Forward-Deployed Virtual Workspaces

Military operations, humanitarian missions, and industrial field deployments require secure, scalable, and rapidly deployable computing environments in remote or high-risk locations. Traditional computing models depend on centralized infrastructure, which is often difficult to maintain and vulnerable to cyber threats. These environments frequently face connectivity issues, limited IT support, and the need for frequent manual updates to ensure security and operational continuity.

Key Capabilities:

By leveraging edge computing with high-performance edge infrastructure:

> **Virtualized Desktop Environments:** Provides users with secure, containerized workspaces that can be accessed from thin clients, ruggedized laptops, or mobile devices.

> **Edge-Hosted Virtualization:** Runs virtual desktops on edge servers, reducing reliance on cloud connectivity while enabling local compute capabilities.

> **Zero Trust Security Architecture:** Implements strict access controls, user authentication, and containerized session isolation to minimize cybersecurity risks.

> **Remote IT Management:** Centralized administration enables IT teams to push software updates, security patches, and policy changes without requiring on-site presence.

Benefits:

> **Reduced Hardware Footprint:** Lightweight endpoint devices reduce the need for high-end laptops, leading to extended lifespans and lowered maintenance costs.

> **Secure and Isolated Workspaces:** With session isolation, cross-contamination from cyber threats and unauthorized access is prevented.

> **Rapid Deployment & Scalability:** Organizations can quickly provision and scale virtual desktop environments in response to mission needs, reducing setup time and infrastructure complexity.

Use Cases

> **Forward Operating Bases:** Deploy CDI to provide warfighters with secure, lightweight access to mission planning tools and classified systems without relying on fragile endpoint devices.

> **Humanitarian Aid & Disaster Relief:** Enable first responders to access logistics platforms, medical databases, and coordination tools from ruggedized tablets in the field.

> **Industrial Remote Operations:** Support energy, mining, and manufacturing field teams by providing secure, virtualized workspaces that integrate with operational technologies (OT) at the edge.

> **Mobile Command Centers:** Establish remote command and control nodes with secure CDI deployments to coordinate tactical or emergency response efforts.

By integrating CDI with edge server solutions, organizations can enhance operational agility, reduce security risks, and ensure reliable computing in austere environments.