



PacStar SWCP CUI

Secure Wireless Command Post (SWCP) for Controlled Unclassified Information (CUI)

PacStar's SWCP CUI system enables wireless and mobility for Commercial off the Shelf (COTS) mobile devices in expeditionary and tactical environments.

PacStar SWCP CUI is a small modular communications package that enables end user devices, such as smart phones, tablets and laptops, to utilize built-in commercial Wi-Fi or LTE radios for communication. PacStar's SWCP CUI provides voice, video, and data in protocols compatible with Wi-Fi or VPN encryption and eliminates the need for external or Type-1 cryptographic equipment. The SWCP CUI is based on a PacStar Integrated Solution that is accredited and fielded by the U.S. Department of Defense (DoD) Tactical Network program office for NIPRnet wireless access. It includes a comprehensive suite of common criteria and FIPS evaluated commercial off-the-shelf (COTS) security technology that meets DoD wireless requirements and can support simultaneous Wi-Fi and VPN connectivity.

In Wi-Fi mode, the SWCP CUI conforms to DoDI 8420.01 WLAN requirements for secure CUI network access over Wi-Fi. In VPN mode, the system conforms to DoDI 1035.01 and Remote Access VPN and Policy STIGS for transport of CUI over non-government networks – including, but not limited to, any untrusted transport such as LTE and SATCOM. Both Wi-Fi and VPN modes are available without additional equipment.

In addition to CUI networks, PacStar 400-Series tactical hardware and PacStar IQ-Core Software are customizable and configurable for use in Commercial Solutions for Classified (CSfC) solutions.



PacStar's SWCP CUI is configurable to optimally serve a wide range of team sizes and can be customized with additional software and Virtual Network Functions (VNF) solutions to ensure interoperability with existing customer infrastructure.

Key Features

- **Complete, standalone system** including all CUI cybersecurity components (PKI, HSM, authentication server, firewall, WIDS, IDS, etc.) necessary to meet DoD requirements and guidelines.
- **Includes** technologies listed on the Common Criteria, FIPS, and DoDIN evaluated or approved lists*, easing certification and accreditation processes
- **Expandable/modular system** may be customized to meet expanding mission requirements with added networks or alternative component technologies.
- **Based on rugged, MIL-STD tested, PacStar 400-Series modules** and packages that optimize SWaP and maximize deployment flexibility.
- **Managed by PacStar IQ-Core® Crypto Manager**, providing management, configuration and trouble-shooting of CUI Wi-Fi- and VPN capabilities including PKI management, digital certificates and SIEM in accordance with government requirements.

* Common criteria and FIPS evaluated technologies on select PacStar 451 Xeon E3 models. PacStar 451 Xeon D model Common Criteria and FIPS evaluation dates TBD.

Solutions Contents

PacStar SWCP CUI supports multiple networks and can be scaled to meet customer-specific mission requirements. Optional inclusion of tactical Certificate Authorities and HSMs allows complete in-theater management; however those components may reside in DoD PKI, MIL DEP NOCs or teleport sites. Additional hardware and software may be necessary to host Government Furnished Equipment (GFE) software or for enclave security components to meet all DoD mandates, such as HBSS, ACAS, etc.

The PacStar 400-Series hardware platform can host alternate virtualized network functions based on a vast set of supported third-party sources on PacStar 451 servers. Please contact PacStar for more details.



PacStar 413
HSM Sled



PacStar 451
Rugged Server



PacStar 444
GigE Switch



Wireless Network Infrastructure

A single PacStar 451 Xeon D Server, or Dual PacStar 451 Xeon E3 Servers with:

- Wi-Fi Mobility Controller (Aruba VMC)
- Aruba Airwave (WIDS)
- Aruba ClearPass (Authentication Server)
- Firewall/IDS (Palo Alto VM)
- Management (IQ-Core Crypto Manager)
- Network Services (Domain Services, NTP)
- Certificate Authority/CDP (ISC)

Black Network

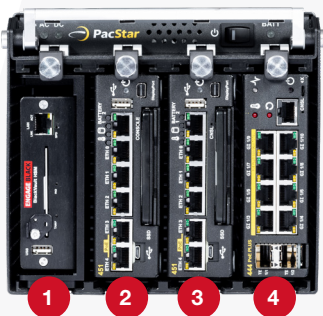
Wi-Fi Mode

- PacStar 444 (Cisco ESS 3300 PoE switch)
- One or more Aruba Wireless APs with WIDS monitor

VPN Mode

- Any non Wi-Fi radio infrastructure (such as LTE) (government vs non government)
- Uncertified or non-compliant Wi-Fi radio infrastructure

Standard Configuration



- 1 PacStar 413 HSM (Optional)
- 2 PacStar 451 Server
IQ-Core Crypto Manager
ISC Certificate Authority
Palo Alto FW and IDS
Network Services
- 3 PacStar 451 Server
Aruba AirWave
Aruba ClearPass
Aruba VMC
- 4 PacStar 444 GigE Switch
Cisco ESS 3300

Lite Configuration



- 1 PacStar 451 Server
IQ-Core Crypto Manager
Aruba AirWave
Aruba ClearPass
Palo Alto FW and IDS
Aruba VMC
- 2 PacStar 444 GigE Switch
Cisco ESS 3300

System Packaging

Physical Specifications

Included in a PacStar Smart Chassis with a payload of up to (4) modules, provides enclosure, thermal management, power supply, and UPS.

- Custom designed self-contained chassis (7.5" x 6.8" x 12")
- Available in 4 or 5 module variants
- Chassis weight with 4 modules ~21 lbs.
- May be transported in custom "Pelican" cases with foam, or mounted in PacStar Mini-Transit Case

Optionally available with PacStar Mini-Transit Case (for more comprehensive or multi-network systems), with a payload of up to (9) modules, provides a transportable infrastructure for housing and operating PacStar 400-series Smart Chassis and modules.

- Custom designed carbon fiber transit case with wheels and handle (9" x 21" x 14")
- Meets FAA maximum carry-on bag size restrictions
- Holds multiple Smart Chassis with a maximum (9) module payload - e.g. (1) 4-slot and (1) 5-slot Smart Chassis
- Removable lids for operation of equipment in the transit case
- Smart Chassis are user-removable and capable of operating outside the transit case; enabling physical separation as required for classified enclaves
- Overall system weight ~65 lbs.

Secure Wireless Command Post (CUI) is also available in a PacStar Rack Mount Frame and other configurations ideal for ground vehicle and airframe mounted use cases including networking on the move, and en route networking.



PacStar SWCP CUI

System Power Specifications

- World-wide AC input, 47 - 63 Hz, 85 V - 264 V
- Wide range DC input, 10 - 36 V DC
- Includes an integrated UPS based on the DoD standard 2590 Li-Ion rechargeable battery
- 200 watt-hours rated
- Automatically auto-senses and switches to battery if prime power is interrupted
- User accessible battery compartment
- LED indicators for battery status

PacStar 400-Series Modules Key Features

Size	5.3" x 7.1" x 1.6" (each)
Weight	~2.45 lbs (each)
Power	Snap-together connectors provide DC pass-through for powering additional PacStar 400-series products
Operational Temperature	-20C to 60C
Testing	Extensively tested: MIL-STD 810G, MIL-STD-461 and MIL-STD-704D
Power	Battery snap-together connectors for 1 or 2 AN/PRC-148 radio batteries; hot swappable with 5+ hours runtime per battery. Wide range DC input, 10-36 V DC World-wide AC power input (with adapter cable) PoE power output: Up to 10 watts available PoE power on AC or DC input Power draw: Nominal 10 to 45 watts per module, depending on module type