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DELL(TM) OPENMANAGE(TM) IT ASSISTANT VERSION 8.0.1 README

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IT Assistant provides a central point of access to monitor and manage systems on a local area network (LAN) or wide area network (WAN). By allowing an administrator a comprehensive view across the enterprise, IT Assistant can increase system uptime, reduce repetitive tasks, and prevent interruption in critical business operations.

This file contains updated information for your "Dell OpenManage IT Assistant User's Guide" and any other technical documentation included with IT Assistant.

You can access all the documentation from the documentation CD or from the Dell Support website at "support.dell.com."

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CRITICALITY

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2 - Recommended

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COMPATIBILITY/RECOMMENDED REQUIREMENTS

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Minimum Supported Operating System Requirements for IT Assistant
(by Enterprise Size)

Small (up to 500 Managed Systems):

Microsoft(R) Windows(R) XP Professional with SP1
Windows 2000 with SP4
Windows Server(R) 2003

Large (500+ Managed Systems):

Windows Server 2003
Windows 2000 with SP4

Recommended Minimum Hardware Configuration for IT Assistant
(by Enterprise Size)

Small (up to 500 Managed Systems):

Processor: 1 processor (1.8-GHz minimum)
Memory: 512 MB
Disk Space: at least 4 GB

Large (500+ Managed Systems):

Processor: 2 to 4 processors (800-MHz minimum)
Memory: 1-2 GB
Disk Space: as much as 10 GB

NOTE: The disk space needed may increase based on the:

- * Number of Dell Update Packages you are importing for software update.
- * Number of MSI files you are importing for software deployment.
- * Amount of performance monitoring sample data you are collecting.

Recommended Operating System Updates

* If you have set up WMI discovery and enter incorrect credentials, the memory consumed by the IT Assistant services keeps increasing. After running for a few days, this could cause IT Assistant services to crash due to insufficient memory. This has been traced to memory leaks in the underlying COM libraries. Applicable OS: Win2000-SP4 issue KB Article:
<http://support.microsoft.com/?kbid=891861>
<http://support.microsoft.com/kb/891861/en-us>

* If you have set up WMI discovery/performance monitoring, the memory consumed by the IT Assistant services keeps increasing. After running for a few days, this could cause IT Assistant services to crash due to insufficient memory. Applicable OS: Win2K3 SP1/WinXP SP2 KB Article:
<http://support.microsoft.com/kb/911262/en-us>

Additional Required Software

* For Dell/EMC storage arrays, you will need to be sure your array is at FLARE(R) version 19 or above. You will also need to install Navisphere(R) Secure CLI (version 19 or above) on your management station. This CLI software is part of the IT Assistant install.

Recommended SQL Server Updates

SQL Server 2000 SP3 is required for using SQL Server 2000 as the database.

SQL Server 2005 SP1 is required for using SQL Server 2005 as the database.

RELEASE HIGHLIGHTS
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* Storage Integration
You can use IT Assistant to discover and monitor Dell PowerVault Modular Disk Storage Arrays, as well as to inventory detailed storage data such as Array Disks that can be reported using the reporting sub-system.

INSTALLATION
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(A) First-time Installation of IT Assistant 8.0.1

See the "Dell OpenManage Installation and Security User's Guide" for instructions on setting up IT Assistant for the first time on a system.

(B) Upgrade from IT Assistant 6.x to IT Assistant 8.0.1

IT Assistant 8.0.1 does not support a direct upgrade from versions 6.x or older. To upgrade from version 6.x to 8.0.1, first install version 7.0, and then apply version 8.0.1 as an upgrade.

NOTE: During an upgrade from version 6.x of IT Assistant to version 7.0, the installation will preserve the following settings:

- (a) Global configuration settings
 - (b) Discovery configuration settings
 - (c) Event Stored actions
- Any other database information such as custom groups, custom event filters, or event categories will not be migrated because the database schema is not compatible with earlier versions of IT Assistant. To save this information, back up your original database

before upgrading.

(C) Upgrade from IT Assistant 7.0 to IT Assistant 8.0.1

If you have changed the data that was prepopulated as part of the 7.0 install in the Report and EventSource tables, that you want to retain after upgrading to 8.0.1, take a backup of these tables and manually restore them after the upgrade.

NOTE: If the CIM protocol was used before an upgrade, after the upgrade it is important to verify that the CIM credentials are qualified with a domain or localhost if no trusted domain is configured (for example, domain\administrator or localhost\administrator). The CIM credentials can be seen by editing the imported discovery ranges in the CIM Configuration Pane. If this is not done, devices will not be discovered through the CIM protocol.

USER NOTES
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Software Updates

NOTE: IT Assistant does not support software update task on the management station, as a software update might require a reboot that will impact other scheduled tasks being run on the management station. Perform updates using a "Dell PowerEdge Server Update Utility" CD after closing the IT Assistant application.

Software Updates For Linux

To perform a remote Linux software update, IT Assistant uses Plink for SSH communication. By default, IT Assistant will pass your password as a command-line parameter to Plink. Note that this occurs only on the IT Assistant Server. Passwords are always encrypted when transferred to the managed system. If you are concerned about passing passwords through the command line on the IT Assistant server, then you can configure the updates to use RSA keys instead of passwords. A blank password in IT Assistant will trigger SSH authentication using RSA keys. The following steps guide you through the process for creating RSA keys. This process assumes that you are running an SSH2 server and that you are using RSA2 keys.

1. Run PuTTYgen (or your preferred mechanism) for generating public/private key pairs. You can save your private keys (".ppk" files) at any location on your system.

The following is a sample public key that you would put in a file that you create called "authorized_keys2 for RSA2 keys."

```
ssh-rsa AAAAB3NzaC1yc2EAAAABJQAAAIEAxfMzTwS4Cwnua61h7kiad9l3HvlSeFIYPsZOrCYMuA++  
9mPRraUEtrKNkwdPKqPnc2/JFHyAxOu31jfUgQqgM2CSqwdr7fuowjseVVPTuG5JdVR1BwUAXIJK/
```

Hy1BM+mkKHMuNe0jTrN/gUxcmlA0IHFaFNRjV++AeM15upJsk= rsa-key-20050209

Linux ships with other utilities for creating public/private key pairs. You can download PuTTYgen from the following Web address:
"<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>"

Your public keys will go in the following configuration file on the Linux system.

~/.ssh/authorized_keys2

2. Create this file, if it is not present.
3. You can store your private keys in the directory of your choice. For security reasons, it is recommended that you set the appropriate permissions for your private key files.

Here is a sample "sshconfig.pro" file where you will configure the names and location of your private keys.

```
#server[.user]=<path-to-file>
#A server-name of global would be appropriate to accommodate a
network where all or most systems are set up using the same key.
#global[.user]=<path-to-file>
global.root=C:\SSH Private Keys\root\global_root_privatekey.ppk
global.fred=C:\SSH Private Keys\fred\global_fred_privatekey.ppk
192.168.157.149.root=C:\SSH Private Keys\root\system1_root_privatekey.ppk
192.168.157.151.fred=C:\SSH Private Keys\fred\system2_fred_privatekey.ppk
```

4. Copy "sshconfig.pro" to the bin folder of IT Assistant. By default, this folder is located at:
c:\Program Files\Dell\SysMgmt\ItaAssistant\bin directory

Entering a blank password will trigger the usage of the RSA keys instead of passwords. IT Assistant will then attempt to find the entry in "sshconfig.pro" file. If IT Assistant can find the system and user or global key in the above file, IT Assistant will use the ".ppk" file for establishing an SSH connection to the server. If IT Assistant cannot find this information, then it will assume that you meant to enter a blank password.

For further documentation on the usage of public keys for SSH authentication, go to the following Web address:
"<http://www.tartarus.org/~simon/puttydoc/Chapter8.html>"

4. Creating templates for Import Node List Utility.
A template can be created in IT Assistant by entering a discovery range. To create a template for the Import Node List Utility:

- 1) Log in to IT Assistant.
- 2) In the "Discovery and Monitoring" menu, select "Ranges."
- 3) Right-click "Include Ranges" in the "Discovery Ranges" tree and select "New Include Range..."
- 4) In the "New Discovery Wizard-Step 1 of 6," select "Host Name."
- 5) Enter the template name in "Host Name." (For example, template_1).

Complete the wizard by entering the required protocol configurations. The template you have created can be used in Import Node List Utility.

Reports

*Install Array Manager on the managed systems for retrieving the "Volume Info Report."

Modular Disk Storage Manager

Install DirectX 8.1 in the system to run IT Assistant with the Modular Disk Storage Manager under Windows 2000 Server.

KNOWN ISSUES

- * If you attempt to update the BIOS from version A05 or earlier on a PowerEdge(TM) 1500SC that has 4 GB of system memory installed, the system stops responding on the BIOS post screen. The system must be manually rebooted and the BIOS will not be updated. To avoid this issue, you can either use the diskette flash method or you can temporarily remove some memory before performing the update. (148580)

- * If you have a Windows Firewall configured on the management station or the managed system, the following configuration changes need to be done to enable remote Server Administrator CLI and software updates to work successfully.
Management Station:
 - 1) Open TCP port 135.
 - 2) Add the application "omremote.exe" (located in ITAssistant\bin) to the Firewall exception list.Managed System:
If you have Windows Firewall configured, enable remote administration by running the following command in the Command Prompt:
"netsh firewall set service RemoteAdmin"
For additional information on connecting through the Windows Firewall, see the Platform SDK: Windows Management Instrumentation (Connecting through Windows Firewall) on Microsoft's MSDN website.
http://msdn.microsoft.com/library/en-us/wmisdk/wmi/connecting_through_windows_firewall.asp
(141134)

- * When running Firefox on Red Hat(R) Enterprise Linux versions 3.0 and 4.0, the focus on a component may disappear when you hide a Modal Dialog. This is a known issue with Java(TM) (Issue ID: 6274378).
To regain application focus, click outside the context of the browser in which IT Assistant is running, and then click back within the IT Assistant User Interface (UI). (146975)

* The preference and help pages on the IT Assistant browser will be active only after IT Assistant is completely loaded. (145205)

* If you create a Generic Command Line Task, you cannot enter the Server Administrator Command Line executable directly. (for example, "omreport system summary"). To create a Server Administrator Command Line Task that runs against the system where the IT Assistant services are installed, select that system in the device selection tree pane and do not enter credentials for the task. (139376)

* Dell PowerEdge servers with DRAC III, DRAC III/XT, ERA, or ERA/O will be displayed in the IT Assistant Device tree under modular systems if the out-of-band SNMP agent property is enabled with "racadm." This property is not supported on the DRAC III family and will be disabled in the next firmware release. If you see systems with a DRAC III card under modular systems, use the racadm command-line utility to disable the property with the following command:

Locally on the server with the DRAC card:

```
"racadm config -g cfgOobSnmp -o cfgOobSnmpAgentEnable 0"
```

Remotely from a management station with the RAC management software installed:

```
"racadm -r <ipaddress of RAC card> -u <RAC username> -p  
<RAC password> config -g cfgOobSnmp -o cfgOobSnmpAgentEnable 0"  
(139394)
```

* On Windows 2000, you may see an error message on launching the Remote Desktop Connection application using the right-click menu option on the Device tree. This issue may occur because older versions of the client do not get installed in the system path. To correct this problem, install a later version of the Remote Desktop Client (6.0.2600.0 or later). You can download the client from Microsoft's website at:
"<http://www.microsoft.com/windowsxp/downloads/tools/rdclientdl.msp>."
(139630)

* When running Mozilla on Linux:
Using the "View | Reload" (Ctrl + R) command in Mozilla results in unpredictable behavior. IT Assistant may reload in some cases, but at other times you may see the following message:

```
"An instance of the IT Assistant console is already running on  
this device."
```

To address this issue, close the browser session and open a new session. (132635)

* When name resolution on an IP address to a host name fails using

DNS, then IT Assistant attempts to resolve the name using NetBIOS name query. This action may cause the device to appear in IT Assistant with the NetBIOS name even if it does not have a DNS entry. (138013)

* The IT Assistant UI supports the Mozilla browser only on systems running the Linux operating system. On systems running the Windows operating system, the supported browser is Internet Explorer. (137365)

* If you use a special character font (for example, Wingdings(R) or a similar font) for your report name, the report is saved correctly but the name will be displayed as question marks instead of the special character font. To avoid this issue, use only standard fonts for report names. (135701)

* If you have Java Runtime Environment JRE(TM) versions 1.3 and 1.5.0 installed on your IT Assistant UI client, and you uninstall an older version of the JRE, the IT Assistant UI may request that you reinstall JRE version 1.5.0. To correct this problem, uninstall JRE version 1.5.0 and then reinstall it by opening the IT Assistant UI. (137304)

For more information on this issue, see bug ID:4994468 on "<http://bugs.sun.com>."

* When opening the IT Assistant UI, respond to the security certificate challenge box within approximately 5 minutes; otherwise the UI will time-out and fail to load. To correct this problem, close the current UI and re-open it. (102193)

* IT Assistant 8.0.1 does not work well with operating system schemes that use very large fonts (for example, various "High Contrast" schemes in Windows). Changing the display settings to use such a scheme may cause text in various parts of IT Assistant to appear incomplete or truncated. If you notice this situation, change the display properties.

To change the display properties on Windows systems:

1. Click the "Start" button, click "Settings"-> "Control Panel"-> "Display Settings," then select the "Appearance" tab.
2. Select a scheme with smaller fonts.
3. Close the browser and restart IT Assistant to implement the new settings.

On Linux systems, similar problems may occur if the system font size selected is too large. To correct this issue, select smaller fonts ("Start"-> "Preferences"-> "Fonts") and restart the application. (102193)

* To disable mnemonics at the operating system level, close and restart the IT Assistant browser session. Doing so allows the JRE

to re-load and implement the new settings. (120978)

- * When managing an environment with more than 2000 devices, increase the amount of memory allocated to the JRE heap.

Open the Windows Control Panel and click the "Java" icon to display "Java Control Panel." Select the "Java" tab. Then click "Java Applet Runtime Settings | View..." Enter -Xmx256m in the "Java Runtime Parameters" section. (123581)

- * Changing the display "Scheme" option under "Preferences," which you can access on the topmost IT Assistant menu bar, is not supported in this version of IT Assistant. (123829)
- * When viewing Network Interface Card (NIC) information of Red Hat Linux systems on the "Details" page, the information may not be aligned correctly. IP addresses may not align with the correct MAC addresses, or the IP and MAC addresses may not be displayed at all. This issue has been fixed in the Red Hat net-snmp package. To correct this issue, install the latest Red Hat net-snmp package on the managed system. (131619,74483)

- * If you try to open a second session of IT Assistant on the same system while using the Mozilla browser, an error message is displayed stating that only one browser session at a time may be used. Close the second browser session using the Mozilla "File | Close" command or by clicking the "X" in the top right of the browser window. Do not click the IT Assistant "Logout" hotlink on the top Global Navigation bar on the top right of the window. As only one session is allowed per client, clicking "Logout" would have the effect of logging out of the first browser session as well. (131954)

- * A registry editor error occurs while opening the IT Assistant UI on a system with less than the required space. The IT Assistant client requires 25 MB of available hard-drive space. (132615)

- * The reporting system generates the output in Unicode format ("<http://www.unicode.org>"). To open the CSV reports in Microsoft Excel(R), open Microsoft Excel and run the "File | Open" command. Select the "comma delimited" option to open the report with the data in the correct columns. (132619)

- * When you mouse-over a device in the Topology view, a white box or flicker may appear instead of the tool tip containing the device data. (133161)

For more information on this issue, see bug ID:4762705 on "<http://bugs.sun.com>."

- * "Device Name" is a default field and is present in all reports. (134260)

- * For Remote Access Controllers (RACs) that have instrumentation

installed and that are running on the host operating system, the RAC IP addresses are shown in the "RACDevice" table. (134365)

* If your browser is set to a language that is different from the language setting on the IT Assistant system, you may see both languages displayed in the client system. To correct this problem, set the browser and the system to the same language. (133691)

* If an alert storm is sending more than 5 traps a second to IT Assistant, it could take IT Assistant several minutes to process all the alerts. New alerts that are received in the interim will not be displayed in the UI until all the alerts in the storm are processed.

* Pressing "Next," "Previous," or "Refresh" on the "Alerts" page of the UI, while a constant stream of alerts are being processed by IT Assistant, may cause the counters in the "Alerts" page of the UI to fall short. To correct this problem, click "Refresh" when the constant stream of alerts has subsided. The refresh action does not impact any alert actions. (134862)

* When creating or updating a task, the stamp for the creation or update time is that of the IT Assistant UI. The "Last Run Time" displayed on the summary report, however, is the time of the IT Assistant Services system. If there is a significant variation in the UI and Services system time, it is possible that a scheduled task may not execute or show that it was executed before it was created.(137997)

* For NIC information on systems, IT Assistant uses the operating system's provider(s) to retrieve data rather than Server Administrator. This behavior can result in discrepancies in reporting NIC information between IT Assistant and Server Administrator. For example:

1. On Linux systems, adapters may be named differently between IT Assistant and Server Administrator. For example, IT Assistant may report a NIC adapter as "eth0," while Server Administrator shows the actual manufacturer name of the NIC.

2. If more than one NIC card is not configured with an IP address, IT Assistant may show only one of the cards with an IP address of 0.0.0.0.

3. IT Assistant may not report disabled NIC adapters.

4. On Novell(R) NetWare(R) systems, since NetWare reports each NIC port as a NIC interface entry, IT Assistant may show more NIC interfaces than are actually present in the system. (138454)

* IT Assistant may not allow login if the host name/domain name contains non-standard characters. Standard characters include letters (A-Z, a-z), digits (0-9), and hyphen (-). For more

information on this issue, see the Microsoft article at <http://support.microsoft.com/default.aspx?scid=kb;en-us;153529>. (152055)

- * While performing discovery, if a device is discovered using "host name," and if its IP Address changes at a later time, IT Assistant will display two devices after the next discovery cycle. One device will display the old IP address and status as Power Down, while the other will display the new IP Address. This problem is likely to affect systems that have DNS-DHCP IP addressing and for which the IP addresses frequently change. A workaround to eliminate duplicate device is to delete the device with the old IP address. (148069)
- * IT Assistant will discover a RAC under the RAC group only if IT Assistant can communicate out-of-band (bypassing the operating system) with the SNMP agent on the controller. DRAC III (and below) do not have this capability, and hence would not be grouped under the RAC group. DRAC 4 (and above) support out-of-band communication with the SNMP agent and are discovered under the RAC group. (151535)
- * The choice of protocols specified for discovering and managing the devices can result in varying levels of manageability. For instance, if you choose to manage devices in your network using only CIM, the devices with only SNMP agent (example DRAC) will get classified under the "Unknown" group and consequently, you may not get application launch (example RAC console) functionality for the same. To avoid such issues, make a careful choice of the protocols while configuring discovery ranges, keeping in mind the devices (and protocols supported by agents running on those devices) that you are going to manage. (153729)
- * If you change Web Server properties (like the HTTPS port, session timeout etc.) that require the Web Server to be restarted after applying changes, manually restart the "IT Assistant Connection Service" under "Administrative Tools" in the "Control Panel." Failing to restart the service manually will continue running the Web Server with old settings. (152604, 152476)
- * The processor count in IT Assistant will differ for managed systems that contain processors with multiple cores or hyperthreading enabled. The count will differ based on whether the managed system is discovered using the CIM or SNMP protocol. The systems discovered using SNMP will report physical processors, and the systems discovered using CIM will report logical processors.
- * After the JRE is installed, if you change the operating system language of the system from where the IT Assistant UI is run (from the Regional and Language Options settings), the JRE may fail to load using the new operating system language and exit during the IT Assistant startup. For the language changes to be supported by the JRE, un-install it and then launch IT Assistant. This will install the JRE with support for the new operating system language.

* After installing IT Assistant, if you reinstall the database application (Example: MSDE 2000/SQL Server 2000 etc - which is used by IT Assistant) then IT Assistant database will be detached from the database application. Run the following command manually to attach it back to the application.

NOTE: The command mentioned below shows the default location of SQL Server. Use the exact path to locate the database files.

```
EXEC sp_attach_db @dbname = 'ITAssist', @filename1 =  
'C:\Program Files\Microsoft SQL Server\MSSQL\Data\ITAssist_Data.MDF',  
@filename2 = 'C:\Program Files\Microsoft SQL Server\MSSQL\Data\ITAssist_Log.LDF'
```

- This command can be run directly in SQL Query Analyzer. Or on command prompt, run this command by using "OSQL -E."
- After executing the command, ensure that IT Assistant services ("DSM IT Assistant Connection Service" and "DSM IT Assistant Network Monitor") are up and running.

* IT Assistant incorrectly associates a stand alone Dell PowerConnect(TM) 3448 switch with a modular chassis, as the switch Firmware incorrectly reports a non-blank chassis service tag. This issue will be corrected in the next Firmware release for the 3448 switch.

* The password changes on a Windows managed system will not have any effect on the performance monitoring task if the connection to the managed system has already been established.(DF71103)

* If you are managing a Dell/EMC AX100i (iSCSI) array, see the EMC PowerLink website and view the information in Knowledge Base article emc136753 for obtaining a FLARE patch. This patch will fix a problem with discovering AX100i devices.

* NIC information is not displayed in the device details screen for Dell/EMC arrays. Use Navisphere Manager to view these details.

* When using the Broadcom ASF client utility to change Administrator or Operator permissions on your client machine, re-discover the device in IT Assistant to apply the changes before creating any new ASF power control tasks.

* The time displayed in the reports generated by IT Assistant and the "Device Summary/Details" page are in the time zone corresponding to the management station. (75603)

* If you are managing a Dell/EMC storage array, note that you need to enter the IP address for only one of the storage processors (that is, either SPA or SPB, and not both) in the discovery range. The storage processors are redundant and return the same inventory data to IT Assistant. If you enter both SPs in the discovery range, only one SP will be displayed in the device tree.

* IT Assistant bundles JRE plug-in version Java 5.0, update 6. If you have Java 5.0 (without any update), or below, or no JRE installed, the plug-in installer will install Java 5.0 update 6. However, if the UI client system has any update (say, Java 5.0 update 1) installed, the plugin installer does not update the JRE to Java 5.0 update 6. The IT Assistant UI runs with the installed JRE version. The workaround is to manually update the JRE to Java 5.0 update 6 by pointing the browser to https://<host name>:<port number>/jre-1_5_0_06-windows-i586-p.exe. (74417)

* On Dell PowerEdge x8xx systems (IPMI 1.5 systems) discovered through IPMI, system health will not reflect any redundancy information. For example, if one of the redundant power supplies is down and the other is available, the system health will still indicate green. (78500)

* While browsing the SNMP MIB in the Device details tab, the timeout values may have to be changed to enable retrieval of large entries from the MIB. The timeout value that controls the MIB retrieval is for the range applicable to the device. (SNMP configuration timeout in step 3 of the Edit Discovery Wizard.) The request timeout values may also need to be changed. (80132)

* IT Assistant will not work as expected if IP version6 is enabled on the Management Station. (79768)

* It is not recommended to provide an IP address in multiple ranges, especially with IPMI Protocol. This could result in duplicate devices displayed on the device tree. (78710)

* For discovering systems running SUSE(TM) Linux using SNMP, add the following to the snmpd.conf:

```
-----  
com2sec mynetwork 192.168.1.0/24 public  
group MyRWGroup v1 mynetwork  
view all included .1 80  
access MyRWGroup "" any noauth exact all all none  
-----
```

Ensure to retain the trapsink and the smuxpeer lines in the existing conf file. Everything else can be deleted. In the line containing "com2sec mynetwork...", substitute the existing address with the subnet address your management station is on. For example, if your IT Assistant system has an IP address of 143.166.29.117, then substitute it with 143.166.29.0. Ensure to retain "/24."
Restart /etc/init.d/snmpd. (81249)

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