



PacStar[™] 7100 Small Office UC Solution



The PacStar 7100 is a full-featured, UC (Unified Communications), EoIP (Everything over IP) solution designed for small businesses, branch offices, or organizations of up to 50 phone users. Comprised of proven, best-of-breed, networking and voice/data/video communications equipment in use by thousands of customers, and managed by PacStar IQ-Core Software, the PacStar 7100 brings state-of-the-art solutions under one, easy-to-use, software-managed solution.

The PacStar 7100 provides IP-converged services based on the Cisco Unified Communications platform, integrated and tested to rigorous security standards. The system includes IP routing, LAN/switching, VoIP and analog call processing, voice mail, VPN, firewall, wireless LAN, UPS and data backup systems. The system offers support for a wide variety of Cisco IP phones and analog phones.

Designed for small businesses and branch offices, the PacStar 7100 uses advanced VoIP technologies, yet reduces training and maintenance support services because it is managed by PacStar IQ-Core Software. Originally designed to meet ease-of-use and security requirements for US military communications deployments, IQ-Core Software converts a complex stack of advanced networking equipment into a simple-to-use, secure, reliable, and proven solution.

Features

- PacStar IQ-Core Software v3.0 for wizard-based, simplified, and unified system management
- Cisco IP-based, UC services, including IP softswitch, TDM trunking, integrated voice mail, analog voice, conferencing
- Supports up to 50 phone users
- Extensive options for IP phones, from entry level to video-enabled
- Cisco ISR routers with an extensive catalog of modular services
- High performance LAN for voice/data/video with QoS
- Advanced security including firewall/IPS and VPN
- Highly secure wireless 802.11 options
- Tape backup, UPS and KVM options

PacStar IQ-Core Software

- Integrated system management software providing a simplified, unified, user interface
- Wizards automate key management functions to simplify setup and

- operation, and to reduce errors
- Reduces training and support requirements
- Enables system management by non-technical users
- Dashboard view of status of devices and phone system, and system events
- Setup and management of users
- Setup and management of phones, call traces, and hotlines
- Views of the call route plan, recent call detail records, calling search spaces, and trunk traffic and performance
- Management of devices, including console access and password changes
- Monitoring of devices, with alerts
- Management of device configurations
- System event logging and reporting
- Efficient remote management protocol
- Designed from the ground up for net-centric computing
- Award-winning, PDF-based, user documentation
- Context-sensitive, PDF-based Help

Cisco 2800-series Integrated Services Router

- Branch office routing optimized for secure, wire-speed delivery of concurrent data, voice, video, and wireless services
- Supports over 90 existing modules for extended services
- Optional services include:
 - Encryption acceleration
 - On-board voice digital signal processing
 - High density interfaces for a range of wired and wireless connectivity options such as Fast Ethernet, T1/E1, FXO and FXS interfaces

Cisco Unified Communications Manager Express 7.0

- Call processing resident on the core Cisco ISR router
- IP and analog phone support
- Support for up to 240 phone users, depending on router model
- Integrated voice mail and auto-attendant solution with Cisco Unity Express
- Extensive trunking support including H.323 and SIP

Cisco Catalyst 2960 Switches

- PoE switch with 24 full 15w PoE ports
- Integrated security
- NAC support, ACL support
- Dual-purpose 10/100/1000 uplink ports with SFP
- Advanced QoS support

Cisco Unified IP Phones

- The PacStar 7000-series is compatible with a wide variety of Cisco IP phones offering cost-effective, entry-level functionality, or advanced features such as video, softphones, color screens, and room conferencing models.
- Key available functions include:
 - Voice quality: Comfort-noise generation and voice-activity-detection (VAD) programming on a system basis
 - Multiple-line options in Business Class phones models – up to 8 lines on select models
 - Support for SCCP and Session Initiation Protocol (SIP)
 - Codec support: G.711a, G.711, G.729a, G.729b, and G.729ab audio-compression codecs
 - 10/100/1000 BASE-T Ethernet connection through 2 RJ-45 ports, 1 for the LAN connection, the other for connecting a downstream Ethernet device
 - Configuration options: Provisioning of network parameters through Dynamic Host Configuration Protocol (DHCP)
 - PoE-compatible with any Cisco inline power-capable switch
 - XML-based configuration and application support
 - Unicode support for international languages

Cisco Media Convergence Server 7825-13 (H3 also available)

- Entry-level server platform for hosting unified communications
 - Intel Dual-Core Xeon 3050 2.13-GHz processor with an 1066-MHz front side bus (FSB) and 2 MB of Layer 2 cache
 - 2-GB PC2-5300 double-data-rate 2 (DDR2) Error Checking and Correcting (ECC) memory (must be installed in pairs)
 - 2 160-GB cold-swap serial advanced technology attachment (SATA) hard disk drives configured as Redundant Array of Independent Disks (RAID 1)
 - Dual-port Gigabit Ethernet controller (embedded)

Cisco ASA 5505

- Full-featured security appliance with high-performance firewall, Ipsec and SSL VPN
- VPN throughput up to 100 Mbps
- Firewall throughput up to 150 Mbps
- Up to 25 Ipsec VPN Peers or SSL VPN peers
- Up to 25,000 concurrent sessions
- Includes 8-port switch, with 3 VLANs

Aruba Networks Wireless (Optional)

- Aruba Multi-Service Mobility Controller MC-200 Series (Central controller)
 - Support for up to 6 access points and 100 users
 - Identity-based security with role-based access control policies
 - 1 Gigabit Ethernet port
 - Extensive security features, including rogue AP (Access Point) detection and containment, and DoS protection
 - Converged voice and data support, including extensive VoIP support such as Cisco SCCP and SIP protocols, QoS, bandwidth controls, and CAC
- AP 60 – Series WLAN access points including:
 - 802.11 a/b/g support
 - 2.4-2.5 Ghz and 5 Ghz RF spectrum
 - Dual-band antennas
 - Wireless intrusion detection
 - Dual 100/1000 PoE interfaces
 - Extensive mounting options
 - Multiple access security methods
 - Designed for central management

Additional Equipment

PacStar can provide extensive additional equipment tailored to meet your requirements. Typical configurations include:

- ATEN KL1508 17" LCD/KVM – integrated KVM and KVM switch. Includes dual rail slide system. Highly tested by PacStar, and may be configured to meet DoD security requirements
- APC UPS and rack/enclosure solutions – custom configured based on customer runtime and environmental requirements.

Solutions Engineering

PacStar and our partners can provide additional customization, integration and configuration as necessary to meet your needs.

Intellectual Property

- Pacific Star Communications, Inc. products are protected by US patent number 7,535,861
- Additional patents pending