Have feedback on QuickSpecs? We're listening

HPE SANnav Management Software QuickSpecs

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.

HPE SANnav Management Software empowers IT administrators to be more efficient and productive by providing comprehensive visibility into the SAN environment. They accelerate administrative tasks by simplifying workflows and automating redundant steps, making it easier for organizations to realize their goal of an autonomous SAN.

Overview

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. This is a daunting task owing to the growing complexity of their IT environments and the lack of easy-to-use SAN management tools.

HPE SANnav Management Software empowers IT administrators to be more efficient and productive by providing comprehensive visibility into the SAN environment. They accelerate administrative tasks by simplifying workflows and automating redundant steps, making it easier for organizations to realize their goal of an autonomous SAN. It implements a highly scalable client-server architecture for SAN management with a modern browser-based UI eliminating the need for a Java-based thick client. SANnav uses a micro-services based architecture based on Docker container technology that allows it to scale to meet the management needs of both small and large SAN environments.

HPE SANnav Management Software is the next-generation SAN management application suite for HPE B-series SAN environments. It consists of SANnav Management Portal Software and SANnav Global View Software:

- SANnav Management Portal is a next-generation SAN management application with a simple browser-based user interface (UI) streamlining common workflows, such as configuration, zoning, deployment, troubleshooting, and reporting
- SANnav Global View helps administrators visualize the health, performance and inventory of multiple SANnav Management Portal instances at data centers across the globe or a single multi-tenant data center using a simple, intelligent dashboard

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.

HPE SANnav Management Software is available as a term-license for 1-year, 3-year and 5-year periods as well as a one year renewal licenses. It supports 8Gb, 16Gb, 32Gb and 64Gb FC Switches and Directors.

Notes: Both the SANnav Management Portal Base Edition and the SANnav Management Portal Enterprise Edition fully support managing FICON environments.

Highlights

- Streamline workflows to accelerate the deployment of new applications, switches, hosts and targets
- Transform information into actionable insights to quickly identify and isolate problems
- Minimize manual tasks by automating data collection and reporting
- Capture SAN telemetry data and translate it into visual health and performance dashboards
- Easily navigate the entire SAN from a global view down to local environments
- Automate the identification and re-configuration of out-of-compliance fabrics and switches
- Increase workflow efficiencies with an intuitive one-click navigation

Models

SANnav Software Licenses

License type	Description	SKU
Electronic	HPE SANnav Management Portal Base 1yr E-LTU	R3P45AAE
Electronic	HPE SANnav Management Portal Enterprise 1yr E-LTU	R3P46AAE
Electronic	HPE SANnav Global View 1yr E-LTU	R3P47AAE
Electronic	HPE SANnav Management Portal Base 3yr E-LTU	R3P48AAE
Electronic	HPE SANnav Management Portal Enterprise 3yr E-LTU	R3P49AAE
Electronic	HPE SANnav Global View 3yr E-LTU	R3P50AAE
Electronic	HPE SANnav Management Portal Base 5yr E-LTU	R4P29AAE
Electronic	HPE SANnav Management Portal Enterprise 5yr E-LTU	R4P30AAE
Electronic	HPE SANnav Global View 5yr E-LTU	R4P31AAE

Notes:

- The Base edition of HPE SANnav Management Portal does not support management of director class switches.
- HPE SANnav Management Software License-to-Use (LTU/E-LTU) includes maintenance and support for the duration of the license. At the end of the license period, customers have the option to renew the license, maintaining the same license key, by selecting from the SANnav Renewal Software License section below. Software renewal via HPE Services is not allowed/supported.
- Trial Licenses: depending on the version of SANnav license, the trial period is different.
  - 90-day trial license available with all SANnav releases through v2.2.0
  - 30-day trial license available with SANnav v2.2.1 and v2.2.2
  - No trial license available with SANnav v2.3.0

SANnav Renewal Software Licenses

Notes: For users who currently have a SANnav license and want to renew their software license, one of the following licenses should be selected. The SANnav license must align with the current type of software license i.e. in order to renew a Base license, the Base renewal licenses will need to be selected.

Description	SKU
HPE SANnav Management Portal Base 1-year Renewal E-LTU	S1S52AAE
HPE SANnav Management Portal Enterprise 1-year Renewal E-LTU	S1S55AAE
HPE SANnav Global View 1-year Renewal E-LTU	S1S58AAE

Notes:

- The Base edition of HPE SANnav Management Portal does not support management of director class switches.
- HPE SANnav Management Software License-to-Use (LTU/E-LTU) includes maintenance and support for the duration of the license.

Overview

- Trial Licenses - depending on the version of SANnav license, the trial period is different.
  - 90-day trial license available with all SANnav releases through v2.2.0
  - 30-day trial license available with SANnav v2.2.1 and v2.2.2
  - No trial license available with SANnav v2.3.0 or later

What's New

- SANnav one year renewal licenses are now available for customers who have already purchased a SANnav license and would like to extend the license for a period of one year
- HPE SANnav Management software is available in multiple offerings:
  - SANnav Management Portal Base edition supports maximum up to 600 ports
  - SANnav Management Portal Enterprise edition supports maximum up to 15,000 ports
  - SANnav Global View supports up to 20 SANnav Management Portal licenses

Standard Features

SANnav Management Portal

SANnav Management Portal allows management of one or more SAN fabrics that are in the same or different geographical locations and support up to a maximum of 15,000 physical SAN ports. For environments larger than 15,000 ports, multiple SANnav Management Portal instances can be deployed.

It monitors and manages fabrics, switches, switch ports and other SAN elements. Dashboards provide summary status and performance information with optional drill downs for detailed views. A highly flexible reporting infrastructure enables generation of custom graphical or tabular reports.

Monitoring

Discovery

SANnav Management Portal starts the discovery process by contacting the backbone and edge devices in the SAN before starting to monitor and manage a fabric. Post discovery, monitoring is automatically enabled on the fabric and on all switches in the fabric. When monitoring is enabled, the following occurs:

- Data collection happens periodically at an interval depending on the size of the SAN
- SANnav interface displays are updated with the latest fabric and switch information
- SANnav registers itself as an Simple Network Management Protocol (SNMP) trap recipient and Syslog message recipient

Notes: All switches in the fabric must be running FOS 8.2.0 or higher

Dashboards, Reports and Topology visualization

SANnav dashboards provide a functional, seamless and customizable view of the SAN environments for effective and efficient monitoring and troubleshooting. Some of the key capabilities of dashboards include the following:

- Live monitoring of network health and performance
- Ability to build custom content for static and dynamic views
- Out-of-the-box widgets to monitor switch and port status and error and performance statistics
- Ability to customize content using network scope and date range

SANnav provides "out-of-the-box" Health Summary and Network Port Traffic Conditions dashboards. SANnav Management Portal implements a highly flexible reporting infrastructure to enable generation of custom static reports of SAN environment. Reports are generated in PDF, HTML, and CSV formats and are downloaded as a .zip file during Export.

Performance monitoring

SANnav Management Portal provides real-time and historical data of performance and error information for Fiber Channel ports, Ethernet ports, GbE ports, and extension tunnels and circuits. It collects data for a specific set of fabrics from the managed devices in the SAN and generates historical performance data for selected ports. It also provides real-time performance monitoring to investigate port issues and caches the time-series data temporarily for faster access. Data collection for performance metrics for ports (like traffic and errors) and for switches (like CPU utilization and memory utilization) is enabled via SNMP v3.

Standard Features

Inventory management

SANnav Management Portal Inventory page is a central location where the inventory of all discovered fabrics, switches, switch ports, hosts, host ports, storage, storage ports, extension tunnels and trunks can be viewed and managed. Additional detailed investigations, configuration operations and other tasks can be done for the managed object too.

Configuration

Policy-based configuration

SAN Management Portal makes sure that all the switches in the SAN are conforming to a defined configuration. It can periodically check that the switches are conforming to the policy, identify switches that are not conforming, display the configuration drifts, and allow synchronization of the switches to the policy.

- Provisioning switches - It makes provisioning new switches easier by importing configuration settings from one switch and saving the configuration to multiple switches.
- Configuration drifts - It monitors switch configuration that are different from what is defined in the configuration policy. This can further be resolved by either replacing the configuration on the switch or updating the configuration policy.
- Configurations are defined using JavaScript Object Notation (JSON) schema format.

Event Management

SANnav Management Portal can configure traps; register to receive SNMP traps, syslog events, and other information from switches. It can view, search and filter event logs and forward SNMP traps and syslog messages to selected destinations.

Following are some of the actions that can be configured for events:

- Generating email alerts
- Triggering SupportSave
- Enabling maintenance mode to suppress switch events in the event log

A powerful event analysis can be performed by filtering events using network scope, date range, and custom filters. Searching can be performed within the event log and generate event reports.

Zoning

Through Zoning, the administrator can partition the network into logical groups of devices. This partition allows the devices to inter-connect and prevent access from the other devices outside the group, thereby providing increased network security and stability. This also relieves the network from Registered State Change Notification (RSCN) storms created due to multiple devices interactions.

Using the Zone Management option in the SANnav Management Portal the following tasks can be performed:

- Create zone aliases
- Create standard zones, peer zones, logical SAN (LSAN) zones, and LSAN peer zones

Standard Features

- Create zone configurations
- Create offline zones
- Configure zones from the Inventory page

In addition, SANnav Management Portal implements a highly simplified workflow called “Simplified Zoning” to create peer zones. Simplified zoning workflow allows to easily create and activate peer zones in SANs. Zone creation can be initiated from the inventory view of hosts, host ports, or storage ports. Created peer zones are automatically activated in the fabrics based on the devices selected.

For example, if one chooses a host that has ports in A and B fabrics and select target ports from A and B fabrics, LSAN peer zones are created and activated in both A and B fabrics.

Monitoring and Alerting policy Suite

The SANnav Monitoring and Alerting Policy Suite (MAPS) feature enables configuring and monitoring policies on the discovered switches in a fabric. The Monitoring and Alerting Policy Suite (MAPS) is an optional storage area network (SAN) health monitor that can enable each switch to constantly monitor its SAN fabric for potential faults and automatically provide alert (email messages, SNMP traps, log entries) for problems long before they become costly failures. MAPS provides customizable monitoring thresholds. MAPS can be configured to provide notifications before problems arise, such as reporting when network traffic through a port is approaching the bandwidth limit. This information enables to perform preemptive network maintenance, such as trunking or zoning, and avoid potential network failures.

Fibre Channel Routing

Fibre Channel Routing (FCR) connects two or more fabrics without merging the fabrics. The FC router connects two or more fabrics through EX_ or VEX_Ports. SANnav Management Portal enables viewing all discovered backbone fabrics and connected edge fabrics, creating new backbone fabrics, and configuring Ex_Ports.

Notes: In SANnav Management Portal, an Integrated Routing License on the switch is required for configuring EX_Ports.

SANnav Global View

SANnav Global View provides a comprehensive view of a SAN environment that spans multiple SANnav Management Portal instances. It enables you to navigate seamlessly across multiple SANnav Management Portal instances and drill down to any individual SANnav Management Portal instance to perform detailed monitoring, investigation and troubleshooting.

Notes: SANnav Global View is a separate product from SANnav Management Portal, and requires separate installation and licensing.

Standard Features

Dashboards

With Brocade SANnav Global View, administrators can quickly visualize the health, performance, and inventory of multiple SANnav Management Portal instances using a simple, intelligent dashboard. The easy to read and customizable tabs provide Global View inventory information about fabrics, switches, switch ports, host & storage devices/ports, application events and configuration settings.
Data is retrieved from SANnav Management Portal instances on-demand (data is not stored in a Global View database), and the Global View dashboard is auto-refreshed every 15 minutes.

The Global View Summary dashboard provides the following widgets: Health summary, Switch Health, Alerts, and Port Usage Summary. These widgets indicate the status of the fabric, switch, host, and storage entities connected to SANnav Global View.

Fabric health Summary: The Fabric Health widget of SANnav Global View shows the number of fabrics in Healthy, Degraded, and Poor state. The least overall score across all objects in this group of fabrics is displayed.

Switch health Summary: The Switch Health widget displays details of switch health across selected Management Portal instances. A summarized view as well as details of switches based on firmware version, SANnav Management Portal instance, switch model and product category (Switch, Embedded Switch, Access Gateway, Directors, Extension) Category can also be obtained.

Port Usage Summary: The Port Usage Summary widget displays data for each SANnav Management Portal instance categorized by the number of device:

- Ports, unused ports, and ISL/IFL ports
- Device ports include F_, L_, and N_Ports
- Unused ports include G_ and U_Ports
- ISL/IFL ports include E_ and EX_Ports

This widget covers only the FC ports. FCIP and ETH ports are not covered as part of the widget.

Alert Summary: For each SANnav Management Portal instance, the Alert widget displays the count of alerts, those switch-generated and those triggered by special events and configuration drifts. The supported Alert categories are Errors, Call Home, Special and FPI Events.

Similar to SANnav Management Portal, SANnav Global View enables you to set up the authentication and authorization policies for Local Database, LDAP, RADIUS and TACACS+.

Inventory Management

SANnav Global View Inventory management enables collection of the following components (across one or more SANnav Global View instances) with respect to a specific context to view their detailed information:

- Switches / Switch Ports
- Hosts / Host Ports
- Storage / Storage Ports
- Fabrics

Standard Features

Software Pre-Requisites

Firmware versions defined in the HPE SANnav Management Portal and Global View User Guide, Release Notes and B-series Single Point of Connectivity Knowledge (SPOCK):

http://www.hpe.com/storage/spock

Hardware Pre-Requisites

HPE SANnav Management Software: B-Series 8 Gbps, 16 Gbps, 32 Gbps and 64Gbs Switches listed in the HPE SANnav Management Portal and Global View User Guide, and Release Notes.

For more information, please refer to: http://www.hpe.com/storage/spock

Server Pre-Requisites

HPE SANnav Management Software is supported on the following Operating Systems:

- Red Hat Enterprise Linux CentOS supported for version up through v2.2.x
- Rocky Linux, supported with version v2.3.x

Software Licensing

HPE SANnav Management Software is available as a term-license for 1-year, 3-years and 5-years duration.

The Base edition of SANnav Management Portal supports up to 600 switch ports from a single server.
The Enterprise edition of SANnav Management Portal supports up to 15000 ports from a single server. SANnav Global View supports up to 20 SANnav Management Portal instances.

Notes:

- The Base edition of HPE SANnav Management Portal does not support management of director class switches.
- HPE SANnav Management Software License-to-Use (LTU/E-LTU) includes maintenance and support for the duration of the license. At the end of the license period, customer needs to purchase a new license to continue using the software. Software renewal via HPE Services is not allowed/supported.
- A 90-day, full-featured trial license for SANnav Management Portal and SANnav Global View is available.

Fabric Vision

Fabric Vision technology provides a breakthrough hardware and software solution that helps simplify monitoring, availability, increase operational stability, and dramatically reduces costs.

Featuring innovative monitoring, management, and diagnostic capabilities, Fabric Vision technology
Enables administrators to avoid problems before they impact operations, helping their organizations meet SLAs. Fabric Vision Includes:

- Dashboards: Provides integrated dashboards that display an overall SAN health view, along with details on out-of-range conditions, to help administrators easily identify trends and quickly pinpoint issues occurring on a switch or in a fabric

Standard Features

- IO Insight: Proactively monitors IO performance and behavior through integrated network sensors, providing deep insight into problems and helping to ensure service levels. This capability non-disruptively and non-intrusively gathers IO statistics from any device port, then feeds them to a monitoring policy that sets thresholds and generates alerts
- VM Insight: This software applies IO Insight visibility for each Virtual Machine (VM). Integrated VM, application & device-level IO latency and IOPS monitoring enables administrators to set the baseline for application performance and identify the VM or physical layer responsible for the degraded performance
- Monitoring and Alerting Policy Suite (MAPS): Simplifies fabric-wide threshold configuration, monitoring, and alerting with pre-built, rule- or policy-based templates. Administrators can configure the entire fabric (or multiple fabrics) at one time using common rules and policies, or customize policies for specific ports or switch elements. In addition, administrators can use IO Insight metrics to set thresholds in MAPS policies in order to be notified of application, VM, and storage IO performance degradation
- Fabric Performance Impact (FPI) Monitoring: Leverages predefined MAPS policies to automatically detect and alert administrators to different latency severity levels, and to identify slow drain devices that could impact network performance. This feature identifies various latency severity levels, pinpointing exactly which devices are causing or are impacted by a bottlenecked port, and quarantines slow drain devices automatically to prevent buffer credit starvation
- Configuration and Operational Monitoring Policy Automation Services Suite (COMPASS): Simplifies deployment, safeguards consistency, and increases operational efficiencies of larger environments with automated switch and fabric configuration services. Administrators can configure a template or adopt an existing configuration to seamlessly deploy a configuration across the fabric
- ClearLink Diagnostics: Ensures optical and signal integrity for Fibre Channel optics and cables, simplifying deployment and support of high-performance fabrics. ClearLink Diagnostic Port (D_Port) is an advanced capability of Fibre Channel platforms
- Flow Vision: A comprehensive tool that enables administrators to identify, monitor, and analyze specific application data flows in order to simplify troubleshooting, maximize performance and avoid congestion without using taps to ensure optimized performance:
    - Flow Monitor: Provides comprehensive visibility, automatic learning, and non-disruptive monitoring of a flow's performance. Administrators can monitor all flows from a specific host to multiple targets or volumes, from multiple hosts to a specific target/volume, or across a specific ISL. Additionally, they can perform volume-level monitoring of specific frame types to identify resource contention or congestion that is impacting application performance. With the IO Insight capability, administrators can monitor first IO response time, IO completion time, the number of pending IOs, and IOPS metrics for a flow from a specific host to a target or volume running SCSI or NVMe over Fibre Channel traffic. With VM Insight, administrators can monitor network throughput and IO statistics for each VM
    - Flow Learning: Enables administrators to non-disruptively discover all flows that go to or come from a specific host port or a storage port, or traverse ISLs/IFLs or FCIP tunnels, to monitor fabric-wide application performance. In addition, administrators can discover top and bottom bandwidth-consuming devices and manage capacity planning
    - Flow Generator: Provides a built-in traffic generator for pretesting and validating the data center infrastructure for robustness—including route verification and integrity of optics, cables, ports, back-end connections, and ISLs—before deploying applications

Standard Features

- Flow Mirroring: Enables administrators to non-disruptively create copies of specific application and data flows or frame types that can be captured for in-depth analysis
- Credit Loss Recovery: Automatically detects and recovers buffer credit loss at the Virtual Channel (VC) level, providing protection against performance degradation and enhancing application availability

Extended Fabric

- Optional license which extends all of the scalability, reliability, and performance benefits of Fibre
- Channel Storage Area Networks (SANs) beyond the native 10 km distance specified by the Fibre
- Channel standard

ISL Trunking

For high performance enhanced Trunking, this optional license logically groups up to eight 32 Gbps SFP+ ports per ISL trunk or up to two 128 Gbps QSFP ports per ISL trunk to provide a high bandwidth trunk between two switches. Each 32Gb switch needs its own license. The switch operating system views the trunk as a single, high bandwidth resource (up to 256Gb) when routing connections between 32Gb switches. Connections are load-balanced across the individual links, which comprise the logical trunk group.

Adaptive Networking

Adaptive Networking (AN) is a family of technologies which allow flexible control of traffic movement within the fabric which deliver application aware management of fabric resources. Applications may be used with multiple protocols and multiple classes of service. It includes the following features:

- Ingress Rate Limiting
- Allows the ingress bandwidth of a port to be throttled to a rate lower than negotiated with the SAN node. This could be very useful for enterprises offering stepped levels of service and enforcing SLAs

Quality of Service (QoS)

Enables zones with high, medium, and low priorities within a fabric on a zone by zone basis. This can be very useful for prioritizing array replication over MANs and WANs over less critical traffic.

Traffic Isolation Zones

Defines paths through a fabric for some or all nodes. Failover allows a non-preferred path to be used if the preferred fails. TIZs use failover by default but it can be disabled if traffic should stop if a preferred path fails. TIZ can be used to manually map out traffic flows within a fabric based on application, priority, and topology.

HPE Smart SAN for 3PAR

HPE Smart SAN for 3PAR, which is included with HPE 3PAR All-inclusive software and is optionally available for 3PAR systems without All-inclusive software. Smart SAN for 3PAR simplifies and automates traditional error-prone and tedious SAN zoning and host provisioning to just a few clicks or complex zoning configurations in minutes orchestrated from 3PAR.

Standard Features

This allows a storage administrator to zone and provision the SAN with little or no FC expertise. It is an application embedded in SAN components (array, hosts and switches) that enables 3PAR arrays to orchestrate configuration, settings and policies across the SAN. Smart SAN is supported with HPE B-series Switches, Fibre Channel adapters (HBAs) and 3PAR storage. HPE Smart SAN for 3PAR through takes advantage of Fibre Channel Industry Association (FCIA) T11 standards Peer Zoning and uses Target Driven Peer. Zoning (TDPZ) feature in Smart SAN which enables customers to automate peer zoning, resulting in the creation of fewer zones and enables configuration of zones in minutes and not in hours. Through automation, it reduces the probability of errors and potential downtime.

Additional information can be found here:
https://www.hpe.com/us/en/product-catalog/storage/storage-software/pip.hpesmart-san-for-3par.8295863.html
http://www.hpe.com/storage/spock

Product Warranty

Hewlett Packard Enterprise warrants only that the Software media will be free of physical defects for a period of ninety (90) days from delivery.
Notes: EXCLUSIVE REMEDY. The entire liability of Hewlett Packard Enterprise and its suppliers and your exclusive remedy for Software that does not conform to this Limited Warranty shall be the remediation of the defective digital media. This warranty and remedy are subject to providing notification to the HPE SW Support team of the defective digital media during the warranty period.

Services Included with Product Purchase

HPE SANnav Management Software comes with 24x7 software support for the duration of the term-license purchased (1-year, 3-years or 5-years). The service provides access to HPE technical resources for assistance in resolving software operations issues, and, also provides access to software updates and reference manuals in electronic form.
Please note that HPE SANnav Management Software is customer self-installable.

HPE Services - Service and Support

Get the most from your HPE Products. Get the expertise you need at every step of your IT journey with HPE Services. We help you lower your risks and overall costs using automation and methodologies that have been tested and refined by HPE experts through thousands of deployments globally. HPE Services Advisory Services, focus on your business outcomes and goals, partnering with you to design your transformation and build a roadmap tuned to your unique challenges. Our Professional and Operational Services can be leveraged to speed up time-to-production, boost performance and accelerate your business. HPE Services specializes in flawless and on-time implementation, on-budget execution, and creative configurations that get the most out of software and hardware alike.

Consume IT on your terms

GreenLake brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, GreenLake accelerates digital transformation in a distributed, edge-to-cloud world.

- Get Faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

Managed services to run your IT operations

GreenLake Management Services provides services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.

Free up resources with Operational Services from HPE Services

HPE delivers services for IT by using proven best practices as well as automation and methodologies that have been tested and refined by HPE experts and artificial intelligence through thousands of deployments globally. Choose from the recommended services for customers purchasing from Hewlett Packard Enterprise or an authorized reseller. Services are quoted using Hewlett Packard Enterprise order configuration tools.

Recommended Services

HPE Tech Care Service.

HPE Tech Care Service is the new operational service experience for HPE products. Tech Care goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service has been reimagined from the ground up to support a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2 hour response time. Essential which provides a 15 minute response time 24x7 for most enterprise level customers, and Critical which includes a 6 hour repair commitment where available and outage management response for severity 1 incidents.

https://www.hpe.com/services/techcare

Service and Support

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

https://www.hpe.com/services/completecare

Related services from HPE Services

HPE Service Credits

Offers flexible services and technical skills to meet your IT demands as your business evolves. With a menu of services, you can access additional resources and specialist skills to help you maintain peak performance of your IT. HPE Service Credits help you proactively respond to your dynamic IT and business needs.

HPE Education Services

Provides comprehensive training designed to expand the skills of your IT staff and keep them up to speed with the latest technologies.

Consult your Hewlett Packard Enterprise Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

Parts and Materials

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product QuickSpecs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

Defective Media Retention

An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

AI Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a brand-new digital and data driven customer experience.

Sign into the customer engagement platform, featuring modern self-serve case creation and management capabilities with inline knowledge recommendations. You will find powerful troubleshooting support through a new intelligent virtual agent with seamless transition when needed to a live support agent.
https://support.hpe.com/hpesc/public/home/signin

HPE Support Center

The HPE Support Center is a personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with Hewlett Packard Enterprise experts, access support resources or collaborate with peers.

Learn more http://www.hpe.com/support/hpesc

Hewlett Packard Enterprise Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime.

HPE Insight Remote Support and HPE Support Center are available at no additional cost with a HPE warranty, HPE Support Service or HPE contractual support agreement.
Notes :*HPE Support Center Mobile App is subject to local availability

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For more information

- http://www.hpe.com/services
- https://www.hpe.com/us/en/services/operational.html

To learn more on HPE Storage Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE".
https://www.hpe.com/us/en/contact-hpe.html

HPE Support Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools
- Customers purchasing from a commercial reseller can find HPE Support Services at https://ssc.hpe.com/portal/site/ssc/

Configuration Information

Step 1 – Configuration

License type	Model Description	SKU
Electronic	HPE SANnav Management Portal Base 1yr E-LTU	R3P45AAE
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Electronic	HPE SANnav Global View 5yr E-LTU	R4P31AAE

Notes:

- The Base edition of HPE SANnav Management Portal does not support management of director class switches.
- While installing HPE SANnav Management software, there is an option to install a 90-day full-featured free trial version of the SANnav Management Portal and SANnav Global View version. The trial version includes full functionality but expires after the trial period.
- HPE SANnav Management Software License-to-Use (LTU/E-LTU) includes maintenance and support for the duration of the license. At the end of the license period, customer needs to purchase a new license to continue using the software. Software renewal via HPE Services is not allowed/supported.

SANnav Renewal Software Licenses

Notes: For users who currently have a SANnav license and want to renew their software license, one of the following licenses should be selected. The SANnav license must align with the current type of software license i.e. in order to renew a Base license, the Base renewal licenses will need to be selected.

Description	SKU
HPE SANnav Management Portal Base 1-year Renewal E-LTU	S1S52AAE
HPE SANnav Management Portal Enterprise 1-year Renewal E-LTU	S1S55AAE
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- The Base edition of HPE SANnav Management Portal does not support management of director class switches.
- HPE SANnav Management Software License-to-Use (LTU/E-LTU) includes maintenance and support for the duration of the license.
- Trial Licenses - depending on the version of SANnav license, the trial period is different.
  - 90-day trial license available with all SANnav releases through v2.2.0
  - 30-day trial license available with SANnav v2.2.1 and v2.2.2
  - No trial license available with SANnav v2.3.0 or later

Configuration Information

Step 2 - Additional B-Series Supported Software Options

HPE Power Pack+ Software

HPE Power Pack+ software provides the SAN administrator with the necessary tools to monitor.

Health and performance of the network, while also ensuring the highest levels of security, scalability and manageability.

Notes: HPE PowerPack+ Software includes the following- Fabric Vision, Extended Fabric, ISL Trunking.

Summary of Changes

Date	Version History	Action	Description of Change
21-Sep-2026	Version 8	Changed	QuickSpecs maintenance updates.
02-Feb-2026	Version 7	Changed	HPE Rebranding applied
10-Jul-2023	Version 6	Changed	Overview, Standard Features and Configuration Information sections were updated SANnav renewal license was added
04-Oct-2021	Version 5	Changed	Service and Support section was updated
02-Aug-2021	Version 4	Changed	Service and Support section was updated.
03-Aug-2020	Version 3	Changed	QuickSpecs layout was updated and Branding Refresh was applied.
03-Feb-2020	Version 2	Changed	Updated 5-year term E-LTU/LTU
03-Sep-2019	Version 1	New	New QuickSpecs

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