IBM SANnav Management Portal and Global View

Highlights

- Accelerate deployment for new applications, switches, hosts, and storage
- Visualize and isolate points-of-interest with simple topology views
- Minimize manual tasks by automating data collection and reporting
- Capture SAN data and translate to health and performance dashboards
- Automate the configuration of out-of-compliance SAN switches
- Increase workflow efficiencies with an intuitive one-click navigation

Storage Modernization

IT organizations are facing an ever-increasing volume and velocity of data, yet users still expect data centers to deliver maximum performance, business intelligence, and operational efficiency. As organizations race to modernize the data center to support innovation and digital transformation, these demands are driving the storage network to evolve even faster to accommodate new applications. Administrators therefore need ways to easily visualize, manage, and analyze their SAN performance and overall operational health at scale. Many organizations, however, lack these capabilities due to the growing complexity of their IT environments and the lack of easy-to-use SAN management tools. More than two-thirds of senior IT decision makers surveyed by ESG said that their IT environment has become more complex in the last two years. (ESG Master Survey Results, 2018 IT Spending Intentions Survey, December 2017)

IBM SANnav Management Portal and SANnav Global View empower IT administrators to be more efficient and productive by providing comprehensive visibility into the SAN environment. These tools transform information about SAN behavior and performance into actionable insights, allowing administrators to quickly identify, isolate, and correct problems before they impact the business. In addition, SANnav Management Portal and SANnav Global View accelerate administrative tasks by simplifying workflows and automating redundant steps, making it easier for organizations to realize their goal of an autonomous SAN.

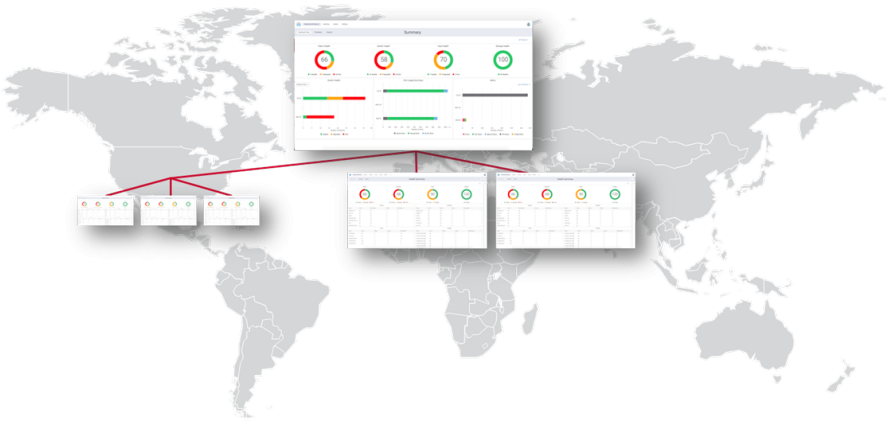

Figure 1: Example of both IBM SANnav Management Portal and SANnav Global View

Visualize the SAN

Most organizations are overwhelmed by the enormous volume of storage data they must process daily. Even well-managed IT organizations struggle to both keep up with the demand for storage and manually correlate millions of data points to extract useful information for the business. To increase efficiency, enterprises need tools that collect, aggregate, distribute, and serve up data in ways that can be easily consumed and uniquely optimized for different users.

SANnav Management Portal

IBM SANnav Management Portal is a next-generation SAN management application, architected from the ground up with a simple browser-based user interface (UI) and with a focus on streamlining common workflows, such as configuration, zoning, deployment, troubleshooting, and reporting. It also increases operational efficiencies with a modernized graphical user interface (GUI) that enables enhanced monitoring capabilities, faster troubleshooting, and advanced analytics. Key features and capabilities include:

- Configuration management: Implements policy-based configuration that allows users to apply consistent switch and monitoring configurations across their environments, view switches that have experienced configuration drifts via a dashboard widget, and examine what exactly has changed in the environment. This ensures operational stability and maximum uptime. In addition, SANnav Management Portal dramatically simplifies zoning configuration by implementing a highly simplified and intuitive workflow.

- Dashboards: Provides at-a-glance views and summary health scores for fabrics, switches, hosts, and targets that may be contributing to performance issues within the network. Administrators can instantly drill down into any hot spots for investigation and take corrective action. The summary health score represents the overall health of the network from various perspectives, providing an overall score from 1 to 100. A score above 90 is healthy, 71 to 90 is degraded, and below 70 is poor.

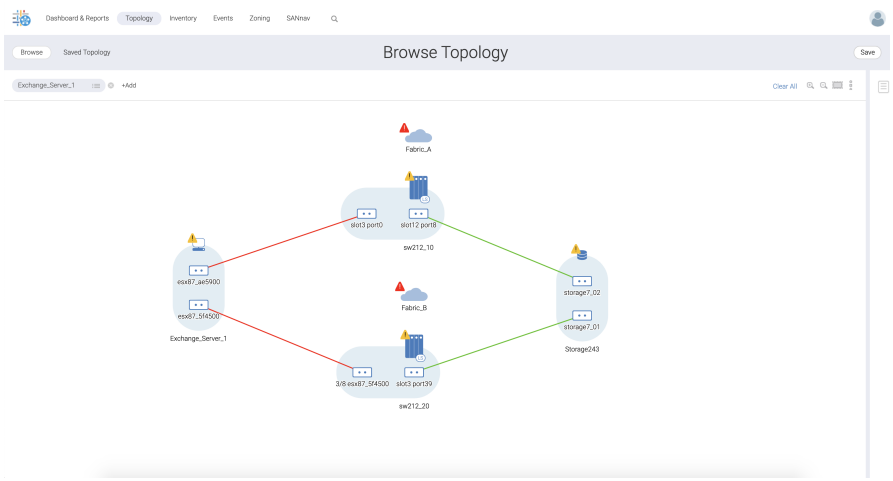

Figure 2: Topology View from IBM SANnav Management Portal

- Contextual-based topology views: Allows users to quickly locate an object of interest without having to sift through irrelevant information. Visualizing relevant contextual information about a specific device, such as a particular switch, enables users to see all directly connected entities in the data path for that switch, as well as all end-point physical devices directly connected to that switch (see Figure 2). This ability to navigate and investigate points of interest dramatically simplifies the process of detecting, isolating, and troubleshooting problems.
- Context search: Enables users to search by various contexts, such as switches, switch ports, hosts, host ports, virtual machines (VMs), storage, and storage ports. While doing a context-based search, users can type any word to search for within that context. A drop-down display under the search box will then show the search results.
- Filter management: Provides users with the ability to sort through large amounts of data by selecting only attributes of importance. For example, users can search for all 32 Gb/s ports that are offline. This filter reduces the displayed content to only the points of interest, allowing faster identification and troubleshooting.
- Investigation mode: Provides intuitive views that users can instantly drill down into for key details to help them understand complex behaviors. SANnav Management

Portal periodically collects metrics and stores them in a historical time-series database for further analysis. In addition, it can collect metrics more frequently (at 10-second intervals) for selected ports.

- Reporting: Generates customized reports that provide graphical summaries of performance and health information, including all data captured using IBM b-type Fabric Vision technology. Reports can be configured and scheduled directly from SANnav Management Portal to show only the most relevant data, enabling administrators to more efficiently prioritize their actions and optimize network performance.

SANnav Global View

Whether an organization has data center locations across the globe or a single multi-tenant data center, it is important for administrators to be able to understand the health of the entire SAN. With IBM SANnav Global View, administrators can quickly visualize the health, performance, and inventory of multiple SANnav Management Portal instances using a simple, intelligent dashboard. In addition, they can easily navigate from a global view down to local environments to investigate points of interest. Important events across all local environments are propagated at a global level for instant visibility in the alerts box. Using the powerful search capabilities within SANnav Global View, administrators can then seamlessly navigate across instances and drill down into any individual SANnav Management Portal instance for additional details (see Figure 3).

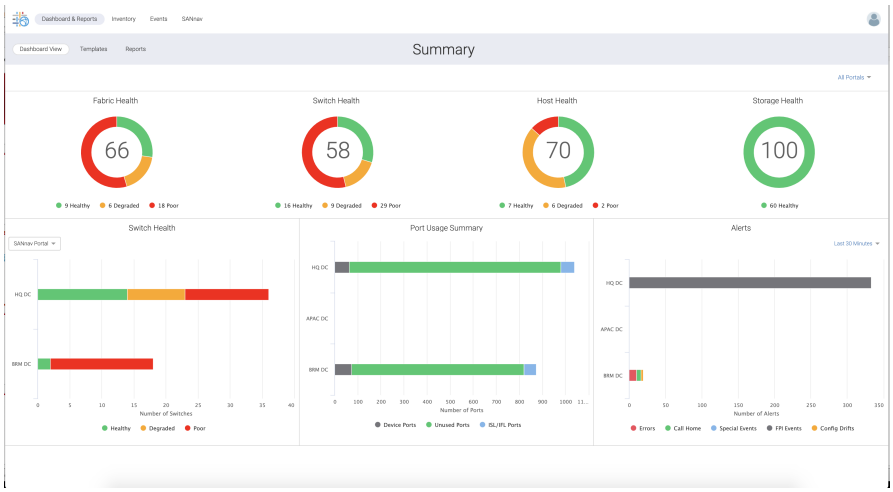

Figure 3: Dashboard Display of IBM SANnav Global View

Optimize the SAN

IBM Storage Networking hardware includes integrated network sensors that non-disruptively gather millions of real-time metrics that SANnav Management Portal uses to identify, monitor, and analyze the overall health and performance of the SAN. This data is then contextualized into dashboards that can be used to quickly detect and isolate problems. At a glance, administrators have actionable intelligence on the overall health of their fabric, switches, servers, and storage, which they can view in the form of summary health score circles (see Figure 3). The summary health score circles help administrators quickly identify areas that require further investigation. Administrators can drill down from each dashboard into investigation mode to further examine any relevant data for performance optimization or troubleshooting.

IBM SANnav Management Portal and SANnav Global View not only transform SAN telemetry data into useful insights, such as health and performance scores, but also enable administrators to quickly associate real-time data with historical metrics and logs for in-depth analysis. This can help with spotting trends, establishing baselines, and identifying any behavioral changes over time.

Realize the Autonomous SAN

Today's IT organizations are evolving, gradually shifting their focus away from infrastructure management and toward delivering value-added applications and services. An autonomous SAN self-discovers, self-heals, and simplifies operational processes and management tasks. It leverages machine learning and advanced analytics with automation to predict behavioral changes with historical trends and real-time monitoring. In the future, administrators will be able to leverage machine learning to create application profiles based on application behavior. They will then be able to apply automation software to run multiple variants of responses to a given situation, allowing them to see the potential impact before committing to an application or infrastructure change.

Administrators can use IBM SANnav Management Portal to build the foundation for an autonomous SAN. This innovative tool streamlines workflows to accelerate the deployment of new applications, switches, hosts, and storage arrays. It also automates key processes, such as deploying new resources, allowing administrators to reduce repetitive tasks and focus on being more strategic. SANnav Management Portal further simplifies operations through its self-discovery and self-healing capabilities, which it uses to identify and reconfigure out-of-compliance fabrics and switches, keeping the infrastructure up and running. For ongoing management processes, such as reporting, SANnav Management Portal automates the collection of data and generates customizable reports for different stakeholders.

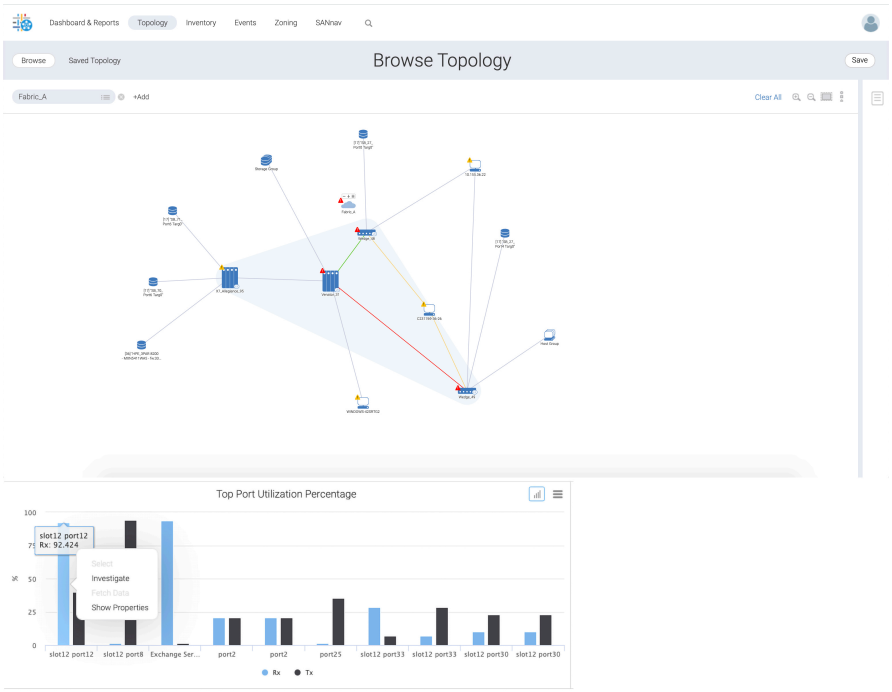

Figure 4 - Intuitive One-Click, Drill-Down Interface for Increased Workflow Efficiencies

System Requirements

IBM SANnav Management Portal software and documentation are available via download. To access the server requirements, refer to this guide.

Browser Support

Chrome and Windows versions of Firefox and Edge are supported.

IBM SANnav Global and Management Portal Models (MTM)

Product Name	Description	1-Year Subscription	3-Year Subscription	5-Year Subscription
IBM SANnav Management Portal (Base)	Up to 600 SAN ports. No Director support.	9239-B01	9240-B03	9241-B05
IBM SANnav Management Portal (Enterprise)	Up to 15,000 SAN Ports. Full Director Support.	9239-E01	9240-E03	9241-E05
IBM SANnav Global View	Up to 20 SANnav Portal instances	9239-G01	9240-G03	9241-G05

Why IBM?

Innovative technology, open standards, excellent performance, and a broad portfolio of proven storage software, hardware and solutions offerings—all backed by IBM with its recognized industry leadership—are just a few of the reasons to consider storage solutions from IBM. In addition, IBM delivers some of the best storage products, technologies, services and solutions in the industry without the complexity of dealing with different hardware and software vendors.

For more information

To learn more about IBM Storage Networking b-type family, please contact your IBM representative or IBM Business Partner or visit: https://www.ibm.com/it-infrastructure/storage/san/b-type

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