The Extreme Networks Data Center Solution

Extreme Networks delivers open and standards-based, high-performance, software-defined network architecture and analytics for enterprise, cloud and big data/HPC data centers. With an established open technology partner ecosystem, we solve today’s data center challenges with out-of-the-box, proven and integrated solutions that are simple, fast and smart. Our best-in-breed solution is comprised of innovative hardware, software and software-defined network architectures that interoperate seamlessly with each other and existing data center implementations in order to solve key data center challenges faced by our customers.

The Extreme Data Center Solution directly addresses a number of key data center challenges with specific features outlined on the following page. However, the solution itself is comprised of three integrated components that make this possible.

The Software-Defined Data Center Architecture

Extreme Networks’ open standards based Software-defined Architecture (SDA) coupled with advanced virtualization features in its Extensible Operating System (EXOS), create a uniquely flexible and powerful basis for data centers of any size. By taking advantage of best-in-breed hardware and software tools, customers can build open, orchestrated data centers that not only fit any desired configuration, but also integrate seamlessly with existing standards-based networks and equipment. The resulting data centers get:

- High-performance, low latency and highly reliable hardware
- Open and standards-based SDN that will capitalize on high solution velocity
- Application analytics to understand and optimize highly virtualized data centers
- An established open ecosystem approach with proven and integrated solutions
- Data centers that are simple, fast and smart
Extreme Networks Software-Defined Networking Platform

The many data center components are all seamlessly integrated by an open and standards-based SDN platform that ensures interoperability and orchestration across the entire data center. Extreme Networks SDN platform is an evolutionary software-defined networking (SDN) platform to promote community led innovation. We believe customers should be able to migrate their existing (brownfield) networks to SDN without expensive forklift upgrades. Seamless SDN migration requires both an open, standards-based and comprehensive approach with strong community mindshare and partner ecosystem support. Extreme Networks’ SDN platform is based on a comprehensive, hardened OneController based upon OpenDaylight (ODL) that uniquely includes: network management, network access control, application analytics and wireless controller technology. Extreme Networks comprehensive approach preserves the integrity of the open API provided by ODL while extending data center orchestration, automation and provisioning to the entire network under a single pane of glass.

Extreme Networks’ Technology Solution Partner (TSP) Ecosystem

Extreme Networks Technology Solutions Partner (TSP) Ecosystem is a consortium of technology leaders committed to accelerating IT innovation through open, standards based, flexible and high performance network architectures. Leveraging the Extreme Networks SDN platform and software-defined architecture, the TSP Ecosystem focuses on integration, validation, and interoperability with technology leaders in the areas of mobility, security, SDN, IT operations, data center, cloud, analytics, and convergence.

In the data center, these partners provide validated and proven solutions that integrate seamlessly with Extreme Networks solutions to provide a vast range of easily-implemented applications. Combined with our legendary customer service, this means that almost any solution can be part of a customer’s data center without expensive or time-consuming additional development. Some TSP partners include: Microsoft, Palo Alto Networks, AirWatch by VMware, A10, NetOptics/IXIA and Sanbolic.

Extreme Networks Data Center Solutions and Benefits

The Extreme Data Center Solution was developed specifically to provide the benefits required by data centers today as well as in the future. Some of the specific solutions are outlined below along with the benefits they provide.
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<th>SOLUTION</th>
<th>BENEFITS</th>
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| ExtremeXOS, NetSight and Data Center Manager | • Single-pane-of-glass network management  
  • Visibility and automated policy management of virtualized environments  
  • Fast, efficient roll out of new applications, services and other network changes  
  • Support for all leading hypervisor management and orchestration platforms (VMware, Citrix, Microsoft and OpenStack)  
  • Traffic optimization and orchestration |
| Best-in-Breed Switching Platforms (Summit Series, S-Series, BlackDiamond Series) | • Resilient core solutions for class 1-4 data centers  
  • Choice of two architectures optimized for low-latency and time-sensitive applications or better traffic management and bursty applications  
  • High-density and diversity based connectivity options ranging from 100MbE to 100GbE (100MbE/1GbE/10GbE/40GbE/100GbE)  
  • Simplified and reduced-tier architectures for CAPEX and OPEX reductions  
  • Improved service availability in order to eliminate expensive downtime  
  • Advanced features and robust, standards-based protocol implementations  
  • Energy efficient product and network designs |
| Purview Application Analytics | • Application-level visibility for network analytics, business intelligence and troubleshooting  
  • Virtual and physical device analytics  
  • Flow-based deep packet inspection |
| Software-Defined Networking and Software-defined Architecture | • Open and standards-based integration with existing equipment, vendors and public/private/hybrid cloud services  
  • Simple, dynamic network and process automation  
  • Fast and efficient automation and orchestration between compute, storage, physical and virtual networking for reduced OPEX  
  • Intelligent topology scheduling to maximize application performance |
| Technology Solution Partner Ecosystem | • Proven, tested and validated partner solutions that interoperate seamlessly with existing networks and equipment  
  • Open and standards-based architectures for the broadest possible range of technology partners |

References

For more information please visit:


Technology Solution Partners - [http://www.extremenetworks.com/partners/tsp](http://www.extremenetworks.com/partners/tsp)