Pulsonix Design System

Node Locked & Network Installation

Start-up Notes

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Contents

CONTENTS **3**

NODE LOCKED INSTALLATION **5**

Contents of the CD or Download Executable 5
Installing Pulsonix 5
Installation - New Users 5
To install the HASP USB key Driver 9
Installation - Existing Users 9
Licensing Pulsonix through the License Manager 10
Distributor Sales 10
Technical Support 11

NETWORK LICENSE INSTALLATION **13**

Introduction 13
Node-locked licensing 13
What is network licensing? 13
How network licensing operates 13
Terminology used 14
Installation overview 15
Backing up data 15
System permissions and the System Registry 15
Installing Network License Clients and Servers 15
Installing the Network License Client 16
Installing the Network License Server 17
Installing the USB key driver 18
How to get the license server running 18
Running the Server and Pulsonix on the same machine 20
Running Network Licenses 20

Node Locked Installation

The information provided below is essential to get you started. Please read it carefully as it covers some important questions which get asked regularly. It also covers where you can obtain support from and the license agreement.

Contents of the CD or Download Executable

The CD-ROM or download executable file contain the Pulsonix program installation, the HASP key driver, the On-line help, documentation and ancillary files for the program's use. The license file for the Pulsonix programs including all options are supplied separately by email or as a text file.

Installing Pulsonix

Floating Network License Users

If you have purchased a floating network license, you will need to use the installation guide in the next chapter headed *Floating Network Installation*.

Before Starting

Don't connect the USB key, the Pulsonix product disk contains the USB key driver, which will be required.

Storage of settings

The settings needed for licensing are stored in a configuration file called "License.ini". This file is created and maintained automatically by the installer and the applications, in a folder called "C:\PulsonixConfiguration". If you prefer this file to be written to a different hard drive, you can create a "PulsonixConfiguration" folder on any hard drive up to drive letter "H" before running the installer.

Licensing Pulsonix

Before installation, you should copy your supplied Pulsonix license from an email to a suitable location on your hard drive. You can call it any name you like, license.lic, fred.lic 1234567.lic etc. but it must be .lic though and not contain illegal characters like '@#~

When requested for the license file, you should browse to the file saved previously.

Installation - New Users

Copy the license supplied by email to a folder on your hard drive (c:\temp for example). Call it any name you like, license.lic, fred.lic 1234567.lic etc. it must have the .lic extension though and not contain illegal characters '@#~ etc.

From CD

Now insert the CD-ROM into the CD drive and wait for a short time. The default setup of Windows includes an *autorun* facility that should detect the CD and start the **Intro** program on the CD.

If your system has the autorun facility disabled, or it simply hasn't worked, select **Run** from the **Taskbar Start** menu, and type **D:\setup.exe** (replacing the D: with the actual CD drive letter if yours is different), then **<Enter>**.

Double-click on the executable and the installation will start. Use the Installation Wizard to install Pulsonix.

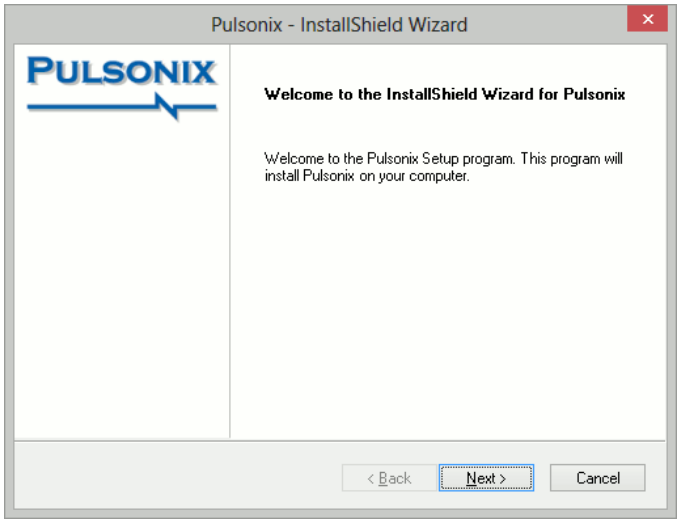
From an electronic download

Using the instructions you have been provided with, download the Pulsonix installation set to your local hard drive or an accessible network location.

Double-click on the executable and the installation will start. Use the Installation Wizard to install Pulsonix.

Installation Wizard

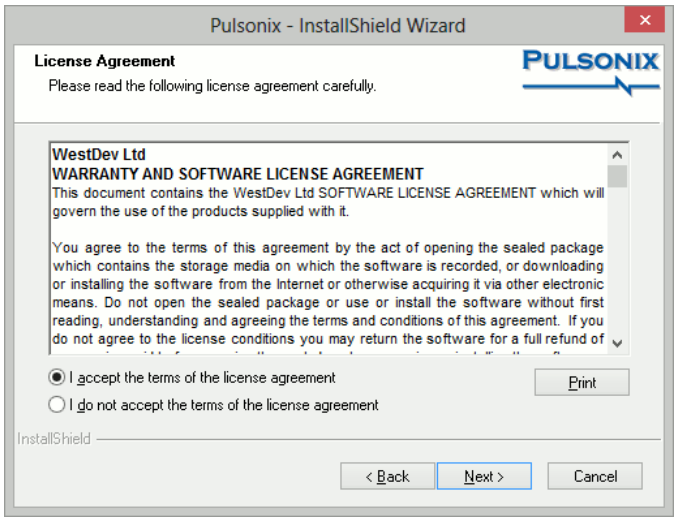
From the **Setup** dialog, follow the instructions presented to you on the screen.



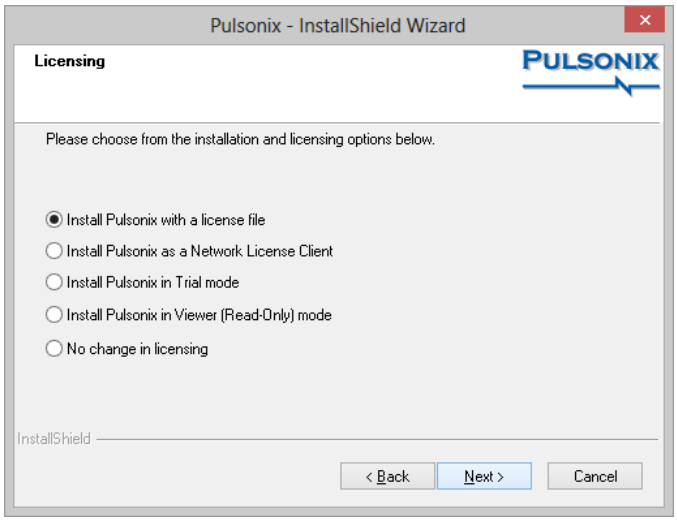
Press **Next>** to continue.

Select the **I Accept…** radio button to accept the terms and conditions of the agreement displayed.

Press **Next>** to continue.

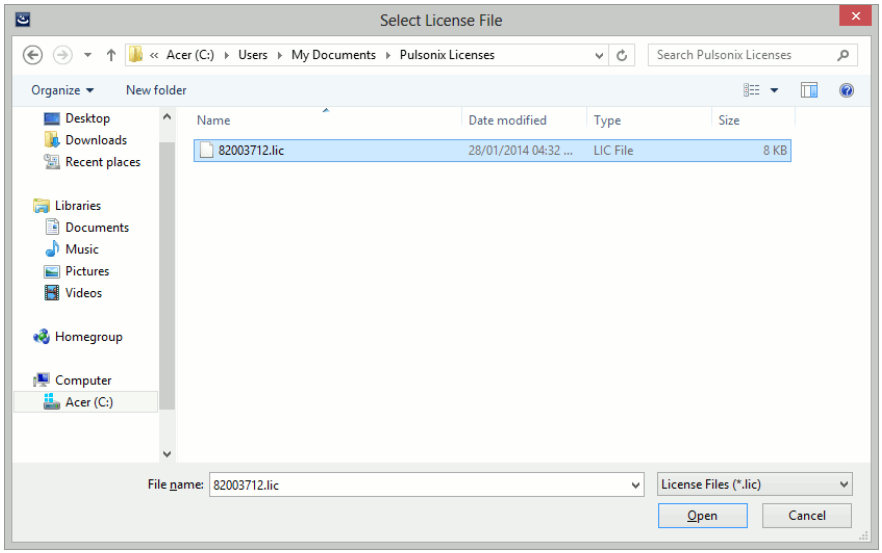


You will be requested to select a **license** type:



You can opt to run the program in **Trial mode** and then select a license after installation or by selecting the first option, **Install Pulsonix with a license file**, can browse to the location where it is saved and select the file. Press the **Open** button once the file has been selected.

The license file will be supplied to you by email generally. Copy the file supplied onto your local hard drive. This is the location you will browse to.



You will need to install the HASP USB driver if you are using the HASP USB key for Pulsonix security. Follow the additional instructions below if you require the driver to be installed.

If using a MAC address for the security lock, you will not need to install this driver.

Follow the instructions and click **Finish** to complete the installation.

To install the license file after installation of Pulsonix

▶ To use a license file after installation

1. Do not attach the USB key!
2. Install Pulsonix from the CD or demo download on the Pulsonix web site. The product is the same whether you run in demo mode or full product, it's just that the save mode is enabled or disabled.
3. Once Pulsonix is running successfully in demo mode, close it.
4. Copy the license file supplied in the email to a location on your hard drive (anywhere).
5. Call it any name you like, license.lic, fred.lic 1234567.lic etc. it must be .lic though and not contain illegal characters '@#~ etc.
6. From the **Start** menu on the **Task** bar, go to the **Pulsonix** program folder and run **License Manager**.
7. Select the **Browse License File** button and locate the license file, click the **OK** button.
8. If you have installed Pulsonix in demo mode, you will now be prompted to load the Aladdin HASP key driver. You must install this if you wish to use the USB key supplied. If using a MAC address, you will not need to install this.
9. The **Licenses** list will show you the license has loaded correctly.
10. Close the License Manager.
11. Attach the USB key if you have been supplied one.

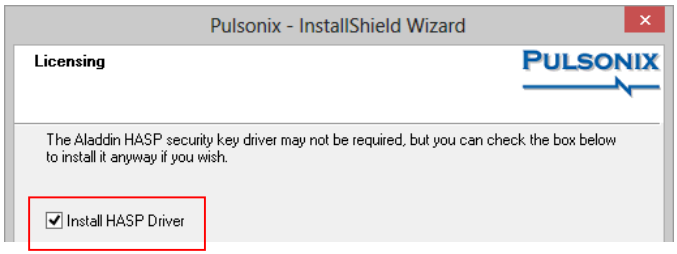
12. Run Pulsonix and it will operate with the **Save** and **Save As** modes enabled.

To install the HASP USB key Driver

Pulsonix uses a USB key or MAC address based license to protect the product. To use the key with Windows it requires its own device driver to be installed. This will be installed as part of the installation procedure during Setup if it doesn't already exist on your computer.

Install Pulsonix **before** attaching the key. **Don't connect USB key, the Pulsonix product disk contains the USB key driver, which will be required.**

During installation, you are requested to install the USB Driver by selecting the **Install USB Driver** check box on its own page. The driver is supplied on the CD. This is a special driver and must be used for correct operation of Pulsonix. The driver can also be installed separately using its own installation program.



Once the installation is complete, if you connect the USB key, the Windows Plug & Play option will automatically detect the key and request the driver. Select the **Aladdin HASP** driver installed. The key will now be ready for use.

Troubleshooting the USB installation

If you experience problems installing the USB key drive, either contact your local technical support center, or visit the Pulsonix web site www.pulsonix.com and view the Tools page which has additional information available.

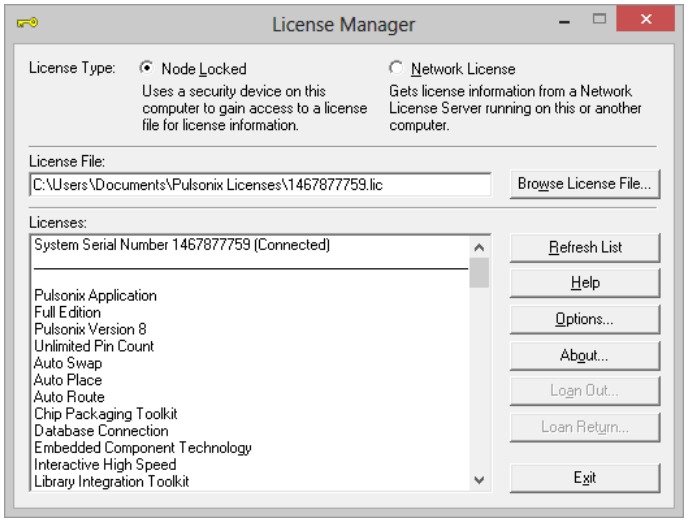
Installation - Existing Users

The installation is the same for both new and existing users except for a few minor points:

- The new installation can be made over the top of any existing Pulsonix product or revision.
- Unless otherwise instructed to do so, or unless you receive a new license file, you will use your existing license. During installation you can select not to install any more licenses. If a new license file has been supplied, use this during installation.
- Ensure that you de-select the **MasterLibrary** and **UserLibrary** switches during setup if you do not wish to overwrite your existing libraries. It is recommended that you backup all libraries before you attempt the installation.
- You may also need to de-select check boxes for other installed items such as Technology files, Format files, Colour files etc. otherwise these will be overwritten.

Licensing Pulsonix through the License Manager

In the event that the license has not been recognised by the program or that there is a problem with the license file, you will need to run the **Pulsonix License Manager** program. This program can be run by clicking the **Start** button from the **Taskbar** and clicking **Programs**. Then click **Pulsonix**, click **License Manager**.



Using the **Browse License File** button, use the **Open** dialog to select the license file to use and click **OK** to use it. The contents will show a list of internal Pulsonix packages authorised for use.

A successful authorisation will display a completion message.

Floating Network Licensing

If you have purchased a floating network license, you will need to use the installation guide in the next chapter headed *Floating Network Installation*.

Distributor Sales

If you have purchased this software package through one of our distributors or resellers, you must register the product with our sales office in order to qualify for free technical support from our support desk for the first 12 months. The registration is only used by Pulsonix for qualifying eligibility of technical support and for keeping you informed and up-to-date about our products. Your details are not passed onto any other 3rd party or used for any other purposes. Support is not provided in any circumstances where the product has not been registered if bought through one of these channels.

Note: Additional extended support schemes are available outside the initial warranty period. Please contact your local sales office for further information.

Technical Support

Technical Support Maintenance

A technical support maintenance contract entitles you to one full year of free support by phone, fax or email. You will also be entitled to download updates from our web site, and will be provided with any major updates within this extended period.

Without training, technical support can only be provided on problems relating to the software or where an option's use is not clear in the Users Guide. Training cannot be given over the phone for the product's use.

Pulsonix Web-site

The Pulsonix web site will contains current information about the products and contains technical information for existing users. This includes items such as updated default files and libraries, plus tips and techniques for using the product. This service is available on www.pulsonix.com

Updates

Free service patches are available for maintenance paying customers through our web site www.pulsonix.com. We do not provide service patches on CD-ROM free of charge but they are available if requested for a small media charge. A login and password are required to access the update service on our web site. This is limited to the duration of a valid maintenance contract. Once outside of the contract without renewing, this service is automatically suspended for your access.

On-site Support

On-site support is not provided as part of any technical support package under any circumstances. If you require this service, please contact us for more information. Our technical support people have remote access utilities where they can access remote computers for diagnostic purposes.

Supported Versions of Software

Support can only be provided on the current major release, and where problems are to be verified, the latest patch version on our web site. If we need to fix designs for any reason, the design can only be fixed in the latest version of the program. For an up-to-date list of supported operating systems, please visit our web site www.pulsonix.com/support.asp

Training

Training courses can be arranged both on and off customer site. Standard courses are available or can be tailored for individual customers and scheduled to suite your requirements. All courses are lead by experienced instructors from our staff. Please contact our sales office for information and availability.

Technical Support For International Users

Users outside the UK should contact their local distributor for technical support, or contact our international sales office for more information.

Distributor Sales

If you have purchased Pulsonix through one of our distributors, you must obtain support through that office.

Contact Details

Email Support	support@pulsonix.com
Web site	www.pulsonix.com
Support Phone	+44 (0) 1684 296 570
Support Fax	+44 (0) 1684 296 515

Network License Installation

Introduction

Pulsonix support two types of licensing; node-locked and network (or ‘floating’).

This supplement details the installation of the network licensing only. Node-locked licensing is covered in the main users guide or in the *ReadMe First* documentation that was supplied with your Pulsonix product.

Node-locked licensing

Node-locked is a single installation of Pulsonix which has the product and security device (a key or Network Address) on the same PC. This system can be ‘network aware’ but will not look at any other ‘node’ or server for its security.

What is network licensing?

Network licensing provides the ability to have an installation of Pulsonix on one PC, and its security on another, which removes the need for a security device on each machine on which Pulsonix is to be used.

This is sometimes called ‘floating’ licensing, and because the licensing is ‘floating’, this means that as long as a particular PC has an installation of Pulsonix, and it points at the correct server PC for its licensing, then it can book out the necessary licenses for use. This can happen on any PC on a given network provided enough licenses are available from the server. The number of any particular license available is predefined based on the number purchased.

Network licensing should not be confused with the use of a network card address as the security device

How network licensing operates

The network licensing is managed centrally by a network license ‘server’ that controls access to the licensed options, protected by the security device. This mechanism allows licenses to be ‘floated’ to any nominated machine within a local network. The scheme works on a book out / book in system for each available product license.

The server application can also be configured to allow particular combinations of licenses, users and/or machines to be granted or denied access to particular licenses. For example, user *Bert* might be able to use a Pulsonix Schematics license but not a PCB one, while user *Fred* can use Schematics, PCB and the Autorouter. This example also applies for machines, so that a user can log in as his name on any machine but will still only have the products available to him, ones that have been allocated to him through the administration options in the server.

The floating license scheme uses a special set of licenses; you can’t ‘float’ normal licenses. The Network License Server will not run unless the license file contains the right type of licenses.

Terminology used

Below is a list of some of the basic terminology used in network licensing and this documentation:

Connect – in Pulsonix terms, this means a Pulsonix Client has made a successful connection to the server.

Client – a computer on which Pulsonix is to be used, and which communicates with the License Server to request licenses.

Floating license – in this instance, when a license is referred to as floating it means that the license can be used on any client on the network.

Heartbeat – a 'heartbeat' message is sent by the Pulsonix client to the server to indicate that it is still running.

License – a license is a file that enables and authorises the Pulsonix products.

License Manager – This is a Pulsonix supplied and installed program which you use to configure a client to locate the licenses needed to allow the main Pulsonix application to run. It is used for both node-locked and network licensing. When used for network licensing it is used to specify the computer name and port on which the license server is situated.

Network licensing – a licensing scheme that centralises access to licenses, allowing them to be used from any machine on the network.

Network License Monitor – a program that provides a user interface on top of the server.

Network Manager or **System Administrator** – this is the person who looks after your network and is knowledgeable enough to know how to get the Pulsonix network licensing running.

Node-locked – a system installation locked to one PC with a local security device.

Port – a number that identifies the particular socket used by Pulsonix to communicate between client and server.

Security device – this is an item of hardware that provides a specific unique identification used to control access to licenses. This is usually a physical key (or dongle) that plugs into either the USB or parallel communications port on your computer. It can also be a network card.

Service – an application that is run automatically by the system, and is not reliant on user action to start it up.

Server or License Server – an application controlling the central repository of licenses, which is capable of being accessed across the network from other computers.

Sockets – an industry standard network communication protocol.

System Admin rights or permissions – these are system rights that you have as a user. With certain permissions, you are able to access, view or edit drives, folders and files within your network.

Installation overview

Below is an overview of the order in which to install the various facets required to run network licensing:

- Use the Pulsonix Setup program to install the Network License Server.
- Start the Network License Server.
- On each of the machines on which Pulsonix itself is to be used, use the Pulsonix Setup program to install Pulsonix as a Network License Client.

Backing up data

If you are an existing user, it is recommended that you back-up all libraries, designs, technology files, profile files, reports and netlists before installing the latest version. Other than for any particular reason, this is good working practice, although you should have a backup already of all this data!

System permissions and the System Registry

The server needs the License Server application and associated files to run the Pulsonix network licensing; it does not require a full Pulsonix installation.

The Pulsonix Setup program may add or modify entries in your System Registry, therefore you must be logged in as the System Administrator or have System Admin rights. There are some issues relating to access permissions that are described below.

Two areas of the System Registry are written by Pulsonix Setup. One is for the 'current user', and the other is for the 'local machine'. To write to the latter section of the registry, you must be logged in as a user that has permission to write to this part of the registry.

For users of Windows NT-based systems (Windows NT, Windows 2000, XP and Vista) each user who logs into a computer generally has various access permissions assigned to them. In order to install Pulsonix successfully these permissions must include Administrator rights on the local computer itself.

If you are in any doubt about whether or not your system is set up to allow you to access the registry correctly, please consult your System Administrator.

Installing Network License Clients and Servers

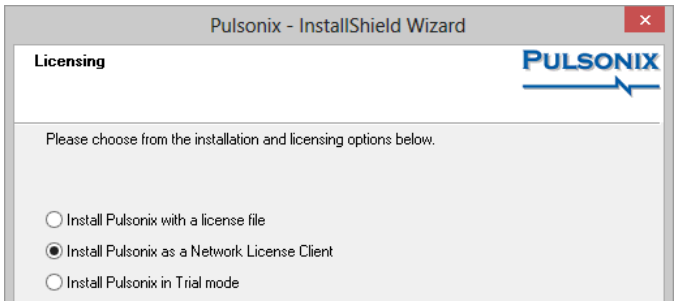
For network licensing there are two types of installation:

- A Network License Client – the user wanting to use Pulsonix and connect to a server
- A Network License Server – the server supplying licenses to the Pulsonix client user

Installing the Network License Client

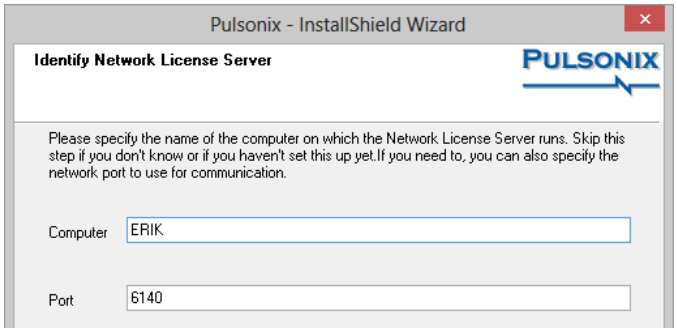
A **Network License Client** is installed using the main **Pulsonix Application Setup** available from the **Setup** dialog**.**

During installation it will ask you to select an installation type, select **Network License Client** installation.



You are also requested for the **Computer name** on which the License Server will run (or is already running). The License Server does not need to be running at the time, as the Setup program will not actually attempt to communicate with the server. If installing the client on the same machine as the server, make sure that the server is not running otherwise the client installation will fail.

If you don't know the name of the License Server Computer, you can skip this step by leaving the Computer name blank. You can set up the name of the License Server later by using the Pulsonix License Manager program once you have finished installing Pulsonix.



You will also be requested for the **Port** number of the license server, by default this is **8083**.

If necessary, you can also change the network **Port** used by Pulsonix to communicate with the License Server. This should only be necessary if you are already using other software that uses a network 'Socket' on this port number. This number is generally only changed with the assistance of a member of our Technical Support Team.

Once you have set up the Computer and/or Port, click **Next** to proceed. The values you have specified will be stored in the system registry for later use by the various Pulsonix programs that need to use the Network Licensing scheme.

The remaining installation will be as a normal Pulsonix user.

Installing the Network License Server

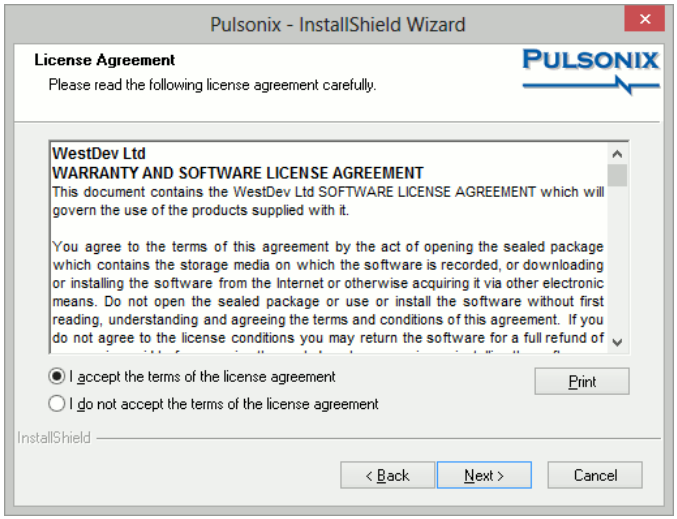
A **Pulsonix Network License Server** installation has its own setup program.

It will only install the files required to be able to run the license server. You will not be able to run Pulsonix as well from this PC unless you also install the Pulsonix Network License Client (see previous section).

Before you install the Network License Server, if your license mechanism uses a dongle, then ensure that it is **not** connected. The server software supplied with the program must be installed first. This installation contains the HASP driver required by the key to enable it to run.

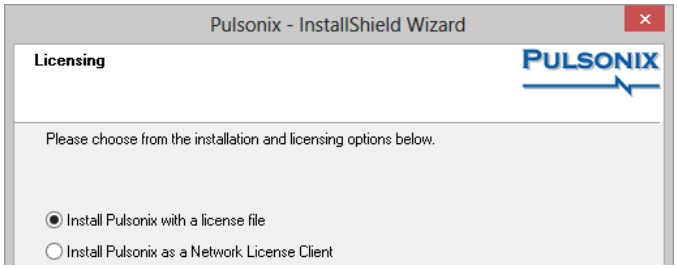
From the welcome page, press **Next>** to continue.

Select the **I Accept…** radio button to accept the terms and conditions of the agreement displayed.



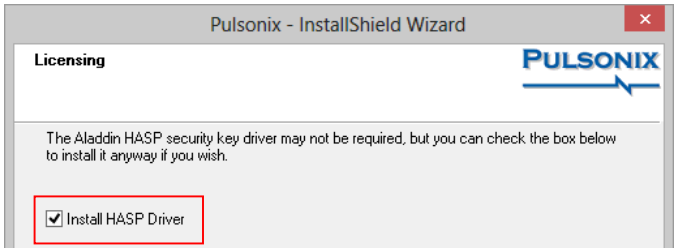
Press **Next>** to continue.

From the **Licensing** page there is an option to **Install a License file**. With this option selected, Setup will only install the tools required to centrally license Pulsonix.



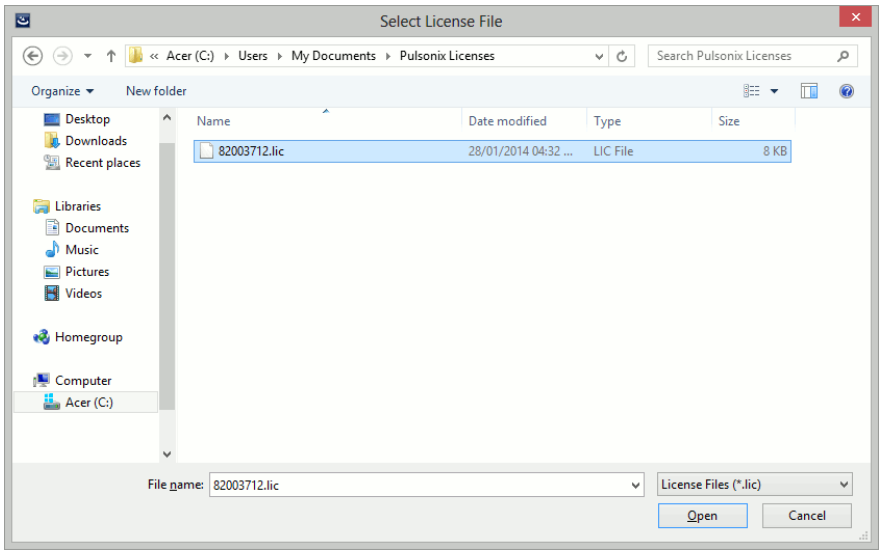
If you wish to run both the License Server and a copy of the Pulsonix application on the same computer, you will first need to install the License Server, then re-run Setup and choose the next option **Install Pulsonix as a Network License Client**, this will install Pulsonix itself.

Depending on your system configuration, you may also be prompted to install a HASP driver for a server installation. If you are using a dongle, an appropriate HASP driver must be installed otherwise the program will not run. Setup will install the HASP driver for you.



Server License

During installation you will also be requested for a license file. This would have been provided to you by email. If you have the file on email, save the attachment using the name **license.lic** and save it into the Pulsonix installation folder.



Browse to this folder when requested for the license. You cannot proceed without the license file.

Installing the USB key driver

Once the installation is complete, if you connect the USB key, the Windows Plug & Play option will automatically detect the key and request the driver. Select the Aladdin HASP driver installed from the Pulsonix CD. The key will now be ready for use.

How to get the license server running

With the **Pulsonix Network License Server** installed, there are two methods for running the license server. Depending on your operating system and how it is configured, it is possible that only one method will be available to you; it is recommended that you use the second method (run as a Service) if possible.

It is recommended that you use the manual method first to verify that the server and license will run.

Running the license server manually

During Setup, a shortcut to the **Network License Server** application (nlserver.exe) is added to the 'Pulsonix' group on your Start menu. Clicking on this shortcut will start the server as a 'normal' application. As well as running it 'manually' like this, you can also opt to run the server automatically each time you log into Windows, by copying the shortcut to the 'Startup' group on your Start menu.

Once the server is running, a client (once installed) can then find the server and request to have the necessary licenses booked out.

Running the license server as a 'service'

The process of starting up the server can be automated, by installing it as a special kind of program called a 'service' (this is only available for Windows NT4.0, 2000 and XP). This service will then be started up automatically as the operating system itself starts up, thus allowing the license server to run entirely independent of whoever is logged onto the server computer.

To install the network license server service, first open a command prompt window (from the Taskbar go to Start and Run. Type **cmd** [or **command**] in the window and OK). Then, change the current folder to the Pulsonix program folder (for example on the default installation, use **cd "c:\program files\pulsonix\pulsonix"**)

Now type in this command to install the service:

```
nlss install
```

If you wish to remove the license server service, type the following:

```
nlss remove
```

Note that it may seem that nothing has happened at this point but the service will have been installed into the Services, viewed through the Control panel.

Next, start the license server by typing:

```
net start nlss
```

These messages should now appear:

The Pulsonix Network Licensing service is starting.
The Pulsonix Network Licensing service was started successfully.

Your network license server is now running. If it was not started successfully, run the nlserver.exe program to sort out any problems with the license file.

Note that you will only need to follow this sequence of instructions once. Now that the network license server is installed, the operating system will take care of restarting the service if the computer is re-booted.

When the license server is being run as a service, it doesn't have any user interface, so you can't see what its doing. The license server application can be used instead to 'interrogate' the status of the license service.

Now select the **Network License Server** program from your Start menu and 'Pulsonix' group. The license server will start up and run as a monitor to show you the status of the network license service. This monitor provides the user interface to change permissions and options on the server. It can also be used on a client machine to monitor a service running on another computer but is limited in its functionality.

Once the service is running, the client (once installed) can then find this service and request to book out the licenses it wants.

Running the Server and Pulsonix on the same machine

If you intend running the Network License Server and the Pulsonix program on the same machine (and it is perfectly okay to do so) then you must install both the **Server** program and the **Client** on the same machine.

In this case, once the Server is installed and the Client is installed, the network license server is run as normal but the client is simply looking at its own machine rather than looking across the network for this service. The name given for the server will be that of the machine hosting it, the one which you are on.

Running Network Licenses

All other information regarding running Network licensing and running the server monitor is detailed in the **Pulsonix Network Licensing** users guide. This is available on the product CD and is installed into the Pulsonix folder under \Documents. It is also available on our web site www.pulsonix.com