Dell System E-Support Tool Version 3.6.0

Release Notes

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Dell System E-Support Tool

Dell System E-Support Tool (DSET) is a utility that collects configuration and log data from the target server for various chassis hardware, storage, and operating system components of a Dell PowerEdge server. DSET application generates a System Configuration Report, which consolidates the gathered data into a .zip file that can be automatically or manually uploaded to Dell Technical Support.

Note: For the latest release notes, go to **www.dell.com/serviceabilitytools** and click **Dell System E-Support Tool Version 3.6.0**.

Version
DSET 3.6.0

Release Date
May 2014

Previous Version
DSET 3.5.1

Importance

RECOMMENDED: Dell recommends applying this update during your next scheduled update cycle. The update contains feature enhancements or changes that will help keep your system software current and compatible with other system modules (firmware, BIOS, drivers and software).

Platform(s) Affected

Not applicable.

What is Supported?

Supported Devices

DSET application supports the following systems:

- Storage Systems: PowerVault DL2000, DL2100, DL2200, and PowerVault NX.
- Rack Systems: PowerEdge R720, R720xd, R620, R320, R420, R520, R820, R200, R210, R210II, R300, R310, R410, R415, R510, R515, R610, R710, R715, R805, R810, R815, R900, R905, R910, 1950, 1955, 2950, 6950, and 2970.
- Blade Systems: PowerEdge M620, M420, M520, M820, M600, M605, M610, M610X, M710, M710HD, M805, M905, M910, M820, and M915.
- Tower Systems: PowerEdge T620, T320, T420, T100, T105, T110, T110II, T300,T310, T410, T605, T610, T710, 1900, and 2900.
- CloudEdge Systems: PowerEdge C1100, C2100, C6100, C6105, and C6145.

Supported Web Browsers

DSET supports the following Web browsers:

- Internet Explorer 7.0 and later versions for viewing the reports in windows platform.

Supported Operating System List

DSET and Remote Provider

Installation and report collection (local and remote) is done from the following operating systems:

- Microsoft Windows Server 2003 (32-bit and 64-bit)
- Microsoft Windows Server 2003 R2 (32-bit and 64-bit)
- Microsoft Windows Server 2008 (32-bit and 64-bit)
- Microsoft Windows Server 2008 R2
- Microsoft Windows Small Business Server 2011 (64-bit)
- Microsoft Windows Server 2012
- VMware ESX 4.0
- VMware ESX 4.1
- Red Hat Enterprise Linux 5 (32-bit and 64-bit)
- Red Hat Enterprise Linux 6 (64-bit)
- SUSE Linux Enterprise Server 10 (64-bit)
- SUSE Linux Enterprise Server 11 (64-bit)
- CentOS 6.2 (64-bit)
- CentOS 6.3 (64-bit)
- CentOS 6.4 (64-bit)
- Citrix Xen Server 6.2 (32-bit)
- Oracle Enterprise Linux 6.4 (64-bit)
- Oracle Virtual Machine 3.2 (64-bit)

DSET

Installation and remote report collection is done from the following client operating systems:

- Microsoft Windows XP
- Microsoft Windows Vista
- Microsoft Windows 7
- Microsoft Windows 8

Remote report collection from the following operating systems is done when DSET is installed in Windows/Linux:

- VMware ESXi 4.0
- VMware ESXi 4.1
- VMware ESXi 5.0
- VMware ESXi 5.1
- VMware ESXi 5.5

NOTE:

1. To collect hardware and storage data from ESXi remotely, install supported OpenManage Server Administrator version on the target system.
2. DSET application cannot be installed on a system with Server Administrator version lower than 5.5.
3. DSET application (64-bit) cannot be installed on a 64-bit Linux system with Server Administrator version lower than 6.3.
4. Only DSET application (32-bit) can be installed on ESX 4.x systems.

What's New

- Support for Dell PowerEdge Express Flash PCIe SSDs on the following operating systems:
    - Microsoft Windows Server 2012. Processor: x64/EM64T
    - Microsoft Windows Server 2008 R2 or later, including Hyper-V virtualization. Processor: x64/EM64T
    - Red Hat Enterprise Linux 6.1 64 bit or later. Processor: x64/EM64T
    - SUSE Linux Enterprise Server 11 SP2 64 bit or later. Processor: x64/EM64T
    - VMware ESXi 5.1 or later
- Support for the following new hardware platforms: PowerEdge R220 and R920
- Support for the following new operating systems:
    - Microsoft Windows 2012 R2
    - Windows 2012 R2 Hyper-V
    - RHEL 6.5
    - SLES 11 SP3
    - Cent OS 6.3
    - Citrix Xen Server 6.2
    - Oracle Enterprise Linux 6.4
    - Oracle Virtual Machine 3.2
    - ESXi 5.0 U3
    - ESXi 5.1 U2
    - ESXi 5.5
- Support for 9th generation PowerEdge RAID H730P controller
- Support for iDRAC firmware version 1.55.55
- Support for checking the communication between the target server and provider

Important Notes

Report Collection Prerequisites

- For report collection from iDRAC7 (out of band), the iDRAC7 firmware version must be 1.30.30 or later.
- For report collection from OpenManage Server Administrator namespace, the OpenManage Server Administrator services must be running.
- For remote report collection, SSH should be enabled on the target system on systems running Linux.

Known Issues

Issue 1 (DSET-47):

Description

On T110 II systems with Windows 2008 SP2 x64 bit operating system, the slot information for external controller (PERC 6E) is displayed as Embedded under Storage->Dell PERC 6E Controller.

Resolution

None

Versions/Systems Affected

None

Issue 2 (DSET-50):

Description

Network information under Software -> Linux OS section may be missing for PowerEdge M910 systems running RHEL 6.1.

Resolution

Most networking information can be found under the Chassis -> Network section instead.

Versions/Systems Affected

None

Issue 3 (DSET-46):

Description

The NX4 configuration is not sent if you run a collection for NX4 without root credentials and the **"send full collection"** option is cleared.

Resolution

Make sure that the **"send full collection"** option is selected before running a collection for NX4 without root credentials.

Versions/Systems Affected

None

Issue 4 (DSET-51):

Description

Software -> Linux OS -> Display information is not available from a RHEL 6.164-bit system due to changes in xorg.conf.

Resolution

None

Versions/Systems Affected

None

Issue 5 (DSET-77):

Description

For Windows 2008 operating systems, the Hotfix Install date is not displayed correctly in the DSET report > Software section > Installed applications page.

Resolution:

None

Versions/Systems Affected

None

Issue 6 (DSET-1117):

Description

On modular server, CD/DVD ROM connected through external USB enumerates under Storage does not show proper device information like Device Location, Parent Location etc.

Resolution

None

Versions/Systems Affected

None

Issue 7 (DSET-1124):

Description

Few attributes missing for the Storage Array Disk in iDRAC Namespace Report.

Resolution

None

Versions/Systems Affected

None

Issue 8 (DSET-941):

Description

In the OpenManage Server Administrator namespace report, in the Error Summary Information table, data in the Location column is automatically generated by using a predefined format, which can be interpreted only by having prior knowledge about the format.

Resolution

The format used to display the location is:

 <Controller name> <Enclosure name> <PCIe slot number>:<Global number>:<Channel>: <Enclosure ID>: <Index>

For example, PERC H810 Adapter MD 1220 2:1:0:0:2

Versions/Systems Affected

None

Issue 9 (DSET-2349):

Description

"Total Maximum Capacity" value is mismatch with OMSA report data on R820 running on ESX 4.1U3

Resolution

None

Versions/Systems Affected

None

Issue 10 (DSET-1597, 1598):

Description

During the silent installation mode, if a later version of DSET is present on the server, and if you try installing the earlier version of DSET on the server, the downgrade process will not get blocked, but two versions of DSET will exist on the server.

Resolution

None

Versions/Systems Affected

DSET 3.4 to DSET 3.6

Issue 11 (DSET-1756):

Description

On systems running on Windows, Windows Activation status has been deleted from Software information page of DSET report, because it is being reported incorrectly.

Resolution

None

Versions/Systems Affected

DSET 3.x

Issue 12 (DSET-1759):

Description

NIC teaming information is not enumerated under Network class in DSET namespace report on Systems with Windows 2012 R2.

Resolution

Partial NIC teaming data is present on Network page under Software section of report.

Versions/Systems Affected

DSET 3.6, Win2k12 R2

Issue 13 (DSET-1950):

Description

In DSET namespace report,under Network page, Duplex value is showing as "Unknown" instead of "Full".

Resolution

None

Versions/Systems Affected

DSET 3.6, R220/R920

Issue 14 (DSET-2031):

Description

Hardware logs are not displayed for iDRAC namespace report.

Resolution

None

Versions/Systems Affected

DSET 3.6, M820

Issue 15 (DSET-2296):

Description

Incomplete remote report getting generated in case of Modular server with SLES 11 SP3.

Resolution

Provide root\dsetcim in namespace parameter explicitly from command line

Versions/Systems Affected

DSET 3.6, Modular Servers/SLES 11 SP3

Issue 16 (DSET-1925):

Description

On Windows 2012 R2, Network IRQ and Base Memory Address values missing on DSET namespace report.

Resolution

None

Versions/Systems Affected

DSET 3.6, Windows 2012 R2

Issue 17 (DSET-1767):

Description

In DSET namespace report, BIOS Setup page shows 'Error Command successful' when the system is debranded (without Dell & OEM BIOS).

Resolution

None

Versions/Systems Affected

DSET 3.6

Issue 18 (DSET-2172):

Description

On Windows 2012 R2, S110 controller information may not get enumerated in DSET namespace report because of some limitation in communicating with controller drivers.

Resolution

None

Versions/Systems Affected

DSET 3.6

Issue 19 (DSET-2347):

Description

If IPV6 kernel module is not enabled before DSET installation, then DSET display the following message: "Dell System E-Support Tool 3.x installed on this system, may not function properly as the system does not have the ipv6 kernel module enabled."

Resolution

This message does not have any impact on DSET functionality.

Versions/Systems Affected

ESX

Limitations

Issue 1

Description

On Linux operating system (RedHat Enterprise Linux 5.x and 6.x), if SFCB package rpm is installed using "Dell Systems Management Tools and Documentation DVD", then DSET 3.5.0 installation is unsuccessful.

Resolution

Upgrade to the SFCB from Operating System media, using the command **"rpm -Uvh sblim-sfcb-*.*"** and re-install DSET 3.5.0 and then generate the Report

Versions/Systems Affected

None

Issue 2:

Description

On Linux machines if the root user is not configured to use remote network (HTTP or HTTPS service) for OpenPegasus, hardware and storage information is not collected in the report.

Resolution

None

Versions/Systems Affected

None

Issue 3:

Description

DSET on Linux cannot collect a remote report through the OpenManage Server Administrator namespace.

Resolution

None

Versions/Systems Affected

None

Issue 4:

Description

On Linux systems, if SFCB is installed using Open Manage Server Administrator DVD and then DSET application is installed, DSET report collection fails.

Resolution

Restart SFCB service on the system, and then generate the report.

Versions/Systems Affected

None

Issue 5:

Description

Bios -> Bios Setup page will not be available when a normal user under root group attempts to collect Windows to Linux remote DSET application report from OpenManage Server Administrator Snamespace.

Resolution:

None

Versions/Systems Affected

None

Issue 6:

Description

When only DSET is installed, the report is not collected when using Start menu > Create Advanced DSET Report or Create Basic DSET Report.

Resolution

None

Versions/Systems Affected

None

Issue 7:

Description

On ESX 4.1 Operating System, less firmware data is collected.

Resolution

To collect full firmware data, **usbarbitrator** service should be stopped.

Versions/Systems Affected

None

Issue 8:

Description

On Windows 2008 operating system (standard, enterprise, and core), if DSET application version 3.3 and above is currently in the system, it cannot be upgraded to a later version.

Resolution

Uninstall the already installed version of DSET and install the later version.

Versions/Systems Affected

None

Issue 9:

Description

In the DSET namespace report, the System Location is not displayed in the Main System Chassis page, if the location is modified.

Resolution

None

Versions/Systems Affected

None

Issue 10:

Description

On Linux target system, more than one simultaneous report collection is not supported.

Resolution

None

Versions/Systems Affected

None

Issue 11:

Description

On 12G Platforms, CSIOR (Collect System Inventory On Restart) must be enabled to get modified attributes after last restart.

Resolution

None

Versions/Systems Affected

None

Issue 12:

Description

For OpenManage System Administrator report collected from any system having System Administrator version 6.5 or lower, the Array Disks page is not displayed correctly under the corresponding Enclosure. However, it is displayed under the Connector to which the Enclosure is connected.

Resolution

None

Versions/Systems Affected

None

Issue 13:

Description

In the DSET namespace report, the value of "System Reset Timer" attribute in "Auto Recovery" class modified in OpenManage Server Administrator is not displayed.

Resolution

None

Versions/Systems Affected

None

Issue 14:

Description

On 9G and 10G Servers, Remote Access Logs are not collected when OpenManage Server Administrator Remote Access Controller (RAC) Component is not present.

Resolution

None

Versions/Systems Affected

None

Issue 15:

Description

Windows Unified Data Storage Server 2003 R2 Enterprise 64-Bit is displayed as Windows 2003 Enterprise 64-Bit, as Unified Data Storage Server information is not available through any WMI class or through any registry entry.

Resolution

None

Versions/Systems Affected

None

Issue 16:

Description

Fewer Dell logs are collected on the ESXi Operating System.

Resolution

None

Versions/Systems Affected

None

Issue 17:

Description

Attribute collection data will vary in the report when DSET version and Remote Provider version are different.

Resolution

None

Versions/Systems Affected

None

Issue 18 (DSET-959):

An unexpected error message is displayed while extracting a Linux-based report.

Description

MS-Windows is unable to process the request because the file name has a colon (:).

Resolution

Install either 7-zip or WinRAR, and then save the file. These software applications convert a colon (:) to an underscore (_).

Versions/Systems Affected

None

Issue 19:

Description

iDRAC namespace report collection is not supported for iDRAC 7 with Basic Management license.

Resolution

None

Versions/Systems Affected

None

Issue 20:

Description

In the report collected using DSET namespace for any system with Red Hat enterprise Linux 6.2, the Broadcom BCM57800 1GB NIC is enumerated as Broadcom BCM57800 1GB Port 10 GB NIC

Resolution

None

Versions/Systems Affected

None

Issue 21 (DSET-696):

Description

On OEM Server, DSET may not support collection of Remote Access Log as part of report collection

Resolution

None

Versions/Systems Affected

Only OEM Servers.

Issue 22 (DSET-1099):

Description

DSET report from iDRAC will have fewer data when PERC H800 card is connected on 12G systems.

Resolution

None

Versions/Systems Affected

None

Issue 23 (DSET-1133):

Description

On Windows 64 bit System DSET Upload fails when System wide proxy is set using netsh command.

Resolution

Run the netsh command to set the system wide proxy "netsh winhttp set proxy x.x.x.x" from 32bit command prompt (c:\windows\syswow64\cmd.exe) and then try the upload operation.

Versions/Systems Affected

Windows 64 bit

Issue 24:

Description

When DSET is installed in a linux System then even if the dset providers are registered to tog-pegasus cimom, the providers show the dependency to the sfcb cimom due to which the uninstallation of sfcb would fail.

Resolution

Uninstall sfcb with --nodeps option "rpm -e --nodeps sblim-sfcb-*.rpm".

Versions/Systems Affected

None

Issue 25:

Description

In iDRAC namespace report, under Storage > Controller > Battery page, "Predicted Capacity Status" is always displayed as "Unknown".

Resolution

None

Versions/Systems Affected

None

Issue 26:

Description

On Oracle Virtual Machine Server OS, if you collect advanced logs, Remote Access Controller logs will not be available.

Resolution

None

Versions/Systems Affected

DSET 3.6.0, Oracle Virtual Machine OS

Issue 27:

Description

On systems running on Linux, where only OpenManage Server Administrator and DSET client are installed, DSET report collection will prompt for root password if no namespace is mentioned.

Resolution

None

Versions/Systems Affected

None

Issue 28 (DSET-2186):

Description

Fewer firmware data is displayed in DSET report on Oracle virtual machine operating system.

Resolution

None

Versions/Systems Affected

None

Issue 29:

Description

Storage data will not available in DSET report collected from ESX-SMASH namespace.

Resolution

None

Versions/Systems Affected

None

Issue 30:

Description

On all supported servers and operating systems, if only DSET component is installed and advanced logs are gathered, then Remote Access Controller logs will be missing.

Resolution

None

Versions/Systems Affected

None

Issue 31:

Description

On systems having Citrix Xen Server operating system, sfcb is not present by default. If the Dell OpenManage Server Administrator is present, sfcb is installed from OpenManage Server Administrator DVD with which DSET is non-functional. While trying to upgrade existing sfcb (sblim-sfcb-1.3.7) to sfcb from Red Hat Enterprise Linux 5.x operating system media, sfcb upgrades, but causes an error while installing or collecting DSET report because of known IPV6 issue in sfcb.

Resolution

Uninstall existing sfcb gracefully and install DSET.

Versions/Systems Affected

None

Issue 32:

Description

On ESXi 5.5 PCiE SSD is not supported because the micron driver blocks management command.

Resolution

None

Versions/Systems Affected

None

Issue 33:

Description

On Linux operating system, when DSET namespace report is collected on 11G or later, a message "Unable to mount MAS001" is displayed on the GUI. This message is displayed because, during the report collection DSET mounts and later unmounts the iDRAC partition to get the firmware data.

Resolution

None

Versions/Systems Affected

None

Issue 34:

Description

Downgrade check is not present in DSET version 3.4.1 and lower if only DSET Provider is installed.

Resolution

Issue number DSET-1101 fixed in DSET 3.5.0 release.

Versions/Systems Affected

None

Installation

Prerequisites

For windows

- You need to be logged in as a local or Domain Administrator.

- To Install DSET on Microsoft Windows Server 2008 or later, Microsoft Windows Vista or newer, run the DSET installer with elevated privileges using **"Run As"** option.
- To install Remote Provider, Windows Management Instrumentation (WMI) service must be running.
  - If WMI is stopped, DSET starts WMI automatically and continues with installation.
  - If WMI is disabled, installation of DSET terminates with an error message.

For Linux

- You need to be logged in as the root user.
- Enable SSH services for remote report collection from Linux systems.
- Make sure that the user credentials supplied for remote report collection can initiate SSH connection and have root privileges.

NOTE: For Linux CIMOM, the default port 5988 (for http) or 5989 (for https) is used by the system to install Remote Provider. If custom ports are used, update the configuration file available at /opt/dell/advdiags/dset/config/dset.cfg.

For silent installation:

On Linux Operating system for Silent installation of DSET application, CIMOM (SFCB or Open Pegasus) should already be installed.

To install SFCB:

1. Locate the SFCB rpm from the Operating System Media.
2. Install SFCB rpm using "rpm -ivh sblim-sfcb-*.rpm"
3. Try to perform DSET silent installation.

To install Top-Pegasus:

1. Locate the Tog-Pegasus rpm from the Operating System Media.
2. Install Tog-Pegasus using "rpm -ivh tog-pegasus-*.rpm"
3. Start the Pegasus services.
4. Try to perform DSET silent installation.

Probable reasons for provider installation failure

The DSET installation or collection is blocked on Red Hat Enterprise Linux operating system and CentOS, because the SELinux option is enabled by default.

Resolution

Modify the security enforce feature using the command, setenforce 0.

Credential-less CIMOM authentication

When installing the DSET or collecting DSET report using DSET version 3.5.0 and earlier, you must enter password at the command line interface on systems running Linux. If the credentials are correct and the CIMOM (SFCB or OpenPegasus) authenticates, the installation or report collection process is successfully completed.

From DSET version 3.5.1 and later, DSET supports single sign-on for the logged-in user. That is, DSET does not anymore require a password for its functioning. CIMOM accepts a client certificate while establishing the HTTPS connection. If the certificate is signed by a trusted authority, a network connection is started. During installation, DSET generates and deploys its own certificate and key which is used later. The access to these files is limited only to the root user.

A brief description about the DSET installation or report collection process:

1. Collecting DSET report without providing any username or password: DSET tries for CIMOM connections through certificates.
   1. If the connection is successful, the report collection continues without prompting for a password.
   2. If the connection is unsuccessful, DSET asks whether or not you want to provide password and continue.

- If you choose to continue, DSET prompts you to enter root password and proceed.
- If you decide not to proceed, credential-based authentication is not performed.

2. Collecting DSET report by providing username and/or password, DSET will not try for a certificate-based connection and prompts for a password (if not entered).

Note: The tasks mentioned earlier in Credential-less CIMOM Authentication On Systems Running Linux section are also applicable for DSET installation only when CIMOMs are pre-installed and operational.

Possible Reasons For Unsuccessful Certificate Connection

The following are the possible reasons for unsuccessful certificate connection:

- DSET client certificate has expired. By default, the certificate is valid for one year from the time of generation.
- A particular version of operating system or CIMOM does not support certificate-based Authentication.
- DSET does not perform the certificate-based connections because there are known issues with a particular version of operating system or CIMOM for certificate-based authentication.
- DSET client certificate or CIMOM Trust Store is corrupted.

Limitations

The following are the limitations:

- The credential-less authentication does not work on ESX. Therefore, DSET requires the credentials to run on ESX.
- For credential-less authentication, the minimum supported version of Tog-pegasus is 2.11.0 and that of SFCB is 1.3.11. In case, the server has CIMOM versions earlier than the versions specified, you will be prompted for a password.

Installation Instructions

For instructions on installation, advanced command-line installation, and error codes refer to the DSET Installation Guide.

The PDF format is available at:

http://www.dell.com/support/Manuals/us/en/555/Product/dell-systm-esuprt-tool-v3.6

The text format is available at: <INSTALLEDDIRECTORY>\AdvDiags\DSET\

Open Source Library

The lists of open source libraries used are:

- Python 3.1.2
- OpenSSL 0.9
- PyWBEM 0.7
- 7-Zip 4.65
- Plink 0.55 - for Windows
- Plink 0.62 - for Linux
- Pscp 0.62

- Libxml2 2.9.0
- Libxslt 1.1.28
- sblim-sfcb 1.3.11
- python cmpi-bindings 0.4.0-7.1
- sblim-indication_helper 0.4.2
- sblim-cmpi-base 1.5.5
- cim-schema 2.19

The modified open source libraries are available at the following location:

http://opensource.dell.com/releases/dset/3.6.0/DSET350.iso

Upgrade

Not applicable

Uninstallation

Not applicable

Contacting Dell

Note: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Visit **www.dell.com/support**.
2. Select your support category.
3. Verify your country or region in the **Choose a Country/Region** drop-down menu at the top of page.
4. Select the appropriate service or support link based on your need.

Accessing Documents From Dell Support Site

You can access the required documents in one of the following ways:
- From the following links:
  a. For all Systems Management documents — **dell.com/softwaresecuritymanuals**
  b. For Remote Enterprise Systems Management documents — **dell.com/esmmanuals**
  c. For Enterprise Systems Management documents — **dell.com/openmanagemanuals**
  d. For Client Systems Management documents — **dell.com/OMConnectionsClient**
  e. For Serviceability Tools documents — **dell.com/serviceabilitytools**
  f. For OpenManage Connections Enterprise Systems Management documents — **dell.com/OMConnectionsEnterpriseSystemsManagement**
  g. For OpenManage Connections Client Systems Management documents — **dell.com/OMConnectionsClient**
- From the Dell Support site:
  a. Go to **dell.com/support/manuals**.
  b. Under section, click **Software & Security**.
  c. In the **Software & Security** group box, click the required link from the following:
     - **Serviceability Tools**
     - **Enterprise System Management**

- **Client System Management**
- **Remote Enterprise System Management**
  d. To view a document, click the required product version.
- Using search engines:
  - Type the name and version of the document in the Search box.