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DELL(TM) MANAGEMENT PACK 2.1 FOR MICROSOFT(R) OPERATIONS MANAGER 2005
SP1 and MICROSOFT OPERATIONS MANAGER 2005 WORKGROUP EDITION SP1 README

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NOTE: This readme provides information for Dell Management Pack
     for Microsoft Operations Manager (MOM) version 2.1. Dell
     OpenManage Connection for Microsoft Operations Manager is
     hereafter referred to as the Connection.

This file contains updated information for your "Dell Management Pack
for Microsoft Operations Manager User's Guide" and any other
technical documentation included with the Dell Management Pack for
MOM.

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

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The Dell Management Pack for MOM enables the Microsoft Operations
Manager to accurately depict the status of Dell systems on a defined
network segment. This improved representation, which includes the
receipt of failure and pre-failure alerts, allows Dell customers to
assess, respond to, and ensure the availability of Dell systems
monitored in the MOM environment. In addition to improved
availability, the Management Pack enhances the ability to monitor
and manage the hardware in a single management solution. In short,
the Dell Management Pack integrates with MOM to aid the discovery
and status management of Dell systems.

This file contains the following sections:

* Criticality

* Minimum Requirements

* Release Highlights

* Installation/Upgrade

* User Notes

* Known Issue

* History

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CRITICALITY
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2 - Recommended

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MINIMUM REQUIREMENTS
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This section provides information about the minimum requirements for
installing and using the Dell Management Pack for Microsoft
Operations Manager.

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Managed System Software Requirements
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* Operating system support: Microsoft Windows(R) 2000 Server (SP4 or
  later), Windows 2000 Advanced Server (SP4 or later), Windows
  Server(TM) 2003 (Standard, Web, and Enterprise Edition), Windows
  Server 2003 SP1 (Standard, Web, and Enterprise Edition), Windows
  Server 2003 SP1 x64 (Standard, Web, and Enterprise Edition), Windows
  Server 2003 R2 (Standard and Enterprise Edition), Windows Server
  2003 R2 x64 (Standard and Enterprise Edition), Windows Small Business
  Server (SBS) 2000 SP1 and Windows SBS 2003 SP1

* Dell OpenManage(TM) Server Administrator version: 1.6–5.0

* Dell OpenManage Storage Management Service version 1.0–2.0

* Dell OpenManage Array Manager version: 3.4–3.7
  NOTE: For receiving alerts from the storage subsystem, you must
       install either Array Manager or the enhanced Storage
       Management Service.

* Browser support for Server Administrator-managed systems:
  For information on browser support for Server Administrator-managed
  systems, see the Server Administrator "readme.txt" file.

NOTE: If the "Launch Server Administrator" Task gives you a "Page
      cannot be displayed" error, ensure that there is network
      connectivity from the Dell server.

NOTE: If any of the Remote power control or LED Identification control
      tasks give you errors, ensure that there is network connectivity
      from the BMC NIC of the Dell server and the BMC is configured
      with a valid IP Address and is IPMI-enabled. For IPMI Shell
      errors, refer "Dell OpenManage Baseboard Management Utilities
      User's Guide" from the Dell OpenManage "Systems
      Management Consoles CD" for details.

NOTE: If you have a Dell Remote Access Controller (DRAC) installed,
      you must install the DRAC agent using the "Dell OpenManage
      Systems Management" CD for Server Administrator versions
      1.6 - 1.9 or the "Dell PowerEdge Installation and Server
      Management" CD for Server Administrator version 2.0 - 5.0.
      During installation, select "Managed Node"-> "DRAC Agent."

NOTE: If the DRAC Console Launch gives you a "Page cannot be
    displayed" error, ensure that there is network connectivity from
    the DRAC card, and that the DRAC is configured with a valid IP
    address.

NOTE: If tooltips are not populated for Dell Servers, ensure the CIM
    Dell namespace is not corrupted and Dell Services are not down.
    Restart the Dell managed node or Re-install Server Administrator
    to correct the CIM behavior.

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MOM Management Console Requirements
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* Microsoft Operations Manager (MOM) 2005 with Service Pack 1 must be
  installed and running.

* MOM agent software must be installed on all Dell-managed systems
  either remotely from the management station or manually on the
  managed system.

* For discovered systems to be recognized as Dell devices in the MOM
  environment, Server Administrator 1.6-5.0 must be installed on all
  Dell-managed systems.

* The "MOM Management Server Action Account" must have local Admin
  privileges on all the agent-managed systems.

* To run remote power control or LED Identification control tasks on
  Dell-managed systems, BMC Management Utility 2.0 must be installed on the
  Management Server. BMC Management Utility 2.0 is available on the
  Dell OpenManage 5.0 "System Management Consoles" CD.

NOTE: When Usernames, passwords or KGKeys for the BMC are changed, the
    BMC login details of the corresponding server should also be
    manually updated in the
    "Individual_BMC_Authentication_Credentials" section of the
    "%Management_Group_Name%_bmcServers.xml" file, which is present
    in the ipmish binary directory on the management server.

    By default, individual BMC username, password, and KGKey will
    be used by the Remote power control and LED Identification
    control tasks. Global BMC Authentication Credentials are
    disabled when either BMC_UserName or BMC_Password or
    BMC_KGKey of the Global Credential section is set to -1 in the
    XML file.

    For enabling the use of Global BMC Authentication Credentials
    (that is, one global BMC_UserName, BMC_Password, and BMC_KGKey
    for BMCs of all Dell systems), replace the -1 value with the
    exact login credentials for the BMC_UserName, BMC_Password, and
    BMC_KGKey in the Global BMC Authentication Credentials Section.

BMC_KGKey entered in the XML file should be a valid hexadecimal.

NOTE: The component name in Dell Services in the Dell State View
    reflects the corresponding Dell OpenManage Service name for
    releases prior to Dell OpenManage version 5.0:
      * DSM SA Shared Services - Dell OpenManage Common Services
      * DSM SA Connection Service - Secure Port Server
      * DSM SA Data Manager - Systems Management Data Manager
      * DSM SA Event Manager - Systems Management Event Manager

NOTE: Remote Power control tasks, LED Identification control tasks and
    Clear Agent ESM Log will function only for Dell systems on which
    a Dell Agent is installed.

NOTE: Remote Power control tasks and LED identification control tasks
    will provide IPMI Shell Task output only on Dell systems with
    IPMI capability and with Server Administrator installed.

##
RELEASE HIGHLIGHTS
##
NOTE: Dell Management Pack version 2.1 is compatible with MOM 2005 and
    MOM 2005 SP1 only (Full Edition or Workgroup Edition). It does
    not function with prior releases of the MOM product.

* Support for Dell OpenManage Server Administrator version 5.0.

* Support for enhanced Storage Management Service version 2.0.

* Support for Dell OpenManage Array Manager version 3.7.

* Remote power control (Power On, Power Off (graceful and enforced),
  Power Reset, Power Cycle, and Power Status) and LED Identification
  On/Off tasks for Dell systems with BMC Hardware and Server
  Administrator installed.

* Support for new events in Storage Management and battery events in
  Server Administrator.

* State View with Dell OpenManage Services along with Dell hardware
  agents' status.

* Additional classification for Dell systems without Server
  Administrator and a Warning alert for Dell systems where Server
  Administrator is required to be installed.

* Additional tooltips for Dell Computers - Server Administrator version,
  BMC IP Address, IPMI Version, BIOS Version, and RAC Web address.

* Task to Clear Agent ESM Log.

* Task to update State Views Dell Services and Dell Hardware agents'
  status.

* Update of Dell Knowledge Base information to support new event
  processing rules of Server Administrator (including the
  Storage Management) and Array Manager.

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INSTALLATION/UPGRADE
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Installation
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This section describes the installation of Dell Management Pack for:

- MOM 2005 / MOM 2005 SP1 (Full Edition / WorkGroup Edition)

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Installing Dell Management Pack for MOM 2005 / MOM 2005 SP1
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The Dell Management Pack installation package consists of a single
Management Pack module (the "DOMMP21.AKM" file). To install
the Management Pack, import this file by using the MOM "Import
Management Pack" wizard.

NOTE: The following steps require that you install the Management
     Pack on a system that has MOM installed and running.

1. Download the Dell Management Pack, "DOMMP21.exe," from the Dell
   Support website at "support.dell.com." This file is a
   self-extracting ".exe" file.

2. Copy the downloaded file to the destination directory on your
   local system's hard drive.

3. Open the ".exe" file to extract "DOMMP21.AKM."

4. Open the MOM Administrator Console from the
   "Start"-> "Programs"-> "Microsoft Operations Manager 2005" menu.

5. Select "Microsoft Operation Manager" in the left pane view.

6. Select "Import Management Pack" in the right pane view.
   The "Import Management Pack" window appears.

7. Click "Next" on the "Welcome to the Management Pack Import/Export
   Wizard" screen.

8. Select the "Import Management Packs and/or Reports" option and
   click "Next."

9. Enter or browse for the location of the Management Pack, which is
   usually the same location to which you downloaded and extracted
   the contents of the "DOMMP21.exe" file, and then click "Next."

10. Select "DOMMP21.akm" from the list displayed on the "Select
    Management Packs" screen.

11. Click the installation options from the following available
    Options, and click "Next." If you are installing the Management
    Pack for the first time, you may select any of these options:

     - "Update Existing Management Pack. Custom rules,
       enabled/disabled settings, company knowledge are retained" –
       This option specifies that you want to update your existing
       Management Pack processing rules, if any, with the processing
       rules from the new Management Pack.

     - "Replace Existing Management Pack" – This option specifies that
       you want to replace your existing Management Pack processing
       rules, if any, with the processing rules from the new
       Management Pack.

     - "Backup Existing Management Pack" – This option specifies that
       you want to make a backup copy of your existing Management Pack
       processing rules, if any. You may use this option with either
       the "Update" or "Replace" option.

12. Click "Next" in the "Select Management Pack" window.
    A summary of selected options is displayed.

13. Click "Finish" on the "Completing the Management Pack
    Import/Export Wizard" screen.

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Upgrade to Management Pack Version 2.1
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NOTE: You can upgrade to Dell Management Pack 2.1 only if your Dell
      Management Pack is running on MOM 2005 or MOM 2005 SP1.

To upgrade to Dell Management Pack 2.1, download the Dell Management
Pack, "DOMMP21.exe", from the Dell support website at
"support.dell.com". See steps 1 to 8 of "Installing the Management
Pack" for the procedure to import the Management Pack.

Perform the following steps to upgrade the Management Pack:

1. Enter or browse for the location of the Management Pack, which is
   usually the same location to which you downloaded and extracted
   the contents of the "DOMMP21.exe" file.

2. Select the "Update Existing Management Pack. Custom rules,
   enabled/disabled settings, company knowledge will be retained"
   option with the "Backup" option checked.

   This option retains:

* User-added company knowledge base information on Dell-specific
    rules

  * All user-added custom rules to the Management Pack

  However, the user-modified rules, scripts, data providers, and
  computer groups on Dell rules will be overwritten. To replace the
  existing Management Pack without retaining any user modifications,
  select the "Replace" option with the "Backup" option checked.

3. Click "Next" in the "Select Management Pack" window.
   A summary of all of the options chosen appears.

4. Click "Finish" to import the Dell Management Pack into the MOM
   console.

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Uninstallation
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Uninstalling the Management Pack involves the following tasks:

a. Delete Dell Processing Rule groups
b. Delete Dell Computer groups
c. Delete Dell Attributes
d. Delete Dell Tasks
e. Delete Dell Scripts
f. Delete Dell Providers
g. Delete Dell Public Views
h. Delete the bmcServers.xml file

****
a. Deleting Dell Processing Rule Groups
****

1. In the Microsoft Operations Manager Administrator Console, expand
   "Microsoft Operations Manager"-> "Management Packs"-> "Rule
   Groups."

2. Select the "Dell OpenManage" rule group.

3. Right-click the "Dell OpenManage" rule group and select "Delete"
   from the pop-up menu.

4. Select the "Delete the rule group and all child rule groups" option
   in the "Delete Rule Group" dialog box and click "OK."

NOTE: Disable the Dell OpenManage processing rule groups and resolve
      all alerts generated by the Dell processing rule group. Next,
      ensure that these resolved alerts are groomed from the MOM
      database before deleting the Dell OpenManage processing rule
      groups. Otherwise, the MOM console will not allow deletion of
      the Dell processing rule group.

For information on MOM database grooming, see the MOM product
documentation or online help.

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b. Deleting Dell Computer groups
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1. In the Microsoft Operations Manager Administrator Console, expand
   "Microsoft Operations Manager"-> "Management Packs"-> "Computer
   Groups."

2. Select the "Dell Computers" computer group.

3. Right-click the "Dell Computers" computer group and select "Delete
   Computer Group" from the pop-up menu.

4. Select the "also delete contained subgroups, always." option in
   the "Delete Computer Group" dialog box and click "OK."

5. Click "Yes" to confirm deletion.

6. Select the "Dell Computers - Server Administrator Required"
   computer group.

7. Right-click the "Dell Computers - Server Administrator Required"
   computer group and select "Delete Computer Group" from the pop-up
   menu.

8. Select the "also delete contained subgroups, always." option in
   the "Delete Computer Group" dialog box and click "OK."

9. Click "Yes" to confirm deletion.

****
c. Deleting Dell Attributes
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1. In the Microsoft Operations Manager Administrator Console, expand
   "Microsoft Operations Manager"-> "Management Packs."

2. Select "Computer Attributes."

3. Select the "DellOMSAAttrib" computer attribute in the right pane
   view.

4. Right-click the "DellOMSAAttrib" computer attribute and select
   "Delete" from the pop-up menu.

5. Click "Yes" to confirm deletion.

****
d. Deleting Dell Tasks
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1. Close the Microsoft Operations Manager Operators Console.

2. In the Microsoft Operations Manager Administrator Console, select
   "Tasks" from the bottom left pane tab view.

3. Expand the "Tasks" folder from the left pane tree view and select
   the "Dell OpenManage" folder.

4. Right-click the "Dell OpenManage" folder and select "Delete" from
   the pop-up menu.

5. Click "Yes" to confirm deletion.

****
e. Deleting Dell Scripts
****

1. In the Microsoft Operations Manager Administrator Console, expand
   "Microsoft Operations Manager"-> "Management Packs."

2. Select "Scripts."

3. Select the "DellOMSALaunch" script in the right pane view.

4. Right-click "DellOMSALaunch" and select "Delete" from the pop-up
   menu.

5. Click "Yes" to confirm deletion.

6. Select the "Dell Agents Service Discovery" script in the right
   pane view.

7. Right-click "Dell Agents Service Discovery" and select "Delete"
   from the pop-up menu.

8. Click "Yes" to confirm deletion.

9. Select the "Dell Agents State Monitoring" script in the right pane
   view.

10. Right-click "Dell Agents State Monitoring" and select "Delete"
    from the pop-up menu.

11. Click "Yes" to confirm deletion.

12. Select the "Dell RAC Console Launch script" in the right pane
    view.

13. Right-click "Dell RAC Console Launch" and select "Delete" from
    the pop-up menu.

14. Click "Yes" to confirm deletion.

15. Select the "Dell Classification of Servers without OMSA script"
    in the right pane view.

16. Right-click "Dell Classification of Servers without OMSA script"
    and select "Delete" from the pop-up menu.

17. Click "Yes" to confirm deletion.

18. Select the "Dell Clear Agent ESM Log script" in the right pane
    view.

19. Right-click "Dell Clear Agent ESM Log script" and select "Delete"
    from the pop-up menu.

20. Click "Yes" to confirm deletion.

21. Select the "Dell Server BMC Discovery script" in the right pane
    view.

22. Right-click "Dell Server BMC Discovery script" and select "Delete"
    from the pop-up menu.

23. Click "Yes" to confirm deletion.

24. Select the "Dell IPMISH Tasks script" in the right pane view.

25. Right-click "Dell IPMISH Tasks script" and select "Delete" from
    the pop-up menu.

26. Click "Yes" to confirm deletion.

****
f. Deleting Dell Providers
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1. In the Microsoft Operations Manager Administrator Console, expand
   "Microsoft Operations Manager"-> "Management Packs."

2. Select "Providers."

3. Select the "Schedule every 30 minutes" provider in the
   right pane view.

4. Right-click "Schedule every 30 minutes" and select "Delete"
   from the pop-up menu.

5. Click "Yes" to confirm deletion.

6. Select the "Schedule every 60 minutes" provider in the
   right pane view.

7. Right-click "Schedule every 60 minutes" and select "Delete"
   from the pop-up menu.

8. Click "Yes" to confirm deletion.

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g. Deleting Dell Public views
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1. In the Microsoft Operations Manager Operators Console, select
   "Public Views" from the bottom left pane tab view.

2. Expand the "All Public Views" folder from the top left pane tree
   view and select the "Dell OpenManage" folder.

3. Right-click the "Dell OpenManage" folder and select "Delete" from
   the pop-up menu.

4. Click "Yes" to confirm deletion.

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g. Deleting bmcServers.xml file
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1. Browse to the directory where BMC Management Utility was installed and
   delete the %Management_Group_Name%_bmcServers.xml file(s).

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USER NOTES
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This section provides information to help enhance your experience
with the Management Pack in particular implementations and
environments.

- When importing the Management Pack, be careful when the "Replace"
  option is selected, as this will replace all the user-added company
  knowledge base information, and the user-added custom rules.

- Ensure that the MOM Agent is installed on all the managed systems.

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KNOWN ISSUE
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This section provides information on open issues with the Dell
Management Pack 2.1 for MOM 2005 and MOM 2005 SP1 (Full
Edition or Workgroup Edition)

- When the managed system name is a double-byte character string,
  for example, Chinese or Japanese, Microsoft Operations Manager
  Workgroup Edition does not install the MOM Agent on the system
  or manage the system.

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HISTORY
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This section provides historical information about the new features and fixes that were implemented in the previous version of the Management Pack.

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RELEASE HIGHLIGHTS FOR VERSION 2.0 OF DELL MANAGEMENT PACK FOR MICROSOFT OPERATIONS MANAGER
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The Dell Management Pack 2.0 supported Microsoft Operations Manager 2005.

Features
* Added Dell State View to display health status for Dell Hardware
  agents.
* Added Topology views, Alert views and a Task to update Dell State
  View.
* Added Tooltip information - Dell Asset Tag, Dell Service Tag,
  Operating System name, IP Addresses, Dell Server Model Type.
* Added new event processing rules for new Dell OpenManage Server
  Administrator versions 2.1 events under Dell OpenManage ->
  Server Administrator subprocessing rule group.
* Added RAC Launch Address to server warning or critical alert
  description.

Knowledge Base
* Added Dell Knowledge Base information to the new event processing
  rules of Server Administrator (including the enhanced Storage
  Management Service) and Array Manager.

==
RELEASE HIGHLIGHTS FOR VERSION 1.2 OF DELL MANAGEMENT PACK FOR MICROSOFT OPERATIONS MANAGER
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The Dell Management Pack 1.2 supported Microsoft Operations Manager 2005.

The Dell Management Pack 1.2 also made changes to the Dell processing rule groups and added Knowledge Base information for the new event processing rules.

Processing Rule Group
* Added new event processing rules for new Dell OpenManage Server
  Administrator versions 1.9 events under Dell OpenManage->
  Server Administrator subprocessing rule group
* Added new event processing rules for new enhanced Storage
  Management Service version 1.0 events under Dell OpenManage->
  Storage Management subprocessing rule group
* Added new event processing rules for new Dell OpenManage Array
  Manager 3.6 events under Dell OpenManage-> Array Manager
  subprocessing rule group
* Generated new alerts for new Server Administrator (including the

enhanced Storage Management Service) and Array Manager events,
whose severity is either Critical or Warning

Knowledge Base
* Added Dell Knowledge Base information to the new event processing
  rules of Server Administrator (including the enhanced Storage
  Management Service) and Array Manager.

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RELEASE HIGHLIGHTS FOR VERSION 1.1 OF DELL MANAGEMENT PACK FOR
MICROSOFT OPERATIONS MANAGER
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The Dell Management Pack 1.1 made changes to the Dell processing rule
groups and added Knowledge Base information for the new event
processing rules.

Processing Rule Group
* Added new event processing rules for the new events of Server
  Administrator versions 1.7 and 1.8 under the "Dell OpenManage ->
  Server Administrator" subprocessing rule group.

* Added new event processing rules for the new events of Array
  Manager 3.5 under "Dell OpenManage"-> "Array Manager" subprocessing
  rule group.

* Generated alerts for the new events of Server Administrator and
  Array Manager whose severity is either Critical or Warning.

Knowledge Base
* Added Dell Knowledge Base information to the new event processing
  rules of Server Administrator and Array Manager.

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RELEASE HIGHLIGHTS FOR VERSION 1.0 OF DELL MANAGEMENT PACK FOR
MICROSOFT OPERATIONS MANAGER
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* Performed grouping of Dell servers

* Generated alerts for all the Critical and Warning events from
  Server Administrator and Array Manager

* Reflected the status of the server on the MOM Console

* Launched Server Administrator web console to help in better
  management of Dell servers

* Knowledge Base Information on all events

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