

DELL Lasso
Version 4.1

Readme



This readme contains information for Lasso 4.1.

Lasso is a Java-based utility that automates the collection of logs and configuration from servers, disk arrays (EqualLogic, PowerVault MD-Series, and EMC), Fibre Channel switches (Brocade, McData, and Cisco), Tape Libraries, and Ethernet and FCoE switches.

After the collection, Lasso parses the data into an XML file, which is packaged with the original collection and encrypted. The encrypted file is uploaded to Dell Technical Support to use the hardware, software, and firmware information for troubleshooting, checking compatibility, and upgrading existing equipment.

What's New

- 1) Support to collect diagnostic information from the Group Lead and member, when a member IP address is provided.
- 2) Option to automatically upload the collection report to Dell Technical Support site.
- 3) Support for the following devices:
 - EqualLogic PS4110
 - EqualLogic PS6110
 - EqualLogic PS6510
- 4) Support to collect and parse Host Integration Tool Kit data for vSphere hosts in the EqualLogic SAN.
- 5) Option to provide the Delta Service Request number and Project Manager ID and include this in the XML and HTML reports.
- 6) Parser support for the following devices:
 - EqualLogic FS7500
 - Dell Force10 S50/S60/S2410/S4810 Switches
 - XenServer
 - PowerVault NX3500
- 7) Resolving Lasso Error 904 for the EqualLogic Array.
- 8) Parser support for MaxRequestHoldtime for all the Windows hosts in EqualLogic and MD Series SAN.
- 9) Support to capture and parse Broadcom NIC information when running in Host Bus Adapter (HBA) mode under the control of Broadcom Advanced Server Program (BASP) software.
- 10) Support to collect NAS Appliance information from the EqualLogic Group.
- 11) Support for firmware version 5.2 on Dell EqualLogic Arrays.
- 12) Support to collect and parse the following attributes from EqualLogic Array:
 - ROM Level
 - Last Boot Time
- 13) Support for ping test between the members in the EqualLogic Group.
- 14) Support to collect and parse Qlogic FC information from Windows, Linux, and VMware hosts attached to Compellent.
- 15) Support to collect Emulex FC information from Windows, Linux, and VMware hosts attached to Compellent.
- 16) Support to collect and parse SAS HBA information from Windows and Linux (32-bit only) hosts attached to PowerVault MD Series.
- 17) Support to validate user input for Ethernet Switch type in Ethernet Switches screen.
- 18) Support to include the following attributes in the HTML report:
 - Collection Date
 - Collection Time
 - Build Version
- 19) Support to collect and parse Data Center Bridge (DCB) information from EqualLogic Storage array and Windows Hosts attached to EqualLogic, MD Series, and Compellent.
- 20) Support to collect Converged Network Adapter (CNA) card information using Broadcom Command Line Utility (BCU) that is installed on Windows Hosts attached to EqualLogic, MD Series, and Compellent.
- 21) Support to collect DCB information from PowerConnect B-Series Switch.

Hardware and Software Requirements

Supported Devices

Lasso collects data from:

- Storage Arrays:
 - Dell EMC CLARiiON Storage Processor Release 6 or later
 - Dell EMC Celerra Storage devices (NAS)
 - PowerVault MD Series arrays - MD3000, MD3000i, MD3200, MD3220, MD3200i, and MD3220i
 - PowerVault FluidFS NAS
 - EqualLogic PS series Release 4.3 or later
 - EqualLogic FluidFS NAS
- Windows Operating Systems:
 - Windows Server 2003 Standard, Enterprise, and Datacenter Editions
 - Windows Server 2003 R2 Standard and Enterprise Editions
 - Windows Server 2003 x64 Standard, Enterprise, and Datacenter Editions
 - Windows Server 2003 x64 R2 Standard and Enterprise Edition
 - Windows Server 2008 R2 Standard, Enterprise, and Datacenter
 - Windows Server 2008 x64 Standard, Enterprise, and Datacenter
 - Windows Server 2008 x86 Standard, Enterprise and Datacenter Editions
 - Windows 2000 Advanced Server (Limited support)

NOTE: Windows Server Core is not supported.
- UNIX Operating Systems:
 - Linux - Red Hat Enterprise Linux up to version 6.0, SUSE Linux Enterprise Server up to SP1, CentOS, XenServer
 - Solaris
 - HP-UX
 - IBM AIX

- VMware - ESX and ESXi servers 3.5 and later
- Fibre Channel Switches:
 - Brocade, McData, and Blade switches except director class switches
 - Cisco 9124
- Tape Libraries:
 - PV136T
 - PV132T
 - TL2000
 - TL4000
 - ML6000
- Ethernet and FCoE Switches:
 - Dell PowerConnect 5424/5448
 - Dell PowerConnect 6224/6248
 - Dell PowerConnect 7024/7048
 - Dell PowerConnect M6220
 - Dell PowerConnect 8024/8024F
 - Dell PowerConnect M8024/M8024K
 - Dell PowerConnect M6348
 - Dell PowerConnect B-Series 8000
 - Cisco 2960
 - Cisco 4948
 - Cisco 3750E/3750X
 - Cisco CBS 3130
 - Cisco CBS 3030
 - Cisco Catalyst 3750E
 - Cisco Nexus 5020
 - Dell Force10 S50/S60/S2410/S4810

Before collecting data, make sure to perform the settings provided in Software Requirements section.

Installation

Lasso 4.1 - Installation

Prerequisites

- Make sure IP connectivity is available to all defined devices.
- .NET framework 2.0 and SP v1.0 or later.

NOTE: In the case of EqualLogic, MD series, and Compellent SAN, .Net framework 2.0 or later must be installed on the remote Windows host to successfully collect data.

NOTE: In the case of EqualLogic, Compellent, and MD series SAN, the SANsurfer CLI (iSCSI) software must be installed on the remote Windows, Linux, and VMware hosts to successfully collect iSCSI HBA information.

NOTE: In the case of Compellent SAN, the SANsurfer CLI (FC) must be installed on the remote Windows, Linux, and VMware host to successfully collect Qlogic FC HBA collection.

NOTE: In the case of Compellent SAN, the HBAnyware CLI must be installed on the remote Windows, Linux, and VMware host to successfully collect Emulex FC HBA collection.
- To collect from EMC, use a system that is not a Fibre Channel attached host.

- To collect from EqualLogic, install Lasso on one of the iSCSI hosts.

Software Requirements

- Windows Systems:
 - For Windows 2008 (R2), it is recommended to use administrator account during report collection. If it is not used, do one of the following:
 - Edit the registry on that remote host using the Windows 2008 Configuration registry script that is provided in the help file.
 - Under HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\system\key, add a DWORD value 'LocalAccountTokenFilterPolicy' and set its value data to 1 and reboot the system.
 - Enable "admin\$" and "c\$" share to run remote commands.
 - Make sure adequate disk space is available to temporarily store all event logs and other system data.
 - xCmd.exe, a program embedded in Lasso, may be detected as a threat by McAfee or AVG installed on the remote Windows host. To prevent this, add xCmd.exe to the trusted programs (for McAfee) or the PUP exception list (for AVG.)

- UNIX systems:
For more information on Linux, Solaris, HP-UX and IBM AIX systems, see the readme file at <ftp://ftp.emc.com/pub/emcgrab/Unix>.

For more information on ESX and ESXi, see the readme file at <ftp://ftp.emc.com/pub/emcgrab/ESX/>.

NOTE: Make sure that SSH is installed and configured. Credentials for normal user is required to establish SSH session, and root password is required to run commands as root.

NOTE: Make sure adequate disk space is available to hold a copy of all logs and system data to be collected.

- Fibre Channel Switches:
Enable Telnet on all M6220 Ethernet switches.
- A command line JRE Version 1.6 or later.
- Modular Disk Storage Manager must be installed on the management station for successful MD Series collection.
- Modify the timeout value, as the default timeout value of 15 minutes may not be sufficient to collect data from PowerVault NX3500 and EqualLogic FS7500 devices. The timeout value (nas.timeout.value) must be modified in the NAS.properties file available in the Lasso installation directory.
NOTE: The timeout value is in milliseconds.
NOTE: This timeout mechanism is applicable to all the devices. For collection to be successful, change or update the corresponding device properties file.
- SANsurfer CLI (FC) must be installed on the remote Windows, Linux, and VMware Host to gather FC HBA information.
- SANsurfer CLI (iSCSI) must be installed on the remote Windows, Linux, and VMware hosts to gather iSCSI HBA information.
- HBAnyware CLI (FC) must be installed on the remote Windows, Linux, and VMware hosts to gather FC HBA information.

Installation and Configuration Notes

To install Lasso, use an administrator account or you must have administrator privileges. Double-click the .msi file and follow the instructions on the wizard.

Upgrade/Downgrade

To upgrade or downgrade Lasso, uninstall existing version, and install the required version.

Uninstallation

To uninstall Lasso, use one of the following options:

- Go to **Start -> Control Panel -> Add/Remove Programs**. Locate Lasso and click **Remove**.
- Go to **Start -> Programs -> Dell -> Lasso -> Uninstall**.
- In the installation directory, double-click **Uninstall.exe**.

Notes

In case of any issue with EMCReports, see the readme file at <ftp://ftp.emc.com/pub/emcgrab/Windows>.

Limitations

- Lasso version 4.0/4.1 - Whenever a different host type is selected in the Your Hardware Environment: Hosts screen, no option is available to reset the data fields.
- DF351714, DF449573, and LASSO 107: On importing .SAN file in Lasso 4.0/4.1, Lasso fails to display Cisco Fibre Channel switches, Brocade, Ethernet and FCoE Switches, and hosts attached to Compellent in the Your Hardware Environment: Fibre Channel Switches, Ethernet and FCoE Switches, Storage Arrays, and Attached Hosts screens.
- DF521933: When multiple collections run on an ESXi 5.0 host, Lasso fails to delete the Dell Collector folder from the temporary directory.
- DF378248: Microsoft Security Essentials detects Lasso as a threat during Windows collection.
Resolution:
Disable Microsoft Security Essentials during Windows Collection.
- User needs to add xCmd.exe as a trusted program in the exception list of McAfee and AVG antivirus respectively.
- Windows host validation fails if "xCmd" has erroneously registered.
Resolution:
Check the host's services to see if "xCmd" is erroneously registered. If yes, run "sc delete xCmdSvc" on the remote host to remove it and retry validation.
- Windows 2000 collections using Lasso are not supported on a Windows 7 or a Windows 2008 Server R2 machine.
- Powerpath must be installed on the remote Windows host to get LUN mapping information in the XML and HTML format of collection.
- Lasso cannot be installed in folder names containing special characters.
- To collect data for McData switches, enable Telnet on all McData switches.
- The SAN Configuration HTML format of the collection report displays "unknown" for most attributes as minimal information is collected from VMware and 64-bit Linux hosts attached to CLARiiON or Celerra.
- To run Lasso, command line JRE Version 1.6 or later is required.
- Lasso installer does not support SystemRoot directory as the destination folder. Therefore, do not select this directory as the destination folder during Lasso installation.
- Lasso-50: If Lasso runs and collects data from the same host, Windows host collection fails.
- LASSO-191: On Force10 devices, the "Show running" command fails to run in model s50v.
- Lasso does not display the correct HTML Layout for Cisco FC switch.

- In case of Cisco Ethernet switches, Lasso does not parse the trunk ports.
- LASSO-120: Lasso validation of Force10 switches through SSH is not successful if enable password is configured.
- LASSO-72: Lasso collection of Force10 stacked switches through SSH is not successful when enable password is not configured.

Open Issues and Resolutions

Issue 1 (DF249815)

Description

In Lasso version 3.9.1, when any Fibre Channel Switch is selected from the "Type of Fibre Channel Switch" List and IP/Login credentials are provided for a different Ethernet switch, Lasso successfully validates and collects data for the selected switch but uses an incorrect script to correctly collect the correct command strings for Cisco Switch.

Resolution

Provide switch credentials for the selected switch type and do the collection. Make sure that the same credentials work correctly while logging on to the switch.

Issue 2

Description

Lasso installer may hang with a message 'Waiting for disk space calculation to be complete'.

Resolution

Cancel the installation and retry.

Issue 3

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.

Issue 4

Description

If an earlier version of Lasso is installed in a folder other than the default version, the customer configuration file is not moved to the USERPROFILE\Del\Lasso folder.

Resolution

Move the customer configuration file or use **Load a configuration file** option from Lasso Welcome page to use an existing customer configuration file.

Issue 5

Description

The Device Collection page may have duplicate vertical and horizontal scroll bars if the window is resized, or if there are too many devices in the configuration.

Resolution

Use the full screen mode or increase the resolution.

Issue 6

Description

Lasso's "auto-discover" feature works only for EMC CLARiiON arrays and not for hosts attached to Celerra, EqualLogic, and PowerVault MD Arrays.

Resolution

For those arrays, enter in the name or IP address of each attached host.

Issue 7

Description

spcollect command is not supported on EMC Arrays having FLARE less than R13.

Resolution

Run the command "getall".

NOTE: This command provides less information.

Issue 8

Description

When Lasso is run from a Windows 7, Windows Vista, Windows Server 2008, or Windows Server 2008 R2, if the User Access Control (UAC) is activated, the MD Series data collection is not successful.

Resolution

Make sure the User Access Control (UAC) is deactivated.

Issue 9 (DF476739)

Description

When Lasso GUI is opened and Lasso is uninstalled through CLI, the system reboots.

Resolution

Make sure that the GUI is closed before uninstalling Lasso.

Issue 10 (DF496170)

Description

For Linux, the number of Physical NICs is displayed in the HTML file instead of the number of iSCSI NICs.

Resolution

See the raw data collection for the Number of iSCSI NIC attribute.

Issue 11 (LASSO-212)

Description

Lasso does not proceed to the next screen if EqualLogic array is selected as the default storage group.

Resolution

After adding the EqualLogic array, either clear the option **Use this as the default storage array type**

Or

Click **Cancel** to proceed with the next screen.

Issue 12 (LASSO-233)

Description

Lasso does not validate the Cisco Ethernet Switches if SSH-1 protocol is enabled on the switch.

Resolution

Configure the switch to enable SSH-2 protocol.

Issue 13 (Lasso-230)

Description

For ESX 3.5, Adapter name is not shown correctly in the HTML collection report if there is more than one iSCSI HBA card.

Resolution

See the raw data collection (iscsihba_info.txt) file for the Adapter name.

Issue 14 (Lasso-229)

Description

For XEN server, iSCSI volume is not shown correctly in the XML ad HTML collection reports.

Resolution

See the raw data collection (iscsiinitiator_info.txt) file for the iSCSI volumes.

Issue 15 (Lasso-227)

Description

For PowerConnect M6348 and M6220 switches, Group VLAN are not shown correctly.

Resolution

See the raw data collection for the Group VLAN.

Issue 16 (Lasso-226)

Description

For PowerConnect Ethernet switches, VLAN name is not displayed correctly if the configured VLAN contains the sequence "...".

Resolution

See the raw data collection for VLAN name.

Issue 17 (Lasso-224)

Description

For PowerConnect Ethernet switches, VLAN ID is not displayed correctly if the configured VLAN contains a space.

Resolution

See the raw data collection for VLAN ID.

Issue 18 (Lasso-221)

Description

Lasso does not display the community string if the user edits the entry that has the **save as default username and password for additional arrays** option selected during validation.

Resolution

Re-enter the community string.

Corrected Problems

The following problems were reported in earlier releases of Lasso and are corrected in this release:

- DF522259: For Cisco Ethernet Switches, the serial number is interchanged between the Master and Member switches.
- DF513124: For stacked PowerConnect Simple Mode switches, Lasso does not display data correctly in the HTML format of collection.
- DF513449: For MDSeries, Lasso displayed the Host group data multiple times.
- DF523565: Lasso 4.0 collection fails on PS6100 with Error code 904.

Description

If any error occurs in the network section of the EqualLogic Array PS6100, the complete data collection fails.

- DF523035: For PowerConnect Ethernet Switches, when jumbo frames are enabled, MTU for Port Channel is not displayed correctly.
- Lasso-58: Note does not display in the Your Company Information screen when Secure Site option is selected.
- Lasso-44: Force10 does not enable validation without a password and enable password.
- Lasso-17: Lasso does not support Host Integration Tool Kit Version 4.0 for Windows.
- Lasso-7: Link status is displayed as unknown in the for a RHEL 6 host report.
- Lasso-3: Lasso 4.0 fails to create collection on Windows 2008 R2.
- CR504294: Debug logs must be improved in Lasso.
- Lasso-12: Lasso does not support PCEthernet with Version 4.2.0.4.
- Lasso-67: Lasso displays incorrect Maximum Transmission Unit (MTU) values for PC6224 Ethernet switches.
- Lasso-98 or DF503657: PowerConnect or Cisco Lasso collection gets invalid data in log collection.

Description

In Lasso version 3.9.1, when any of the Ethernet Switches are selected from the "Type of Ethernet Switch" list and IP or login credentials are provided for a different Ethernet switch, Lasso successfully validates and collects data for the selected switch but uses the wrong script to correctly collect the command strings for Cisco Switch.

Resolution

Provide switch credentials for the selected switch type and perform the collection. Make sure that the same credentials are valid while logging on to the switch.

- Lasso-55: In the case of Windows hosts, virtual NICs are not mapped when physical NIC's are parsed.

- LASSO-148: During data collection, Lasso must detect the EQL firmware versions and notify if the firmware version is lower than 4.3.2.

Description

Lasso collection was failing if the firmware version on the EqualLogic Array is below 4.3.2.

- LASSO-124: Lasso must support Upload for Single device collection through CLI.
- LASSO-272: After installing Lasso on Windows 2008 x64 or Vista x64 Operating System, if the system is restarted, a blue screen or system crash is observed.

Global Support

For information on technical support, visit www.dell.com/contactus.

For information on documentation support, visit support.dell.com/manuals. On the **Manuals** page, click **Software** -> **Serviceability Tools**. Click **Dell Lasso** on the right-side to access the documents.

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