Dell SupportAssist: Alert Policy

This Dell Technical FAQ provides details on how SupportAssist processes alerts and automatically creates support cases with SupportAssist for OpenManage Essentials or Microsoft System Center Operations Manager (SCOM)

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Introduction

Dell SupportAssist is a service capability that enables automated support from Dell by identifying potential hardware issues in your IT environment remotely. Dell's robust and easy to use proactive support technology allows us to identify, diagnose, and resolve hardware issues faster and more precisely with less of your involvement – eliminating or reducing downtime and letting you get back to business.

This document provides details on how SupportAssist processes alerts and automatically creates support cases with SupportAssist for OpenManage Essentials or Microsoft System Center Operations Manager (SCOM).

What is SupportAssist?

Dell SupportAssist is a proactive, automated support technology integrated into a suite of enterprise products and systems management consoles to enable faster resolution and reporting of hardware issues. SupportAssist capabilities include monitoring, automated data collection, automated case creation, and proactive contact from Dell Technical Support. The primary benefits of SupportAssist are available only for Dell devices that have a Dell ProSupport or Dell Prosupport Plus entitlement. SupportAssist also monitors Dell devices that do not have a ProSupport or ProSupport Plus entitlement, and sends an automatic email notification when a potential hardware issue is identified, however, Dell Technical Support does not contact you proactively.

Downloading, installing, and using SupportAssist does not require any fee.

> **Note:** SupportAssist is not a remote monitoring service. Systems management software such as OpenManage Essentials or Microsoft System Center Operations Manager (SCOM), monitor and receive alerts from managed devices. SupportAssist monitors the alerts received by the systems management console, and automatically creates a support case based on Dell Support Services predefined alert thresholds. A support case is created only for hardware alerts that would most likely create a support case when you contact Dell Technical Support by phone or via Dell TechDirect online case management. The purpose of SupportAssist is to automate and accelerate the process for opening support cases with Dell Technical Support.

Dell also offers several Managed Services that you can order based on your requirement. For information on the Managed Services offered by Dell, see Dell.com/Services.

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 Dell PowerEdge servers, SupportAssist can monitor approximately 100 hardware fault events. These faults include memory, disk, power supply, controller, and other component issues.
- On Dell Storage such as PowerVault and EqualLogic storage devices, SupportAssist can monitor faults such as disks, controllers, power supplies, cache, batteries, and other component issues.
- On Dell Networking switches such as PowerConnect and Force10, SupportAssist can monitor faults such as link failures or rising temperatures.

What happens on hardware faults?

When a fault occurs on a device with an active ProSupport or ProSupport Plus entitlement, SupportAssist creates a new case with Dell Technical Support. You receive an email notification containing the case number for that Dell service tag, and then a support technician contacts you to resolve the issue. All subsequent faults on that service tag are appended to the same case until the issues are resolved and the case is closed.

When a fault occurs on a system without an active ProSupport or ProSupport Plus entitlement, SupportAssist does not create a new case with Dell technical support. However, you receive an email notification containing a message that an error has occurred for a service tag, and that you may want to contact Dell Techical Support for assistance.

How am I notified of alerts and where?

Alert notifications in the systems management software occur within the systems management console. For example, alert notifications in OpenManage Essentials or Microsoft System Center Operations Manager (SCOM) occur within the OpenManage Essentials or SCOM console respectively. You can also set up OpenManage Essentials or SCOM to send alert notifications automatically through email. For more information on setting up alert notifications in OpenManage Essentials, see the "**Managing Alerts**" and "**Alerts – Reference**" chapters in the *Dell OpenManage Essentials User's Guide* at Dell.com/OpenManageManuals.

Alert notifications in SupportAssist occur through automatic email notifications from Dell Technical Support. If the device that generated the alert has a Dell ProSupport or Dell ProSupport Plus entitlement, Dell Technical Support will also contact you by phone to assist you in resolving the issue. SupportAssist automates support case creation at Dell. If the alerts generated by a device exceed the Dell Support Services predefined alert threshold, a support case is automatically created. For information on the predefined alert thresholds, see Alert Threshold.

> **Note:** SupportAssist sends automatic email notifications for only hardware alerts that would most likely create a support case when you contact Dell Technical Support by phone or via Dell TechDirect online case management.

What is the response time?

A Service Request to open a support case with Dell is created by SupportAssist at the time a given alert goes beyond the predefined threshold. These Service Requests are then automatically sent and assigned to a Dell Technical Support agent. The agent accepts the Service Request and starts the resolution process.

The response time for a support case created by SupportAssist is generally the same as that of a support case created by contacting Dell Technical Support over phone. The support case is created at severity level within Dell Technical Support which is important, but not urgent. If you deem that the support case requires more urgent attention, contact Dell Technical Support.

For more information on the Dell Support agreement, see the [Service Descriptions](#).

What if I need assistance with deploying OpenManage Essentials and SupportAssist?

Many customers have downloaded and installed OpenManage Essentials and SupportAssist without assistance from Dell. For other customers, Dell Remote Consulting Service (RCS) is available to provide deployment assistance.

If your IT Administrator has already implemented OpenManage Essentials or SCOM, and you have moderate to advanced IT proficiency, installing and setting up SupportAssist would require about 15 minutes. You may require additional time to verify if OpenManage Essentials or SCOM is set up properly to send alerts via SNMP and SupportAssist is set up to upload collections to Dell.

For more information, you can access additional documents at [Dell.com/SupportAssistManuals](#).

The following technical white papers provide specific steps and information on configuring Dell Storage devices, Networking switches, and PowerEdge servers with iDRAC:

- *Monitoring iDRAC7 Devices Using Dell SupportAssist*
- *Monitoring Dell Force10 Ethernet Switches Using Dell SupportAssist*
- *Monitoring Dell PowerConnect Ethernet Switches Using Dell SupportAssist*
- *Monitoring PowerVault MD Series Storage Arrays Using Dell SupportAssist*
- *Monitoring Dell EqualLogic Storage Arrays Using Dell SupportAssist*
- *Monitoring Dell EqualLogic Storage Hosting a Fluid File System*

Note: For managing credentials of monitoried devices in SupportAssist, an additional document is available as follows: *Managing Windows Device Credentials in SupportAssist Using Service Account.*

If you have minimal or no IT proficiency with systems management software, or if you do not have sufficient time, it is best to utilze RCS to implement SupportAssist properly. RCS includes deployment and setup by a Dell Support Engineer over phone using a secure Internet connection. RCS will assist you with the following:

- OpenManage Essentials along with SupportAssist is set-up on the management server
- OpenManage Server Assistant (OMSA) is set-up on additional devices to be monitored

Note: Deployment of Microsoft SCOM is not included in RCS. However, RCS does include assistance with Dell SuppportAssist SCOM plugin and OMSA on monitored devices.

You can order and utilize RCS by one of the following methods:

- If you have devices with a ProSupport or ProSupport Plus entitlement, you may contact your Technical Account Manager for additional information.
- You can contact your Dell Sales Representative for a quote and to order RCS using a standard Dell SKU number.
- If you have an existing order number with RCS, contact Dell Support to schedule the implementation at a suitable time.

When you order RCS, a specific service description would be reviewed with you. For more information on the service description, see Enterprise Configuration & Deployment.

Alert Threshold

The SupportAssist alert threshold specifies the criteria that must be satisfied for a **support case** to be created (or appended) in the Dell Technical Support case management system.

Currently, there are two policies for determining the criteria for creating or appending a support case:

- FirstMatch() – The support case should be created/appended each time this alert is detected.
- Occurs(count,duration) – The support case should be created/appended only when the alert has occurred as many times within a specified duration.

SupportAssist processes all alerts from OpenManage Essentials, but a support case is created only if

- The policies qualify the alert for creating a support case
- SupportAssist is configured correctly to automatically create support cases
- The service tag has a ProSupport or ProSupport Plus entitlement at the time of alert

For SupportAssist to generate a case, the alert needs to match a policy in the alert policy file within SupportAssist. The policy**.xml** file can be found at **C:\Program Files (x86)\Dell\Dell Integrated Support\bin\conf**. Dell may change a policy for a specific alert within the alert policy file for either the SupportAssist application or back-end infrastructure at Dell. This may be done from time to time, as Dell Technical Support and Engineering continue to incorporate experience from support case data with all customers. The alert policy is global and not configurable.

FirstMatch() policies

The FirstMatch() policies represent all hardware-related events. These events can be characterized as follows:

- Hardware issues that impact you from accessing applications or data
- Hardware replacement is required
- Your data has been lost or corrupted or is at an imminent risk of loss or corruption
- Violation of critical threshold values for sensors (fan, temperature, power, and so on)

Table 1   Example of a policy file

Policy property	Description	Example
clientType	Type of client reporting the alert	OME
eventSourceType	Source of the alert	1.3.6.1.4.1.674.10893.2.30
trapId	Trap identifier	1
Eventid	Event identifier	226C
Severity	Severity of the alert	CRITICAL_EVENT
Description	Description of the alert	Physical Disk Failed
autoCase	Indicates if the alert should be processed	True
alertThreshold	Policy filter used when a case is created	FirstMatch()
deltaSeverity	Severity code passed to Dell technical support	3

Occurs(count,duration) policies

The duration argument of the Occurs threshold defines a relative time in days, hours, minutes, and seconds and is formatted as dd-hh:mm:ss. The following are some examples of the Occurs threshold and their descriptions.

Table 2   Examples of Occurs threshold

Example	Description
Occurs (5,1-00:00:00)	Create/append a case if the alert occurs 5 or more times within the previous 1 day.
Occurs (3,0-05:00:00)	Create/append a case if the alert occurs 3 or more times within the previous 5 hours.
Occurs (8,1-12:00:00)	Create/append a case if the alert occurs 8 or more times within the previous day and a half.

Valid duration values of the Occurs threshold are as follows:

- Days: 0 to 365
- Hours: 0 to 23
- Minutes: 0 to 59
- Seconds: 0 to 59

Polices which specify the Occurs() threshold instruct the SupportAssist server hosted by Dell to retain the timestamp of each alert. With each new alert occurrence, the SupportAssist server evaluates if the number of alerts within the duration exceeds the count, and if so, creates/appends the case. The timestamps are discarded to ensure that the Occurs() threshold will not append the case until an entirely new set of alerts are received which satisfy the criteria.

Severity 2 (warning)

Typically, Dell technical support monitors for events with a severity 2 (warning) and critical events that are redundant.

A severity 2 (warning) event indicates that you should schedule time to address the issue. These events can be characterized as follows:

- Hardware issues that have limited impact on your access to applications or data
- Missing devices
- Predictive events that indicate that hardware is at risk of failing
- Redundancy loss or degradation (typically 2 or less occurrences)
- Violation of warning threshold values for sensors (fan, temperature, power, and so on). These items typically have threshold < 5 occurrences within a short time span.
- Events that result in minor performance degradation in your applications or access to data
- Greater than 5 occurrences (high frequency of occurrence within a short time span)
  - Events in which the system fails to complete a requested action (utilization > 80%)
  - Network type of events

Table 3   Example of severity 2 event

Example	Description
TrapId	2
EventId	
Severity	
AutoCase	True
AlertThreshold	Occurs(10,0-01:00:00)
DeltaSeverity	3
AlertDescription	The agent generates this notification to denote the change in InterConnect Link Status. The notification contains information on the new ICL status. The possible states are as follows: 1. NotEstablishted 2. LinkUp 3. LinkDown 4. LinkError

Severity 3 (informational)

A severity 3 or informational event may not require you to take action. These events can be characterized as follows:

- Hardware issues that have minimal impact on your access to applications or data
- Events which you can easily workaround
- Error recovery events
- Hardware inventory changes
- System and device setting changes
- Infrequent self correcting events such as disk media errors or single bit ECC

After a support case is created, the corresponding SupportAssist collection component is invoked on the device to generate and upload the collection to Dell.

Note: For devices covered under the Dell Basic Support service agreement or with an expired agreement, a support case is not created, but the collection component of SupportAssist is invoked and the collection is uploaded to Dell when SupportAssist is configured correctly. The customer must also choose to opt in for the collection component used during troubleshooting with Dell Technical Support.

Conclusion

Dell SupportAssist is designed for customers that want to benefit from automation and acceleration of opening support cases and troubleshooting with Dell Technical Support, when potential hardware issues arise. It is not a replacement for customer staff which has responsibility for systems management and hardware uptime. Rather, it is a complementary resource to augment customers capabilities, especially for customers that have choosen ProSupport or ProSupport Plus.