Trusted Thin Client
Distribution Console Spanning

Expanding secure multilevel access to geographically separate enterprise data centers

Forcepoint Trusted Thin Client enables secure connections to one or more networks (regardless of classification) and back-end Virtual Desktop Infrastructure (VDI) environments from a physical or virtual client and a single network connection. Secure data separation is maintained while allowing users appropriate access to virtual desktops on one or more networks.

Utilizing Distribution Console Spanning in these enterprises enables a secure, seamless, and high-performance architecture through which users—no matter their agency affiliation or location—can gain access to all allowed resources from a single endpoint across the wide area network (WAN). Distribution Console Spanning also supports low-bandwidth networks, such as tactical and satellite communications.

WAN Access throughout the Cloud
Large enterprises with multiple sites require that users have simultaneous access to networks and clouds regardless of physical location. Installing a Distribution Console at each network’s physical point of presence (POP) and connecting them through the client creates a Cluster. This architecture gives users the ability to seamlessly connect to remote networks and VDI sessions regardless of location.

Expanding Failover and Load Balancing
A standard Forcepoint Trusted Thin Client deployment supports failover between local Distribution Consoles. When Distribution Console Spanning is configured, remote failover capabilities are utilized. The failover feature also supports configurable priority levels to provide predictable and controllable failover situations (e.g., failing over to a Distribution Console on another locally available network (LAN) segment before utilizing one accessible via network connectivity).

The Forcepoint Trusted Thin Client solution consists of client and server software components. The client software can be used on thin clients, repurposed PCs, laptops, or hybrid devices.

The Distribution Console server component runs on standard server hardware. Residing in the data center, the Distribution Console is the Forcepoint Trusted Thin Client enterprise administration and security hub, maintaining secure connections to each virtualized back-end network or cloud (private, public, hybrid). This architecture allows clients to securely access desktops, applications, and data from the back-end environment at various security or sensitivity levels.

Many enterprise Forcepoint Trusted Thin Client deployments require access to a wide range of networks and sensitivity levels including those that may be hosted in different geographic regions and controlled by separate departments, organizations, agencies, or coalition partners.

In these cases, extending the infrastructure for those networks to every location is cost-prohibitive and potentially politically sensitive.
Multi-Enterprise Spanning

Distribution Console Spanning expands the ability to share information between cooperating agencies and communities of interest (COIs) that also utilize the Forcepoint Trusted Thin Client solution. Multi-Enterprise Spanning allows each agency’s or organization’s Forcepoint Trusted Thin Client cluster administrators to selectively publish service resources to other clusters without exposing back-end resources or architecture. Multi-Enterprise Spanning allows disparate mission groups and agencies to work together quickly and securely from any location.

Distribution Console Spanning in Use

A large Intelligence Community (IC) customer utilizes Distribution Console Spanning to provide their users with access to LANs and WANs that are outside the local network operations center or are not within close proximity for direct connection to a Distribution Console. With Distribution Console Spanning established in their environment, users located at the home office can access remote networks that are not available in their local data center. These users connect directly to the Distribution Consoles located in offices outside of the country, which in turn connect directly to the required networks.

This gives users transparent access to networks worldwide by selecting a menu item from their client desktop.

A key benefit realized by this IC customer is that the network did not require infrastructure modifications.

All communications to the remote networks are tunneled though the high-side network backbone over a 256-bit AES, IPSec-encrypted tunnel, and access is driven by user profiles and organizational policy.

Distribution Console Spanning also provides this IC customer with access to a larger number of network connections, 50 or more, by sharing access to backend-connected networks between properly configured Distribution Consoles.

Conclusion

Forcepoint Trusted Thin Client enables secure connection to one or more networks and back-end virtualized environments from a physical or virtual client and a single network connection. The Forcepoint Trusted Thin Client server component, the Distribution Console, is a security boundary device that maintains secure network separation enabling users to securely access desktops, applications, and data at each permitted network security level. Distribution Console Spanning enables access across the WAN to other Distribution Consoles, providing immediate seamless access to remote desktops, applications, and data that were previously unreachable. Distribution Console access controls prescribe which network connections can be accessed by each individual user or device. Distribution Console Spanning is used to expand the number of network connections provided by a single Distribution Console, while maintaining the benefits of load distribution, local/regional failover capabilities, and system-wide enterprise management from a single location.