

Brocade Network Advisor

HIGHLIGHTS

- Simplifies network operations with an intuitive interface and customizable dashboards
- Provides unprecedented visibility through integration with Brocade fabric technologies
- Reduces costs by automating tasks across the network operations lifecycle
- Unifies management of Fibre Channel and IP storage network devices
- Integrates seamlessly with industry-leading management solutions from Microsoft, VMware, EMC, HP, and IBM, maximizing the value of IT investments

Simplified Network Operations for Dynamic Networks

Under pressure to reduce costs, free up resources, and accelerate the introduction of cloud services, many organizations are standardizing their operational processes and policies. Operations teams are seeking ways to get ahead of performance issues and ensure maximum availability. Focus on the network is critical to avoid unexpected downtime, reduce ongoing operational costs, and enable IT and business agility.

Brocade® Network Advisor simplifies daily network operations with customizable dashboards that enable administrators to identify network problems quickly and maintain network availability. It unifies management of the Brocade IP and SAN portfolio, and integrates with third-party solutions, reducing the number of tools needed for end-to-end network visibility and control. Brocade Network Advisor automates repetitive tasks, so that network teams can focus on proactively managing their network resources.

More Effective Network Operations

Brocade Network Advisor helps network teams efficiently manage the network operations lifecycle, including monitoring, diagnostics, change management, and troubleshooting. Brocade Network Advisor saves time and enables IT and business agility through:

- **Customizable, browser-accessible dashboards:** Proactively identify problem areas and prevent network

downtime with at-a-glance summaries of all discovered Brocade devices and third-party IP devices.

- **Performance reporting:** Gain visibility into real-time and historical performance data for advanced troubleshooting and performance management.
- **Point-in-time analysis:** Filter dashboards to observe and report on trends, and use the playback feature to quickly identify errors that might have caused a network event.
- **Network scope:** Use simple, customizable filters to focus all dashboard widgets on a specific segment of the network, such as a department or device type.
- **Virtual infrastructure:** See Virtual Machine (VM) connectivity in topologies and sFlow reports, and use event insights to enhance network troubleshooting through VMware integrations.

- **Role-Based Access Control (RBAC):** Define granular administrator roles and privileges to support the needs of different SAN and IP network teams.
- **Event management:** Receive SNMP traps, syslog event messages, and customizable event alerts for reporting, analysis, and remediation.
- **Advanced Call Home:** Automatically collect diagnostic information and send notifications for faster fault detection, isolation, and remote support operations.
- **Out of Range Violations widget:** Identify devices or ports with the most demanding traffic flows for proactive capacity planning.
- **VM-to-storage visibility:** Easily integrate insights from leading virtualization solutions for VM-to-LUN visibility and management.
- **Multivendor adapter management:** Monitor and report on Emulex and QLogic adapter properties for a more holistic view of the SAN.

Brocade Fabric Vision Technology

Brocade Network Advisor integrates with Brocade Fabric Vision™ technology to provide unprecedented visibility and insight across storage networks. Brocade Network Advisor supports the following Brocade Fabric Vision technology features:

Data Center Storage Networks

Brocade Network Advisor simplifies management of data center fabrics with its performance dashboards, easy-to-use interface, and automation features. Storage and server administrators can proactively manage their storage network environments to support non-stop networking, address issues before they impact operations, and minimize manual tasks. Key capabilities and features include:

- **Consolidated storage views:** See both Gen 5 Fibre Channel and IP storage devices from a single, pre-defined storage dashboard—or view networks separately via individual storage dashboards.
- **Configuration and Operational Monitoring Policy Automation Services Suite:** Guard against drift from preferred configuration settings with configuration and policy violation monitoring, highlighted in dashboards.
- **Multiprotocol support:** Automate manual operations with configuration wizards for Fibre Channel SANs, FICON® and cascaded FICON environments, Fibre Channel over IP (FCIP) tunnels, and Fibre Channel over Ethernet (FCoE) networks.
- **Monitoring and Alerting Policy Suite (MAPS):** Apply pre-built, customizable rules and policies to multiple ports, switches, or fabrics in a single click and instantly visualize health and performance statistics of the SAN infrastructure in the dashboard, topology, and event views. Click through wizards to adjust configurations to ensure availability is maintained; minimal expertise is required.
- **Fabric Performance Impact (FPI) Monitoring:** Set pre-defined thresholds in a single click from MAPS and take action on latency alerts highlighted in the dashboard or via e-mail. Use customizable topology views to visually pinpoint which devices and hosts are impacted by a bottlenecked port. Use the wizard and right-click menus to diagnose and troubleshoot before performance begins to degrade.
- **Brocade ClearLink Diagnostics:** Configure ports to diagnostic mode and view reports to validate optic and cable signal integrity before deployment.

- **Flow Vision:** Automatically configure application flows from the network topology view to accelerate and simplify troubleshooting and maximize performance.
- **Single-dialog bulk configuration:** Reduce time spent on repetitive tasks by deploying MAPS policies and rules across the fabric from a single dialog.

Enterprise Campus Networks

Brocade Network Advisor provides management for increasingly complex enterprise campus networks that support services such as video conferencing, real-time collaboration, and distance learning. Brocade Network Advisor helps network administrators deliver highly available wired and wireless networks by enabling:

- **Customizable health and performance dashboards:** Focus attention on the most critical health and performance indicators for the campus network.
- **Brocade HyperEdge® architecture:** Consolidate management of wired and wireless solutions, including Access Points (APs) and wireless controllers.
- **Discover and manage configurations:** Ensure consistency across dynamically updated groups of devices.
- **Policy monitoring:** Configure multiple check options, including end-to-end VLAN consistency.
- **Real-time alerts:** Receive instant notifications when users deviate from customizable configuration policies, ensuring compliance standards are maintained.
- **Report for audit and compliance:** Create and export reports for wired products and APs using pre-built templates that can be easily customized.

Metro and Carrier Ethernet Networks

Service providers must address the exponential growth in network traffic by helping to reduce operational costs, prevent bandwidth over-provisioning,

¹ The Brocade Network Advisor license is required only for the VMware vRealize Operations Analytics Pack. All other adapters are available to download at no cost from the [VMware Solutions Exchange](#).

and improve user service provisioning. Brocade Network Advisor helps service providers achieve these goals by providing:

- Discovery, monitoring, deployment, management, and configuration capabilities for metro and Carrier Ethernet networks
- Comprehensive MPLS service management with support for MPLS Virtual Private LAN Services (VPLS), Label Switched Path (LSP), Local VPLS, Virtual Leased Line (VLL), and Local VLL services
- The ability to detect, isolate, and report Ethernet faults with full support for the IEEE 802.1ag Connectivity Fault Management (CFM) set of standards

Advanced Management for VCS Fabrics

Brocade Network Advisor allows organizations to maximize their Brocade VCS® Fabric technology investments by enabling advanced management of Brocade VCS fabrics and Brocade VDX® switches. For more information on VCS Fabric technology, visit www.brocade.com/vcs.

Key VCS fabric technology features include:

- **Flexible management options:** Manage a VCS fabric as a single entity or logical chassis, or drill down to individual Brocade VDX switches.
- **VCS fabric visibility:** Gain end-to-end visibility from the data center edge to hosts and VMs, as well as across multiple VCS fabrics and at individual node levels.
- **VCS fabric diagnostics:** Visualize traffic paths, measure network latency, and perform fault isolation via hop-by-hop inspection to pinpoint bottlenecks.
- **sFlow-based monitoring:** Achieve VM-level monitoring and gain application performance insights through this integration.

- **Firmware management:** Receive non-disruptive firmware updates for the entire VCS fabric or for a subset of Brocade VDX switches within the fabric.
- **VCS Virtual Fabric management:** Create, edit, and delete virtual fabrics.
- **Automatic Migration of Port Profiles (AMPP) Management:** Create, read, inventory, delete, associate, and disassociate port profiles to VMs. Rapidly associate port profiles and VMware port groups managed by a single or multiple VMware vCenter servers. Perform integrity checks of the port profiles across Brocade VDX switch configurations, either in the same fabric or across different VCS fabrics.

Flexibility through Partner Integration

To ensure organizations maximize their existing investments, Brocade Network Advisor integrates with a wide range of network management solutions—including tools from VMware, Microsoft, HP, EMC, and IBM—to provide end-to-end network visibility. Organizations also have the flexibility to extract data directly from Brocade Network Advisor for integration with homegrown applications through Open Database Connectivity (ODBC), or SMI-S.

Integration options include:

- **Brocade Network Advisor REST APIs (SAN):** Enables third-party applications to leverage REST services to access Brocade Fabric Vision performance data, events, dashboard summaries, SAN zoning, and inventory. This enables further programmability and paves the way for cloud, virtual, and Software-Defined Networking (SDN).
- **Brocade integrations with VMware vRealize Operations Insight¹:** Delivers health, risk, and efficiency insights from Brocade fabric technologies to dashboards in VMware vRealize Operations, enabling faster root-cause analysis and better VM and application performance. The vRealize Log Insight integration helps virtualization and cloud teams further troubleshoot from within vRealize, by presenting Brocade SAN and IP device log data.

- **Brocade Management Pack for Microsoft System Center Operations Manager (SCOM):** Provides visibility into the network connectivity of Microsoft SCOM servers and proactively responds to bottlenecks through policy-based actions.

Supported Technologies and Platforms

Brocade Network Advisor supports the entire Brocade portfolio, unifying network management under a single tool. For a complete list of supported products, refer to the [Brocade Network Advisor Installation and Migration Guide](#).

Supported platforms and hardware include:

- Brocade DCX® Backbones
- Brocade CER 2000 Series
- Brocade FastIron® SX Series
- Brocade SAN switches
- Brocade FastIron WS Series
- Brocade VDX switches
- Brocade ICX® switches
- Brocade vRouters
- Brocade MLX® Series
- QLogic and Emulex adapters
- Brocade MLXe Core Routers
- Aruba mobility devices

Brocade Global Services

Brocade Global Services has the expertise to help organizations build scalable, efficient cloud infrastructures. Leveraging 15 years of expertise in storage, networking, and virtualization, Brocade Global Services delivers world-class professional services, technical support, and education services, enabling organizations to maximize their Brocade investments, accelerate new technology deployments, and optimize the performance of networking infrastructures.

Training and Education

Brocade Global Education Services offers Web-based training and instructor-led courses to share product information, tips, and best practices—and to provide hands-on experience with Brocade Network Advisor.

Affordable Acquisition Options

Brocade Capital Solutions helps organizations easily address their IT requirements by offering flexible network acquisition and support alternatives. Organizations can select from purchase, lease, Brocade Network Subscription, and Brocade Subscription Plus options to align network acquisition with their unique capital requirements and risk profiles.

To learn more, visit www.Brocade.com/CapitalSolutions.

Maximizing Investments

To help optimize technology investments, Brocade and its partners offer complete solutions that include professional services, technical support, and education. For more information, contact a Brocade sales partner or visit www.brocade.com.

System Requirements

Brocade Network Advisor software and documentation are available via download. For details on the recommended system specifications, refer to the [Brocade Network Advisor Installation and Migration Guide](#).

Supported Client and Server Operating Systems

- Windows Server 2008 R2 Standard, Data Center, and Enterprise Editions
- Windows Server 2012 and 2012 R2 Standard and Data Center Editions
- Windows 8 and 8.1 Enterprise
- Red Hat Enterprise Linux 6.4, 6.5, 6.6, and 6.7 Adv
- Oracle Enterprise Linux 6.4, 6.5, 7.0
- SUSE Linux Enterprise 11.3 and 12
- Guest VMs for the following operating systems: VMware ESXi (5.1/5.5), KVM RedHat Linux Enterprise 6.5, and Microsoft Hyper-V (Hyper-V Server 2008 R2, Windows Server 2012, and Windows Server 2012 R2 Data Center)

Server Requirements

For 64-bit Windows and Linux systems, Intel Core 2 Duo Dual-CPU, 2.4 GHz or equivalent, 8 to 16 GB RAM, 80 GB disk is required. 16 GB RAM is required for the SAN+IP bundle, and medium or large networks.

Browser Support

Windows versions of Firefox, Internet Explorer, and Chrome are supported.

Software Evaluation

A 120-day, full-featured evaluation version of Brocade Network Advisor is available for download from www.brocade.com/networkadvisor. Install the software in minutes and start managing your network more effectively today.

Ordering Information

Brocade Network Advisor comes in several packages, providing organizations with the flexibility to choose what best meets their network requirements. Package options include SAN-only, IP-only, SAN+IP, and SMI Agent-only. For additional details, refer to the [Brocade Network Advisor Software Licensing Guide](#).

| License | Description |
|--|--|
| SAN Professional (no license required) | Up to 300 SAN switch ports and 2 SAN fabrics |
| SAN Professional Plus | SAN management, supports up to 2,560 switch ports and 36 fabrics |
| SAN Enterprise | SAN management, supports up to 15,000 switch ports and 100 fabrics |
| IP Base ² | IP management, supports multiple VCS fabrics, up to 50 IP devices |
| SAN Professional Plus with IP | SAN+IP management, supports up to 2,560 SAN switch ports, 36 SAN fabrics, and 150 IP devices |
| SAN Enterprise with IP | SAN+IP management, supports up to 15,000 SAN switch ports, 100 SAN fabrics, and 550 IP devices |

² Additional licenses can be purchased for MPLS management and increased IP device support.

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