

Fabric Watch is a robust fabric-monitoring tool for mission-critical Storage Area Network (SAN) fabrics.

BROCADE FABRIC WATCH

Highlights

Fabric Watch enables network managers to:

- Track numerous fabric and switch elements
- Receive automatic event notifications when switch and fabric elements exceed thresholds
- Quickly identify and isolate faults
- Optimize fabric-wide performance
- Easily integrate Fabric Watch with Enterprise Systems Management Solutions
- Rely on a single fabric monitoring solution rather than multiple, vendor-specific software solutions

The intelligent fabric monitor for SANs

Brocade® Fabric Watch™ is an optional Storage Area Network (SAN) monitor for Brocade SilkWorm® switches running Fabric OS™ 2.2 or higher. Fabric Watch enables each switch to constantly watch its SAN fabric for potential faults—and automatically alert network managers to problems long before they become costly failures.

Fabric Watch tracks a variety of SAN fabric elements, events, and counters. Monitoring fabric-wide events, ports, GBICs, and environmental parameters permits early fault detection and isolation as well as performance measurement. Unlike many systems monitors, Fabric Watch is easy to configure. Network administrators can select custom fabric elements and alert thresholds—or they can choose from a selection of preconfigured settings. In addition, it is easy to integrate Fabric Watch with enterprise systems management solutions.

By implementing Fabric Watch, storage and network managers can rapidly improve SAN availability and performance without installing new software or system administration tools.

CONSTANT MONITORING FOR LARGE, HETEROGENEOUS SAN FABRICS

For a growing number of companies, the SAN fabric is a mission-critical part of their systems architecture. These fabrics can include hundreds of elements, such as hosts, storage devices, switches, and Inter-Switch Links (ISLs). An instrumentation solution for SANs delivers optimal value by tracking a wide spectrum of fabric events. Fabric Watch monitors:

- Fabric resources, including fabric reconfigurations, zoning changes, and new logins
- Port state transitions, errors, and traffic for multiple port classes, including Generic Ports, E_Ports, F/FL Optical Ports, and E/FL Cooper ports
- Switch environmental functions, such as temperature, power supply, and fan status
- Operational values for GBICs, including supported models of FINISAR “Smart” GBICs

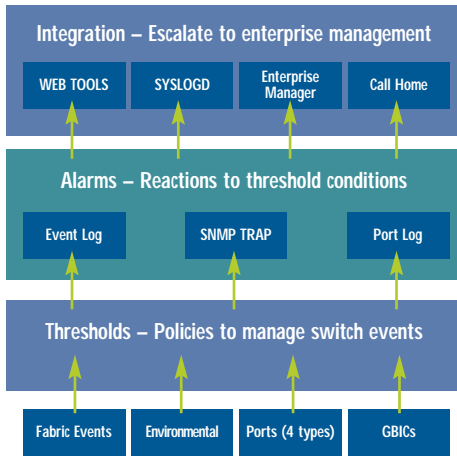


Figure 1. Fabric Watch alerts managers to potential faults before they become failures.

AUTOMATIC EVENT NOTIFICATION

Fabric Watch lets administrators define how often to measure each switch and fabric element and specify notification thresholds. Whenever fabric elements exceed these thresholds, Fabric Watch automatically provides an event notification. Fabric Watch supports two types of automatic notifications:

- **Continuous Alarm:** A continuous alarm provides a warning message whenever a threshold is breached, and it continues to send alerts until the condition is corrected. For example, if a switch exceeds its temperature threshold, Fabric Watch activates an alarm at every measurement interval until the temperature returns to an acceptable level.
- **Triggered Alarm:** A triggered alarm generates one warning when a threshold condition is reached and a second alarm when the threshold condition is cleared. Triggered alarms are frequently used for performance thresholds. For example, a

single notice might indicate that port utilization exceeds 80 percent. Another notice would appear when port utilization drops 80 percent.

FLEXIBLE EVENT DATA

Fabric Watch provides event notifications in several different formats to ensure event details are accessible to all platforms and operating systems. In response to an event, Fabric Watch can record event data as any (or all) of the following:

- **Simple Network Management Protocol Trap (SNMP):** Following an event, Fabric Watch can transmit critical event data as an SNMP trap. Support for SNMP makes Fabric Watch readily compatible with both network and enterprise management solutions.
- **Event Log Entry:** Following an event, Fabric Watch can add an entry to an individual switch's internal Event Log, which stores up to 256 error messages.
- **Lock Port Log:** Following an event, Fabric Watch can add an entry to an individual switch's internal port log and freeze the log to ensure detail-level information is available.

SEAMLESS INTEGRATION WITH EXISTING MANAGEMENT TOOLS

Network administrators can easily integrate Fabric Watch with existing enterprise systems management tools. Fabric Watch is designed for seamless interoperability with:

- **SNMP-based Enterprise Managers:** The Fabric Watch Management Information Base (MIB) lets system administrators configure fabric elements, receive SNMP traps generated by fabric events, and obtain the status of fabric elements through SNMP-based Enterprise Managers.

- **Brocade WEB TOOLS:** By running Fabric Watch with Brocade WEB TOOLS, a Web-enabled SAN management solution, network administrators can configure Fabric Watch and query fabric events from the WEB TOOLS easy-to-use graphical interface.
- **SYSLOGD:** Through its integration with the UNIX operating system's standard interface for system logging and events, Fabric Watch can bring SAN events into the log that has historically recorded events related to older, direct-attach storage devices.

RAPID DEPLOYMENT AND CONFIGURATION

Fabric Watch is designed for rapid deployment. Simply enabling Fabric Watch permits immediate fabric monitoring. It is also designed for rapid custom configuration. Network administrators can easily create and modify configuration files using a text editor, and then distribute configurations to all the switches in the SAN through Fabric OS's configuration management utility. Fabric Watch also comes with preconfigured profiles for rapid, "out-of-the-box" implementations.

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Corporate Headquarters

1745 Technology Drive
San Jose, CA 95110
T: (408) 487-8000
F: (408) 487-8101
info@brocade.com

European Headquarters

29, route de l'Aéroport
Case Postale 105
1211 Geneva 15, Switzerland
T: +41 22 799 56 40
F: +41 22 799 56 41
europa-info@brocade.com

Asia Pacific Headquarters

The Imperial Tower 15th Fl.
1-1-1 Uchisaiwaicho,
Chiyoda-ku, Tokyo 100-0011
Japan
T: +81 3 5219 1510
F: +81 3 3507 5900
apac-info@brocade.com