SILCE 2100

A Carrier Class 4/5 Softswitch in a single 1U platform



Don't let the blue confuse you — there's nothing greener than a SLICE[®] 2100[™]

✓ VoIP call management, media gateway & TDM all in one platform

IMS interoperability via industry-standard SIP-based architecture

Up to 2,000 IP subscribers per unit

Interoperable with multiple access solutions including SIP, MGCP/NCS, GR-303 & V5.2

✓ VoIP security: TLS/SRTP/SSL

REDCOM

www.redcom.com

TRANSic

a carrier class 4/5 softswitch in a 1U platform

REDCOM's SLICE 2100 is an integrated softswitch and media gateway platform that delivers interoperable communications to service providers, ILECs/CLECs and private networks. Built on an industry-standard SIP-based architecture, SLICE 2100 is a drop-in solution for carrier IP migration, End Office replacement, and distributed cloud voice services.

a low-risk transition to IP networks



SLICE 2100 provides a high assurance migration solution that enables carriers to schedule a phased approach to VoIP implementation, risks, and financial exposure. Traffic, subscribers, and services are cut-over when it makes sense for your business, eliminating a high risk wholesale replacement. SLICE 2100 facilitates a cost effective way to add packet voice (IP) to an existing TDM switching network, while allowing service providers to retain legacy equipment investments.

remote/access solutions



Sharpen your competitive edge with remote subscriber access via SIP, MGCP/NCS, GR-303, V5.2, or direct wired lines. Supporting both legacy TDM remotes and SIP-enabled Access Nodes with DSL, the SLICE 2100 enables carriers to modernize the access network on a responsible schedule. REDCOM's Intelligent Remote model preserves local communications during catastrophic network failures. Key services (e.g., fire, police, government) front-ended with the SLICE 2100 can continue to operate even if the network core or significant transmission assets are compromised.

improve network efficiency



Designed for geographic distribution throughout the Cloud, SLICE 2100 enables carriers to keep the intelligent resources closer to the end user, and to share service resources for cost control and network resilience. Compatible with both legacy networks and the IMS network architecture, SLICE 2100 drops into existing networks while providing a leap into the future, allowing carriers to select the most efficient and cost effective transport routes. In fact, SLICE 2100 makes the old centralized exchange model obsolete, replacing it with a truly distributed Cloud voice services architecture.

the lowest total cost of ownership



Don't burn your OpEx budget with the recurring costs of multi-year maintenance contracts. SLICE 2100 users enjoy NO scheduled maintenance, NO annual service contracts, and NO forced upgrades. Carriers realize a substantial reduction in OpEx when replacing legacy exchanges. Considering that recurring maintenance and service contracts typically double the price of most softswitches within four or five years, it's comforting to know that lifetime costs for the SLICE 2100 won't be much more than the initial purchase.

nothing's greener than a SLICE 2100



SLICE 2100's slim and light chassis was built for efficiency. It uses only 110 Watts on average, less than a couple incandescent light bulbs. Less wasted energy means more green in your wallet. In some cases, the power savings alone can show a full recovery on the investment in as little as four years! SLICE 2100 is built using REDCOM's green manufacturing processes, meaning it is free of lead, mercury and other hazardous substances.

secure & encrypted communications



TRANSip, REDCOM's VoIP technology suite, offers an additional layer of security for VoIP traffic with the ability to encrypt calls. Secure Real-Time Transport Protocol (SRTP) and Transport Layer Security (TLS) are available to encrypt the SIP call signaling and client authentication to ensure confidential communications.

application development API



"Killer Apps" may be a vestigial term, but the business is still alive. Create custom softswitch and media gateway applications with REDCOM's Application Programming Interface (API). The SLICE 2100 is the perfect platform for carrier-class prototyping and developing applications to drive new revenue sources.

SIP trunking made easy



SIP trunking is a cost-effective way for service providers to leverage their IP network to reduce costs. SIP trunks deliver a significant return on investment and TRANSip-equipped SLICE 2100 softswitches have extensive SIP trunking capabilities to ensure that your switching resources fit your business model for current and future growth.

SLICE 2100 next generation network



interchangeable plug-in modules

The SLICE 2100 features two rear-accessible positions for your choice of interface modules. These modules allow service providers to configure each SLICE 2100 to meet their specific needs.

12 Port Line Module

- 12 Loop Lines
- 2 ISDN BRI-S (2B+D) Lines
- 1 Test Access Jack

Multi-E1/T1 Module

- 4 E1/T1 Spans
- 4 general-purpose DSPs: DTMF, MF/R1, MFC R2, Echo Cancellation
- Support for Primary Rate ISDN
- Integrated SS7 support (8 links per module)

24 Port Line Module

- 24 Loop Lines
- 1 Test Access Jack

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Media Gateway Module

- Provides the SLICE 2100 with an additional 128 timeslots per module:
- Allows more simultaneous TDM-IP calls
- Provides extra bandwidth for gateway applications
- 1 10/100 Ethernet Port



Analog Trunk Module

- 10 Loop Lines
- 2 ISDN BRI-S (2B+D) Lines
- 2 E&M/SF Trunks
- 2 GSRD/LSRD Trunks



Radio Interface Module

- An interface to two-way radios allowing a radio user to access most of the SLICE 2100's features normally accessible to a standard station user.
- Allows any phone in the REDCOM system to dial out to a radio net.
- Allows a remote radio to dial directly into the system or call another radio network.

SDP Manipulation

VLAN Tagging

features

CODECS

iLBC

SECURITY

SRTP

TIS

REDGOMLTL

G.723.1H&L

Silence Suppression

System CRON Timers

SIP support for CLASS lineside

Telephony Tones: RFC 4733

VoIP (SIP standards-based)

G.711A&µ (64kbps PCM)

G.722.1 & G.722.2 (HD Voice)

G.729A&B (8kbps CS-ACELP)

Conversion (MGC) & Auto

Lawful Intercept (CALEA):

PIN Number Authorization

RADIUS Authentication

US J-STD-025A & US J-STD-025B

Fax over IP: T.38, Media Gateway

RFC4040 (64 kbps)

Modem over IP: V.150.1

Distributed Control

Priority Override

User Level Security

G.726 (16, 24, 32, 40kbps ADPCM)

specifications

PHYSICAL SPECIFICATIONS

- Width: 19 in rack mount;
- 17.5 in / 44.5 cm
- Height: 1U 1.75 in / 4.4 cm
 Depth: 17.5 in / 45.5 cm
- Depth: 17.5 in / 45.5 cm
 Weight: 16 lbs. / 7.3 kg*
- Weight, fold
 Power:
- - -48 VDC; 2.3 amps
 100/220 VAC, 50-60 Hz
- (external rectifier)
- Environment
 - Operating temperatures: 32–122 °F / 0–50 °C ambient
 - Operating humidity: 5%–90% (non-condensing)

SYSTEM ARCHITECTURE

- Distributed Control
- Hot-Swappable Interfaces
 Two bays for field-replaceable modules
- Carrier-Class Reliability: 99.999% ("five nines")
- Two 10/100 Ethernet Ports
- Two dedicated E1/T1 Ports
- Stackable up to 3 units (up to 6,000 IP subscribers)

SYSTEM FEATURES

- Administrative Package
- Call Records SMDR/CDR/LAMA
 - Bellcore AMA Format (BAF)

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- Emergency Services (911)
- Local Number Portability (LNP)
- Multiple Home Exchanges
- Percentage Trunking
- REDCOM ClusterNet[™]: host/remote for integrated network operation
 SNMP
- Three PIC Equal Access
- Time-of-Day Database Changes
- (Least Cost Routing)
- Voice Mail System InterfaceWeb Portal for Subscribers, Centrex
- and Administration

 Zone Paging

CLASS^M & BILLABLE FEATURES

- CLASS Features
- Automatic Call Distributor (ACD)
- Automated Call Processing (ACP)
- Caller ID (Name and Number
- Delivery)
- Centrex (IP and TDM)Conferences
- Conferences
 Hotlines
- Single Number Services (Find Me)

ACCESS SOLUTIONS

+1.585.924.6500

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- Broadband Loop Carrier (BLC)
- Direct wire 2-wire subscribers

* Exact weight is dependant on module configuration. Some features are optional. Please contact REDCOM for a more detailed description of product features and capabilities. ©2014 REDCOM Laboratories, Inc. REDCOM, the REDCOM logo, SLICE and TRANSip are registered trademarks of REDCOM Laboratories, Inc. CLASS is a service mark of Telcordia. Subject to change without notice or obligation.

- FXO/FXS
- GR-303

One Redcom Center, Victor, NY 14564, USA

- ISDN BRI
 - MSANRadio
 - SIP
 - V5.2

REDCOM TRANSIP® IP TECHNOLOGY SUITE

- Up to 2,000 registered IP subscribers per unit
- SIP Call Controller/Call Manager
- SIP Trunking
- DHCP client
- DNS client
- Dual Stack IP (IPv4, IPv6)Audio Streaming RTP
- (RFCs 3550, 3551, 3389)
- Comfort Noise GenerationEcho Cancellation: G.165,
- G.168 (up to 128ms) Fax over IP (T.38) and
- Modem over IP (V.150.1)
- IMS Compatible
- IP Bandwidth ManagementLegacy Interface Support

Network Time Protocol (NTP)

QoS: IP Differentiated Services

- Legacy Interface
 Media Gateway
- Media Gateway
 MGCP/NCS Line Support (Packetcable 1.5)

(DiffServ) marking

RFC 3261, 3326, 4028

PROUDLY DESIGNED, BUILT & SERVICED IN THE USA