Extreme Networks Solutions for Microsoft Skype for Business Deployments

SOLUTION BRIEF
Today’s organizations are realizing the financial and operational benefits of replacing legacy communication infrastructures with Microsoft Skype for Business and bringing together presence, voice, video, IM, mobility, and collaboration services on a single platform.

Yet IT departments responsible for these implementations often face complex deployments, limited resources, and high user expectations. Challenges tied to application and network response times, interaction quality, and visibility into overall performance can slow ROI and user adoption. Administrators must ensure high performance across all parts of the network and applications, while proactively identifying potential issues impacting user experiences.

With Extreme Networks Solutions for Microsoft Skype for Business, network administrators now benefit from end-to-end QoS over certified wired, wireless, and SDN infrastructures, granular insights into network and application performance, and powerful management tools to ensure optimal user experiences and accelerate ROI.

**Simple, Fast, and Smart Deployments**

With Extreme Networks Automated QoS and Analytics Solution for Microsoft Skype for Business, organizations optimize control and management of their entire UC environment, administrators gain deep technical and business insights into IT resources and investments, and Skype for Business users benefit from higher levels of productivity and improved collaboration.

**Qualified Wired, Wireless, and SDN Solutions for Microsoft Skype for Business**

Extreme Networks integration with Microsoft Skype for Business includes WiFi, Switching, and SDN qualification, application, device, user, and network analytics, and SDN API integration via Extreme Networks OneFabric Connect SDN Platform. In addition to delivering QoS for video and audio applications, benefits to application and network administrators also include:

- Accelerated user adoption
- Faster, simpler, and more transparent deployments
- Faster and more accurate troubleshooting
- Quantifiable visibility into UC investment returns
- Reallocation of IT resources from tactical to strategic objectives

**Extreme Networks Automated Quality of Service and Analytics Solution for Microsoft Skype for Business**
Extreme Networks QoS solution resolves implementation challenges arising from end system QoS provisioning and static network policies, due to the wide range of dynamic UDP ports in use by Skype for Business traffic. The Microsoft SDN API relays detailed information regarding video and audio to OneFabric Connect, where the data is utilized to provide in-depth visibility and control over the quality of audio/video calls, and allow administrators to leverage analytics delivered from our Purview Analytics engine.

OpenFlow Integration with Microsoft Skype for Business

Using OneFabric Connect API integration with Microsoft, customers can deploy end-to-end QoS and in-depth reporting in mixed infrastructure environments that support Open Flow 1.3 or higher with Extreme Networks OneController, our SDN Open Daylight Controller. The solution enables customers to centrally manage and enable OpenFlow switches to prioritize calls and deliver end-to-end QoS and in-depth reporting across their Skype for Business environment.

By functioning independently across OpenFlow infrastructures, OneController provides customers with a high degree of Skype for Business flexibility. This delivers on the promise of Skype for Business by freeing customers from proprietary vendor compromise, and creates a standards-based platform for aligning the network’s capabilities in support of universal collaboration.

Save Time and Lower Costs with Purview Analytics

Extreme Networks Purview Analytics engine enables organizations to gain visibility into overall application and network performance. With Purview, administrators see application response times and network response times, as well as pre-defined or internally-developed application fingerprints. Purview provides predictive analysis about where problems may arise and offers specific parameters that indicate where to begin diagnostics, rather than troubleshooting the entire network, saving valuable time and enhancing productivity.

With Extreme Networks Automated QoS and Analytics Solution for Skype for Business, organizations refreshing their communication infrastructures or leveraging Skype for Business as a UC overlay solution now have the tools to ensure deployment success, reduce complexity, provide clear visibility into network challenges, and fully leverage the organization’s investment.
Microsoft Skype for Business Call Distribution By Source and Destination Device

Purview Analytics for Applications, Bandwidth, Flows, Clients, and Services
Microsoft Skype for Business Call Quality By Device Type

### Call Quality by Source Device Type

<table>
<thead>
<tr>
<th>Device Type</th>
<th>Total</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Unknown</th>
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### Call Quality by Destination Device Type

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<tr>
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</table>
REQUIREMENTS

- Extreme Networks NetSight Advanced Management Application (includes OneFabric Connect API)
- Extreme Networks Purview Application Analytics Engine
- Extreme Networks OneController OpenFlow Controller (for SDN OpenFlow environments)

MICROSOFT COMPONENTS

- Microsoft SDN API installed on each LDL server
- Microsoft SDN Manager API installed on a separate Windows Server (2008 R2 SP1 or above)
- Both SDN API installations Version 2.0

Additional Microsoft Solutions from Extreme Networks

MICROSOFT HYPER-V AND EXTREME NETWORKS DATA CENTER SOLUTIONS

Extreme Networks Data Center Manager (DCM) provides IT administrators with a transparent, cross-functional service provisioning and orchestration tool for Microsoft Hyper-V environments that bridges servers, networking, and storage, and provides a single integrated view of virtual server and network environments.

By enabling the unification and automation of the physical and virtual network provisioning, Data Center Manager enables networks to benefit from the high availability required for mission critical application and data performance. DCM delivers numerous benefits to IT, including the ability to:

- Automate physical and virtual switching environments to streamline data center network provisioning
- Create consistent configurations throughout the network fabric for predictable behaviors and simplified troubleshooting
- Increase coordination and improve workflow between network, server, and storage teams within IT
- Gain granular visibility into traffic flows and real-time and historical data to simplify incorporation of VMs into the network, improve visibility and control, and enable simplified auditing of the network via policy-based management
- Unify management through an easily extensible architecture that supports a variety of hypervisor technologies and vSwitches, including VMware, Citrix, and Microsoft supported platforms

MICROSOFT SCCM AND EXTREME NETWORKS ONEFABRIC CONNECT

Integration with Microsoft SCCM and Extreme Networks OneFabric Connect provides automatic detection of SCCM managed devices and assigns appropriate quality of service and security policies. System Center administrators can also access OneView Reporting to see detailed network information on all System Center managed devices, including Netbios name, user, operating system, service pack, hardware manufacturer and model, received from SCCM and automatically policies are assigned.

For more information, please visit www.extremenetworks.com or contact your Extreme Networks representative or channel partners.