# PacStar 6100 Early Entry Package (EEP)

The PacStar 6100 is a deployable Unified Communications (UC) “Everything-over-IP” system designed for DoD, Disaster Recovery, and Continuity of Operations. Serving small-to-medium teams up to 40 people, the PacStar 6100 contains best-of-breed networking and voice/data/video communications equipment and is managed by PacStar IQ-Core® Software.

IQ-Core Software integrates key components in the system, providing a common graphical user interface (GUI), making the system easier to use. IQ-Core Software also helps prevent system mis-configuration and reduces training and support requirements.

The PacStar 6100 provides IP-converged services based on the Cisco UC platform and is integrated and tested to demanding DoD security standards. The system includes IP routing, LAN/switching, VoIP/analog call processing, WAN optimization/acceleration, VPN, voice compression, and firewall capabilities.

The PacStar 6100 configuration is based on JITC certified equipment and a version has been approved for connection to the DISN-TE (Tactical Edge), providing access to DSN, DRSN, NIPRNet, SIPRNet, JWICS, and DSVS-II networks. The PacStar 6100 is designed for rapid field deployment and is compatible with any deployed tactical satellite communications system via a standard IP-over-Ethernet connection.

Packaged in commercial airline-checkable transit cases, the system provides a flexible and powerful communications system that can be deployed and turned up in the minimum possible time.

## Features

<table>
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<tr>
<th>PacStar’s IQ-Core Software for graphical, wizard-based, simplified, and unified system management</th>
<th>Field proven, JITC-certified for use with DISN-TE</th>
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<tbody>
<tr>
<td>Cisco IP-based, unified communications services, including IP softswitch, integrated voice mail, analog voice, fax, and conferencing</td>
<td>Secure voice/data communications in separable enclaves, via SecNet 54 HAIP equipment and ViaSat KG-250X or other GFE HAIP equipment</td>
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<tr>
<td>Cisco high performance PoE LAN for voice/data/video with QoS</td>
<td>Cisco ISR router with extensive catalog of modular services</td>
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<td>Secure analog STE-based voice services using FXS ports</td>
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<td>Voice-packet multiplexing and compression using NET VX400</td>
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<td>Advanced TCP/IP and application acceleration using Riverbed Steelhead appliances (w/optional SCPS support)</td>
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</tbody>
</table>

## Cisco Unified Communications Manager (UCM)

- JITC PBX1- and LSC-certified IP voice exchange and Unified Communications platform with call processing and call control
- Video switching, wideband codec support, encrypted audio and signaling, device mobility
- Call analysis and reporting tools
- Real-time monitoring tools
- Dial plan analyzer

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**PacStar**

15055 SW Sequoia Parkway | Suite 100 | Portland, Oregon | 97224 | pacstar.com | Toll Free 888.872.1512
Cisco 2800-Series ISR Router or Cisco 2900-Series ISR Option
- Branch office scale 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:
  - On-board voice digital signal processing
  - High-density interfaces for range of wired/wireless connectivity options (Fast Ethernet, T1/E1, FXO, FXS interfaces)

Cisco Catalyst 3560G PoE Switch
- Layer2/Layer3 routing switching with extensive capabilities via Cisco IOS, such as:
  - QoS, rate limiting, ACLs, static or RIP routing
  - IPv6, multicast, and PBR
  - Up to 40 ports of PoE Fast Ethernet per switch
  - Extensive port options, including SPF and GigE support

Cisco Unified IP Phones
- Compatibility with a variety of Cisco IP phones, offering cost-effective, entry-level functionality, or advanced features like 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
  - sRTP support meeting DoD security requirements
  - 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, one for the LAN connection and the other for connecting a downstream Ethernet device such as a PC
  - Configuration options: Provisioning of network parameters through Dynamic Host Configuration Protocol (DHCP)
  - PoE-compatible with any Cisco inline power-capable switch

NET VX400 Mobile VoIP Gateway
- Mobile Voice over IP (VoIP) network device
- Designed to extend analog voice, VoIP (SIP/H.323) and Secure Calling (STU/STE/SCIP) across IP-based networks (i.e., IP LAN, IP WAN, IP/ISDN, VSAT, BGAN)
- Using BSP/VTP VoIP optimization cuts bandwidth and packets needed to transport VoIP calls between remote/local devices

Riverbed Steelhead TCP/IP and Application Accelerator
- Accelerates application performance and data transfer over a WAN to overcome bandwidth limitations imposed by satellite and other deployed network WAN solutions
- Increases application performance up to 100 times
- Reduces bandwidth use by 60% to 95%
- DoD-approved and FIPS-140 validated

Laptop: Panasonic Toughbook W8 for IQ-Core Software and System Management
- Ultra-lightweight, 3.0 lbs.
- Windows® XP®/Vista/Windows 7
- Intel® Core™ 2 Duo Processor
- Lithium ion battery pack, long life

Transmission Options
- Compatible with any IP-based WAN/backhaul infrastructure
- JITC-tested and approved for Ku and X band use

Additional Equipment
- PacStar can provide extensive additional equipment to meet specific requirements. Typical configurations may include:
  - Additional networking capabilities like email, storage, firewalls/VPNs, etc
  - Ruggedized UPS in transit case(s)
  - Custom phone and accessory cases

Solutions Engineering
- PacStar can provide additional customization, integration, configuration, training, documentation, testing, and certification testing (MIL-STD, JTC, DIACAP, etc) assistance as necessary to meet your needs. Please call for more information.