



SupportAssist for enterprise systems

Frequently Asked Questions

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General Information

1. What is SupportAssist?

SupportAssist is a proactive predictive and automated support technology to enable faster resolution and reporting. SupportAssist includes remote monitoring, automated collection of system state information, automatic case creation and proactive contact from Dell EMC technical support. This capability is available on most Dell EMC server, storage and networking devices covered under a [ProSupport™](#), [ProSupport Plus](#), [ProSupport Flex](#) or [ProSupport One](#).

2. What version of SupportAssist should I use?

SupportAssist for enterprise systems has 4 versions. This document will focus on SupportAssist Enterprise.

- **SupportAssist Enterprise** is for customers that want monitoring of up to 15,000 server, storage and networking devices. SupportAssist Enterprise can be used as a standalone application or with leading management consoles OpenManage Essentials, OpenManage Enterprise or Microsoft System Center Operations Manager (SCOM).

The other SupportAssist versions come embedded on the product and are used for monitoring a single device.

- **SupportAssist for iDRAC** is embedded on Dell EMC PowerEdge 14G servers, requires the iDRAC service module (iSM) and enablement.
- **SupportAssist for SAN Headquarters (SAN HQ)** is embedded on Dell EMC PS Series Storage, requires enablement from SAN HQ.
- **SupportAssist for Storage Manager with Storage Center Operating System (SCOS)** is embedded and Dell EMC SC Series Storage arrays, requires enablement from Storage Manager (See page 9 for more information).

3. How do I get SupportAssist Enterprise in my environment?

SupportAssist Enterprise can be downloaded from Dell.com/SupportAssist or by clicking on the links below. There is version for either a Windows or Linux management server. For additional technical information, review [release documents](#) and [how-to videos](#), or ask a question on the [SupportAssist Enterprise forum](#).

- [Windows management server \(monitors both Windows & Linux devices\)](#)
- [Linux management server \(monitors Linux devices\)](#)

4. What features of SupportAssist are available with Basic Hardware Support, ProSupport and ProSupport Plus?

	Basic Hardware Warranty	ProSupport	ProSupport Plus
Automated issue detection and system state information collection	●	●	●
Proactive, automated case creation and notification		●	●
Predictive issue detection for failure prevention			●
Recommendation reporting available on-demand in TechDirect			●

5. How does SupportAssist save me time during the troubleshooting process?

SupportAssist automatically detects issues, captures system state information and initiates alerts and contact from Dell EMC. You will eliminate time spent on collecting system state information, case creation and engaging with Dell EMC. If you choose to disable the automatic collections, you can still use Dell SupportAssist to run the collection on demand and to automatically send system state information to Dell EMC.

6. Which systems are supported?

When monitoring without a management console: Ninth-generation (9G) or newer Dell EMC™ PowerEdge™ servers, blade enclosures, modular infrastructure devices, and Dell EMC Networking devices. Storage devices including: PowerVault, PS Series and select SC Series are included in collections, but not monitoring of alerts or automated case creation. Unity, VMAX, Isilon, VxRail and other heritage-EMC warranted devices are not currently monitored by SupportAssist. These devices can use Secure Remote Services (formerly ESRS). Click [here](#) for more information.

When monitoring using the OpenManage Essentials or OpenManage Enterprise adapters: Ninth-generation (9G) or newer Dell EMC™ PowerEdge™ servers, PS Series Storage, PowerVault™ storage, Dell EMC Networking.

When monitoring using the Microsoft System Center Operations Manager adapter: Ninth-generation (9G) or newer Dell EMC™ PowerEdge™ servers supported.

For more information, refer to the Support Matrix at www.dell.com/SupportAssistEnterpriseManuals

7. What are the bandwidth requirements for the SupportAssist adapter for OpenManage Essentials, OpenManage Enterprise or Microsoft SCOM?

The bandwidth requirement (both local and external) is usually less than or equal to 1 GB. For networks with T1 or greater capacity, bandwidth usage should have a negligible impact on overall traffic. For additional information, refer to the [Support Matrix](#).

8. What if I am only monitoring one server?

For customers with PowerEdge 14th Generation (14G) servers, SupportAssist comes factory embedded on your server. To start automated proactive and predictive support, enable iDRAC Service Module (iSM) and register SupportAssist.

For customers with PowerEdge 9th – 14th Generation servers, SupportAssist Enterprise can be downloaded from Dell.com/SupportAssist. The simplified installation process brings up the SupportAssist application with very few clicks. After successful registration, the local system (the system on which SupportAssist was installed) is automatically discovered and all necessary dependencies (like OMSA and SNMP settings) are checked and automatically configured.

9. Do I have to register my SupportAssist with Dell EMC?

No. A customer may skip registration at time of installation and operate in unregistered mode. Unregistered mode offers the ability to use SupportAssist for:

- Point of need collections during troubleshooting with tech support
- Deployment site readiness and validation
- Collections from disconnected sites

However, registration is a prerequisite to experience the full benefits of SupportAssist Enterprise. Without registration, you can only use SupportAssist Enterprise to manually start the collection and upload of system information from your devices to Dell EMC. Until registration is completed, SupportAssist Enterprise can neither monitor your devices for hardware issues nor automatically collect system information.

10. Can I use SupportAssist when my system is not connected to the internet?

Yes. If the server where SupportAssist Enterprise is installed does not have internet connectivity, you can choose to manually upload collections to the [Dell EMC TechDirect upload portal](#). At a disconnected site the customer would download SupportAssist through a secure device with internet access and VPN to the disconnected site. This device could be a laptop, server, or any other connected device.

11. What does Dell EMC recommend for management station server with SupportAssist?

The [User Guide](#) contains a table stating minimum requirements for installing and using SupportAssist when monitoring up to 20, 100, 300, 1000, and 4000 PowerEdge servers. In addition, for customers monitoring a large number of devices in their environment, Dell EMC recommends that you install SupportAssist on a dedicated server. Periodic collections (required for ProSupport Plus reporting) from a large number of devices may result in a high processor or memory utilization on the monitoring server. The high resource utilization may affect other applications that are running on the monitoring server, if the resources are shared with other applications.

12. How does the SupportAssist Management Server scale to 15,000 devices?

The SupportAssist management server scales to 15,000 devices by adding one or more remote collectors. Each remote collector expands the number of devices supported by up to 4000 devices.

13. How can I use the credential management features of SupportAssist?

SupportAssist provides the flexibility to add multiple credential accounts and profiles. The credential accounts allow administrators to add authentication by product type (e.g iDRAC) and profiles allow multiple administrators that are segregated by function or region to manage their specific accounts.

14. What are the system requirements for monitored devices?

For monitoring a device through the agent-based method, the Dell EMC OpenManage Server Administrator (OMSA) agent must be installed and running on the device. The recommended version of OMSA varies based on the operating system running on the device. SupportAssist can monitor 12G, 13G, and 14G servers without OMSA agent when using iDRAC7, iDRAC8, and iDRAC9 respectively. For additional information, refer to the [Support Matrix](#).

15. Is OMSA recommended to be installed on the monitored servers if inband monitoring is the choice?

In most cases, yes. SupportAssist can monitor servers either in-band (via OMSA) or out-of-band (via iDRAC). However, customers can get more benefits by choosing the OMSA or iSM due to the following:

- Monitoring of servers via iDRAC is only supported on 12th, 13th and 14th generation servers. OMSA is the only available option for older systems (9-11G), but is supported through 14G. Thus for 13th and 14th generation servers customers have the option to use iSM or OMSA.
- SupportAssist Enterprise discovery requires Enterprise or Express license on iDRAC7 and iDRAC8.
 - A Basic iDRAC license is not sufficient, as there is not substantial data available for discovery in the diagnostic collection needed for Dell EMC Enterprise Technical Support trouble-shooting. For iDRAC9 onwards, this will not be a pre-requisite. A Basic license will work.
- The alert generation capabilities of iDRAC are not in parity with that of OMSA. Though in 13th generation and later servers, most OMSA features have been incorporated.
 - Alerts from chipset and software RAID are still only available via OMSA or iSM.
- The alert generation capabilities of iDRAC are in parity with that of OMSA on 14th generation servers.

For ProSupport Plus customers, only reports generated via OMSA can fetch the recommendations around software and operating systems component and versions.

16. Is the diagnostic collection visible in the user interface?

Yes, SupportAssist Enterprise has a feature for users to view diagnostic collection in the interface. This allows for a common view of diagnostic information for a more collaborative experience with Dell EMC tech support.

17. What is the benefit of the maintenance mode feature?

Traditionally, whenever there was an “event storm” (hardware alerts in quick succession breaching a pre-defined count limit), SupportAssist would stop processing alerts and case creation and place all devices under Maintenance mode for a specified time. With this approach, SupportAssist could potentially miss out on some genuine alerts during the maintenance window. By contrast enhanced functionality has been added to SupportAssist for servers, this software only stops processing alerts for those specific devices which caused the event storm. All other devices will still be monitored by SupportAssist for valid alerts that may create support cases.

Additionally, now the user also has an option to manually enable maintenance on one or more devices from within the Application. This option is used to cater for planned maintenance activities and users do not want SupportAssist to monitor those devices. Once the planned maintenance

activities are done, users can manually disable maintenance mode to signal SupportAssist to resume its monitoring.

18. Which hardware faults does SupportAssist monitor?

SupportAssist has a smart hardware fault monitoring algorithm with thresholds to avoid false positives and duplication of actions. Not all hardware faults have immediate response actions. They are compared to persistent fault threshold values prior to responding with defined actions. Defined response actions include case creation, diagnostic execution and log attachment. On PowerEdge servers, SupportAssist monitors for hardware fault events, including memory, disk, power supply, controller and other component failures. On Dell EMC SC series with Storage Manager, PowerVault and PS Series storage devices, SupportAssist can monitor faults such as disks, controllers, power supplies and cache batteries as well as other component failures. On Dell EMC Networking devices, SupportAssist can monitor faults such as link failures or rising temperatures.

19. What alerts open predictive support cases in advance of hardware failures?

Predictive alerts are based on scheduled collections that are submitted to Dell EMC. These collections are analyzed and compared so we can determine a failure will occur with a high degree of certainty. SupportAssist processes alerts received from monitored devices to determine if the alerts qualify for support case creation. If an alert matches with the predefined criteria for case creation, a support case is automatically created. Customers using SupportAssist will receive automated predictive case creation for server hardware (hard disk, backplane and expanders) on systems with ProSupport Plus. The [SupportAssist: Alert Policy](#) technical white paper gives information on the alerts that open cases with Dell EMC technical support.

20. What alerts are eligible for automated dispatching?

As of mid-2018, for customers in 30+ countries, cases created for hard drive alerts on PowerEdge servers with a next business day entitlement are eligible for automated parts dispatch. To take advantage of automated dispatching for hard drive alerts customers must update their address and preferences in the setting tabs of the SupportAssist Enterprise user interface.

21. What happens on hardware faults?

When a fault occurs on a system with an active ProSupport entitlement, SupportAssist opens a new case with Dell EMC technical support. You receive an email notification containing the case number for that service tag and a Dell EMC Support Technician contacts you to resolve the issue. All subsequent faults on that service tag are appended to the same case until issues are resolved and case is closed.

22. Is SupportAssist a replacement for remote monitoring service?

SupportAssist is not a remote monitoring service. Systems management software, such as OpenManage Essentials, OpenManage Enterprise, or Microsoft SCOM and Storage Management software such as Dell EMC Storage Manager with Storage Center OS or SAN HQ, monitors and receives alerts from managed devices. SupportAssist monitors the alerts received by the systems or storage management console and automatically creates a support case based on alert thresholds pre-defined by Dell EMC. A support case is created only for hardware alerts that would have been most likely to create a support case when a customer contacts Dell EMC technical support.

The goal is to automate and thereby accelerate the process for opening support cases with Dell EMC technical support, when potential hardware issues arise. It is not a replacement for IT staff, which has responsibility for systems or storage management and hardware uptime; but rather, it is a

complementary resource to augment a customer's capabilities, especially for those that are ProSupport or ProSupport Plus entitled.

23. What happens to SupportAssist features when ProSupport coverage on my monitored system expires?

If your ProSupport service contract expires, the automatic case creation feature will be disabled. SupportAssist will, however, continue to run automated system state collections. If you upgrade to or extend your ProSupport contract on a system (service tag), the automatic case creation will be re-enabled automatically on that system.

24. Does SupportAssist send email notifications?

Yes. SupportAssist sends a welcome email once downloaded and registered. It will also send emails for hardware issue alerts and support case creation to customers with ProSupport or ProSupport Plus.

25. What is the language support for SupportAssist?

The SupportAssist Enterprise software interface is available in English, German, Brazilian Portuguese, French, Spanish, Simplified Chinese, and Japanese. SupportAssist Enterprise users may choose 1 of 28 languages for auto-email notifications sent at the time of a service request incident. Users may select their preferred language within the software.

26. In which countries is SupportAssist available?

SupportAssist availability is dependent on a user having SupportAssist activated at the time of an alert on their device. Response by Dell EMC Technical Support is determined by the support agreement active on the service tag at time of alert. ProSupport offering entitlement and country availability of the ProSupport offering apply at time.

27. What's new about monitoring of device connectivity to Dell EMC? How do I view the site health status and check for device connectivity issues?

The enhancement now available with SupportAssist Enterprise 2.0 enables you to see device connectivity status in the user interface. The application proactively checks for any issues such as common errors with connectivity, collection capability, and monitoring capability. View the site health status by selecting "Devices" and then "Site Inventory Validation." SupportAssist Enterprise also notifies you by email if there are problems with your site.

28. How do dispatch notifications work with SupportAssist Enterprise?

If you have a TechDirect account, you will get a dispatch notification in TechDirect and will then confirm your dispatch preferences and approve or deny the dispatch. If you don't have a TechDirect account, you will receive an email with a link to a secure webpage that allows you to confirm your dispatch preferences and approve or deny the dispatch. The link is valid for 24 hours. More information on email notifications in TechDirect is available in the [User Documentation](#).

SupportAssist alerts and ProSupport Plus on-demand reporting TechDirect

29. Can I view my SupportAssist alerts in TechDirect?

Yes. All SupportAssist for enterprise systems customers are able to view and manage SupportAssist created cases in TechDirect.

30. How do I begin receiving SupportAssist alerts and manage cases in TechDirect?

Single sign-on with TechDirect is a new feature available with SupportAssist Enterprise 2.0. To enable single sign-on with TechDirect follow these steps:

1. Click on the "Settings" tab.
2. Click "TechDirect login."
3. Next, enter the One-Time Password (OTP) to verify the TechDirect account.

For more information on managing cases and dispatches in TechDirect, view the [tutorial video](#).

31. How do I begin receiving my ProSupport Plus reporting on-demand in TechDirect?

After purchasing a ProSupport Plus or ProSupport One service plan, you will receive an email from your Technology Service Manager (TSM) to log into TechDirect. Your Technology Service Manager is your designated Dell EMC support advocate who understands the specific IT needs and objectives of your business. He or she has access to your reports in order to make personalized recommendations based on your environment. Get started by following these steps:

1. Click the link in the email to go to the TechDirect account that has been created for you.
2. Sign TechDirect Terms of Use.
3. Scroll over Reports in the top navigation and select ProSupport Plus / One.
4. Approve Terms and Conditions.
5. Select Access ProSupport Plus Reports.

32. How does SupportAssist enhance ProSupport Plus on-demand reporting?

Although all ProSupport Plus Customers have access to on-demand reporting in TechDirect, only those with SupportAssist take full advantage of the reporting. SupportAssist will enable firmware and software revision recommendations.

SupportAssist and REST APIs

33. How do I get started with REST APIs?

Customers are able perform and support their own custom scripting with REST APIs in SupportAssist Enterprise v2.0. A separate User Guide for REST APIs is available within the [user documentation](#).

SupportAssist Security Information

34. What information does SupportAssist collect?

SupportAssist collects system state information that is required for troubleshooting hardware issues and providing proactive support from our ProSupport engineers. SupportAssist does not collect any user files stored on the system, any passwords or any information about application usage.

SupportAssist collection includes following types of system state information:

- **Hardware configuration** — installed device, processor, memory, network device and usage
- **Event Data** – Windows event logs, core dump, and debug logs
- **Software configuration for servers** — operating system and installed applications
- **Network Identity information** — computer name, domain name, and IP address

For more details on the system state information collection, see:

[SupportAssist Enterprise reportable items](#)

SupportAssist also stores the contact information that is provided during SupportAssist registration or SupportAssist configuration screens which includes customer name, email address and phone numbers.

35. Can the system state information be filtered before being transmitted back to Dell?

Yes, SupportAssist Enterprise users can filter the system state information before it is transmitted to Dell. Refer to the [User Guide](#) specific for more information

The system information that is collected by SupportAssist includes identity information (PII) such as the complete configuration snapshot of systems, hosts, and network devices that can contain host identification and network configuration data. In most cases, part or all of this data is required to properly diagnose issues. If the security policy of your company restricts sending identity data outside of the company network, you can configure SupportAssist to filter such data from being collected and sent to Dell EMC. Refer to the User Guide for instructions on how to accomplish. In addition, the data that is collected and sent to Dell EMC by SupportAssist also includes software information and system logs. If required, you can configure SupportAssist to exclude the collection of software information and system logs from all monitored devices. Note: These changes may limit the ability of technical support to troubleshoot the issue. In addition, you will not receive some ProSupport Plus reporting information about your devices entitled to ProSupport Plus.

36. How is my system state information transferred to Dell EMC?

The information sent from your Dell EMC systems to Dell EMC is encrypted with 256-bit encryption and transferred securely using SSL protocol. The system state information is stored in compliance with the Dell EMC Privacy Policy.

37. What steps does Dell EMC take to safeguard customer information?

Dell EMC hosts SupportAssist information—including the application, systems, network and security components—in a US-based data center designed to maintain high levels of availability and security. Dell EMC protects your system state information by using a wide variety of measures, including

- **Physical security** – Features include, but are not limited to:
 - On-premise security guards
 - Rigorous exterior building security, including cameras, false entrances, vehicle blockades, specialized parking lot design, bulletproof glass and walls, and the use of an unmarked building
 - Interior pan/tilt/zoom security cameras with digital recorders
- **Network security** — All monitoring components are located behind a firewall and are managed by a Dell EMC network security team. We tightly control all network traffic, requiring all inbound traffic to be transmitted via specific ports and sent only to appropriate destination network addresses.

- **Server and database security** — Servers and OS components reside on standard images that have undergone security review. We regularly review security updates used by the application, including those published by Microsoft and vendors of other software. When critical security updates are issued, we test them first on nonproduction images and generally apply them to live servers within 48 hours.
- **Procedural security** — Dell EMC groups who have access to SupportAssist components (such as the database administration group and the operational support team) are assigned separate duties and access rights. All updates to the production environment go through a defined change control process that incorporates checks and balances.
- **Auditing** — Dell EMC retains proprietary monitoring hosting device logs, accessible only by Dell EMC. These logs record all attempts to log into or access the OS or SupportAssist Web Server Console, as well as every write or escalation operation performed by an authenticated user on the Server Console.

38. Who has access to the SupportAssist collected system state information at Dell EMC?

SupportAssist collected information is accessible by technical support agents who use it for troubleshooting hardware issues reported by SupportAssist. The information is also available to Technical Account Managers for their respective accounts for providing technical recommendation to ProSupport Plus and ProSupport Flex customers. The system state information is not shared for sales or promotional purposes.

Dell EMC takes information security and privacy seriously. Above described mechanisms makes sure that customer information collected by SupportAssist is secure and used only for support purposes.

SupportAssist Deployment Assistance

39. How do I get assistance deploying SupportAssist?

Many customers download and install SupportAssist without assistance from Dell EMC. For those wanting assistance, the [ProDeploy](#) Enterprise suite of services include the enablement and configuration of SupportAssist.

SupportAssist on OEM Devices

40. How are OEM ready devices supported?

Dell EMC OEM Ready devices (either re-branded or de-branded Dell EMC equipment), when added, are classified under the original Dell EMC hardware name and not the re-branded name. All of the functionality available with Dell EMC standard devices, such as alerts handling, automatic case creation (when the support level has been validated at time of support incident as ProSupport or ProSupport Plus) and ProSupport Plus reports are available for OEM Ready devices. However, the OEM Ready re-branded name is not displayed in the SupportAssist user interface or referenced in the reports.

Automatic case creation is supported through Dell EMC enterprise technical support and not available for other support case service request management systems.

As with any system that is modified for custom solutions, it is recommended that all SupportAssist features be validated to ensure proper operation with those modifications.

NOTE: Dell EMC OEM Ready version of the PowerEdge servers listed within this document are supported. OEM Ready versions of Dell EMC Storage and Networking devices are not supported at time of this document being published.

41. Where do I go to download SupportAssist for OEM-ready products?

SupportAssist Enterprise can be downloaded [here](#) at no charge. Available features are dependent on your service tag support agreement.

SupportAssist for Storage Manager with Storage Center OS (SCOS)

42. What is SupportAssist for Storage Manager with Storage Center OS (SCOS)?

SupportAssist for Storage Manager with Storage Center OS (SCOS) is an integrated support technology that collects and stores product configuration, diagnostics, and events. This information is transmitted using an encrypted protocol (RSA-2048) and is securely stored on centralized Dell EMC SupportAssist servers. This allows Dell EMC technical support to efficiently and effectively support Dell EMC SC Series Storage products. Customer data/files stored on the product are never sent to Dell EMC.

SupportAssist allows remote software and security updates. Customers are notified when they are available, and have the choice to schedule the download and/or the installation of the update. This may also be done automatically if so configured by the customer.

Once enabled, SupportAssist does not require any additional customer resources (e.g. hardware, software, personnel, etc.).

43. How do I get SupportAssist for my SC Storage products?

SC Storage products using Dell Storage Manager include SupportAssist technology. Customers have the ability to disable SupportAssist, but this would likely increase resolution time when working with Dell EMC technical support and is not recommended.

44. What communication technologies are used by SupportAssist?

SupportAssist provides automatic and secure communication between the Dell EMC SC Series Storage product and the SupportAssist servers at Dell EMC. The SupportAssist technology communicates with Dell EMC using a Dell EMC IIS Web Server which utilizes SOAP or RESTful services over an HTTPS (Hyper-Text Transfer Protocol with Secure Socket Layer) session. SupportAssist authenticates the web server using an SSL Certificate issued by the Certificate Authority. The web server then directs the communication through the Dell EMC firewall to the secured SupportAssist server. All information transferred between SupportAssist in the Dell EMC SC Series Storage product and the SupportAssist server is encrypted using an RSA 2048-bit key.

45. What is Storage Center Secure Console?

Dell EMC Storage Center Secure Console is an ancillary utility that allows Dell EMC technical support to remotely access the Storage Center in real time. When enabled, it allows remote in-box command line console access for support personnel to perform in-depth system analysis and troubleshooting via an advanced command set. Customers control when access is granted by enabling it only upon a request from Dell EMC technical support. Storage Center Secure Console utilizes SSHv3 Reverse

Tunneling for secure console access to connect directly to the Storage Center. Secure console does not allow access to actual data that is being presented between the storage center and the hosts.

46. How is my information protected?

SupportAssist provides automatic and secure communication between supported Dell EMC SC Series Storage products and the SupportAssist Server. The Dell EMC Storage product communicates with SupportAssist using a Dell EMC IIS Web Server which utilizes SOAP or RESTful services over an HTTPS (Hyper-Text Transfer Protocol with Secure Socket Layer) session. SupportAssist authenticates the web server using an SSL Certificate issued by the Certificate Authority. The web server then directs the communication through the Dell EMC firewall to the secured internal SupportAssist server. All information transferred between the SupportAssist technology in the Dell EMC Storage product and the SupportAssist server is encrypted using an RSA 2048-bit key. The IIS Web Server listens on TCP port 443 for requests from the SupportAssist Embedded client in Dell EMC products. Secure Console requires ports 22 and 8443* to allow for a reverse SSH connection to the Storage Center. Ports 22, 443, and 8443* must be enabled on the customer's firewall to allow outbound traffic. See the [Dell EMC Storage Center Pre-Deployment Tech Note](#) for additional details on the required firewall configuration.

*Port 8443 is for customers using Storage Center 6.6 and later.