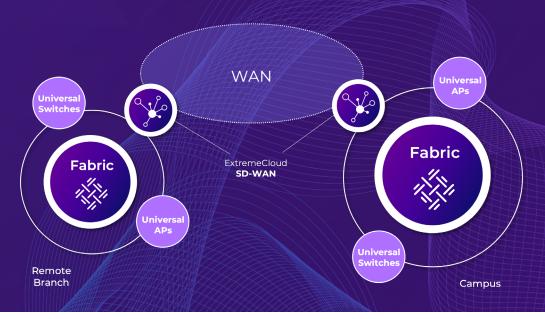# The Value of Fabric Extend

Extreme Fabric Connect enables customers to deploy a unified solution that seamlessly connects their data center, campus, and branch locations, that simplifies standard network operations via automation, while securing the network from internal and external breaches.

The power of Extreme's native Fabric services can be extended beyond the traditional data center or campus location to branch sites connected by a WAN. In doing so, a unified operational model can be leveraged end-to-end, providing the same automation and security benefits to your remote sites as in your central locations.

How Extreme Fabric Extends to Your Distributed Locations

Fabric Extend supports the extension of native Extreme Fabric services to a remote location over public or private IP WAN services using VXLAN tunnels. Alternatively, it can use IPSec encrypted tunnels to traverse public networks, like the Internet, for primary or backup WAN services.

In addition to interconnecting branch or remote sites back to the main campus and data center, Fabric Extend can also be used for data center interconnect or to connect Extreme Fabric islands over an IP infrastructure.

Reduce Operating Costs by Running One Network

With Extreme Fabric Extend, branch networks, campuses, and data centers can be set up and managed simply as a single entity. Instant onboarding enables remote site devices to automatically attach to the Fabric and be provisioned with new services. Changes can be made on the fly without IT teams having to touch each individual device.

Simplify the Deployment of Remote Site Devices

Extending the Fabric to remote sites allows the dynamic auto-attach of users and devices in that remote site (or branch) location. This simplifies the deployment of any branch device and its connection to the Extreme Fabric. This includes auto-attach of Extreme Wireless APs in remote locations to create a unified architecture for the wired and wireless environment.

Automate New Services and Network Changes

With Extreme Fabric, network services are abstracted from the underlying Fabric infrastructure. So, when extending the Fabric across the wide area to remote locations, remote site services can be easily managed. Rather than hop-by-hop provisioning, Extreme Fabric enables network services to be provisioned at the source and destination only. The network then dynamically establishes the shortest path to interconnect these endpoints. With fewer touchpoints, services can be enabled quickly and troubleshooting reduced.

Secure Networking Through Segmentation

Extreme Fabric offers built-in hyper-segmentation that allows organizations to converge multiple physically separate networks into one converged infrastructure. Each segment is in essence a logical network that runs independently of other micro-segments. With Fabric Extend, multiple segments (logical networks) can be run within a single VXLAN tunnel. And network services extended to the branch are transparent to the WAN operator, which enhances both the security and simplicity of the solution.

Elastic Network Services

Furthermore, network services extended to the remote devices in the branch are "elastic". As users, devices and applications disconnect from the Fabric, and the Fabric service is no longer required, the configuration is automatically deleted on the edge switches. This improves an organization's security posture by eliminating the risk of a back-door entry point to the network.

Simplified Multicast Extension

For organizations that need to extend multicast applications to remote sites, Fabric Extend can do this with unparalleled ease. Extreme Fabric, itself, provides highly scalable, resilient multicast services without the use of complex legacy protocols. With Fabric Extend, IP Multicast services and applications can be seamlessly extended to the remote site, just as if the remote users were connected to the central office network.

Integration with ExtremeCloud SD-WAN

Customers can unify and more efficiently manage their branch sites using Fabric Extend combined with ExtremeCloud SD-WAN. Instant onboarding capabilities built into ExtremeCloud SD-WAN enable customers to automatically provision devices and make changes to hardware without touching each individual devices. And ExtremeCloud SD-WAN assures superior application performance, while reducing IT overhead and minimizing visits to remote sites.

Summary

Extreme Fabric is a very powerful technology that can deliver simplicity, automation, and security to the underlying network. With Fabric Extend, the same significant cost and operational advantages of a unified end-to-end network can be provided to remote site and branch offices.

For more details on Extreme Fabric for remote and branch office connectivity, please contact your Extreme authorized sales representative.

http://www.extremenetworks.com/contact