##

DELL OPENMANAGE(TM) IT ASSISTANT VERSION 7.2 README

##

NOTE: This readme provides information for IT Assistant version 7.2.

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(TM) Support website at "support.dell.com."

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##
CRITICALITY
##

2 - Recommended

##
COMPATIBILITY/RECOMMENDED REQUIREMENTS
##

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(TM) 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 1 GB

Large (500+ Managed Systems):

 Processor:2 to 4 processors (800-MHz minimum)
 Memory: 1-2 GB
 Disk Space: as much as 5 GB

NOTE: The amount of disk space needed may increase if you import
multiple Dell Update Packages.

##
RELEASE HIGHLIGHTS
##

* Updates on the previous release (IT Assistant version 7.1)

 - Event Source:

    1. A new Baseboard Management Controller (BMC) trap has
       been added: "asfTrapCPUNotPresent."

    2. The severity for "asfTrapSystemEventLogFull" has been
       identified as "Critical."

    3. The severity for "asfTrapBatteryFailed" has been
       identified as "Critical."

 - The following two issues have been fixed in the software update
   feature:

    1. Java security dialog box: When the user navigates to

"Manage" -> "Software Updates" and opens a catalog.xml
file, IT Assistant version 7.1 used to display a Java
security warning dialog box. You will not see this dialog
box in this release.

   2. Blank error message blocks the software repository
   feature: IT Assistant version 7.1 would hang, displaying
   a blank error dialog box if you imported software
   packages/bundles, closed the browser, re-opened it, and
   navigated to "Manage" -> "Software Updates." This issue has
   been resolved in this release of IT Assistant.

* User Authentication
  IT Assistant now uses operating system or domain-based
  authentication; the IT Assistant 6.x read/write password is no
  longer used. See "Single Sign-On" in the online help documentation
  for additional information.

* Native Install
  The Dell OpenManage systems management products are now installed
  using the installation process native to the operating system.

* User Interface (UI) Design and Online Help
  In addition to the new functionality described here, the IT
  Assistant UI now includes wizard-based dialogs for doing most of
  the standard tasks. IT Assistant menu bar options have changed, so
  earlier users should familiarize themselves with the new layout.

* Comprehensive online help is now available from the Help link at
  the top right of the IT Assistant window and from the
  content-specific Help buttons within individual dialogs.

* The UI is exclusively web-based, uses Sun Microsystems (TM)
  Java (TM) technology, and now supports Linux systems.

* DMI Support
  IT Assistant no longer supports the Desktop Management Interface
  (DMI) protocol. So systems running DMI using Dell OpenManage Server
  Agent 4.5.1 (and below) and Dell OpenManage Client Instrumentation
  6.0 (and below) will not be discovered by IT Assistant.

* New Topology View
  In the UI, you can select "Views" -> "Topology" to see a graphic and
  hierarchical presentation of the devices in your network. When you
  double-click the icon to view the group, you move down through the
  hierarchy. Additionally, you can display detailed device information
  by moving the cursor over each icon. You can also carry out tasks on
  the devices in this view, such as application launch, refresh
  inventory and status, and troubleshooting.

* Dynamic Groups
  You can create dynamic groups of devices to manage and monitor
  them more effectively.

* Application Launch
  IT Assistant provides a consolidated launch point for the following
  Dell systems management applications: Dell OpenManage Server
  Administrator, Dell OpenManage Array Manager, Remote Access
  Console, Dell PowerConnect(TM), and Digital KVM
  (keyboard/video/mouse).

* Reporting
  IT Assistant offers a customizable reporting feature that gathers
  data from the Microsoft Data Engine (MSDE) or SQL server database.
  Report results are based on the data gathered in the last discovery
  and/or inventory cycle. The report interface wizard is designed to
  allow you to select actual fields in the IT Assistant database. You
  can create a report containing information such as:

  -Details of the hardware devices being managed by IT Assistant,
   including systems, switches, and storage devices
  -BIOS, firmware, and driver versions
  -Other asset or cost of ownership details

  You can also specify the output format, such as HTML, XML, or
  comma-separated value (CSV) (for use in a spreadsheet tool, such as
  Microsoft Excel). IT Assistant saves the report definitions for
  later use and retrieval.

* Software Updates
  IT Assistant allows you to load Update Packages and System Update
  Sets into a central repository, and then compare the packages to the
  versions of the software currently running on your enterprise
  systems. You can then decide whether to update systems that are not
  in compliance, either immediately or according to a schedule you
  define. You can also customize the view of the package information
  by operating system, device name, component name, and software
  type.

* Manage Tasks
  IT Assistant now provides an updated tasking functionality that
  allows you to set up and remotely run certain tasks on all systems
  in your enterprise, including device control (shut down and wake
  up), software update, and command-line execution.

* Troubleshooting Tool
  A graphical troubleshooting tool is now available at
  "Tools" -> "Troubleshooting" Tool in the IT Assistant UI to diagnose
  and resolve discovery and configuration problems, including Simple
  Network Management Protocol (SNMP) and Common Information Model
  (CIM) issues. You can also use the tool to test device and e-mail
  connectivity.

* Enhanced Inventory Cycle
  IT Assistant collects inventory information such as software and
  firmware versions, as well as device-related information about
  memory, processor, power supply, PCI cards and embedded devices,
  and storage.

* Single Sign-On
 The "Single Sign-On" option on Windows systems enables all
 logged-in users to bypass the login page and access IT Assistant by
 clicking the IT Assistant icon on their desktop. To enable single
 sign-on for IT Assistant:

 1. Navigate to "Tools" in Internet Explorer.
 2. Under "Tools," click "Internet Options."
 3. Under "Internet Options," click the "Security" tab.
 4. Select the security zone that the IT Assistant system falls
    within. (By default, it falls under "Local intranet." If it is
    already added in "Trusted sites," then the setting needs to be
    done under that zone).
 5. Click the "Custom Level" button.
 6. Under "User Authentication," select the "Automatic Logon
    with current username and password" radio button.

###
INSTALLATION
###

(A) First-time Installation of IT Assistant version 7.2

For instructions for a first time installation of IT Assistant on a
system, see the "Dell OpenManage Installation and Security User's
Guide."

(B) Upgrade from IT Assistant 6.x to IT Assistant version 7.2

IT Assistant version 7.2 does not support a direct upgrade from
version 6.x or later. To upgrade from version 6.x to 7.2, first
install IT Assistant version 7.0, and then apply version 7.2 as an
upgrade.

NOTE: During an upgrade from version 6.x of IT Assistant to version
7.0, by default 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, and event categories will not be migrated because the
database schema is not compatible with previous versions of IT
Assistant. If you want to save this information, you must backup
your original database before upgrading.

(C) Upgrade from IT Assistant version 7.0/7.1 to IT Assistant
    version 7.2

If you have changed the data (that was pre-populated as part of the
IT Assistant version 7.0 install in the Report and EventSource
tables) that you want to preserve after upgrading to IT Assistant
version 7.2, 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
##

Software Updates

Note:
IT Assistant does not support software updates on the management
station. This is because a software update might require a reboot
which would impact other scheduled tasks being run on the management
station. Updates can be performed using the "Dell PowerEdge(TM)
Updates" 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, 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 AAAAB3NzaC1yc2EAAAABJQAAAIEAxfMzTwS4Cwnua61h7kiad9l3HvlSeF
   IYPsZOrCYMuA++9mPRraUEtrKNkwdaPKqPnc2/JFHyAxOu31jfUgQqgM2CSqwdr7fu
   owjseVVPTuG5JdVR1BwUAXlJK/Hy1BM+mkKHMuNe0jTrN/gUxcmlA0lHFaFNRjV++
   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 setup 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\ItAssistant\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 the "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"

5. Creating templates for the 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,
   perform the following steps:

   1) Log on to IT Assistant.
   2) In the "Discovery and Monitoring" menu, select "Ranges."
   3) Right-click on "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 the
Import Node List Utility.

##
KNOWN ISSUES
##

The following are known issues for IT Assistant version 7.2.

* If you attempt to update the BIOS from version A05 or earlier on
  a PowerEdge 1500SC that has 4 GB of system memory installed, the
  system hangs on the BIOS post screen. The system must be rebooted
  manually 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.

* If you have a Windows firewall configured on the management station
  or the managed system, the following configuration changes need to
  be carried out 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 invoking 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 web site.
  "http://msdn.microsoft.com/library/en-us/wmisdk/wmi/
   connecting_through_windows_firewall.asp"

* When running Firefox on Red Hat(R) Enterprise Linux (versions 3 and
  4), the focus on a component may disappear when you hide a Modal
  Dialog. This is a known issue with Java (Issue ID: 6274378). To
  solve this issue and to re-gain application focus, click
  outside the context of the browser in which IT Assistant is
  running, and then click "Back" within the IT Assistant UI.

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

* 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.

* 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 servers
  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"

* On Windows 2000, you may get an error message when you launch 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 higher). You can download the
  client from the Microsoft's web site at:
  "http://www.microsoft.com/windowsxp/downloads/tools/rdclientdl.mspx."

* 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 the user may see the following message:

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

  To correct this issue, close the browser session and open a new
  one.

* When name resolution on an IP address to a host name fails using
  DNS, then IT Assistant attempts to resolve the name using the
  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.

* 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.

* 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.

* If you have JRE 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.

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

* When opening the IT Assistant UI, you must 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.

* IT Assistant version 7.2 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 issue, change
  the Display properties.

  To change the Display properties on Windows systems:

  1. Go to "Start" -> "Settings" -> "Control Panel" -> "Display
     Settings", and then go to 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.

* To disable mnemonics at the operating system level, you must close
  and restart the IT Assistant browser session. Doing so allows the
  JRE to re-load and implement the new settings.

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

  To do so, go to the Windows Control Panel and click the "Java"
  icon to display the "Java Control Panel." Click the "Java" tab.

Then click "Java Applet Runtime Settings | View...". Enter the
following in the "Java Runtime Parameters" section:

-Xmx256m

* Changing the display "Scheme" option under "Preferences," which
  you access on the topmost IT Assistant menu bar is not supported
  in this version of IT Assistant.

* When viewing IP addresses of Red Hat Enterprise Linux systems on
  the Details page, the information may not be aligned correctly.
  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.

* 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. You should 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 at the top right of the
  window. Since only one session is allowed per client, clicking
  "Logout" would have the effect of logging out of the first browser
  session as well.

* 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.

* The reporting system generates all of its output in Unicode format
  ("http://www.unicode.org"). To open the CSV reports in Excel, you
  should start Microsoft Excel and run the "File | Open" command.
  Doing so displays the Import Wizard. Choose the "comma delimited"
  option to open the report with the data in the correct columns.

* In certain cases, when you hover over a device while in the
  Topology view, instead of the proper tool tip being displayed
  which contains device data, a white box or flicker appears. This
  condition usually occurs when hovering over a device near the
  bottom of the screen.

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

* "Device Name" is a default field and is present in all reports.

* 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.

* 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

situation, set the browser and the system to the same language.

* 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 of the alerts in the storm
  are processed.

* Pressing "Next," "Previous," or "Refresh" in 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 resolve the alert count problem, click "Refresh"
  when the constant stream of alerts has subsided. The refresh does
  not impact any alert actions.

* 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.

* For Network Interface Card (NIC) information on servers, 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 only show 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.

* IT Assistant may not allow the user to log on 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.

* During discovery, if a device is discovered using "host name,"
  and if its IP Address changes later, 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 which have DNS-DHCP IP addressing and for which the IP addresses frequently change. To eliminate a duplicate device delete the device with the old IP address.

* IT Assistant will discover a Remote Access Controller 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 are not grouped under the RAC group. DRAC 4 (and later) support out-of-band communication with the SNMP agent and would get discovered under the RAC group.

* 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 and not SNMP, the devices with only SNMP agent (example DRAC) will get classified under "Unknown" group and consequently, the application launch (example RAC console) functionality may not work. 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.

* If you change web server properties (like the HTTPS port and session timeout) that require the web-server to be restarted after applying changes, you have to manually restart the "IT Assistant Connection Service" under "Administrative Tools" in the "Control Panel." If you fail to restart the service manually, the web-server will continue with the old settings.

* 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 Java Runtime (JRE) is installed, if you change the OS language of the system from where the IT Assistant UI is run (from the Regional and Language Options settings), the JRE might fail to load using the new OS 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 OS language.

##
THIRD PARTY DISCLAIMER
##
The following disclaimer applies to the "TreeTable" control code in IT Assistant:

refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

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