

SupportAssist Enterprise: Alert Policy

This technical document provides details on how SupportAssist Enterprise processes alerts and automatically creates support cases

Dell EMC Engineering
November 2017

Revisions

Date	Description
November 2017	Initial release

THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY, AND MAY CONTAIN TYPOGRAPHICAL ERRORS AND TECHNICAL INACCURACIES. THE CONTENT IS PROVIDED AS IS, WITHOUT EXPRESS OR IMPLIED WARRANTIES OF ANY KIND.
Copyright © 2017 Dell Inc. All rights reserved. Dell and the Dell logo are trademarks of Dell Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

Table of contents

Revisions.....	2
Introduction	4
What is SupportAssist Enterprise?	4
Which hardware faults does SupportAssist Enterprise monitor?.....	5
What happens on hardware faults?	5
How am I notified of alerts and where?	5
What is the response time?	6
What alerts open predictive support cases in advance of hardware failures?	6
What if I need assistance with deploying SupportAssist Enterprise?	6
Alert threshold	7
First occurrence policies	7
Repeat occurrence policies.....	8
Conclusion	8

Introduction

SupportAssist is a service capability that enables automated support from Dell EMC by remotely identifying hardware issues in your IT environment. Dell EMC'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. SupportAssist monitors alerts from your devices without increasing the load on your network. As soon as SupportAssist detects one or more alerts that indicate a critical failure, a service request is automatically submitted to Dell EMC, saving valuable time for you and your IT department.

This technical document provides details on how SupportAssist Enterprise processes alerts and automatically creates support cases.

What is SupportAssist Enterprise?

SupportAssist Enterprise is a proactive, automated support tool that enables faster resolution and reporting of hardware issues. SupportAssist Enterprise capabilities include monitoring, automated collection of system information and events, automated case creation, and a proactive contact from Dell EMC Technical Support. The primary benefits of SupportAssist Enterprise are available only for Dell EMC devices that have an active ProSupport, ProSupport Plus, ProSupport Flex for Data Center, and ProSupport One for Data Center service entitlements.

SupportAssist Enterprise can also monitor Dell EMC devices that do not have a ProSupport or ProSupport Plus service entitlement. When a hardware issue is detected on such devices, an email notification is sent to the customer, but a support case is not created automatically.

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

Note: SupportAssist Enterprise can also integrate with systems management consoles such as OpenManage Essentials or Microsoft System Center Operations Manager (SCOM). Systems management consoles monitor and receive alerts from managed devices. SupportAssist Enterprise monitors the alerts that are received by the systems management console, and automatically creates a support case based on alert thresholds defined by Dell EMC Support Services. A support case is created only for hardware alerts that would most likely create a support case when you contact Technical Support by phone or via Dell EMC TechDirect online case management. The purpose of SupportAssist Enterprise is to automate and accelerate the process for opening support cases with Dell EMC Technical Support.

Which hardware faults does SupportAssist Enterprise monitor?

SupportAssist Enterprise 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 EMC PowerEdge servers, SupportAssist Enterprise monitors for hardware faults, including memory, disk, power supply, controller, and other component failures.
- On Dell EMC Storage devices such as MD Series, PS Series, and SC Series, SupportAssist Enterprise can integrate with OpenManage Essentials to monitor faults such as disks, controllers, power supplies, cache batteries, and other component failures.
- On Dell EMC Networking switches previously known as PowerConnect and Force10, SupportAssist Enterprise 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, ProSupport Plus, ProSupport Flex for Data Center, and ProSupport One for Data Center service entitlement, SupportAssist Enterprise creates a new support case with Dell EMC Technical Support. You receive an email notification containing the case number for that Dell EMC 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 support case until the issues are resolved and the case is closed.

When a fault occurs on a system that does not have a ProSupport or ProSupport Plus service entitlement, SupportAssist Enterprise does not create a new case with Dell EMC Technical Support. However, you receive an email notification stating that an error has occurred for a Service Tag, and that you may want to contact Dell EMC Technical Support for assistance.

How am I notified of alerts and where?

For devices that are managed by a systems management console, alert notifications are displayed within the systems management console. You can also set up OpenManage Essentials or SCOM to send alert notifications automatically to you by 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 Enterprise occur through automatic email notifications from Dell EMC Technical Support. If the device that generated the alert has a ProSupport, ProSupport Plus, ProSupport Flex for Data Center, and ProSupport One for Data Center service entitlement, Dell Technical Support will also contact you by phone to assist you in resolving the issue. SupportAssist Enterprise automates support case creation with Dell EMC. If the alerts generated by a device exceed the Dell EMC Support Services predefined alert threshold, a support case is automatically created. For information on the predefined alert thresholds, see [Alert Threshold](#).

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

What is the response time?

A service request to open a support case with Dell EMC is created by SupportAssist Enterprise at the time a given alert goes beyond the predefined threshold. The service request is created automatically, without you necessarily noticing the issue and then contacting Dell EMC. These service requests are then automatically sent and assigned to a Dell EMC Technical Support agent. The agent accepts the service request and starts the resolution process.

The response time for a support case created by SupportAssist Enterprise is generally faster than that of a support case created by contacting Dell EMC Technical Support over phone. The support case is created at severity level which is important, but not urgent. If you consider that the support case requires more urgent attention, you may contact Dell EMC Technical Support.

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

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

Predictive alerts are based on scheduled collections that are sent to Dell EMC. These collections are analyzed and compared so we can determine that a failure will occur with a high degree of certainty. Customers using SupportAssist Enterprise will receive automated predictive case creation for server hardware (hard disk, backplane and expanders), provided the server has an active ProSupport Plus service entitlement.

What if I need assistance with deploying SupportAssist Enterprise?

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

Alert threshold

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

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

- First occurrence policies – These policies create or append a support case each time a specific alert is detected
- Repeat occurrence policies – These policies create or append a support case when a specific alert is detected a specific number of times within a specific duration

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

- SupportAssist Enterprise policies qualify the alert for creating a support case
- SupportAssist Enterprise is configured correctly to automatically create support cases
- The Service Tag has an active ProSupport, ProSupport Plus, ProSupport Flex for Data Center, and ProSupport One for Data Center service entitlement at the time of the alert

For SupportAssist Enterprise to create a support case, the alert must match a criteria in the alert policy defined in SupportAssist Enterprise. Dell EMC may change a policy for a specific alert within the alert policy for either the SupportAssist Enterprise application or the back-end infrastructure at Dell EMC. This may be done from time to time, as Dell EMC Technical Support and Engineering continue to incorporate experience from support case data with all customers. The alert policy is global and is not configurable. To ensure that SupportAssist Enterprise is up-to-date with the latest alert policy, it is necessary that the policy file update is enabled in the SupportAssist Enterprise **Settings > Preferences** page.

First occurrence policies

The first occurrence policies represent all hardware-related events. These events can be characterized as follows:

- Hardware issues that impact you from accessing applications or data
- Hardware issues that require a part replacement
- Hardware issues that may result in your data being lost or corrupted
- Violation of critical threshold values for sensors (fan, temperature, power, and so on)

Repeat occurrence policies

These policies represent critical, warning, or informational events. These events result in a support case, if the alert occurs several times within a specified duration.

Warning events

Typically, Dell EMC Technical Support monitors for warning and critical events that are redundant. A 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 the hardware is at a 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

Informational events

An 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, SupportAssist Enterprise collects system state information from the device and uploads it to Dell EMC.

Note: For devices that are covered by a Dell EMC Basic Support service entitlement or with an expired entitlement, a support case is not created, but the system state information is collected and uploaded to Dell EMC, provided SupportAssist Enterprise is configured correctly.

Conclusion

SupportAssist Enterprise is designed for customers that want to benefit from automation and acceleration of opening support cases and troubleshooting with Dell EMC Technical Support, when potential hardware issues occur. SupportAssist Enterprise is not a replacement for customer staff which has responsibility for systems management and hardware uptime. Rather, it is a complementary resource to augment capabilities, especially for customers who have opted for a ProSupport, ProSupport Plus, ProSupport Flex for Data Center, and ProSupport One for Data Center service entitlement.