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Dell™ PowerVault™ MD3000/MD3000i Storage Arrays Discovery  
Utility - README

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Version 1.0  
Release Date: January 2010

This readme provides information on the Dell PowerVault MD Storage Arrays Discovery Utility version 1.0, which creates a text file with a list of discovered MD storage arrays that Microsoft(R) System Center Operations Manager (SCOM) 2007 SP1/R2 and System Center Essentials (SCE) 2007 SP1 uses to discover and monitor the MD storage arrays.

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

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This utility discovers PowerVault MD3000/3000i storage arrays, from the IP Addresses/IP Address ranges (IPv4 or IPv6 address(s)) that you specify, and creates a text file with a list of discovered IP addresses of the MD storage arrays. Microsoft® Systems Center Operations Manager (SCOM) uses the text file containing the IP addresses of the storage arrays to discover and monitor the storage arrays.

This readme contains the following sections:

- \* Criticality
- \* Minimum Requirements
- \* Release Highlights
- \* Additional Information
- \* Operating System Support
- \* Known Issues

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**CRITICALITY**  
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- Recommended

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MINIMUM REQUIREMENTS  
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This section provides information about the minimum requirements for using the Dell Discovery Utility.

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Requirements  
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\* Install the Microsoft .Net 2.0 SP1 framework or later on the system from where you run the utility.

\* Controller Firmware :  
The recommended version for PowerVault MD3000/MD3000i Controller Firmware(CFW) is 07.35.31.60. The supported firmware versions are:  
\* 07.35.31.60  
\* 07.35.22.61  
\* 06.70.17.60

\* Host Software :  
Install the Modular Disk Storage Manager (MDSM) Client on the server that hosts the PowerVault MD3000/MD3000i storage arrays to discover the Dell storage device through in-band. The recommended version is 03.35.36.49

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Supported Dell Devices  
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\* Supported PowerVault Storage Arrays:  

- MD3000
- MD3000i

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RELEASE HIGHLIGHTS  
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- \* The utility offers a simple graphical user interface (GUI) to enable you to enter a valid range of IPv4 or IPv6 addresses to scan for PowerVault MD3000/ MD3000i storage arrays.
- \* The utility spans across subnets and discovers PowerVault MD3000/ MD3000i storage arrays from the IP addresses or IP address ranges that you specify.
- \* The utility enables you to create and edit IP listing file that contains Dell MD Storage Arrays to be later used by SCOM/SCE for monitoring.
- \* The utility discovers PowerVault MD3000/ MD3000i storage arrays through both in-band, and out-of-band.

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Additional Information

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\* Security Consideration for Dell Discovery Utility

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When you run Dell Discovery utility for first time on any system, to discover the MD storage arrays, there is a delay of 40-45 seconds to launch the utility if the system does not have access to the internet. The delay occurs because in the .NET Framework 2.0, when the CLR loads an 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 network is too slow, then this process is delayed – thereby delaying the start of the application.

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 when you use the PublisherIdentityPermission class.

To avoid the delay in launching the utility on a system without internet access:

1. Open the DellDiscoveryUtility.exe.config file from the location where you have extracted the contents Dell\_MDStorageArray\_ABB.exe.
2. Set the value of <generatePublisherEvidence enabled="True"/> to "False".

For more information, see <http://support.microsoft.com/kb/936707>.

\* The "dell\_MDStorageArray\_ip.cfg" file contains sample IP addresses separated by semi-colons. Before importing the management pack, the operator needs to replace them with the set of MD IP addresses manually or use the output file of Dell Discovery Utility.

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OPERATING SYSTEMS SUPPORT

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List of Operating Systems supported on the system where you run the Dell Discovery utility:

Servers

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- Windows 2000 Advanced Server SP4
- 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

## Client Systems

- Windows XP Professional SP2 x86 Edition
- Windows XP Professional SP3 x86 Edition
- Windows XP Professional SP2 x64 Edition
- Windows Vista Ultimate SP1 x86 Edition
- Windows Vista Ultimate SP1 x64 Edition
- Windows Vista Business SP1 x86 Edition
- Windows Vista Business SP1 x64 Edition
- Windows Vista Enterprise SP1 x86 Edition
- Windows Vista Enterprise SP1 x64 Edition
- Windows 7 Professional x86 Edition
- Windows 7 Professional x64 Edition
- Windows 7 Ultimate x86 Edition
- Windows 7 Ultimate x64 Edition

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 KNOWN ISSUES  
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\* When you use the "Run As" option to launch the Dell Discovery utility, it displays the following error "Unable to find a version of the runtime to run the application". To avoid this error, you must uncheck the following option in the "Run As" popup menu: "Protect my computer and data from unauthorized program activity" to run the utility.(DF 357265)

\* You cannot launch the Discovery utility from a network share.  
You must modify the .Net security policy in order to run the application  
from a network share.  
For more information, see <http://support.microsoft.com/kb/897296>

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