

Cisco TelePresence in Military Operations: Enhance Decision Making



Challenge

Rapid, informed decision making is of critical importance in military operations. In many scenarios, it can mean the difference between life and death. Yet, when troops are positioned in remote tactical locations, delivering the necessary information can be difficult. The quality of the interaction between military staff and subordinates and peers significantly affects the success of a mission. Face-to-face interaction is needed for most effective communication to help ensure that the commanders intent is understood, build, enhance, and maintain relationships, but it is often unfeasible. Traveling long distances to meet in person requires time, and can threaten lives unnecessarily.

Solution

You can use Cisco® TelePresence™ solutions in military environments to enhance situational awareness with face-to-face, high-definition briefings, meetings, and operational planning. These direct interactions enable defense organizations to collaborate with coalition forces, government agencies, non-government organizations, all over the world and at a moment's notice. By doing so, commanders can monitor, adapt, react, and change plans to enhance their operational outcome in whatever role they are involved.

A Life-Like Experience for Participants

The Cisco TelePresence application was designed to provide a life-like, "in-person" experience that improves long-distance communication with the visual cues of face-to-face contact. It enhances communication and collaboration among operational staff in fixed networks and deployed sites. Built upon Cisco patented technology, the solution provides real-time interaction, superior video quality, simplicity, flexibility, and interoperability all in an environment that simulates an in-person meeting.

- Real-time interaction:** The Cisco TelePresence application uses high-definition video to emulate an in-person experience. Life-size images of meeting participants and spatial audio create the dynamic of voices coming directly from participants who are in operations rooms in deployment zones. Deployed staff will feel as if they are in the same command post with people in the strategic headquarters. The full-duplex, near-zero latency of the solution allows users to communicate in real time, while observing the nuances of face-to-face conversation.
- Superior video quality:** The Cisco TelePresence solution achieves superior video quality compared with competing products. Whereas other products use rear-projection systems limited to 720p, the Cisco solution offers 65-inch plasma screens at 1080p. Staff experiences excellent vertical gaze alignment because the cameras are positioned well with viewers' eyes. This high-definition video captures and communicates every expression and gesture, providing the real-life interaction that is critical in making life and death decisions.

- **Simplicity:** The Cisco TelePresence solution is easy to use and takes advantage of tools that are familiar to military staff. Scheduling meetings is easy, because the application is integrated with Microsoft and Cisco Unified Communications Solutions. Unlike older video teleconference (VTC) systems, which are difficult to use and require technical knowledge, the Cisco TelePresence application requires no training or IT support, and participants can be connected quickly.
- **Flexibility:** Built on the intelligent Cisco Service-Oriented Network Architecture, the Cisco TelePresence Meeting solution is flexible, secure, and reliable. This architecture is flexible enough to conduct real-time collaborative communications such as voice and video with high quality of service, high availability, and low total cost of ownership.
- **Interoperability:** The Cisco TelePresence application solves the interoperability challenges of defense organizations. It interoperates with many Cisco Unified Communication Systems, standards-based H.320, H.323, Session Initiation Protocol (SIP), or Skinny Client Control Protocol (SCCP) video conferencing endpoints, and facilitates connectivity with most Polycom, Tandberg, PictureTel, and other endpoints.
- **Strategic fixed networks:** In this high-bandwidth environment, the Cisco TelePresence application is very effective in linking commanders to each other or to government agencies. In this scenario, users link over a high-capacity WAN connection from within an office environment—in essence, having a face-to-face meeting without traveling to another location. In military situations, time is of the essence, so the ability to meet “in person” with this solution is extremely valuable.
- **Strategic fixed networks to deployed sites:** The Cisco TelePresence solution is also very effective in more bandwidth-constrained environments. Senior political and military leaders can be in direct face-to-face contact with deployed commanders who are on the other side of the world in a meeting that simulates being across the table from one another. Such “in-person” meetings increase the speed, quality, and precision of communications from the strategic command base to tactical deployed sites.

Deployment Scenarios

You can use the Cisco TelePresence application for operational planning, briefings, and communicating orders in strategic fixed networks and between strategic and deployed sites. The technology can help commanders communicate efficiently and effectively with deployed troops, eliminating the confusion and ambiguity that can result from voice-only communication.

Innovative Global Government Solutions

The Cisco Global Government Solutions Group (GGSG) supports governments and defense agencies around the world by delivering innovative, integrated mission capabilities through thought leadership, advanced technologies, and services. The GGSG staff comprises a team of top experts from space, military, homeland security, and public safety, and the intelligence community from all levels of government around the world. They not only understand the unique challenges of government, but also bring years of personal experience to help meet mission requirements.

For More Information

Learn more about the Cisco TelePresence solution for critical military operations and other global government solutions and services for defense at www.cisco.com/go/defense.

Critical Defense Applications

The Cisco TelePresence application can improve operational capability in:

Strategic Fixed Networks: High-Bandwidth Environment

- Commanders' regular operational planning and situational update briefings
- Logistic planning for staff coordinating support from geographically spread locations
- Intelligence briefings for staff working in separate agency headquarters

Strategic Fixed Networks to Deployed Sites: Bandwidth-Constrained Environment

- Deployed force commanders to superior headquarters command briefings
- Daily operational updates
- Media and public relations briefings
- Welfare and family communications



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