BROCADE
A Broadcom Company

Solution Brief

Brocade® Support Link

Brocade Support Link Identifies Issues Before They Become Problems

Broadcom understands that every network is unique and requires a different level of technical support to meet the customer's business requirements. Brocade® Support offers different levels of assistance to meet each customer's specific needs. To help all customers maximize the value of their networks, ranging from a small or midrange environment to the largest and most complex data center, Brocade has introduced a new suite of support capabilities called Brocade Support Link (BSL).

BSL automates many support and troubleshooting activities for customer environments and provides additional insight through reports and analysis. BSL users can take advantage of these reports to show their management the health of their environment and how potential problems have been avoided without the need for additional resources or expense.

What Is Brocade Support Link?

Brocade Support Link leverages over 25 years of Brocade SAN knowledge to provide automated analysis of SAN fabric configuration, performance metrics, and fabric behaviors. Additionally, BSL enables real-time monitoring of Brocade switches for events, 24 hours a day, 7 days a week. The technology that enables BSL is built directly into Brocade Fabric OS® (FOS) software and is available to all Brocade Direct Support and Supplemental Support customers.

BSL's Active Support Connectivity (ASC) technology is embedded within FOS and enables automatic, remote SAN assessment and support functions to evaluate customer environments against Brocade's established best practices. Once enabled, ASC automatically gathers and sends the encrypted Brocade device configuration, event information, and health and performance metrics to the Brocade Support Link Server (SLS) on a regular basis, providing an "always on" connection for proactive data collection and monitoring.

The ASC Gateway (ASC-G), an optional software utility with secure proxy functionality, also provides encrypted data transfer from ASC-enabled switches to the Support Link Server. A single instance of ASC-G can support 200 Brocade devices and facilitates centralized control and automated configuration of ASC activities in a multiswitch environment.

Brocade Support Link Offering

Best Practice Assessment (BPA) Report: A proactive, comprehensive evaluation and analysis, the BPA report provides validation of SAN design and configuration, health monitoring, firmware levels, device compatibility, and identification of known issues. The BPA report includes the following features:

- Summary health status scorecard: An easily sharable format for senior management.
- Actionable recommendations: Based on best practices, with explanations and specific configuration changes to make in the SAN to comply with recommendations. Reduces the need to refer to administration guides or manuals.
- Cross-links to detailed switch configuration and performance data contained in the CPI report.

BPA reports include evaluation of over 150 different performance indicators and can be obtained by customers at any time from the Customer Support Portal (CSP).

Configuration, Performance, Inventory (CPI) Report: The BPA report links to an accompanying CPI report to provide greater detail about items noted in the BPA report. The CPI report contains the following information:

- Inventory
- Fabric, switch, and port configuration
- Firmware levels
- Support contract status
- Port performance
- Attached device information
- Log entries
- Switch management details
- MAPS settings
- Zoning data
- Access Gateway settings

The CPI report documents the configuration of all switches along with attached device information where available, and it also includes detailed port performance metrics and information. In addition to being a daily management tool, the CPI report has been used by IT organizations as a useful on-boarding tool for new staff as it provides a clear and concise view of the configuration of all switches in one report.

Automated Case Creation (ACC): Brocade Support cases are automatically created (with immediate notification to both the customer and Brocade Support) based upon switch event data that is securely sent to Brocade Support in real time via the ASC-G.

A complex-rules engine evaluates the received events and creates a support case in Brocade's case management tool with a severity based upon the events received if warranted. Automated Case Creation shortens the time to resolution of an issue by proactively creating a support case with no customer intervention required.

Data Collection Assistant (DCA): The DCA enables the automated capture and secure transmission of switch SupportSaves to Brocade Support when used in conjunction with Automated Case Creation. When a case is automatically created, the complex-rules engine requests the SupportSaves via the ASC-G from the switches that are associated with the created case, with no customer intervention. Manual retrieval and transmission of SupportSaves by a customer, especially during off-hours, can be a time- consuming process that can significantly impact the time to resolve the issue.

Additionally, the DCA enables on-demand SupportSave management, which allows customers to retrieve SupportSaves from one or more switches at any time. The SupportSaves can then be easily associated with an existing support case and transmitted securely to Brocade Support at a later time.

Enabling Automated Case Creation and Data Collection Assistant together results in Brocade Support having the information needed to resolve switch and fabric issues with minimal or no customer involvement, often before the customer even knows there is a problem.

Fabric Analytics: Fabric Analytics provides proactive SAN fabric monitoring and analysis that focuses on network performance and reliability.

Fabric Analytics analyzes switch port performance data for congestion, buffer credit stalls, oversubscription, and physical-layer issues. Quite often, when a port experiences performance issues, the actual source of the problem stems from behaviors elsewhere in the fabric. Fabric Analytics not only provides detailed information about the port experiencing the issue but also determines the source of the problem and recommends a method of remediation.

Fabric Analytics provides the following reports:

- A Proactive Health Analysis report with key findings and a summary of any high-priority issues observed.
- An individual Root Cause Analysis report with recommendations for each observed high-priority issue.
- A SAN Data Inspection report that provides performance-related, usage-related, and health-related time series data in graph, table, and CSV format. The metrics reported are customizable to meet each customer's unique reporting needs and requirements.

Summary

Brocade Global Support has the expertise to help organizations build resilient, efficient SAN infrastructures. Leveraging 25+ years of expertise in storage networking, Global Support delivers world-class services like Brocade Support Link to maximize their hardware and software investments, accelerate new technology deployments, and optimize the overall performance of their network.

To learn more about Brocade Support Link (BSL), please visit www.broadcom.com or email us at BSL.Inquiries@broadcom.com.