

Beyond the Next Generation

TOCNET-G4+ paves the way for unified voice and data services in a single, elegant solution. G4+ bridges the gap between stove-piped systems and leverages spare computing for increased utility, redundancy and reliability at the point of need.

The G4+ solution enables an environment for rich collaboration between user, partner, and SCI software capabilities. This minimizes SWaP further and enables automation to reduce cognitive load on the Warfighter.

- TOCNET-G4+ supports Linux Docker
- Enhanced computing above standard G4
- Containerized access to computing & network
- Hosting for 3rd Party Software Apps / Services
- Primary or Redundant host computing
- Increases platform utility and reliability
- Potentially eliminates other equipment
- Independent operation from TOCNET®
- Potential for integration with TOCNET®
- TOCNET® UVMS Services retain priority
- Shared connectivity to multiple networks



TOCNET®-G4 Qualifications & Certifications

Storage Temperature	MIL-STD-810G, Methods 501.5 and 502.5, Procedure I, -50°C to +71°C
Operating Temperature	MIL-STD-810G, Methods 501.5 and 502.5, Procedure II, -40°C to +55°C
Immersion	MIL-STD-810G, Method 512.5, Procedure I, 1 meter, 30 min., 27°C differential
Vibration	MIL-STD-810G, Method 514.6, Procedure I, Category 20, Tracked Vehicle
Shock	MIL-STD-810G, Method 522.1, Procedure III (Ballistic Shock)
Humidity	MIL-STD-810G, Method 507.5, Procedure II
Sand & Dust	MIL-STD-810G, Method 510.5, Procedure I followed by Procedure II
Salt Fog	MIL-STD-810G, Method 509.5 (24/24/24/24)
EMI/EMP	MIL-STD-461F, Army Ground to Include RS 105
Power Conditioning	MIL-STD-1275E

- Authority to Operate (ATO) on U.S. Army SIPRNET through Various Programs JITC Certified
- NSNs Assigned and System Available on CHS
- Export Controlled under the EAR

TOCNET®-G4

DELIVERING COMMUNICATION AT THE POINT OF NEED

ALL WE DO. TO SERVE THOSE WHO SERVE.



TOCNET®-G4

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TOCNET®-G4

The Next Generation of Unified Communications

TOCNET®-Generation 4 is SCI Technology's most advanced Unified Voice Management System (UVMS) to date.

Leveraging SCI's latest innovations for increased performance and dramatically reduced Size, Weight and Power (SWaP) and costs, TOCNET-G4 is ideal for virtually any expeditionary operation, whether at the halt or on the move.

With superior capabilities and adaptable, future-proof technology, TOCNET-G4 is a vehicle intercom system, UVMS, and VoIP / RoIP gateway in a single, powerful package.

TOCNET-G4 Platforms

(Non-exhaustive)

- JLTV
- M-ATV
- GMV
- Stryker
- LAV
- CCA / CCM / CCH
- ARV / NGCV
- Demonstrators
- CPI2
- IBCS
- M-SHORAD
- Patriot
- THAAD
- NOTM
- CAC2S
- GBAD / LMADIS

Versatile + Refined

In developing TOCNET-G4, SCI drew on extensive customer feedback to craft a platform that outperforms the competition while cutting costs and reducing space requirements.

The result is a versatile, refined system that delivers both exceptional communications capabilities and significant Size, Weight and Power (SWaP) advantages.

Trade studies and user evaluations from both Government and Industry consistently place TOCNET-G4 at the head of the pack with top ratings for intuitive operations, audio quality, and performance in low-light conditions.

Committed to Innovation

TOCNET-G4 isn't just the most powerful system of its kind on the market today. Thanks to SCI's ongoing commitment to innovation, it will remain a future-proof communications solution for years to come.

Inspired by the wide-ranging functionality of commercial plug-and-play technologies, TOCNET-G4 utilizes the operational adaptability of Multifunction Interfaces (MFIFs) to offer maximum flexibility and longevity in the tactical environment.

SCI hasn't stopped there. Our latest innovations for wearable communications interfaces (WTIP) and enhanced computing with TOCNET-G4+ are now available for evaluation. With the unification of voice and data capabilities in a single, automated solution in sight, SCI will continue to drive the evolution of tactical communications well into the future.

On the battlefield of the future, TOCNET will extend from a manned platform capability to enable common, unified voice and data communications for platforms, Warfighters, and Robotics and Autonomous Systems (RAS), leveraging new technologies and value added Partners.



Basic Crew Interfaces

- › Blind Touch Operation
- › TX, Mon & Override Channel Selection
- › Microphone Mode Selection: PTT, VOX, Hot Mic
- › Binaural Audio and Volume Control
- › Options for 1, 2, or 4 Operators per TIP
- › Options for Loudspeaker Interfaces
- › Options for Wearable and Wireless Interfaces

Advanced Crew Interfaces

- › Blind Touch Operation
- › TX, Mon & Override Channel Selection
- › Microphone Mode Selection: PTT, VOX, Hot Mic
- › Binaural Audio and Volume Control
- › Options for 1 or 2 Operators per TIP
- › Options for Loudspeaker Interfaces
- › Menu, Display & Buttons for Advanced Operations
- › Optional Keypad / Button Backlighting
- › Remote Radio Control
- › VoIP and P2P Calling
- › Radio Relay & Cross Banding Management
- › System Status and Management



Software Applications

- › Java-based, Platform Independent
- › IP-based, Small Footprint, Low Bandwidth
- › User-Friendly, full featured GUI for Operations
- › Multiple Robust Audio Interface Options
- › Voice Recording Options for Mission Analysis / Training
- › Web Services / API for Common Operating Environment (CoE)
- › Dynamic Discovery for minimizing Configuration



Central Hub/Switch/Gateway

- › Power Input, Conditioning & Distribution
- › 2 Gigabit Ethernet Interfaces
- › 4 or 8 Multifunction Interfaces (MFIF)
- › 2 Intercom Bus Interfaces for Expansion via IHUBs
- › Up to 16 Radios & 20 TIP Operators per Local node
- › Network Expansion with up to 1,024 Assets
- › Radio Gateway (Radio Agnostic) - Support for Military and Commercial Radios
- › Remote Radio Control & Status / Presence
- › Radio Relay & Cross Banding
- › Extensive VoIP / RoIP (Raw RTP, H.323 & SIP)
- › IPv4/v6/Dual Stack Connectivity
- › Standalone VoIP & Cisco / REDCOM interoperability
- › Network optimization for bandwidth and QoS
- › Talk-groups & Conferencing of Radios, VoIP, Operators
- › IP Tethering with Wave Relay for MANET integration
- › Data routing between external radio & Ethernet subnets
- › Open Standards, SAVE & VICTORY compatible
- › AESOP & Type 1 Secure Wireless Intercom Extensions