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DELL(TM) EQUALLOGIC(TM) STORAGE MANAGEMENT PACK SUITE 4.0 FOR
MICROSOFT(R) SYSTEM CENTER OPERATIONS MANAGER 2007 SP1/R2 and
SYSTEM CENTER ESSENTIALS 2007 SP1 - README

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Version: 4.0
Release Date: April 2010

This readme provides information on the Dell EqualLogic Storage Management Pack Suite v4.0, which can be imported into Microsoft(R) System Center Operations Manager (SCOM) 2007 SP1/R2 and System Center Essentials (SCE) 2007 SP1.

This readme contains updated information for the Dell EqualLogic Storage Management Pack Suite Version 4.0 for Microsoft System Center Operations Manager 2007 and System Center Essentials 2007 User's Guide, and any other technical documentation included with the Dell management pack for Operations Manager.

All references to Operations Manager are also applicable to System Center Essentials.

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The Dell EqualLogic Storage Management Pack Suite v4.0 enables SCOM to discover and monitor the status of one or more Dell EqualLogic PS Series Arrays on a defined network segment. The management pack includes realistic icons describing EqualLogic PS Series arrays and its components; failure and pre-failure alerts, and allows you to assess, respond to, and ensure the availability of Dell EqualLogic PS Series Arrays monitored in the SCOM environment.

This readme contains the following sections:

- * Criticality
- * Minimum Requirements
- * Release Highlights
- * Installation/Un-Installation
- * Operating System Support
- * Known Issues
- * Additional Information

CRITICALITY
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- Recommended

MINIMUM REQUIREMENTS
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This section provides information about the minimum requirements for installing and using the Dell EqualLogic Storage Management Pack Suite version 4.0 for Microsoft System Center Operations Manager SP1/R2 and System Center Essentials SP1.

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Requirements
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- * EqualLogic Controller Firmware :
The recommended EqualLogic Firmware versions are:
 - * 4.0.x
 - * 4.1.x
 - * 4.2.x
 - * 4.3.x

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Supported Dell Devices
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- * Supported Storage Arrays:
 - * PS5000
 - * PS5500
 - * PS4000
 - * PS6000
 - * PS6500
 - * PS6010
 - * PS6510

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Operations Manager Management Server Requirements
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* To discover Dell EqualLogic PS Series Arrays, Dell EqualLogic Helper is a prerequisite on the management station. Install the Dell EqualLogic Storage Management Pack Suite version 4.0 on the management station. This installs and configures the Dell EqualLogic Helper on the management station.

For more information, refer to "Dell(TM) EqualLogic(TM) Storage Management Pack Suite Version 4.0 For Microsoft(R) System Center Operations Manager 2007 SP1/R2 and System Center Essentials 2007 SP1 User's Guide".

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RELEASE HIGHLIGHTS

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* Base folder utility, which holds the root folder for Dell hardware and the views for other management packs to group under.

* The Diagram view of the EqualLogic PS Series arrays displays realistic icons for the various components modeled by the EqualLogic Storage management pack.

Security Consideration for Dell EqualLogic Storage management pack

When you discover EqualLogic PS Series arrays for first time on any system, there is a delay of 40-45 seconds for devices to appear in the Diagram View if the system does not have access to the Internet. The delay occurs because in the .NET Framework 2.0, when the CLR loads Dell EqualLogic Helper assembly into a process, if the CLR finds an Authenticode signature (which involves a Certificate), it generates Publisher Evidence from it and validates the Certificate by contacting the issuing authority to ensure the Certificate has not been revoked. When validating the Certificate, the operating system scans the chain of Certificates and tries to download the Certificate Revocation List from a server on the Internet. If you do not have Internet access or the network is too slow, then this process is delayed - thereby delaying the start of the Dell EqualLogic Helper.

Note: When you disable signature verification, the .NET Framework 2.0 managed application no longer receives publisher evidence. This behavior affects the .NET Framework 2.0 managed application only when you use publisher evidence or the PublisherIdentityPermission class.

To disable the signature verification,

- * Edit the file DelleQLHelper.dll.config under the Library folder where Dell EqualLogic Storage Management Pack Suite v4.0 is installed.
- * Change the value of generatePublisherEvidence to "false"

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INSTALLATION/UN-INSTALLATION

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Installation

For information on installing the Dell(TM) EqualLogic(TM) Management Pack Suite Version 4.0 for Microsoft (R) SCOM 2007 SP1/R2 and SCE 2007 SP1, see the "Dell(TM) EqualLogic(TM) Storage Management Pack Suite Version 4.0 For Microsoft(R) System Center Operations Manager 2007 SP1/R2 and System Center Essentials 2007 SP1 User's Guide".

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Un-Installation
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For information on uninstalling the Dell(TM) EqualLogic(TM) Management Pack Suite Version 4.0, see the "Dell(TM) EqualLogic(TM) Management Pack Suite Version 4.0 For Microsoft(R) System Center Operations Manager 2007 SP1/R2 and System Center Essentials 2007 SP1 User's Guide".

OPERATING SYSTEMS SUPPORT
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List of Operating Systems supported on the Management Station:

- Windows Server 2003 SP2, Standard x86 Edition
- Windows Server 2003 SP2, Standard x64 Edition
- Windows Server 2003 SP2, Enterprise x86 Edition
- Windows Server 2003 SP2, Enterprise x64 Edition
- Windows Server 2003 SP2, Datacenter x86 Edition
- Windows Server 2003 SP2, Datacenter x64 Edition
- Windows Server 2003 R2 SP2, Standard x86 Edition
- Windows Server 2003 R2 SP2, Standard x64 Edition
- Windows Server 2003 R2 SP2, Enterprise x86 Edition
- Windows Server 2003 R2 SP2, Enterprise x64 Edition
- Windows Server 2003 R2 SP2, Datacenter x86 Edition
- Windows Server 2003 R2 SP2, Datacenter x64 Edition
- Windows Server 2008, Standard x86 Edition
- Windows Server 2008, Standard x64 Edition
- Windows Server 2008, Enterprise x86 Edition
- Windows Server 2008, Enterprise x64 Edition
- Windows Server 2008, Datacenter x86 Edition
- Windows Server 2008, Datacenter x64 Edition
- Windows Server 2008 SP2, Standard x86 Edition
- Windows Server 2008 SP2, Standard x64 Edition
- Windows Server 2008 SP2, Enterprise x86 Edition
- Windows Server 2008 SP2, Enterprise x64 Edition
- Windows Server 2008 SP2, Datacenter x86 Edition
- Windows Server 2008 SP2, Datacenter x64 Edition
- Windows Server 2008 R2, Standard x64 Edition
- Windows Server 2008 R2, Enterprise x64 Edition
- Windows Server 2008 R2, Datacenter x64 Edition

KNOWN ISSUES
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* After you remove the management pack, close and re-launch the SCOM console for a complete cleanup of the cache. (DF310069)

* The description under the management pack Properties tab contains unknown characters as separators. (DF325583)

* The tooltip for objects in the Diagram view of the SCOM Web console does not display any information related to attributes. This is a limitation in the SCOM Web console.

* The Display Name attribute for Dell EqualLogic PS Series Array is not displayed in the SCOM Operations console. This is a limitation in the SCOM Operations console.

* The Alert Details pane of the Alert View in the SCOM Operations console, does not display the Knowledge Resolutions. This is a limitation in SCOM 2007 SP1. (DF344587)

* An Invalid character is displayed in the Alert description field of Alert Properties pane. This is a limitation in SCOM 2007 SP1. (DF350178)

* EqualLogic Alerts may not be visible in the Alert View of the SCOM Operations console on Windows 2008 operating systems. To resolve this issue, see Microsoft KB958936 available on the Microsoft support site at support.microsoft.com (DF372017)

* On 64-bit Windows operating systems, Internet Explorer may not launch EqualLogic Web Console properly. To resolve this issue, perform the following:-

- In Internet Explorer Security settings page, set "Download signed ActiveX controls" to "Prompt". For instructions on modifying the Internet Explorer settings, see Microsoft KB article 174360.
- Install the latest 64-bit Java Runtime Environment (JRE)

Thereafter, perform the following:

- On Windows 2008 R2 operating systems, use 64-bit Internet Explorer to launch EqualLogic Web Console.
- On other 64-bit Windows operating systems, use 32-bit Internet Explorer to launch EqualLogic Web Console.

If this option fails, contact the Dell Technical Support team. (DF382569)

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