File on

Receive : None

Acknowledge : None

Clear : None

Sound File :

Digital Video Camera : None

Alarm Detail View Message :

Card was denied entry because it has already been used going in/out with out properly going out/in.

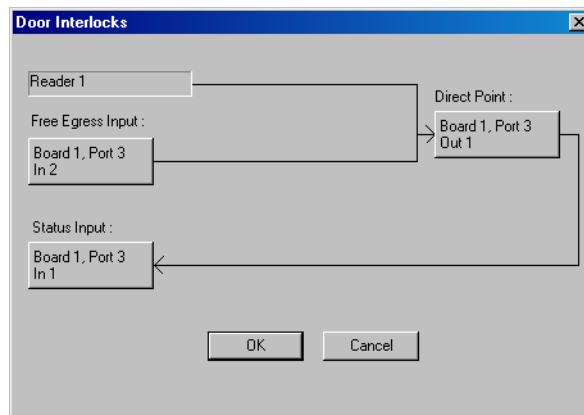
OK Cancel

**NOTE:** Refer to the "Abstract Devices" section of this chapter for details on setting up ADVs.

- 19 Click the **OK** button to save the ADV and return to the Reader tab.

### Door Interlocks

Door Interlocks show input and output relationships available for the reader. When the Door Interlocks button on the Reader tab is clicked, the Door Interlocks window is displayed.



Two types of locking devices can be configured with WIN-PAK:

- Magnetic Locks - which require power for the door to be closed.
- Door Strikes - which require power for the door to be opened.

Door Interlocks have been set up for you, however, you can use this dialog to change the default settings of the Direct Point, Free Egress Input, and Status Input as desired.

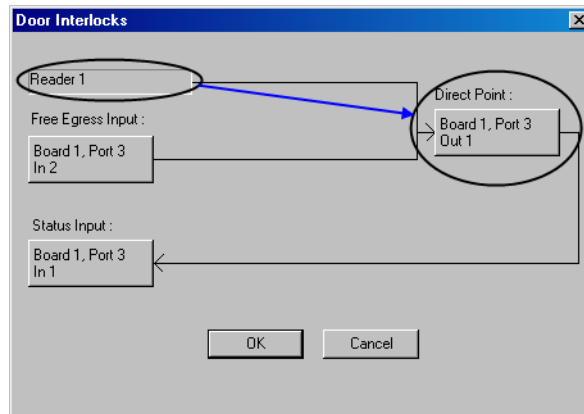
---

**NOTE:** When you click the Door Interlocks button, WIN-PAK knows you are controlling a door, and automatically determines the appropriate inputs for status and REX devices.

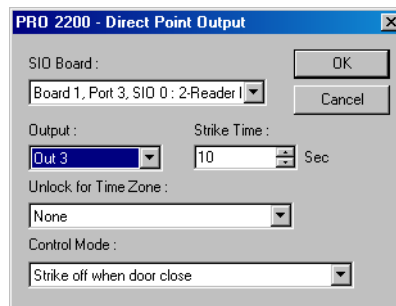
---

### Direct Point

The Direct Point indicates the output that will be directly controlled by the reader.



When the **Direct Point** button is clicked on the Door Interlocks window, the Direct Point Output window is displayed.



- 1 Select the **SIO Board** with which you want to contain the direct point.
- 2 Select the **Output** that is going to be used as the door output or door lock. Only active output points that have not been added as ADVs appear on this list. The contents of the list are dependent upon the SIO Board selected.

The Output names displayed are those defaulted by the system..

---

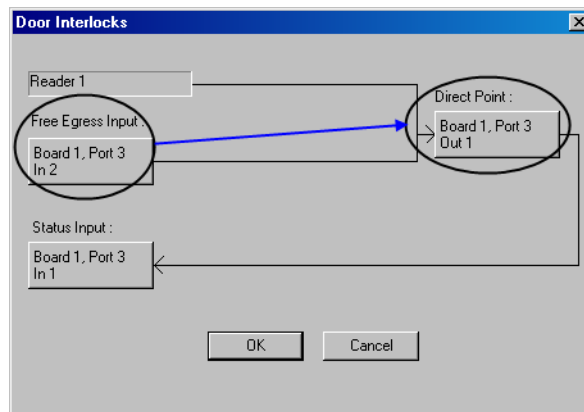
**NOTE:** If the point you need is not listed, make sure the input, output point, or reader is active [the check box is selected on its appropriate tab, within its board configuration windows] and that no ADV exists for the point or reader.

---

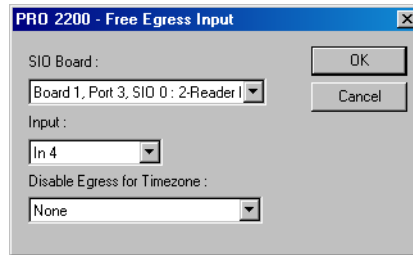
- 3 Strike Time is the amount of time the direct point relay is pulsed/interlocked. The default for this field is ten seconds, but can be set up to 60 seconds.
- 4 Control Mode is an auto-relock function. The field defaults to "Strike off when door closed," but can be set to strike off when door opened.

### Free Egress Input

Free Egress Input is used to indicate which input will be used for the Free Egress device, and to configure a door's free egress point. Free Egress Input can only be linked to an input point.



When the Free Egress Input button is clicked on the Door Interlocks window, the Free Egress Input window is displayed.



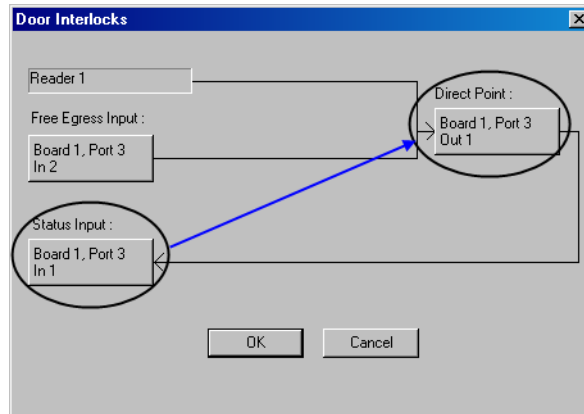
- 1 Select the **SIO Board** with which you want to contain the free egress point.
- 2 Select the **Input** that you want to utilize as the Free Egress Input from the drop-down list. Only active input points that have not been added as ADVs appear on this list. The contents of the list are dependent upon the SIO Board selected. The Input names displayed are those defaulted by the system.

The Time Zone defaults to Always On.

### Status Input

Status Input indicates the status of the door (normal/closed, forced open, ajar).

The "Configure Status Input" may only be linked to an input. It is normally connected to a door position sensor, such as a magnetic door contact to detect the status of the door (open, closed, etc.).

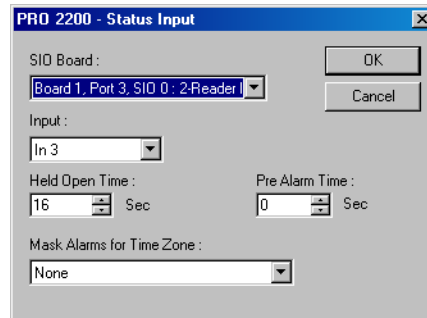


From the **Status Input** representation on the Door Interlocks window, you can see that the Direct Point is **Input 1 \***, on **Board 1** (the first board installed on the panel), which is connected to **Port 3** off the Intelligent Controller.

\* Input 1 (along with Inputs 2, 3, and 4) is reserved by WIN-PAK for use in controlling doors.



When the Status Input button is clicked on the Door Interlocks window, the Status Input window is displayed.



- 1 Select the **SIO Board** with which you want to contain the status point.
- 2 Select the **Input** that will be used as the door status input from the drop-down list. Only active input points that have not been added as ADVs appear on this list. The contents of the list are dependent upon the SIO Board selected. The Input names displayed are those defaulted by the system.
- 3 The Held Open Time is the amount of time that can elapse after the door is opened [or the REX is tripped], before the door is reported as ajar. This field defaults to 16 seconds.

The held-open timer starts under two conditions:

Whenever the door opens [for any reason] a door ajar/held open alarm is generated, even after a "forced open" condition.

After a new door cycle [valid access granted or valid egress attempted] if the door is open, the held-open timer restarts. If the door is still open after the held open time is up, a door ajar alarm is generated in the Alarm and Event views.

- 4 Pre Alarm Time is the amount of time that can elapse after the door is opened, before a warning [typically a beeping sound] indicates that the alarm will be activated.

### Using Held Open Time and Pre Alarm Time

Consider a door with a Held Open Time set at 30 seconds and a Pre Alarm Time also set at 30 seconds. As soon as the door opens, a beeping sound is emitted (the Pre Alarm) indicating that an alarm is imminent. At the end of the 30 second Held Open Time, the alarm is activated.

### Standard Reader Types

WIN-PAK is delivered with four standard reader types:

- Std NCI 5-Wire
- Std HID
- Std Motorola
- Std Mercury

Select any of these reader types to examine its predefined configuration.

### SIO Board Configuration – Inputs

Use the Inputs tab on the SIO Board Configuration window (next illustration) to set up the input points for the Reader Module.

Panel input points are configured using the Inputs tab which lists all the input points available on the current panel. Inputs are status points in the system doors, windows, motion sensors, etc. Input points can be linked to time zones, shunt time, as well as interlocks.

Inputs that are added as ADVs are referred to as monitor points within the system. Inputs that are being used in conjunction with the door cannot be added as ADVs.

**SIO Board Configuration**

Basic | Reader | **Inputs** | Outputs

☒ 1 - No ADV  
☒ 2 - No ADV  
☒ 3 - No ADV  
☒ 4 - No ADV  
☒ 5 - No ADV

Time Zone :  
None

Hold Time : 0 Sec      Mode : Normal

Debounce Cycles : 2 1/60 sec      Entry Delay : 0 Sec

Shunt Time : 0 Sec      Exit Delay : 0 Sec

☐ Interlocking      ☐ ☐

Activate in Time Zone :  
 SIO Board :  
 Point :  
 Alarm Action :  
 Normal Action :

Input Circuit Type : NC : No end of line      Transaction Mask : Log all transactions

OK Cancel Apply Help

ADV  
Add  
Edit  
Isolate  
Delete  
☐ Show

- 1 The PRO-2200 Series Dual Reader Module has eight input points, and all are displayed in the list box at the top of the Inputs window (the PRO-2200 Series Single Reader Module has two input points). All the input points are shown as active (with the check box selected), with No ADV. Remember, any input point you intend to use as a monitor point will require an ADV.

Input points are considered active if the wiring and the devices are hooked up. Inputs are not active if the device is not currently working.

---

**NOTE:** Input points 1 through 4 are reserved by WIN-PAK for use with door interlocks, and therefore cannot be assigned an ADV.

---

- 2 Use the **Time Zone** dropdown list to attach a time zone to an input point. For example, to shunt [deactivate] an input point during a particular time zone, select that time zone from the list. The Time Zone defaults to None.
- 3 When the input becomes active [alarm or trouble condition], the Hold Time begins counting down. If the input goes normal before the hold time ends, the input will wait to report normal until the hold time ends. If the input goes normal after the hold time ends, the normal status is reported immediately.

For example: with a hold time of seven seconds, when the input is in alarm, the hold timer starts counting down. If the point goes normal after three seconds, the normal waits another four seconds before reporting. If the point goes normal after ten seconds, the input reports as normal immediately.

Hold Time defaults to zero seconds, but can be set from zero to fifteen seconds.

- 4 Debounce Cycles set the amount of time [in 1/60<sup>th</sup> of a second cycles] that an input must be in a changed state before that change is reported. In other words, a debounce cycle instructs the system to ignore an alarm for a specific period of time.

For example: an input point with a debounce time of "4" (the default) must be in an alarm state for four cycles before it is reported as an alarm. The same is true when it returns to normal condition. The input point would not report as normal until it is in the normal state for the debounce period.

Debounce time can be set in the range of 2/60<sup>th</sup> - 15/60<sup>th</sup> of a second.

- 5 Shunt Time only comes into play when an event [an interlock, or manual shunt] is applied to the input point. Enter a value in the **Shunt Time** field to set the amount of time that the input point is deactivated (shunted) when triggered. This can be set in seconds, minutes, or hours using the selection buttons directly above the option.

The field defaults to zero, but can be set from 0 to 63 seconds, 0 to 63 minutes, 0 to 63 hours.

Shunt Time cannot be applied to door status or door inputs.

- 6 The Mode list offers three choices: Normal, Latching, and Non-Latching. Latching is the manual use of electronic access control credentials in which one credential read causes a lock to unlock and a second read locks the lock. The lock changes state only after a credential is read.

Following is a description of each Mode.

## Mode Descriptions

### Normal

---

The input acts normally, reporting alarms, normals, and troubles.

### Non-Latching

---

Entry: A door is set up as an input point, with an entry delay of 10 seconds. If the door remains open more than 10 seconds, it is reported.

Exit: The exit delay is the amount of time a contact can be unshunted (unmasked) before being reported. (Similar to a pulse time).

### Latching

---

Entry: If a door [set up as an input point, with an entry delay of 10 seconds] is opened, the user has 10 seconds to shunt the point, otherwise it will report as an alarm. Even if the point returns to normal before the entry delay time runs out, if the point has not been shunted (masked), it will report as an alarm.

Exit: The exit delay is the amount of time a contact can be unshunted (unmasked) before being reported. (Similar to a pulse time).

- 7 The Entry Delay is the amount of time an input point can remain open before an alarm is activated. This field defaults to zero seconds, but can be set up to 255 seconds.
- 8 Exit Delay is the amount of time a point can be unshunted [unmasked] before being reported as an alarm. This field defaults to zero seconds, but can be set up to 255 seconds.

---

**NOTE:** The Entry and Exit Delay fields are not available if the Mode selected is Normal.

---

- 9 The Input Circuit Type allows you to designate whether a point is supervised or unsupervised. The system needs to know when the input point is in a normal condition and when it is in an alarm condition.

Following is a definition of each Input Circuit Type.

### **Input Circuit Type Definitions**

#### **Normally Opened – No End of Line / Two-state circuit (Alarm or Normal)**

Refers to contact points that do not touch when a device is in its normal position. A normally open device, such as most REX switches, complete the circuit when pushed.

#### **Normally Closed – No End of Line / Two-state circuit (Alarm or Normal)**

Refers to contact points that always touch when a device is in its normal position. A normally closed device, such as most door contacts, complete a circuit when they are in their normal, at rest condition

#### **STD – End of Line**

Refers to a three-state circuit (Alarm, Normal, or Trouble)

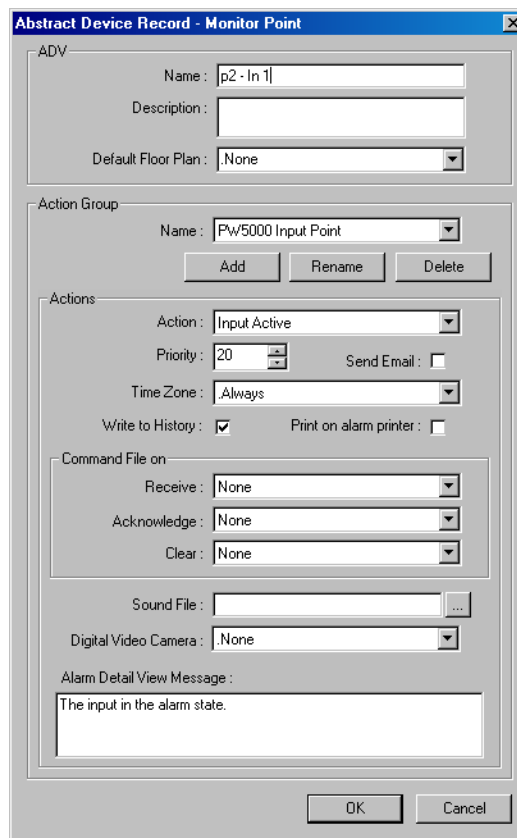
- 10 Transaction Mask allows for masking the log of transaction information related to input points. The Transaction Mask field defaults to "Log all Transactions," indicating that all input points will be monitored and all information on them logged to the PC.

### Create an ADV for Each Input Point

You must configure an ADV for each of the input points that you will be using. Inputs that are used in conjunction with the door [1, 2, 3, and 4] cannot be added as ADVs.

- 11 Click the **Add** button in the ADV area of the window to open the Abstract Device Record - Monitor Point window (below).

**NOTE:** Within the Abstract Device Records, input points are considered "Monitor Points." Output points are considered "Control Points," and Readers are considered "Entrances."



The image shows a software window titled "Abstract Device Record - Monitor Point". It contains several sections for configuring an ADV (Abstract Device Variable):

- ADV Section:** Includes fields for "Name" (containing "p2 - In 1"), "Description", and a "Default Floor Plan" dropdown menu (set to "None").
- Action Group Section:** Includes a "Name" dropdown menu (set to "Pw5000 Input Point") and three buttons: "Add", "Rename", and "Delete".
- Actions Section:** Includes a dropdown menu for "Action" (set to "Input Active"), a "Priority" spinner (set to 20), a "Send Email" checkbox (unchecked), a "Time Zone" dropdown menu (set to "Always"), a "Write to History" checkbox (checked), and a "Print on alarm printer" checkbox (unchecked).
- Command File on Section:** Includes three dropdown menus for "Receive", "Acknowledge", and "Clear", all set to "None".
- Sound File:** A text field with a browse button ("...").
- Digital Video Camera:** A dropdown menu set to "None".
- Alarm Detail View Message:** A text area containing the message "The input in the alarm state."
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

- 12 The designation "In 5" is appended to the Intelligent Controller Name for the input point. [Inputs 1 - 4 are reserved for use with the door.] As each input point is configured, the number increments, making the name unique. If necessary, the default name can be changed to something more descriptive or logical for your organization.
- 13 Select each ADV **Action** [Input Active, Normal, or Troubled] for each input point to be monitored, and set the **Priority** of the alarm messages generated when this input is in an alarm state. Make any changes necessary on the ADV window.

---

**NOTE:** Refer to the "Abstract Devices" section of this chapter for details on setting up ADVs.

---

- 14 Click the **OK** button to save the ADV and return to the Inputs tab.

### Interlocking

Interlocking allows you to interlock the selected input point with another SIO board, reader, or input/output point within the Intelligent Controller [so long as an ADV has been created for the board, reader, or point].

When an input point is interlocked to an output point, and there is a change of status in the input point, the system performs the operation specified. For example:

Component A is Input 5 [a motion detector]

Component B is Output 3 [a siren]

Action 1 - Energize

Action 2 - De-energize

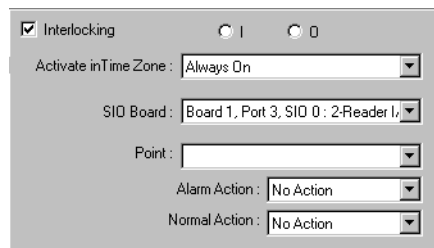
When the motion detector is triggered, Input 5 goes into an active state and Output 3 energizes, sounding the alarm.



When Input 5 returns to normal state, Output 3 de-energizes, turning off the siren.

To interlock a particular input point, select the input or output point to link to, and what action to perform on alarm and normal conditions.

- 1 Select the **Interlocking** check box on the Inputs window to activate the interlocking fields for configuration.

A screenshot of a software window titled "Interlocking". At the top left, there is a checked checkbox labeled "Interlocking". To its right are two radio buttons, the first of which is selected. Below these are several dropdown menus: "Activate in Time Zone:" with "Always On" selected, "SIO Board:" with "Board 1, Port 3, SIO 0 : 2-Reader 1," selected, "Point:" which is currently empty, "Alarm Action:" with "No Action" selected, and "Normal Action:" with "No Action" selected.

- 2 Click the Input (**I**) or Output (**O**) radio button to drive the contents of the SIO Board and Point fields. For example, clicking the input button allows you to select SIO Boards with input capability, as well as all the input points configured for the SIO Board selected.
- 3 Use the **Activate in Time Zone** list to indicate the time zone during which the interlock is in effect.
- 4 Select the **SIO Board** with which you want to contain the input or output point.
- 5 Choose the interlocking **Point** from the drop-down list. Only input and output points that have been activated appear on this list. The contents of the list are dependent upon the SIO Board selected first, followed by the Input/Output selection made.

---

**NOTE:** If the point you need is not listed, make sure the input point or output point is active (that the check box next to the item is selected).

---

For example: if you choose a 2-Reader I/O board with the Input radio button selected, the Point list will contain all the input point ADVs that were set up for the 2-reader SIO Board. Likewise, if you select a 16-Relay Output SIO Board [and, of course have the Output radio button selected], the Point list will display all available output points for that board.

---

**NOTE:** The Point names displayed are those defaulted by the system when the ADV is added.

---

- 6 Select the **Alarm Action** for the interlocked point. The second point will take this action when the initial input becomes active [alarm or trouble].

Alarm and Normal Actions include:

- No Action
- Energize [turn the point on]
- De-Energize [turn the point off]
- Pulse On [energize the point for a set amount of time]
- Pulse Off

- 7 Select the **Normal Action** for the interlocked point. This is the action that the second point will take when the initial input becomes inactive [normal].

### SIO Board Configuration – Outputs

Use the Outputs tab on the SIO Board Configuration window to set up the output points for the 2-reader board. Just as the Inputs window was used for input points, the Outputs window allows you to establish the characteristics of output points as well as establish relationships (interlocks) between outputs and inputs.

The screenshot shows the 'SIO Board Configuration' window with the 'Outputs' tab selected. The window has a title bar and a standard Windows-style interface. The 'Outputs' tab is active, showing a list of output points (1-6) all set to 'No ADV'. Below the list are fields for 'Time Zone' (set to 'None'), 'Pulse Time' (set to '1' with units 'Sec', 'Min', 'Hr'), and 'Output Inverter' (set to 'Normal'). A section for 'Interlocking' is also visible, with a checkbox and several dropdown menus for 'Activate in Time Zone', 'SIO Board', 'Point', 'On Action', and 'Off Action'. On the right side, there is a vertical panel with buttons for 'Add', 'Edit', 'Isolate', 'Delete', and 'Show'. At the bottom of the window are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

**SIO Board Configuration**

Basic | Reader | Inputs | **Outputs**

Name :

- ☒ 1 - No ADV
- ☒ 2 - No ADV
- ☒ 3 - No ADV
- ☒ 4 - No ADV
- ☒ 5 - No ADV
- ☒ 6 - No ADV

Time Zone :  
None

Sec Min Hr  
Pulse Time : 1

Output Inverter  
Normal

☐ Interlocking

Activate in Time Zone :  
SIO Board :  
Point :  
On Action :  
Off Action :

ADV  
Add  
Edit  
Isolate  
Delete  
☐ Show

OK Cancel Apply Help

- 1 The Name list displays the output points available on the 2-reader board, and shows them as active (with the check box selected), with No ADV.

The PRO-2200 Series Dual Reader Module has six output points, and all are displayed in the list box at the top of the Outputs window [the PRO-2200 Series Single Reader Module has one output point]. Remember, any output point you intend to use as a control point will require an ADV.

WIN-PAK sets some output points as active. The default settings [typically 1 and 3] may vary depending upon whether or not you have chosen the anti-passback option.

---

**NOTE:** Output points 1 and 3 are reserved by WIN-PAK for use with door interlocks, and therefore cannot be assigned an ADV.

---

- 2 Use the **Time Zone** drop-down list to attach a time zone to an output point. For example, to shunt [deactivate] an output point during a particular time zone, select that time zone from the list. The Time Zone defaults to None.
- 3 Enter a value in the **Pulse Time** field to set the amount of time that the output point is energized when triggered. The field defaults to zero, but can be set from 0 to 63 seconds, 0 to 63 minutes, 0 to 63 hours.
- 4 The Output Inverter field [which defaults to Normal] can be changed to Inverted.

The following list shows possible Output Inverter field settings.

### Output Settings

---

#### Normal

- Relay defaults to a de-energized state.
- Pulsing the output energizes it for its designated pulse time (or pulses the output on). At the end of the pulse time, the output de-energizes. (The output responds the same upon a valid egress, a valid card read, and/or a manual pulse command.
- Energizing a relay turns the relay on (LED on).
- De-energizing a relay turns the relay off (LED off).
- Normally Open circuit acts as a NO circuit. Normally Closed circuit acts as a NC circuit.

---

#### Inverted

- Relay defaults to an energized state.
- Pulsing the output de-energizes it for its designated pulse time (or pulses the output off). At the end of the pulse time, the output reenergizes. (The output responds the same upon a valid egress, a valid card read, and/or a manual pulse command.
- Energizing a relay turns the relay off (LED off).
- De-energizing a relay turns the relay on (LED on).
- Normally Open circuit acts as a Normally Closed circuit. Normally Closed circuit acts as a Normally Open circuit.

### Create an ADV for Each Output Point

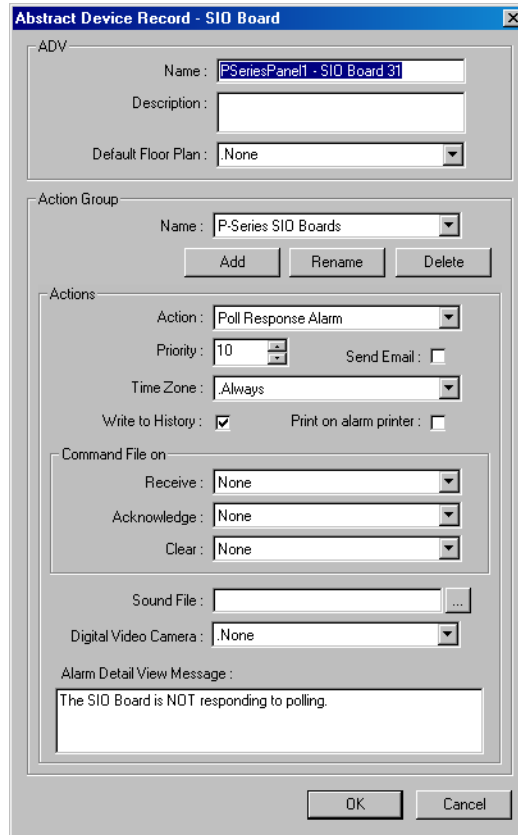
You must configure an ADV for each of the output [Control] points that you will be using. Outputs that are used in conjunction with the door cannot be added as ADVs.

- 5 Click the **Add** button in the ADV area of the window to open the Abstract Device Record - Control Point window (next illustration).

---

**NOTE:** Within the Abstract Device Records, output points are considered "Control Points." Input points are considered "Monitor Points," and Readers are considered "Entrances."

---



The image shows a software dialog box titled "Abstract Device Record - SIO Board". It contains several sections for configuring a device record. The "ADV" section has fields for Name (set to "P-SeriesPanel1 - SIO Board 31"), Description, and Default Floor Plan (set to "None"). The "Action Group" section has a Name dropdown (set to "P-Series SIO Boards") and buttons for Add, Rename, and Delete. The "Actions" section includes dropdowns for Action (set to "Poll Response Alarm"), Priority (set to "10"), Time Zone (set to "Always"), and checkboxes for "Write to History" (checked) and "Print on alarm printer". The "Command File on" section has dropdowns for Receive, Acknowledge, and Clear, all set to "None". There is a "Sound File" field with a browse button and a "Digital Video Camera" dropdown set to "None". The "Alarm Detail View Message" section contains a text area with the message "The SIO Board is NOT responding to polling." At the bottom are "OK" and "Cancel" buttons.

Abstract Device Record - SIO Board

ADV

Name : P-SeriesPanel1 - SIO Board 31

Description :

Default Floor Plan : None

Action Group

Name : P-Series SIO Boards

Add Rename Delete

Actions

Action : Poll Response Alarm

Priority : 10

Send Email : ☐

Time Zone : Always

Write to History : ☒ Print on alarm printer : ☐

Command File on

Receive : None

Acknowledge : None

Clear : None

Sound File : ...

Digital Video Camera : None

Alarm Detail View Message :

The SIO Board is NOT responding to polling.

OK Cancel

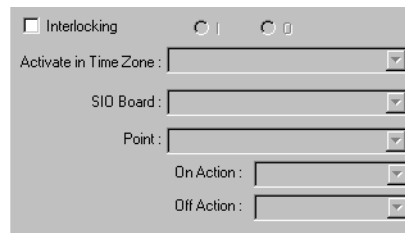
- 6 The designation "Out 2" is appended to the Intelligent Controller Name for the output point. [Outputs 1 and 3 are reserved for use with the door.] As each output point is configured, the number increments, making the name unique. If necessary, the default name can be changed to something more descriptive or logical for your organization.

- 7 Select each ADV **Action** for each output point to be controlled. Available actions include Energized, De-energized, and Trouble. Set a **Priority** for each output point you want to control.
- 8 Click the **OK** button to save the ADV and return to the Outputs tab.

### Interlocking

Interlocking allows you to interlock the Output point selected with another output or input point from an SIO Board within the Intelligent Controller, so long as an ADV has been created for the board or point.

- 1 Select the **Interlocking** check box on the Outputs window to activate the interlocking fields for configuration.

The screenshot shows a software window titled "Interlocking". At the top left is a checked checkbox labeled "Interlocking". To its right are two radio buttons, the first of which is selected. Below these are five dropdown menus, each with a small arrow icon on the right. The labels for the dropdowns are: "Activate in Time Zone:", "SIO Board:", "Point:", "On Action:", and "Off Action:". The window has a light gray background and a standard Windows-style border.

- 2 Click the Input (**I**) or Output (**O**) radio button to determine the contents of the SIO Board and Point fields. Clicking the input button will allow you to select SIO Boards with input capability, as well as all the input points configured for the SIO Board selected.
- 3 Indicate the **Activate in Time Zone** during which the interlock is in effect.
- 4 Select the **SIO Board** with which you want to contain the input or output point.

- 5 Choose the interlocking **Point** from the drop-down list. Only input and output points that have been activated appear on this list. The contents of the list are dependent upon first the SIO Board selected, then the Input/Output selection made.

---

**NOTE:** If the point you need is not listed, make sure the input or output point is active (the check box is selected on its appropriate tab, within its board configuration windows).

---

For example: if you select a 2-Reader I/O board with the Input radio button selected, the Point list will contain all the input point ADVs set up for the reader. Likewise, if you select a 16-Relay Output device [and, of course have the Output radio button selected], the Point list will display all available output points for that board.

---

**NOTE:** The Point names displayed are those defaulted by the system when the ADV is added.

---

- 6 Select the **On Action** for the interlocked point. The second point will take this action when the initial output goes on. On and Off Actions include:
  - No Action
  - Energize [turn the point on]
  - De-Energize [turn the point off]
  - Pulse On [energize the point for a set amount of time]
  - Pulse Off
- 7 Select the **Off Action** for the interlocked point. The second point will take this action when the initial output goes off.



### Completing SIO Board Configuration

When you have completed setting up the SIO Board, click the **OK** button at the bottom of the SIO Board Configuration window.

You are returned to the PRO-2200 Configuration - SIO Boards window, from which more boards can be added, as needed.

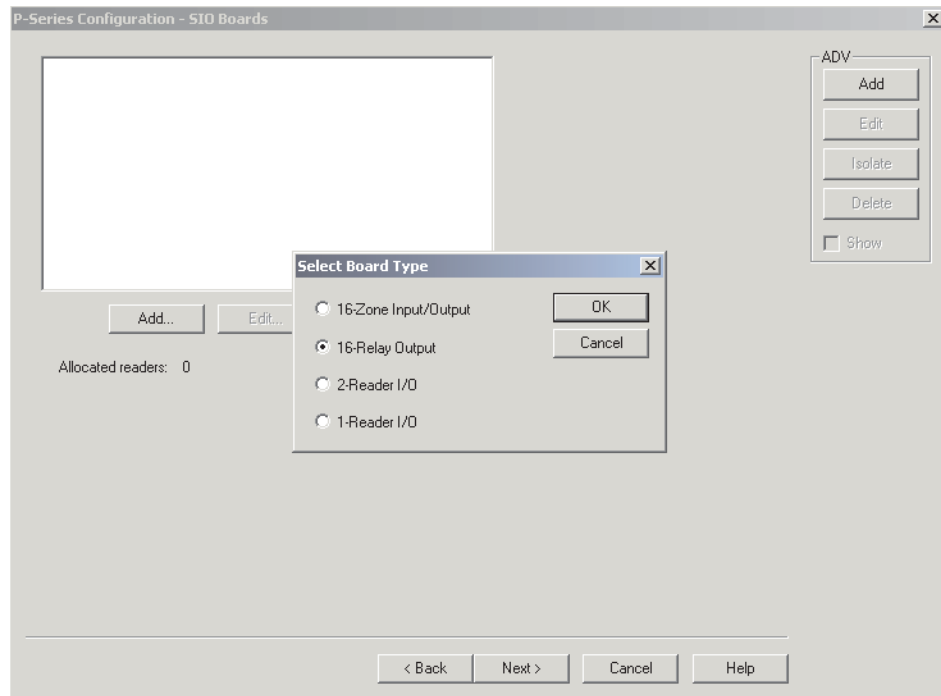
When you have finished setting up all the SIO Boards for the panel, click the **Next** button at the bottom of the PRO-2200 Configuration - SIO Boards window to advance to the final PRO-2200 Configuration window: Triggers and Procedures.

## 16-Relay Output Module Setup

The PRO-2200 Series 16-Relay Output Module interfaces with the Intelligent Controller, to provide 16-relay output control. This relay output board is connected to the PRO-2200 Intelligent Controller through a supervised RS-485 bus at 38,400 bps.

The 16-Relay Output Module is set up using the PRO-2200 Configuration – SIO Boards window.

When configuring a new direct connection, the SIO Boards window (next illustration) is empty when first displayed. Click the **Add** button to select a board type.



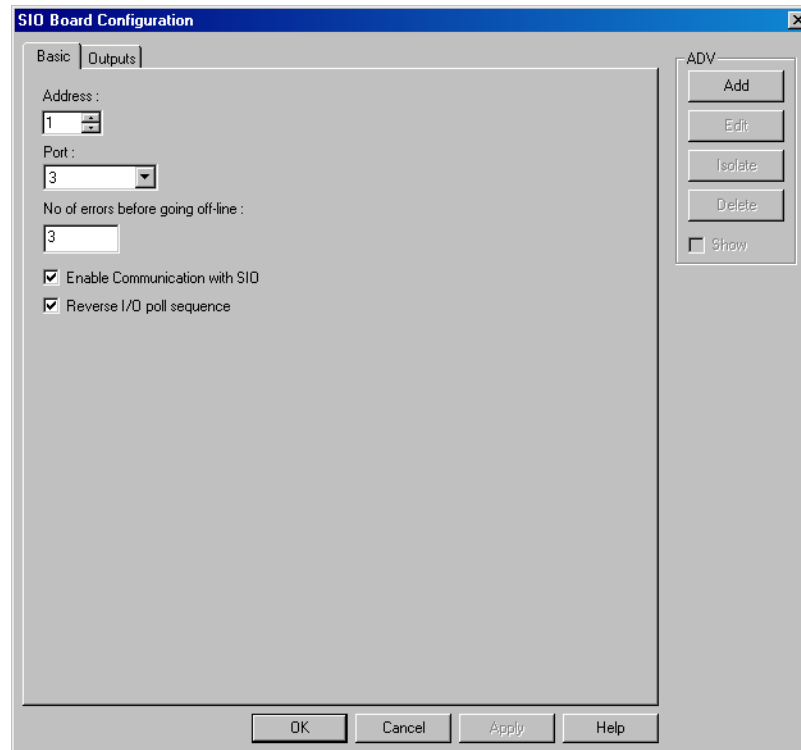
Select the 16-Relay Output option and click the **OK** button.

A tabbed window is presented for use in setting up the 16-Relay Output Module.

### SIO Board Configuration – Basic Information

- 1 On the Basic tab of the SIO Board Configuration window, indicate the panel's hardware **Address**. The default value for this field is "1".

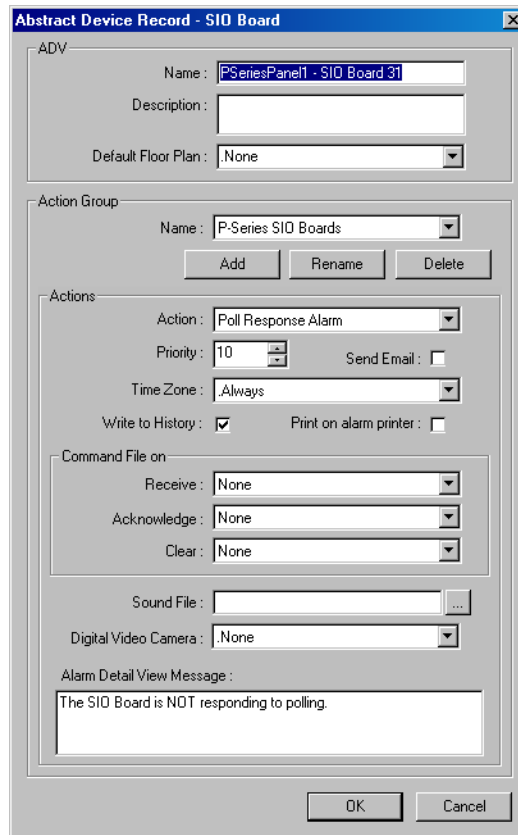
**NOTE:** The address corresponds to the DIP Switch setting on the panel (1–8). Each board on a panel must have a unique address. Consult the PRO-2200 Output Module Installation Manual for further information.



- 2 The Port field is used to indicate the port on the Intelligent Controller where this output module is located. The default Port is 6, but it can be set to 3, 4, or 5 as well.
- 3 Use the **Number of Errors before Going Off-Line** field to indicate the number of tries the panel should make to "talk" to the communication server [without receiving an understandable answer] before tripping the offline trigger. This field defaults to 3.
- 4 Select the **Enable Communication with SIO** check box only when the board is installed [not before]. The default for this box is selected.

### Create an ADV for the Output Module Board

- 5 Click the **Add** ADV button to call the Abstract Device Record – SIO Board window.



The image shows a Windows-style dialog box titled "Abstract Device Record - SIO Board". It contains several sections for configuring an ADV (Abstract Device View) for an SIO Board. The "ADV" section has fields for Name (set to "P-SeriesPanel1 - SIO Board 31"), Description, and Default Floor Plan (set to "None"). The "Action Group" section has a Name dropdown (set to "P-Series SIO Boards") and buttons for Add, Rename, and Delete. The "Actions" section includes a dropdown for Action (set to "Poll Response Alarm"), a Priority spinner (set to 10), a Send Email checkbox, a Time Zone dropdown (set to "Always"), and checkboxes for Write to History (checked) and Print on alarm printer. The "Command File on" section has dropdowns for Receive, Acknowledge, and Clear, all set to "None". There is a Sound File field with a browse button, a Digital Video Camera dropdown (set to "None"), and an Alarm Detail View Message text area containing the text "The SIO Board is NOT responding to polling." At the bottom are OK and Cancel buttons.

- 6 The designation "SIO Board #" is appended to the Intelligent Controller Name. If more than one SIO Board is configured for the Intelligent Controller, the board numbers automatically increment in order to make the name unique.

- 7 Select each **Action** for the 16-Relay Output Module, set its **Priority**, and make any other changes necessary on the ADV window.

---

**NOTE:** Refer to the "Abstract Devices" section of this chapter for details on setting up ADVs.

---

- 8 Click the **OK** button to save the ADV and return to the Basic tab.

### SIO Board Configuration – Outputs

Use the Outputs tab on the SIO Board Configuration window to set up the output points for the 16-Relay Output Module.

The screenshot shows the 'SIO Board Configuration' window with the 'Outputs' tab selected. The window has a title bar with a close button. Inside, there are two tabs: 'Basic' and 'Outputs'. The 'Outputs' tab is active. The main area contains the following controls:

- Name:** A list box showing six items, all checked: '1 - No ADV', '2 - No ADV', '3 - No ADV', '4 - No ADV', '5 - No ADV', and '6 - No ADV'.
- Time Zone:** A dropdown menu set to 'None'.
- Pulse Time:** A numeric input field set to '1'. Above it are radio buttons for 'Sec', 'Min', and 'Hr', with 'Sec' selected.
- Output Inverter:** A dropdown menu set to 'Normal'.
- Interlocking:** A checkbox that is unchecked. To its right are two radio buttons, the first of which is selected.
- Activate in Time Zone:** A dropdown menu.
- SIO Board:** A dropdown menu.
- Point:** A dropdown menu.
- On Action:** A dropdown menu.
- Off Action:** A dropdown menu.

On the right side of the window, there is a vertical panel labeled 'ADV' containing the following buttons: 'Add', 'Edit', 'Isolate', 'Delete', and 'Show' (with a checkbox next to it). At the bottom of the window are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

- 1 The Name list displays all 16 output points available on the board, and shows them as active [with the check box selected], with No ADV. There can be a total of 16 output points on the board (1-16). Remember, any output point you intend to use will require an ADV.
- 2 Use the **Time Zone** drop-down list to attach a time zone to an output point. For example: to energize [activate] an output point during a particular time zone, select that time zone from the list. The Time Zone defaults to None.
- 3 Enter a value in the **Pulse Time** field to set the amount of time that the output point is activated [pulsed on] when triggered. The field defaults to zero, but can be set from 0 to 32400 seconds, 0 to 540 minutes, 0 to 9 hours.
- 4 The Output Inverter field [which defaults to Normal] can be changed to Inverted.

Following is a list of Output Inverter field settings.

### Output Settings

#### Normal

---

- Relay defaults to a de-energized state.
- Pulsing the output energizes it for its designated pulse time (or pulses the output on). At the end of the pulse time, the output de-energizes. (The output responds the same upon a valid egress, a valid card read, and/or a manual pulse command.
- Energizing a relay turns the relay on (LED on).
- De-energizing a relay turns the relay off (LED off).
- Normally Open circuit acts as a NO circuit. Normally Closed circuit acts as a NC circuit.

---

**Inverted**

- Relay defaults to an energized state.
- Pulsing the output de-energizes it for its designated pulse time (or pulses the output off). At the end of the pulse time, the output reenergizes. (The output responds the same upon a valid egress, a valid card read, and/or a manual pulse command.
- Energizing a relay turns the relay off (LED off).
- De-energizing a relay turns the relay on (LED on).
- Normally Open circuit acts as a Normally Closed circuit. Normally Closed circuit acts as a Normally Open circuit.

**Create an ADV for Each Output Point**

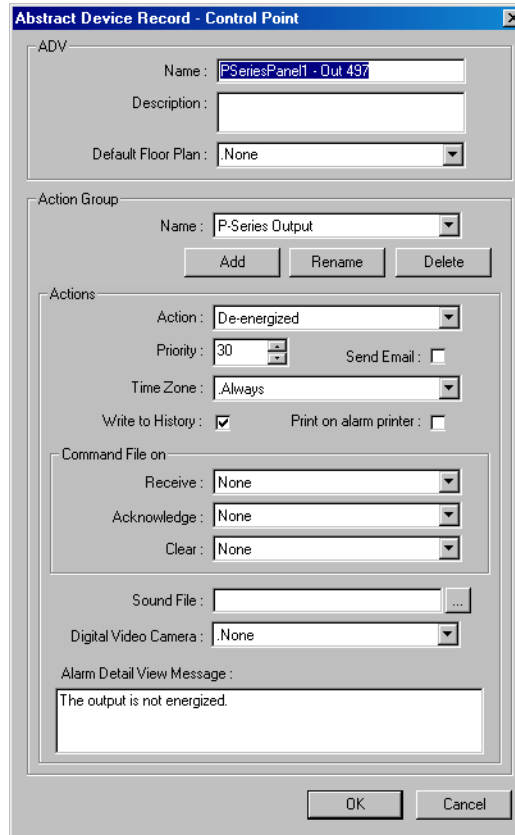
You must configure an ADV for each of the output [control] points that you will be using.

- 5 Click the **Add** button in the ADV area of the window to open the Abstract Device Record - Control Point window (below).

---

**NOTE:** Within the Abstract Device Records, output points are considered "Control Points." Input points are considered "Monitor Points," and readers are considered "Entrances."

---



The image shows a Windows-style dialog box titled "Abstract Device Record - Control Point". It contains several sections for configuring an Abstract Device (ADV). The "ADV" section has fields for Name (set to "P-SeriesPanel1 - Out 497"), Description, and Default Floor Plan (set to "None"). The "Action Group" section has a Name dropdown (set to "P-Series Output") and buttons for Add, Rename, and Delete. The "Actions" section includes dropdowns for Action (set to "De-energized"), Priority (set to 30), Time Zone (set to "Always"), and checkboxes for "Write to History" (checked) and "Print on alarm printer". Below this is a "Command File on" section with dropdowns for Receive, Acknowledge, and Clear, all set to "None". There are also fields for Sound File and Digital Video Camera, both set to "None". At the bottom, there is an "Alarm Detail View Message" text area containing the text "The output is not energized." and buttons for OK and Cancel.

- 6 The designation "Out #" is appended to the Intelligent Controller Name, in order for the output point name to be unique. If necessary, the default name can be changed to something more descriptive or logical for your organization.
- 7 Select each **Action** and set its **Priority** for each output point you want to control. Make any other changes necessary on the ADV window.

---

**NOTE:** Refer to the "Abstract Devices" section of this chapter for details on setting up ADVs.

---

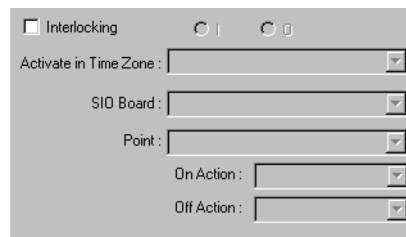


- 8 Click the **OK** button to save the ADV and return to the Outputs tab.

### Interlocking

Interlocking allows you to interlock the Output point selected with another output or input point from an SIO Board within the Intelligent Controller, so long as an ADV has been created for the board or point.

- 1 Select the **Interlocking** check box on the Outputs window to activate the interlocking fields for configuration.

The screenshot shows a software window titled "Interlocking". At the top left is a checked checkbox labeled "Interlocking". To its right are two radio buttons, "I" (Input) and "O" (Output), with "O" being selected. Below these are five dropdown menus, each with a small arrow icon on the right. The labels for the dropdowns are: "Activate in Time Zone:", "SIO Board:", "Point:", "On Action:", and "Off Action:". The "On Action" and "Off Action" dropdowns are currently empty.

- 2 Click the Input (**I**) or Output (**O**) radio button to determine the contents of the SIO Board and Point fields. Clicking the input button will allow you to select SIO Boards with input capability, as well as all the input points configured for the SIO Board selected.
- 3 Indicate the **Time Zone** during which the interlock is in effect.
- 4 Select the **SIO Board** with which you want to contain the input or output point.
- 5 Choose the interlocking **Point** from the drop-down list. Only input and output points that have been activated appear on this list. The contents of the list are dependent upon first the SIO Board selected, then the Input/Output selection made.

---

**NOTE:** If the point you need is not listed, make sure the input or output point is active [the check box is selected on its appropriate tab, within its board configuration windows].

---

For example: if you select a 2-Reader I/O board with the Input radio button selected, the Point list will contain all the input point ADVs set up for the reader. Likewise, if you select a 16-Relay Output device (and, of course have the Output radio button selected), the Point list will display all available output points for that board.

---

**NOTE:** The Point names displayed are those defaulted by the system when the ADV is added.

---

- 6 Select the **On Action** for the interlocked point. The second point will take this action when the initial output goes on. On and Off Actions include:
  - No Action
  - Energize [turn the point on]
  - De-Energize [turn the point off]
  - Pulse On [energize the point for a set amount of time]
  - Pulse Off
- 7 Select the **Off Action** for the interlocked point. The second point will take this action when the initial output goes off.

### Completing SIO Board Configuration

When you have completed setting up the SIO Board, click the **OK** button at the bottom of the SIO Board Configuration window.

You are returned to the PRO-2200 Configuration - SIO Boards window, from which more boards can be added, as needed.

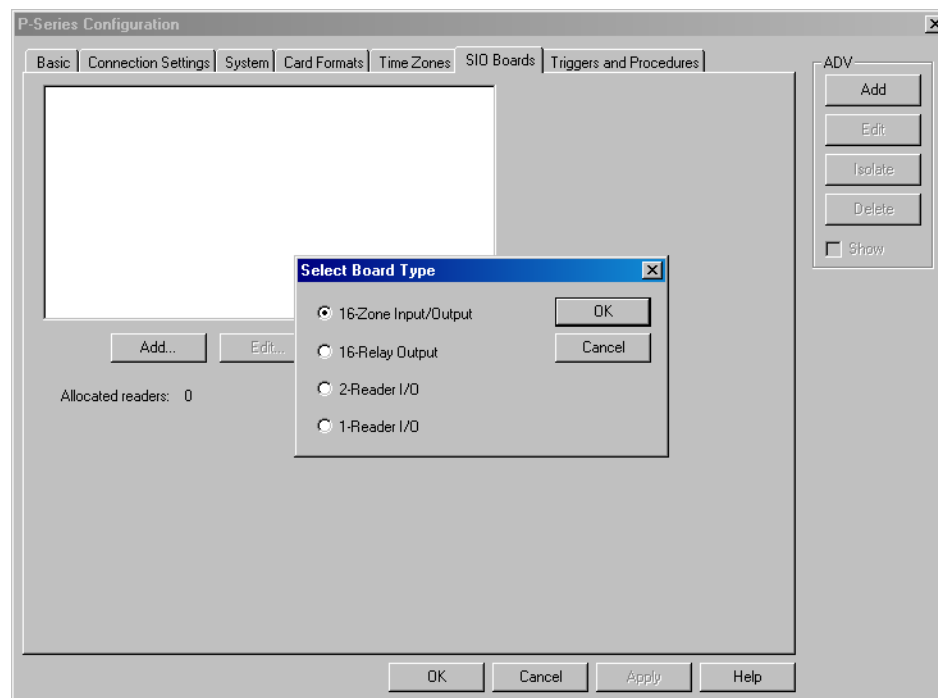
When you have finished setting up all the SIO Boards for the panel, click the **Next** button at the bottom of the PRO-2200 Configuration - SIO Boards window to advance to the final PRO-2200 Configuration window: Triggers and Procedures.

## 16-Zone Input Module Setup

The PRO-2200 Series 16-Zone Input Module interfaces with the Intelligent Controller, to provide 16 supervised zone inputs and two relay outputs. This input board is connected to the PRO-2200 Intelligent Controller through a supervised RS-485 bus at 38,400 bps.

The 16-Zone Input Module is set up using the PRO-2200 Configuration – SIO Boards window.

When configuring a new direct connection, the SIO Boards window is empty when first displayed. Click the **Add** button to select a board type:



Select the 16-Zone Input/Output option and click the **OK** button. A tabbed window is presented for use in setting up the 16-Zone Input Module.

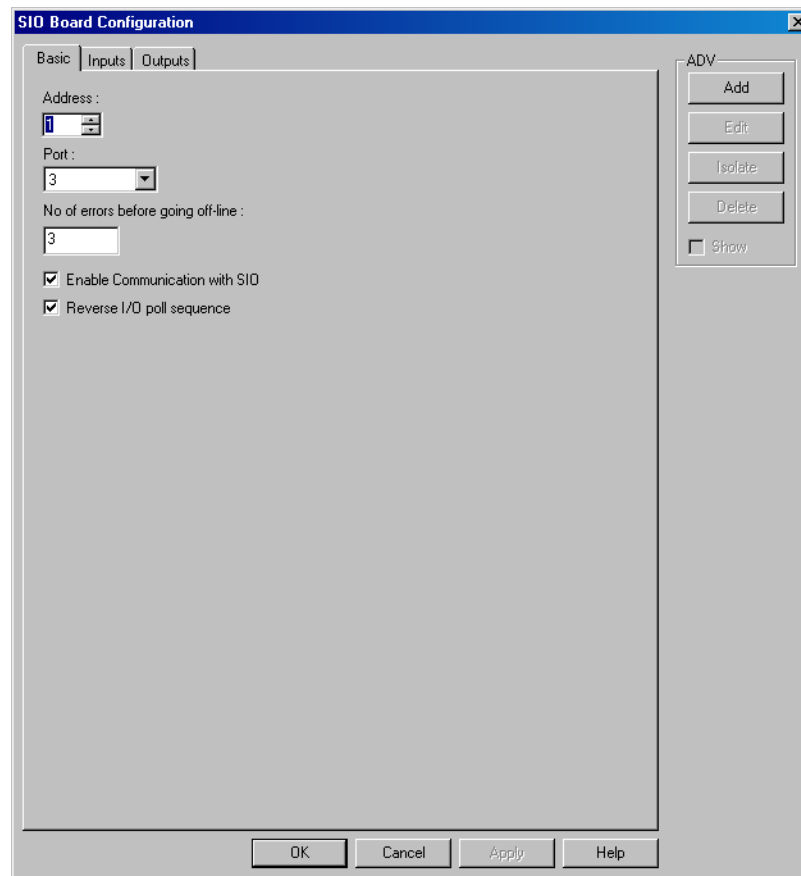
### **SIO Board Configuration – Basic Information**

- 1 On the Basic tab of the SIO Board Configuration window, indicate the panel's hardware Address. The default value for this field is "1".

---

**NOTE:** The address corresponds to the DIP Switch setting on the panel (1–8). Each board on a panel must have a unique address. Consult the PRO-2200 Input Module Installation Manual for further information.

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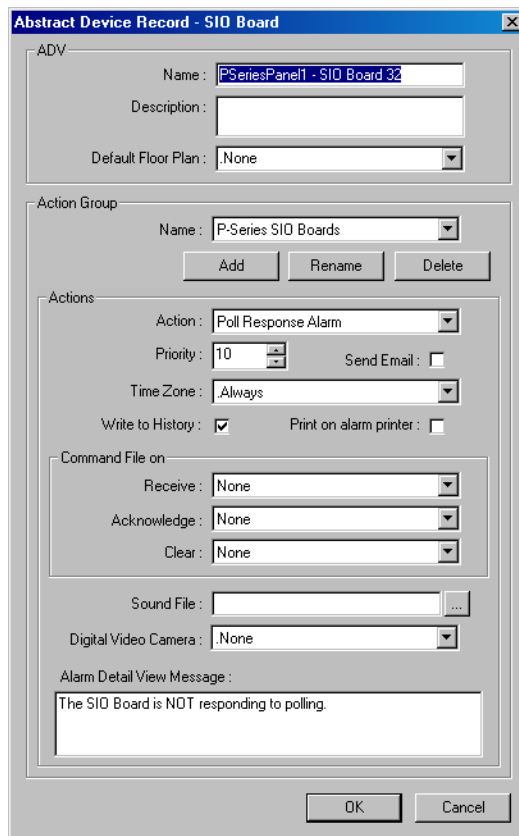


- 2 The Port field is used to indicate the port on the Intelligent Controller where this input module is located. The default Port is 6, but it can be set to 3, 4, or 5 as well.
- 3 Use the **Number of Errors before Going Off-Line** field to indicate the number of tries the panel should make to "talk" to the communication server [without receiving an understandable answer] before tripping the offline trigger. This field defaults to 3.

- 4 Select the **Enable Communication with SIO** check box only when the board is installed (not before). The default for this box is selected.

### Create an ADV for the Input Module Board

- 5 Click the **Add ADV** button to call the Abstract Device Record – SIO Board window.



The image shows a Windows-style dialog box titled "Abstract Device Record - SIO Board". It contains several sections for configuring an ADV (Abstract Device View) for an SIO Board.

- ADV Section:**
  - Name: P-SeriesPanel1 - SIO Board 32
  - Description: (empty text box)
  - Default Floor Plan: .None (dropdown menu)
- Action Group Section:**
  - Name: P-Series SIO Boards (dropdown menu)
  - Buttons: Add, Rename, Delete
- Actions Section:**
  - Action: Poll Response Alarm (dropdown menu)
  - Priority: 10 (spin box)
  - Send Email: (checkbox, unchecked)
  - Time Zone: .Always (dropdown menu)
  - Write to History: (checkbox, checked)
  - Print on alarm printer: (checkbox, unchecked)
- Command File on Section:**
  - Receive: None (dropdown menu)
  - Acknowledge: None (dropdown menu)
  - Clear: None (dropdown menu)
- Sound File:** (text box with browse button "...")
- Digital Video Camera:** .None (dropdown menu)
- Alarm Detail View Message:**
  - Text box containing: "The SIO Board is NOT responding to polling."

At the bottom right are "OK" and "Cancel" buttons.

- 6 The designation "SIO Board #" is appended to the Intelligent Controller Name, in order to make the name unique. If more than one SIO Board is configured for the Intelligent Controller, the board numbers increment automatically. This name can be changed, if desired.
- 7 Select each **Action** for the Input Module, set its **Priority**, and make any other changes necessary on the ADV window.

---

**NOTE:** Refer to "Abstract Devices" section of this chapter for details on setting up ADVs.

---

- 8 Click the **OK** button to save the ADV and return to the Basic window.

### **SIO Board Configuration – Inputs**

Use the Inputs tab on the SIO Board Configuration window (next illustration) to set up the input points for the 16-Zone Input Module.

An input is considered active if the wiring and device are hooked up, and not active if the device is not currently working. Also set the priority of alarm messages generated when this input is in an alarm state.

**SIO Board Configuration**

Basic Inputs Outputs

☒ 1 - No ADV  
☒ 2 - No ADV  
☒ 3 - No ADV  
☒ 4 - No ADV  
☒ 5 - No ADV

Time Zone :  
None

Hold Time : 0 Sec Mode : Normal

Debounce Cycles : 2 1/60 sec Entry Delay : 0 Sec

Shunt Time : ☒ Sec ☐ Min ☐ Hr Exit Delay : 0 Sec

☐ Interlocking

Activate in Time Zone :  
SIO Board :  
Point :  
Alarm Action :  
Normal Action :

Input Circuit Type : NC: No end of line Transaction Mask : Log all transactions

OK Cancel Apply Help

ADV  
Add  
Edit  
Isolate  
Delete  
☐ Show

- 1 The Name list displays all 16 input points available on the board, and shows them as active [with the check box selected], with No ADV. There can be a total 16 input points on the board (1-16). Remember, any input point you intend to use as a monitor point will require an ADV.

Input points are considered active if the wiring and the devices are hooked up. Inputs are not active if the device is not currently working.



- 2 Use the **Time Zone** drop-down list to attach a time zone to an input point. For example, to shunt [deactivate] an input point during a particular time zone, select that time zone from the list. The Time Zone defaults to None.
- 3 When the input becomes active [alarm or trouble condition], the Hold Time begins counting down. If the input goes normal before the hold time ends, the input will wait to report normal until the hold time ends. If the input goes normal after the hold time ends, the normal status is reported immediately.

For example: with a hold time of seven seconds, when the input is in alarm, the hold timer starts counting down. If the point goes normal after three seconds, the normal waits another four seconds before reporting. If the point goes normal after ten seconds, the input reports as normal immediately.

Hold Time defaults to zero seconds, but can be set from zero to fifteen seconds.

- 4 Debounce Cycles set the amount of time [in seconds] that an input must be in a changed state before that change is reported. In other words, a debounce cycle instructs the system to ignore an alarm for a specific period of time.

For example: an input point with a debounce time of "4" (the default) must be in an alarm state for four cycles before it is reported as an alarm. The same is true when it returns to normal condition. The input point would not report as normal until it is in the normal state for the debounce period.

Debounce time can be set in the range of 0 to 255 seconds.

- 5 Enter a value in the **Shunt Time** field to set the amount of time that the output point is energized when triggered. The field defaults to zero, but can be set from 0 to 63 seconds, 0 to 63 minutes, 0 to 63 hours.
- 6 The Mode list offers three choices: Normal, Latching, and Non-Latching. Latching is the manual use of electronic access control credentials in which one credential read causes a lock to unlock and a second read locks the lock. The lock changes state only after a credential is read.

Following are descriptions of each Mode.

### Mode Descriptions

---

#### Normal

The input acts normally, reporting alarms, normals, and troubles.

---

#### Non-Latching

Entry: A door is set up as an input point, with an entry delay of 10 seconds. If the door remains open more than 10 seconds, it is reported.

Exit: The exit delay is the amount of time a contact can be unshunted (unmasked) before being reported. (Similar to a pulse time).

---

#### Latching

Entry: If a door [set up as an input point, with an entry delay of 10 seconds] is opened, the user has 10 seconds to shunt the point, otherwise it will report as an alarm. Even if the point returns to normal before the entry delay time runs out, if the point has not been shunted (masked), it will report as an alarm.

Exit: The exit delay is the amount of time a contact can be unshunted [unmasked] before being reported. (Similar to a pulse time.)

- 7 The Entry Delay is the amount of time an input point can remain open before an alarm is activated. This field defaults to zero seconds, but can be set up to 255 seconds.
- 8 Exit Delay is the amount of time a point can be unshunted (unmasked) before being reported as an alarm. This field defaults to zero seconds, but can be set up to 255 seconds.

---

**NOTE:** Entry and Exit Delay fields are not available if

the Mode selected is Normal.

---

- 9 The Input Circuit Type allows you to designate whether a point is supervised or unsupervised. The system needs to know when the input point is in a normal condition and when it is in an alarm condition.

Following is a list of Input Circuit Types and definitions of each.

### Input Circuit Type Definitions

#### Normally Opened – No End of Line / Two-state circuit (Alarm or Normal)

Refers to contact points that do not touch when a device is in its normal position. A normally open device, such as most REX switches, complete the circuit when pushed.

#### Normally Closed – No End of Line / Two-state circuit (Alarm or Normal)

Refers to contact points that always touch when a device is in its normal position. A normally closed device, such as most door contacts, complete a circuit when they are in their normal, at rest condition

#### STD – End of Line

Refers to a three-state circuit (Alarm, Normal, or Trouble)

- 10 Transaction Mask allows for masking the log of transaction information related to input points. The Transaction Mask field defaults to "Log all Transactions," indicating that all input points will be monitored and all information on them logged to the PC.

### Create an ADV for Each Input Point

You must configure an ADV for each of the input points that you will be using. Inputs that are used in conjunction with the door cannot be added as ADVs.

- 11 Click the **Add** button in the ADV area of the window to open the Abstract Device Record - Monitor Point window (below).

---

**NOTE:** Within the Abstract Device Records, input points are considered "Monitor Points." Output points are considered "Control Points," and readers are

considered "Entrances."

**Abstract Device Record - Monitor Point**

ADV

Name : P-SeriesPanel1 - In 497

Description :

Default Floor Plan : None

Action Group

Name : P-Series Input Point

Add Rename Delete

Actions

Action : Input Active

Priority : 20

Send Email : ☐

Time Zone : Always

Write to History : ☒ Print on alarm printer : ☐

Command File on

Receive : None

Acknowledge : None

Clear : None

Sound File :  ...

Digital Video Camera : None

Alarm Detail View Message :

The input in the alarm state.

OK Cancel

- 12 The designation "In #" is appended to the Intelligent Controller Name for the input point, in order to make each name unique. If desired, the default name can be changed to something more descriptive or logical for your organization.
- 13 Select each ADV **Action** and set the **Priority** for each input point to be monitored. Make any other changes necessary on the ADV window.

**NOTE:** Refer to the "Abstract Devices" section of this

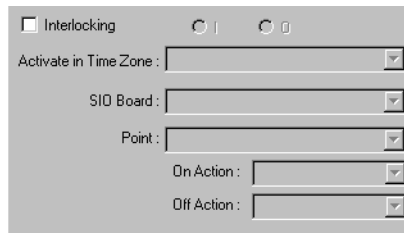
chapter for details on setting up ADVs.

- 14 Click the **OK** button to save the ADV and return to the Inputs tab.

### Interlocking

Interlocking allows you to interlock the Input point selected with another SIO Board, Reader, or Input/Output point within the Intelligent Controller, so long as an ADV has been created for the board, reader, or point.

- 1 Select the **Interlocking** check box on the Inputs window to activate the interlocking fields for configuration.

The screenshot shows a software window titled "Interlocking". At the top left is a checked checkbox labeled "Interlocking". To its right are two radio buttons, "I" (Input) and "O" (Output), with the "I" button selected. Below these are five dropdown menus, each with a small arrow icon on the right. The labels for the dropdowns are: "Activate in Time Zone:", "SIO Board:", "Point:", "On Action:", and "Off Action:". The "On Action:" and "Off Action:" labels are positioned to the left of their respective dropdowns.

- 2 Click the Input (**I**) or Output (**O**) radio button to drive the contents of the SIO Board and Point fields. For example, clicking the input button will allow you to select SIO Boards with input capability, as well as all the input points configured for the SIO Board selected.
- 3 Use the **Time Zone** list to indicate the time zone during which the interlock is in effect.
- 4 Select the **SIO Board** with which you want to contain the input or output point.
- 5 Choose the interlocking **Point** from the drop-down list. Only input and output points that have been activated appear on this list. The contents of the list are dependent upon the SIO

Board selected first, followed by the Input/  
Output selection made.

---

**NOTE:** If the point you need is not listed, make sure the input point or output point is active (that the check box next to the item is selected).

---

For example: if you choose a 2-Reader I/O board with the Input radio button selected, the Point list will contain all the input point ADVs that were set up for the 2-reader SIO Board. Likewise, if you select a 16-Relay Output SIO Board [and, of course have the Output radio button selected], the Point list will display all available output points for that board.

---

**NOTE:** The Point names displayed are those defaulted by the system when the ADV is added.

---

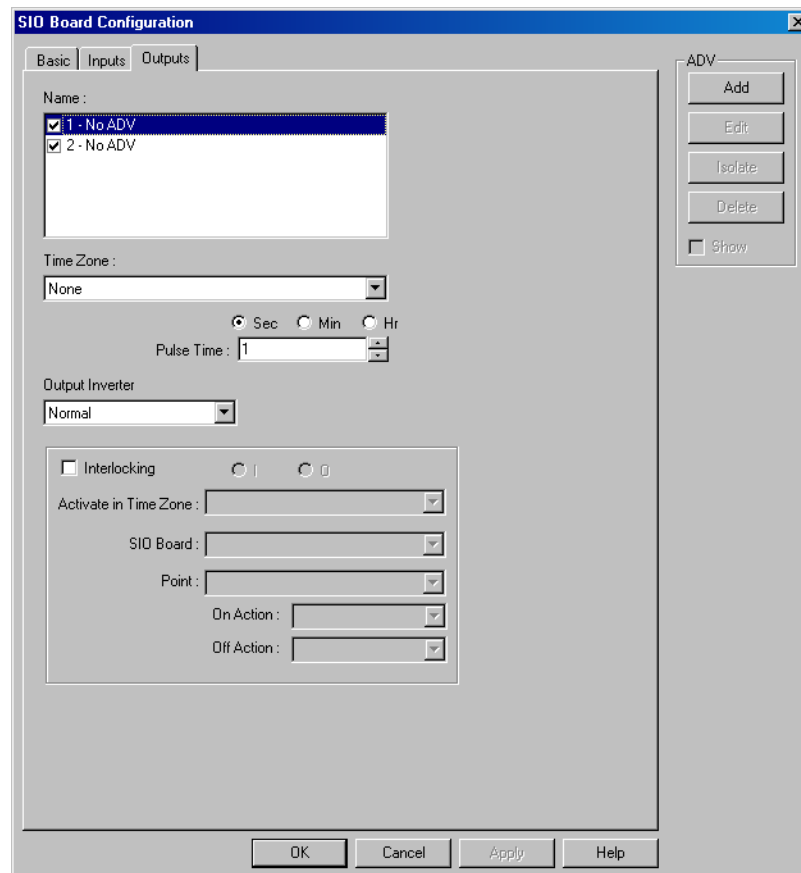
- 6 Select the **Alarm Action** for the interlocked point. The second point will take this action when the initial input becomes active [alarm or trouble].

Alarm and Normal Actions include:

- No Action
  - Energize [turn the point on]
  - De-Energize [turn the point off]
  - Pulse On [energize the point for a set amount of time]
  - Pulse Off
- 7 Select the **Normal Action** for the interlocked point. This is the action that the second point will take when the initial input becomes inactive [normal].

### SIO Board Configuration – Outputs

Use the Outputs tab on the SIO Board Configuration window to set up the output points for the 16-Zone Input Module.



- 1 The Name list displays both output points available on the 16-Zone Input Module board, and shows them as active [with the check box selected], with No ADV. Remember, any output point you intend to use as a control point will require an ADV.

- 2 Use the **Time Zone** drop-down list to attach a time zone to an output point. For example: to shunt [deactivate] an output point during a particular time zone, select that time zone from the list. The Time Zone defaults to None.
- 3 Enter a value in the **Pulse Time** field to set the amount of time that the output point is energized when triggered. The field defaults to zero, but can be set from 0 to 63 seconds, 0 to 63 minutes, 0 to 63 hours.
- 4 The Output Inverter field [which defaults to Normal] can be changed to Inverted.

The following list shows Output Inverter field settings.

### Output Settings

#### Normal

---

- Relay defaults to a de-energized state.
- Pulsing the output energizes it for its designated pulse time (or pulses the output on). At the end of the pulse time, the output de-energizes. (The output responds the same upon a valid egress, a valid card read, and/or a manual pulse command.
- Energizing a relay turns the relay on (LED on).
- De-energizing a relay turns the relay off (LED off).
- Normally Open circuit acts as a NO circuit. Normally Closed circuit acts as a NC circuit.

#### Inverted

---

- Relay defaults to an energized state.
- Pulsing the output de-energizes it for its designated pulse time (or pulses the output off). At the end of the pulse time, the output reenergizes. (The output responds the same upon a valid egress, a valid card read, and/or a manual pulse command.
- Energizing a relay turns the relay off (LED off).
- De-energizing a relay turns the relay on (LED on).
- Normally Open circuit acts as a Normally Closed circuit. Normally Closed circuit acts as a Normally Open circuit.

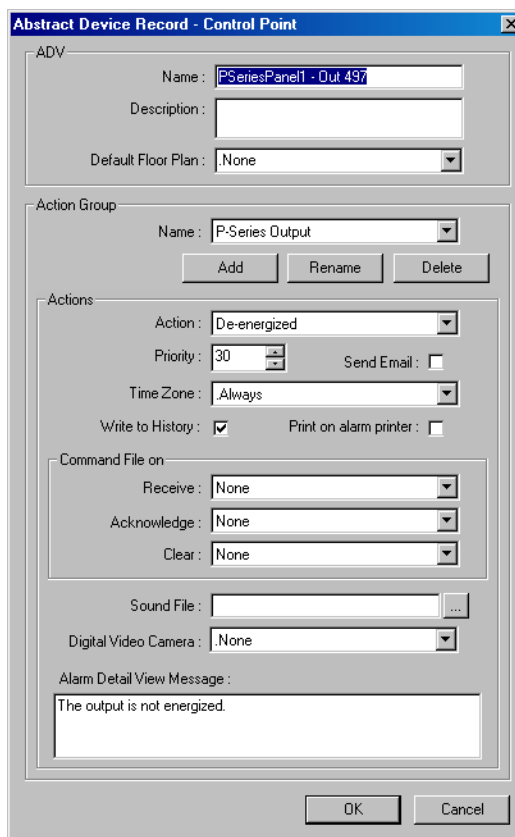


### Create an ADV for Each Output Point

You must configure an ADV for each of the output [control] points that you will be using. Outputs that are used in conjunction with the door cannot be added as ADVs.

- 5 Click the **Add** button in the ADV area of the window to open the Abstract Device Record - Control Point window (below).

**NOTE:** Within the Abstract Device Records, output points are considered "Control Points." Input points are considered "Monitor Points," and Readers are considered "Entrances."



The image shows a screenshot of the "Abstract Device Record - Control Point" dialog box. The dialog is titled "Abstract Device Record - Control Point" and has a close button (X) in the top right corner. It is divided into several sections:

- ADV**: Contains fields for "Name" (set to "P-SeriesPanel1 - Out 497"), "Description" (empty), and "Default Floor Plan" (set to "None").
- Action Group**: Contains a "Name" dropdown (set to "P-Series Output") and three buttons: "Add", "Rename", and "Delete".
- Actions**: Contains a list of actions with the following settings:
  - Action: "De-energized" (dropdown)
  - Priority: "30" (spin box)
  - Send Email: ☐
  - Time Zone: "Always" (dropdown)
  - Write to History: ☒
  - Print on alarm printer: ☐
- Command File on**: Contains three dropdowns for "Receive", "Acknowledge", and "Clear", all set to "None".
- Sound File**: A text field with a browse button (...).
- Digital Video Camera**: A dropdown set to "None".
- Alarm Detail View Message**: A text area containing the message "The output is not energized."

At the bottom of the dialog are "OK" and "Cancel" buttons.

- 6 The designation "Out #" is appended to the Intelligent Controller Name for the output point, in order to make each name unique. If necessary, the default name can be changed to something more descriptive or logical for your organization.
- 7 Select each ADV **Action** and set the **Priority** for each output point to be controlled. Make any other changes necessary on the ADV window.

---

**NOTE:** Refer to the "Abstract Devices" section of this chapter for details on setting up ADVs.

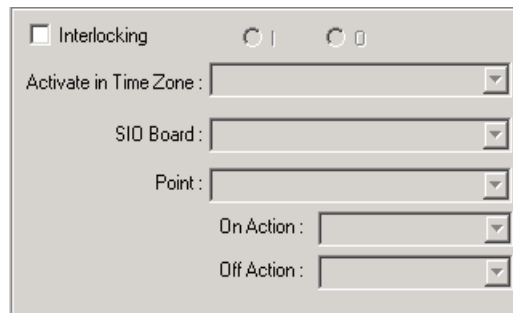
---

- 8 Click the **OK** button to save the ADV and return to the Outputs tab.

## Interlocking

Interlocking allows you to interlock the Output point selected with another SIO Board, Reader, or Input/Output point within the Intelligent Controller, so long as an ADV has been created for the board, reader, or point.

- 1 Select the **Interlocking** check box on the Outputs window to activate the interlocking fields for configuration.

The screenshot shows a software window titled "Interlocking". At the top left is a checked checkbox labeled "Interlocking". To its right are two radio buttons, the first of which is selected. Below these are five dropdown menus: "Activate in Time Zone:", "SIO Board:", "Point:", "On Action:", and "Off Action:". Each dropdown menu has a small arrow icon on its right side.

- 2 Click the Input (**I**) or Output (**O**) radio button to determine the contents of the SIO Board and Point fields. Clicking the input button will allow you to select SIO Boards with input capability, as well as all the input points configured for the SIO Board selected.
- 3 Indicate the **Time Zone** during which the interlock is in effect.
- 4 Select the **SIO Board** with which you want to contain the input or output point.
- 5 Choose the interlocking **Point** from the drop-down list. Only input and output points that have been activated appear on this list. The contents of the list are dependent upon first the SIO Board selected, then the Input/Output selection made.

---

**NOTE:** If the point you need is not listed, make sure the input or output point is active (the check box is selected on its appropriate tab, within its board configuration windows).

---

For example: if you select a 2-Reader I/O board with the Input radio button selected, the Point list will contain all the input point ADVs set up for the reader. Likewise, if you select a 16-Relay Output device [and, of course have the Output radio button selected], the Point list will display all available output points for that board.

---

**NOTE:** The Point names displayed are those defaulted by the system when the ADV is added.

---

- 6 Select the **On Action** for the interlocked point. The second point will take this action when the initial output goes on. On and Off Actions include:
  - No Action
  - Energize [turn the point on]
  - De-Energize [turn the point off]
  - Pulse On [energize the point for a set amount of time]
  - Pulse Off
- 7 Select the **Off Action** for the interlocked point. The second point will take this action when the initial output goes off.

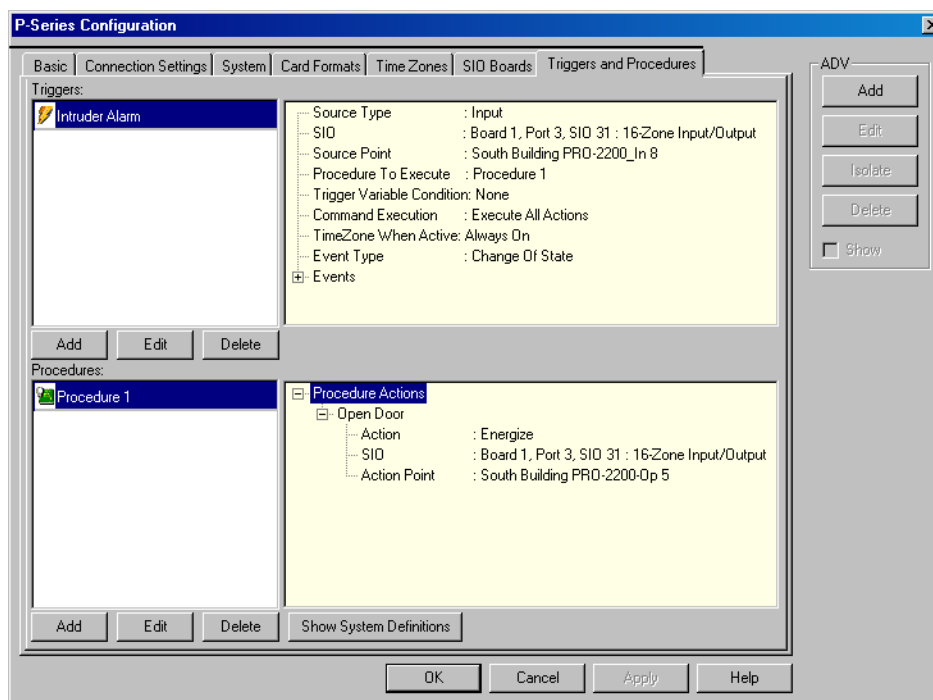
### Completing SIO Board Configuration

When you have completed setting up the SIO Board, click the **OK** button at the bottom of the SIO Board Configuration window.

You are returned to the PRO-2200 Configuration - SIO Boards window, from which more boards can be added, as needed.

When you have finished setting up all the SIO Boards for the panel, click the **Next** button at the bottom of the PRO-2200 Configuration - SIO Boards window to advance to the final PRO-2200 Configuration window: Triggers and Procedures.

## Triggers and Procedures



The ability to view and configure Triggers and Procedures is an exclusive feature of the PRO-2200 Intelligent Controller.

In response to a panel event [trigger], you can define a set of actions you want the panel to carry out. The occurrence of the event triggers the execution of the procedure.

Triggers and procedures are used to define interlocks [an action on a point triggered by an action on a different point]. Assigning points and readers to time zones is also be done via triggers and procedures on the PRO-2200 Intelligent Controller.

User triggers are those defined for site-specific events and actions. System triggers are those created when points are assigned to interlock definitions. User triggers can be added, edited, or deleted at any time from the Triggers and Procedures window of the PRO-2200 Configuration dialogs. System triggers can be viewed, but not edited from the Triggers and Procedures window.

When the Triggers and Procedures window is displayed, system triggers and procedures already configured for the panel are shown.

Analyzing the system triggers and procedures can provide great insight into the manner in which interlocks work in your access control system.

### **System Triggers and Procedures**

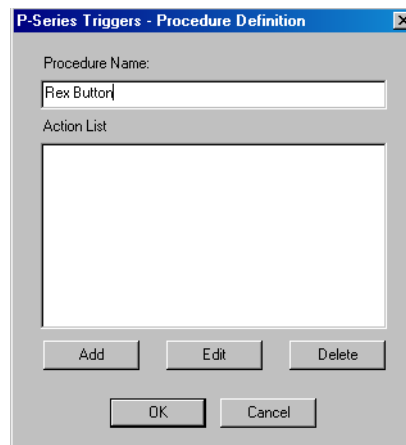
System triggers and procedures are created as a result of an interlock being defined on one of the PRO-2200 Configuration SIO Board Inputs or Outputs tabs. Once an action is assigned to an interlock point, two system triggers and procedures are created to correspond to the interlock. One trigger and procedure set deals with the On action, and one deals with the Off action.

### Adding a New Procedure

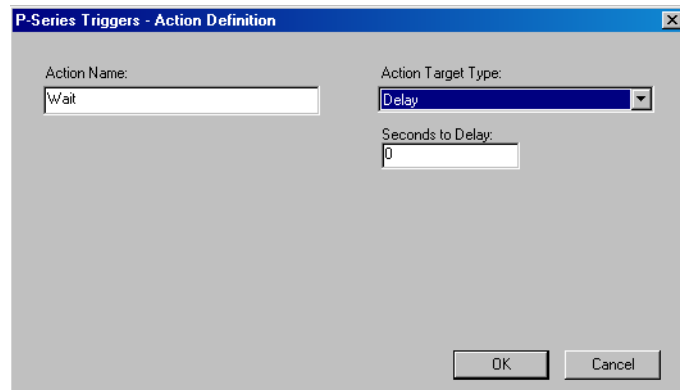
Procedures are assigned to triggers, and therefore, must be defined first. Use the Procedure Definition dialogs to build a script of actions that will take place based upon the event [trigger] to which the procedure is linked.

Procedures are limited by the type of device or point being defined.

- 1 Click the **Add** button at the bottom of the Procedures section of the Triggers and Procedures window. The Procedure Definition dialog is displayed.

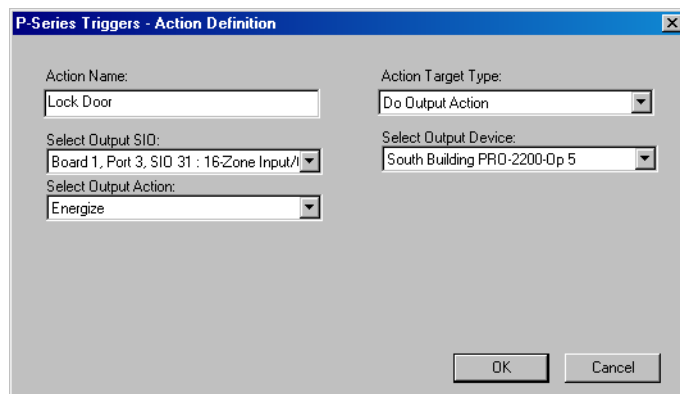


- 2 Enter a **Procedure Name**. This name should be unique and descriptive for easy reference.
- 3 Click the **Add** button at the bottom of the Action List box to begin defining the actions that will make up the procedure. The Action Definition window is displayed (next illustration).



- 4 Assign an **Action Name**.
- 5 Use the **Action Target Type** drop-down list to select the target of the action: Reader, Output, Input, Delay.

The remaining fields on the window are activated, depending on the action target type selected. For example, when Output Action is selected as the Action Target Type, the following fields are added to the dialog:

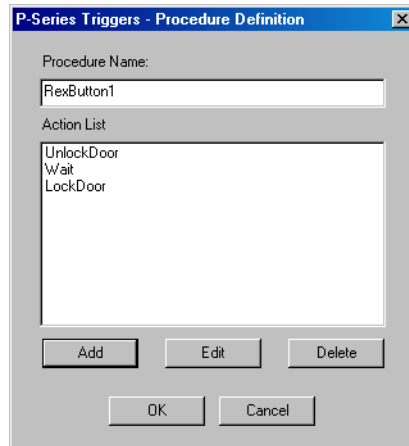


- 6 Use the **Select Output SIO** and the **Select Output Device** lists to indicate the board and the point on which the output action will occur. Then, from the **Select Output Action** list,

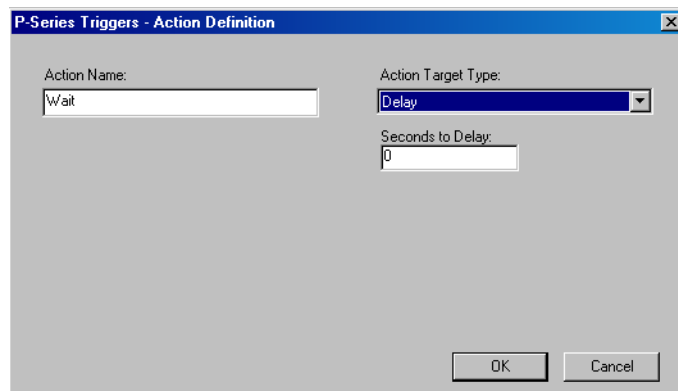


choose the action itself.

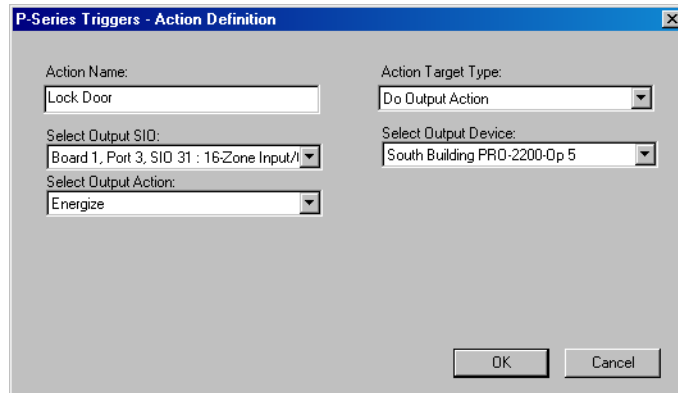
- 7 Click the **OK** button to return to the Procedure Definition window (below), where the action is now displayed in the Action List.



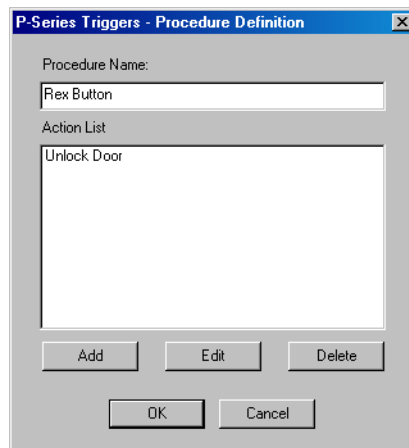
- 8 Click the **Add** button then add the next action to the procedure [this time, a delay]:



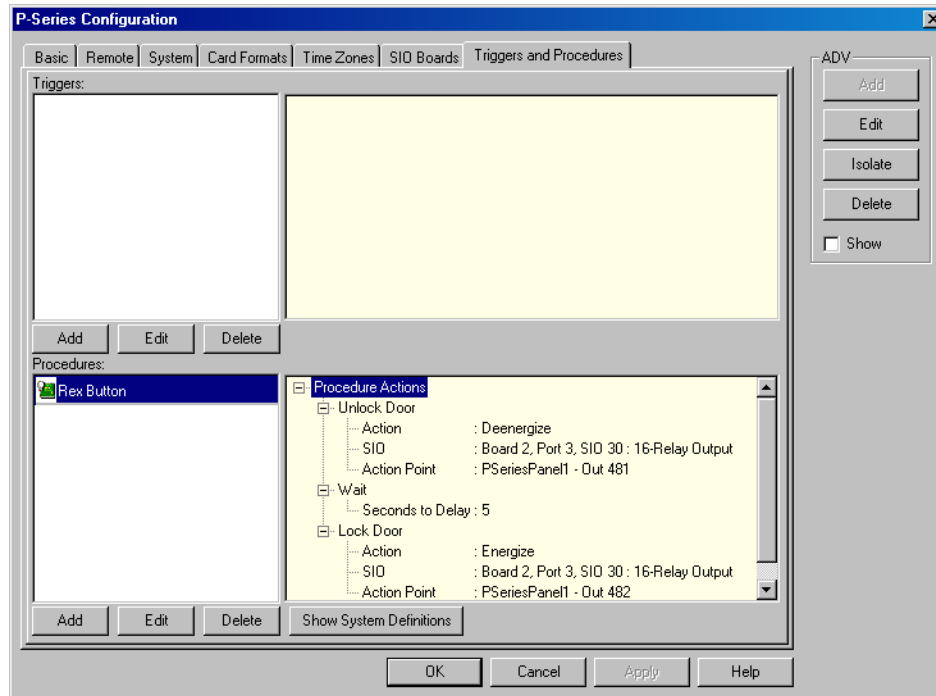
- 9 Lastly, add a final action to the procedure:



On returning to the Procedure Definition window (below), the Action List now contains the three actions defined for this procedure.



- 10 Click the **OK** button to return to the main Triggers and Procedures window (next illustration).



The newly-defined procedure is shown in the Procedures list. By expanding the Procedure Actions tree, you can see a detailed view of each action defined for this procedure.

### Adding a New Trigger

Once a procedure has been defined, it is associated with a trigger. Use the Trigger Definition dialog to indicate the trigger event that will call the procedure into action.

- 1 Click the **Add** button at the bottom of the Triggers section of the Triggers and Procedures window. The Trigger Definition dialog is displayed (next illustration).

**P-Series Triggers - Trigger Definition**

Name: Rex Button Trigger

Procedure: Rex Button

Trigger Source Type: Output

Source SIO Board: Board 1, Port 3, SIO 31 : 16-Zone Input/Output

Transaction Type: Change Of State

Trigger Transactions:

- ☒ Deenergize
- ☒ Energize

☐ All Sources

Trigger Source: P-SeriesPanel1 - Out 497

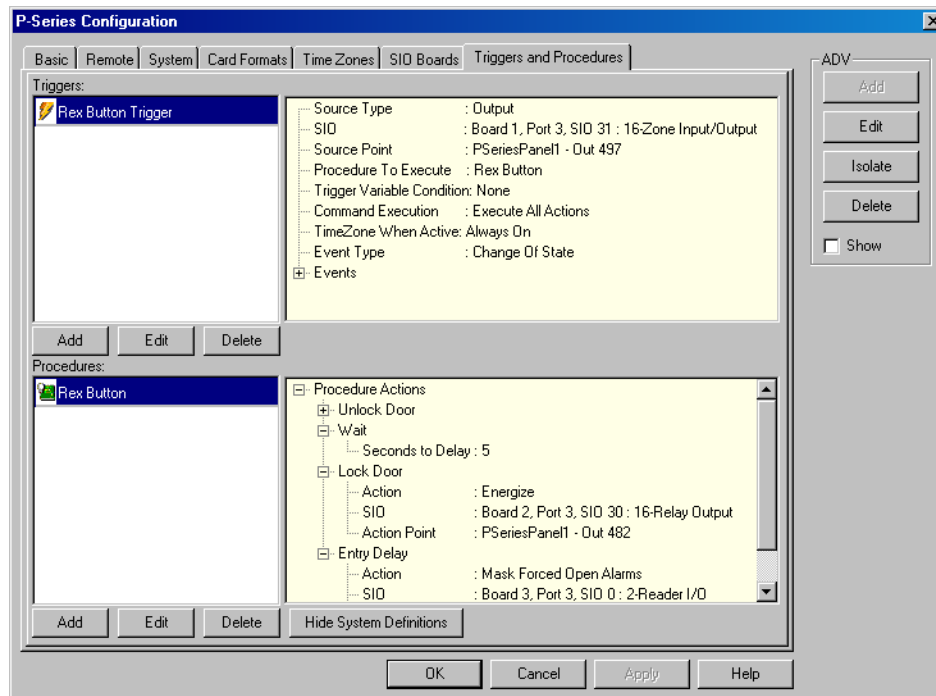
Time Zone: Always On

OK Cancel

- 2 Enter a **Name** for the trigger. This name should relate to its corresponding procedure.
- 3 Select a **Procedure** from the drop-down list. Only user-defined procedures [as opposed to system procedures] are displayed in this list.
- 4 Use the **Trigger Source Type** drop-down list to select the type of trigger point being defined [Input, Output, Reader, or Time Zone].
- 5 Click the **All Sources** check box if you want the trigger to apply to all inputs, outputs, and readers.
- 6 Select a **Source SIO Board**. Only the boards configured for this panel are displayed in the list.
- 7 Once a Source SIO Board is selected, the Trigger Source field is activated, allowing you to select the exact point on the SIO Board that you want to use as the trigger point.
- 8 In the **Time Zone** field, indicate the time zone in which the trigger is active. This field defaults to "Always On."

- 9 Make a selection from the **Transaction Type** list.
- 10 Using the **Trigger Transactions** list, select the events to associate with the trigger.
- 11 Click the **OK** button at the bottom of the Trigger Definition window to save the definition and return to the main Triggers and Procedures window (next illustration).

On returning to the main Triggers and Procedures window, you can see the new trigger displayed in the list. Highlight the trigger to see its definition on the right side of the window. Click the plus sign (+) to expand the Events view.



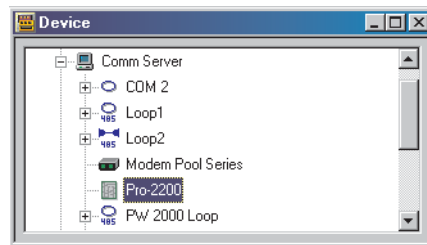
When you finish working with Triggers and Procedures, click **Next** to advance to the Finish window (next illustration).

### Panel Configuration – Finish

There are no settings to be configured on the Finish window, but this does give you an opportunity [using the Back button] to make adjustments to the panel before it is added to the system [though editing the panel after it is added to the Communication Server is quite easy].

Be careful with the Cancel button on the Finish window. Clicking Cancel at this point will [after a prompt] will delete the panel, its settings and associated ADVs.

When you click the Finish button, the panel configuration dialog is closed, and the panel is now available on the Device Map.



### **Naming and Numbering Monitor Point and Control Point ADVs**

If more than one input or output point is configured for an SIO Board, the input or output number automatically increments, up to the limits of both the board and the panel. For example: the second monitor point ADV added to the first Reader Module placed on a panel would be named "In 6." Input points 1-4 are reserved by WIN-PAK for use with doors. There are 8 input points available on a Dual Reader Module, so the naming/number could go up to "In 8".

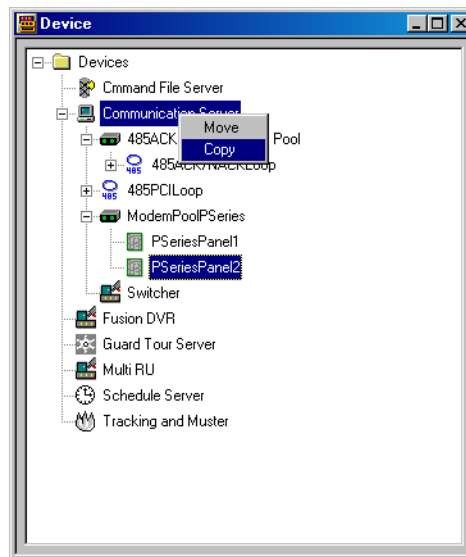
If a second Dual Reader Module is added to an Intelligent Controller, the first monitor point ADV on the second board would be named "In 9", and so on.

When a board is added, WIN-PAK knows that it must take into account all the possible input and output points contained in the boards already added to the system, and begin naming and numbering accordingly. In other words, you will never have non-sequential numbering within a single board.

## Copying a Direct PRO-2200 Connection

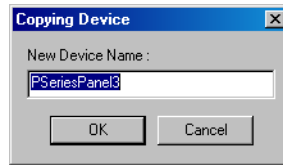
A direct PRO-2200 connection [panel] can be copied onto another (or the same) Communication Server [but cannot be copied onto a Modem Pool or a Loop] directly from the Device Map.

Just right-click on the panel icon [and keep the mouse button held down] and drag the panel icon to the Communication Server onto which you want it copied. When you release the mouse button, the Move/Copy menu is displayed, allowing you to indicate the desired action.

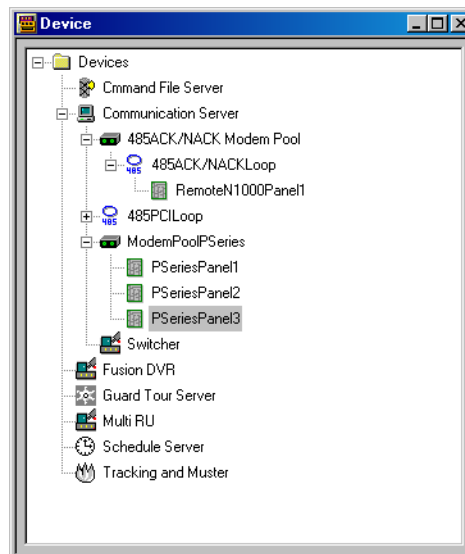


When you use this procedure to make a copy of a PRO-2200 Intelligent Controller on the same Communication Server, after moving the icon and select Copy, the Copying Device dialog is displayed, with an incremental number appended onto the device name.





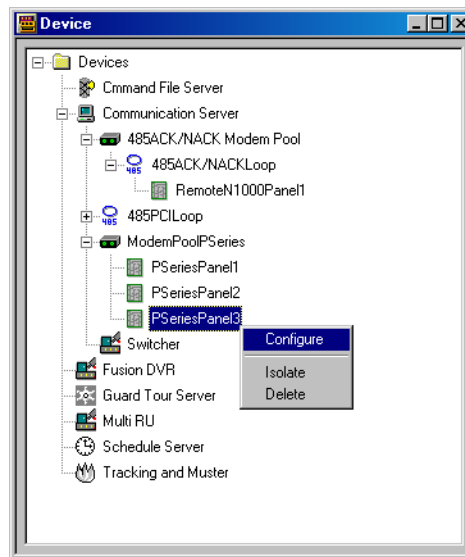
You can rename the device, or accept the default. Click the **OK** button, and the device is added to your Device Map.



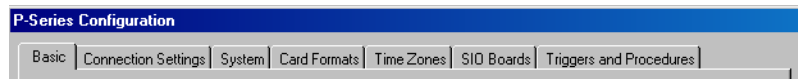
## Editing Panels

Editing PRO-2200 Intelligent Controller Panels is quite simple. The same strategy used in the configuration wizard, allows you to easily pick the spot in the panel that needs to be changed.

In the Device Map, right-click on the panel to be edited, and select **Configure** from the menu.



Use the tabs across the top of the PRO-2200 Configuration window to open the corresponding window and make any changes necessary.



## Initializing Panels

Programming information entered into the WIN-PAK System must be sent to the panels before it can take effect. When panels are first added to the system, they must be initialized so that the information entered during panel configuration can be sent to the panels.

Likewise, whenever there is a change in the panel configuration, the new information must be sent to the panels.

The only exceptions to this are changes to individual cards and card holders, which are automatically sent to the panels.

Panels are initialized from the Floor Plan view [the background] or from the Control Map.

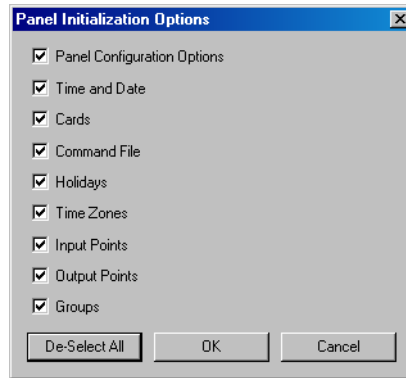
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**NOTE:** Panel Configuration Options reset all of your panel's programming. It is recommended that you select all options (check the Select All check box) when sending the Panel Configuration Options.

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### Initializing a Panel from the Floor Plan

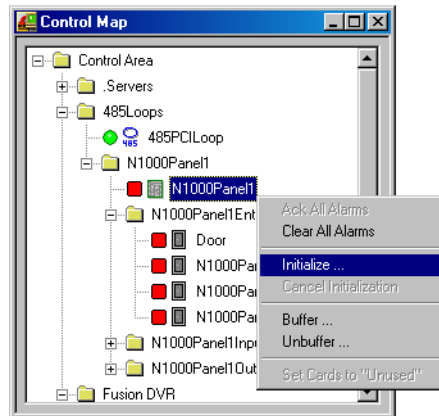
- 1 Select **Floor Plan** from the Operations menu, and open the Floor Plan view containing the panel you wish to initialize.
- 2 Right-click the panel, and select **Initialize** from the subsequent menu. The Panel Initialization Options window opens (next illustration).



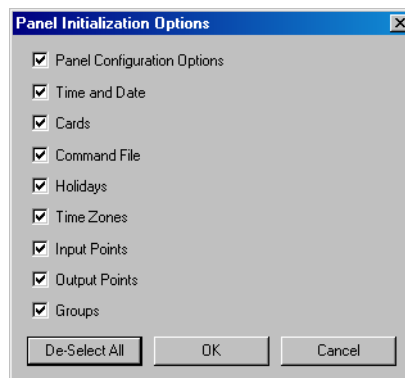
- 2 If you want to send all information to the panel, click **Select All**. This will replace all panel programming with the new information being sent.
- 3 Otherwise, if you want to update selected information do not select **Panel Configuration Options**. Select the check boxes for each type of information you want to send, then click **OK**.

### Initializing a Panel from the Control Map

- 1 Select **Control Map** from the WIN-PAK Operations menu.
- 2 Right-click the desired panel within the Control Map tree, and select **Initialize**.



- 3 To send all types of information displayed on the Panel Initialization Options dialog, click **Select All**. This will replace all panel programming with the new information being sent.



If you just want to update selected information do not select **Panel Configuration Options**. Select the check box for each type of information you want to send and click **OK**.

---

**NOTE:** The options available on the Panel Configuration Options dialog are device-dependent and will vary.

---

## Panel Initialization Options

**Panel Configuration Options:** Sends all panel configuration information. This resets your panel programming. It is recommended that you use the

**Select All** feature (button) when the Panel Configuration Options are to be sent.

**Time & Date:** Updates panel time and date with the network time and date. You may notice a pause for up to 50 seconds when the time and date are sent because the time is sent at the top of the computer minute up to + 10 seconds.

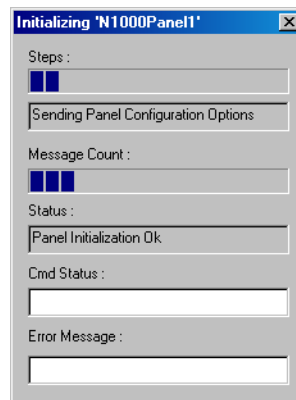
**Cards:** Sends card information to the panel. When sending cards it is recommended that you re-initialize the panel by choosing **Select All**. This ensures that old card information is removed when the new card information is added. When cards with an Active or Trace status are added, edited, or deleted from the card or card holder database, this information is automatically sent to the panels. All other card information changes must be sent using this command.

Additionally, new/updated information on the following features, functions, and panel elements can be sent to the panel:

- Command File
- Inputs
- IC Configuration
- Conversion Tables
- Procedures/Actions
- Access Control Areas
- Holidays
- Outputs
- Input Scan
- SIO Boards
- Triggers
- Reader LED/Buzzer specs
- Time Zones
- Groups
- Card Formats
- Access Levels
- Input Groups

### Initializing Status

As the panel initializes, a status window indicates what information is being sent. If an error occurs, the status window indicates which command caused the error.



**Steps:** Indicates what information is being sent.

**Message Count:** The progress of messages being sent.

**Status:** Whether the initialization is proceeding, is successful, or has failed.

**Cmd Status:** Indicates if a command has timed out.

**Error Message:** Indicates if any errors occurred while transmitting information to the panel.

## Defining Access, Tracking & Control Areas

### Access Areas

Access Areas are defined by adding entrances (doors and readers from the control panels) to a tree structure. An ADV must be defined for an entrance before it is available for selection. Access Areas list entrances and indicate where they are located. The Access Areas are then used to define Access Levels.

Access Levels are added to cards as they are entered into the Card database. A card must have an Access Level, which allows the card holder entry to selected areas during assigned times and restricts access to all other areas and to unassigned times.

An Access Level is defined by choosing selected entrances in an Access Area and a selected time zone during which access is allowed.

For example, to define an Executive Access Level having access to all doors, 24 hours a day, you would select all entrances in the Access Areas, assign access rights and a 24-hour, 7-day time zone. For a Visitor Access Level, you might select the main door between 8:00 a.m. and 5 p.m. Monday through Friday.

### Defining Access Areas

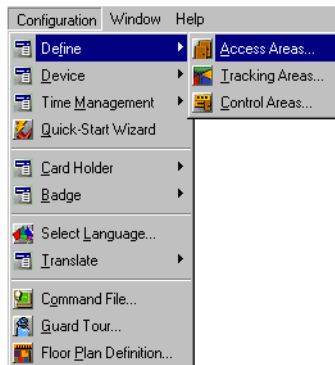
Access Areas provide a logical map of your access control system, showing entrances (doors), and their relative location within the system.

Once panels and readers have been defined and added to the Device Map, you can define Access Areas by creating branches on a tree structure and adding entrances to those branches. Branches can also have sub-branches.

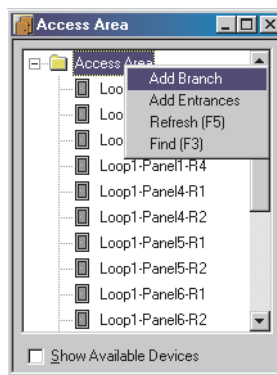
Access Areas are ultimately used to define Access Levels.



- 1 Select **Access Areas** from the Define option on the WIN-PAK Configuration menu.



- 2 Right-click the **Access Area** folder, and select **Add Branch**.

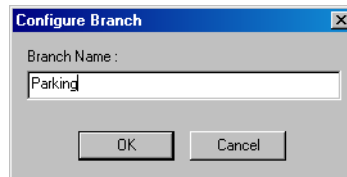


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**NOTE:** On networked systems, other operators may be adding information. Refresh (F5) updates the Access Area displaying changes made without exiting and re-entering the Access Area to update. Find (F3) is case sensitive and will search from the selected branch downward. Any character or string of characters can be searched on.

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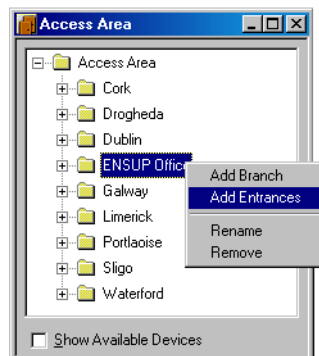
The Configure Branch window is displayed.



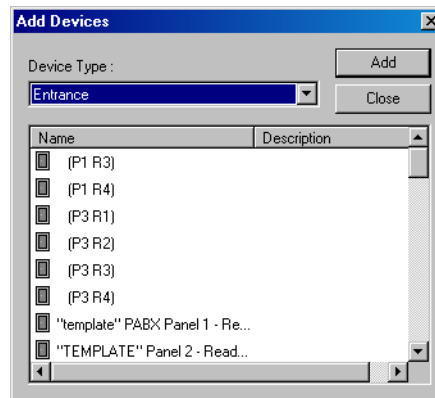
- 3 Enter a unique **Branch Name** (with up to 30 characters) for the Access Area.
- 4 Click **OK**. The new branch appears in the Access Area window.

### Adding Entrances to an Access Area

- 1 Right-click the new branch, and click **Add Entrances**.



The Add Devices window is displayed.



- 2 Select an entrance or entrances.
- 3 Click **Add**.

---

**NOTE:** Entrances can be moved from one branch to another. Right-click an entrance and drag it to the desired branch.

---

### Removing an Entrance or a Branch

Right-click on an entrance or branch to be removed and click **Remove** from the subsequent menu. An entrance cannot be removed if it is assigned to an access level.

### Renaming a Branch

- 1 Right-click the branch you want to rename, and select **Rename**.
- 2 Type the new name in the **Branch Name** field on the Configure Branch dialog.
- 3 Click **OK**.

## Tracking and Mustering Areas

Tracking and Muster reporting allows card holders to be located in the event of an emergency. Tracking and muster areas are defined by mapping Tracking Areas and Muster Readers on a tree structure.

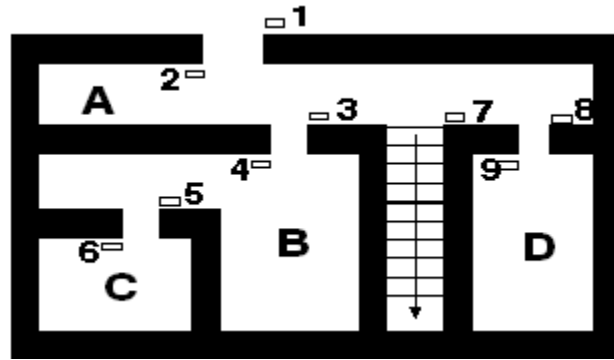
People are required to use readers when entering or leaving tracking areas. In an emergency, a muster is declared, and people go to the muster readers and present their cards.

### Tracking Areas

Tracking Areas are sections of a facility defined by selecting designated readers. Card reads within this area are recorded and can be seen in the Muster view.

In case of an emergency, card holders are instructed to go to a muster area and present their cards to a muster reader. The operator can then tell if everyone has exited the tracking areas, and if not, where they last presented their card.

In the following diagram, A, B, C, and D are Tracking Areas.



If each area is distinct and not nested (explained later), the area is defined by the readers that allow access to the area.

- Readers 1, 4, and 9 allow access to Tracking Area A
- Readers 3 and 6 allow access to Tracking Area B
- Reader 5 allows access to Tracking Area C
- Reader 8 allows access to Tracking Area D

The first time a person presents a card at one of these readers, the read event is recorded and may be observed in the Muster view.

Each time that card is presented at one of the readers in that same area, the previous record for the card is replaced by the new record.

When a person moves to a different area, his card reads are removed from the former area and now appear in the new area. The screen displays the most recent records of card reads from individual areas, or from all areas at one time.

The operator can select which areas to view by selecting the appropriate branch on the Tracking Area tree. If the top level is selected, card reads from all areas are displayed. Reports can also be generated from the Tracking Areas.

When a card is presented at a muster reader, it is removed from the tracking area and is listed in the muster area. A report of these card reads can be printed.

### **Muster Areas**

Like tracking areas, muster areas are also logical areas, not defined by the hardwiring of the system. [Muster readers are not used for controlling a door.]

Muster areas contain readers that are only used by card holders if there is a call for muster (e.g. in the event of a disaster).

Several different muster areas can be created.

The Muster View displays card read events. A report can be run on cards presented in an individual muster area or at all muster areas.

In normal conditions no transactions are recorded at muster readers. They are only used if there is a muster call, usually in an emergency.

### **Nesting Areas**

The concept of nesting is not unique to the tracking system, but does take on considerable significance when planning for disaster management, and can change the way tracking reports are generated.

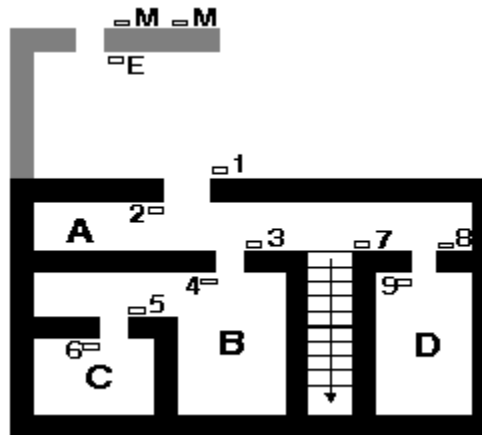
When an area is nested in another area, its readers are also part of that area. The general principle of nesting is that readers used to enter an area [or move about within the area] should be listed under the tracking area in the Tracking Areas database.

For example, if a hospital building is designated as tracking area H, the laboratory within the hospital can be a tracking area labeled L which is nested within H.

The two readers in the lab would define tracking area L, but would also be part of the H tracking area. Therefore, an employee who has entered the lab is shown as being present in the hospital as well as being present in the lab.

Where the laboratory area not nested, an employee entering the lab would be shown as present in the lab, but not present in the hospital.

To take another example, note the following diagram.



- 1-9 are Tracking Readers
- A, B, C, D are Tracking Areas,
- M is the Muster Reader
- E is the Exit Reader

If we focus on the B and C areas shown above, we can consider those areas in two ways.

**Not Nested**

If they are not nested, then Readers 3 and 6 define Area B because they allow access to Area B. Reader 5 defines Area C.

**Nested**

If we consider these same areas to be nested, anyone in Area C is ALSO in Area B. In which case, Readers 3, 5, and 6 define Area B and Reader 5 is also in Area C. There can be many nesting levels. There could be another room inside Area C, which would be nested under both B and C.

The diagram has the following Tracking Area definitions when nested:

**Tracking Area A:** [Readers 1, 3, 4, 5, 6, 8, 9].

Presenting a card at any of these readers shows the person in Tracking Area A. Readers 2 and 7 both leave Tracking Area A.

**Tracking Area B:** [Readers 3, 5, 6]. Reader 4 leaves Tracking Area B.

**Tracking Area C:** [Reader 5]. Reader 6 leaves Tracking Area C.

**Tracking Area D:** [Reader 8]. Reader 9 leaves Tracking Area D.

**Reader E:** [Exit Reader]. An Exit tracking area can be defined, if desired. If left blank, all readers not assigned a tracking area are considered exit readers.

Designate an exit reader, which card holders are required to use on leaving the facility. When mapping the tracking areas, this reader (or readers) defines the exit area. Reader E causes the card-holder information to be entered into the Exit tracking. This information is not displayed.

**Reader M:** [Muster Reader]. If M readers are defined as muster readers, a card read removes the card holder from the tracking area and moves them to the muster area.



## Muster System Precautions

When designing a muster system for use with WIN-PAK it is important to keep the following precautions in mind:

- Use a separate dropline [communication port] to isolate muster readers from tracking units.

An alternate/additional communication path from the N-1000 to the computer can be achieved by using the N485DRLA (Digital Redundant Loop Adapter).

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**NOTE:** Muster readers are not used for controlling a door.

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- Run a special line for the muster units to provide a unique data path, even if the wiring from the main facility is damaged. Ideally, the tracking units should also have a unique data path.
- Use 485 communications with ACK-NAK enabled. A battery backup power supply is required for the 485-API-2 on any PW-2000-II Control Panel.
- Provide a UPS or other backup power source for the WIN-PAK computer and any other associated communication devices.
- Provide a safe location for the computer and communication.
- Keep the muster system on-line [not buffered] to ensure timely and complete information.
- Perform regular checks to insure that the muster system is functioning properly.
- Check that all panels are maintaining the correct time and date. It is critical that the time and date be correct on card reads at the muster readers. If the time and/or date are earlier than that of other reads in the system they will be ignored.

- Program the Scheduler to update panel time and date at least once a day.
- Create a check list for muster procedures.
- Hold regular drills to practice muster procedures.
- Test the Muster Report printer.

#### **At the Time of Muster**

- Verify that muster reads from the panel have the correct time and date.
- If the date and time are wrong, stop the presentation of cards, and send the time and date to the panel.
- Test the correction.
- Repeat all card presentations. Multiple presentations of the same card at the Muster reader does not adversely affect the result of the Muster as the most recent time/date stamp is the one that is displayed.

---

**CAUTION:** A cold restart of the access control panel sometimes occurs if there is a serious power surge on the power or communication lines. This can cause corruption of the panel's database and time functions. The PW-2000 panels address the time problem by generating a system alarm 99 (Panel Database, System Alarms, Panel Reset Alarm) when the panel experiences a cold restart. WIN-PAK then sends the current Time and Date to the panel within 60 seconds of receiving this alarm. The default time and date after a cold restart is January 1st, Monday at 12:00 a.m. This time stamp appears on activities in the Event view and History report. Panel Time is critical to the proper operation of the muster function as the most recent event is used to determine the tracking/muster status of a card holder. If a card is presented to the Muster reader and the time and date stamp is earlier than the stamp from another reader location, there will be no change of status to the Muster (safe) location.

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In the event that the card database is lost or corrupted at the muster reader, WIN-PAK recognizes all read-types [Not Found, Time Zone, Normal, Trace, PIN Violation, and Expired] as valid muster reads, provided that the time is later than the previous card read as described above.

This function eliminates the need to reload cards or to have host grant enabled to a muster panel during a muster event. Only Valid and Trace card reads count at a Tracking reader.

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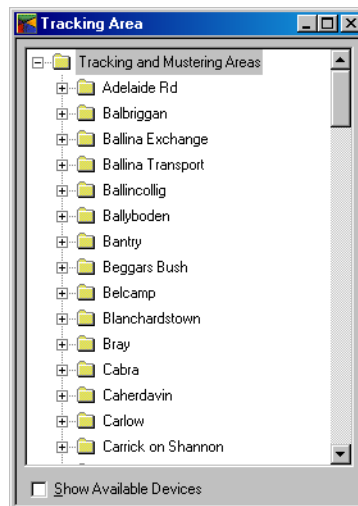
**NOTE:** It is recommended that the muster panel have the host grant feature set to disabled to optimize system communication in the event the panel would go through a cold restart.

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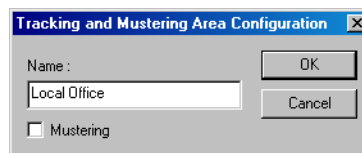
## Defining Tracking and Muster Areas

Tracking and muster areas are defined using a mapping tool. Branches are added to the tree representing either tracking or muster areas. Then the appropriate doors and readers are added to the branches.

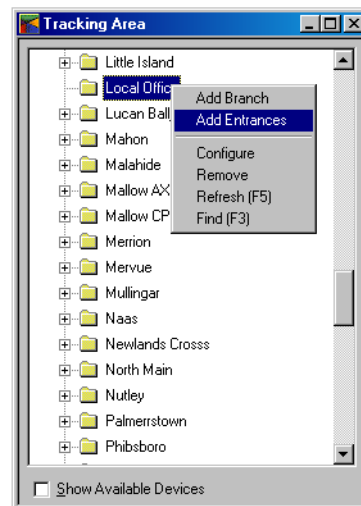
- 1 Select **Tracking Areas** from the Define option on the WIN-PAK Configuration menu. The Tracking Area window is displayed.



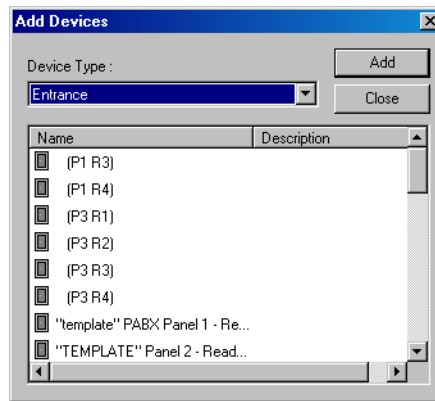
- 2 Right-click **Tracking and Muster Areas**, and select **Add Branch**. The Tracking and Muster Area Configuration dialog opens:



- 3 Enter the **Name** of the first area you want to define.
- 4 By default, the area is a tracking area. To designate it as a muster area, select the **Muster** check box.
- 5 Click **OK**. The new branch appears in the Tracking Area window.
- 6 Right-click the new branch and select **Add Entrances**.



- 7 When the Add Devices window is displayed, select from the list of available entrances.



Continue until you have added all of the branches and entrances required.

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**NOTE:** Entrances selected for a tracking area can be moved to other tracking areas, but are NOT available for a muster area. Entrances selected for a muster area can not be moved to any other muster area or a tracking area.

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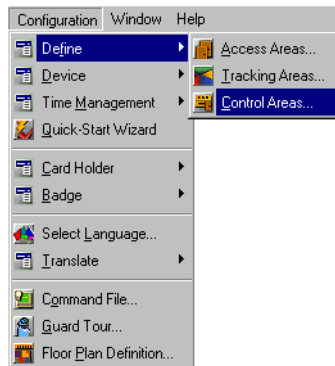
## Control Areas

Control Areas are used to define the Operator Levels, and to filter alarms and other information being sent to various views.

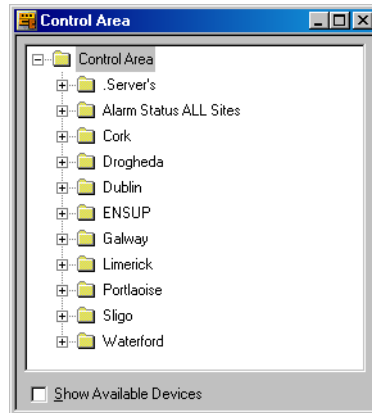
Control Areas are also used to defined the Control Map. The tree structure of the Control Map shows system devices, as well as the relationships of the communication server, loops, panels, input and output points, and groups to one another. In addition, the Control Map provides another method of controlling system devices.

Control areas should be created to provide a logical means of controlling the system. An example may be grouping entrances under several branches and separating access control hardware from video equipment, etc.

Begin Control Area definition by selecting **Control Areas** from the Define option on the WIN-PAK Configuration menu.



The Control Area window is displayed.



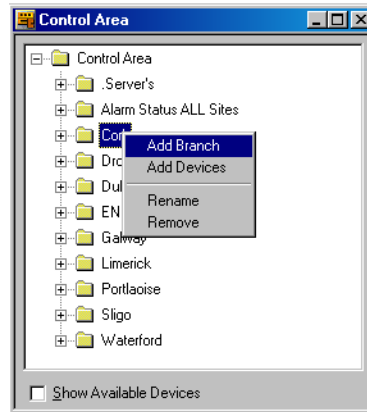
## Adding Branches, and Devices to the Control Area Tree

When configuring the Control Areas, you'll notice that devices can only be added to branches on the Control Area Tree. If the branch to which you need to add a device doesn't exist, it must be added.

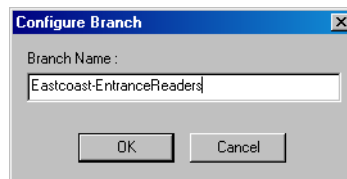
### Adding Branches

- 1 Add a Branch by right-clicking on the control area or the sub branch where the Branch is being added, and select **Add Branch** from the menu.





The Configure Branch dialog is displayed (next illustration).



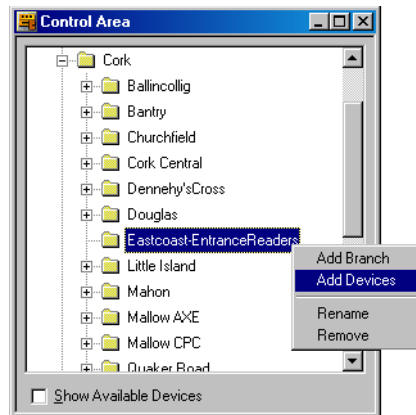
- 2 Enter the **Branch Name** and click the **OK** button.

The Branch is now available on the Control Area Tree.

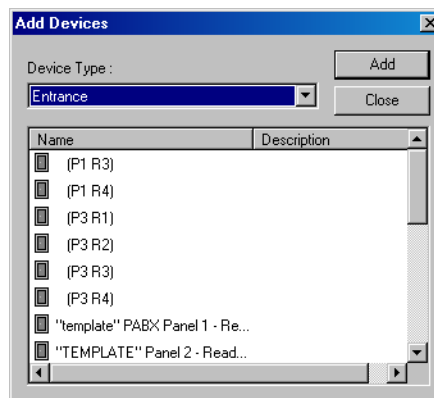
### Adding Devices to Branches

Once you have branches defined, individual devices can be added to the Control Area Tree.

- 1 Right click on the branch to which the device is being added and select **Add Device**.



The Add Devices window is displayed.



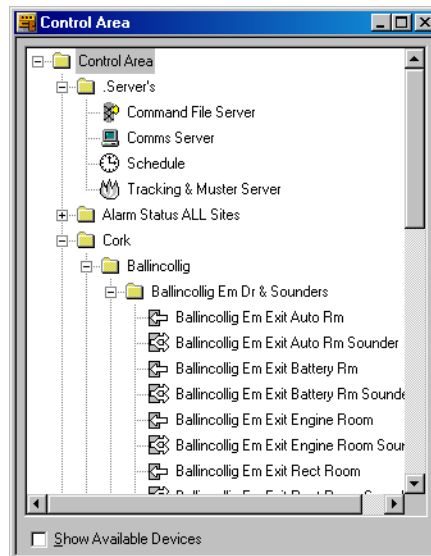
- 2 Use the **Device Type** list to select the type of device to be added to the Control Area. When you select a Device Type, the Name/Description list shows all devices not currently assigned to the Control Map.
- 3 Highlight each device to be added to the Control Area, and click **Add**. The device is immediately placed on the Control Area window.

The device is no longer available on the Add Devices window.

Continue this procedure until all the required devices are included in the Control Area.

- 4 Click the close button (X) in the upper right corner of the window to close the Add Devices window.

The Control Area Tree will be displayed.



### Showing Available Devices

Devices can also be added to the Control Area Tree by clicking the Show Available Devices check box on the Control Area window.

Selecting this option calls the Add Devices window, and allows you to highlight any branch on the Control Area Tree and add devices to it.

### **Removing a Branch or Device from the Control Area Tree**

To remove a branch or device from the Control Area Tree just right-click on it, and select Remove from the menu.

The branch or device is removed from the Control Tree and the device is now available [via the Add Devices window] for placement on another branch in the Control Area Tree.

Devices can be moved from one branch to another by selecting and dragging the device to a different branch. One branch and its devices can be moved in this manner also.

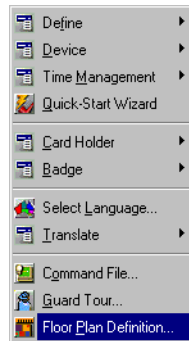
If the Quick Start Wizard was used, a branch named Quick Start Site was created. Use the above procedure to logically layout the control map.

## Floor Plans



The Floor Plan database contains information on all the floor plans that have been entered into the system. Floor plans can be added, changed, or deleted from the Floor Plan database.

The Floor Plan database is accessed via the Floor Plan Definition option on the WIN-PAK Configuration menu or by clicking the Floor Plan toolbar button.



The Floor Plan database lists existing floor plans by name and description.

Information in the Floor Plan database can be searched and sorted by name and description.

The Add, Edit and Delete buttons allow you to create new floor plans, edit existing ones, or remove floor plan definitions from the system.

## Floor Plan Definition

Designing a floor plan begins with a background. This background is a static graphic image that can be an actual floor plan drawing, a photo, or a simple graph. Floor plan backgrounds are imported as Windows metafile graphics (.wmf) that are scalable so the floor plan view can be easily enlarged or reduced without distortion. Floor plans can also be created without a background graphic.

The next step in floor plan definition is to add an ADV for each device you want to monitor or control from the floor plan. You can choose from any of the ADVs that have been defined. Different objects (e.g. doors, panels, C-100 loops) are available in the Floorplan Toolbox, representing the different types of ADVs.

Links to other floor plans, or to an Alarm or Event view, can also be added. In addition, a text block can be added to the floor plan. For example, if you want to create a legend explaining the color codes of the ADVs or give special instructions for the operator viewing a particular floor plan; just select the text object from the toolbox, drag it onto the background, and type in the text.

Once an object has been dragged from the toolbox onto the floor plan, it has a right-click menu that allows you to set its properties, copy it, or delete it.

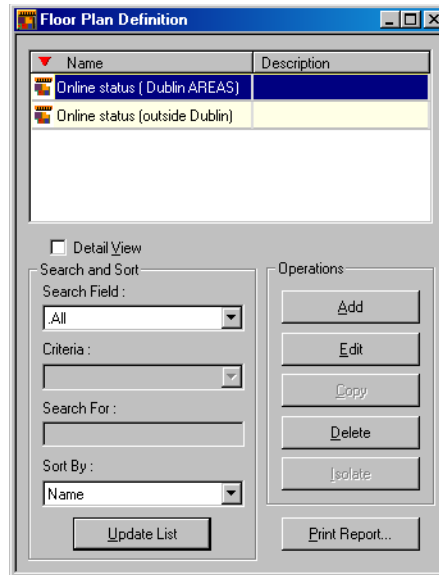
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**NOTE:** A Floor Plan object must be selected (left-click) before its properties can be changed. Be sure you have selected the correct object (there is a visible box around the selected object) before attempting to set its properties.

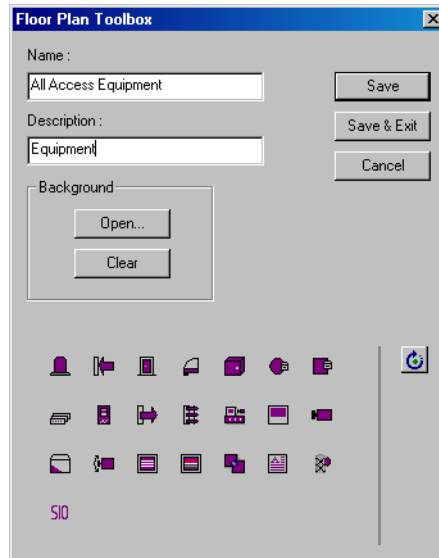
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## Adding a Floor Plan

- 1 Open the Floor Plan database by selecting **Floor Plan Definition** from the WIN-PAK Configuration menu.



- 2 Click **Add** to open the Floor Plan design window, along with the Floorplan Toolbox.

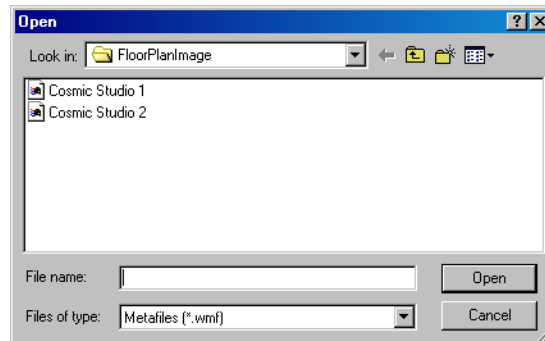


- 3 Enter the **Name** for the floor plan. A name is required. The name can be up to 30 alphanumeric characters in length.
- 4 Enter a **Description** of the floor plan if desired. The description can be up to 60 alphanumeric characters in length.
- 5 Complete the procedures in the following three sections.

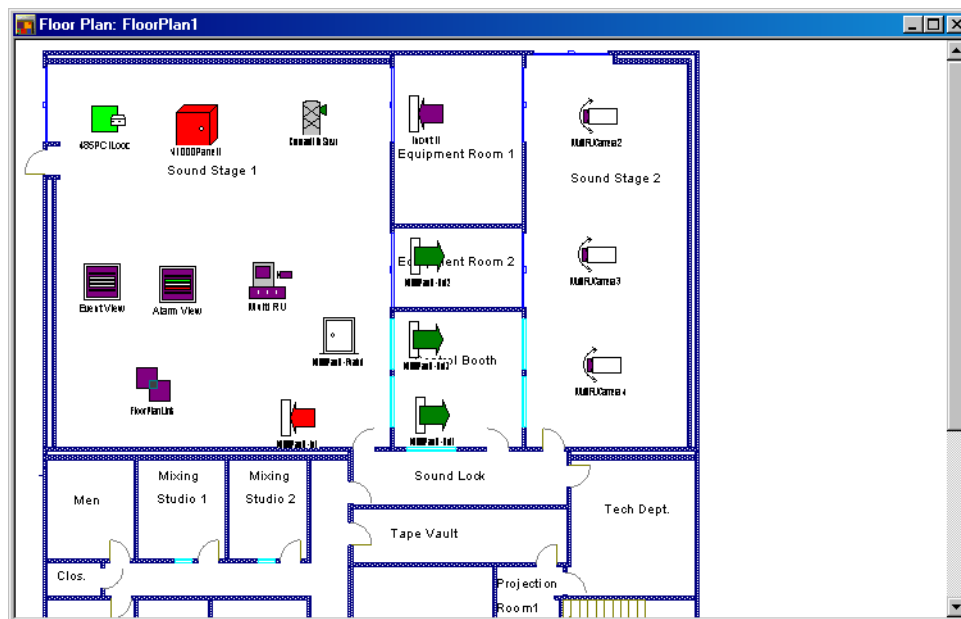
### Opening a Floor Plan Background

- 1 In the **Background** area of the Floorplan Toolbox, click the **Open** button. The Open window is displayed.





- 2 Navigate to **WINPAK PRO\Database\FloorPlanImage** directory and select a Floor Plan background. A sample image called "Cosmic Studio 1.wmf" can be found in this directory.
- 3 Click **Open**. The selected graphic file opens in the window behind the Floorplan Toolbox.



- 4 Add ADVs, links, and text objects to the background.

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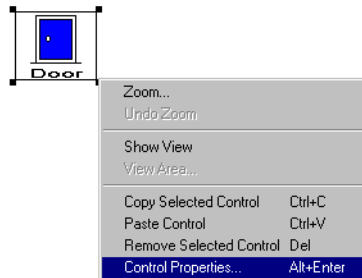
**NOTE:** Any graphic can be used for a Floor Plan background, as long as it is saved as a Windows metafile. (.wmf). Copy graphic files to the **FloorPlanImage** folder in the WIN-PAK Database directory.

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### Adding ADVs, Links and Text Objects to a Floor Plan

Adding objects to the floor plan is quite simple. Select an object from the Floorplan Toolbox and drag it onto the Floor Plan background. Once an item is placed on the floor plan, set its properties.

- 1 Right-click the object you have selected and click **Control Properties**.



- 2 The Control Properties window is displayed for the device selected. For example, if a door is the device selected, then a Door Control Properties window opens.

### ADV Icons



**Input:** Commonly used to signal an alarm condition.



**Input II:** Commonly used to signal an input condition or state not associated with an alarm condition.

Both "Input" and "Input II" use the same ADV type and allow Acknowledge All Alarms, Clear All Alarms, Shunt, Unshunt and Restore ToTime Zone control.



**Door:** Used with Entrance ADV.



**Door II:** Used with Entrance ADV for configuration of four different types of doors: left-handed, right-handed, double, or garage. Each door type displays an open or closed animation.

Both "Door" and "Door II" use the same ADV type and provide Acknowledge All Alarms, Clear All Alarms, Unlock, Lock, Shunt, Unshunt, Pulse, Timed Pulse and Restore To Time Zone control..



**Panel:** Used with all control panels. The ADV Provides Panel Initialize, Cancel Initialization, Buffer, Unbuffer, Acknowledge All Alarms and Clear All Alarms control.



**Loop C100:** Used with C-100 ADV. Provides Acknowledge All Alarms, Clear All Alarms, Buffer All Panels, Unbuffer All Panels, Set Retry Count and Set Command Timeout control. For remote C-100 loops, additional ADV control includes Connect Remote and Disconnect Remote.



**Loop PCI:** Used with N-485-PCI ADV. Provides Acknowledge All Alarms, Clear All Alarms, Buffer All Panels, Unbuffer All Panels, Sety Retry Count and Set Command Timeout control. For remote N-485-HUB loops, additional ADV control includes Connect Remote and Disconnect Remote.



**Modem Pool:** Used with Modem Pool ADV. Provides Acknowledge All Alarms, Clear All Alarms, Hang-up Modem and Reset Modem control.



**Communication Server:** Used with the communication server ADV. Provides Acknowledge All Alarms and Clear All Alarms control.



**Output:** Used with relay output ADV. Provides Acknowledge All Alarms, Clear All Alarms, and Clear All Alarms control.



**Group:** Used with relay group ADV. Provides Acknowledge All Alarms, Clear All Alarms, Energize, De-energize, Pulse, Timed Pulse and Restore To Time Zone control.



**Switcher:** Used with the CCTV switcher ADV. Provides Acknowledge All Alarms, Clear All Alarms, Send Time & Date, Send Camer Titles, and Camera To Monitor Switch control.



**Monitor:** Used with the monitor ADV. Provides Acknowledge All Alarms and Clear All Alarms control.



**Stationary Camera:** Used with the stationary camera ADV. Provides Acknowledge All Alarms, and Clear All Alarms control.



**Reader:** Used with the reader ADV. Provides Acknowledge All Alarms and Clear All Alarms control.



**Pan/Tilt Camera:** Used with pan/tilt camera ADV. Provides Acknowledge All Alarms, Clear All Alarms and Pan/Tilt/Zoom/Focus/Iris/Home control.



**Event View:** Used to display an Event View that can be limited to a defined control area, allowing the operator to see only what the viewer is programmed to view.



**Alarm View:** Used to display an Alarm View that can be limited to a defined control area, allowing the operator to see and control only what the viewer is programmed to view.



**Floor Plan Link:** Used to link to other floor plans. The link can provide a more detailed map or contain several ADVs [communication room where panels, modems and other devices are located] that could not fit in the primary floor plan. The Floor Plan Link will indicate alarms contained in the link to the main floor plan by color changes and blinking. The Floor Plan Link can also open as a separate window or in the same window as the main floor plan.



**Text:** Used to provide an area on the floor plan for special instruction to be entered.



**Command File Server:** Used with the command server ADV. Provides the ability to select and run a command file.



**SIO Board:** Used with the SIO Board ADV. Provides tamper and power status of the PRO-2200 SIO boards.

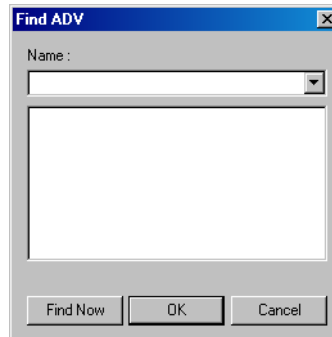


**ADV Rotation Tool:** Used to rotate the ADV to the desired angle. Click on the desired ADV, then click on the rotation tool and move the mouse to a corner of the ADV. The pointer will change to the rotation symbol.

### Adding an ADV to a Floor Plan Object

Any ADV that is defined within the WIN-PAK System can be associated with an appropriate floor plan object.

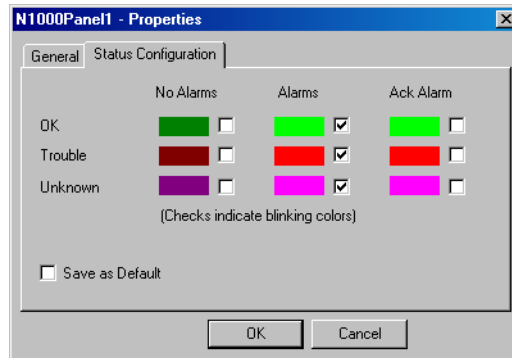
- 3 Click the **Find ADV** button [on the General tab of the Control Properties window] to locate the ADV to be associated with this object. The FindADV dialog is displayed.



- 4 Click **Find Now** to activate the ADV list. Large ADV lists can be reduced by typing in the first letter or letters of the name of the ADV in the Name box before clicking on Find Now.
- 5 Select the ADV you want associated with the object and click **OK** to return to the Control Properties window.
  - The Rotation Angle field defaults to zero. Change this setting only if you want the ADV rotated in the Floor Plan design window.
  - Use the **Show Name** and **Show Tooltip** check boxes to toggle these options on and off. Show Name displays the ADV name inside the ADV. This can be difficult to read if the ADV name is long or the ADV is small. To make it easier to read, select Show Tool Tip. The ADV name will appear on the screen when the mouse rests on the ADV.

#### Status Configuration

- 6 Click the **Status Configuration** tab, and make any desired changes in the color or blink settings.



Change a color by clicking the color swatch to open the Color window. Select a basic color or create a custom color and click **OK**. For more information on working with Colors, refer to the "Colors" section of chapter 5.

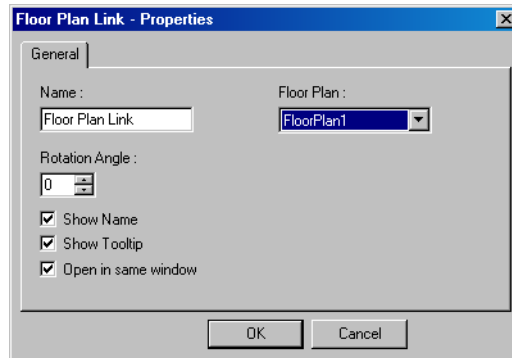
By default, devices blink when in a alarm state [indicated by the checked box]. To change this setting, select or deselect the appropriate boxes.

The new status configuration can be saved and applied as the default for other ADVs of this type by selecting the Save as Default check box.

- 7 Click **OK** to save the property settings.
- 8 On returning to the Floorplan Toolbox, click **Save** or **Save & Exit**.

### Link Properties

If the object being placed on the floor plan is a link to another floor plan, the Control Properties are slightly different.



Select the name of the target **Floor Plan** from the drop-down list on the right side of the dialog.

Use the **Open in same window** option to indicate if, when the originating floor plan is closed, the linked floor plan replaces it in the same floor plan window.

### Text Properties

If a Text object is being placed on the floor plan, move the mouse pointer to the text box edge until the pointer changes to double arrows. Then right-click the mouse to bring a Font window, instead of the Control Properties. Using the Font dialog, you can set the Font, Font Style, and Size for the text object.



### Arranging Objects on the Floor Plan

- 1 Click and drag the ADVs and other objects to the desired position on the Floor Plan background.
- 2 To enlarge or reduce an object, click it, and drag a corner sizing handle until the object is the desired size.
- 3 To rotate an object, select it (left-click), then right-click and open the object's **Control Properties**. Select the angle of rotation, and click **OK**.
- 4 Click **Save**.
- 5 When you have added and arranged all objects, click **Save and Exit** on the Floorplan Toolbox to close the Floor Plan window.

### Editing a Floor Plan

- 1 Select the floor plan you want to edit from the Floor Plan Definition window and click **Edit**.  
  
You can change the name or description of the floor plan, add or delete objects, or change the properties of existing objects.
- 2 To add ADVs or other objects, select the type of object you want from the **Floorplan Toolbox** and drag it onto the Floor Plan.
- 3 Select and right-click the object, and open its **Control Properties**. Set the object properties as desired.
- 4 When you have finished editing the floor plan, click **Save and Exit**.

### Deleting an Object from a Floor Plan

Delete an object from a floor plan by selecting it and right-clicking. Select **Remove Selected Control** from the subsequent menu.

## Guard Tours

A Guard Tour is a defined series of check points that a guard must activate within a given amount of time. Usually the check point is a reader where a card is presented, but it can also be input points attached to other devices, such as an egress button. The check points can be sequenced [they must be activated in a specified order] or they can be unsequenced [they can be activated in any order].

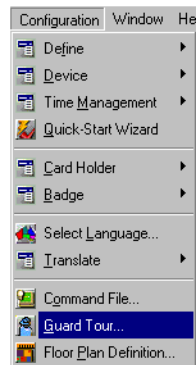
The tour definition sets the amount of time the guard has to get from one check point to the next. Alarms can be defined and priorities set for early arrival, late arrival, unsequenced, or missed check points. A grace period can be defined for each check point, allowing a certain number of minutes early or late to be accepted as a timely check-in.

## Guard Tour Database

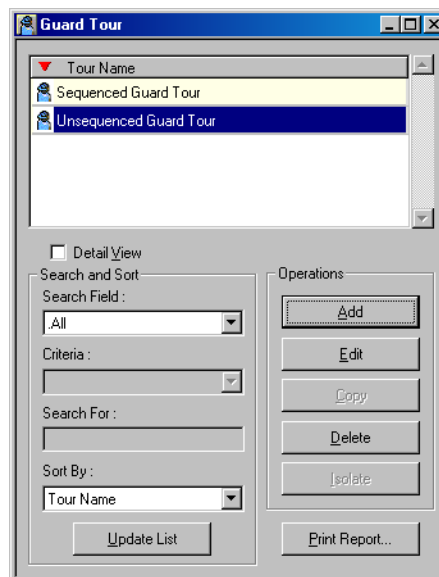
Guard tour definitions are stored in the Guard Tour database. The list of tours can be searched and sorted and reports can be generated. Details of a selected tour can be viewed by selecting the Detail View check box. Tours are added and edited in the Guard Tour database.

## Defining A Guard Tour

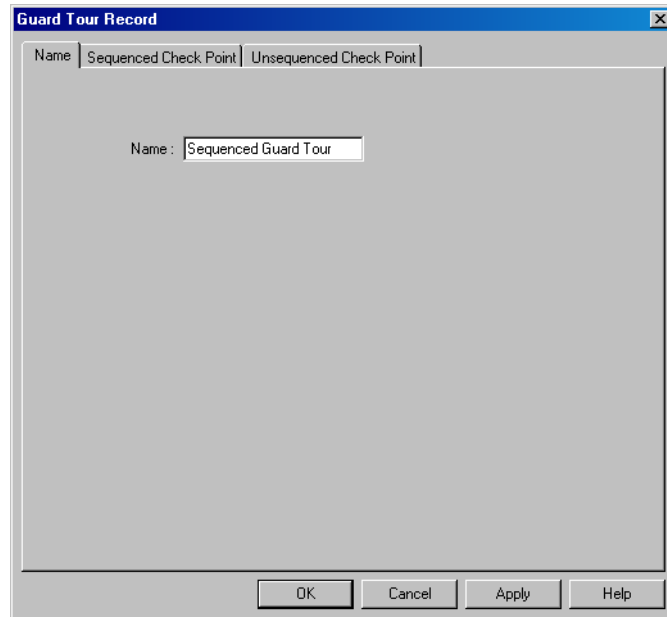
- 1 Select the **Guard Tour** option from the WIN-PAK Configuration menu.



The Guard Tour database window is displayed.

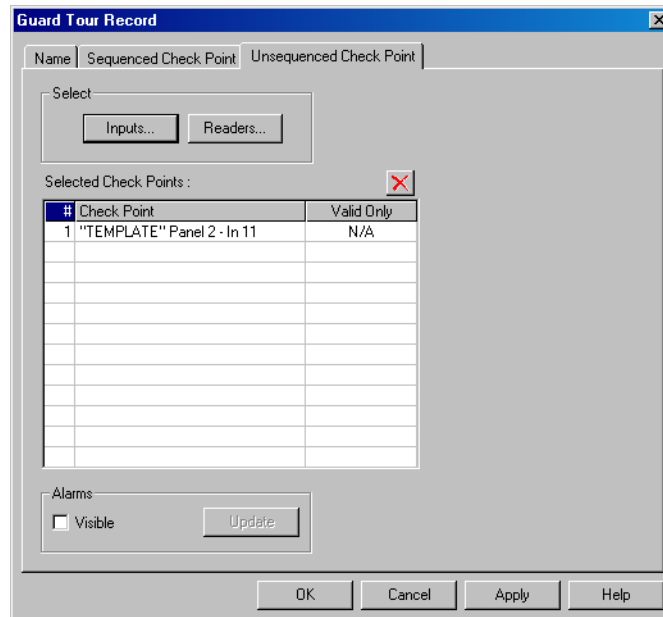


2 Click **Add** to open the Guard Tour Record.



- 3 Enter a descriptive **Name** for the Guard Tour.  
This field holds up to 40 characters.
- 4 Click either the **Sequenced Check Point** or **Unsequenced Check Point** tab. One guard tour can have both types of check points.

## Unsequenced Check Points



- 5 In the **Select** area of the window, click **Inputs** to select inputs points or click **Readers** to select readers. The Select dialog opens.



- 9 If the check point is a reader rather than an input point, you have the choice of using a valid card read only, or allowing either valid or invalid cards to activate a check point.

In this case an invalid card can activate a check point without unlocking the door. In the **Valid Only** column enter the type of card read required for the check point:

**Y** - for valid cards only

**N** - for any card (valid or invalid) will work

---

**NOTE:** Multiple Guard Tours can be run at the same time. If you plan to run tours concurrently, do not use the same unsequenced check points in both tours, as doing so will make it difficult to tell which guard is validating the point.

---

Use the **Visible** check box and **Update** button on the Unsequenced Check Point window to work with ADVs assigned to the check point devices. Refer to the "Check Point Alarms" section of this chapter for details.

On a specific tour, the checkpoints or readers can not be shared on both the sequenced and unsequenced tab. They may be defined multiple times on one tour type but not both on the same tour.

When you have finished adding all the Unsequenced Check Points, click the **Apply** button to save the information, and continue working in the Guard Tour Record. Click **OK** to save the information and exit the Guard Tour Record.





- 5 To change the order of the check points, use the up arrow or down arrows to move the selected point in the list.

Use the **Visible** check box and **Update** button on the Unsequenced Check Point window to work with ADVs assigned to the check point devices. Refer to the "Check Point Alarms" section (below) for details.

When you have finished adding all the Unsequenced Check Points, click the **Apply** button to save the information, and continue working in the Guard Tour Record. Click **OK** to save the information and exit the Guard Tour Record.

## Check Point Alarms

Sequenced check points on a guard tour generate alarms for four states: Early Arrival, Late Arrival, Missed, and Out of Sequence. Unsequenced check points generate alarms for one state only: Checked.

The priorities and dependent actions for these alarms are set in an action group which can be supplied to multiple check points. If the action group is changed, the settings for all Guard Tour Check Points associated with it are changed as well.

Action groups can be edited from the Guard Tour database by selecting a guard tour and clicking the Edit button, then clicking the Update button on the Sequenced or Unsequenced Check Point window.

Action groups can also be accessed through the Action Group database. See the "Action Groups" section of the "Device Map" section, of this chapter, for further information.

### Setting Check Point Alarms

- 1 Open the **Guard Tour** database [Configuration menu], and select a guard tour from the list.
- 2 Click **Edit** to open the associated Guard Tour Record.
- 3 Click either the **Sequenced Check Point** or **Unsequenced Check Point** tab.

**Guard Tour Record**

Name: Sequenced Check Point | Unsequenced Check Point

Select

Inputs... Readers...

Selected Check Points :

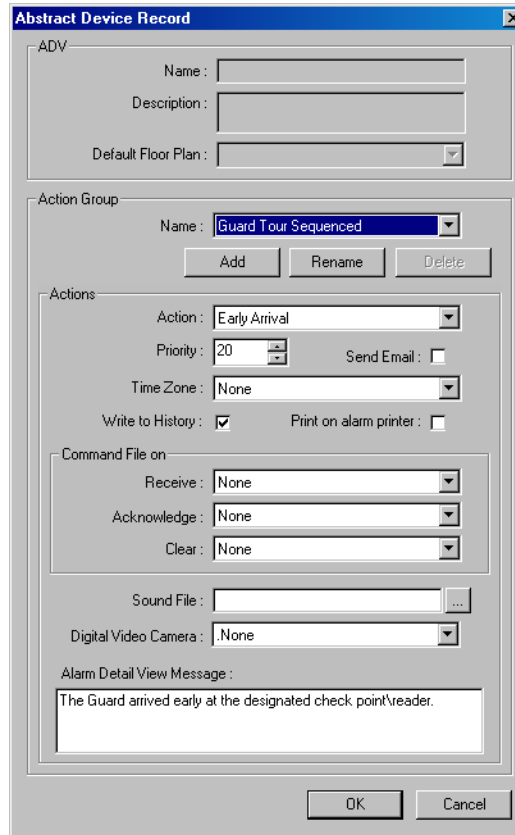
#	Check Point	Valid Only	Time (hh:mm)	(+) (hh:mm)	(-) (hh:mm)
1	"TEMPLATE" Panel 2 - In 16	N/A	00:01	00:00	00:00
2	"TEMPLATE" Panel 3 - In 10	N/A	00:01	00:00	00:00
3	Adelaide Rd. Rectify Rm. Exit (4 i10)	N/A	00:01	00:00	00:00
4	Balbriggan Fire Release	N/A	00:01	00:00	00:00

Alarms

☐ Visible Update

OK Cancel Apply Help

- 4 In the **Alarms** area of the window, select the **Visible** check box to view the current action group settings [on the ADV window].
- 5 Click the **Update** button on the Guard Tour Record window to edit these settings. The Abstract Device Record for the check point is displayed:



The image shows a software dialog box titled "Abstract Device Record". It contains several sections for configuring device settings:

- ADV**: Includes fields for "Name", "Description", and a "Default Floor Plan" dropdown.
- Action Group**: Includes a "Name" dropdown (currently showing "Guard Tour Sequenced"), and "Add", "Rename", and "Delete" buttons.
- Actions**: Includes an "Action" dropdown (showing "Early Arrival"), a "Priority" spinner (set to 20), a "Send Email" checkbox, a "Time Zone" dropdown (showing "None"), a "Write to History" checkbox (checked), and a "Print on alarm printer" checkbox.
- Command File on**: Includes three dropdowns for "Receive", "Acknowledge", and "Clear", all currently set to "None".
- Sound File**: Includes a text field and a browse button.
- Digital Video Camera**: Includes a dropdown menu currently set to "None".
- Alarm Detail View Message**: Includes a text area containing the message: "The Guard arrived early at the designated check point\reader."

At the bottom right are "OK" and "Cancel" buttons.

## 6 Select an **Action Group**.

If an action group for reader check points has been defined, select it from the Action Group list. All of the properties of the selected action group are then applied to this check point. Click **OK** to return to the Guard Tour Record window.

If no action group has been defined, click the Add button (just beneath the Action Group field) and enter a name for the new Action Group. Press the ENTER key on your keyboard to set the new Action Group name.

7 Select an **Action** for the alarm state.

8 Assign a **Priority** to the alarm.

---

**NOTE:** 1 is the highest priority; 99 is the lowest. If no priority is assigned, no further information can be entered.

---

9 Select a **Time Zone** during which the action group is activated.

---

**NOTE:** If None is selected as the Time Zone, the defined actions take effect regardless of the time.

---

10 Select any **Command Files** you want activated in response to the alarm state. You can choose to activate command files on any combination of Receive, Acknowledge, and Clear.

11 If desired, select a **Sound File** to be activated in response to receiving the alarm.

12 Select the appropriate check box to **Print** the event and/or **Write it to history**.

13 Enter a **Message** to be sent to the Alarm View detail in response to the action.

14 Repeat this procedure for each alarm state for which you want a response.

15 Click **OK** to save the changes and return to the **Guard Tour Record** window.

## Command File Database

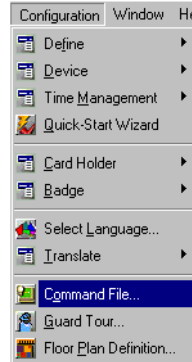
Text files containing device instructions are stored in the Command File database.

Command Files are defined by assigning a name and description to one or more commands. This file is then saved as a Command File.

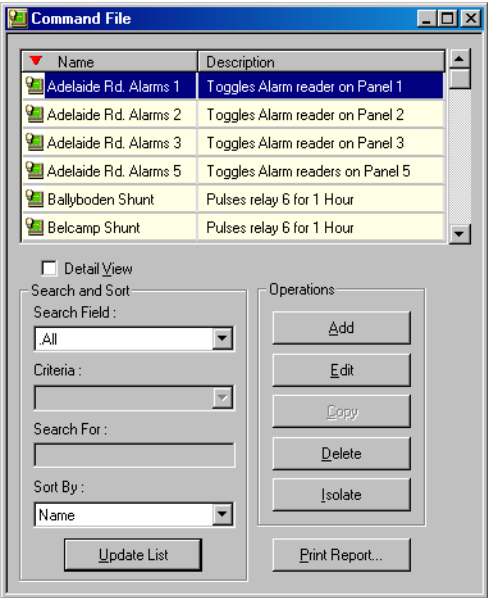
In setting up an ADV Action Group, Command Files can be used to set up dependencies. In other words, when a particular event takes place, a designated command file is activated. For example, a Command File can be activated automatically on receiving, acknowledging, or clearing an alarm, as defined in the Action Group.

### Defining Command Files

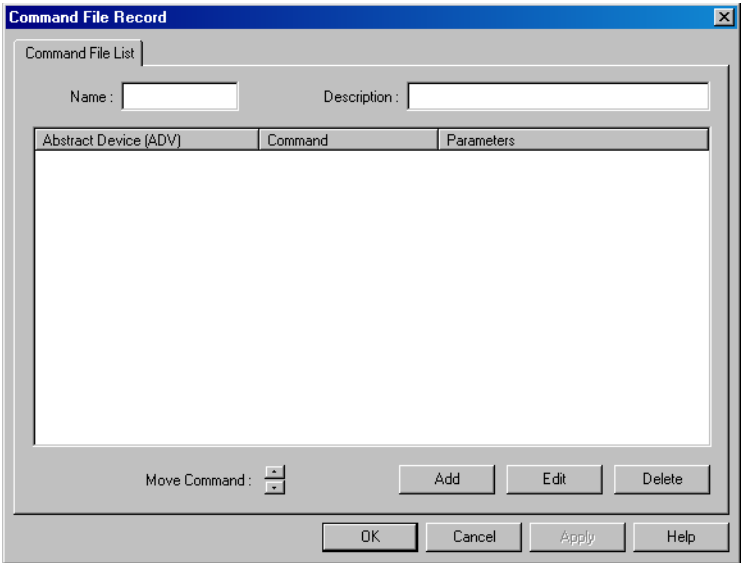
- 1 Select **Command File** from the WIN-PAK Configuration menu.



The Command File database window is displayed (next illustration).



- 2 Click **Add** to open the Command File Record window .



- 3 Enter a descriptive **Name** for the command file (with up to 30 characters).
- 4 Enter a **Description** (with of up to 60 characters) for the command file if desired.
- 5 Click the **Add** button to open the Command window in order to further define the Command File.



- 6 Select an **ADV Category** for the command file.
- 7 Select the **ADV** for the command file.

---

**NOTE:** The ADV selected determines which commands are available.

---

- 8 From the **Command** list, select the desired command. Commands that are not listed can be sent to a panel as Custom Commands. See the following procedure.

---

**NOTE:** If parameters are required for the command you have selected, choose them or enter the required variables in the **Parameters** area of the window.

---

- 9 Click **OK** to close the Command window. The new command is added to the list in the Command File Record window.
- 10 Click **OK** to close the Command File Record window and save the changes to the Command file.

---

**NOTE:** Add as many commands as you wish to this file. If necessary, use the **Move Command** arrows to adjust the order of the commands you have entered.

---

### Available Commands

The following list shows standard commands available when defining Command Files.

ADV	Commands	Parameters
<b>CCTV</b>	Camera	Go Home
	Go to Preset	Preset #
	Iris Open	
	Iris close	
	Pan Left	
	Pan Right	
	Refresh	
	Stop	
	Tilt Down	
	Tilt Up	
	Zoom In	
	Zoom Out	
<b>CCTV Switcher</b>	Custom Command	Custom Command
	Switch Camera	
	to Monitor	
	Camera ID	Camera ADV
<b>CCTV Monitor</b>	Monitor ID	Monitor ADV
	Refresh	
	Switch Camera (Camera ID)	Camera ADV
<b>Door</b>	Lock	
	Pulse	
	Timed Pulse	0 - 65, 335 sec.
	Unlock	



<b>Input:</b>	Shunt	
	Switch To Time	
<b>Loop:</b>	Zone Control	
	Unshunt	
	Buffer All Panels	
	Unbuffer All Panels	0 = Hard , 1=Soft
<b>Output &amp; Group</b>	De-energize	
	Energize	
	Pulse	
	Switch to TimeZone Control	
	Timed Pulse	0 - 65, 335 sec.
<b>Panel:</b>	Buffer	
	Unbuffer	
	Custom Command	
<b>Server (All):</b>	Refresh	
<b>RS232 Connect.</b>	Custom Command	

---

**NOTE:** When a panel is buffered, transactions are stored in the panel RAM memory. When a panel is unbuffered, it transmits stored information to a computer, then continues to transmit ongoing access transactions to that computer. Transactions are not stored in the panel RAM.

A buffer command can be either hard or soft. Normally, when an unbuffered panel receives a buffer command, it switches to the buffered mode. When the buffered panel receives an unbuffer command, it switches back.

However, if a panel receives multiple soft buffer or unbuffer commands, it does not switch modes until it receives the same number of buffer or unbuffer commands.

However, a hard buffer or unbuffer command overrides any number of soft commands. When a panel receives a hard buffer or unbuffer command it switches state, regardless of how many soft buffer or unbuffer commands it has received.

---

## Adding Custom Commands

If the standard commands contained in the system don't quite suit your needs, you can easily add a custom command for CCTVs, Panels, and RS232 Connections. With the Command dialog displayed.

- 1 Select a device from the **ADV Category** list.

- 2 Select the specific device name from the **ADV** list.
- 3 Select **Custom Command** from the **Command** list.
- 4 Type the command in the **Custom Command** field [in the Parameters area of the window].
- 5 Click **OK**.

---

**NOTE:** Refer to the "Abstract Devices and Floor Plans" sections of this chapter to learn more about working with command files.

---

## Editing Command Files

Command Files are quite easy to edit.

- 1 Select the Command File you want to edit from the main Command File database window.
- 2 Click **Edit** to open the Command File Record.

Change the Command File **Name** or **Description** by typing over the existing entries with new entries.

Delete a command by selecting it in the list and clicking the **Delete** button.

Use the **Move Command** arrows to rearrange the order in which the commands are sent. The commands at the top of the list are sent first.

- 3 When you have completed editing this Command File, click **OK**.

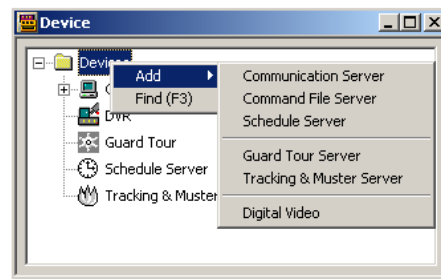
## Access DVPRO

To use Access DVPRO, a Digital Video must be configured on the Device Map.

**Note:** For Access DVPRO, RapidEye Admin/View Software needs to be installed on the machine from where it has to be viewed.

## Configuring Access DVPRO

- 1 On the Configuration menu, select Device > Device Map to open the Device window.



- 2 On the Device window, right-click on the Devices folder and select Add > Digital Video. The Digital View Configuration window appears.

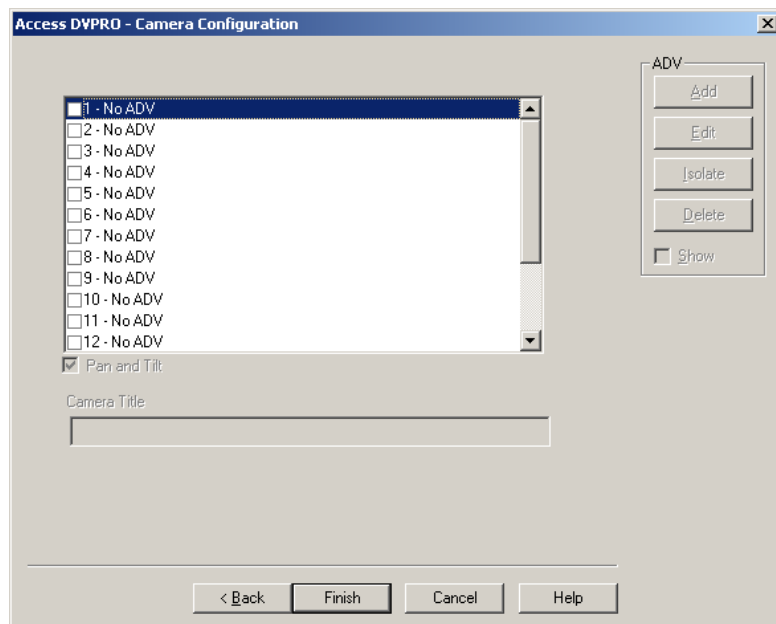
A screenshot of the 'Digital Video Configuration' window. It contains fields for Name, Description, Type (set to Access DVPRO), User, and Password. On the right, there is an 'ADV' section with buttons for Add, Edit, Isolate, Delete, and a Show checkbox. At the bottom, there are navigation buttons: < Back, Next >, Cancel, and Help.

- 3 In the Type list, select Access DVPRO.
- 4 Type in the Name, User and Password parameters. The Description parameter is optional.

**NOTE:** The Access DVPRO name must be identical to the RapidEye Site name.

**NOTE:** To control a digital video device, the User and Password must be identical to the User and Password defined in the RapidEye unit software.

5. Click **Next**.



6. On the Access DVPRO dialog box, for each of the camera defined in the Access DVPRO system, select a camera ADV, and then click **Add**. The sequential order of the ADVs corresponds to the sequential order of the Access DVPRO cameras. Selecting the Pan and Tilt option defines a camera as a PTZ (pan tilt zoom) camera. Clearing the Pan and Tilt option defines the camera as a stationary camera.

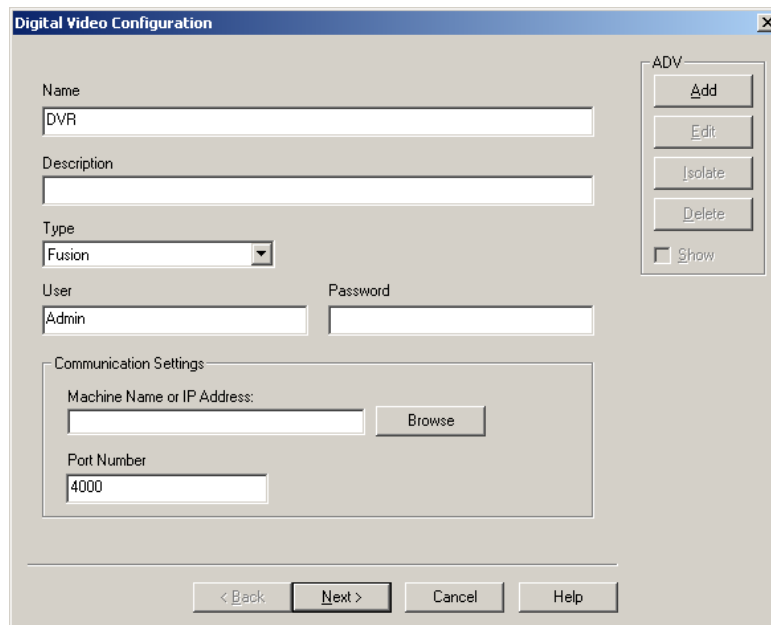
7. Click **Finish**. The Device window displays the newly defined Access DVPRO devices.

## Fusion

To use **Fusion**, a digital video must be configured.

### Configuring Fusion

- 1 On the Configuration menu, select Device > Device Map. The Device dialog box appears. (Refer Configuring Access DVPRO section).
- 2 Right-click the Devices folder and select Add > Digital Video. The Digital View Configuration window appears.



The image shows a 'Digital Video Configuration' dialog box. It has a title bar with the text 'Digital Video Configuration' and a close button. The main area contains several input fields and a list of buttons. The 'Name' field is labeled 'Name' and contains the text 'DVR'. The 'Description' field is labeled 'Description' and is empty. The 'Type' field is labeled 'Type' and has a dropdown menu with 'Fusion' selected. The 'User' field is labeled 'User' and contains the text 'Admin'. The 'Password' field is labeled 'Password' and is empty. Below these fields is a section titled 'Communication Settings' which contains a 'Machine Name or IP Address' field with a 'Browse' button next to it, and a 'Port Number' field with the text '4000'. On the right side of the dialog box, there is a vertical list of buttons: 'Add', 'Edit', 'Isolate', 'Delete', and 'Show'. The 'Show' button is preceded by a small square icon. At the bottom of the dialog box, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

ADV

Add

Edit

Isolate

Delete

Show

Name

DVR

Description

Type

Fusion

User

Admin

Password

Communication Settings

Machine Name or IP Address:

Browse

Port Number

4000

< Back

Next >

Cancel

Help

- 3 In Type list, select Fusion.
- 4 Type in the Name, User and Password parameters. The Description parameter is optional.

---

**NOTE:** To control a digital video device, the User and Password must be identical to the User and Password defined in the Fusion software.

---

- 5 Click the Browse button or specify the Machine Name or IP Address of the Fusion DVR.
- 6 Specify the Port Number. It should be the same as configured in Fusion DVR.

---

**NOTE:** Default Port Number, is recommended.

---

- 7 On the Fusion dialog box, for each camera defined in the Fusion system, select a camera ADV, then click **Add**. The sequential order of the ADVs corresponds directly to the sequential order of the Fusion DVR cameras. Selecting the Pan and Tilt option defines a camera as a PTZ (pan tilt zoom) camera. Clearing the Pan and Tilt option defines the camera as a stationary camera.
- 8 After defining cameras, click **Finish**. The Device window displays the newly defined Fusion devices.

## Chapter 5

# Badging

---

Badge Layouts Database

Badge Definition Window





## Badge Layouts Database

The WIN-PAK integrated badging utility allows you to design and print badges from within the system itself. Video images and signatures can be imported or [with the appropriate hardware] captured and saved for printing badges or for viewing video images in AutoCard Lookup when used at selected readers.

Badge layouts [or designs] are templates that define the size and properties of a badge, as well as the placement of elements on the badge. Badge templates are then associated with cards.

When a card is issued to a card holder, his or her information is automatically merged with the badge template, creating an individual card.

Badges can be printed on Technology or non-Technology cards. Most any Windows-compatible printer, ink jet, laser, or PVC card printer can be used to print badges. Special PVC card printers allow two-sided printing and magnetic stripe encoding.

The Badge Layout utility can also be applied in Human Resources applications providing photos and other Card Holder information.

The Badge Layouts database contains information on various badge layouts and designs in your WIN-PAK System. The Badge database also provides access to the Badge Layout Utility which is used to create and edit badges.

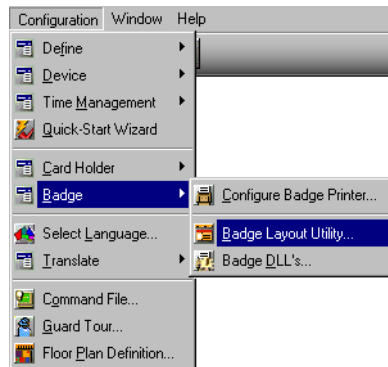
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**NOTE:** The Badge Layouts database contains badge templates [or designs] not access cards.

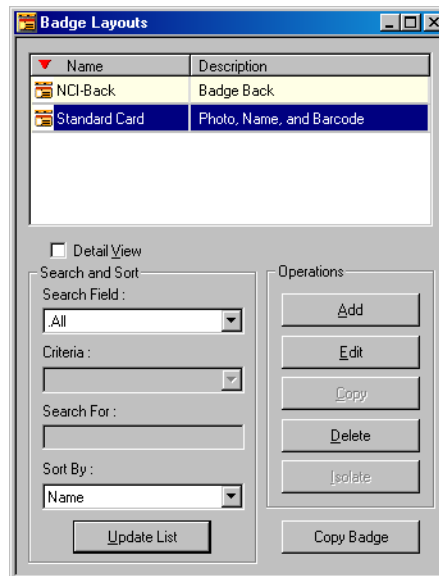
---

## Adding Badge Layouts to the Database

Open the Badge Layouts database by selecting **Badge Layout Utility** from the Badge option from the main WIN-PAK Configuration menu.



The Badge Layouts database window is displayed.



The main database window contains a list of badges which can be searched and sorted either by name or description. View a badge by highlighting it in the database list and selecting the **Detail View** check box.

Click **Edit** to make changes in the selected badge. Deleting a badge from the list removes it from the system. Use the **Copy Badge** button to make a copy of a selected badge definition.

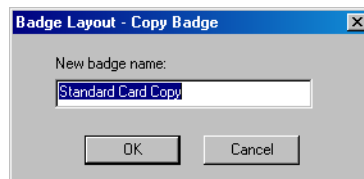
Click the **Add** button to open the **Badge Definition** window.

### Copying a Badge Layout

Copying a badge design allows you to more easily create several badges with the same basic layout, but with distinguishing features (e.g. the background color). Create your basic design, copy it, and edit the copy to suit your needs.

With the Badge Layouts database window open, select the badge to be copied, and click the **Copy Badge** button at the bottom of the window.

The Copy Badge dialog prompts you to enter the **New badge name**.



Click **OK** to save the new badge name and return to the main Badge Layouts database window. The new badge can now be edited to suit your needs.

## Editing a Badge Layout

With the Badge Layouts database window open, select the badge to be edited, and click the **Edit** button.

The Badge Definition window opens, allowing you to make changes to the badge layout.

When you have made all necessary edits to the badge layout, **Save** the layout and close the Badge Definition window.

A prompt will remind you to save changes to the layout if you forget to do so before attempting to close the window.

## Isolating and Deleting a Badge Layout

Selecting a Badge Layout and clicking Delete permanently deletes the selected badge layout from the database. However, if the badge layout you are attempting to delete is assigned to one or more cards, you are prompted to confirm your deletion:



Clicking the Delete button on the Delete Badge Layout prompt removes the layout from the system and clears the link to all cards. Once the link is broken, the cards can not be reattached. Caution should be used when deleting a badge layout as it could be attached to thousands of cards.

## Creating Badges

The full-featured WIN-PAK badge layout utility, allows you to create badge designs with shaded or graphic backgrounds, logos, text, and barcodes, and the ability to leave placeholders for card holder photos and signatures.

The graphical design tools employed in the Badge Definition window make setting up and laying out badge designs quite simple.

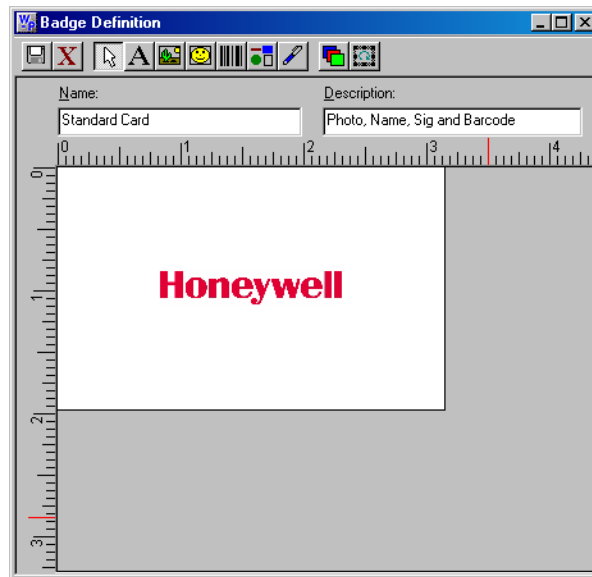
Badge layout begins with you naming and describing the layout, and defining the size and orientation of your badge.

Once the basic badge design has been defined, items are added to the layout and can be placed, moved, resized, and modified in a number of ways.

Whether you are creating a new badge from scratch [by clicking the **Add** button on the main Badge Layouts database window], or are working from a badge layout copy, you will use the Badge Definition window as your desktop while designing the badge.

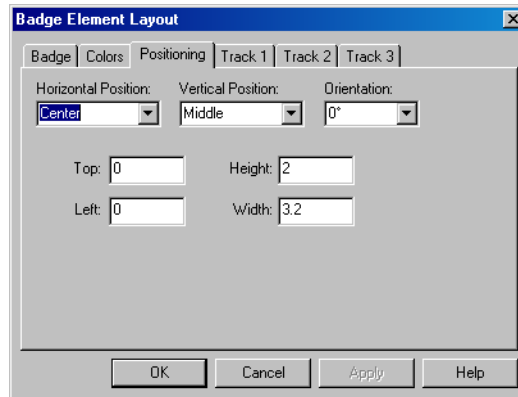
## Badge Definition Window

The elements on the Badge Definition window make badge layout and design simple. The outline inside the Badge Definition window shows the current badge size and shape.



### Setting the Printable Size of the Badge

- 1 Right-click anywhere in the Badge Definition window, and select **Properties**. The Badge Object Properties window is displayed.
- 2 Click the **Positioning** tab of the Badge Object Properties window.



- 3 Set the **Height** and the **Width** of the badge in millimeters. The badge outline resizes to these dimensions.

The default badge size is 50 mm high by 80 mm wide. These dimensions work with most PVC printers.

---

**NOTE:** To change the badge orientation from landscape (horizontal) to portrait (vertical) enter the larger dimension in the **Height** field.

---

- 4 Click **OK** to apply the settings and return to the Badge Definition window.

## Badge Definition Window: Right-Click Menu

The right-click menu is used for a number of control functions with the Badge Definition window.

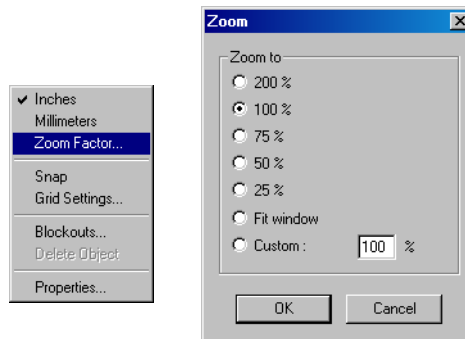
### Ruler Definitions

The Inches and Millimeters options on the Badge Definition right-click menu allow you to determine if you want the rule displayed on window to measure in inches or millimeters.

A check mark indicates which option is currently in use. To switch from one unit of measure to another, simply select the desired unit from the menu.

### Zoom Factor

Selecting Zoom Factor from the Badge Definition right-click menu allows you to enlarge or reduce the badge layout view, via the Zoom dialog:

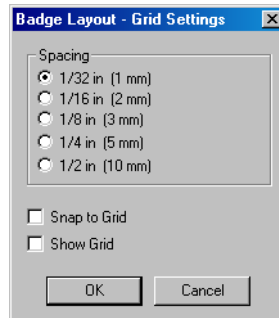


### Snap and Grid Settings

The Snap menu item indicates [via a check mark] whether the Snap To setting is on or off.

The Grid Settings option calls a dialog, with which you can indicate if grids should be turned on for the badge layout area.





Grids are evenly spaced points on the badge layout area that assist in sizing and aligning items. The grid can be used as a visual aid in placing items, or you can have items snap to the grid for more precise object alignment.

Use the **Grid Settings** dialog to select the spacing of your grid.

Select **Snap to Grid** if you want items to snap to the grid when they are moved. With Snap to Grid selected, when an item is moved close to a grid mark, it is pulled to it as if to a magnet.

Select **Show Grid** if you want the grid marks visible in the layout area.

## Blockouts

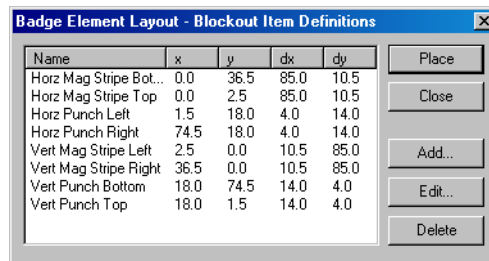
Blockouts provide a non-printing area for badges. The blockout keeps a defined area of the badge free of printing which is useful in preventing printing over a magnetic stripe or hole punch area in the card.

Unlike other badge objects, the blockout has no properties. Within the item layering order, the blockout always remains on top.

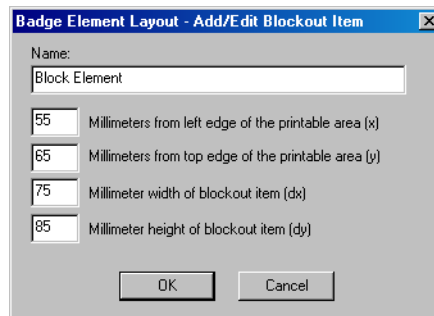
**NOTE:** While blockout is generally effective in preventing overprinting of the magstripe area, some card printers will print resin black over the blockout area. Therefore, avoid placing any black type over the magstripe area.

### Setting a Blockout

- 1 Use the Badge Definition right-click menu to select **Blockout**. The Blockout Items Definitions dialog is displayed:



- 2 Click **Add**, to call the Add/Edit Blockout Item dialog:



- 3 Enter a **Name** for the blockout area.
- 4 Enter position settings for left edge, top edge, width, and height of the blockout area.

You may have to measure an actual card and print a test to determine the exact position for the blockout.

5 Click **OK**.

### Placing a Blockout on a Badge Layout

To place a blockout on a badge layout, right-click and select Blockout from the menu. When the Blockout Items Definition dialog is displayed, select the desired blockout and click the **Place** button.

### Deleting Objects

Objects and elements placed on the badge layout can only be deleted by selecting them, and using the right-click menu Delete Object option.

### Properties

The **Properties** dialog available from the Badge Definition right-click menu differs depending upon the item selected. For example, each of the following objects has its own set of properties:

- Badge Object Properties
- Badge Bitmap Object Properties
- Badge Text Object Properties
- Badge Photo Object Properties
- Badge Barcode Object Properties
- Badge Shape Object Properties
- Badge Signature Object Properties

Details on properties are covered as each item is documented in this chapter.


## Badge Objects: Introduction

Six types of objects can be placed on a badge: text, bitmap, photo, barcode, shape, and signature. A toolbar button represents each object.



text   bitmap   photo   barcode   shape   signature

Badge items are layered as they are placed. This is only noticeable when one item overlaps another.

The layering order is changed by using the Select Next Item  button from the toolbar. As each item is selected, it is brought to the front.

### Adding Objects to the Badge Layout

- 1 Click the toolbar button representing the object you want to place.
- 2 Click within the badge (drawing) area of the Badge Definition window and drag the box to the desired size.
- 3 Release the mouse, and a dotted box is visible, representing the area where the object will be placed.

Each type of object has a different set of properties used for its configuration [available by right-clicking on the item]. For example, a Bitmap item requires a source file, a Text item requires a font definition, etc. Refer to the “Badge Object Properties” section of this chapter for details on working with specific badge objects.


### Moving and Resizing Badge Layout Objects

Standard Windows-type conventions are used to move and resize badge layout items.

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
**NOTE:** If it is difficult to select an object, use the

**Change Layering** button  or the **Select Next Item**

 button to locate the item you want to select.

---

#### Moving Objects

Move the cursor over the object to be repositioned until the cursor becomes a four-headed arrow. . Click the object and drag it to the desired location, then release the mouse button.

### Resizing Objects

Click on an item in the badge area of the window to select it for modification. Move the cursor over a sizing handle on the edge of the selected object until the cursor changes to a double-headed arrow  $\updownarrow$ . Click and drag the sizing handle until the object is the desired size and shape. Release the mouse button.

## Badge Object Properties

The basic Properties dialog available from the Badge Definition right-click menu includes six tabs allowing for settings that apply to the badge layout, including Badge, Colors, Positioning, and Track 1, Track 2, Track 3.

The Badge tab allows you to import or capture background images. The Badge tab is also used to indicate how the image will fit into the available space.

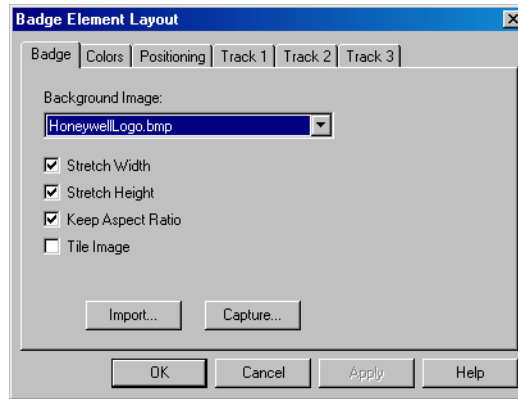
Use the Colors tab to select the background color for the badge.

The Positioning tab allows you to change the size and orientation of the badge

Track 1, Track 2, and Track 3 tabs are used for magnetic stripe encoding.

### Badge Tab

The Badge Layout Utility can set a colored or graphic background for the entire printable area of the badge. Other items are then placed on this background. The outline in the Badge Definition window (next illustration) shows the printable area.



There are three ways to provide a background for a badge: select a single color for the background, capture an image for the background, or import a graphic that can be added to the Background Image list.

Use the **Badge** tab to import background images, as well as to determine how the program will fit the image to the available space.

---

**NOTE:** If no badge object is selected when the dialog is opened, the settings apply to the entire badge. If a shape, bitmap, or other object is selected, a different Object Properties dialog appears, and the settings apply to the selected object.

---

Background Images can be imported into the WIN-PAK database from any directory. Once added to the WIN-PAK database, background-image files are available to any workstation.

Scanned images, photos taken with a digital camera, and artwork created in a drawing or paint program can all be incorporated into your badge design. However, they do need to be saved in one of the following supported file types: .bmp, .jpg, .pcx, and .tga.

The Stretch Width, Stretch Height, and Keep Aspect Ratio options allow graphics to fill placeholders that are not exactly the same size as the graphic. The stretch options make the graphic fill the space as you have defined it. If the image is a different shape than the space, it will be distorted. If you also select Keep Aspect Ratio, the graphic will be as large as possible, without distortion.

For example, if you place a square photo placeholder in the badge design, then place a tall rectangular photo in the placeholder, with the Keep Aspect Ratio option selected, the photo will be as tall as the placeholder, but will leave a margin on the sides through which the placeholder background color will show. To keep the margin from showing through, select the placeholder, then open the **Colors** tab and select **Transparent Background**.

### Options on the Badge Tab

**Background Image:** Select a graphic file from this list to use as a background.

**Stretch Width:** Stretches the graphic to fill the defined horizontal space.

**Stretch Height:** Stretches the graphic to fill the defined vertical space.

**Keep Aspect Ratio:** Maintains the image proportions.

**Tile Image:** Repeats the image to fill the defined space.

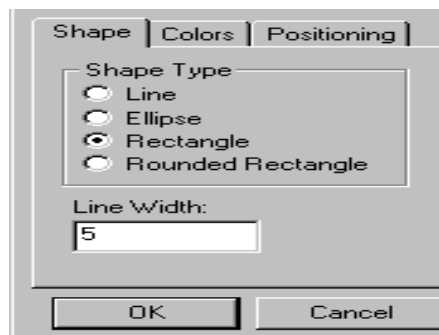
**Import:** Click this button to select graphic images to be imported into the WIN-PAK database and added to the list for background images.

**Capture:** Use this button to open the **Capture Graphic** window for capturing video images.

## Applying a Bitmap Image to a Badge Background

Applying an image to a badge is essentially the same as applying wallpaper to your PC desktop.

- 1 Right-click on the badge in the Badge Definition window, and select **Properties**. The Badge Object Properties window is displayed.
- 2 Click the **Badge** tab of the Badge Object Properties window.



- 3 Click the **Background Image** field down-arrow, and select an image from the list.

---

**NOTE:** Images can be added to the Background Image list by importing existing graphic files or by capturing live images using a computer equipped with a video camera and capture board.

---

- 4 Select the **Stretch Width** and **Stretch Height** check boxes to make the image cover the entire badge. To fill as much of the badge as possible, without distorting the image, select **Keep Aspect Ratio**.
- 5 Click **Apply** to view the changes, or click **OK** to apply the image to your badge and exit the Badge Object Properties dialog.



## Importing Graphics for Backgrounds

Importing existing bitmap graphics allows an infinite number of possibilities for background images. For example, you can scan a logo or photograph, take photos with a digital camera, or use a graphic design software program to create artwork.

---

**NOTE:** When creating your background file, remember, the file must be saved as a Windows Bitmap (.bmp), JPG (.jpg), Targa (.tga) or PCX (.pcx) file. For best results, the file should be at least to 300ppi (pixels per inch).

---

Keep in mind the orientation and size of the badge, as well as the placement of photos, barcodes, and text so important parts of your background are not obscured.

Create your background image to be as close in size as possible to the printable area of your badge. Keeping the sizes the same will avoid distortion or loss of image quality caused by resizing or stretching the image to fill the badge.

### To Import a Background Graphic:

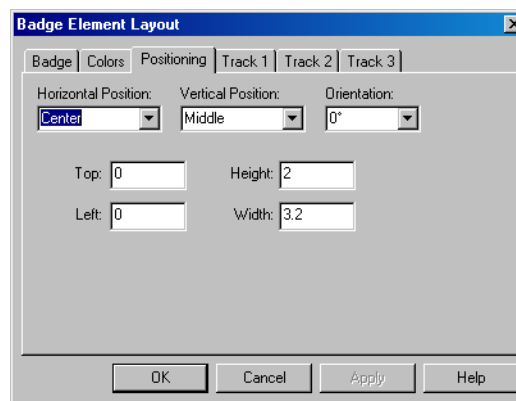
- 1 Right-click in the badge background area of the Badge Definition window and select **Properties**. Open the **Badge** tab of the Badge Object Properties window.
- 2 Click the **Import** button. The familiar Open dialog is displayed, allowing you to navigate to the folder containing the graphic file to be imported and select the file.
- 3 Double-click the file name [or highlight it and click **Open**]. The graphic file is added to the Background Image list and to the Badge Image folder in the WIN-PAK database.

## Positioning Badge Elements

The Positioning tab of the Badge Object Properties window allows you to change the size of the badge or its orientation, determine the alignment of objects within a photo or graphic placeholder, rotate an object on the badge layout, and adjust a background image's position on the badge. For example:

### To Work with a Background Image:

- 1 Right-click in the badge background area of the Badge Definition window and select **Properties**. Open the **Positioning** tab of the Badge Object Properties window.



- 2 Use the down-arrow to the right of the Horizontal Position field to select either Left, Center, or Right.
- 3 Indicate the **Vertical Position** of the image by selecting Top, Middle, or Bottom.
- 4 Set the degree of rotation in the **Orientation** field.

**Options on the Positioning Tab**

**Horizontal:** Places the graphic object in the top, center, or bottom of the defined area.

**Vertical:** Places the graphic object to the right or left side [or in the middle] of the defined area.

**Orientation:** Rotates the selected object by 90-degree increments.

**0°** Places the object upright

**90°** Rotates the object 90° clockwise

**180°** Places the object upside-down

**270°** Rotates the object 90° counterclockwise

**Top:** Position from the top of the badge in millimeters (normally 0 for PVC printers).

**Left:** Position from the left edge of the badge (in millimeters (normally 0 for PVC printers).

**Height:** Height of the badge in millimeters or inches.

**Width:** Width of the badge in millimeters or inches.

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NOTE: By default, badge height and width is shown in terms of inches.

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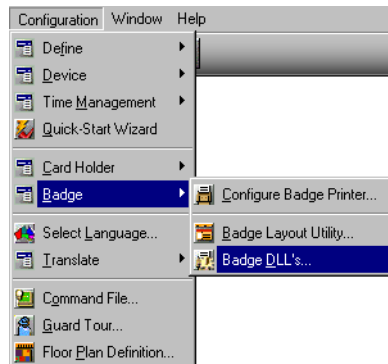
## Video Backgrounds

Another way to create a background graphic is to capture a video image. Your video equipment, including a supported video capture card, or compatible TWAIN device must be installed.

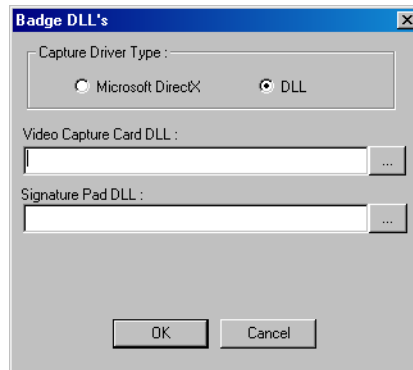
## Installing Badge DLLs

A specific dynamic-link library (.dll) file is required for the video capture card, TWAIN device [image acquisition device], and signature pad used with the WIN-PAK System. The DLLs for currently supported hardware are included in the WINPAK PRO directory and can be installed from within WIN-PAK.

- 1 Select **Badge DLL's** from the **Badge** option on the Configuration menu.



- 2 When the **Badge DLL's** dialog opens click the browse button next to the hardware device you have installed.



The Open window appears allowing you to navigate through the WINPAK PRO directory.

- 3 Select the appropriate DLL file and click **Open** [or double-click on the file]. The DLL name is entered in the hardware device field in the Badge DLL's window.

---

**NOTE:** If no DLL appears, verify that the Windows Explorer folder Options, View is set to show all files.

---

- 4 Click **OK** to save your selections and close the **Badge DLL's** window.

## Capturing a Video Background

- 1 Right-click the badge and select **Properties**. Select the **Badge** tab of the Badge Object Properties window.
- 2 Click the **Capture** button. The Capture Image window is displayed showing the live view from your video camera. If TWAIN is selected as your video DLL you will have a different view and will need to select the source and get the image.



- 3 Click **Settings** to expand the window and access the video settings.
- 4 Adjust the **Video** settings (explained below) until the picture is satisfactory.
- 5 If you are not using a flash, set the **Grab** settings to the same values as the **Video** settings. If you are using a flash, reduce the **Grab Brightness** and **Contrast**.

---

**NOTE:** Exact settings will vary depending on the type of flash and other lighting elements being used. The exact settings can only be determined by experimentation.

---

- 6 Click **Freeze**, to capture the image. Once the picture is frozen or captured, you can make a number of adjustments.

The Freeze/Live button toggles between static and live-view image. When the desired image is on screen, click Freeze to keep it. Click Live to switch back to the live camera view. Adjust the slides at the right of the background image to enhance the quality.

- 7 Use the cropping frame to crop the image and adjust its proportions. If you want a particular proportion, enter it in the **Aspect Ratio** field and make sure to select the **Lock Aspect Ratio** check box.

---

**NOTE:** When using the default badge size, set the aspect ratio to .625 to fill the entire area.

---

- 8 If the image is too dark or too light, adjust the **Photo Brightness**.
- 9 Set the degree to which you want to **Compress** the captured image.
- 10 Click **OK** to save the image.

### Video Settings

These settings apply to the live on-screen video image.

**Brightness:** Lightens or darkens the entire tonal range of the image.

**Contrast:** Expands or contracts the entire tonal range of the image. The difference in highlights and shadows can be greatly increased or decreased.

**Saturation:** Adjusts the vibrancy [the level of color] in the image.

**Hue:** Adjusts the value of color in the image. Adjusting this can correct images that seem to have incorrect color.

**Sharpen:** Sharpens blurry images by increasing the contrast of adjacent pixels.

### Grab Settings

These settings are applied to the camera when an image is captured. If you are not using a flash, set the Grab Brightness and Contrast the same as the Video settings. If a flash is used, reduce both the Brightness and Contrast settings lower than the Video settings. This prevents the camera from overexposing the picture.

The exact settings must be determined by experimentation, as they vary depending on the type of flash, distance from the subject, and other lighting being used.

**Brightness:** Lightens or darkens the entire tonal range of the image to be captured.

**Contrast:** Expands or contracts the entire tonal range of the image to be captured.

### Photo Settings

Photo settings are applied to the video image after it is captured.

**Brightness:** Lightens or darkens the entire tonal range of the captured image.

**Compress:** The captured image is saved as a .jpg file which uses compression technology to decrease the file size. If desired, use the slider to adjust the compression of the saved image. The lower the number, the greater the compression. However, images lose quality as they are compressed, so avoid over-compressing. A setting of 100 applies the least amount of compression and provides the best image quality. A setting of 30 applies the most compression, but provides lower image quality.



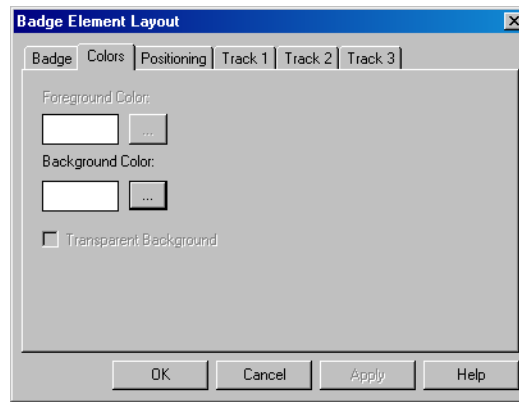
## Working with Colors

The Colors tab of the Badge Object Properties window allows you to select colors for badge elements. If no item is selected when the Properties dialog opens, the color is applied to the entire badge background. The foreground color is not available unless a badge object is selected.

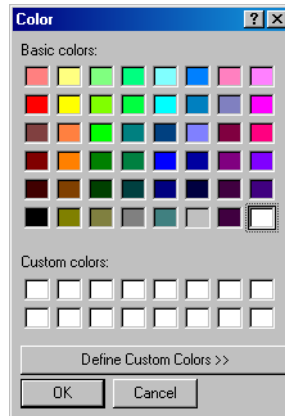
The simplest background to apply to a badge is a single, solid color.

### Applying a Basic Background Color to a Badge

- 1 Right-click the badge, and select **Properties**.  
Open the **Colors** tab from the Badge Object Properties window.



- 2 Click the browse button to the right of the **Background Color** field. The Color window is displayed:



- 3 From the Basic Colors palette (at the top of the window), click the color swatch you want to use for a background.
- 4 Click **OK**. The Color dialog is dismissed, and the selected color is placed in the Background Color field [on the Color tab].
- 5 Click **Apply** or **OK** to apply the color to your badge. Solid dark colors may not print evenly on all printers, so it is recommended that you use a light colored or white background.

## Creating Custom Colors

If the preset colors on the color palette don't meet your specifications for a background, object, or text color, you can create a custom color.

Define Custom Colors >>

Click the **Define Custom Colors** button at the bottom of the Color window to display the custom color selector.

The color selector describes colors in two common color models: HSL (hue, saturation, luminosity) and RGB (red, green, blue). RGB corresponds to PMS #/% assignment.

A third common color model is CYMK (cyan, magenta, yellow, and black), based on the use of four colors of ink to approximate a full spectrum of colors. Many badge printers use the CMYK color model and, therefore, will give only an approximate match for the colors displayed on the screen.

## Hue, Saturation and Luminosity

The HSL color model is based on how colors are viewed by the human eye. Colors are described by three basic characteristics.

- **Hue** is the wave length of light reflected by [or transmitted through] an object. It is the characteristic commonly called color, and identified by color names such as yellow, green, or orange. Hue values range from 0 [red] through 239 [running through the spectrum and returning to red].
- **Saturation** is the strength of the color. It indicates the amount of gray in the color. Saturation values range from 0 [gray with no trace of color] through 240 [fully saturated color with no gray].
- **Luminosity** is the relative brightness or darkness of the color. Luminosity values range from 0 [black] through 240 [white] with the untinted color at about 120.

## Red Green Blue

The RGB model is based on the representation of the visible spectrum by mixing red, green, and blue light. Computer monitors are based on this model, creating colors by emitting light through red, green, and blue phosphors.

The RGB model assigns a value for each pixel ranging from 0 [black] to 255 [white] for each color component. For example, the red on the Basic color palette has a Red value of 255, a Green value of 0 and a Blue value of 0.

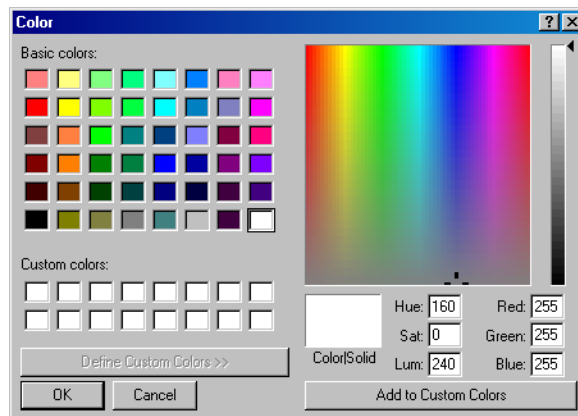
## Color Solid

The color swatch shows the color as it appears on the monitor and gives an approximation of how the color appears when printed. Because monitors can only show a certain number of colors at a time, the colors may be dithered. This dithering appears on the monitor only. The color prints as a solid.

The Solid swatch shows the closest solid color your monitor can display with its current settings. If your monitor is set to display 256 colors, the closest match is displayed. If your monitor can display more colors, the Solid swatch will probably match the Color swatch exactly.

## Selecting Custom Colors

- 1 With the Color window displayed, click the **Define Custom Colors** button to expand the color palette window.



- 2 If you know the **Red, Green, Blue** equivalents for a specific color, enter those values in the appropriate fields.

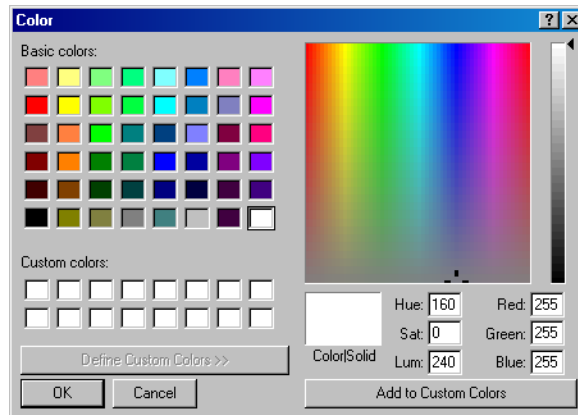
-OR-

If you know the **Hue, Saturation, Luminosity** equivalents for a specific color, enter those values in the appropriate fields.

-OR-

Use the color selector to choose the color you want.

- 3 When the desired color appears in the Color|Solid field, click the **Add to Custom Colors** button. The new color is added to the Custom color palette on the left side of the window.



- 4 Click **OK** to select the new custom color and return to the Colors tab on the Badge Object Properties window. The selected color now appears in the Background Color field.
- 5 Click **Apply** or **OK** to apply the background color to your badge.

---

**NOTE:** Due to differences in monitors, printers and print media, the printed badge color may be a different shade than the color displayed on your monitor.

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## Magnetic Stripe Encoding

Track 1, 2, and 3 tabs on the Badge Object Properties window are used when magnetic stripe data is defined for the badge.

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**NOTE:** Some encoders and some cards do not support Track 3. Check your printer and card supplier before using this feature.

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For each track, specify the magnetic stripe format: IATA, ABA, or TTS. The industry standards for track/format assignment are:

- **Track 1 - IATA:** The NR-2-WR and NR-6-WR read ABA on Track 1.
- **Track 2 - ABA:** The NR-1-WR, NR-3-WR, NR-5 and the NR-5-KP read ABA on Track 2.
- **Track 3 - TTS:** The NR7 reads ABA on Track 3.

Each track can have a number of data items. The number of items is limited by the amount of data that will fit on a given track. See your printer documentation for the number of characters that can be encoded using each format. Only certain ASCII characters can be used, depending on the format selected for that track.

**IATA** accepts the alphanumeric characters 0 – 9, and A – Z, plus various punctuation characters (ASCII 32 - 95). Lower case letters are forced to uppercase as IATA doesn't understand lowercase. If a field separator is required, it is designated by the ^ character.

**ABA** accepts only numeric characters 0–9 and various punctuation characters (ASCII 48–63).

**TTS** accepts numeric characters 0–9, and various punctuation characters (ASCII 32–95).

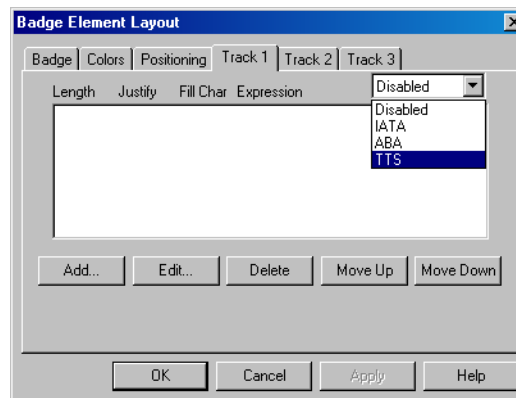
As an example, the maximum number of characters that can be printed using the Datacard IC III printer are listed in the following table:

Track	Type of Character	Max. Char.	bits per inch
Track 1:	alphanumeric	76 characters	210 bits/in.
Track 2:	numeric only	37 characters	75 bits/in.
Track 3:	numeric only	104 characters	210 bits/in.

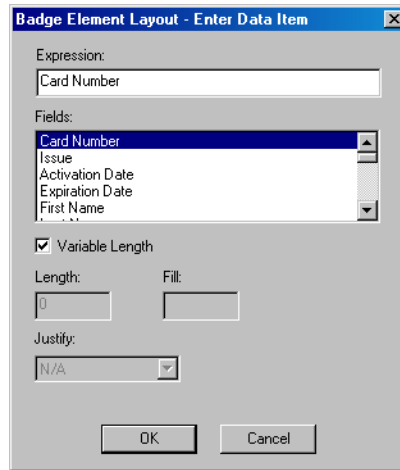
These specifications differ from the ISO 7811/2 Standard because of printer limitations.

### Adding or Editing Magnetic Stripe Data

- 1 From the Badge Object Properties window, select the tab for Track 1, Track 2, or Track 3, then choose the format from the drop-down list in the upper right corner.



- 2 Select **Add** or **Edit** to define items to be added to the track, via the Enter Data Item window.



- 3 Select **Fields** or type in data for the **Expression**. See the following explanation for magnetic stripe encoding options.
- 4 Click **OK** to save your entries and return to the **Track** tab.
- 5 When several data items have been entered on the Track tab, they can be reordered using the Move Up and Move Down buttons.  
  
To remove a data item from the list, select it and click the **Delete** button.
- 6 When you have completed the data item list, click **OK** to save your changes.



## Magnetic Stripe Encoding Options

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**NOTE:** The options available for a given track depend on which format is selected.

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**Expression:** Any combination of text or database fields can be entered. Either type the desired text, or double-click an item in the **Fields** list, to enter it in the **Expression** field.

**Fields:** Select a field and double-click it to add it to the expression. All the Card and Card Holder note fields are displayed in this list.

**Variable Length:** If the **Variable Length** check box is selected, the field length is adjusted to match the number of characters in the data item.

**Length:** If a value is entered for **Length**, the data item is truncated or padded so that it is precisely that number of characters.


**Fill:** Enter the character to be used to pad the data to fit a fixed-length field.

**Justify:** This only applies to fixed-length data items. If a data item is shorter than the number of characters allotted for it, it can be justified left, center, or right, within those characters. All other characters are set to the **Fill** character.

## Badge Objects: Text and Text Boxes

Text is added to badge layouts by first drawing a text box, then typing in the text. The appearance of the text can be changed by changing its font, color, size, or orientation. Text can be justified horizontally and vertically within the text box, and it can be rotated within the box at set intervals.

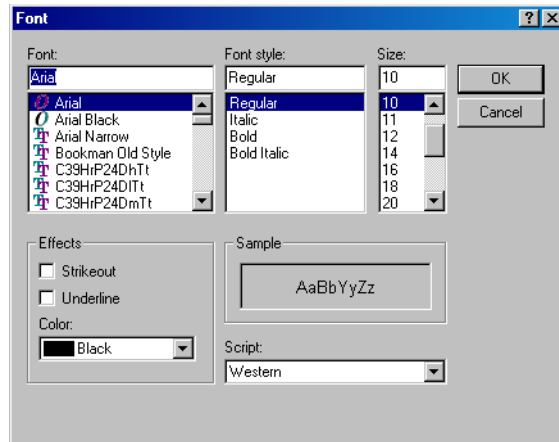
### Creating a Text Box on a Badge

- 1 Click the text button  on the Badge Definition window toolbar.
- 2 Click in the badge layout area and drag the text box to the desired size and shape.
  - Move the text box by selecting it and using the four-headed arrow to drag it to the desired position.
  - Resize the text box by selecting it and using the two headed-arrow to drag one of the sizing handles to the desired position. If you use one of the corner sizing handles, you can change the height and width of the box at the same time.

### Adding and Editing Text

Once a text box has been created you can add [or edit] text within the box.

- 1 Right-click inside the text box and select **Properties**. The Badge Text Object Properties dialog is displayed (next illustration):



- 2 On the **Text Block** tab, enter the desired text [in the **Text** field].
- 3 To place specific card holder data in the text box, make a selection from the **Fields** list: Double-click on a field to add it to the Text area of the dialog.
- 4 Use the **Size font to box** check box to have the font automatically sized to fit the text box.

---

**NOTE:** Enabling this option changes the text size to fit the text box when resized. The text will grow or shrink proportionally when the box is resized. This may not be desirable in fields where the data is a variable such as a name, as the size of the font will change.

---

- 5 Click **Apply** to preview the text on the badge.
- 6 Click **OK** when finished.

## Changing Fonts and Sizes

Format text by right-clicking inside the text box and selecting Properties. Select the Text Block tab of the Badge Text Object Properties window.

Click the **Font** button. A familiar Windows-style Font window is displayed. The fonts listed are those installed via your Windows operating system.

Using standard selection conventions select a **Font**, **Font Style**, **Size**, and specify any **Effects** you want assigned to the font.

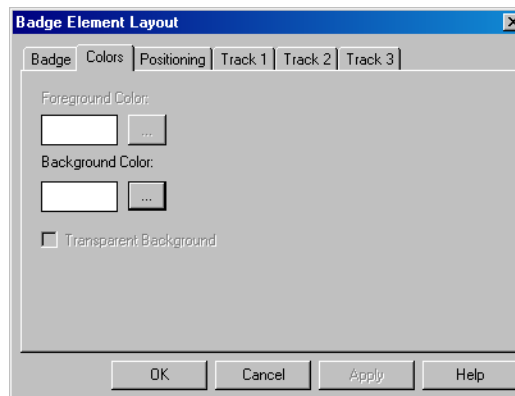
---

**NOTE:** If the Size Font to Box option is selected, the font size will adjust automatically to fill the text box.

---

## Changing Text Color

- 1 Right-click inside the text box and select **Properties**. Select the Colors tab of the Badge Text Object Properties window.



- 2 Click the browse button to the right of the **Foreground Color** field. The Color window opens, allowing you to select a text color.

---

**NOTE:** For additional color choices click the Define Custom Colors button. See "Creating Custom Colors" for more information.

---

- 3 Click **OK**. The new type color is displayed in the **Foreground Color** field.
- 4 Click **Apply** to preview the new color on the badge.
- 5 Click **OK** when finished.

### Changing Text Background Color

- 1 Right-click inside the text box and select **Properties**. Select the Colors tab of the Badge Text Object Properties window.
- 2 Click the **Background Color** browse button to open the **Color** window.
- 3 Select a color swatch.

---

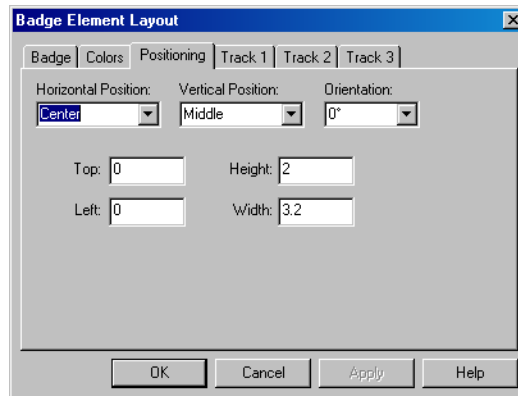
**NOTE:** For additional color choices click the Define Custom Colors button. See “Creating Custom Colors” for more information.

---

- 4 Click **OK**. The new background color is displayed in the Background Color field.
- 5 If you want a transparent background for the text block [the items behind it show through], select the **Transparent Background** option.
- 6 Click **Apply** to preview the background color on the badge.
- 7 Click **OK** when finished.

## Positioning Text in a Text Box

- 1 Right-click inside the text box and select **Properties**. Select the **Positioning** tab of the Badge Text Object Properties window.



- 2 Indicate the **Horizontal** and **Vertical Position** of the text within the text box.
- 3 Select the **Orientation** or angle for the text to appear on the badge. Options include:
  - 0°** - Text is upright
  - 90°** - Text is rotated 90° clockwise
  - 180°** - Text is upside-down
  - 270°** - Text is rotated 90° counterclockwise
- 4 To change the location or size of the text box enter the information in the **Top**, **Left**, **Height**, and **Width** fields.
- 5 Click **Apply** to view the changes, or **OK** to apply the changes and exit.

## Deleting a Text Block

To delete a text box, right-click the text box and select **Delete Object** from the subsequent menu. The text box is removed from the badge.

## Badge Objects: Photo Placeholders

A photo placeholder is used in a badge design where you want a card holder photo to appear. When the badge is assigned to a card and card holder, the appropriate photo from the card holder database is applied to the badge.

WIN-PAK allows up to 99 photos for each card holder. These can be different pictures of the employee, or pictures of the employee's automobile, or equipment assigned to the card holder, such as a laptop computer. A photo index number is used to indicate which card holder photo should appear on the badge.

Photo placeholders can be formatted in a number of ways. The photo can be aligned horizontally and vertically within the box and stretched or shrunk to fill the space. It can also be rotated at set intervals. Photos can be ghosted, that is faded or lightened, so they look like a watermark. A ghosted photo is harder to photocopy and may provide added security against unauthorized reproduction of ID cards.

## Adding a Photo Placeholder to a Badge Layout

- 1 Click the **Place Photo**  Badge Definition window toolbar button.
- 2 Click in the badge layout area and drag the box to the desired size and shape.

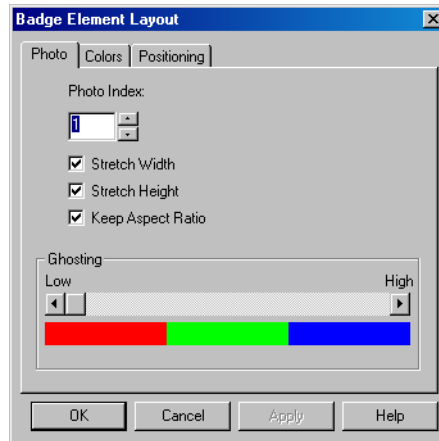
---

**NOTE:** Move the photo placeholder by selecting it and dragging it to the desired position. Resize the photo placeholder by selecting it and dragging one of the sizing handles until it is the desired size.

---

## Formatting a Photo Placeholder

- 1 Right-click inside the photo placeholder and select **Properties**. Select the **Photo** tab of the Badge Photo Object Properties window.



- 2 Set the **Photo Index** if necessary. The Photo Index indicates which card holder picture will appear on the badge. The default is 1.
- 3 Select the **Stretch Width**, **Stretch Height**, and **Keep Aspect Ratio** options to automatically size the photo to fill the placeholder, without distorting the photo's proportions.

Use the Colors and Positioning tabs as documented in the "Working with Colors" and "Positioning Badge Elements" sections of this chapter.

- 4 Click **OK** when finished.



## Creating a Ghosted Photo

Use the slider bar in the **Ghosting** area of the Badge Photo Object Properties window to set the degree of transparency for the photo. You will probably need to experiment with this in order to get the desired effect.


## Deleting a Photo Placeholder

To delete a photo placeholder, right-click on it, and select **Delete Object** from the subsequent menu. The photo placeholder is removed from the badge layout area.

## Badge Objects: Barcodes

Barcodes can be added to a badge in a number of formats, and can be used for a variety of functions. Barcodes can contain information specific to the badge design or to the card holder. For example, the barcode can contain the card number or the user's social security number.

## Adding a Barcode to a Badge Layout

- 1 Click the **Place Barcode**  button on the Badge Definition window toolbar.
- 2 Click in the badge layout and drag the barcode box until it is the desired size.

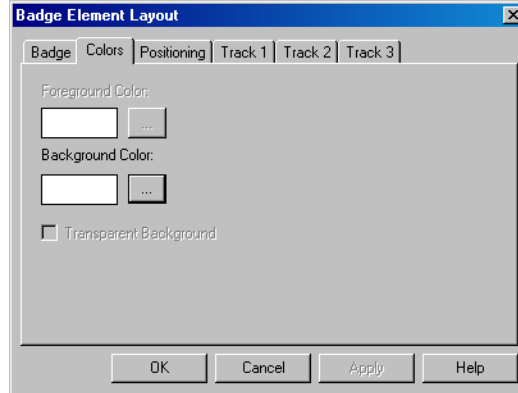
---

**NOTE:** Move the barcode box by selecting it and dragging it to the desired position. Resize the barcode box by selecting it and dragging one of the sizing handles until it is the desired size.

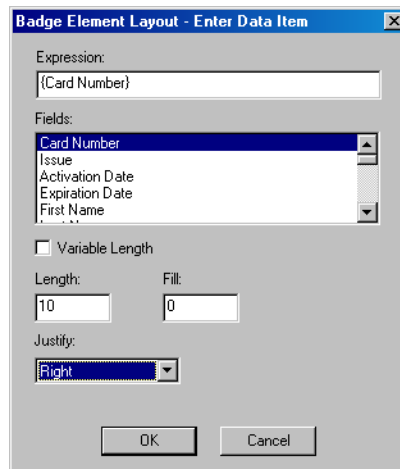
---

## Adding or Editing Barcode Data

- 1 Right-click the barcode box, and select **Properties**. Select the **Barcode Data** tab of the Badge Barcode Object Properties window.



- 2 Click **Add** or **Edit** to open the Enter Data Item window.



- 3 In the **Expression** field, enter the specific data to be contained in the barcode, or make a selec-

tion from the **Fields** list. Double-click on a field to add it to the Expression field.

- 4 Select the desired **Length** and **Fill Character**. See next section for description.
- 5 Click **OK** to save any changes and return to the **Barcode Data** tab.

### Barcode Properties Definitions

**Expression:** Any combination of text or database fields can be entered. Type in the desired expression text or select one of the Fields. You can double-click a Field to enter it in the Expression field.

**Fields:** Select a field and double click it to add it to the expression. All the Card and Card Holder note fields are displayed in this list.

**Variable Length:** If the Variable Length check box is selected, the field length is adjusted to match the number of characters in the data item.

**Length:** If a value is entered for Length, the data item will be truncated or padded so that it is precisely that number of characters.

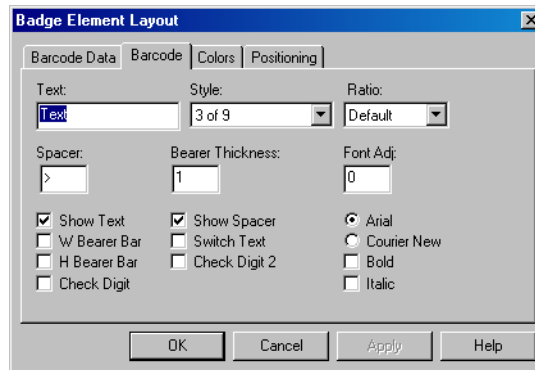
**Fill:** The character used to pad the data in order to fit a fixed length field.

**Justify:** Only applies to fixed-length data items. If a data item is shorter than the number of characters allotted for it, it can be justified left, center, or right, within those characters. All other characters are set to the Fill character.

When several data items have been entered, they can be reordered using the Move Up and Move Down buttons. To remove a data item from the list, select it and click the **Delete** button. When you have completed the data item list, click **OK** to save your changes.

## Formatting a Barcode

- 1 Right-click inside the barcode box on the badge layout and select **Properties**. Select the **Barcode** tab of the Badge Barcode Object Properties window.



- 2 Select the desired options. See “Barcode Options” section.
- 3 Click **Apply** to view changes, or click **OK** to save any changes and return to the Badge Definition window.

## Barcode Options

**Text:** Text to be displayed above the barcode.

**Style:** Style setting for the barcode characters.  
Choices include:

- 2 of 5
- 2 of 5 interleaved
- 3 of 9
- Codabar
- Code 11
- Code 39
- Code 93
- Code 128
- Code 128 A
- Code 128 B
- Code 128 C
- Code B
- EAN 8
- EAN 13
- EAN 128
- ITF
- MSI
- Telepen
- UPC A
- UPC E

**Ratios:** Determines the width ratio of thick bars to thin bars. For example, a ratio of 200 means that thick bars are twice the width of thin bars.

**Spacer:** Adds space before and after the barcode when show data is enabled.

**Bearer Thickness:** Thickness, in points, of the bearer bars.

**Font Adj:** Adjusts the font size in relation to the bar code.

**Show Text:** Displays the barcode data as text beneath the encoded information.

**W Bearer:** Displays the width bearer bars [top and bottom borders].

**H Bearer:** Displays the height bearer bars [left and right borders].

**Check Digit:** Error detection.

**Show Spacer:** Displays the space before and after the barcode data.

**Switch Text:** Switches top and bottom text. The barcode data displayed as text is placed above the barcode. The text entered into the Text field is displayed below the barcode.

**Check Digit 2:** Error detection.

**Arial:** The selected text font.

**Courier New:** The selected text font.

**Bold:** Applies bold format to the text.

**Italic:** Applies italic format to the text.

## Editing Barcode Colors

Before changing the barcode color, note that most barcode readers are infrared and require that the barcode be black (resin black).

- 1 Right-click the barcode box, and select **Properties**. Select the **Colors** tab of the Badge Barcode Object Properties window.
- 2 Click the **Foreground Color** browse button to open the Color window. Select a color swatch for the barcode, or create and select a custom color.
- 3 Click **OK** to return to the Colors tab. The new barcode color is displayed in the **Foreground Color** field.

## Changing the Barcode Background Color

Before selecting a background color, note that visible light barcode readers require some contrast between the barcode and the background. If the background color is too dark, the reader will not be able to read the code.

- 1 Right-click the barcode box, and select **Properties**. Select the **Colors** tab of the Badge Barcode Object Properties window.
- 2 Click the **Background Color** browse button to open the Color window. Select a color swatch for the barcode background, or create and select a custom color.

---

**NOTE:** Do not select black for the background color as the barcode will be printed in black, making it unreadable.

---

- 3 Click **OK** to return to the Colors tab. The new barcode color is displayed in the **Background Color** field.
- 4 Click **Apply** to view the color on the badge.
- 5 Click **OK** to save the changes and return to the Badge Definition window.

## Positioning a Barcode

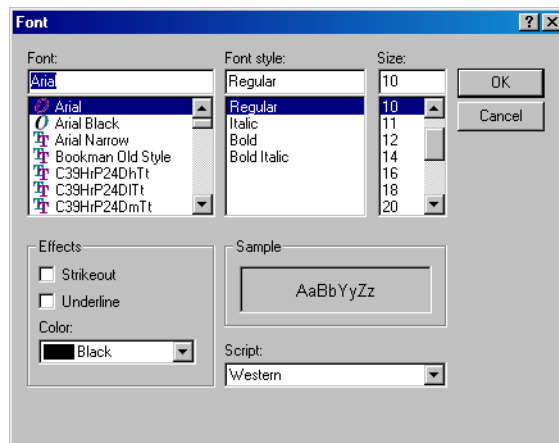
Barcodes are automatically positioned within the barcode box. Select the **Positioning** tab on the Badge Barcode Object Properties window to adjust the position of the box relative to the top and left side of the badge by entering a value in millimeters in the **Top** and **Left** fields, respectively. Refer to the “Positioning Badge Elements” section of this chapter for details.

---

**NOTE:** Test the bar code in the bar-code reader for proper positioning and operation before creating a large run.

---

Certain barcode readers using high density code 39 may require the barcode to be created using a text box and one of the several true type barcode fonts that were added when WIN-PAK was installed. This application also allows the barcode to be rotated as any other text box. Refer to "Creating a Text Box on a Badge" and "Adding and Editing Text". Once created, edit the font as indicated below.



In the example above C39HrP24DhTt represents Code 39 with Human Readable text at a Point size of 24 with Density set to High and font type which is True Type. To create the best quality barcode, the font style must be set to normal, and the size must match the font point size, for the example above: 24 with color black.

## Deleting a Barcode


To delete a barcode, right-click the barcode placeholder, and select **Delete Object** from the subsequent menu. The barcode is removed from the badge.



## Badge Objects: Shapes

The Badge Layout Utility allows you to place shapes [rectangles, rounded rectangles, ellipses, and lines] on your badge. You can change the border or line width, the border and background colors, or make them transparent to frame photos or text blocks.

### Adding Shapes to a Badge Layout

- 1 Click the **Place Shape**  button on the Badge Definition window toolbar.
- 2 Click in the badge layout area and drag the shape box until it is the desired size.

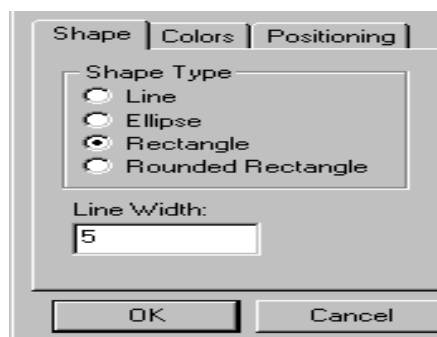
---

**NOTE:** The default shape is a rectangle. Once the shape box has been placed and sized, the type of shape can be changed.

---

Move the shape box by selecting it and dragging it to the desired position. Resize the shape box by selecting it and dragging one of the sizing handles until it is the desired size.

- 3 Right-click the shape box and select **Properties**. Open the **Shape** tab on the Badge Shape Object Properties window.

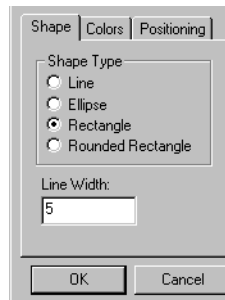


- 4 Select the desired **Shape Type: Line, Ellipse, Rectangle, or Rounded Rectangle**.

- 5 Enter the **Line Width** [in points].
- 6 Click **Apply** to apply the change to the shape and continue with badge design, or click **OK** to apply the change and return to the Badge Definition window.

### Formatting a Rounded Rectangle

- 1 When adding a rounded rectangle to the badge layout, set the following **Rounded Rectangle** parameters.



- 2 To set the percentage of curvature for both the height and width, select **Rounded Independent**.  
  
Or, select **Rounded on Width** or **Rounded on Height** to set the percentage of the height or width to be curved.
- 3 Click **Apply** to apply the change to your badge, and continue with badge design. Or click **OK** to apply the change and return to the Badge Definition window.

### Changing the Border Color of a Shape

- 1 Right-click the shape and select **Properties**. Open the **Colors** tab on the Badge Shape Object Properties window.
- 2 Click the **Foreground Color** browse button to open the Color window. Select a color swatch

for the shape border, or create and select a custom color.

- 3 Click **OK** to return to the Colors tab. The new border color is displayed in the **Foreground Color** box.
- 4 Click **Apply** to apply the change to your badge or click **OK** to apply the change and return to the Badge Definition window.

### Changing the Background Color of a Shape

- 1 Right-click the shape and select **Properties**. Open the **Colors** tab on the Badge Shape Object Properties window.
- 2 Add a colored background to the shape by making sure the **Transparent Background** check box is deselected, then clicking the **Background Color** browse button to open the Color window.

Use the **Transparent Background** check box to make the shape transparent.

- 3 Select a color swatch for the shape background, or create and select a custom color.
- 4 Click **OK** to return to the **Colors** tab. The new color selection appears in the **Background Color** field.
- 5 Click **Apply** to apply the change to your badge or click **OK** to apply the change and return to the Badge Definition window.

### Positioning Shapes

Using the Top, Left, Height, and Width fields on the Positioning tab of the Badge Shape Object Properties window allows you to manually set certain positions for the selected shape. Refer to the "Positioning Badge Elements" section of this chapter for details.

### Deleting a Shape

Delete a shape by right-clicking on the shape and selecting **Delete Object** from the subsequent menu. This removes the shape from your badge layout.

## Badge Objects: Signature Placeholders


Signature placeholders are used in badge design where you want the card holder's signature to appear. When the badge is assigned to a card and card holder the appropriate signature from the card holder database is applied to the badge.

A signature pad [Honeywell Access Systems PB-SIG-CAP or PBSIGCAPLCD] can be connected to the computer to capture signatures. The signatures are saved in vector format. They can be placed on the cards and proportion-ally stretched to fill the area allotted for them. The signature background can also be made transparent to be placed on top of any other object on the badge.

WIN-PAK allows up to 99 signatures for each card holder. A **Signature Index** number is used to indicate which card holder signature should appear on the card.

Signature placeholders can be formatted in a number of ways. The signature can be aligned horizontally and vertically within the box, and stretched or reduced to fill the space.

## Adding a Signature Placeholder to a Badge Layout

- 1 Click the **Place Signature**  button on the Badge Definition window toolbar.
- 2 Click in the badge layout area and drag the signature box to the desired size and shape.

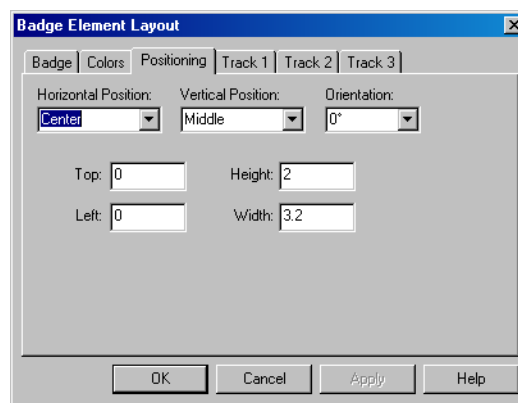
---

**NOTE:** Move the signature box by selecting it and dragging it to the desired position. Resize the signature box by selecting it and dragging one of the sizing handles until it is the desired size.

---

### Formatting a Signature Placeholder

- 1 Right-click inside the signature box and select **Properties**. Select the **Signature** tab of the Badge Signature Object Properties window.



- 2 Set the **Signature Index** if necessary. The Signature Index indicates which card holder signature appears on the badge. The default is Signature 1.
- 3 Click **OK** to save the settings and return to the Badge Definition window.

### Changing the Background Color of a Signature Placeholder

The background color for Signature placeholders defaults to gray.

- 1 To change the background color, right-click inside the signature placeholder and select **Properties**. Select the **Colors** tab of the Badge Signature Object Properties window.

- 2 Click the **Background Color** browse button to open the **Color** window.
- 3 Select a color swatch for the signature placeholder background color, or create and select a custom color.
- 4 Click **OK** to return to the Badge Signature Object Properties window.
- 5 Click **OK** to save the color settings and return to the Badge Definition window.

---

**NOTE:** The thickness of the signature line is set when the signature is captured in the card holder's biometrics tab.

---

### Positioning a Signature Placeholder

Signatures are automatically positioned within the signature placeholder box. Select the **Positioning** tab on the Badge Signature Object Properties window to adjust the position of the placeholder relative to the top and left side of the badge by entering a value in millimeters in the **Top** and **Left** fields, respectively. Refer to the “Positioning Badge Elements” section of this chapter for details.

### Deleting a Signature Placeholder


To delete a signature placeholder, right-click on the placeholder and select **Delete Object** from the subsequent menu. The signature placeholder is removed from the badge.

### Badge Objects: Bitmap Graphics

Graphic images such as logos or symbols can be placed on the badge layout. Simply create (or scan) an image and save it as a bitmap graphic file. WIN-PAK accepts Windows Bitmap (\*.bmp), JPG (\*.jpg), PCX (\*.pcx) or Targa (\*.tga) files.

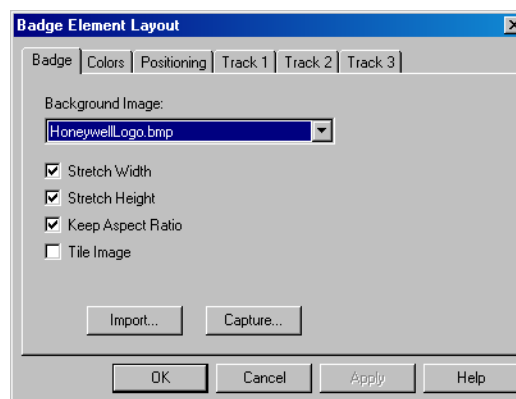
All graphics used in designing a badge are saved to the BadgeImage folder in the WINPAK PRO directory. Once an image is added to the WIN-PAK database, it appears in the Bitmap Image list on the Badge Layouts window and is available to all workstations.

### Adding a Graphic Image to a Badge Layout

- 1 Click the **Place Bitmap**  button on the Badge Definition window toolbar.
- 2 Click in the badge layout area and drag the graphic box to the desired size and shape.

Move the graphic box by selecting it and dragging it to the desired position. Resize the graphic box by selecting it and dragging one of the sizing handles until it is the desired size. You can use one of the corner sizing handles to change the height and width of the box at the same time.

- 3 Right-click in the graphic box and select **Properties** from the subsequent menu. The Badge Bitmap Object Properties window is displayed:



- 4 Click the **Bitmap Image** field down-arrow, and select an image from the list.

- 5 Select the **Stretch Width** and **Stretch Height** check boxes to make the image cover the entire badge. To fill as much of the graphic box as possible, without distorting the image, select **Keep Aspect Ratio**.
- 6 Click **Apply** to view the changes, or click **OK** to apply the image to your badge and exit the Badge Object Properties dialog.

---

**NOTE:** Images can be added to the Bitmap Image list by importing existing graphic files or by capturing live images using your computer, equipped with a video camera and capture board.

---

### Importing Graphics for the Badge Layout

- 1 Right-click inside the graphics box and select **Properties**. Open the **Badge** tab of the Badge Bitmap Object Properties window.
- 2 Click the **Import** button. The familiar **Open** dialog is displayed, allowing you to navigate to the folder containing the graphic file to be imported. Select the file, making sure its extension is one of the following: .bmp, .jpg, .tga, .pcx.
- 3 Double-click the file name [or highlight it and click **Open**]. The graphic file is added to the Bitmap Image list and is now available for use with any badge design, either to be placed in a bitmap box or as a badge background image.

### Adding Background Color to a Graphic

A background color assigned to a graphic will only show if the bitmap is smaller than the graphic placeholder. If you have selected both Stretch Width and Stretch Height, but not Keep Aspect Ratio, the graphic automatically fills the entire box and no background color is visible.



- 1 Right-click inside the graphics box and select **Properties**. Select the **Colors** tab of the Badge Bitmap Object Properties window.
- 2 Click the **Background Color** browse button to open the Color window.
- 3 Select the desired color swatch, or create and select a custom color for the background.
- 4 Click **OK**. The new background color is displayed in the **Background Color** field.

Select the **Transparent Background** check box to make the graphic background transparent.

- 5 Click **Apply** to preview the background color with the graphic. Click **OK** when finished.

### Positioning a Graphic Image

- 1 Right-click inside the graphic box and select **Properties**. Select the **Positioning** tab of the Badge Bitmap Object Properties window.
- 2 Indicate the **Horizontal** and **Vertical Position** of the graphic.
- 3 Select the **Orientation** [or angle] for the graphic to appear on the badge. Options include:

**0°** - Upright

**90°** - Rotated 90° clockwise

**180°** - Upside-down

**270°** - Rotated 90° counterclockwise

- 4 To change the location or size of the box, enter the information in the **Top**, **Left**, **Height**, and **Width** fields.
- 5 Click **Apply** to view the changes, or click **OK** to apply the changes and exit.

## Deleting a Graphic Image


To delete a graphic image, right-click on the graphic and click **Delete Object** from the subsequent menu. The graphic and the graphic box are removed from the badge.

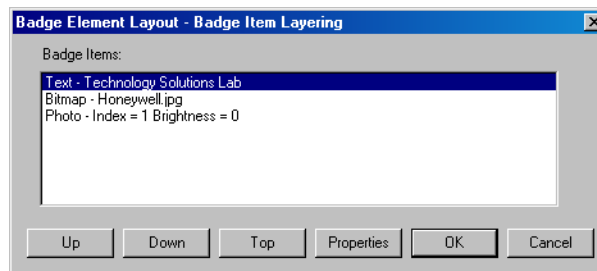
## Badge Objects: Badge Item Layering

Badge items are layered as they are placed. This is only noticeable if one item overlaps another item. When an item is selected, it is brought to the top of the layering order.

Layering can also be controlled using the Change Layering button on the Badge Layout toolbar. In addition, items on the badge can be selected from the Badge Item Layering dialog, allowing the item properties to be edited, without changing their layering order.

## Changing the Layering Order of Badge Items

- 1 Click the **Badge Item Layering**  button on the Badge Definition window toolbar. The Badge Item Layering window is displayed:



- 2 Select the object to be moved from the **Badge Items** list.


- 3 Click the **Up** button to move the object up. Click the **Down** button to move the object down.

Click the **Top** button to bring the selected object to the top layer of the badge.

- 4 Click the **Properties** button to edit an object's properties without changing its order [except for blackout].

### Select Next Item

Badge items are layered as they are placed, which may occasionally make it difficult to select a badge item, either because it is overlapped by another item or because its color makes it difficult to see.

In such cases, use the Select Next Item  button on the Badge Definition window toolbar to select the next item in the layering order.

Each time you click the button, it moves to the next item in the layering order. Continue selecting items until you have the one you want.

### Configuring the Badge Printer

WIN-PAK can print cards to a variety of printers. Most any badge printer supported by the Windows operating system can be used for badge printing.

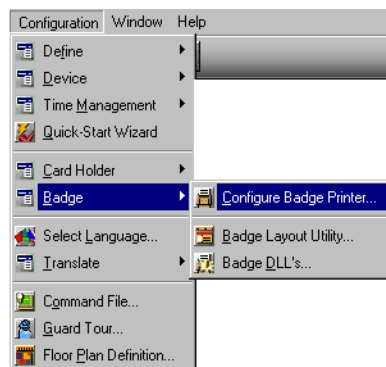
Two-sided PVC printing or magnetic stripe encoding requires printers that are configured for these features. Supported printers include: DataCard ICII+/III/IV/Express/Select and Magna Ultra Electronics Turbo and Northern-Fargo 4250/C25/L20 printers.

In addition, Windows-compatible laser printers can be used to print cards to plain paper.

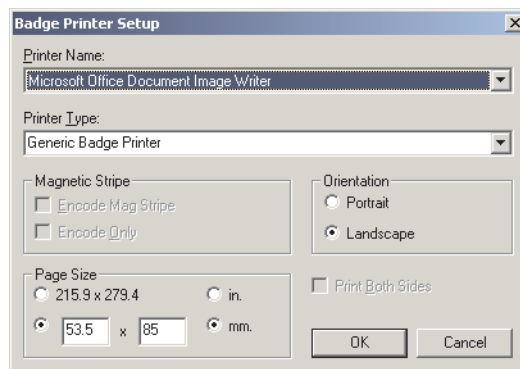
Install your printer or printers using the Windows Control Panel. Consult your Microsoft documentation for more information.

## Configuring the Badge Printer Procedure

- 1 Select **Configure Badge Printer** from the **Badge** option on the WIN-PAK Configuration menu.



- 2 When the Badge Printer Setup window is displayed, select the printer you want to use for badge printing. All the printers installed in your Windows system appear in the list.



- 3 If you are encoding magnetic stripe information, select the **Encode Mag Stripe** check box. If you are only encoding the magnetic stripe information, and not printing it, select **Encode Only**.
- 4 Select the correct **Orientation** for your badges. The default badge has a landscape orientation.
- 5 Some printer drivers automatically set the correct page size, others do not. If the correct page size is not displayed, use the **Page Size** options to enter the correct page size in either inches or millimeters. The default badge size is 53.5 mm x 85 mm.
- 6 When finished, click **OK** to save the settings and close the **Badge Printer Setup** window.

## Badge DLLs

A specific driver (.DLL) file is required for the video capture card, TWAIN device and signature pad. The drivers (DLLs) for currently supported hardware are included in the WINPAKPRO directory and will be installed at the time of WIN-PAK installation.

To Select Badge DLLs,

- 1 On the Configuration menu, click Badge, and then click Badge DLL's.
- 2 In the Badge DLLs dialog box, choose one of the following Capture Driver Type options, as applicable:

Microsoft DirectX – Select this option if you want to capture the video using DirectX and no specific video capture card driver is required.

DLL – Select this option if you have the access to Video Capture Card DLL.

- 3 If you have chosen Microsoft DirectX, select the video driver from the DirectX Compatible Video Driver drop-down list.
- 4 If you have chosen DLL, click the Browse button next to Video Capture card DLL in order to select the DLL from the respective folder. An Open dialog box window shows the WIN-PAK directory. Select the appropriate .dll file and click Open. The DLL file path is displayed on the corresponding Badge DLL window.
- 5 Click the Browse button next to Signature Pad DLL and select the appropriate DLL. This DLL is applicable for both the Capture Driver Types that are shown in the Badge DLL's dialog.

- 6 An Open dialog box window shows the WINPAKPRO directory. Select the appropriate .dll file and click Open. The DLL file path is displayed on the corresponding Badge DLL window.
- 7 Click OK to save your selections and close the Badge DLL window.





## Chapter 6

# Card Holders

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### Overview

### Configuring Card Holder Elements

### Setting Up Card Holders

### Access Levels

### Working with Cards



## Overview

Simply stated, within the WIN-PAK System, a card is typically a combination of a card holder record and a badge template.

The Card and Card Holder Databases work together in WIN-PAK, the separation of cards and card holders into two databases adds flexibility to the system. A card holder can be issued multiple cards to use as replacements for a card that is lost or stolen or to use if cards of different technologies are needed for different applications. A large number of cards can be added to the system and then issued to card holders as the need arises.

The screenshot shows the 'Card Record' dialog box with two tabs: 'Card Properties' and 'Badge'. The 'Card Properties' tab is active. The form contains the following fields and controls:

- Card Number :** Text box containing '30695'.
- Status :** Dropdown menu showing 'Active'.
- Issue :** Text box containing '0'.
- Card Holder :** Text box containing 'MANDOVI, birla' with a browse button (...).
- Access Level :** Dropdown menu showing 'Master'.
- PIN:** Text box.
- Description:** Text box.
- Account:** Dropdown menu showing 'Account1'.
- P-Series Trigger Control:** A sub-section containing:
  - User Level:** A numeric input box with '0' and up/down arrow buttons.
  - Custom Access Level :** A button labeled 'Add...'.
  - Action Group :** A dropdown menu showing 'None' and a 'View..' button.
- Activation Date:** A section with 'Change' and 'Clear' buttons, and a text box showing '11/5/2004'.
- Expiration Date:** A section with 'Change' and 'Clear' buttons, and an empty text box.

At the bottom of the dialog are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

## Cards

Cards are defined by the following properties:

- Card Number
- Access Level
- Status (Active, Inactive, Lost, Stolen, or Trace)

Cards can be assigned activation and expiration dates. Card records can be searched and sorted by their properties. For example, cards can be searched numerically [by card number], or an operator can search for cards most recently expired [by expiration date].

PINs (Personal Identification Numbers) can be defined for cards.

Description can be provided while editing the card details.

A card must have a valid access level in order to have an active status. Cards can be added individually or as a batch, sequentially numbered. Once added, card properties can be edited, both individually or in batches.

Cards do not have to be associated with card holders. For example, you might want to have a number of cards available for visitors, vendors, or temporary employees. You do not have to assign them to an individual card holder.

New cards can be added while adding card holders, but new card holders cannot be added from the Card database.

## Card Holders

Card holders are the people to whom cards are issued. All card holder information is contained in the Card Holder database. The minimum card holder information is first and last name. However, card holder records can also include a variety of optional information entered into user-defined note fields [up to 40].

If a card holder has been assigned to a card, that information is included in the card holder record as well.

Card holder information can be searched and sorted by first or last name, card number, or any of the 40 user-configured notes fields.

When card holders are entered into the database, they can be issued an existing card or entered without a card [and issued one later], or the Card Database can be accessed in order to issue a new card.

Card holder photos and signatures are also stored in the Card Holder database and can be viewed from the card holder record. Card holder photos and signatures can be viewed, captured, or imported from the Card Biometrics tab of the card holder record.

### Card Holder Movement Between Accounts

Card Holders can be moved between accounts by changing the Account selection. The user can select the required account from Card Holder > Basic Info Tab.

Once a Card Holder's Account is changed, the status of the card associated with the card holder is made "inactive" with Access level set to "None".

However, details like PIN, Issue, Activation Date, Expiration Date, Print Status and Note fields are retained even after card holder movement.

---

**NOTE:** The user need organize the Note Fields even though the Note Fields are transferred in order to match with the new account note field tabs.

---

## Configuring Card Holder Elements

WIN-PAK uses the term card holder to indicate an individual to whom a card (or multiple cards) is issued.

Information in the Card Holder database is entered in a series of up to 40 note fields which can be organized on any number of tabs. These note fields make up the card holder record, and can include anything from organizational information to personal information, even biometrics, as shown here.

The screenshot shows a 'Card Record' dialog box with two tabs: 'Card Properties' and 'Badge'. The 'Card Properties' tab is active. It contains the following fields and controls:

- Card Number :** Text box containing '30695'.
- Status :** Dropdown menu showing 'Active'.
- Issue :** Text box containing '0'.
- Card Holder :** Text box containing 'MANDOVI, birla'.
- Access Level :** Dropdown menu showing 'Master'.
- PIN :** Text box.
- Description :** Text box.
- Account :** Dropdown menu showing 'Account1'.
- P-Series Trigger Control :** A sub-section containing:
  - User Level :** A numeric spinner box set to '0'.
  - Custom Access Level :** A button labeled 'Add...'.
  - Action Group :** A dropdown menu showing 'None' and a 'View..' button.
- Activation Date :** A section with 'Change' and 'Clear' buttons, and a text box showing '11/5/2004'.
- Expiration Date :** A section with 'Change' and 'Clear' buttons, and an empty text box.

At the bottom of the dialog are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

The **Note Field Template** allows you to label and define the note fields, while the **Card Holder Tab Layout** provides the tools for creating and configuring tabs.

The note fields and tabs should be set up before information is entered into the Card Holder database. However, note fields and tabs can be edited after card holders are added to the system.

### Working with Card Holder Note Fields

A note field definition is comprised of two parts:

- The **Name**, which is the label that appears next to the note field on the card holder tab.
- A **Template**, which defines the type and number of characters that can be entered into the note field.

If the Template field is blank, the note field acts as a regular text box. Entering special characters into the template creates a mask which prompts the user to enter a certain type of data and/or a certain number of characters in the note field.

For example, a template for a Zip Code field might have five numeric placeholders (#). A Business Phone field can be configured with a combination of numeric placeholders, spaces, and alpha characters to accept the area code, phone number, and a four digit extension.

See the "Note Field Mask Properties" section of this chapter for a complete list of mask characters and their values.

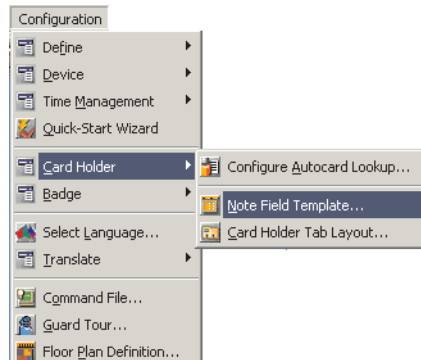
---

**NOTE:** The software monitoring data entry can tell the difference between alphabetic and numeric characters, but it cannot verify the accuracy of the information.

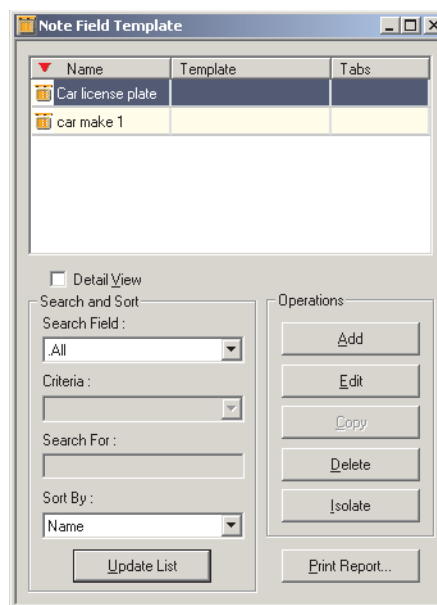
---

The Note Field Template database is opened by selecting **Note Field Template** from the **Card Holder** option on the Configuration menu.



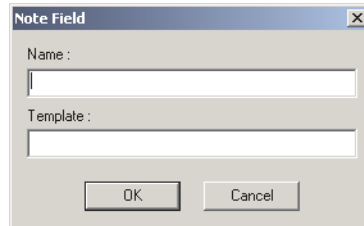


The Note Field Template database window lists notes by name, template, and tab [if one has been defined for the note].



## Adding Card Holder Note Fields

- 1 Click the **Add** button on the Note Field Template database window. The Note Field dialog is displayed:



- 2 Enter a unique **Name** (with up to 30 characters) for the note field.
- 3 Use the **Template** field to create a mask for the note field, defining the type, number, and syntax of the characters to be entered. When a template is used with a dropdown list, a maximum of 255 characters can be entered into the field. A maximum of 64 characters is allowed for each defined choice in the dropdown list.

Refer to the "Note Field Mask Properties" section (ahead in this chapter) for more information.

If the Template field is left blank, the note field acts as a regular text box, accepting up to 64 characters.

- 4 Click **OK** when finished. You are returned to the Note Field Template database window where the new note field is now displayed in the list.

## Editing Card Holder Note Fields

To edit a Note Field, simply open the Note Field Template database window, highlight the note to be edited, and click the **Edit** button.

The **Note Field** window is displayed, allowing you to make changes to the **Name** or **Template** fields.

### Isolating and Deleting a Card Holder Note Field

Deleting a note field not assigned to a tab is simply a matter of selecting it and clicking the **Delete** button on the main Note Field Template database window.

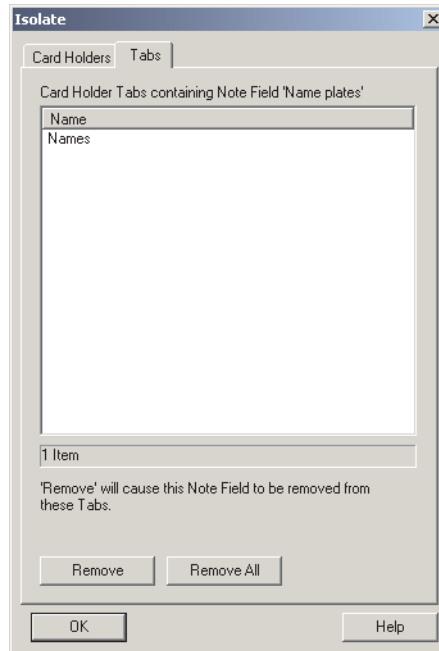
However, since Note fields are used with cards and card holders within the access control system, deleting a note field, without first taking into consideration where it is used, could leave the system with undefined states of operation.

If you attempt to delete a note field that is currently assigned to a card holder [and is in use] the following warning prompt alerts you that you must remove the field from the instances where it is in use before it can be deleted.



The WIN-PAK Isolate function displays a list of card holders who have data entered in the selected note field. It also displays the tabs where the note field appears. You can modify the usage of a note field using the Isolate window functions.

After receiving the warning prompt (shown above), return to the main Note Field Template database window, highlight the note field in question, and click the **Isolate** button. A list is produced (next illustration) showing the Card Holders and Tabs using the selected note.



The Isolate list allows you to make adjustments in the card holder definitions, possibly removing the need for this note.

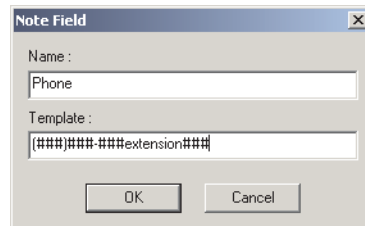
Remove the data from the card holder listed in the Static list. Then remove the note field from the tabs where it is displayed.

When you return to the main Note Field Template database window you can select the note and delete it.

### Note Field Mask Properties

Use mask properties to determine and direct the input of information in note fields.

The **Template** field on the Note Field dialog is used to enter mask characters. For example, in the following illustration a mask is entered for a phone number.



Entering mask characters in the Template field requires the user to enter a like number of the same character when filling in the note field while setting up card holders.

Following are examples of standard input masks that can be used.

### Mask Descriptions

**Null String (Default)** - No mask. Functions as a standard text box.

**##-??-##** - U.S. medium date (20-May-00)

**##-##-##** - U.S. short date (05-20-00)

**##:## ??** - Medium time (05:36 AM)

**##:##** - Military time (17:23)

### Mask Character Descriptions

- # Digit placeholder:** A digit must be entered [0–9].
- . Decimal placeholder:** The actual character used is the one specified as the decimal placeholder in international settings. This character is treated as a literal for masking purposes.

- , **Thousands separator:** The actual character used is the one specified as the thousands separator in international settings. This character is treated as a literal for masking purposes.
  - : **Time separator:** The actual character used is the one specified as the time separator in international settings. This character is treated as a literal for masking purposes.
  - / **Date separator:** The actual character used is the one specified as the date separator in international settings. This character is treated as a literal for masking purposes.
  - \ **Literal character qualifier:** Treat the next character in the mask string as a literal. This allows you to include the #, €, A, L, U and ? characters in the mask. This character is treated as a literal for masking purposes.
  - & **Character placeholder:** Valid values for this placeholder are ANSI characters in the following ranges: 32-126 and 128-255.
  - ~ **Drop-down list:** Gives multiple choices from a drop-down list. For example: ~brown ~blue ~green ~hazel.
  - ? **Letter placeholder:** For example: a – z or A – Z.
  - A **Alphanumeric:** Only alphanumeric data plus spaces [0–9 and A–Z or a–z].
  - L **Lower case:** Accepts a–z or A–Z [plus spaces] and forces to a–z.
  - U **Upper case:** Accepts a–z or A–Z [plus spaces] and forces to A–Z.
- Literal:** All other symbols are displayed as literals: as themselves.

If no mask characters are entered in the Template field (i.e., the mask is an empty string) the note field functions as a standard text box.

When an input mask is defined, underscores appear beneath every placeholder in the note field. You can only replace a placeholder with a character of the type specified in the input mask.

If an invalid character is entered, the masked edit control rejects the character and generates an error message. The user cannot proceed to the next field until the error is corrected.

---

**NOTE:** While the software can distinguish between numeric and alphabetic characters for validation, it cannot check for valid content, such as the correct month or time of day.

---

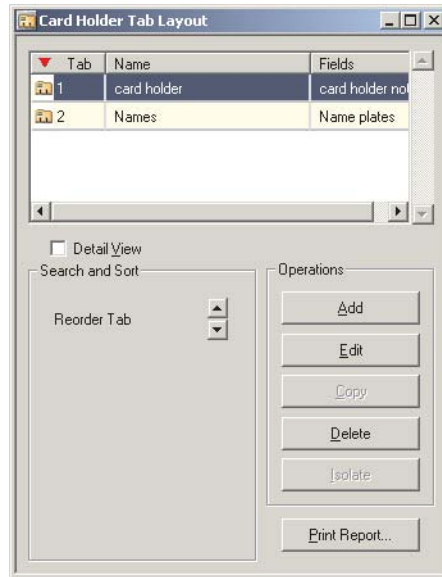
## Setting Up Card Holder Tabs

The Card Holder Tab Layout option allows you to use different tabs to organize note fields for the Card Holder database display. These tabs appear when a card holder record is opened. There are three permanent tabs: Name, Cards, and Card Biometrics.

The Card Holder Tab Layout database is opened by selecting Card Holder Tab Layout from the Card Holder option on the Configuration menu.



Within the Card Holder Tab Layout database window tabs are listed by number, indicating where they appear, followed by the tab name, and the note fields that appear on the tab.



### Adding a Card Holder Tab

- 1 Click the **Add** button on the Card Holder Tab Layout window. The Card Holder Tab Layout Record window is activated.



**Card Holder Tab Layout Record**

Tab Name :

Account :

Available Note Fields

Name
card holder note
Car license plate
Name plates

Add  
Remove

Note Fields Included in this Tab

Order	Name
-------	------

▲ ▼ Note Field Order

OK Cancel

- 2 Enter a unique **Tab Name**. The Account to which the tab belongs is displayed but can not be edited.
- 3 From the **Available Note Fields** list, select the note fields for this tab. Multiple note fields can be selected by holding down the CTRL and SHIFT keys simultaneously while clicking on the first and last item to be selected.
- 4 Click **Add** to move the selected items to the **Note Fields Included in this Tab** list.  
To remove a field from the tab, select it in the **Note Fields Included in this Tab** list and click **Remove**.
- 5 Use the **Note Field Order** arrows to move note fields up or down, until you have the desired configuration.
- 6 Click **OK** to save your changes and return to the main database window.

For each tab listed in the Card Holder Tab Layout database, a corresponding tab appears on the Card Holder Record.

### Editing or Deleting a Card Holder Tab

To edit a tab layout, simply open the Card Holder Tab Layout database window, highlight the tab to be edited, and click the **Edit** button.

The Card Holder Tab Layout Record is activated, allowing you to make changes.

To delete a card holder tab, highlight it in the Card Holder Tab Layout database window and click **Delete**. A prompt is displayed. Click the **OK** button on the prompt to delete the tab. There is no undo function.

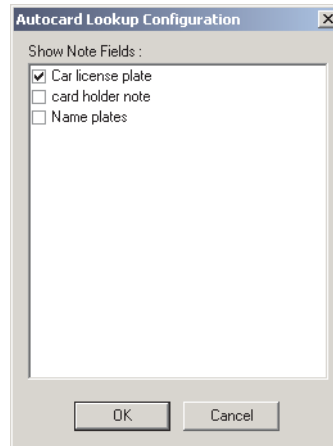
Deleting a tab does not delete the card holder data. Data note fields can be reassigned to a different or new tab if desired.

### Configuring AutoCard Lookup

AutoCard Lookup responds to a card read by providing an on-screen view identifying the Card Holder. If there is a photo in the database, it is also displayed. By selecting the Notes Field option, you can include additional information in this view.

Use the Configure AutoCard Lookup utility to select which note fields are displayed.

Select **Configure AutoCard Lookup** from the **Card Holder** option on the Configuration menu. The AutoCard Lookup Configuration window is displayed:



Use the **Show Note Fields** check boxes to indicate the note fields you want included in the AutoCard Lookup.

Click **OK** to save your AutoCard Lookup selections.

## Setting Up Card Holders

Card Holder records, containing information on all card holders in the system, are stored in the Card Holder database.

Open the **Card Holder Database** by selecting the **Card Holder** option on the WIN-PAK Card menu [or by clicking the Card Holder toolbar button]. The Card Holder database list displays existing card holders by first and last name.

The information in the Card Holder database can be searched and sorted by first or last name or by any note field. The Search and Sort fields allow you to search the database and choose the order in which the card holders are listed. Refer to the "Working with Database Windows" section of chapter 3 for details on working with the Search and Sort fields.

## Adding Card Holders

You can add or edit card holder information, or delete card holders from the main Card Holder database window.

- 1 With the **Card Holder** database window open, click the **Add** button.
- 2 The Card Holder Record window is displayed, with the Name tab open.

Card Holder

Basic Info | card holder | Names | Cards | Card Biometrics

First Name :

Last Name :

Account :

Account1

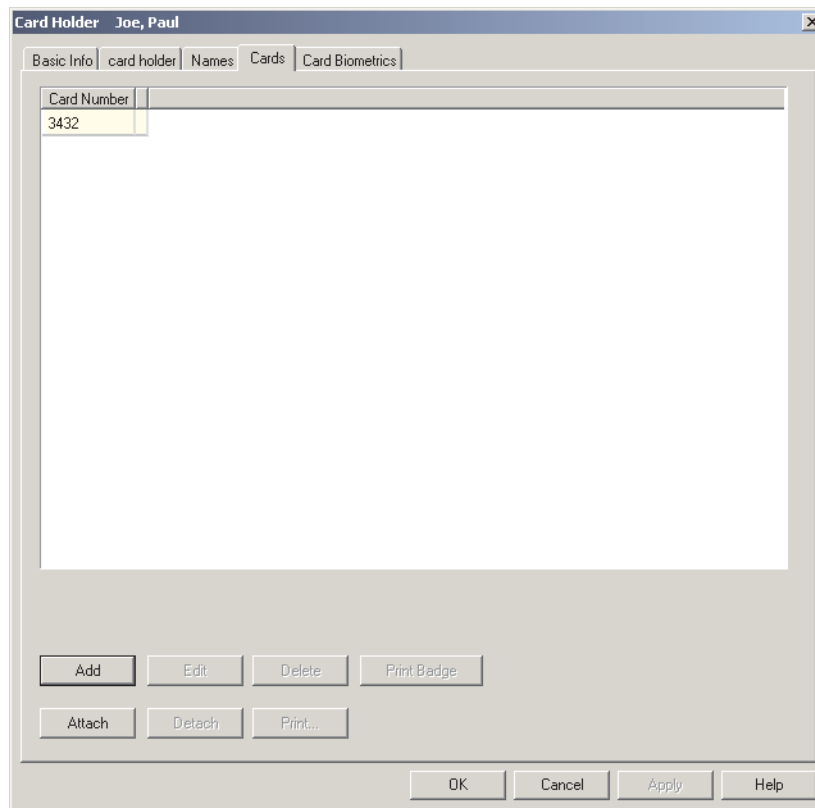
OK Cancel Apply Help

- 3 Enter the Card Holder's **First** and **Last Name**. The account for which this card holder will be available is displayed but can not be edited.

**NOTE:** This is the minimum information required to add a record to the database. If you click OK at this point, the new card holder is added to the database without any cards being attached.

### Attaching a Card to a Card Holder

- 1 Open the **Cards** tab of the Card Holder Record window.
- 2 Click **Attach**. The Select window is displayed.
- 3 Click **Find** to display a list of available card numbers.



- 4 Select a card number with an appropriate access level, and click **OK** to return to the **Cards** tab.

The card number and access level are now listed in the card holder record. You can add multiple cards by repeating this procedure.

---

**NOTE:** If no cards are available, open the **Card** database by clicking the **Add** button on the **Cards** tab. See "Adding a Card from the Card Holder Database" (following section), for more information.

---

### Adding a Card from the Card Holder Database

You can add a card to the system while adding or editing a card holder by opening the **Cards** tab, then clicking **Add** to open the Card Record window.

Enter the **Card Number** and select the **Access Level** for the card. Select any other options you want in order to configure the card.

Click **OK** to save the card and return to the Card Holder Record window.

### Deleting a Card Holder Record

- 1 Open the **Card Holder** database window [from the Card menu].
- 2 Select the desired card holder, and click **Delete**.
- 3 You are prompted to confirm the card holder deletion. You are also notified if there are any dependency conflicts that need to be taken care of [cards, photos, signatures assigned to the card holder] before continuing.



- 4 Use the **Card Holder - Dependency Conflict** dialog to indicate whether you want to delete the cards and images, or detach them from the card holder.
- 5 When asked to confirm the deletion, click **OK** to delete the card holder. Click **Cancel** to retain the card holder.

### Removing a Card from a Card Holder

Card holders can have multiple cards assigned to them. Therefore, cards can be added to, or removed from, card holders, as needed. To remove a card from a card holder, select the desired card holder from the Card Holder database window, and click **Edit**.

Open the **Cards** tab, and select the **Card Number** to be removed.

Click **Detach** to remove the card from the Card Holder Record.

Click **OK** to exit the Card Holder Record window.

---

**NOTE:** A card's history events created while attached to multiple card holders will be associated with the appropriate card holders.

---

### Adding User-Defined Card Holder Information

Select one of the defined tabs. For this example, select the **All Information** tab of the Card Holder Record window to enter details on the card holder.



Note Field	Card Holder Data
Title	Mr
Department	Security System
Extention	2528
Keypad Code	123
Site Code	155

Any note fields and tabs configured via the Note Field Template and Card Holder Tab Layout options are shown on the Card Holder Record window.

Use these tabs and note fields to enter specific information about the card holder being added.

---

**NOTE:** Operator rights must be assigned to edit or even view each defined note field.

---

## Card Holder Photos

Photos can be included in the Card Holder database information. Up to 99 photos can be recorded for each card holder. These photos can include different views of the same person, including front and side views, a photo of the person's car, or equipment issued to them, such as a laptop computer.

If a photo is included in a card holder's record, it appears on the Card Biometrics tab of the card holder record. Each photo has a Photo Index number. By default, photo 1 is displayed. To view other photos, change the **Photo Index** number on the **Card Biometrics** tab.

Photos can be added to card holder information either by capturing video images or by importing digital files created in other programs, scanned images, or photos taken with a digital camera. The Photo Index setting determines whether a captured or imported image overwrites an existing image or is added to the Card Holder Record as an additional image.

When a photo is included in a card holder's information, it is inserted in the badge layout associated with any cards assigned to the card holder. Again, the Photo Index number on the badge layout determines which photo is displayed on the card.

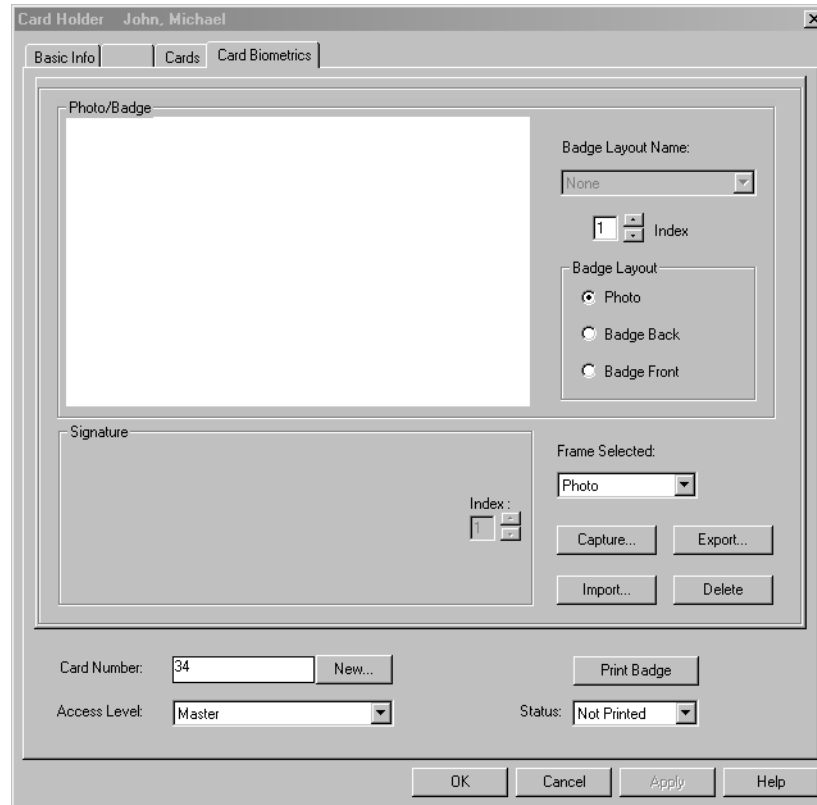
### Importing a Card Holder Photo

- 1 Open the Card Holder database from the WIN-PAK Card menu.
- 2 Select the desired card holder, and click **Edit** to open the Card Holder Record window.
- 3 Click the **Card Biometrics** tab of the Card Holder Record window.

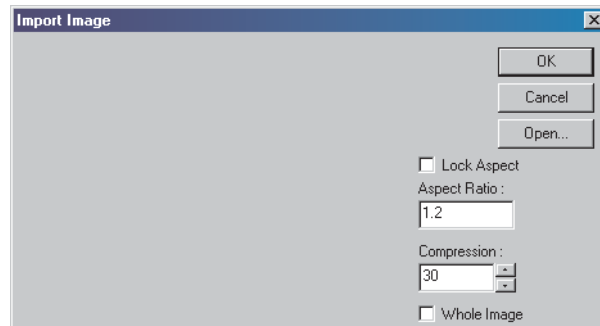
---

**NOTE:** If you are adding a new card holder, you must first enter the card holder's name.

---



- 4 Click the **Import** button on the Card Biometrics window. The Import Image window is displayed (next illustration):



- 5 Click **Open** and navigate to the folder containing your photo files.
- 6 Select the correct file and click **Open**. The image is displayed in the Import Image dialog.
- 7 Select **Whole Image** to import the photo without changes.

To crop the image, deselect **Whole Image** and a cropping guide appears on the photo.



- 8 Move and stretch the cropping guide to the proper position. To maintain a consistent ratio of height to width, enter the **Aspect Ratio**.

When Lock Aspect Ratio is selected, the cropping tool will maintain the same relation of height to width, no matter how much of the image is selected.

Adjust the **Compression** setting at this point, if desired. 100 is the least compression and the best quality, 30 is the most compression and the lowest quality.

- 9 Click **OK**. The Import Image dialog closes and the photo appears on the Card Biometrics tab.

The screenshot shows a software window titled "Card Holder" for a user named "Shelly Watson". The window has four tabs: "Basic Info", "General Info", "Cards", and "Card Biometrics". The "Cards" tab is active. It contains two main sections: "Photo/Badge" and "Signature".

In the "Photo/Badge" section, there is a photo of a woman. To the right of the photo, there is a "Badge Layout Name" dropdown menu set to "None", an "Index" button, and a "Badge Layout" group box with three radio buttons: "Photo" (selected), "Badge Back", and "Badge Front".

In the "Signature" section, there is a signature image. To its right is an "Index" button. Below the signature image are buttons for "Capture...", "Export...", "Import...", and "Delete".

At the bottom of the window, there are fields for "Card Number" (30627) and "Access Level" (Master), both with "New..." and "Print Badge" buttons. A "Status" dropdown menu is set to "Not Printed". At the very bottom are "OK", "Cancel", "Apply", and "Help" buttons.

10 Click **OK** to save the photo.

### Importing Additional Card Holder Photos

Add additional photos to a card holder record by following the procedures described in the previous section, but change the **Photo Index** on the **Card Biometrics** tab to a new number.

If you do not change the Photo Index, the photo you import replaces the existing photo.

### Deleting a Card Holder Photo

On occasion, you may need to remove a photo from a card holder record.

- 1 Open the **Card Holder** database (from the WIN-PAK Card menu) and select the card holder from whose record the photo is to be deleted.
- 2 Click **Edit**. When the Card Holder Record window is displayed, open the **Card Biometrics** tab.
- 3 In the Photo area of the Card Biometrics tab, set the **Index** number to that of the photo to be deleted.
- 4 Click **Delete** to remove the photo.
- 5 You are prompted to confirm the deletion. Click **OK** to remove the photo or **Cancel** to keep it.

### Capturing Card Holer Photos

Photos can be added to a card holder's information when the card holder is first added to the database. Or photos can be added for existing card holders.

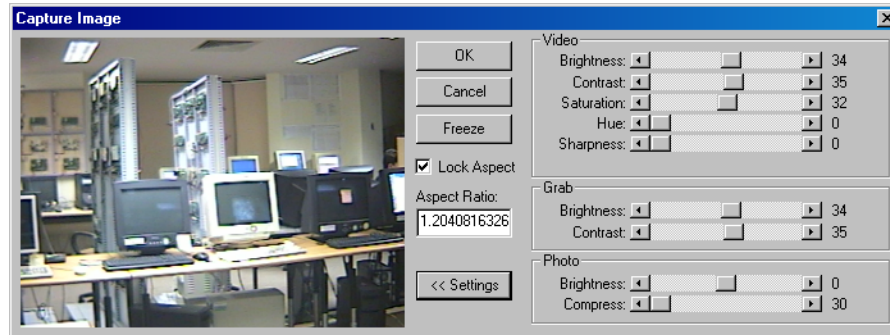
- 1 Open the **Card Holder** database (from the WIN-PAK Card menu), and select the desired card holder.
- 2 Click **Edit**, then open the **Card Biometrics** tab of the Card Holder Record.

---

**NOTE:** If you are adding a new card holder, you must first enter the card holder's name.

---

- 3 Click **Capture** in the Photo area of the window. The Capture Image window opens showing the live view from your video camera.
- 4 Click **Settings** to expand the window and access the video settings.



- 5 Adjust the **Video** settings (explained below) until the picture is satisfactory.
- 6 If you are not using a flash, set the **Grab** settings to the same values as the **Video** settings.

Reduce the **Grab Brightness** and **Contrast** if you are using a flash. The exact settings will vary depending on the type of flash and other lighting used, and can only be determined through trial and error.

- 7 Click **Freeze** to capture the image. Once the picture is frozen [or captured] you can make a number of adjustments.

**Freeze/Live** - This button switches between static and live-view image. When the desired image is on screen, click **Freeze** to keep it on screen. Click **Live** to switch back to the live camera view. Adjust the slides at the right of the background image to enhance the quality.

- 8 Use the cropping frame to crop the image and adjust its proportions. If you want a particular proportion, enter it in the Aspect Ratio field and select **Lock Aspect Ratio**.
- 9 If the image is too dark or too light, adjust the **Photo Brightness**.
- 10 Set the degree to which you want to Compress the captured image.
- 11 Click **OK** to save the image.

### Capturing Additional Card Holder Photos

To add additional photos to a card holder file, follow the procedure outlined above, but change the **Index** on the **Card Biometrics** tab to a new number. If you do not change the photo index, the new photo you capture replaces the existing photo with that photo index number.

### Video Settings

The settings in this section apply to the live on-screen video image.

**Brightness:** Lightens or darkens the entire tonal range of the image.

**Contrast:** Expands or contracts the entire tonal range of the image. The difference in highlights and shadows can be greatly increased or decreased by adjusting the contrast.

**Saturation:** Adjusts the vibrancy (the level of color) in the image.



**Hue:** Adjusts the value of color in the image. Adjusting this can correct images that seem to have an incorrect color.

**Sharpen:** Sharpens blurry images by increasing the contrast of adjacent pixels.

## Grab Settings

These settings are applied to the camera when an image is captured. If you are not using a flash, set the Grab Brightness and Contrast to the same as the Video settings. If a flash is used, reduce both the Brightness and Contrast settings to be lower than the Video settings. This prevents the camera from overexposing the picture. The exact settings must be determined by experimentation, as they vary depending on the type of flash used, distance from the subject, and other lighting employed.

**Brightness:** Lightens or darkens the entire tonal range of the image being captured.

**Contrast:** Expands or contracts the entire tonal range of the image being captured.

## Photo Settings

These settings are applied to the video image after it is captured.

**Brightness:** Lightens or darkens the entire tone range of the captured image.

**Compression:** The captured image is saved as a .jpg file which uses compression technology to decrease the size of the file. If desired, use the slider to adjust the compression of the saved image. The lower the number, the greater the compression. Keep in mind that images lose quality as they are compressed, so avoid over-compressing. A setting of 100 applies the least amount of compression and provides the best image quality. A setting of 30 applies the most compression, but produces a lower-quality image.

## Card Holder Signatures

Card holder signatures can be included in the card holder database information. Up to 99 signatures can be recorded for each card holder.

If a signature is included in a card holder's record, it appears on the Card Biometrics tab. The card holder's signature can also be inserted on the card (if the badge layout provides a signature placeholder).

Signatures can be added to the card holder information either by capturing them with an electronic writing pad, or by importing digital files created in other programs—for example by scanning the card holder's signature and storing it as an Enhanced Metafile (.emf) or signature (.sig).

Each signature has a Signature Index number. By default, signature 1 is displayed. To view other signatures, change the **Signature Index** number on the **Card Biometrics** tab.

## Capturing Card Holder Signatures

Signatures can be added to a card holder's information when the card holder is initially added to the database, or can be added later.

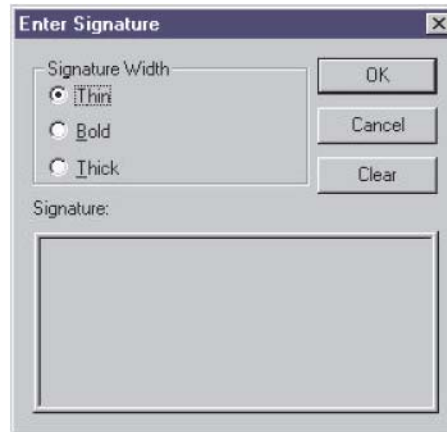
- 1 Open the **Card Holder** database window (from the WIN-PAK Card menu) and select the desired card holder.
- 2 Click **Edit**. Open the **Card Biometrics** tab of the Card Holder Record.

---

**NOTE:** If a new card holder is being added, you must first enter the card holder's name.

---

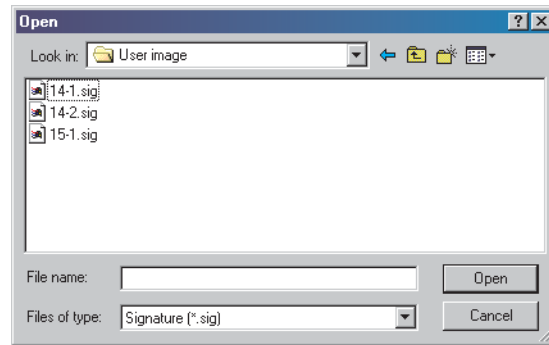
- 3 In the **Signature** area of the window, click **Capture**. The Enter Signature window opens, showing the input from your digital writing pad.



- 4 Have the card holder sign their name on the writing pad.
- 5 Select thin, bold or thick for the width of the signature line.
- 6 Click **OK** to close the capture window and display the signature on the Card Biometrics tab.
- 7 Click **OK** to save the signature.

### Importing a Card Holder Signature

- 1 With the Card Holder database window open, select the card holder whose signature is to be imported.
- 2 Click **Edit**. Open the **Card Biometrics** tab of the Card Holder Record window.



- 3 In the Signature area of the window, click **Import**. If the signatures have already been collected, and are stored in a file, the Open dialog is displayed.
- 4 Navigate to the folder containing your signature files (.sig or .emf), select the correct file and click **Open**. The signature appears in the Signature window.
- 5 Click **OK** to save the signature.

### Importing Additional Card Holder Signatures

To add additional signatures to a card holder file, follow the procedures described above, but change the signature index number. If you do not change the signature index, the signature you import replaces the existing signature.

## Deleting a Card Holder Signature

From time to time you may need to delete a card holder signature altogether.

- 1 With the Card Holder database window open, select the card holder whose signature is to be deleted.
- 2 Click **Edit**. Open the **Card Biometrics** tab of the Card Holder Record window.
- 3 In the Signature area of the window, click **Delete** to remove the signature.
- 4 You are prompted to confirm the deletion. Click **OK** to remove the signature or **Cancel** to retain the signature.

## Access Levels

Access levels determine where and when a user's card is valid in the system. An access level is made up of a list of readers with time zones. Together these elements define time periods during which the listed readers will grant access at various entrances.

The ability to assign cards to a group of entrances eliminates the need to program the card for every reader. When a card is activated, it is assigned an access level. Changing the access level assigned to a card automatically changes when and where the card holder has access.

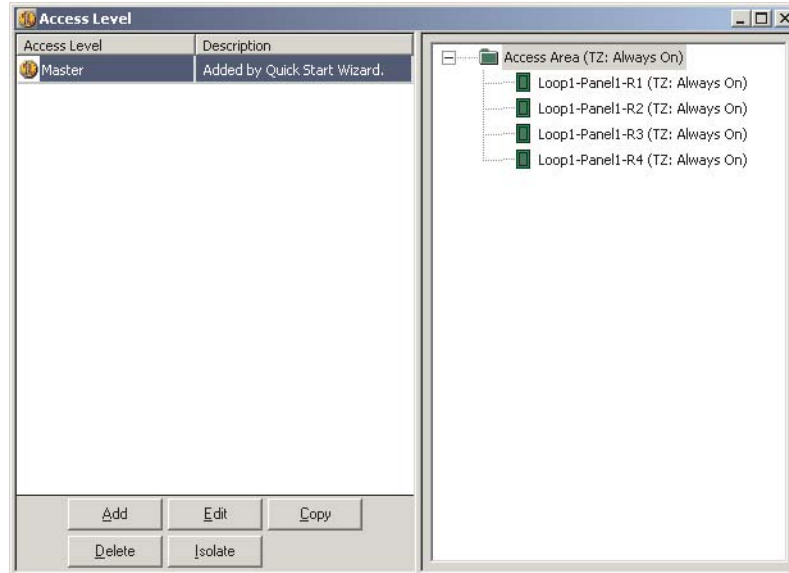
### Access Level Database

The Access Level database contains information on existing access levels, which define the entrances a card holder can use and when they have access to those entrances.

Open the **Access Level** database from the **Card** menu.



The two-pane Access Level database window is displayed (next illustration):



On the left side of the window is a list of existing Access Levels. The right side of the window contains the **Access Area** tree. Below the left pane of the **Access Level** database are five action buttons:

**Add:** Used to define new access levels.

**Edit:** Used to make changes in existing access levels.

**Copy:** Duplicates an access level, allowing you to make changes and save it as a new access level.

**Delete:** Removes the selected access level.

**Isolate:** Displays the card holders assigned to the selected access level, and allows you to reassign those card holders to a different access level.

It is easy to tell at a glance what areas are included in a given access level. Select a level from the Access Level database list (left pane). The branches of the Access Areas are color-coded for the selected level:

**Red** = No access to any door in the area.

**Yellow** = Access permitted to some entrances in this area.

**Green** = Access permitted to all entrances in this area during the assigned time zone.

Click on a branch to view the entrances, which are also color coded and have a time zone notation.

Access levels are defined by selecting entrances and assigning time zones to them. When a new access level is added, it has no associated access rights. All the folders and entrances in the Access Areas are red and no time zones are shown.

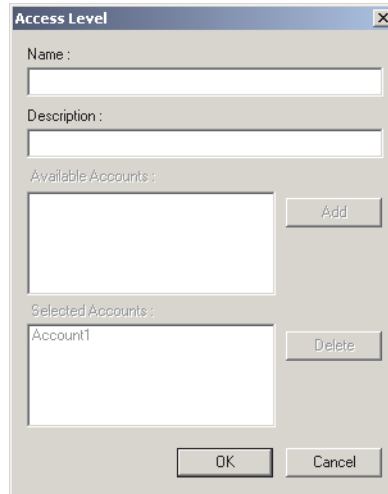
To configure a new access level, right-click on an Access Area branch, then select **Configure**. Use the subsequent **Configure Area Access** dialog to set access for all entrances in this area and to select a time zone.

Configuring an access area at the topmost branch of the Access Area tree applies the settings to all sub-branches. To further refine your settings, you can repeat this procedure for individual readers.

### Adding an Access Level

- 1 Open the **Access Level** database from the WIN-PAK Card menu.
- 2 Click the **Add** button to open the Access Level dialog (next illustration).



The image shows a Windows-style dialog box titled "Access Level". It contains several input fields and buttons. At the top is a "Name:" label followed by a text box. Below that is a "Description:" label followed by a text box. Then is an "Available Accounts:" label followed by a list box and an "Add" button to its right. Below the "Available Accounts" list box is a "Selected Accounts:" label followed by a list box containing the text "Account1" and a "Delete" button to its right. At the bottom of the dialog are "OK" and "Cancel" buttons.

- 3 Enter a **Name** for the access level. A name is required. The Name field accepts up to 30 characters.
- 4 If desired, enter a **Description** of the access level (using up to 60 characters).
- 5 Use the **Available** and **Selectd Accounts** fields to indicate the accounts to which this access level should be available.
- 6 Click **OK** to save the new access level and add it to the Access Level database list. Keep in mind however, that at this point the access level has no rights assigned to it.

You must now configure the access level.

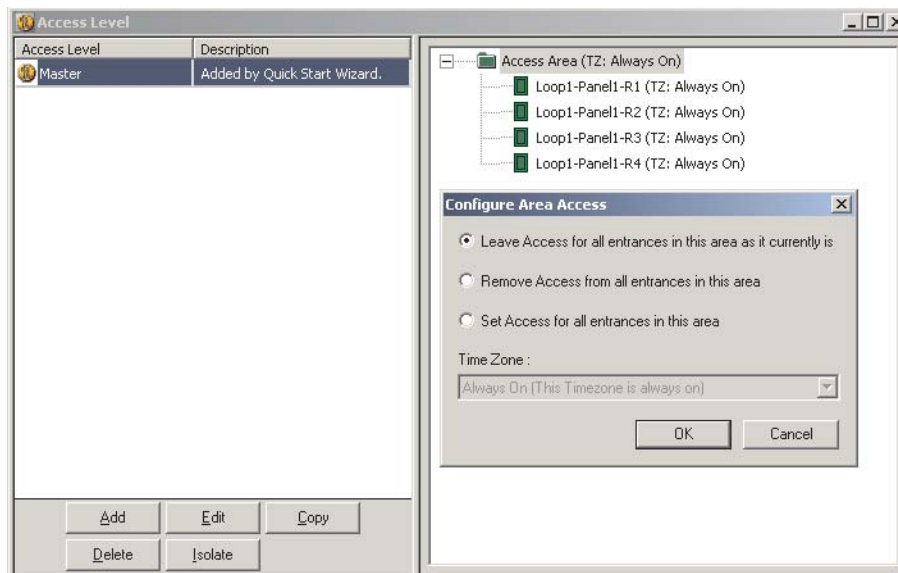
## Configuring an Access Level

You can usually save time by configuring a whole Access Area branch, then adjusting individual readers.

For example, the Cleaning access level shown in the following illustration has access to all entrances, with the exception of HR entrance.

To configure this access level, first grant access to the entire Local Office branch, then go back and restrict the one exception.

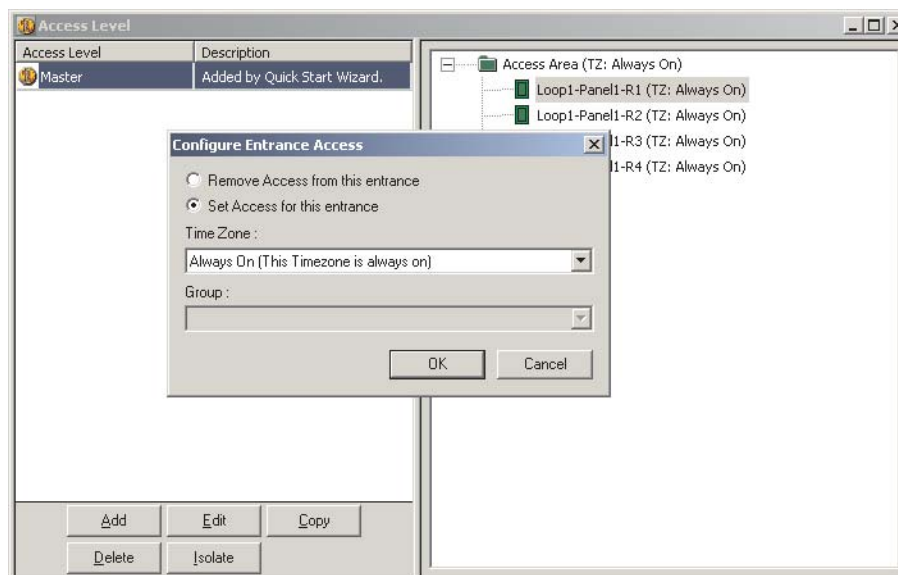
- 1 With the Cleaning access level selected in the Access Level database window, right-click on the **Local Office** branch and select **Configure**. The Configure Area Access window opens.



- 2 To allow access to all doors in the area, select **Set Access for all entrances in this area**.
- 3 Use the **Time Zone** list to indicate the time zone for the access level.

**NOTE:** Time zones that are common to all readers in the branch are shown. A time zone that is unique to a specific reader can only be defined by the individual reader - not as the whole group.

- 4 Click **OK**.
- 5 In the Access Area pane [right side], expand the branch and right-click the individual entrance on the branch to customize its settings.



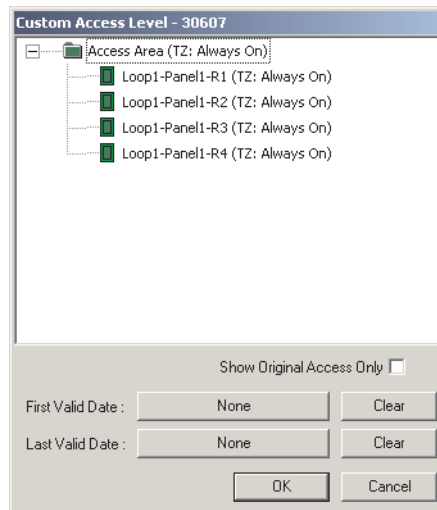
- 6 Continue with branches and entrances until the access level has the required configuration.

## Custom Access Levels

In certain cases, a general access level may not meet the needs of a specific card holder. In these cases, a customized access level can be created for a card holder.

### Creating a Custom Access Level

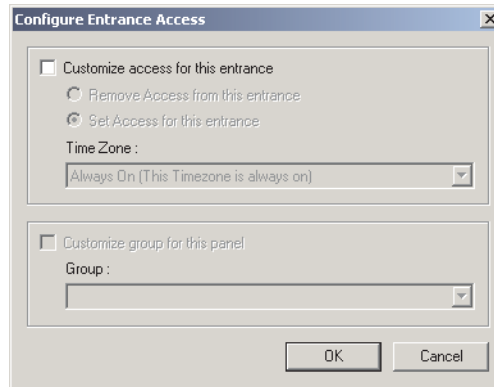
- 1 Open the **Card** database by selecting the Card menu option of the same name. When the database window opens, select the card to which you are adding a custom access level.
- 2 Click **Edit** to open the Card Record window.
- 3 Click the **Add** button in the **Custom Access Level** area of the window. The **Custom Access Level** window opens with the Access Level tree displayed. The tree is a combination of entrances and assigned time zones.



A custom access level is named after the card number to which it is attached. For example, Custom Access Level 3 is attached to Card 3.

### Customizing One Entrance

- 4a Customize one entrance by right-clicking it and selecting **Configure Access**. The Configure Entrance Access window is displayed:



Select the **Customize access for this entrance** check box.

Indicate whether the custom access level should **Remove access from this entrance** or **Set access for this entrance**.

Select a **Time Zone** for the custom access level.

Click **OK** to return to the Custom Access Level window.

### Customizing a Group of Entrances

- 4b To customize a group of entrances, right-click the branch containing the group and select **Configure Access**. The Configure Area Access window is displayed.

Indicate whether to **Remove access from all entrances in this area** or to **Set access for all entrances in this area**.

Select a **Time Zone** for the custom access level.

---

**NOTE:** Time zones that are common to all readers in the branch are shown. A time zone that is unique to a specific reader can only be defined by the individual reader [not as the whole group].

---

Click **OK** to return to the Custom Access Level window.

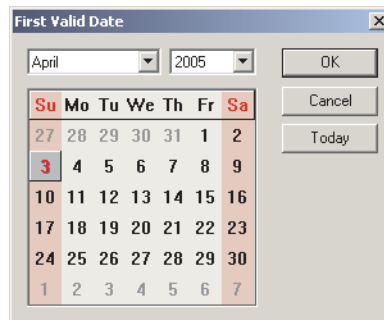
### Activation and Expiration Dates for the Custom Access Level

---

**NOTE:** This feature must have the "Update Custom Access Level" scheduler set to work properly. Refer to the Schedule section in Time Management.

---

- 5a Assign an activation date for the custom access level by clicking the button [typically labeled None until a date is selected] to the right of the **First Valid Date** field.



Use the **First Valid Date** calendar to select the activation date for the custom access level.

---

**NOTE:** Click the **Today** button to set the activation or expiration date to today's date.

---

- 5b Repeat the process to assign the **Last Valid Date** for the access level.

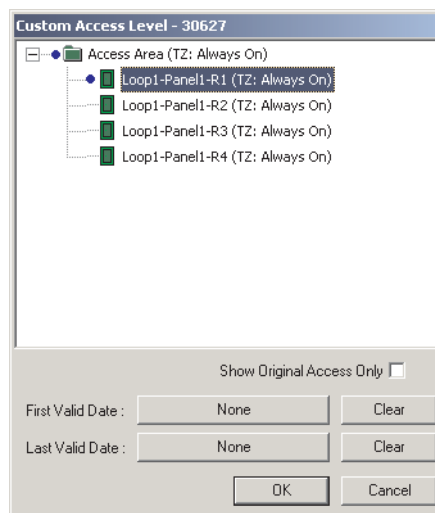
## Show Original Access Level

The new customized access level can be compared with the previous, original access level by checking the box labeled **Show Original Access Only**.

Changes cannot be made when the window is in this view state. To make changes [or to return to the custom access level], deselect the check box.

- 6 Click **OK** to save the Custom Access Level.

A blue dot on the Access Level tree denotes an entrance that has been customized for this access level.



## Working with Cards

The **Card** database contains information on all the cards that have been entered in your WIN-PAK System.

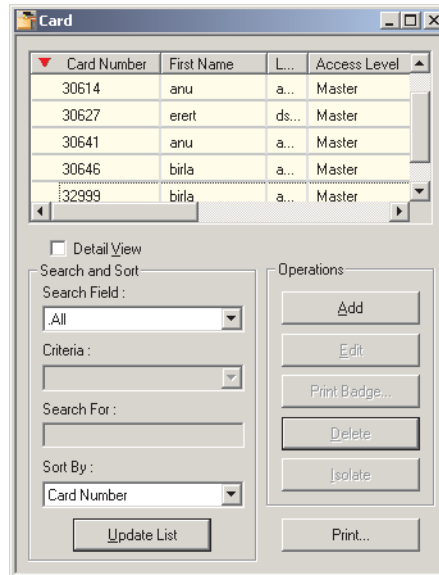
Cards can be entered into the database one at a time or via the Bulk Card Add feature. Required information when adding a card includes the card number, its status, and access level. Additional optional information includes activation and expiration dates, action group assignment, PIN, and custom access level.

Open the **Card** database from the main WIN-PAK Card menu [or click the Card toolbar button].



The Card database list displays existing cards with their associated number, access level, card and badge print status [as well as the activation date and expiration date if they've been assigned]. The Card database list also shows the first and last name of the card holder, for those cards that have been assigned to a card holder.





The detail view of the Card database has two tabs: Card Properties and Badge. When activated, card information can be edited in the detail view.

The Badge tab allows a badge layout to be selected for the front and back of the card. When card holders are associated with the cards, their information appears in the badge layout on the Badge tab. The badge layout can be printed from the Card database.

---

**NOTE:** Refer to the "Working with Database Windows" section in the User Overview chapter of this manual for details on working with the Search and Sort fields.

---

## Card Activation and Expiration with Scheduler

When cards are added to the Card database, they can be configured for an unlimited number of uses over an indefinite period of time. However, you do have the option of limiting card usage in two ways.

When a card is selected to be active in the Card database, the information is automatically sent to the panels. However, if you choose an activation date, on that date the card information is sent to the panels. The Scheduler should be set to periodically send card information to the panels at least once a day.

When a card Activation/Deactivation scheduled event is preformed, cards with an activation date prior to the event are sent to the panel. Cards with a deactivation date prior to the event are deleted from the panel and changed to an inactive status.

The activation and expiration dates can also be changed by editing a card.

---

**NOTE:** Refer to the "Time Management" section of the chapter 4 for more information on setting scheduled events.

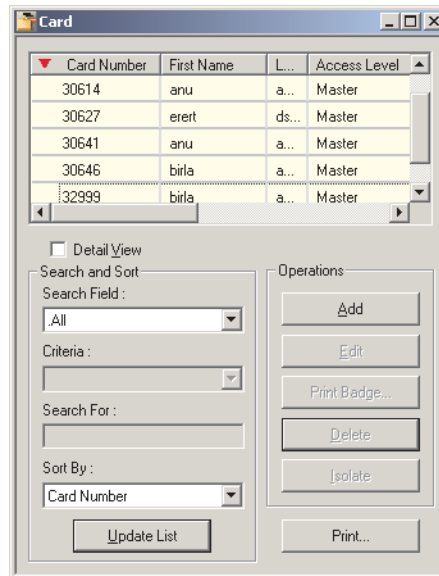
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## Adding, Editing, and Deleting Cards

Cards can be added and deleted individually, or in batches. For information on adding or deleting cards in batches see the "Bulk Card Add and Delete" section of this chapter.

## Adding an Individual Card

- 1 Select **Card** from the WIN-PAK Card menu.  
The Card database window is displayed:



- 2 Click **Add** to open the **Card Record** with the **Card Properties** tab displayed (next illustration).

### Card Properties

Use the Card Properties tab of the Card Record to set certain parameters for the card.

The screenshot shows the 'Card Record' dialog box with the 'Card Properties' tab selected. The 'Badge' sub-tab is also visible. The form contains the following fields and controls:

- Card Number:** Text box containing '36'.
- Status:** Dropdown menu set to 'Active'.
- Issue:** Text box containing '0'.
- Card Holder:** Text box containing 'Michael, John' with a browse button (three dots).
- Access Level:** Dropdown menu set to 'None'.
- PIN:** Text box.
- Description:** Text box.
- Account:** Dropdown menu set to 'account1'.
- P-Series Trigger Control:** Section containing a 'User Level' spinner box set to '0'.
- Custom Access Level:** Text box with an 'Add...' button.
- Action Group:** Text box set to 'None' with a 'View..' button.
- Activation Date:** Section with 'Change' and 'Clear' buttons, and a date field showing '4/1/2005'.
- Expiration Date:** Section with 'Change' and 'Clear' buttons, and an empty date field.

At the bottom of the dialog are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

- 3 Enter the **Card Number**.
- 4 A card's Status defaults to Inactive as soon as it is entered into the system. Click **Change** in the Activation Date area of the window and select the day, month, and year you want the card activated.
- 5 Issue indicates the number of times the card has been reissued [e.g. if a card is lost and a replacement is issued]. This is not a required field and is manually updated.
- 6 Use the **Card Holder** browse button to select the card holder to associate with the card. [This is not a required field. Card assignment can also be done in the card holder database.]

- 7 Select an **Access Level** for the card.
- 8 If your system requires a PIN (personal identification number) enter it in the **PIN** field.

---

**NOTE:** A PIN can be added to the card later. System PIN requirements can be removed from selected card numbers by not entering in the PIN.

---

- 9 Use the **Custom Access Level** option to set a custom [usually limited] access level for the card. Refer to the "Defining Access Levels" section of this chapter for details.
- 10 Action groups can be used to set specific actions to occur when a card is read in different states, for example when its status is Lost/Stolen or Trace, rather than Active.

Refer to "Action Groups" section of the "Device Map" section of chapter 4 for more information.

- 11 Use the **Activation Date** and **Expiration Date** options to set an activation or expiration date for the card. For example, if you want the card to be valid for a limited time, click **Change** in the **Expiration Date** area of the window, and select the desired expiration date from the calendar.

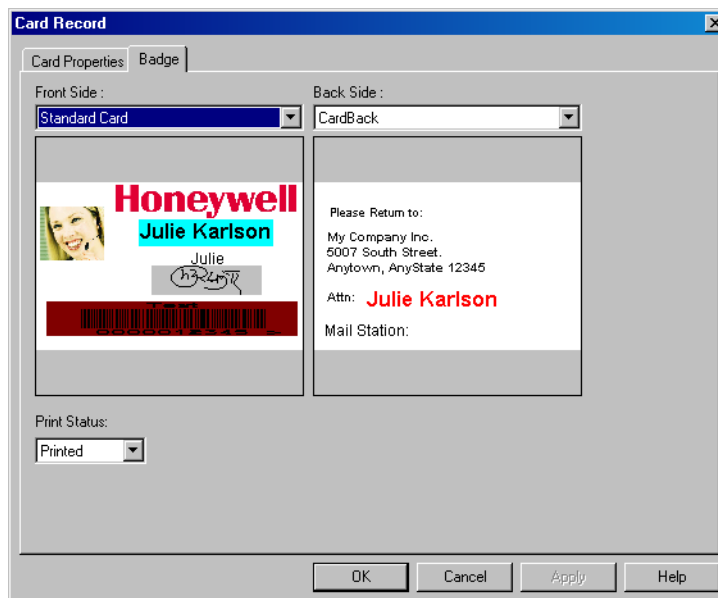
---

**NOTE:** The "Activate and Deactivate Cards" schedule must be set to implement the changes. Refer to the "Scheduler" section of the "Time Management" section of chapter 4.

---

## Badge

- 12 Associate a badge layout with the card by opening the **Badge** tab of the Card Record. If you are not using photo ID badges skip the following steps.



**NOTE:** Card holder biometrics are not displayed until the card is issued to a card holder who has photos and/or signatures in the card holder database.

- 13 Click the down-arrow to the right of the **Front Side** field to select the layout for the front of the card.
- 14 Click the down-arrow to the right of the **Back Side** field and select a layout for the back of the card.
- 15 Click **OK** to save the card definition. Click **Cancel** to return to the **Card** database window without saving the new card definition.

The Print Status box indicates if this badge has been printed.

### Editing a Card

- 1 With the Card database window open, highlight the card to be edited.
- 2 Click the **Edit** button. The Card Record window opens, displaying the Card Properties tab.
- 3 Make the desired changes, and click **OK** to save the changes. Click **Cancel** to return to the Card database window without saving the changes.

---

**NOTE:** To select a different badge layout for the card, open the Badge tab of the Card Record window and make a selection. To change the badge layout design, open the Badge Layout Utility on the Configuration menu.

---

### Deleting a Card

- 1 With the Card database window open, highlight the card to be deleted.
- 2 Click **Delete**.

---

**NOTE:** By default, you are asked to confirm card deletions. However, this setting can be changed [in Workstation Defaults] so that cards can be deleted without confirmation. Change the setting by deselecting the Confirm Card Deletes check box on the Defaults tab of the Workstation Defaults window.

---

- 3 When asked to confirm the deletion, click **Yes** to delete the card or **No** to cancel the deletion.

## Bulk Card Add and Delete

Bulk Card Add can be used to get your system up and running quickly. A range of cards can be added at one time provided all the cards have the same access level and activation/expiration dates.

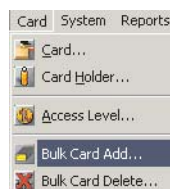
With Bulk Card Add, you can add and activate hundreds of cards at one time. All the cards added in a batch will have the same properties, but can be edited later to suit the needs of individual card holders.

In setting up your system, having several different batches of cards can provide flexibility. For example: a group of cards can be active immediately while another group of cards can be activated by date. Each group can be assigned its own access level or they can be made available when you want to issue them to individual card holders.

An error message is displayed if you attempt to add duplicate cards to the system. No existing cards will be modified.

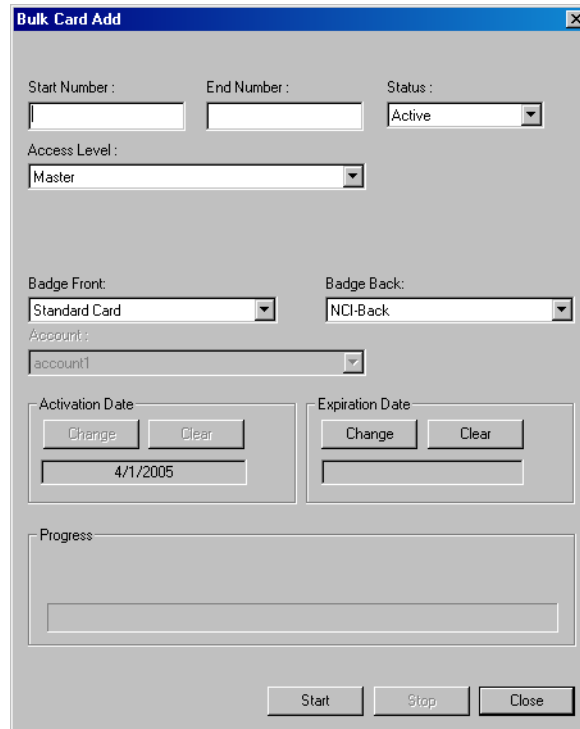
### Adding Cards in Bulk

- 1 Select **Bulk Card Add** from the WIN-PAK Card menu.



The **Bulk Card Add** window is displayed (next illustration):





The image shows a 'Bulk Card Add' dialog box with the following fields and controls:

- Start Number :** A text input field.
- End Number :** A text input field.
- Status :** A dropdown menu with 'Active' selected.
- Access Level :** A dropdown menu with 'Master' selected.
- Badge Front:** A dropdown menu with 'Standard Card' selected.
- Badge Back:** A dropdown menu with 'NCI-Back' selected.
- Account :** A dropdown menu with 'account1' selected.
- Activation Date:** A section containing a 'Change' button, a 'Clear' button, and a text field displaying '4/1/2005'.
- Expiration Date:** A section containing a 'Change' button, a 'Clear' button, and an empty text field.
- Progress:** A large empty rectangular area.
- Buttons:** 'Start', 'Stop', and 'Close' buttons at the bottom right.

- 2 Enter the first card number of the range to be added in the **Start Number** field.
- 3 Use the **End Number** field to enter the last card number in the range to be added.
- 4 Set the **Status** to Active. Inactive and Trace are also available.
- 5 Select a valid **Access Level** for the cards. The Account for which these card will be available is displayed but can not be edited.
- 6 Select an **Activation Date** [card status must be inactive] and/or an **Expiration Date** for the cards. Both these fields are optional.

---

**NOTE:** The "Activate and Deactivate Cards" schedule must be set to implement the changes. Refer to the Schedule section in Time Management.

---

- 7 Select the badge layout for Badge Front and Badge Back from the list of layouts available using the respective drop-down menu.
- 8 The Account field shows the selected account to which you are adding the cards in bulk.
- 9 When you have entered the required information, click **Start** to add the cards to the system [or click **Close** to exit without adding the cards].

---

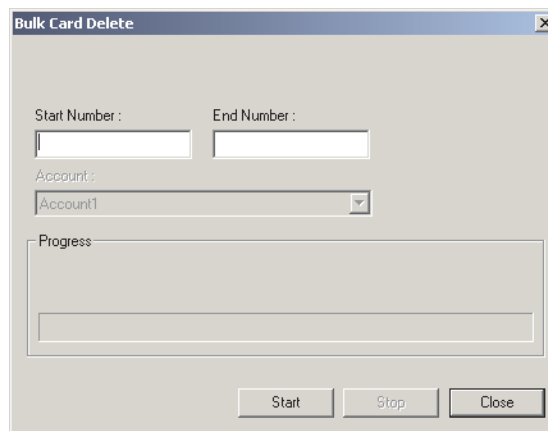
**CAUTION:** After clicking OK, use the bar at the bottom of the window to gauge the progress of the Bulk Card Add. DO NOT close any WINPAK services or turn-off the computer while the Bulk Card Add is in progress.

---

## Bulk Card Delete

Remove a large number of cards from your system quickly by using the **Bulk Card Delete** feature. You can remove any group of consecutive card numbers at one time.

- 1 Select **Bulk Card Delete** from the Card menu. The Bulk Card Delete window opens.



The screenshot shows a software window titled "Bulk Card Delete". Inside the window, there are two text input fields labeled "Start Number:" and "End Number:". Below these is a dropdown menu labeled "Account:" with "Account1" selected. Underneath the dropdown is a progress bar area labeled "Progress". At the bottom of the window, there are three buttons: "Start", "Stop", and "Close".

- 2 Enter the first and last card number to be deleted in the **Start Number** and **End Number** fields. The Account from which these cards will be deleted is displayed but can not be edited.
- 3 Click **OK** to delete the cards [or click **Cancel** to exit without deleting any cards].

---

**NOTE:** By default, you are asked to confirm card deletions. However, this setting can be changed [in Workstation Defaults] so that cards can be deleted without confirmation. Change the setting by deselecting the Confirm Card Deletes check box on the Defaults tab of the Workstation Defaults window.

---

- 4 If asked to confirm the deletion, click **Yes** to delete the card [or click **No** to cancel the deletion].

---

**NOTE:** The bulk cards can not be deleted while WIN-PAK is in Demo mode.

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## Associating Badges and Cards

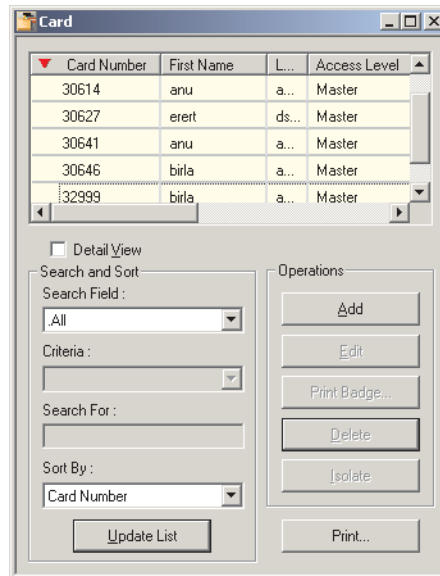
Badge designs or layouts are created using the Badge Layout Utility [on the Configuration menu]. Once a badge design is created, it can be associated with a card.

When the card is issued to a card holder, the card holder's information is merged with the badge design, resulting in an individual card.

Using a badge printer, these badges can be printed to plain cards or used to create a photo ID. They can also be printed on access-control cards and/or have magnetic stripes encoded, resulting in an ID card that is also an access card.

## Assigning a Badge to a Card

- 1 Open the **Card** database [by selecting Card from the menu of the same name].



- 2 Select the desired card from the database list and click **Edit**. The Card Record window opens, displaying the Card Properties tab.
- 3 Click the **Badge** tab of the Card Record window.
- 4 Use the **Front Side** list to select the name of the badge design to be assigned to the front of the card.
- 5 Use the **Back Side** list to select the name of the badge design to be assigned to the back of the card, if desired. A printer that can printed two-sided is required. Refer to the "Configuring the Badge Printer" section for chapter 5.

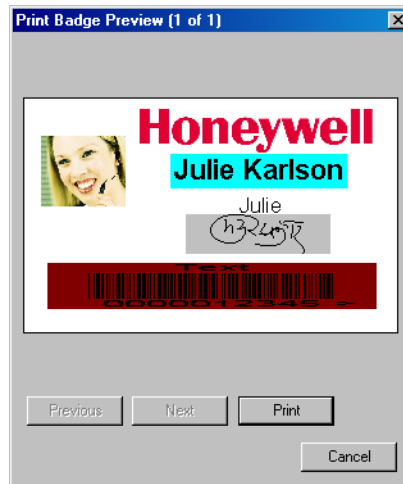
## Previewing and Printing Cards

Once a badge has been associated with a card, it can be printed either to a PVC card or to paper.

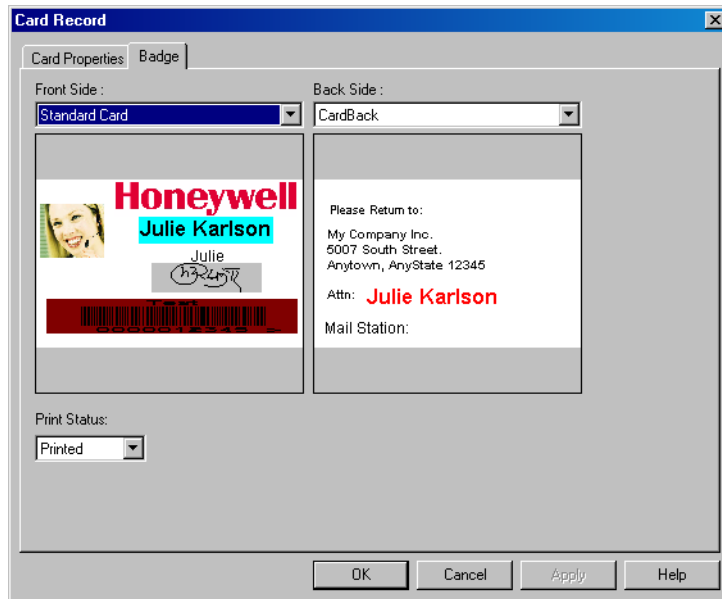
**NOTE:** In order to print a card, your printer must be installed in a Windows environment. For further information on printer installation see your Windows documentation.

### Previewing a Badge

You can preview a card by selecting it in the Card database window, and clicking the Print Badge button, as shown below:



The Print Badge Preview allows you to view the cards before printing them. If you are printing a batch of cards, use the **Next** and **Previous** buttons to scroll through the preview.



**NOTE:** Card holder biometrics are not displayed until the card is issued to a card holder who has photos and/or signatures in the Card Holder database.

- 6 When you finish making badge layout selections for the card, click **OK** to save your selections. Click **Cancel** to return to the Card database window without saving the selections.

The Print Status box indicates if this badge has been printed.

## Printing a Card

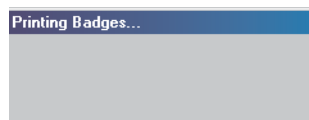
- 1 Select the card(s) to be printed from the Card database window.

---

**NOTE:** To select a continuous range of cards, hold down the **SHIFT** key while clicking the first card in the range and the last card in the range. To select a noncontiguous group of cards, hold down the **CTRL** (control) key, and click on each individual card to be printed.

---

- 2 Click the **Print** button at the bottom of the database window. The Select Printed Output dialog is displayed:



- 3 Click **Print Cards**. The Print Badge Preview window opens, allowing you to view each card in a batch.
- 4 Click **Print** to send the cards to the designated printer.

---

**NOTE:** The badges can not be deleted while WIN-PAK is in Demo mode.

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# **Translation**

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Translating Text & Selecting Languages

Creating a Text File for Translation

Selecting a Language for Translation

Translating Dialogs, Menus, and Other Text

Testing Translations

Importing a Language File



## Translating Text & Selecting Languages

WIN-PAK allows the translation of the User Interface into languages other than English. The Translation utility can also be used to customize selected dialogs in WIN-PAK. To translate the User Interface, you must create or import a file containing the new language.

WIN-PAK is designed to work with U.S. English operating systems. International operating systems require a special version of WIN-PAK. Consult Honeywell Access Systems regarding international operating systems.

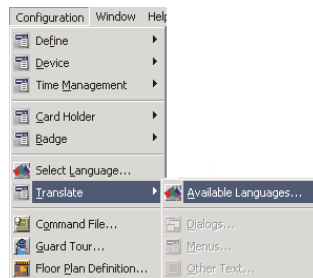
The following three steps should be followed when using the WIN-PAK translation utility for North America/English systems:

- 1 Create a language text file and add the new language to the list of available languages.
- 2 Select the language to which you are going to translate using the Select Language command.
- 3 Translate the menus, dialogs, and other text.

Once this process is completed, you can switch languages by using the Select Language command. You can also add a language selection to an Operator definition, so that when a particular operator logs in, the User Interface switches to the correct language for that operator.

## Creating a Text File for Translation

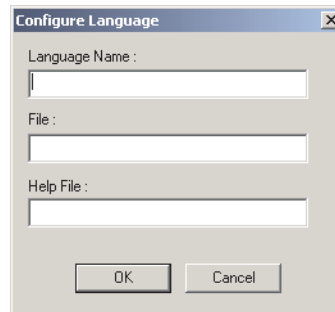
- 1 Select **Available Languages** from the **Translate** option on the Configuration menu.



The Edit List of Available Languages window is displayed (below). This list contains all the language files that have been placed in the WIN-PAK language directory (C:\Program Files\WinPakPRO\Language Files).



- 2 Click **Add** to open the **Configure Language** dialog.



- 3 Enter the new **Language Name** you want to use to describe the language translation, such as European French or Canadian French.
- 4 Enter the name of the new translation text **File**, for example FrenchCA.

---

**NOTE:** Special characters can be copied from the Windows Character Map and inserted into the text where required. If the Character Map is installed on your PC, it should be available on the System Tools menu, which becomes accessible by opening the Program group from the Start menu and selecting Accessories.

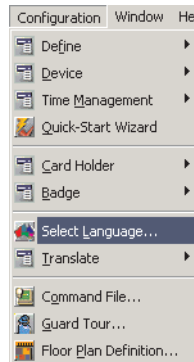
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- 5 The default American English help file is used if the Help File box is empty. Enter the name of the new Help File for the desired language. The Help File feature is used for the international versions of WINPAK.
- 6 Click **OK** to return to the Edit List of Available Languages dialog box. The new language text file name is now listed.
- 7 Click **OK**.

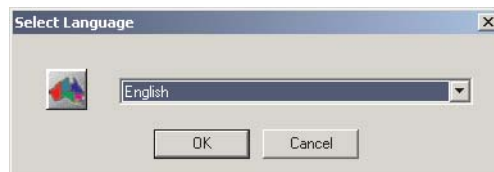
The next step is selecting a language for translation (next section).

## Selecting a Language for Translation

Click the **Select Language** option from the Configuration menu.



The Select Language dialog is displayed:



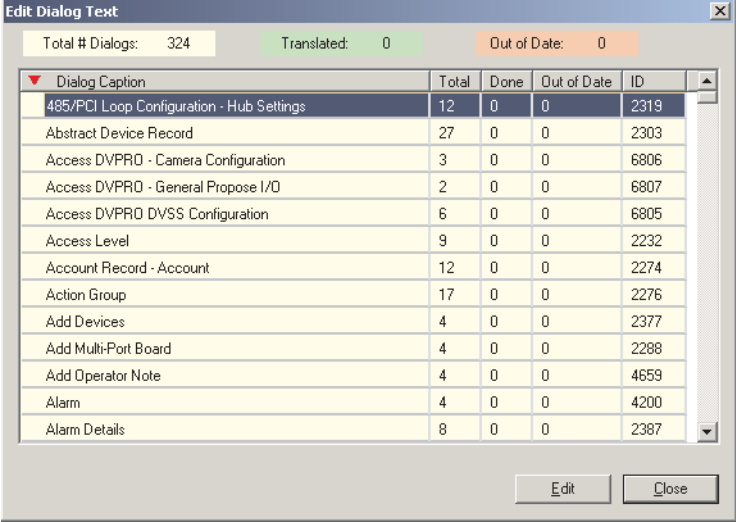
Select a Language, and click **OK**.

Now you can begin translation of the software dialogs, menus, and other text.

## Translating Dialogs, Menus, and Other Text

- 1 Select **Dialogs** from the **Translate** option on the Configuration menu.

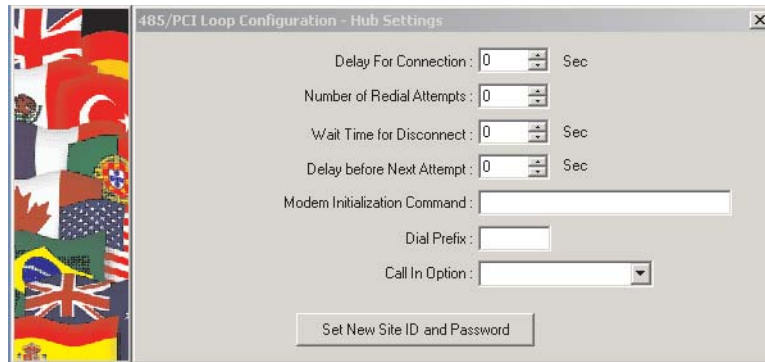
The Edit Dialog Text window is displayed.



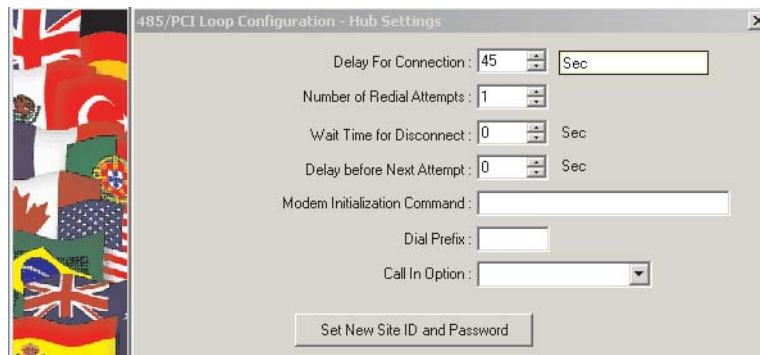
Dialog Caption	Total	Done	Out of Date	ID
485/PCI Loop Configuration - Hub Settings	12	0	0	2319
Abstract Device Record	27	0	0	2303
Access DVPRD - Camera Configuration	3	0	0	6806
Access DVPRD - General Propose I/O	2	0	0	6807
Access DVPRD DVSS Configuration	6	0	0	6805
Access Level	9	0	0	2232
Account Record - Account	12	0	0	2274
Action Group	17	0	0	2276
Add Devices	4	0	0	2377
Add Multi-Port Board	4	0	0	2288
Add Operator Note	4	0	0	4659
Alarm	4	0	0	4200
Alarm Details	8	0	0	2387

The Total # Dialogs box indicates the total number of Dialog boxes that can be translated. The Translated box indicates the total number of fields in the Dialog that have been translated. The Out of Date box indicates the number of dialogs that do not match exactly to an upgrade of WIN-PAK. This number will decrease after each dialog has been edited. Each Out of Date dialog will be displayed by a light red highlight. By clicking on the column heading, the columns can display information in ascending alphabetical order. The Dialog Caption column indicates the caption name to be edited and the Total indicates the number of fields that can be translated. Done indicates that the Caption has been edited even if only one field was changed. The Out of Date and ID column indicates the number of fields that do not match exactly to an upgrade of WIN-PAK.

- 2 Select a dialog from the **Dialog Caption** list and click the **Edit** button. An editable version of the dialog opens:

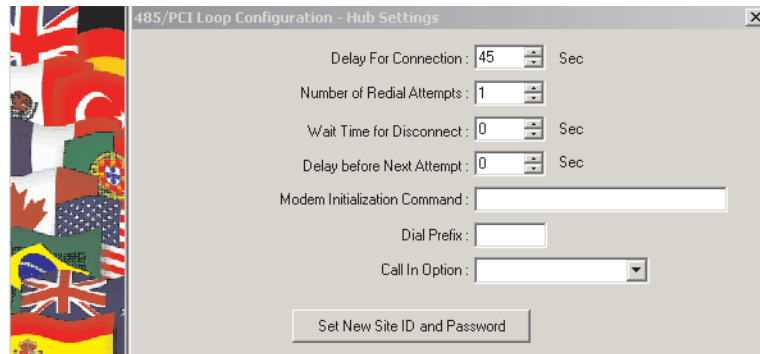


- 3 Click on the text you want to change. The text is automatically highlighted and the size of the field is displayed. Type in the new text. The following illustration shows the word Seconds being used to replace the Sec.





- 4 On completing the text change for a field, press the ENTER keyboard key to close the text field and save the edited text. After changing the three Sec fields, the Dialog now appears as indicated below.



485/PCI Loop Configuration - Hub Settings

Delay For Connection : 45 Sec

Number of Redial Attempts : 1

Wait Time for Disconnect : 0 Sec

Delay before Next Attempt : 0 Sec

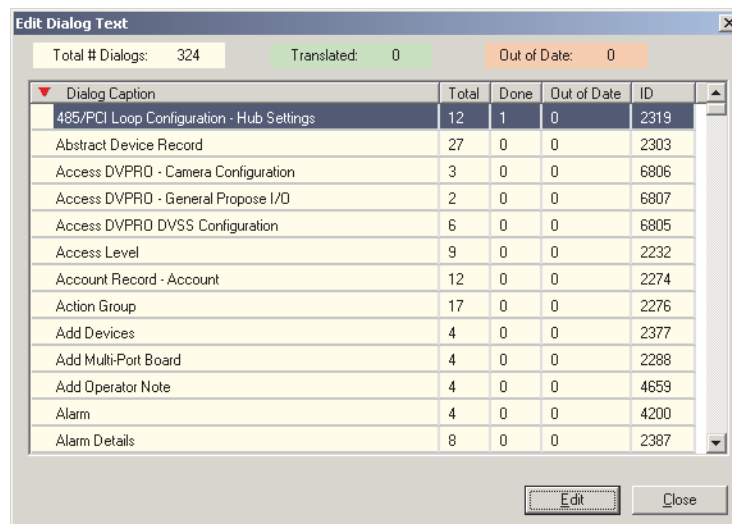
Modem Initialization Command :

Dial Prefix :

Call In Option :

Set New Site ID and Password

- 5 When you have finished making all the necessary changes to the dialog, click the Close button (X) in the upper right corner of the editable dialog or click on the Dialog and select **Close**.



Edit Dialog Text

Total # Dialogs: 324 Translated: 0 Out of Date: 0

Dialog Caption	Total	Done	Out of Date	ID
485/PCI Loop Configuration - Hub Settings	12	1	0	2319
Abstract Device Record	27	0	0	2303
Access DVPRD - Camera Configuration	3	0	0	6806
Access DVPRD - General Propose I/O	2	0	0	6807
Access DVPRD DVSS Configuration	6	0	0	6805
Access Level	9	0	0	2232
Account Record - Account	12	0	0	2274
Action Group	17	0	0	2276
Add Devices	4	0	0	2377
Add Multi-Port Board	4	0	0	2288
Add Operator Note	4	0	0	4659
Alarm	4	0	0	4200
Alarm Details	8	0	0	2387

Edit Close

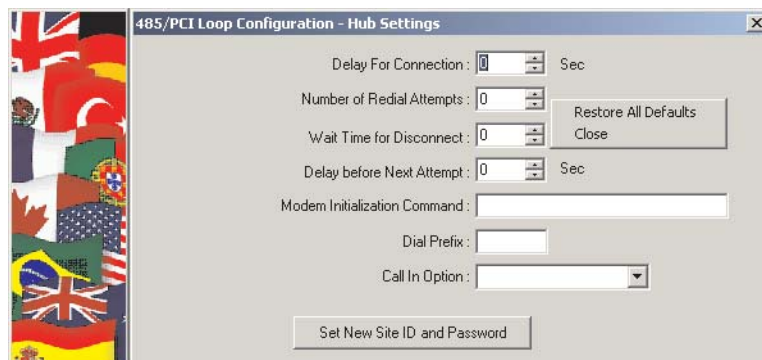
- 6 Select the next dialog to translate. Continue this procedure until all the desired dialogs have been translated.

## Editing Dialog Text

In addition to translating text from English to another language, you may want to customize selected dialogs in your WIN-PAK system. You can use the Edit Dialog Text utility for this purpose as well.

## Restoring Dialog Text Defaults

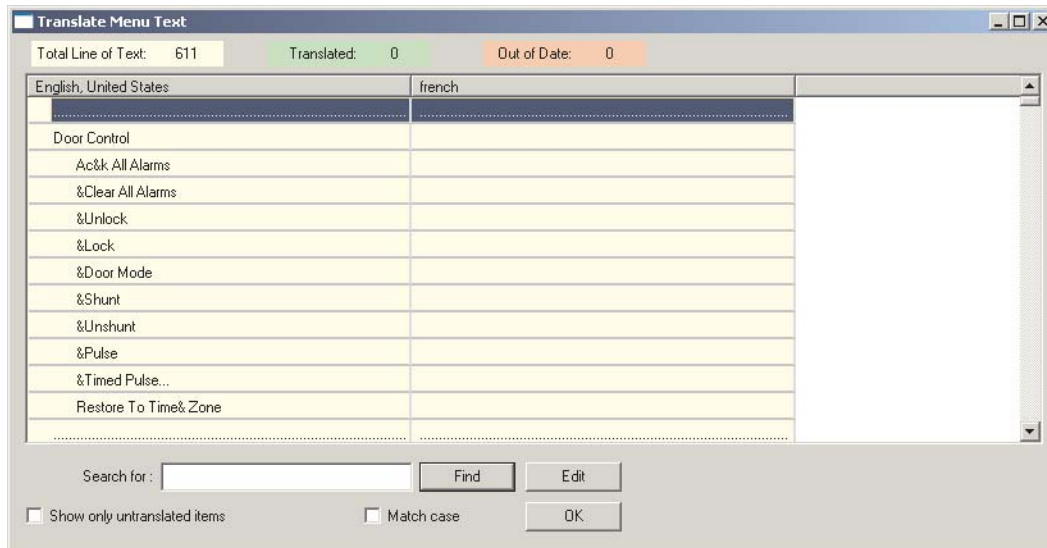
Edited dialog text can be restored to its original default by opening the Edit Dialog Text window [selecting Dialogs from the Translate option on the Configuration menu], and opening the editable version of the dialog to be restored. Right-click anywhere in the dialog and select **Restore Defaults**. The original labels are restored for the selected dialog.



If you have edited text on more than one dialog, you must restore each one separately.

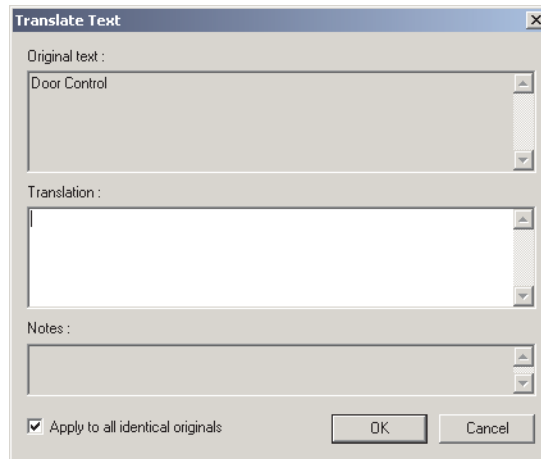
## Changing Menu Text

- 1 Select **Menus** from the **Translate** option on the Configuration menu. The Translate Menu Text window opens on your desktop:



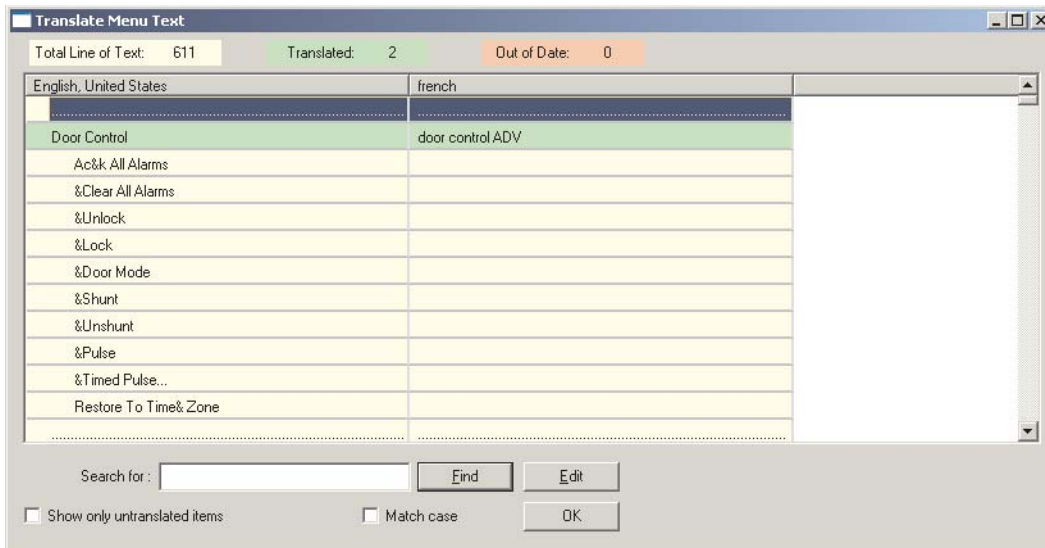
The Total Line of Text box indicates the total number of lines that can be translated. The Translated box indicates the number of lines that have been translated. The Out of Date box indicates the number of dialogs that do not match exactly to an upgrade of WIN-PAK. This number will decrease after each dialog has been edited. Each Out of Date dialog will be displayed by a light red highlight. The Out of Date and ID column indicates the number of fields that do not match exactly to an upgrade WIN-PAK.

- 2 Double-click a menu item to open its **Translate Text** dialog.



- 3 Type the replacement text in the **Translation** area of the dialog. The "&" indicates that the character immediately following is underscored for use as an Alt + Key entry (hot key). Care should be used not to duplicate the same character in the grouping.
- 4 The Apply to all identical originals check box in the lower left corner of the window globally applies the translated phrase throughout the system and in doing so the Translated box reflects how many lines were translated.

- Click **OK** to save the entry and return to the Translate Menu Text window.



- Select the next menu to translate. Continue this procedure until all the desired menus have been translated.

## Searching Menu Text

Use the **Search for** field at the bottom of the **Translate Menu Text** window to search through the list. Enter text in the field and click the **Find** button. The first instance of the searchable item is highlighted in the menu list. When the Match case box is selected, the Search for field becomes case sensitive.

## Sorting Untranslated Items

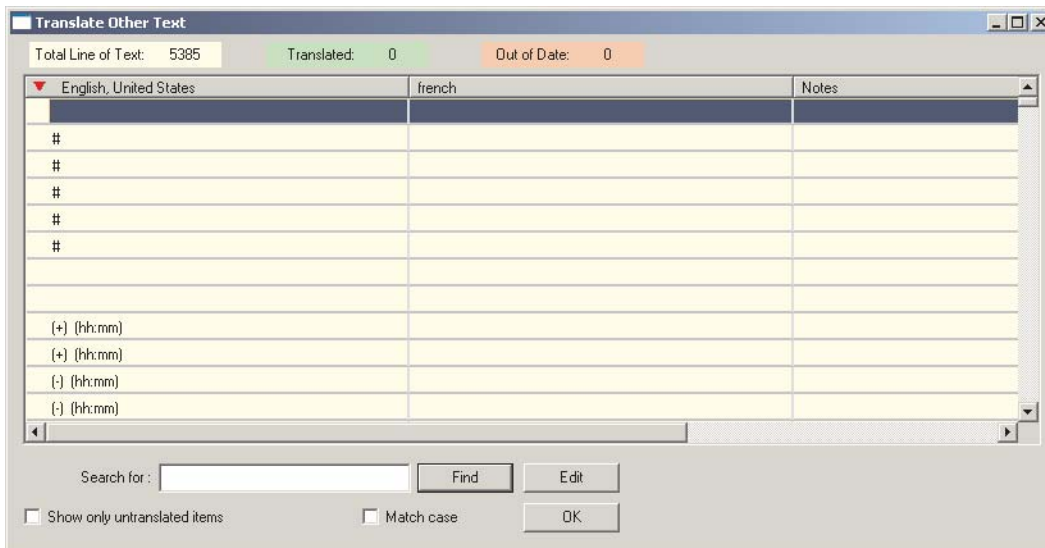
Select the **Show only untranslated items** check box in the lower left corner of the **Translate Menu Text** window to restrict the items displayed to those still needing translation. This can be helpful as you work through a large list of menu items. The Total Line of

Text will reflect the remaining lines that have not yet been translated.

### Changing Other System Text

Throughout the system, the same procedures outlined for changing menu text are used to change text (warn-ings, prompts, messages, etc) that does not fall into the dialog or menu category.

- 1 Select **Other Text** from the **Translate** option on the **Configuration** menu. The Translate Other Text window is displayed:



The Total line of Text box indicates the total number of lines that can be translated. The Translated box indicates the number of lines that have been translated. The Out of Date box indicates the number of dialogs that do not match exactly to an upgrade of WIN-PAK. This number will decrease after each dialog has been edited.

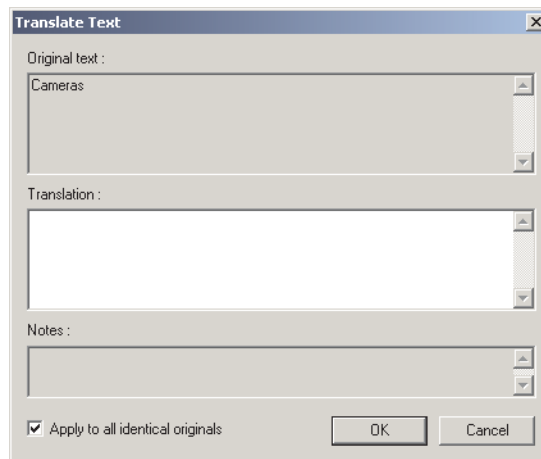
Each Out of Date dialog will be displayed by a light red highlight. By clicking on the column heading, the columns can display information in ascending

alphabetical order.

The English, United States column is the original language of WIN-PAK. The center language column is the name of the language that was added to Available Languages and is the current language being edited (View, Select Language...). The edited changes will be viewed in this column.

The Notes column is not an editable column but displays notes that pertain to certain values that are needed in the text. The In File column provides a unique identity to where the text is used in WIN-PAK.

- 2 Double-click a menu item to open its **Translate Text** dialog.



- 3 Type the replacement text in the **Translation** area of the dialog.
- 4 The Apply to all identical originals check box in the lower left corner of the window globally applies the translated phrase throughout the system and in doing so the Translated box reflects how many lines were translated.

- 5 Click **OK** to save the entry and return to the Translate Other Text window.
- 6 Select the next menu to translate. Continue this procedure until all the desired menus have been translated.

### Searching Menu Text

Use the **Search for** field at the bottom of the **Translate Menu Text** window to search through the list. Enter text in the field and click the **Find** button. The first instance of the searchable item is highlighted in the menu list. When the Match case box is selected, the Search for field becomes case sensitive.

### Sorting Untranslated Items

Select the **Show only untranslated items** check box in the lower left corner of the **Translate Menu Text** window to restrict the items displayed to those still needing translation. This can be helpful as you work through a large list of menu items. The Total Line of Text will reflect the remaining lines that have not yet been translated.

## Testing Translations

To test a translation, click **Select Language** from the **Configuration** menu and choose the desired language from the list. Click **OK**. The terms you have entered should appear in the User Interface dialogs, menus, and other messages.

## Importing a Language File

If you have a translation file for a given language, copy the file to the WIN-PAK Language Files folder. The default path is:

C:\Program Files\WinPakPRO\Language Files.



You can verify or change this path by selecting Workstation Defaults from the WIN-PAK System menu, opening the Directories tab and checking the Path to Language Files.

Once a language file is placed in this directory, it is available for selection and use in the WIN-PAK System.



## Chapter 8

# Reports

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## Overview

### Generating and Printing Reports



## Overview

WIN-PAK allows you to generate a variety of reports that can be viewed on screen or printed.

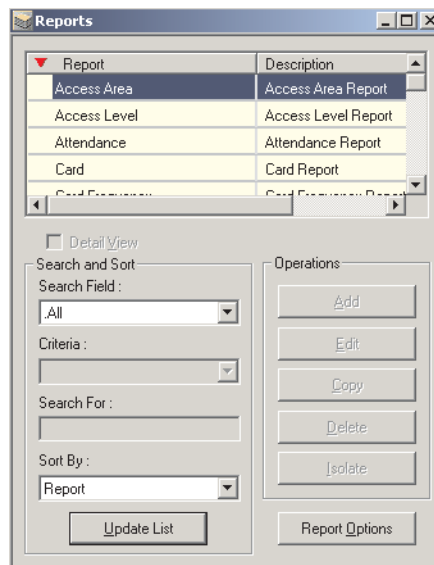
Reports available within the WIN-PAK System include:

- Access Areas
- Account
- Attendance
- Card Holder Tab Layout
- Card History
- Card Holder
- Control Area
- Floor Plan
- History
- Note Field Template
- Operator Level
- Time Zone
- Access Levels
- Card
- Card Frequency
- Command File
- Device Map
- Guard Tour
- Holiday Group
- Operator
- Operator Actions
- Tracking and Mustering Area
- Schedule

Reports are generated by selecting Reports from the WIN-PAK menu of the same name (or by clicking the Run Reports toolbar button).



The Reports database window is displayed (next illustration), listing all reports available.



Double-click on a report to open its detail window, which allows you to set a variety of filtering and sorting parameters for the report. You can also open a report detail window by highlighting it in the database list and clicking the Report Options button at the bottom of the window.

After setting the parameters for the report, click the **Print Preview** button to view the report on your desktop. Click **Print** to send the report to your printer.

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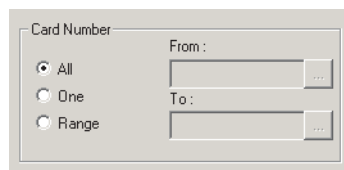
**Note:** While doing Print Preview of the card frequency report, it also executes the disposition option that has been selected.

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## Report Window Conventions

While the sorting and filtering options found on Report detail windows vary depending upon the individual report selected, certain conventions are applied to all reports.

For example, many report windows have a set of radio buttons used to filter the report.



When these filter options are presented, they are used in the same manner across all reports.

- Select the **All** radio button to report on all records that can be included in the report.
- Select the **One** radio button to report on an individual record. When the One button is selected, the From field is activated, allowing a selection to be made.
- Select the **Range** radio button to report on a designated range of records. When the Range button is selected, both the From and To fields are activated, allowing a reporting range to be set.

## Estimating Report Size

The size of a report depends on the type of report and the amount of filtering done to it. The number of pages required for printing also depends on your printer.

Before printing a report it may be helpful to know how many pages it will require. When you click the Estimate Pages button on the report's detail window WIN-PAK scans the report and returns a page count to you.



## Exporting Reports

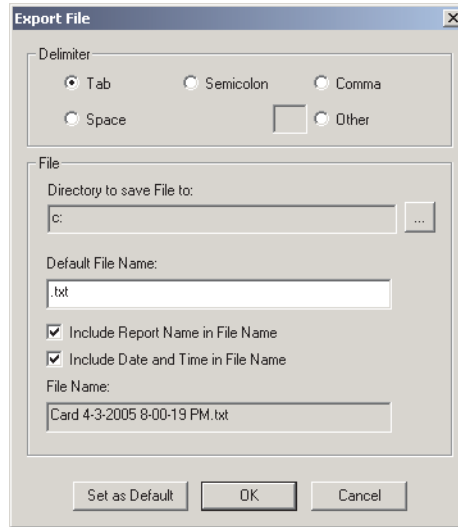
An export function (next illustration) allows the report to be exported in a simple delimited format. The delimiter provides a signal that the information for a particular field is complete and signals that the next string of information is regarded as a new field. The delimiter can be specified as Tab, Semicolon, Comma, Space or Other user definable. Tab is the default delimiter. Care should be used when specifying a delimiter other than Tab as characters such as a Comma or Space could be used in the data field, giving a misleading field separator.

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**NOTE:** The Operator Actions Report has an export function independent from the other reports. Refer to the Operator Actions Report section for exporting an Operator Actions report.

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The File section allows you to specify or navigate to the "Directory to save File to" and allows additions to the Default File Name. Selecting "Include Report Name in File Name" and/or "Included Date and Time in File Name" will automatically create the default file name, using the selected option. The File Name box displays the name as it will be written to your file destination.

## Previewing Reports

To view a report before printing it, click the **Print Preview** button on the report's detail window. Use the **Zoom** tool to enlarge the page view. The Next Page and Previous Page buttons allow you to scroll through a multiple page report.

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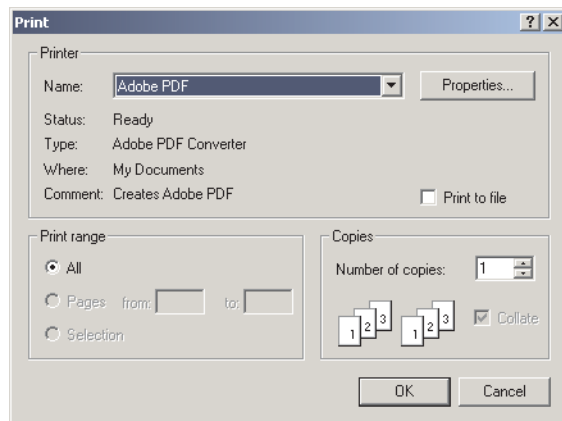
**Note:** While doing Print Preview of the card frequency report, it also executes the disposition option that has been selected.

---

## Printing Reports

Clicking the **Print** button on a report detail window sets off two actions. First, the report generates in the background. For longer reports, you will see the **Print Progress** status window running the report.

Next, a standard **Print** dialog is displayed, where you can indicate the printer to which the report should be sent.



After setting your print parameters, click the **OK** button to send the report to the designated printer. The report prints, and you are returned to the report detail window.

## Reporting from Archived Databases

WIN-PAK reports can be generated from archived databases as well as from its active database.

Select the **Run from Archived Database** check box on the report's detail window to pull report data from an archived database.

---

**NOTE:** The "Run from Archived Database" check box will be grayed out if the archive service is not running. After starting the archive server, the operator must re-login for the User Interface to connect to the archive server.

---

## Generating and Printing Reports

Reports are generated by first selecting the desired report from the Reports database. A report-specific detail window displays the filters and sort options available for the report. After selecting the options you want you can preview the report or print it.

## Report Templates

A template is a pre-defined filter criteria that is commonly used for a particular purpose. Report Templates are the standard format readily available for you to configure reports. The users can use this template to create report configurations and save it. Two different types of report templates (History Report template and Card Holder Report template) are available with WIN-PAK currently and user can create templates for these two reports only. The user can create multiple templates for History and Card Holder Reports.

To create report template,

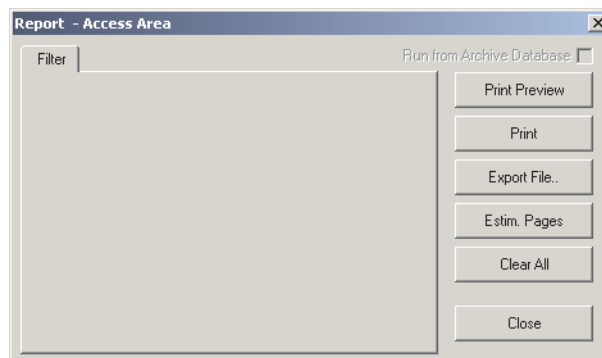
- 1 On the **Reports** menu, click **Report Templates**.
- 2 Select the report folder that are available (Card Holder or History).
- 3 Select Add from the right-click context menu to add a template and to configure properties related to reports.
- 4 After you configure a report, click Save Template to save the user configuration made to the template.
- 5 Click Save As to save the user configuration.
- 6 Click Print Preview to display the report before printing it.

- 7 For an estimate of the length of the report, click the Estim. Pages button.
- 8 Click Export File to export and save the report in the selected folder.
- 9 Click Clear All to clear the configuration made for card frequency.
- 10 Click Print to print the report.
- 11 Click Close to exit the Report window.

## Access Area Report

Select the **Access Area** report from the Reports database window.

No filter or sort options are available on the Report-Access Area detail window.

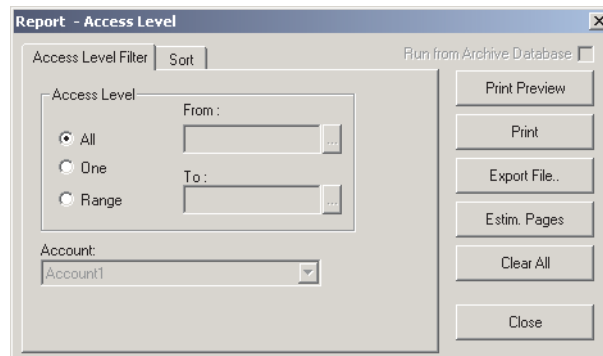


Click the **Print Preview** button to view the Access Area Report prior to printing it. Click **Print** to send the report to your printer.

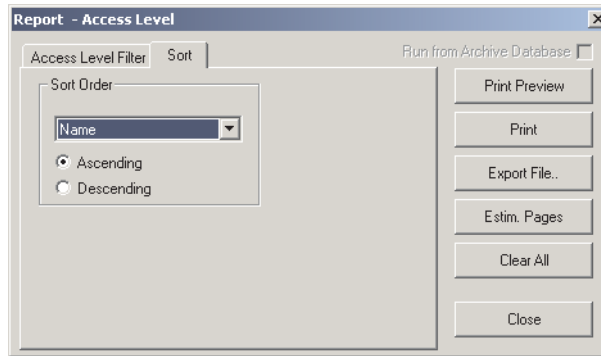
Click **Close** to return to the main Reports database window.

## Access Level Report

- 1 Select the **Access Level** report from the Reports database window.



- 2 On the Report tab of the Report-Access Level detail window, select one of the following from the Access Level area of the window to define the report:
  - All:** reports on every access level.
  - One:** reports on an individual access level using the From field [activated when the One radio button is selected].
  - Range:** reports on a designated range of access levels, using the From and To fields [activated when the Range radio button is selected].
- 3 On the Sort tab (next illustration), use the **Sort Order** list to select a category that determines how to sort the access levels [Names, for example].



- 4 Indicate if the category should be sorted in **Ascending** or **Descending** order.
- 5 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 6 Click **Close** to return to the main Reports database window.

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**NOTE:** There may be access levels listed in the report that do not show up in the access level database and are identified by number only. These numbered access levels are the custom levels for cards that are modified from their base access level.

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## Attendance Report

- 1 Select the **Attendance** report from the Reports database window.

The screenshot shows the 'Report - Attendance' dialog box. It features a title bar with a close button. Below the title bar are two tabs: 'Attendance Filter' and 'Sort'. To the right of the tabs is a checkbox labeled 'Run from Archive Database'. The main area is divided into three sections: 'Tracking Area' with a dropdown menu showing 'Tracking and Mustering Areas'; 'Card Holders' with three radio buttons ('All' is selected, 'One', and 'Group'); and 'Date Range' with 'From' and 'To' fields. The 'From' field is set to 'April 01, 2005' and '0 : 0'. The 'To' field is set to 'April 01, 2005' and '23 : 59'. On the right side of the dialog, there are buttons for 'Print Preview', 'Print', 'Export File..', 'Estim. Pages', 'Clear All', and 'Close'.

- 2 Select a **Tracking Area** if desired.
- 3 Select one of the following from the Card Holders area of the window to define the report.

**All:** reports on all card holders during the dates specified in the date range

**One:** reports on an individual cardholder during the defined date range, using the Card Number and Name fields [displayed when the One radio button is selected].

**Group:** reports on a designated group of card holders during the date range, using the Access Level field and Note Field [displayed when the Group radio button is selected]. Additionally, a text field is available to further define the note field contents.

- 4 Select the Sort tab to sort the report data.

In the two Sort Order fields you can select the first and second fields by which to sort the report data. The first field will accept either First Name or Last Name of the card holder to group the data. On the other hand, in the second field, you can have either card number, event time, first name, or last name for sorting. While sort order 1 helps to filter and group the card holders, sort order 2 is used to sort the items within a group.

You can also choose to sort them in alphabetical and numerical order (Ascending) or reverse alphabetical and numerical order (Descending) by clicking the appropriate radio button beneath each field.

- 5 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 6 Click **Close** to return to the main Reports data-



## Card Frequency Report

The Card Frequency Report refers to the number of times the user accessed a particular reader using the card. This report also helps the user to get details about unused cards and to prevent any misuse of the card.

To Generate a Card Frequency Report,

- 1 Select the **Card Frequency** report from the Reports database window. The Report Card Frequency window opens with the Date and Time Filter tab displayed.

Report - Card Frequency

Run from Archive Database: ☐

Date and Time Filter | Frequency Filter | Card Holder Filter

Date Range

From : Tuesday, April 12, 2005 ... 0 : 0

To : Tuesday, April 12, 2005 ... 23 : 59

Daily Time Range

☐ Only list events between these hours each day

From : 0 : 0 To : 23 : 59

Time Zone : (GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi

Print Preview

Print

Export File..

Estim. Pages

Clear All

Close

- 2 Indicate a **Date Range** for the report, using the From and To fields and browse buttons. Set precise time for the report, using the spinner boxes to the right of the Date Range fields.
- 3 Use the **Daily Time Range** area of the window to set a specific time frame for the report. The time will begin at the From date and time through the end of the To date and time.

If the check box "Only list events between these hours each day" is marked, only the time range each day will be reported omitting information outside the time range.

- 4 Select a **Time Zone** that the report should use as a reference. For example, if you are generating a report for a facility that is located in a different Time Zone, select that facility's Time Zone +/- the time relative to where the report is being generated. In other words, if you are located in Seattle [(GMT -08:00) Pacific Time (US & Canada) Tijuana] and your current time is 7:00 a.m., and you want to generate a report for today from 8:00 a.m. to 10:00 a.m. for the facility in New York, you would select "(GMT -)5:00) Eastern Time (US & Canada)" to indicate that the time elements are relative to New York (three hours ahead – "in the future", relative to your time)
- 5 Use the **Frequency Filter** tab to specify the frequency range in Lower Frequency Limit and Upper Frequency Limit or Zero Frequency, Reader location, Access level, Filter ADVs, and Disposition.

The disposition options are as follows:

**None:** This indicates that no change in the access level and just generates a report.

**Deactivate and Report cards that are between the limits:** Select this option to deactivate the cards based on the defined criteria, although the user has been given card access. (For example, if the card is used only 10 times on the specified reader with the specified access level, you can set the criteria that those cards will be deactivated.)

**Deactivate, Detach and Report cards that are between the limits:** This refers that selecting this option not only deactivates the card, but also detaches it from the card holder.

**Reassign cards between limits to Access Level:**

Use this option to provide a new access to the card or change the access levels. However, this option will be disabled if “All Accounts” is chosen.

**Note:** The selection of access level is based on the account. Only the access levels pertaining to the account selected will be available for filtering.

Report - Card Frequency

Date and Time Filter | Frequency Filter | Card Holder Filter

Run from Archive Database ☐

Frequency

Lower Frequency Limit : 1 Upper Frequency Limit : 500

☐ Zero Frequency

Location

Reader :  ...

Access Level :  ...

Filter ADVs...

Disposition

☒ None

☐ Deactivate and Report cards that are between the limits

☐ Deactivate, Detach and Report cards that are between the Limits

☐ Reassign cards between limits to Access Level

None

Print Preview

Print

Export File..

Estim. Pages

Clear All

Close

- 7 The Card Holder Filter (next illustration) provides the ability to customize the report to card holder specific information. Each selection is "anded" so care should be used when selecting the options in order not to create so many restrictions that no records can be found to meet the selected criteria. Select all appropriate options (listed below illustration).

**First Name:** Enter the card holder's first name or select it from the browse button.

**Last Name:** Enter the card holder's last name or select it from the browse button.

**Card Number:** Enter the card number or select it from the browse button. Only the cards pertaining to the account selected will be available for selection.

**Reader:** Enter the reader or entrance ADV to match or select it from the browse button. For a group of readers, use Tracking Area.

**Tracking Area:** Select a predefined tracking area (group of readers) that should be used to filter the information. Do not use Reader when using Tracking Area because the Reader selection supercedes the Tracking Area selection.

**Card Codes:** Select or deselect the card transaction types to be included.

**Note Fields:** Select up to three note fields to match and the range of the description to match the note field.

**Report - Card Frequency**

Run from Archive Database ☐

Print Preview  
Print  
Export File..  
Estim. Pages  
Clear All  
Close

First Name : Last Name :  
Card Number :  
Tracking Area :  
Card Codes :  
Valid Card  
Trace Card  
Door Unlocked  
Account :  
Note Fields:  
Field : From : To :  
Field : From : To :  
Field : From : To :

## Card Report

- 1 Select the **Card** report from the Reports database window. The Report Card window opens with the Card Filter tab displayed.

- 2 Select one of the following to filter the report by Card Number.

**All:** reports on all cards.

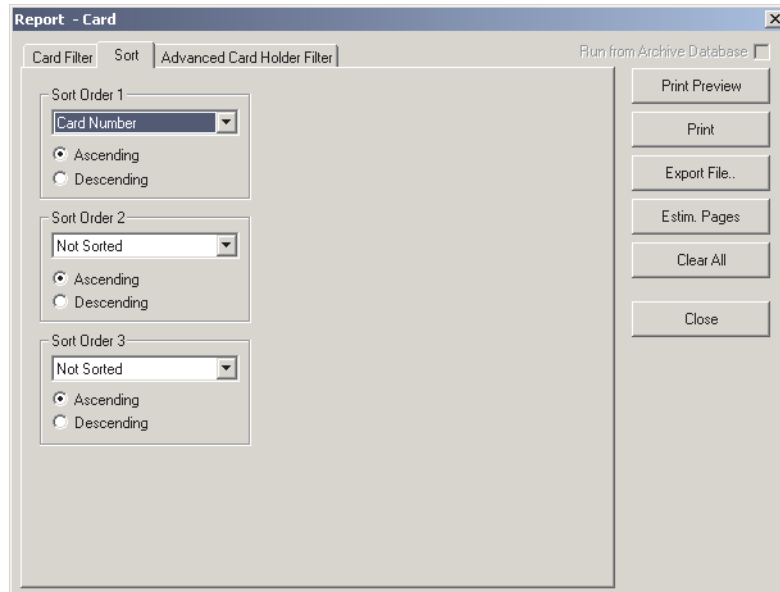
**One:** reports on an individual card using the From field [activated when the One radio button is selected].

**Range:** reports on a numerical range of cards using the From and To fields [activated when the Range radio button is selected].

- 3 Use any or all of the following options to further filter the report.

- Account
- Access Level
- Activation Date Range
- Expiration Date Range
- Card Holder
- Card Status
- Door

- 4 Use the **Number of columns to print** option to set a basic print parameter for the report.
- 5 Click the **Sort** tab. The Card Report can be sorted, in order, by up to three categories.



- 6 Use the **Sort Order** drop-down lists to select the categories determining how you want the cards sorted.

The categories chosen can be sorted in Ascending and Descending order. Ascending order will sort the cards alphabetically or numerically, and Descending order will sort the cards in reverse alphabetical or numeric order.

- 7 Click the **Advanced Card Holder Filter** tab. The Card report can also be filtered by a number of Card Holder categories.

The screenshot shows a software window titled "Report - Card". It has a tabbed interface with "Card Filter", "Sort", and "Advanced Card Holder Filter" tabs. The "Card Filter" tab is active. Inside, there are five filter sections, each with radio button options: "Card Holder" (Both, Attached, Unattached), "Pin #1" (Both, Assigned, Unassigned), "Badge Front" (Both, Assigned, Unassigned), "Badge Print Status" (Both, Printed, Not Printed), and "Badge Back" (Both, Assigned, Unassigned). All "Both" options are selected. At the bottom left is a checkbox for "Custom Access Level". On the right side of the window are buttons for "Print Preview", "Print", "Export File..", "Estim. Pages", "Clear All", and "Close". A checkbox for "Run from Archive Database" is located at the top right of the main content area.

The Card Report can be filtered according to:

- Whether a Card Holder is Attached (to the card), Unattached, or Both.
- Whether a PIN number is Assigned (to the card), Unassigned, or Both.
- Whether a Badge Front and/or Badge Back is Assigned (to the card), Unassigned, or Both.
- Whether the Badge Print Status (of the card) is Printed, Not Printed, or Both.

- 8 Select the **Custom Access Level** check box to include all cards which have custom access levels assigned to them.

- 9 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 10 Click **Close** to exit the Card report window and return to the main Reports database window.

### Card History Report

- 1 Select the **Card History** report from the Reports database window. The Report-Card History report window opens with the Date and Time Filter tab displayed.

**Report - Card Frequency**

Date and Time Filter | Frequency Filter | Card Holder Filter

Run from Archive Database ☐

**Date Range**

From: Friday, April 01, 2005 0 : 0

To: Friday, April 01, 2005 23 : 59

**Daily Time Range**

☐ Only list events between these hours each day

From: 0 : 0 To: 23 : 59

**Time Zone:**

(GMT+05:30) Calcutta, Chennai, Mumbai, New Delhi

Print Preview

Print

Export File..

Estim. Pages

Clear All

Close

- 2 Indicate a **Date Range** for the report, using the From and To fields and browse buttons. Set precise time for the report, using the spinner boxes to the right of the Date Range fields.



- 3 Use the **Daily Time Range** area of the window to set a specific time frame for the report. The time will begin at the From date and time through the end of the To date and time. If the check box "Only list events between these hours each day" is marked, only the time range each day will be reported omitting information outside the time range.
- 4 Select a **Time Zone** that the report should use as a reference. For example, if you are generating a report for a facility that is located in a different Time Zone, select that facility's Time Zone +/- the time relative to where the report is being generated. In other words, if you are located in Seattle [(GMT -08:00) Pacific Time (US & Canada) Tijuana] and your current time is 7:00 a.m., and you want to generate a report for today from 8:00 a.m. to 10:00 a.m. for the facility in New York, you would select "(GMT -)5:00) Eastern Time (US & Canada)" to indicate that the time elements are relative to New York (three hours ahead – "in the future", relative to your time)
- 5 Use the **Transaction Filter** tab to select the type of Card events the report should include. Select all that apply (listed below):

**Account:** Reports on all accounts from a specified account.

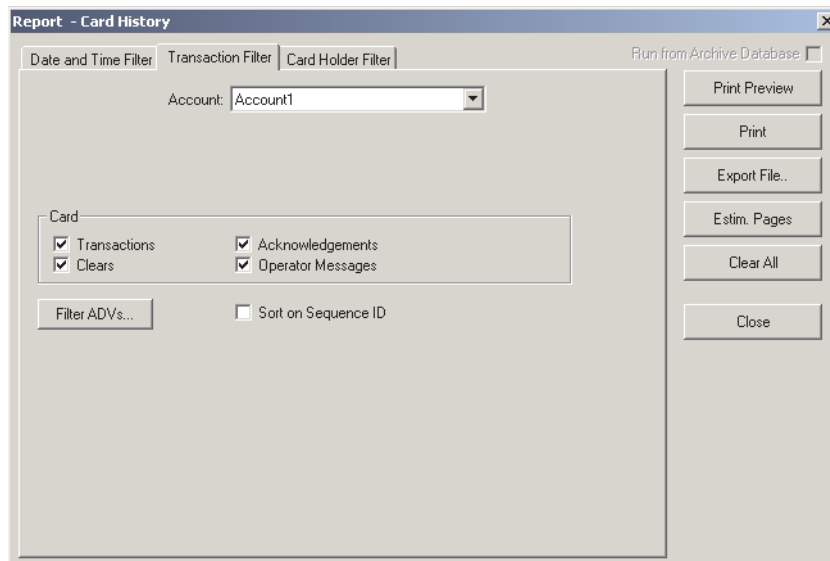
**Transactions:** Reports all card events [normal, alarm, host grant].

**Clears:** Reports the card alarm events that were cleared by the operator.

**Acknowledgements:** Reports the card alarm events that were acknowledged by the operator.

**Operator Messages:** Reports the operator message that was entered for the alarm card event.

- 6 Transactions can be filtered to selected ADVs by clicking on the Filter ADV... button. Navigate through the **Control Map** structure, right clicking on the branch(es) or device(s) to select or invert select ADVs. Click OK to return to the Transaction Filter window.



- 7 The Sort on Sequence ID will display the report that the event was written to the WIN-PAK database, instead of chronological order. This can be helpful in reviewing when an event was actually received to the WIN-PAK computer.

When a new event is seen on the Alarm View, it is given a sequence ID, and any changes that occur relative to that first event, like Alarm, Normal, Operator Note, Operator ACK, Operator Clear are tagged with the same sequence ID until the event is cleared.

When a report is generated with Sort on Sequence ID, the ID number groups the events together in chronological order. This makes it easier to view relative to other system-wide events.

- 8 The Card Holder Filter (next illustration) provides the ability to customize the report to card holder specific information. Each selection is "anded" so care should be used when selecting the options in order not to create so many restrictions that no records can be found to meet the selected criteria. Select all appropriate options (listed below illustration):

**First Name:** Enter the card holder's first name or select it from the browse button.

**Last Name:** Enter the card holder's last name or select it from the browse button.

**Card Number:** Enter the card number or select it from the browse button.

**Reader:** Enter the reader or entrance ADV to match or select it from the browse button. For a group of readers, use Tracking Area.

**Tracking Area:** Select a predefined tracking area (group of readers) that should be used to filter the information. Do not use Reader when using Tracking Area because the Reader selection supercedes the Tracking Area selection.

**Card Codes:** Select or deselect the card transaction types to be included.

**Note Fields:** Select up to three note fields to match and the range of the description to match the note field.

- 9 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 10 Click **Close** to exit the History report window and return to the main Reports database window.

## Card Holder Report

- 1 Select the **Card Holder** report from the Reportsdatabase window.

The Card Holder report window opens with the Card Holder tab displayed.

The screenshot shows the 'Report - Card Holder' window. The 'Card Holder Filter' tab is selected. The 'Card Holder' section has the 'All' radio button selected. The 'From (Last Name):' and 'To (Last Name):' fields are empty. The 'Access Level:' field is empty, and the 'Account:' dropdown is set to 'Account1'. The 'Note Fields' section has the 'None' radio button selected, and all five 'Field:' dropdown menus are set to '.None'. On the right, the 'Print Preview' button is highlighted. Other buttons include 'Print', 'Export File..', 'Estim. Pages', 'Clear All', and 'Close'. A 'Run from Archive Database' checkbox is at the top right.

- 2 Select a filter for the Card Holder Last Name.

**All:** reports on all card holders.

**One:** reports on an individual card holder using the From field [activated when the One radio button is selected to indicate the card holder's last name.

**Range:** reports on a designated range of cards holders using the From and To fields [activated when the Range radio button is selected] to specify the last names range.

- 3 The report can be further defined by selecting an Access Level. Only card holders with the access level specified are included in the report.
- 4 Use the Account field to narrow the report to card holders within a particular account.

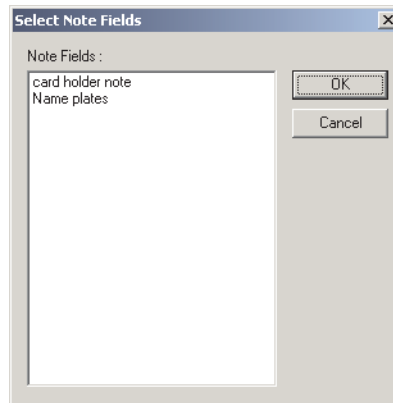
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**NOTE:** The Access Level field narrows the report to card holders with a particular access level. Note Fields can further define the report by any of the user defined note fields.

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- 5 The Notes Fields area of the window allows you to specify very specific types of information to include in the report. Using the radio buttons, you can select either None, for no note fields to be displayed, All or Select to specify any user-defined card holder note field(s) to include in the report.

If Select is chosen, click the browse button just beneath the Select radio button. The Select Note Fields dialog is displayed, allowing you to select any card holder note fields(s) that are required to be printed in the report.



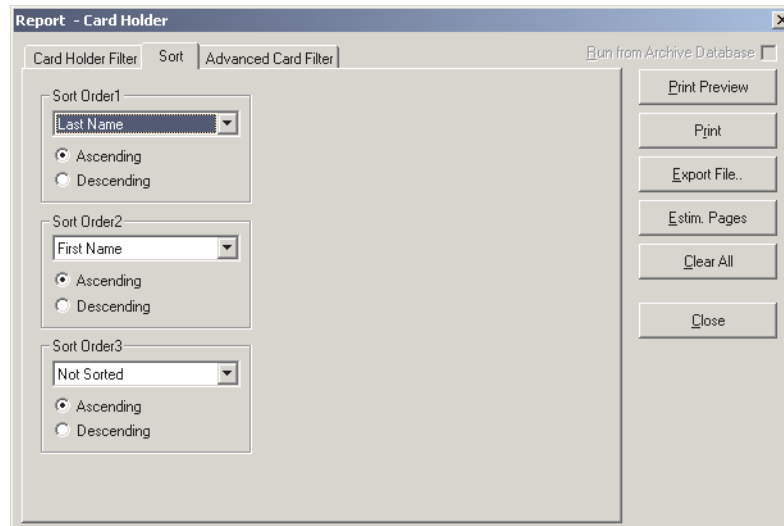
- 6 Click **OK** when finished selecting the Note Fields.
- 7 Filtering of the report can be restricted to match selected note field data and range of data. Select a note field and fill in any **From** and **To** information as required. Where dropdown list data is not defined, [general text fields], the From and To data is case sensitive.

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**NOTE:** The To field should not be left with an open ended range (e.g. Mary vs. Mary Smith). If Mary was used, then Mary Smith will not show up, since Mary Smith is after Mary.

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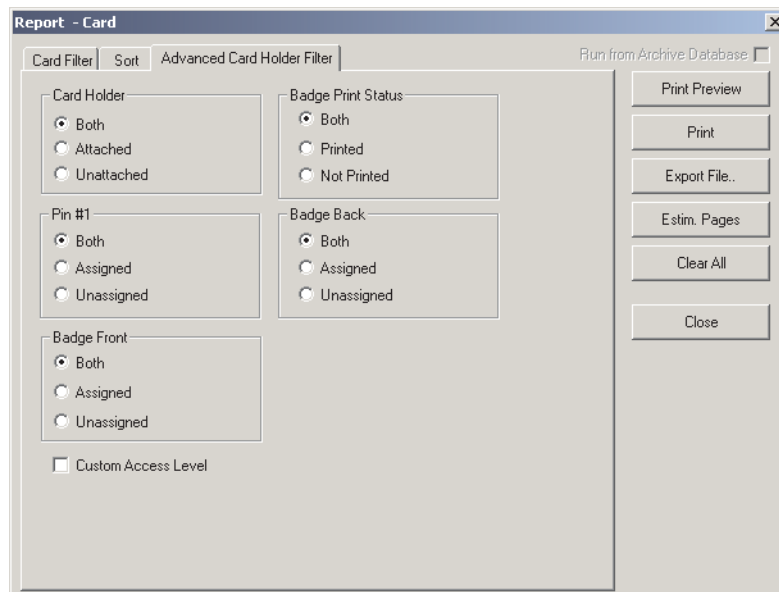
- 8 Click the **Sort** tab. The Card Holder report can be sorted (in order) by up to three categories.



Use the **Sort Order** drop-down lists to select the categories determining how you want the card holders sorted.

The categories chosen can be sorted in Ascending and Descending order. Ascending order will sort the card holders alphabetically or numerically, and Descending order will sort the card holders in reverse alphabetical or numeric order.

- 9 Click the **Advanced Filter Card** tab (next illustration). The Card Holder report can be also be filtered by a number of Card criteria.



The Card Report can be filtered according to:

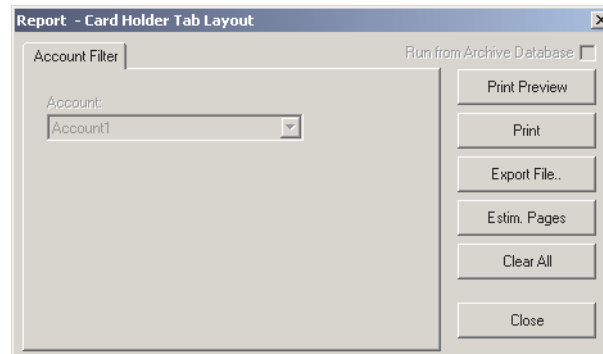
- Whether a Card is Attached (to the card holder), Unattached, or Both.
- The number of Photos or Signatures Assigned (to the card), Unassigned, or Both.

- 10 Use the **Print all cards** [assigned to the card holder], **Print no. of photos assigned**, and/or **Print no. of signatures assigned** check boxes to set global parameters for information to be included in the report.
- 11 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 12 Click **Close** to exit the Card Holder report and return to the main Reports database window.



## Card Holder Tab Layout Report

- 1 Select the **Card Holder Tab Layout** report from the Reports database window.



- 2 When the Report-Card Holder Tab Layout report window is displayed, use the **Account** field to select the account on which to report.

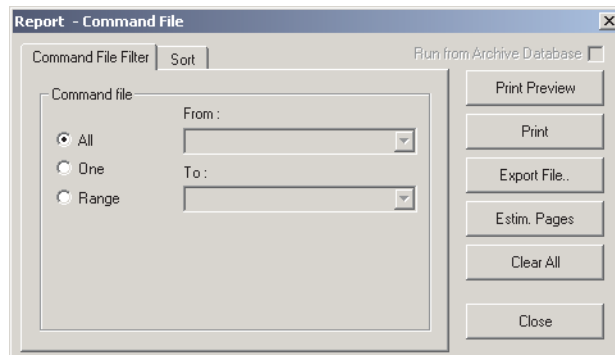
The Card Holder Tab Layout report shows the Note Fields associated with each Tab on the Card Holder Layout.

- 3 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 4 Click **Close** to exit the Card Holder Tab Layout report window and return to the main Reports database.

## Command File Report

- 1 Select the **Command File** report from the Reports database window.

The Report-Command File report window opens with the Filter Command File tab displayed.



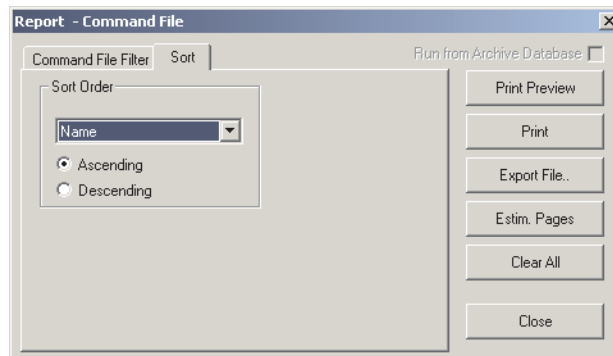
- 2 Select one of the following to define the Command File report to the degree necessary:

**All:** reports on every Command File.

**One:** reports on an individual Command File using the From field [activated when the One radio button is selected].

**Range:** reports on a range of Command Files using the From and To fields [activated when the Range radio button is selected].

- 3 Click the **Sort** tab and select a category to determine the Sort Order for the commands [e.g. Name]. Indicate whether the category should be sorted in Ascending or Descending order.

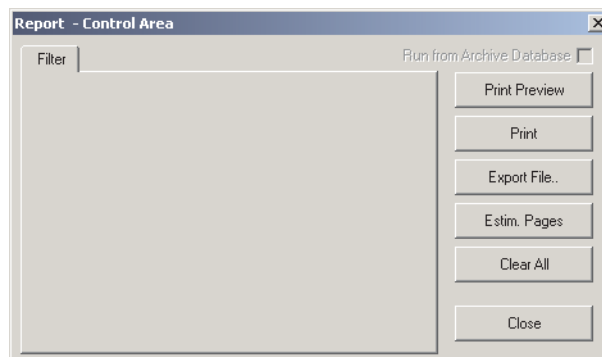


- 4 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 5 Click **Close** to exit the Command File report window and return to the main Reports database.

## Control Area Report

Select the **Control Area** report from the Reports database window.

No filter or sort options are available on the Control Area report window.

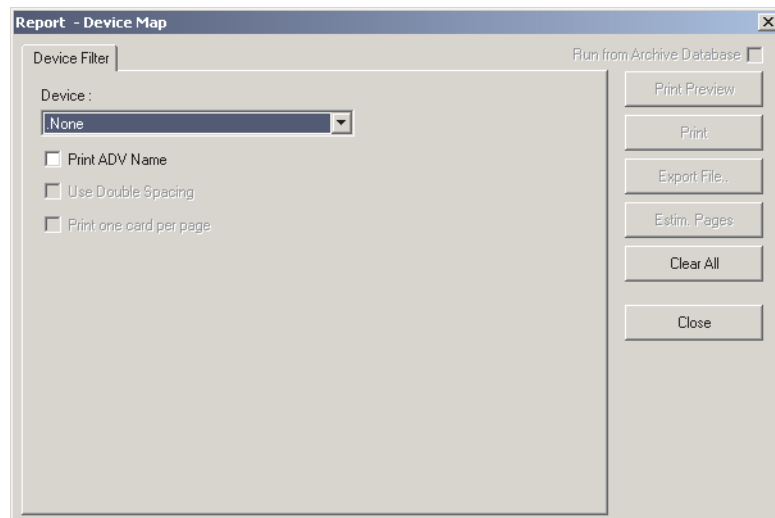


Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.

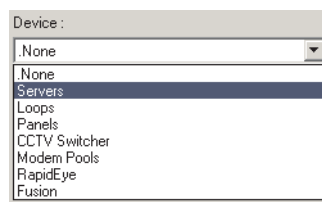
Click **Close** to exit the Control Area report window and return to the main Reports database.

## Device Map Report

Select the **Device Map** report from the Reports database window. The report window opens with the Filter Device tab displayed.



Click the down-arrow to the right of the **Device** field, and select a device on which to filter the report.



A corresponding tab with additional filter options is added to the window. See the following sections.

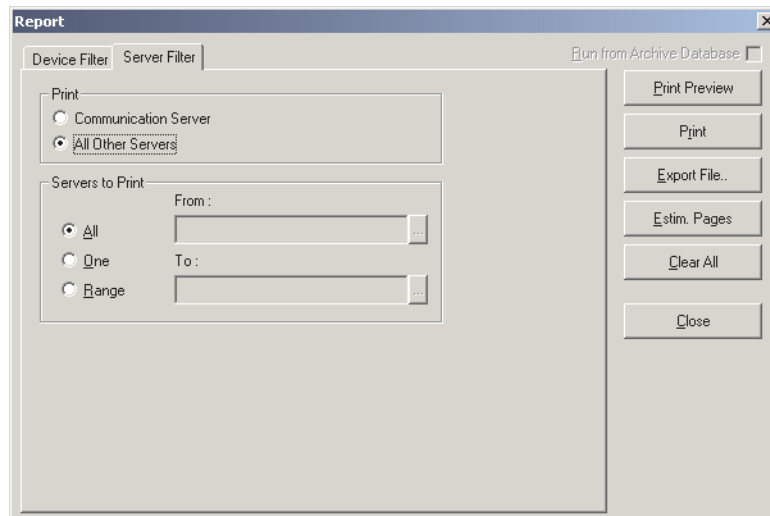
Use the **Print ADV Name** check box if you want abstract device names included on the report when it is generated.

Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.

### Generating a Server Device Report

Server device reports can display all [or a range of] servers.

- 1 Select **Servers** on the Filter Device tab to open the **Server** tab of the report window.

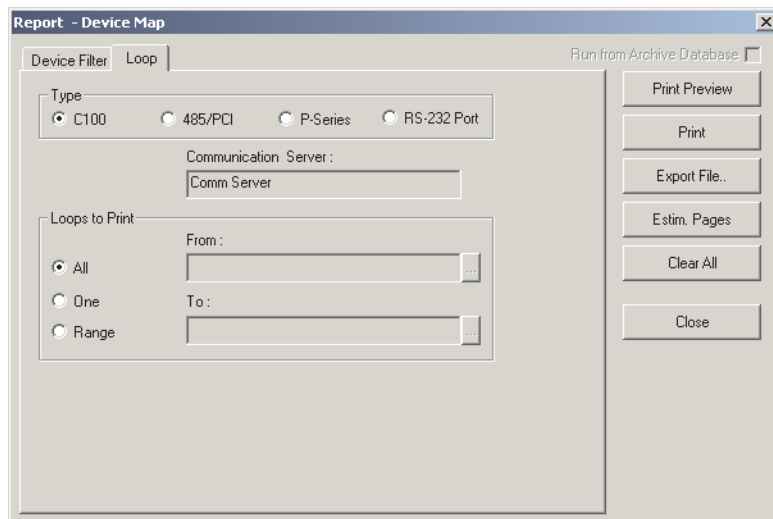


- 2 Indicate whether to print **Comm Server** information or **All Other Servers** in the report.
- 3 In the Servers to Print area of the window, select one of the following to define the report:
  - All:** reports on all servers.
  - One:** reports on an individual server using the **From** field [activated when the One radio button is selected].
  - Range:** reports on a designated range of servers, using the From and To fields. These fields are activated when the Range radio button is selected.

### Reporting on Communication Loops

Loop device reports allow you to indicate whether to report on a C-100, 485/PCI, PRO-2200, or RS-232 loops.

- 1 Select **Loops** on the Filter Device tab to open the Loop tab of the report window.



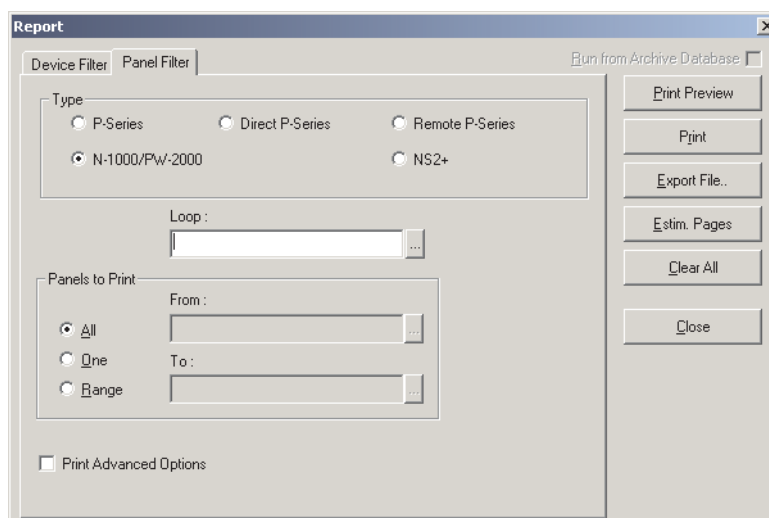
- 2 Select the appropriate radio button to indicate the Type of loop on which to report.
- 3 Use the **Loops to Print** area of the window to select one of the following to define the report:
  - All:** reports on all loops.
  - One:** reports on an individual loop using the **From** field [activated when the One radio button is selected].
  - Range:** reports on a designated range of loops, using the From and To fields [activated when the Range radio button is selected].



### Reporting on Panel Loops

**Panel** device reports can display all, or a range of panels, as well as reporting on a specific panel loop.

- 1 Select **Panels** on the Filter Device tab to open the Panel tab of the report window.



- 2 Select the appropriate radio button for the type of panel configuration on which to report.

An individual Loop can be selected for the report. Click the browse button to the right of the Loop field. When the Select window is displayed, click the **Find** button to display a list of loops on the panel type selected. Highlight the desired loop and click the **OK** button.

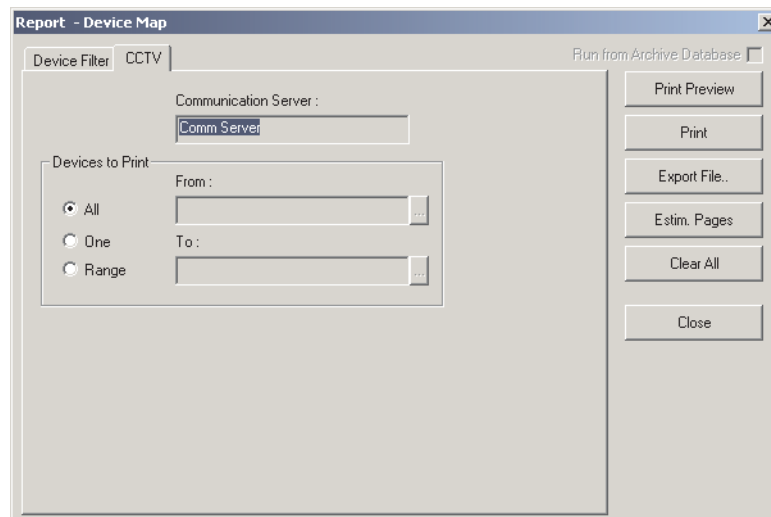
On returning to the Panel window, note that the loop selected is now displayed in the field.

- 3 Use the **Panels to Print** area of the window to select one of the following to define the report:
  - All:** reports on all panels.
  - One:** reports on an individual panel using the From field [activated when the One radio button is selected].
  - Range:** reports on a designated range of panels, using the From and To fields [activated when the Range radio button is selected].
- 4 Select the **Print Advanced Options** check box to include a N-1000 Panel's advanced options in the report.

### Reporting on CCTV Switcher Devices

The CCTV Switcher device reports can display all, or a range of, CCTV Switchers.

- 1 Select **CCTV Switcher** on the Filter Device tab to open the Switcher tab of the report window.

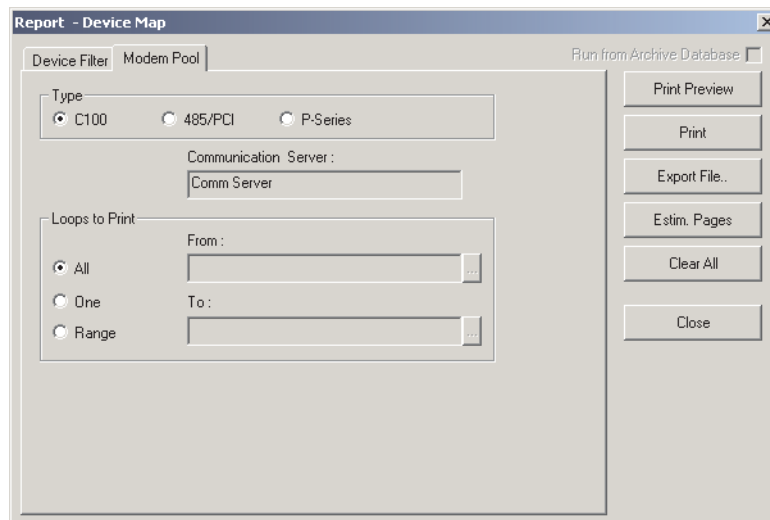


- 2 Use the **Switchers to Print** area of the window to select one of the following to define the report:
  - All:** reports on all CCTV Switchers.
  - One:** reports on an individual Switcher using the From field [activated when the One radio button is selected].
  - Range:** reports on a designated range of Switchers, using the From and To fields [activated when the Range radio button is selected].

### Reporting on Modem Pools

Reports generated on Modem Pools can display all modem pools, or a range of modem pools.

- 1 Select **Modem Pools** on the Filter Device tab to open the Modem Pool tab of the report window.

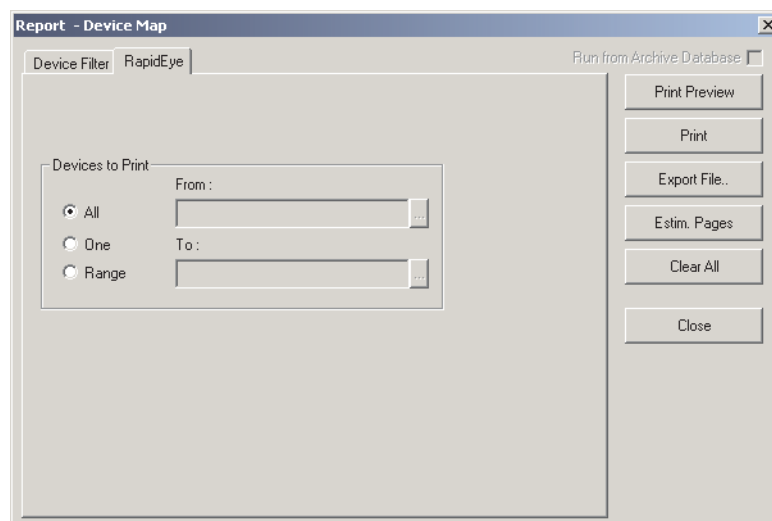


- 2 Select the appropriate radio button to indicate the Type of modem pool device on which to report. The C100 refers to non-ACK/NAK modem pools. The 485/PCI refers to ACK/NAK modem pools. The PRO-2200 refers to standard modem pools.
- 3 Use the **Loops to Print** area of the window to select one of the following to define the report:  
**All:** reports on all modem pools.  
**One:** reports on an individual modem pool using the From field [activated when the One radio button is selected].  
**Range:** reports on a designated range of modem pools, using the From and To fields [activated when the Range radio button is selected].

## Reporting on Digital Video Devices

The Digital Video device reports can display all or a range of Access DVPRO devices.

- 1 Select **Access DVPRO** on the Device Filter tab to open the Access DV PRO tab of the report



- 2 Use the **Devices to Print** area of the window to select one of the following to define the report:

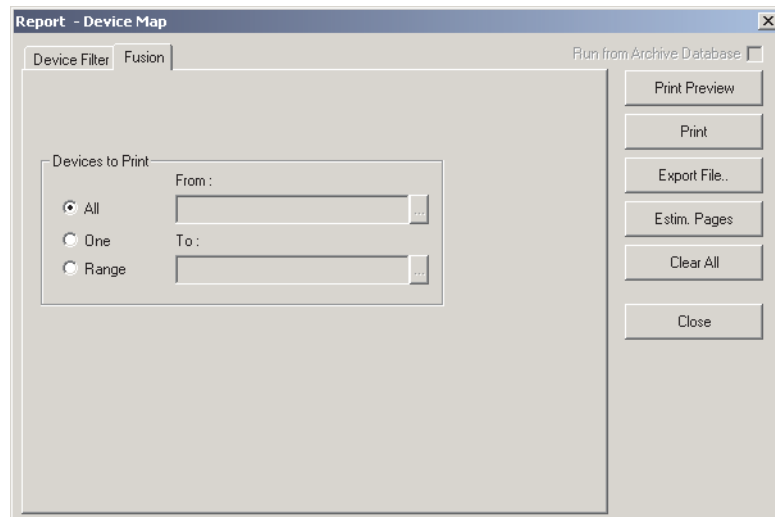
**All:** Reports on all Access DVPRO servers.

**One:** Reports on an individual Access DVPRO server using the From field [activated when the One radio button is selected].

**Range:** Reports on a designated range of Access DVPRO server, using the From and To fields [activated when the Range radio button is selected].

The Digital Video device reports can display all or a range of Fusion DVR devices.

- 1 Select **Fusion** on the Device Filter tab to open the Fusion tab of the report window.



- 2 Use the **Devices to Print** area of the window to select one of the following to define the report:

**All:** Reports on all Fusion DVR servers.

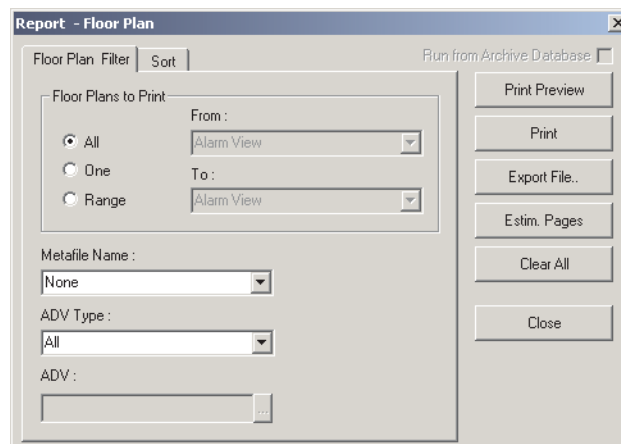
**One:** Reports on an individual Fusion DVR server using the From field [activated when the One radio button is selected].

**Range:** Reports on a designated range of Fusion DVR server, using the From and To fields [activated when the Range radio button is selected].

## Floor Plan Report

- 1 Select the **Report-Floor Plan** report from the Reports database window.

The Floor Plan report window opens with the Filter Floor Plan tab displayed.



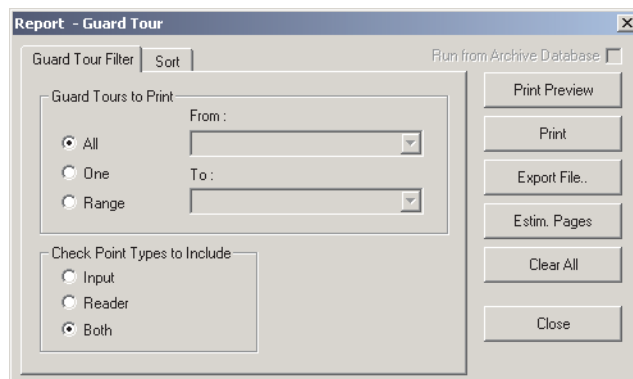
- 2 Use the **Floor Plans to Print** area of the window to select one of the following to define the report:  
**All:** reports on all floor plans.  
**One:** reports on an individual floor plan using the From field [activated when the One radio button is selected].  
**Range:** reports on a designated range of floor plans, using the From and To fields [activated when the Range radio button is selected].
- 3 Use the **Metafile Name** field to include floor plans using a specific background file.
- 4 Use the **ADV Type** and **ADV** fields to further define the report if desired.
- 5 On the **Sort** tab, indicate the Sort Order for the report (e.g. by name in ascending or descending order).

- 6 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 7 Click **Close** to exit the Floor Plan report window and return to the main Reports database window.

## Guard Tour Report

- 1 Select the **Guard Tour** report from the Reports database window.

The Guard Tour report window opens with the Filter Guard Tour tab displayed.



- 2 Use the **Guard Tours to Print** area of the window to select one of the following to define the report:

**All:** reports on all guard tours.

**One:** reports on an individual guard tour using the From field [activated when the One radio button is selected].

**Range:** reports on a designated range of guard tours, using the From and To fields [activated when the Range radio button is selected].



- 3 The report can be further refined by selecting an option from the Check Point Types to Include area of the window.  
**Input:** reports on inputs exclusively.  
**Reader:** reports on readers exclusively.  
**Both:** reports on both inputs and readers.
- 4 On the Sort tab of the report window, use the **Sort Order** list to select a category determining how to sort the guard tours. Choose whether the category should appear in ascending or descending order.
- 5 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 6 Click **Close** to exit the Guard Tour report window and return to the main Reports database window.

### History Report

- 1 Select the **History** report from the Reports database window (next illustration). The Report-History report window opens with the Date and Time Filter tab displayed.

- 2 Indicate a **Date Range** for the report, using the **From** and **To** fields and browse buttons. Set precise time for the report, using the spinner boxes to the right of the Date Range fields.
- 3 Use the **Daily Time Range** area of the window to set a specific time frame for the report. The time will begin at the "From date and time" continuous through the end of the "To date and time". If the check box "Only list events between these hours each day" is marked, only the time range each day will be reported, omitting information outside the time range.
- 4 Select a **Time Zone** that the report should use as a reference. For example, if you are generating a report for a facility that is located in a different Time Zone, select that facility's Time Zone. The report will be generated based on the time requested in that Time Zone, +/- the time relative to where the report is being generated. In other words, if you are located in Seattle [(GMT

- 08:00) Eastern Time (US & Canada): Tijuana)] and your current time is 7:00 am, and you want to generate a report for today from 8:00 to 10:00 am for the facility in New York, you would select "(GMT - 05:00) Eastern Time (US & Canada)" to indicate that the time elements are relative to New York (3 hours ahead - "in the future" relative to your time).

- 5 Use the **Transaction Filter** tab to select the Transaction Type and Alarm & Card events the report should include. Select all that apply. Transaction type possibilities are listed below.

### Transaction Types

**Alarm:** reports alarm point alarm and normals.

**System Alarm:** reports system type alarms [not wired points] such as Poll Response alarms.

**Operator:** reports operator activities, such as login and logout.

**Database:** reports basic database activities, such as time, date, operator, update, delete or add action to a particular database.

**Card:** reports on all card events.

**Guard:** reports Guard Tour events.

### Alarm and Card

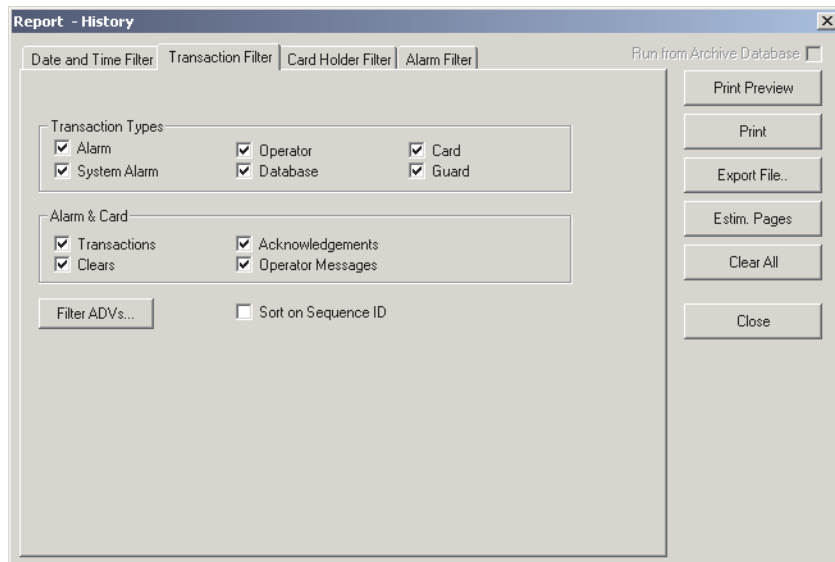
**Transactions:** reports all card and alarm events per the transaction type.

**Clears:** reports the card alarm events that were cleared by the operator.

**Acknowledgements:** reports the alarm events that were acknowledged by the operator.

**Operator Messages:** reports the operator message that was entered for the alarm event.

- 6 Transactions can be filtered to selected ADVs by clicking on the Filter ADVs...button (next illustration). Navigate through the Control Map structure, right clicking on the branch(es) or device(s) to select or invert select ADVs. Click **OK** to return to the Transaction Filter window.



**NOTE:** The Sort on Sequence ID will display the report grouping it by the event identifier [Sequence ID]. This can be helpful in grouping an event's history within multiple events.

- 7 The Card Holder Filter provides the ability to customize the report to card holder specific information. Each selection is "anded", so care should be used when selecting the options, so as not to create so many restrictions that no records can be found that meet the selected criteria. Select all appropriate options (described below).

Field :	From :	To :
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

**First Name:** enter the card holder's first name or select it using the browse button.

**Last Name:** enter the card holder's last name or select it using the browse button.

**Card Number:** enter the card number or select it using the browse button.

**Reader:** enter the reader or entrance ADV to match or select it using the browse button. For a group of readers, use Tracking Area.

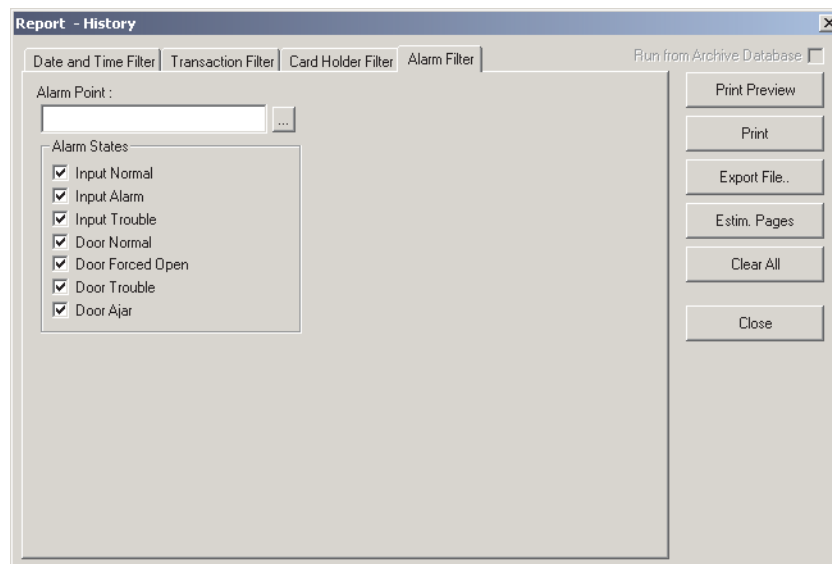
**Tracking Area:** select a predefined tracking area [group of readers] that should be used to filter the information. The tracking areas named in the drop box are the branch names configured in the Tracking Area database.

Do not use Reader when using Tracking Area because the Reader selection supercedes the Tracking Area selection.

**Card Codes:** select or de-select the card transaction types to be included.

**Note Fields:** select up to three Note Fields to match and the range of the description to match the note field.

- 8 The Alarm Filter tab (below) provides additional filtering of alarm events. Use the browse button to select a specific alarm point or leave blank for no restrictions. Select the **Alarm States** that are required for the report.

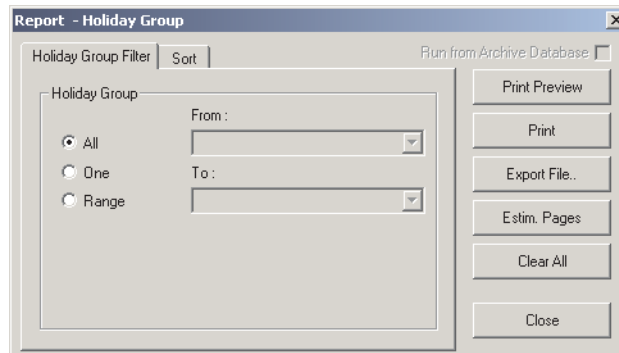


- 9 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of your report.
- 10 Click **Close** to exit the History report window and return to the main Reports database window.

## Holiday Group Report

- 1 Select the **Holiday Group** report from the Reports database window.

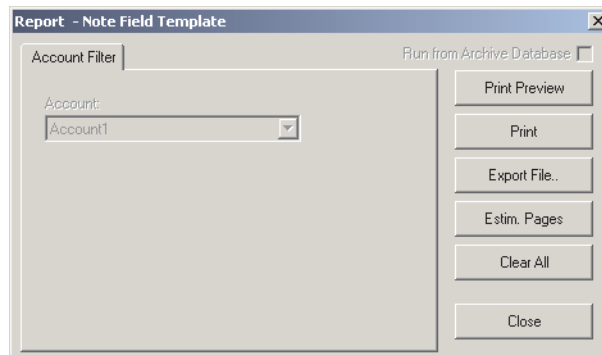
The Report-Holiday Group report window opens with the Filter Holiday Group tab displayed.



- 2 The Holiday Group report can be defined using one of the following option.  
**All:** reports on all holiday groups.  
**One:** reports on an individual holiday group using the From field [activated when the One radio button is selected].  
**Range:** reports on a designated range of holiday groups, using the From and To fields [activated when the Range radio button is selected].
- 3 On the Sort tab of the report window, use the **Sort Order** list to select a category determining how to sort the holiday groups. Choose whether the category should appear in ascending or descending order.
- 4 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 5 Click **Close** to exit the Holiday Group report window and return to the main Reports database.

## Note Field Template Report

- 1 Select the **Note Field Template** report from the Reports database window. When the Note Field Template window is displayed, the Filter tab is blank. The Note Field Template report shows the field name and the template or note field definition.



- 2 Select the appropriate account on which to report.
- 3 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 4 Click **Close** to exit the Note Field Template report window and return to the main Reports database

## Operator Report

- 1 Select the **Operator** report from the Reports database window. The Reports-Operator report window opens with the Filter Operator tab displayed.



The screenshot shows the 'Report - Operator' dialog box with the 'Operator Filter' tab selected. The 'Operator' section has three radio buttons: 'All' (selected), 'One', and 'Range'. To the right of these are 'To:' and 'From:' dropdown menus, both showing 'Admin'. Below these is an 'Account:' dropdown menu showing 'Account1'. On the right side of the dialog, there is a 'Run from Archive Database' checkbox (unchecked) and a vertical stack of buttons: 'Print Preview', 'Print', 'Export File..', 'Estim. Pages', 'Clear All', and 'Close'.

- 2 The **Operator** report can be further defined using one of the following options

**All:** reports on all operators.

**One:** reports on an individual operator using the To field [activated when the One radio button is selected].

**Range:** reports on a designated range of operators, using the To and From fields [activated when the Range radio button is selected].

- 3 Click the **Sort** tab, and select a Sort Order for the report.
- 4 Indicate if the report should be sorted in **Ascending** or **Descending** order.

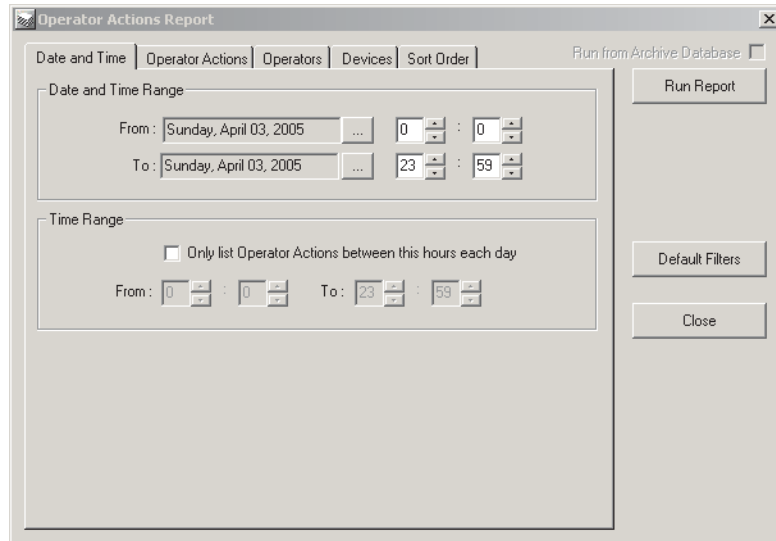
The screenshot shows the 'Report - Operator' dialog box with the 'Sort' tab selected. The 'Sort Order' section has a dropdown menu showing a list of options: 'Operator Name', 'Not Sorted', 'Operator Name', 'Operator Type', 'Operator Level Name', and 'Last Log In'. The 'Operator Name' option is currently selected. The right side of the dialog is identical to the previous screenshot, showing the 'Run from Archive Database' checkbox and the 'Print Preview', 'Print', 'Export File..', 'Estim. Pages', 'Clear All', and 'Close' buttons.

- 5 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 6 Click **Close** to exit the Operator report window and return to the main Reports database window.

### Operator Actions Report

The Operator Actions report provides the details of following for which the reports are requested:

- . Actions that are performed by an operator,
  - . Actions of all the operators including the system administrator,
  - . Reports based on different levels of operators, and
  - . Devices that were used
- 1 Select the **Operator Actions** report from the Reports database window. The Report Operator Actions window opens with the Date and Time Filter tab displayed.



The image shows a software window titled "Operator Actions Report". It has a tabbed interface with tabs for "Date and Time", "Operator Actions", "Operators", "Devices", and "Sort Order". The "Date and Time" tab is active. In the top right corner of the window, there is a checkbox labeled "Run from Archive Database". The "Date and Time Range" section contains "From" and "To" date fields, both set to "Sunday, April 03, 2005", each followed by a browse button "...". To the right of these date fields are time spinner boxes. The "From" time is set to 00:00 and the "To" time is set to 23:59. Below this is the "Time Range" section, which includes a checkbox labeled "Only list Operator Actions between this hours each day". Below the checkbox are time spinner boxes for "From" (00:00) and "To" (23:59). On the right side of the window, there are three buttons: "Run Report", "Default Filters", and "Close".

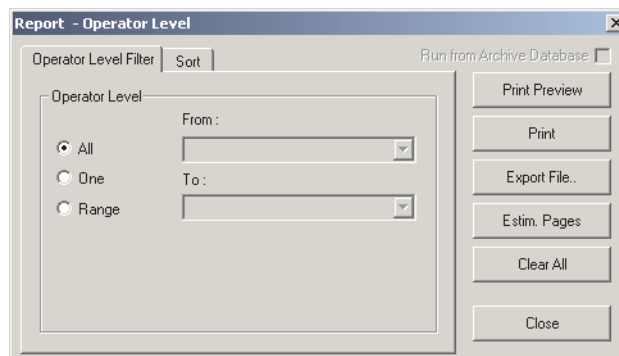
- 2 Indicate a **Date Range** for the report, using the From and To fields and browse buttons. Set precise time for the report, using the spinner boxes to the right of the Date Range fields.
- 3 Use the **Daily Time Range** area of the window to set a specific time frame for the report. The time will begin at the From date and time through the end of the To date and time. If the check box "Only list events between these hours each day" is marked, only the time range each day will be reported omitting information outside the time range.
- 4 Select the Operator Actions tab to select or deselect operator actions. This shows the list of operator's actions and you can select or deselect the actions (using the checkbox) for those the report is requested.
- 5 Use Select All to select all the actions at once and Deselect All to unselect all the selected actions.
- 6 Select the Operators tab to select or deselect the operators from the list.

- 7 Select the Devices tab to select or deselect the devices in the list.
- 8 Select the Sort Order tab to define the sorting properties/criteria. You can sort the fields based on Date and Time, Operator Actions, Operators, or Devices.
- 9 Click Run Report to generate the report. The Operator Actions Report is displayed in a separate window.
- 10 Click Default Filters to show the default filter data.
- 11 Click Close to close Operator Actions Report dialog.

## Operator Level Report

- 1 Select the **Operator Level** report from the Reports database window.

The Operator Level report window opens with the Report tab displayed.



- 2 The Operator Level report can be defined using one of the following options.

**All:** reports on all operator levels.

**One:** reports on an individual operator level using the From field [activated when the One radio button is selected].

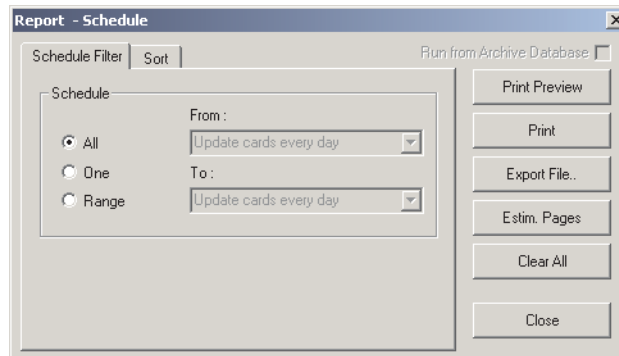
**Range:** reports on a designated range of operator levels, using the From and To fields [activated when the Range radio button is selected].

- 3 Click the **Sort** tab and select a Sort Order for the report, indicating if the report should be sorted in ascending or descending order.
- 4 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 5 Click **Close** to exit the Operator Level report window and return to the main Reports database window.

## Schedule Report

- 1 Select the **Schedule** report from the Reports database window.

The Report-Schedule report window opens with



- 2 The **Schedule** report can be defined using one of the following options.

**All:** reports on all schedules.

**One:** reports on an individual schedule using the From field [activated when the One radio button is selected].

**Range:** reports on a designated range of schedules, using the From and To fields [activated when the Range radio button is selected].

- 3 Click the **Sort** tab, and select a Sort Order for the report, indicating if the report should be sorted in ascending or descending order.
- 4 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 5 Click **Close** to exit the Schedule report window and return to the main Reports database window.

## Time Zone Report

- 1 Select the **Time Zone** report from the Reports database window.

The Time Zone report window opens with the Filter Time Zone tab displayed.

The screenshot shows a window titled "Report - Time Zone". It has three tabs: "Time Zone Filter", "Sort", and "Advanced Time Zone Filter". The "Time Zone Filter" tab is active. Inside this tab, there are three radio buttons under the heading "Time Zone": "All" (which is selected), "One", and "Range". To the right of these buttons are two dropdown menus labeled "From :" and "To :". Both dropdowns show the text "12:00am-8:00am M-F". Below these is a label "Account:" followed by a dropdown menu showing "Account1". On the right side of the window, there is a vertical stack of buttons: "Print Preview", "Print", "Export File..", "Estim. Pages", "Clear All", and "Close". At the top right of the window, there is a checkbox labeled "Run from Archive Database" which is currently unchecked.

- 2 The Time Zone report can be filtered using one of the following options.

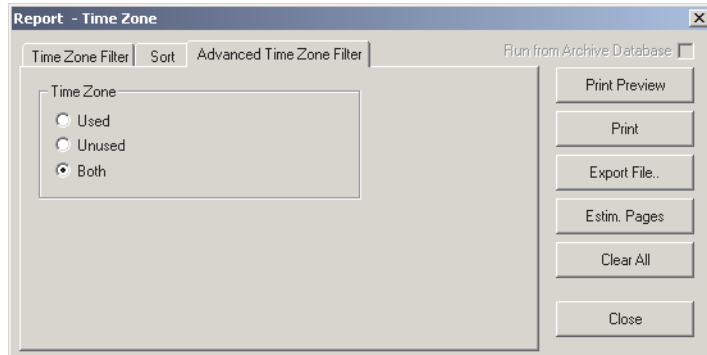
**All:** reports on all time zones.

**One:** reports on an individual time zone using the From field [activated when the One radio button is selected].

**Range:** reports on a designated range of time zones, using the From and To fields [activated when the Range radio button is selected].

- 3 Select the account on which to report.
- 4 Click the **Sort** tab, select a Sort Order for the report, and indicate if the report should be sorted in Ascending or Descending order.

- 5 Click the **Advanced Filter Time Zone** tab.



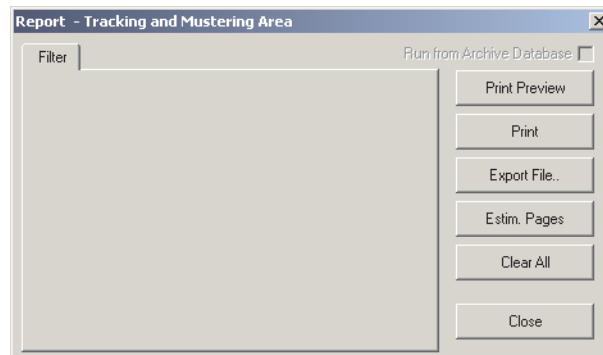
- 6 Indicate if the report should include time zones, which are:  
**Used:** reports time zones currently in use within the system.  
**Unused:** reports time zones not in use within the system.  
**Both:** reports all time zones, regardless of use.
- 7 Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.
- 8 Click **Close** to exit the Time Zone report window and return to the main Reports database window.



## Tracking and Mustering Area Report

Select the **Tracking and Mustering Area** report from the Reports database window.

No filter or sort options are available on the Tracking and Mustering report detail window.



Click the **Print Preview** button to view the report prior to printing it. Click **Print** to send a copy of the report to your printer or select **Export File** to define and create a .txt copy of the report.

Click **Close** to return to the main Reports database window.



# **Database Maintenance**

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## **Overview**

**Removing Deleted Database Records**

**Deleting History from Database**

**Database Backup and Restore Utility**

**Database Limits and Capacities**

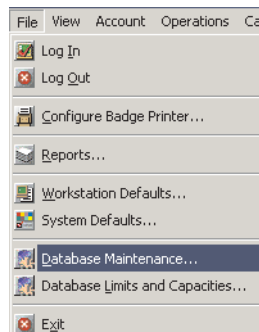


## Overview

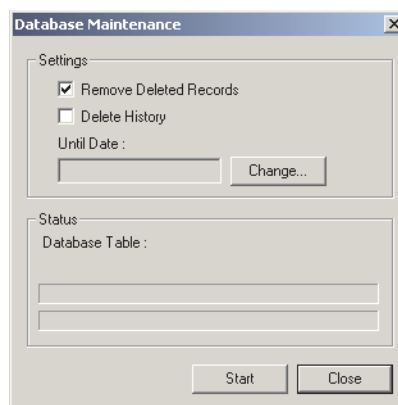
Database maintenance provides tools for monitoring the database and for removing unused information from the database. While deleted records are no longer available within the system, they have not actually been removed from the hard disk. The Remove Deleted Records utility is used to permanently remove them, thus reducing the size of your database.

## Removing Deleted Database Records

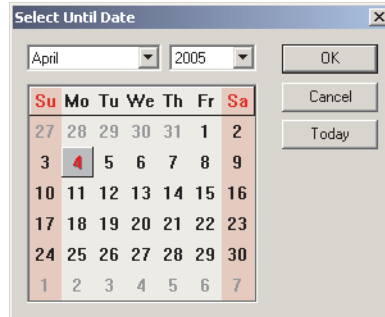
- 1 Select the **Database Maintenance** option from the WIN-PAK File menu.



The Database Maintenance dialog opens on your desktop.



- 2 Select the **Remove Deleted Records** check box.
- 3 Click the **Change** button and select a date for the **Until Date** field.



- 4 Click **Today** to select the current date, or select a date from the calendar. Deleted records up to today but not including today will be deleted.
- 5 Click **Start**. A prompt reminds you to make a backup copy of the databases before deleting records.



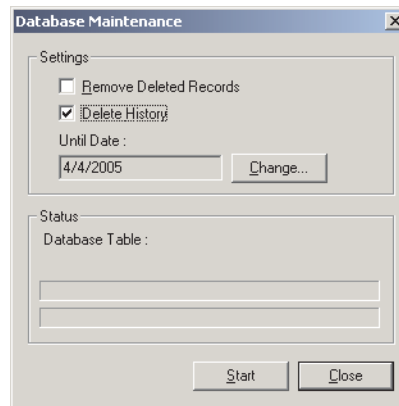
Click **Yes** to proceed with the deletion process.  
Click **No** to stop the deletion.

- 6 A status bar displays the progress of the deletion process, including the name of each database as it is processed.

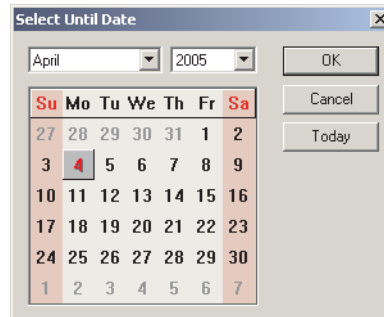
Unwanted history files can also be removed from the databases. This is generally done after you make a backup copy of your database files. Use the Delete History utility to delete history records prior to a selected date.

## Deleting History from Database

- 1 Select **Database Maintenance** from the WIN-PAK File menu. The Database Maintenance dialog opens on your desktop.



- 2 Select the **Delete History** check box.
- 3 Click the **Change** button and select a date for the **Until Date** field.



- 4 Click **Today** to select the current date, or select a date from the calendar. History up to today but not including today will be deleted.
- 5 Click **OK** to return to the Database Maintenance window.
- 6 Click **Start**. A prompt reminds you to make a backup copy of the databases before deleting records.

Click **Yes** to proceed with the deletion process.  
Click **No** to stop the deletion.

- 7 A status bar displays the progress of the deletion process, including the name of the history database as it is processed.

Removal of the deleted database records and removal of unwanted history can be done separately or at the same time. The date selection only applies to history records.

## Database Backup and Restore Utility

In the event of software or hardware problems, it is always a good idea to have a recent copy of your database files.

The WIN-PAK Backup and Restore utility is a stand-alone application that allows the user [typically a database administrator] to create and modify a backup and restore plan.

Database copies made with the Backup and Restore utility can be used to restore your database after a failure has occurred.

The WIN-PAK Backup and Restore utility allows for the creation of multiple scheduled backups, and for the restoration of the WIN-PAK database, the archive database, and a temporary database which allows you to examine the restoration without affecting the current WIN-PAK databases.

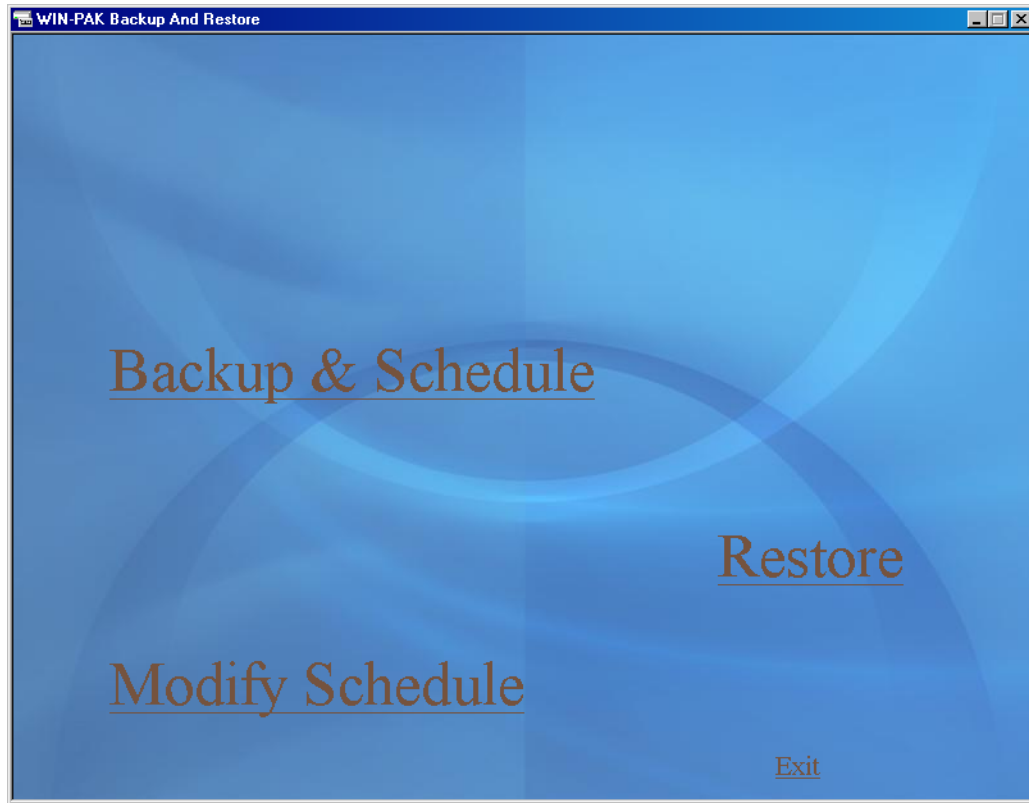


The WIN-PAK Backup and Restore Utility is automatically installed when your WIN-PAK System is installed. The utility is accessed from the WIN-PAK Program group on your Start menu or an icon on your desktop. The WIN-PAK Backup and Restore Utility is made up of three components: Backup, Schedule and Restore.

The Backup and Restore utility will only backup the WIN-PAK hardware and history database information. Other data, such as badge images, signatures, badge and floor plan graphics are not backed up by this utility. This data is normally found in the WINPAK PRO\DATABASE folder with BadgeImage, FloorPlanImage and UserImage subfolders. During the WIN-PAK installation, prompts are provided to allow the installer to place these subfolders at other locations in your system. Therefore you may not find these subfolders in the WINPAK PRO folder. Backup of these data folders can be accomplished using standard Windows backup or copying utilities. Both should be done at the same time to keep all information current.

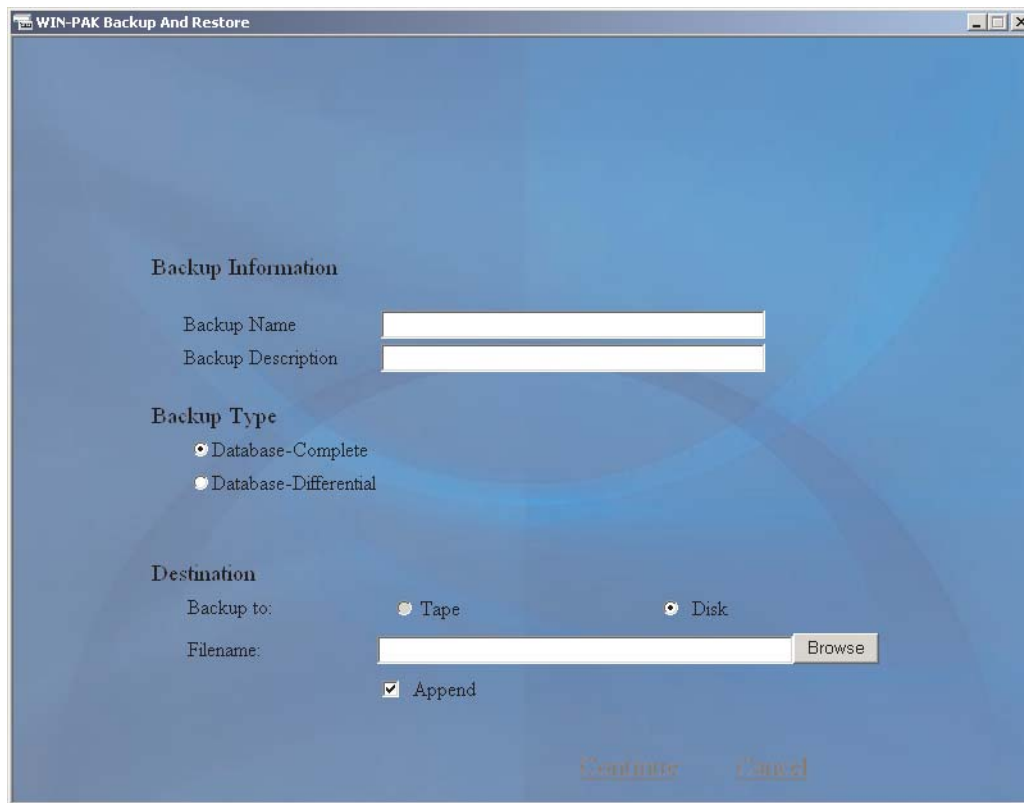
## Backup

- 1 Select **Backup & Schedule** from the main Backup and Restore window to create a new backup.



- 2 When the Backup Information window is displayed, enter a unique Backup Name, as well as an (optional) Description.

- 3 Select a database **Backup Type**. Complete will make a complete backup and Differential will backup only the differences from the last complete, appended or differential backup.

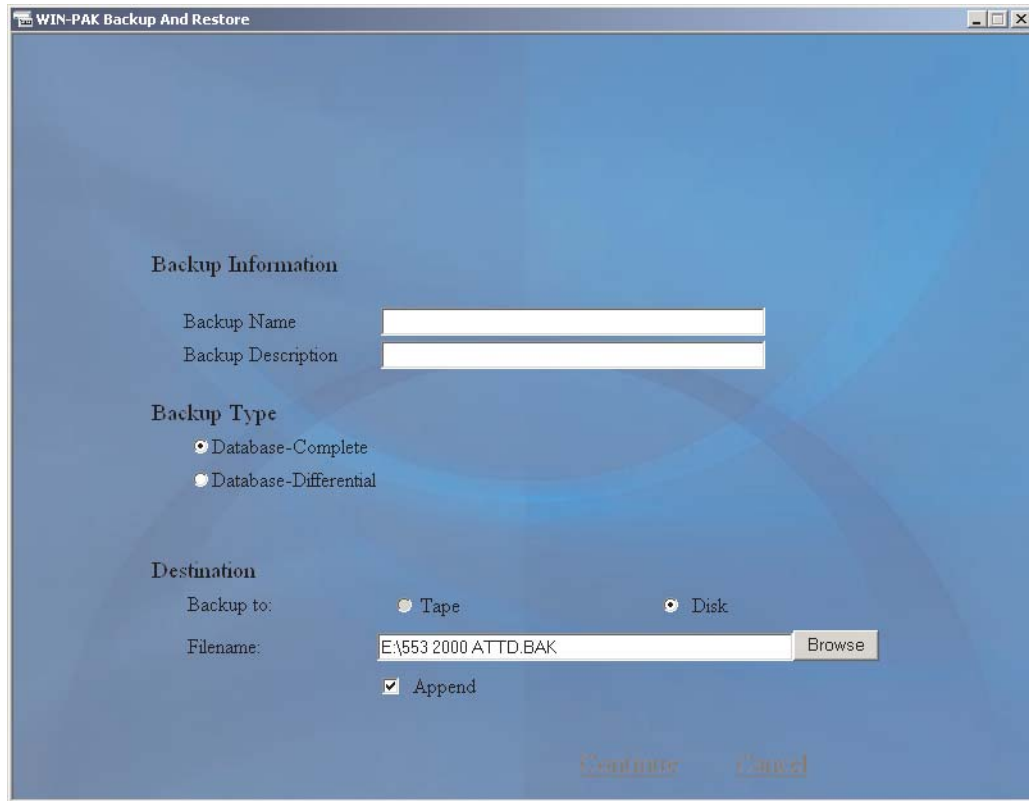


The screenshot shows a Windows-style dialog box titled "WIN-PAK Backup And Restore". The dialog has a blue background with a subtle circular pattern. It contains three main sections: "Backup Information", "Backup Type", and "Destination".

- Backup Information:** Contains two text input fields. The first is labeled "Backup Name" and the second is labeled "Backup Description".
- Backup Type:** Contains two radio button options: "Database-Complete" (which is selected) and "Database-Differential".
- Destination:** Contains two radio button options: "Tape" and "Disk" (which is selected). Below these is a "Filename:" label followed by a text input field and a "Browse" button. A checkbox labeled "Append" is checked.

At the bottom right of the dialog are two buttons: "Continue" and "Cancel".

- 4 Select a **Destination** and file name for the backup. If a tape drive is not installed on the computer you can not select Tape. If a tape drive is on the computer, then the option to format the tape is also given.



The screenshot shows a Windows-style dialog box titled "WIN-PAK Backup And Restore". The dialog has a blue background with a faint circular pattern. It contains three main sections: "Backup Information", "Backup Type", and "Destination".

**Backup Information**

Backup Name: [Empty text box]  
Backup Description: [Empty text box]

**Backup Type**

☒ Database-Complete  
☐ Database-Differential

**Destination**

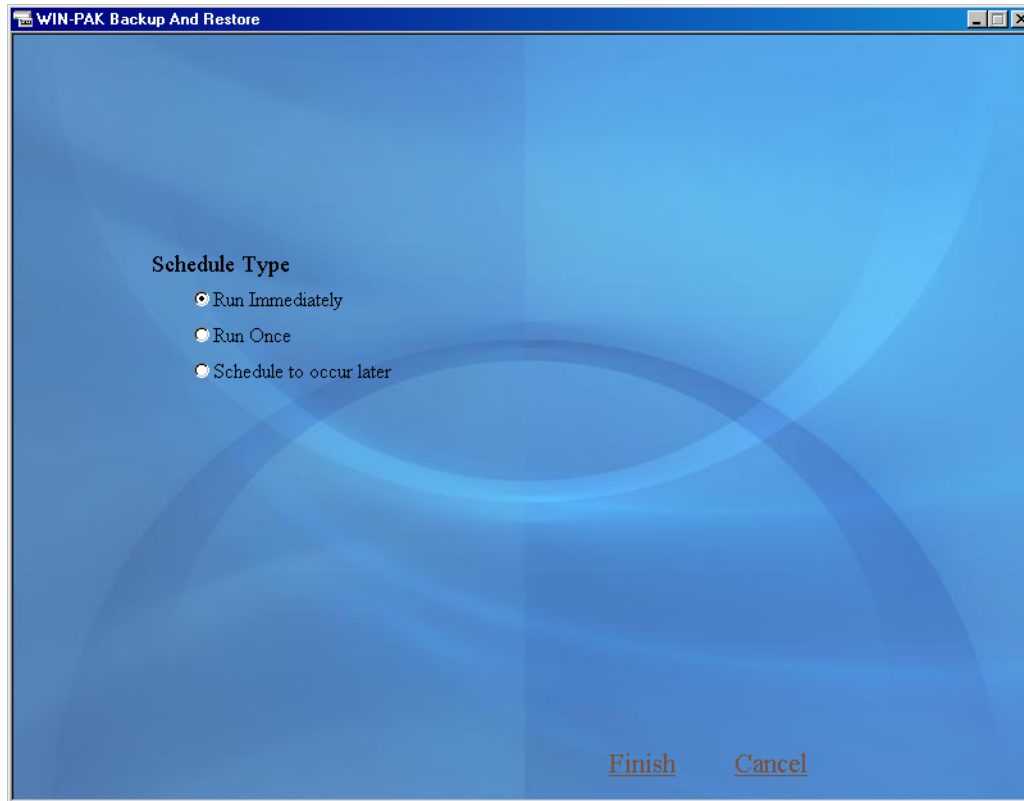
Backup to: ☒ Tape ☐ Disk

Filename: E:\553 2000 ATTD.BAK [Browse button]

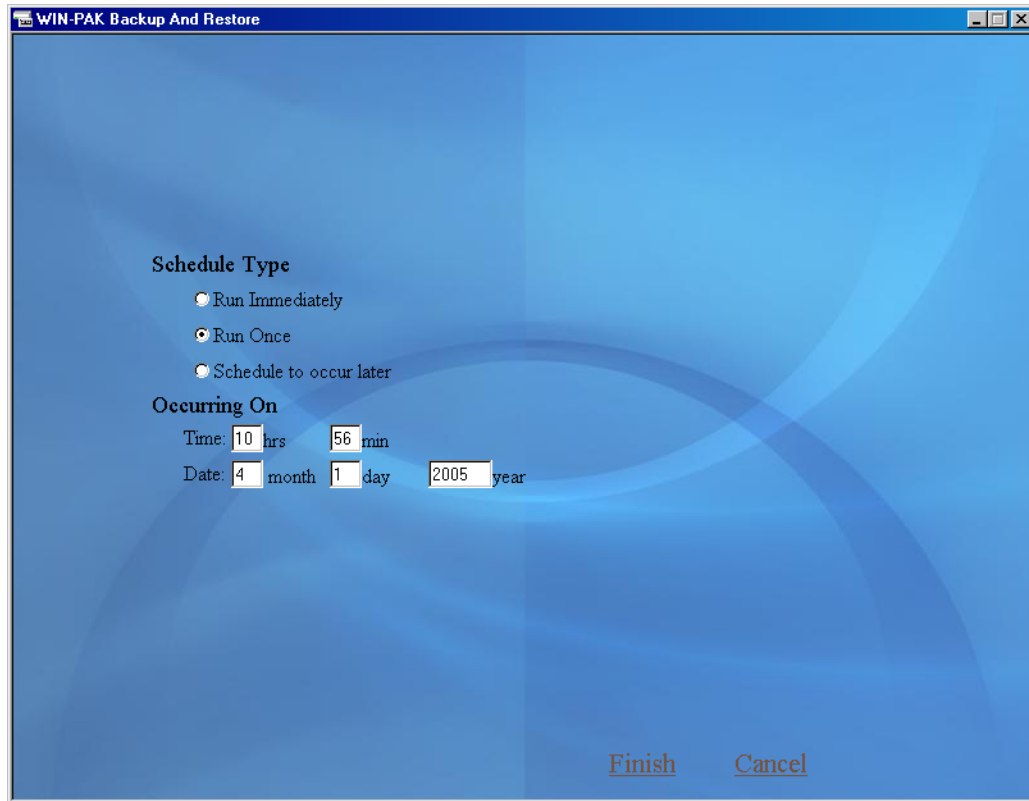
☒ Append

At the bottom right, there are two buttons: "Continue" and "Cancel".

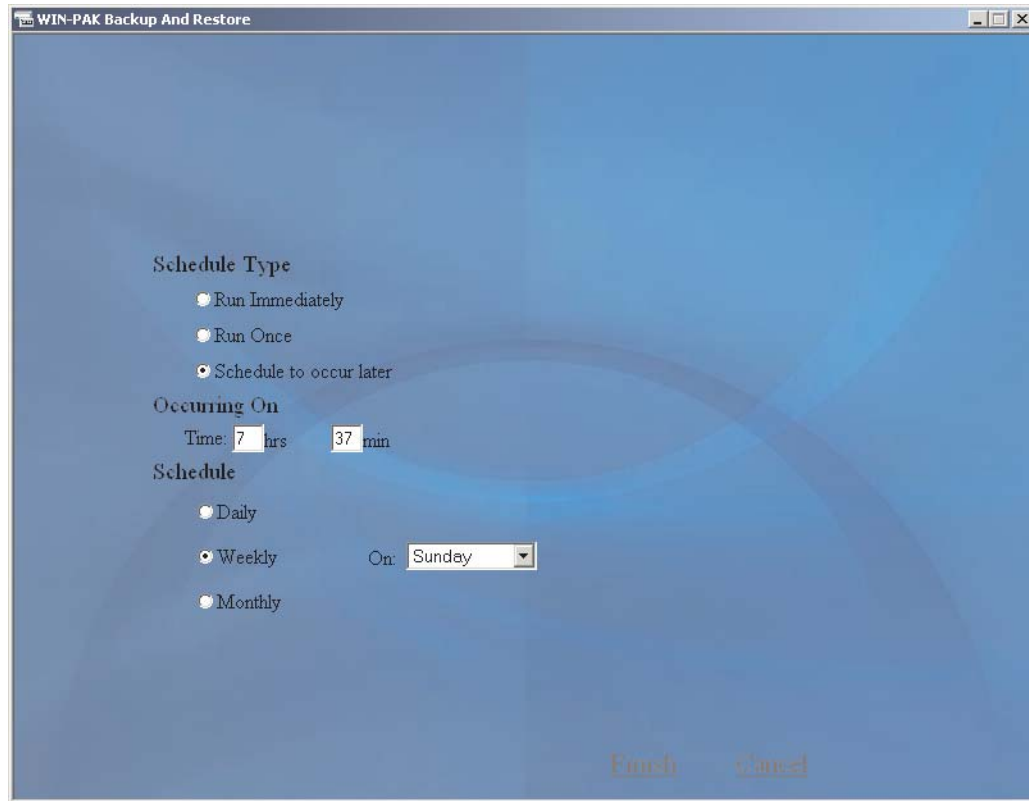
- 5 Click **Continue** to bring up the Scheduling window.



- 6 Select the **Schedule Type**. Run Once will prompt for the time and date.



Schedule to occur later will bring up Daily, Weekly and Monthly options.



Daily allows the back up to be run every so many days as defined from 1-999 day(s) at the specified time.

Weekly allows the back up to be run on a specified day of the week at a specified time.

Monthly allows the backup to be run on the selected the day of the month (1-31) or at regular monthly intervals.

## Schedule

Schedules can be modified by selecting **Modify Schedule** from the main Backup and Restore Window. To open a list of currently-scheduled backups, highlight a backup in the main schedule list and click on **modify**. This will bring up the Schedule screens shown above. Modify the schedule and click **Finish**.

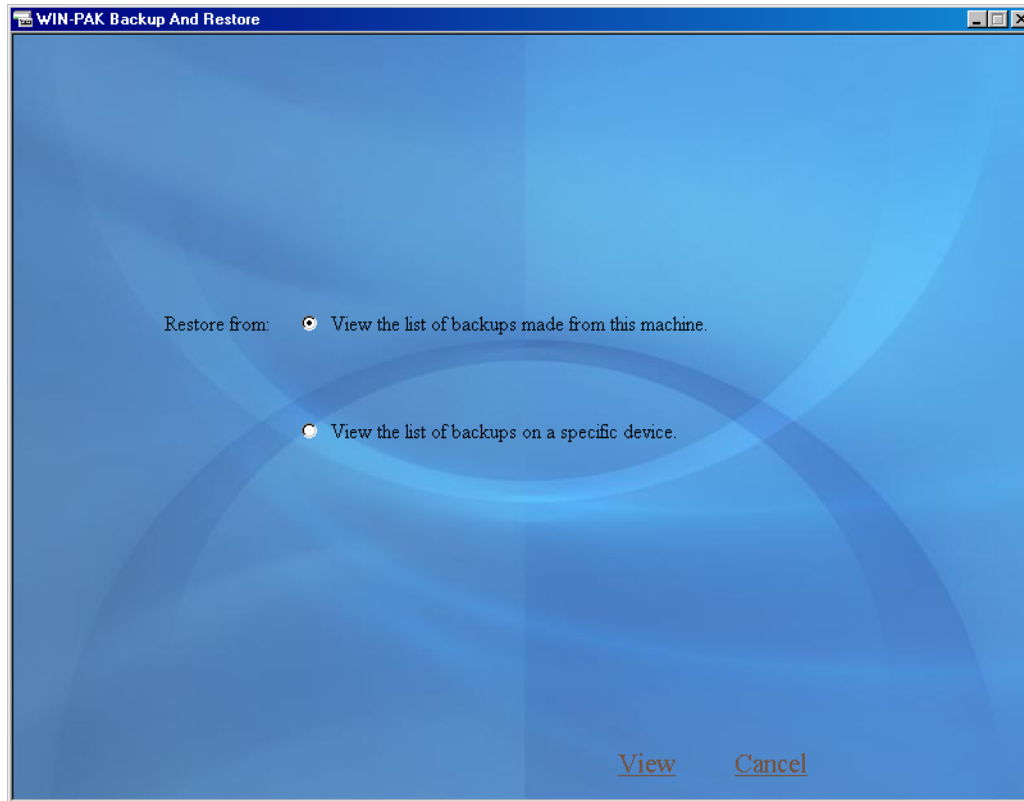
To remove a schedule, select the backup schedule and click **Delete**.

Click **Cancel** to return to the main Backup and Restore window.

## Restore

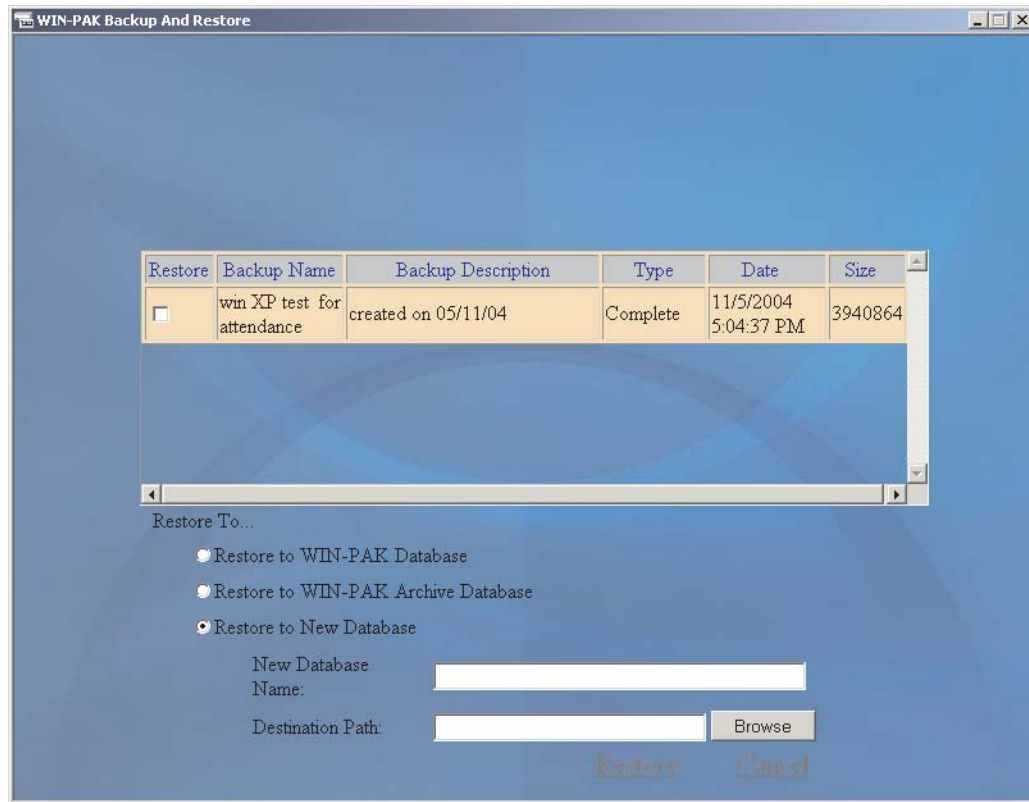
- 1 Select **Restore from** the main Backup and Restore window to restore a backup. WIN-PAK's database knows the locations that the backups were made on this machine. If the backup is to be recovered from a different location, then select the View list of backups on a specific device option and navigate to the desired location.





- 2 Once the appropriate backup file is selected, a viewer (next illustration) shows the contents of that backup. Select the backup file desired. If selecting a differential backup, the last complete backup is automatically selected, as that is required to complete the restore process.

**NOTE:** The WIN-PAK database contains the listing displayed and file location as defined when the backup was made. When the "View the list of back-ups made from this manual" is selected, it is expecting to find the files where it last placed them. If the backup file is not found by the restore utility, it will prompt you to browse the computer to find it. The backup file must be located on the same (physical) computer that is performing the restore. Restoring across a network is not supported. If the backup has been moved to a different computer, it must be moved to the computer performing the restore.



- 3 Use the **Restore** list to set the parameters for the backup. Restoring the WIN-PAK Database requires that the WIN-PAK database services be turned off. The restoration process will not proceed if the services are running. Restoring to WIN-PAK Archive Database replaces the existing archive database and allows reports to be generated for the archive.

Restoring to New Database allows advanced users to view the database without adversely affecting the current or backup database.

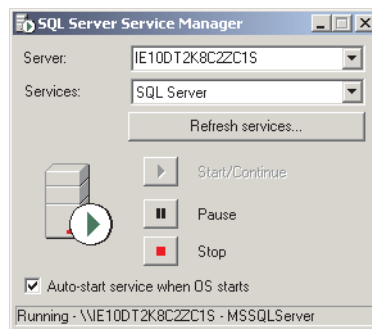
- 4 Click **Restore** to continue. When finished, click **Cancel** or **Exit**.

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**NOTE:** Scheduled backups run automatically as long as the MSSQLServerAgent components are running. By default these components are set to run when the operating system starts.

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- 5 To check if MSSQLServerAgent components are running, double click on the icon in the tray on the bottom of the Window.



- 6 From the Services box, select **MSSQLServer**.

The message on the bottom of the SQL Server Service Manager windows will give you the computer name followed by "MSSQLServer-Running". Select the **SQLServerAgent**. The message on the bottom of the SQL Server Service Manager windows will give you the computer name followed by "SQLServerAgent-Running".

- 7 If MSSQLServerAgent components are not running, click on the **Start/Continue** button.

**Note:**

If the database server is not stopped while SQL maintenance plan is running, the SQL maintenance plan will stop the database directly from SQL. When this occurs, there will be a loss of history for the time the service is stopped until ALL services are restarted.

In order to see any history after this point, it is necessary to stop all services including SQL, and restart all the services as the PC is rebooted. The history during the time the plan was run until the services are restarted is permanently lost.

Alternatively, you can stop the maintenance plans, or deselect the WIN-PAK database from the maintenance plan list.

The WP/WPP services must be stopped before running a maintenance plan. The best way to accomplish this is to create a schedule in the operating system and add a script to stop all WP/WPP services.

It is up to the local IT administrator to create this script as every system is different.

Scenario: Maintenance plan created by a DBA runs on a schedule in SQL at 11pm.

Create a script to stop all WP/WPP/NS2 services.

Create a script to start all WP/WPP services.

Create a schedule in the scheduler of the OS that will run the stop script.

Create a schedule in the scheduler of the OS that will run the start script.

Time line:

10:58 - Script will stop all WP/WPP services based on the OS Scheduler. (The GUI does not have to be shut down)

11:00 - SQL maintenance plan runs

11:04 - Script will start all WP/WPP services based on the OS Scheduler.

All panels will function as normal during this period, as long as they are set to buffer and unbuffer based on the communication server settings.

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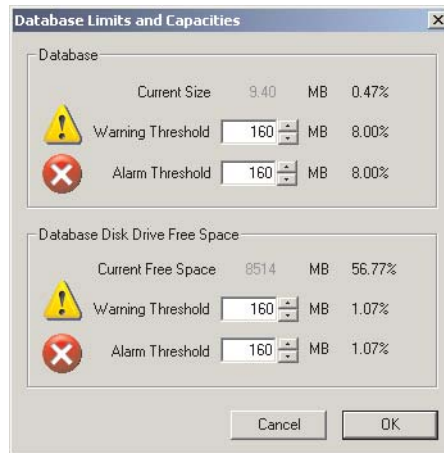
**Note:** Command files will not function when services are stopped.

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## Database Limits and Capacities

Database Limits and Capacities monitors the available space for the database [system programming and history, excluding floor plans, photo and badging images] and available hard drive space. Each monitoring feature has two programmable alarm thresholds. One is a warning that action should be scheduled, the second is an alarm that immediate action should be taken.

Only the WIN-PAK administrator has permissions to change the threshold values of these alarms.



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**NOTE:** The general recommendation is that the OS (operating system) should have 1/3 free space of the hard drive it is installed on. WIN-PAK database upgrades and general database operations should have 2.5 times the database size of hard drive freespace.

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To program the Database Limits and Capacities, click on **File** and select **Database Limits/Capacities**. The Operator must have administrator permissions.

The Database section provides current database size information listed as Current Size and displays the percentage of the database that is used. The MSDE database engine allows for a maximum size of 2GB (excluding floor plans, photo and badging images). The Warning and Alarm thresholds, defined in MB (megabytes), in addition to percentages are displayed.

The Database Disk Drive Free Space section reports Current Free Space of the hard drive where the database is located. In installations where the database is located on a separate drive, it is recommended that at least 2.5 times the maximum size of the database be left as free space. If the database is installed on the same drive as the OS, then 1/3 free space of the hard drive should be used. This allows enough room for backups and archive actions to occur.

Single Hard Drive Setup Considerations

You want to utilize the MSDE to its maximum capacity on a single 10GB (10,000MB) hard drive.

The warning thresholds for a 10GB hard drive may be nominally set as indicated below:

Database		
Warning Threshold	1600MB	80% utilization
Alarm Threshold	1800MB	90% utilization
Database Disk Drive Free Space		
Warning Threshold	4000MB	120% of recommended free space
Alarm Threshold	3333MB	100% of recommended free space (1/3 of total hard drive space)

If it is desired to increase the amount of space for other files and programs, it will be necessary to reduce the amount of space used by MSDE database. To achieve this, the warning thresholds of MSDE database size can be set lower.

The warnings would then prompt the administrator to take action on the database sooner. To increase the amount of space for other files and programs by 1GB [on the same 10GB hard drive], set the warning thresholds as indicated below:

---

#### Database

Warning Threshold	750MB	37.58% utilization
Alarm Threshold	1000MB	50% utilization

---

#### Database Disk Drive Free Space

Warning Threshold	4000MB	120% of recommended free space
Alarm Threshold	3333MB	100% of recommended free space (1/3 of total hard drive space)

---

**NOTE:** While the warning thresholds can be set to any values, the size of the MSDE database will continue to grow to its 2GB limit, unless proper backup and data deletion is performed to maintain or reduce the MSDE database size.

---

### Multiple Hard Drive Setup Considerations

Multiple hard drive setup follows the same basic guide lines for single hard drive considerations, except that the WIN-PAK database is installed on a separate hard drive [logical or physical]. Since WIN-PAK only monitors the database's hard drive and free space, the partition or physical location of the OS is not monitored.

In a multiple hard drive configuration, where the database is located on a separate drive, it is customary to also locate the photo ID images, layouts and floor plan data on the database drive. This provides additional protection against OS crashes, where the OS's hard drive may need to be reformatted before the OS is reinstalled.



A typical example: A single 9 GB hard drive is partitioned to a 2 GB C: and a 7 GB D: The C: partition contains the OS and WIN-PAK program only. This leaves about 1GB or 50% free space on the OS partition. The 7 GB D: partition contains the WIN-PAK MSDE database, photo ID badge information, including photos, signatures and layouts, and floor plan information.

This example assumes a starting capacity of 7 GB, minus 2 GB (full database), minus 3GB (MSDE recommended free space) leaving 2 GB left for photo ID and floor plans.

The warning thresholds for 7GB of partitioned hard drive space may be nominally set as indicated below:

---

**Database**

Warning Threshold	1600MB	80% utilization
Alarm Threshold	1800MB	90% utilization

---

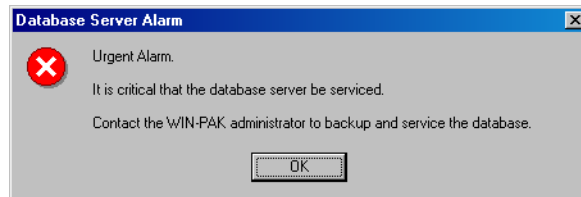
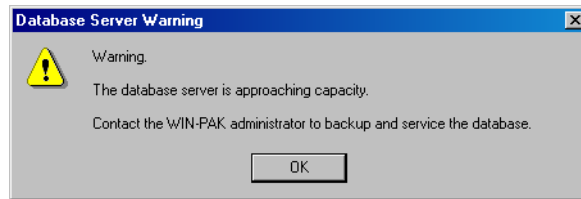
**Database Disk Drive Free Space**

Warning Threshold	3600MB	120% of recommended free space
Alarm Threshold	3000MB	100% of recommended free space for MSDE

Assuming that a typical photo ID (depending on compression settings) is approximately 100KB, this configuration allows for 20,000 photo ID images before the alarm threshold is presented.

## Display of Warnings and Alarms

Warnings and Alarms are only displayed when an operator logs into WIN-PAK. The alarm windows that the operator would see when logging in are indicated below.



## Glossary

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## Symbols

**12 Digit Cards:** Cards that use a combination of a 9 digit card number with a 3 digit issue number. This term is also refers to applications that require a card number greater than 65,535. It is usually implemented for barcode and magnetic stripe applications. WIN-PAK supports up to 15 digits but these are still referred to as 12 digit applications.

**485 ACK-NAK:** A communications verification system of the 485 converter which double-checks that information packets have been sent and **received** from one device to another.

## A

**Abstract Device:** see ADV.

**Abstract Device:** A division within an access control system that segregates the card and cardholder information of one group of users from the card and cardholder information of another group of users. For example: In a multiple tenant building, each tenant can be setup as a separate account.

**Access Control:** Controlling access to a port of entry in a physical area or into a computer. See *Electronic Access Control*.

**Access Level:** A level of authorization defined by a reader (or readers) and the times those readers can be accessed.

**Access Point:** A physical point of entry or exit, such as a door or gate, which is controlled by the system.

**ACK:** Abbreviation for *Acknowledge*.

**ACK-NAK:** See *485 ACK-NAK*.

**Account:** A division within an access control system that segregates the card and card holder information of one group of users from the card and card holder information of another group of users.

For example: in a multiple tenant building, each tenant can be setup as a separate account.

**Activate:** Enable. Make functional. See *Energize*.

**Activation State:** Indicates the behavior of an activated output point.

**Address:** An identification number of a specific control panel.

**ADV:** Abstract device: a logical representation of a physical device (e.g., a communication server, control panel, door or CCTV switcher). Similar in appearance to an icon, an ADV is associated with an actual device in your access control system

**Alarm:** A signal that indicates a problem.

**Alarm Input:** A physical input terminal on a control panel. A point at which an input device is connected to a control panel.

**Alarms View:** A display window that shows alarm activation and allows an operator to respond to situations reported on the system.

**Alarm Priority:** Priority rankings of 1 to 99 are assigned to alarms. Priority 1 is the highest and 99 is the lowest.

**Alarm State:** On an input, refers to the state that is opposite of a normal state. Software can recognize an input when that input goes into alarm, unless some other condition (such as a shunt) applies.

**Alarm Type:** An alarm determined by its unique priority, global shunt status, forced note, auto clear and RTN separate alarm characteristics, and the message displayed when an alarm is reported.

**Alphanumeric:** A combination of numeric, alphabetical and, in some cases, symbols found on a keyboard or display.

**Annunciation:** A device that indicates a condition. This condition can be announced by a message on a computer monitor, a flashing sign, a bell, or similar device, and by a combination of these things.

**Antipassback:** An access control feature that reduces the likelihood that two or more people can use the same access credential to gain admission to a controlled area. This is done by requiring that the credential be presented upon entrance to an area and again when leaving the area. If the same credential is used for two entrances without an exit in between, an alarm is triggered and access is denied.

**Arm Points:** Enable specific input points to report alarms when they occur.

**Arm:** To enable.

**Audit:** The act of checking something to make sure it is correct. *Example:* Checking wiring connections.

**AUX Port Alarm:** An alarm triggered when the panel senses a communication failure from the auxiliary port.

## B

**Badge:** A card that provides information about the person who is using it, usually a photo ID.

**Badging:** The act of creating an ID card. Photo badging includes a picture on the card.

**Bar Codes:** A series of black lines of various thickness that represents a code which is read through an optical reader and is interpreted by a computer or EAC system.

**Battery Backup:** A battery that supplies power to a device when standard primary AC power has been abruptly cut off.

**Battery Low Alarm:** A soft alarm that announces that the battery on a control panel is low.

**Biometrics:** The ability to use a person's physical characteristics such as an eye, to uniquely identify a person.

**Buffer:** Store transactions in the panel's RAM memory. Once stored, the information can be retrieved at a later time (called *unbuffering the panel*).

**Buffer All:** The act of buffering all panels.

## C

**Capture:** Acquire a graphic image by scanning or video.

**Card:** Any type of credential used to carry electronic information in an electronic access control system.

**Card Event:** A card read. WIN-PAK can be programmed to initiate a variety of actions in response to a card event, depending on the status of the card.

**Card Holder:** A person who has been enrolled into the access control system.

**CCTV:** Closed circuit television.

**Central Station:** A remotely located control and monitoring center that supplies a client with monitoring services.

**Chain of Events:** A process that starts at one device and triggers numerous other devices and/or actions before it is done.

**Cold Restart:** Restarting a panel after the power has been completely removed, then restored. This might happen after a storm knocks out power to the area. After a cold restart a panel's programming is missing and the panel needs to be initialized.

**Communications Loop:** See *Loop*.

**Configuration:** The way in which computers, software and related equipment are interconnected to operate as a system.



**Contact:** An electrical switch that can be open or closed state. That state may be electrically, magnetically or physically controlled.

**Continuous Reads:** A software setting that enables a panel to continuously monitor a card reader and/or keypad. If this is not enabled, all cards and keypunches are ignored until the panel completes the actions dictated by the previous card read or keypunch.

**Control Panel:** A specialized computer that manages access for specific doors and related devices (e.g., PW-2000).

**CPU:** *Central processing unit.* It is the main chip (microprocessor) in a computer and control panel.

## D

**Data:** Information. At the lowest level, data is represented as an electrical signal and is interpreted as a code. At the highest level, data represents information that people can read and understand.

**DC:** Direct Current.

**De-energize:** To remove energy from an output point. On a system, the normal state of an output point is "de-energized."

**Default:** A standard condition or setting. Default settings are those provided by software prior to customization by the user.

**Default Time Zone:** A standard time zone that is always in effect unless overridden by another process or feature.

**Dial-Up:** (Also dial-in, dial-out) A system of control panels connected to a communications line (loop or multi-drop) that is not directly connected to a computer. To communicate with the panels, the computer must use a modem at its end to connect with a modem on the communications line. The act

of establishing a connection is called *dialing*, as in "dialing a telephone number."

**Disable:** To render a function or feature unavailable.

**Distributed Processing:** The ability of control panels connected to a single communications loop or multi-drop line to function independently from one another, yet communicate to and receive information from a central computer.

**Distributed System:** A computer network wherein each device (a PC or control panel) can work independently of one another, yet at the same time, communicate with one another.

**Documentation:** Any written record of activities and processes.

**Door Contact:** This is a position locator that senses when a door is fully closed or open.

**Duplex Printing:** Printing on two sides of a single material, such as two sides of an access card.

**Duress Alarm:** A special alarm from a keypad reader which indicates that the card holder is being forced to provide entry to a secured area.

**Duress:** An event in which a card holder is being forced to provide entry into a secured area by an unauthorized person or people. A keypad can be configured in a way to produce a duress alarm when the user types in the PIN number.

## E

**EAC:** Electronic Access Control.

**Egress Button:** A button by a controlled door that, when pushed, sends a signal to the controller indicating that someone wants to leave the area. this device may also mechanically allow the door to unlock, overriding the control.

**Egress:** To exit. See also free egress.

**Electronic Access Control:** Controlling entry into a

physical area by means of a controller and electronic components including locks, readers, sensors, buttons and more.

**Enable:** To make a feature or function on the system usable.

**Enclosure:** An electrical utility box. It can hold control panels, splices, power outlets, etc.

**Energize:** Activate. Often refers to the state of an output point. Output points are in a normal state when they are "de-energized." An energized state means that the output is active.

**EPROM:** Erasable Programmable Read-only Memory.

**Exit Button or Switch:** When pressed or tripped, this device allows a person to exit from a controlled area. See also free egress.

**Exit Reader:** A reader that controls egress from a controlled area. Used in anti-passback applications.

## F

**Facility Codes:** The first part of the ID number on some cards, providing a higher degree of security against a duplicate card number being used in a system.

**Fail Safe Lock:** A lock that is in the unlatched or unlocked state when the unit is not energized.

**Fail Secure Lock:** (Also known as *Non-Fail Safe*.) A lock that is in the latched or locked state when the unit is not energized.

**Firmware:** The computer chip (PROM or EPROM) that runs a control panel. Firmware chips are identified by a version number.

**Floor Plan:** A view made up of ADVs placed on a floor plan background, showing the layout of an access control system. Used to monitor and control devices in the system.

**Floor Plan Background:** A floor plan, graph or other digital graphic saved as a Windows Metafile (.wmf) that can be used to create a floor plan view.

**Follow:** In an interlock, a second point (component B) takes on the same state as the triggering point (component A). See *Invert Follow*.

**Forgiveness:** This feature adjusts the use of anti-passback to accommodate people who did not properly exit the anti-passback area. When forgiveness is enabled, a person who did not use the proper exit reader will be allowed to use the enter reader the following day without an anti-passback violation occurring. This may not provide the desired effect in a third shift situation. *Example:* A card holder who enters a controlled area, but does not leave until the next day, would cause the system to go into alarm the next day because the card was not used to check-in before checking-out.

**Format J:** Enables the J card format on a panel. This accommodates the 35 bit card number where the first 20 bits are read as the card number and the balance as the site code.

**Format L:** Enables the L card format option on a panel. This allows the card number to be linked with the site code, creating a linked card number.

**Free Egress:** Allows exit without requiring the presentation of a credential. This is usually accomplished by using an egress button, motion sensor that trips a momentary shunt of the door alarm input, thus allowing exit without an alarm.

## G

**Global Shunt:** A period of time when all the points assigned to an event type are shunted, regardless of time zones entered on individual points records.

**Ground Connection:** A point where a cable is bonded to the grounding system.

**Ground Fault:** A grounding problem that needs to be corrected for proper system operation.

**Grounding System:** A unified (bonded) system designed to drain excess electrical energy from a circuit in order to protect life and property, and reduce the potential of signal interference.

**Group:** A group of output points that are activated by an input point or reader. This usually refers to a configuration used to program elevator cab door access control.

## H

**Hard Buffer/Soft Buffer:** A hard buffer command overrides any number of soft buffer/unbuffer commands. If a panel receives multiple unbuffer commands, it will remain buffered until it receives the same number of unbuffer commands. If the panel receives a hard unbuffer command it changes to unbuffered mode, regardless of the number of soft buffer commands it has received.

**Hard Unbuffer/Soft Unbuffer:** A hard unbuffer command overrides any number of soft buffer/unbuffer commands. The software keeps track of the number of buffer commands received by panels. The panel remains in buffered mode until it receives the same number of unbuffer commands. If the panel receives a hard unbuffer command it changes to unbuffered mode, regardless of the number of soft buffer commands it has received.

**Hardware Components:** The individual physical components in an access control system. These include the communications loop, panels, locks, readers, sensors, CCTV cameras and monitors, printers and workstations.

**Hardware:** The physical equipment that makes up an access control system.

**Hardwired:** A system of control panels connected to a communication line (loop or multi-drop) that is connected directly to a computer.

**Holidays:** Exceptions to the normal way of operating an EAC system. A holiday on a weekday, for example, can cause normally opened doors to remain locked.

**Host Computer:** The main computer in an EAC network that is directly connected to a controller or controller network. Holds EAC software and databases, and manages the system.

## I

**Icons:** A picture or graphic that represents a concept.

**Infrared Barcode Cards:** A bar code card where the bar code information is opaque to visible light, but transparent to Infrared light. The bar-coded information on the card may be read by the reader, but not copied by a photocopy machine.

**Input:** A point which receives information. An input device, such as an egress button, sends information to a control panel. Software monitors the state of an input. When that input state changes, such as when a related input device sends information to the panel, software regards that input as being in a state of alarm.

**Insertion Card or Token:** A card or token that is inserted into a reader, rather than swiped through or passed near a reader.

**Integration:** The art of controlling electronic devices through activities known as "chains of events." Especially, in EAC, controlling CCTV and other systems in a unified way.

**Interlock:** Refers to creating a chain-of-events between input and output points.

**Invert Follow:** In an interlock, a second point (component B) takes on the opposite state as the triggering point (component A). See *Follow*.

## J

**Job Specifications:** All the written documentation that must be followed in order for a job to be correctly completed.

## K

**Key Control:** In an EAC system, key assignment and control is managed by the controller.

**Keypads:** A keyboard device, often, but not always, limited to numbered keys between 0 to 9.

## L

**Latching:** The manual use of electronic access control credential in which one credential read causes a lock to unlock and a second read locks the lock. The lock changes state only after a credential is read.

**LED:** Light Emitting Diode (a small lamp).

**Local Relay:** The communication occurring between an input device and an output on a control panel.

**Log In:** Signing in to the system. When system operators change shift, the new operator logs in.

**Log Out:** Signing out of the system. When system operators change shift, the operator leaving the shift logs out.

**Loop:** A communications network wherein the communications cable begins and ends at the same point, with control panels linked at increments along the *loop*.

**Low Voltage:** When a battery is too low the N-1000-III and IV panels can be configured to report a low voltage alarm.

## M

**Memory:** In a control panel, this refers to the amount of information that can be handled or stored provided by RAM (Random Access Memory) chips.

**Message:** Information displayed on the Alarm Detail screen in response to the activity (state changes) of an input.

**MIP:** See *Multiple Interlock Protection*.

**Modem:** A device that translates digital signals to analog signals and the reverse, allowing a computer to send information over a standard phone line.

**Multi-drop Line:** A cabling configuration used for 485 communication networks wherein control panels are connected to a length of cable by t-taps.

**Multiple Interlock Protection (MIP):** An option requiring that all input points tied to a single output be returned to a normal state to de-energize the point. Without this option, only one input needs to return to the normal state to de-energize the output.

**Multi-technology Cards:** A single card that uses several information technologies, such as magnetic stripe and bar codes.

**Muster Area:** A designated area where people go to be acknowledged as being safe during an emergency.

## N

**NEC:** The National Electrical Code.

**No Action:** In an interlock, a second point (component B) does nothing in response to the state change of the triggering point (component A).

**Node:** A connection point on network cable. It indicates that a computer is linked to the network.



**Non-Distributed System:** A computer or EAC network that requires a single "host computer" that supplies the programming and decision making resources to other computers and EAC controllers in the system.

**Normally Closed (NC):** Refers to contact points that always touch when a device is in its normal position.

**Normally Open (NO):** Refers to contact points that do not touch when a device is in its normal position.

**Numb Mode:** Disables readers for a set period of time following a card read.

## O

**Off Line:** Disconnecting one computer device from another that stops the flow of information between them.

**On Line:** Connecting one computerized device with another in a way that can send information between them.

**Operating Humidity:** The relative humidity range in which a device can operate.

**Operating Temperature:** The temperature range in which a device can operate.

**Operator:** A person who operates the system directly through the software: a user. Operator privileges are determined by operator level or individually.

**Operator Level:** The granting or denying of a privilege to control, view, or edit an aspect of the access system to a system user or operator.

**Output Control Group:** A configuration of output points that are grouped in such a way that all can be activated when the status of a single input point changes. This is commonly used in elevator applications.

**Output:** This can refer to a location on a controller at which an output device (such as a lock) is connected, or a point on the controller which software controls to produce a transaction.

**Override:** Reverses a condition. When a locked door is overridden, it is unlocked and the reader shows a valid access.

## P

**Panel:** An access control panel. Typically an PW-2000-II or PW-2000-III/IV.

**Panel Primary Power Alarm:** An alarm reported when a control panel loses primary power.

**Panel Reset Alarm:** An alarm triggered when a control panel is reset.

**Parallel Port:** A plug on a computer that is normally hooked up to a printer.

**Parameter:** Specific information (often a number) that controls the behavior of the system.

**Passive Infrared Sensor (PIR):** A small motion sensor commonly used above doors in an EAC installation. A dual technology PIR combines passive infrared and microwave or passive infrared and ultrasound.

**PC:** *personal computer.*

**Piggybacking:** *See Tailgating.*

**PIR:** A passive infrared sensor, which is usually installed above a door and senses motion in an EAC installation. A dual technology PIR combines passive infrared and microwave or passive infrared and ultrasound.

**Poll Response Alarm:** Refers to an alarm that occurs when panels do not respond when polled by the software. Three polling attempts are made. If there is no panel response during these attempts, the alarm is reported. This has a default priority of 1 (very high).

**Poll:** Asking for information. In a computerized system, one computer asks another for information.

**Port Expander:** A special device that allows you to have more than two serial ports on a personal computer.

**Port:** A place where you can connect a communications cable or device into a computer.

**Power Drop:** The change in the available electrical voltage or current supplied to a device. This is a function of the size and length of the supply wires.

**Power Fail Reroute:** An option that reroutes the Power Fail alarm from Input 8 to Input 19 on N-1000-II panels only when using the AEP-5 (optional supervised input).

**Power Supply:** The source of power that changes AC to filtered DC.

**Priority:** See *Alarm Priority*.

**PROM:** Programmable Read-only Memory.

**Pulse:** A command to energize an output point or shunt an input point for a specific amount of time.

**Push Bar:** A door-unlatching device. When pushed, it releases a lock. If the push bar is connected electronically to the controller, it signals the controller that an egress event has taken place.

## **R**

**RAM:** Refers to random access memory used in a computer or control panel.

**Reader:** Any device that reads encoded information from a card or token and transmits the information to a control panel.

**Real Time:** Processing events as they happen.

**Redundant:** Having two or more ways of doing things. Redundant hardware indicates that two or more items exist for every single function. The duplicate hardware can replace failing hardware at a moment's notice.

**Re-enable:** Return the system to normal operation.

**Relay:** An electronically operated switch that, when activated by a change in conditions on an electronic circuit, activates other devices on the same or another electronic circuit.

**REX:** Request-to-exit device. Refers to a button, pushbar or similar device that allows free egress without setting off an alarm.

**RFI:** Radio frequency interference.

## **S**

**Secure:** To arm or enable.

**Serial Port:** A plug on a computer that is normally used for communications functions. These functions include attaching a computer to a modem, or a computer to communications loops that are connected to control panels.

**Server:** The host computer. This is the computer which maintains the system or system functions.

**Shunt:** The automated or manual means through software, to ignore an input or an input alarm.

**Shunt Points:** The act of suppressing the ability of input points from reporting an alarm.

**Shunt Time:** The length of time a door open alarm is suppressed (shunted) after a valid card access or free exit request. This time should be just enough to allow a card user to open a door or gate, pass through and then close it.

**Signal Strength:** Indicates the size or quality of an electrical signal. The signal strength decreases as the length of its path in the medium increases. The media type (generally cable) and length are selected so that a signal can travel from the transmitter to the receiver and still be interpreted. If the signal is transmitted via a radio signal the choice of antenna type and location will affect the signal strength.

**Specifications:** Rules and measures governing what a device does and how it can be used.

**Split Time Zones:** An option that allows you to apply different time zones to readers on a single panel.

**Stand-alone System:** A single, independently working computer or EAC controller that is not networked with other computers.

**State:** A device's current mode. A change of state means that the mode of a device has changed.

**Status:** The current state or condition of a system parameter, such as the state of an alarm point.

**Supervision:** Special electronic protection of a communications line that is accomplished by sending a continuous or coded signal through the circuit.

When this feature is enabled, any change of the circuit will be detected and a tamper alarm will result.

**Surge Protection:** A device that prevents power surges in system or power wiring from affecting or damaging the EAC system or its components.

**System Administrator:** A system operator who maintains full privileges to all applications that are part of the access control system. This person is familiar with hardware components and the software that controls them. He or she is also responsible for assigning passwords and privileges to other system operators.

**System Operators (Users):** The people who operate the system directly through WIN-PAK. Operator privilege is determined by Operator Level.

**System Thresholds:** The maximum number of components the system is designed to handle.

## T

**Tailgating:** In access control, this is the act of two or more people entering a controlled area by using a single card. (Also known as *piggybacking*.)

**Tamper Alarm:** An alarm related to the tampering of the systems, such as opening the N-1000 control panels cabinet or removing a reader from a wall, etc.

**Tamper Switch:** A special switch or contact sensor used to create an alarm when an enclosure or device is opened in an unauthorized manner.

**Tampering:** The unauthorized act of destroying, modifying, or removing a device.

**Terminals:** Points on a circuit board where cables from various devices are attached.

**Throughput Rate:** This can be the rate at which people or vehicles pass through a controlled area, or the rate that information (data) moves through the computer and controller network.

**Time and Attendance:** The means of recording employee time and attendance through a computer-controlled reader.

**Time Zone:** A range of times and days of the week that are assigned to clearance codes (access levels). These allow usage of the system within their specifications.

**Timing:** A procedure that times events so the controller can determine whether the event is normal and within limits or not.

**Tracking Areas:** An area defined by readers. When a person is inside the tracking area, the computer reports that that person is being tracked until such time as that person uses a muster reader or a different tracking-area reader. This feature does not require anti-passback.

**Transaction:** An event that occurs as a result of a card read, alarm, or other physical or software action or circumstances occurring at a panel or workstation in the system. All transactions are recorded in the real-time Transaction History log.

**Transmit when Buffer Full:** Enables a panel to transmit all activity reports when the buffer nears capacity.

**Trigger:** An input or condition that initiates a set response to an output or action.

**Trouble State:** A condition when an alarm circuit is out of specified tolerance, which may indicate tampering or other troubles with the alarm point.

**Troubleshooting:** The act of figuring out a problem through deductive reasoning.

**TTL:** Abbreviation for *Transistor-Transistor Logic*.

**Turnstile:** A type of rotating gate that allows only one person through per valid card read..

## U

**Unbuffer:** A panel mode in which transactions are not stored in the panel's RAM memory. When a panel is unbuffered, it transmits stored information to a computer, then continues to transmit ongoing access transactions to that computer. *See Buffer.*

**Uninterruptable Power Supply (UPS):** A device that continues to provide power even after the main power has been accidentally shut down. It also protects equipment against voltage spikes that can cause damage.

**Unshunt:** *See Shunt.*

**UPS:** *See Uninterruptable Power Supply.*

**Users:** The people who operate the system directly through the software: operators.

**User Defined Fields:** User-customizable fields for the Card Holder Database.

## W

**Wiegand Card:** A card that has specially treated wires embedded in it that, when it passes through a Wiegand reader, emit a discrete electrical signal.



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