Managing Dell™ Servers
Using the Dell Management Pack for Microsoft® Operations Manager 2005
Enterprise Product Group (EPG)

Dell OpenManage™
Systems Management

Dell White Paper

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Dell Enterprise Systems

May 2005
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Section 1

Introduction

The Dell™ Management Pack (Dell MP) for Microsoft® Operations Manager 2005 is a software (management pack) module that can be integrated into the Microsoft® Operations Manager 2005 console. Microsoft® Operations Manager (MOM) is a comprehensive event and performance management solution from Microsoft, for managing both hardware and software resources. Microsoft® Operations Manager 2005 provides event management, proactive monitoring and alerting, and system and application knowledge to help reduce costs and improve availability. Management packs are predefined solutions that have knowledge for managing and monitoring specific environments that can be easily integrated into the MOM console.

The Dell MP has ready to use out-of-the-box knowledge for managing and monitoring Dell specific applications and hardware. Dell MP enables MOM to categorize Dell systems into the Dell specific computer group and accurately depict the status of each system on the network. The status monitoring of Dell systems includes Dell specific alerts and pre-failure alerts with which you can assess, respond to and better ensure the availability of Dell systems being monitored over the MOM environment. The alerts also provide a link to launch Dell OpenManage™ Server Administrator and the Dell Remote Access Console to specifically manage and monitor your system.
Importing the Dell™ Management Pack


You can also obtain the Dell MP as a free download from http://support.dell.com. If you have MOM 2005 Full Edition or Workgroup Edition purchased from Microsoft, then the Dell MP has to be manually imported. To install the Management Pack, import the file using the Management Pack Import Export wizard.

The Dell MP, when imported into the MOM console, will also import predefined computer groups, processing rules, computer attributes, scripts, tasks, the Dell Knowledge Base, and public views for managing Dell specific applications and hardware.

The following are the components of the Dell MP:

- Dell OpenManage™ Processing Rule Groups (PRG) for Dell specific events and alerts
- Dell Computer Group
- Dell Computer Attribute
- Dell Scripts
- Dell Task
- Dell OpenManage Public Views
- Dell Knowledge Base

**Dell OpenManage Processing Rule Groups (PRGs):** The Dell OpenManage PRG is the parent rule group that consists of four children PRGs: Server Administrator, Array Manager, Storage Management and State Monitoring and Service Discovery. All the Dell PRGs are associated with the Dell computer group and are enabled by default.

The Server Administrator PRG contains the Event Processing Rules for critical and warning events of Dell OpenManage Server Administrator. The Array Manager PRG contains the Event Processing Rules for critical and warning events of Dell OpenManage Array Manager. The Storage Management PRG contains the Event Processing Rules for critical and warning events of Dell OpenManage enhanced Storage Management Services. The Event Processing rules are invoked based on
the criteria provided within each of the rules. These rules generate an alert when a Dell event is detected and the rule criteria is met. These alerts are logged in the Dell OpenManage Alerts view. Each of these PRGs also include an Alert Processing Rule. The alert processing rule sends out a notification message to the Hardware Support group that is provided with the MOM console on receipt of a critical or warning alert. Note that the Dell PRGs do not process informational events.

The State Monitoring and Service Discovery PRG contains the event processing rules for monitoring the server and storage components in Dell state view and also contains rules for service discovery. The state monitoring rules generate alerts that update the Dell State view. These state monitoring alerts are logged in the Dell State Monitoring Alerts view.

![Figure 1: View of Dell OpenManage processing rule groups](image)

_Dell Computer Group:_ “Dell Computers” is the computer group defined to group all Dell servers. The criteria for grouping Dell systems into the “Dell Computers” group is based on the Dell Computer Attribute. The Dell processing rules are associated with this computer group, helping you to define the computers on which the Dell processing rules must be deployed.
**Dell Computer Attribute:** The computer attributes are registry-based attributes. It is a criterion in defining a computer group. The Dell computer attribute (DellOMSAAttrib) contains the registry key for Dell OpenManage Server Administrator. The Dell computer attribute is used as the criterion to define the Dell Computers group.

**Dell Scripts:** The Dell MP includes the following scripts:

DellOMSALaunch: This script provides a launch point for the Dell OpenManage Server Administrator (OMSA) within the alert description field. This is a VB Script that detects if Server Administrator is running on the remote managed system. It provides the URL and port number to enable you to launch Server Administrator from the alert description field.

Dell RAC Console Launch: This script provides a launch point for the Dell Remote Access Controller (DRAC) console, within the alert description field. This is a VB Script that detects if the DRAC agent is running on the remote managed system. It provides the URL to enable launching of the web console from the alert description field.

Dell Agents Service Discovery: This is a VB Script that discovers the "Dell Agents" role and its components. It also discovers the following system attributes: Dell Asset Tag, Dell Server IP, Dell Server Model Type, Dell Server OS, and Dell Service Tag.

Dell Agents State Monitoring: This is a VB Script that queries the state of the server and storage components and generates internal events to update the state of these components in the Dell State view.

**Dell Task:** The Dell MP provides a task under the Dell OpenManage folder in the right pane view of the MOM Operators console. You can use this task to manually update the Dell State view.

**Dell OpenManage Public views:** The Dell MP provides several public views under the Dell OpenManage public view folder. These views are accessible to all users through any MOM Operators Console or Web Console. Importing the Dell MP into MOM creates the Dell OpenManage public views folder.

Following are the views that are imported into the MOM console along with the Dell MP:

(a) Dell State View: Displays the status of all server and storage components of a Dell system, managed by MOM.

(b) Dell Computer Listing: Displays the list of all discovered Dell systems with a Dell system icon represented in the Topology view.

(c) Dell Computer Group Listing: Displays the grouping of Dell systems in a Dell Computer Group represented by Dell system icons in the Topology view.
(d) Dell OpenManage Alerts: Displays all new alerts for Dell servers managed by the *Dell Computers* group.

(e) Dell State Monitoring Alerts: Displays all warning and critical alerts that change state in Dell State view.

(f) Array Manager Events: Displays events generated by Dell OpenManage Array Manager.

(g) Server Administrator Events: Displays events generated by Dell OpenManage Server Administrator.

(h) Dell Managed Systems: This is a computer view that lists all computers that match the *Dell Computers* group criteria.

(i) Dell Computer Group: This is a computer group view, which lists all the groups that are included in the Dell MP. For the current Dell MP, this includes only one Computer group, the *Dell Computers* group. This can be customized to include more views.

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**Figure 2:** View of Dell OpenManage public views.

*Dell Knowledge Base:* The Dell MP provides Knowledge base articles on all the Dell processing rules and Dell PRGs. The Knowledge Base article of each of the processing rule provides a brief summary of the event, its cause and the resolution.
The Dell MP can be customized to favorably suit the customer’s environment. By default all the PRGs, computer group and computer attributes are enabled in the Dell MP.
Discovering Dell Servers

For effective management of Dell servers once the Dell MP has been imported into the MOM console, the Dell servers must be grouped into the Dell Computers group. For this to happen, all the Dell servers must have Dell OpenManage Server Administrator installed and also must be listed in the “Agent-managed Computers” view, which is located in the Administration->Computers section of the MOM Administrator Console.

To discover the Dell servers over the network, perform the following steps:

1. Open MOM Administrator Console, expand “Administration” under “Microsoft Operations Manager” in the left pane view.
2. Expand “Computers”.
3. Right click on “Computer Discovery Rules” and select “Create Computer Discovery rule” option.

NOTE: To manage the Dell servers in the network, every system needs to be part of a domain.

![Computer Discovery Rule](image)

Figure 4: Managed computer rules screen
4. Select the appropriate rule type to include / exclude servers from the existing agent-managed computers list.

**NOTE:** Two options will be listed
Include – Include server(s) of this rule to the Managed computers list
Exclude – Exclude server(s) of this rule from the Managed computers list.

5. Type the name of the Domain to which the servers belong.
6. Select the criteria to match the servers belonging to that network.

**NOTE:** The criteria can be generalized using wildcard characters. Click on the right pointing arrow to get list of wildcard characters.

7. Select “Agent-managed” option for the Initial Management Mode field and click on the OK button.

8. For the changes in the Computer Discovery rules to take effect, the MOM Server should initiate a computer scan. To do this, right click on “Computer Discovery Rules” and select “Run Computer Discovery Now” option.

The message box as shown below will pop up. Click “OK” to acknowledge the managed computer scan.
“A computer discovery task has been submitted to the Management Servers.”

![Start scan message box](image)

**Figure 6: Start scan message box**

Once the scan is completed, go to the “Agent-managed Computers” view in MOM Administrator Console. All the systems that satisfy the Computer Discovery Rules will be listed.
Monitoring and Managing Dell Servers

The Dell MP for MOM monitors and manages the Dell servers that are grouped in the *Dell Computers* group based on the events that are logged in the Microsoft Windows event viewer. The Management Pack provides a list of public views to help you monitor and manage the Dell systems in the network. This view includes:

- State View
- Alerts View
- Diagram View
- Computer View
- Events View

**State View:**

In MOM 2005, State Monitoring indicates the system health of a managed computer. MOM updates the status of these managed computers as part of status monitoring view – This view is the State View.

**Dell State View:**

The Dell MP provides a Dell specific state view reflecting the health of each of the Dell servers managed by MOM. To view the Dell state view, the user opens the MOM Operators console, clicks on the state view tab (left pane view). This shows the state views of all imported Management Packs. Expanding “Dell OpenManage” will show the Dell state view.
The Dell state view shows the status of each of the hardware components. The state of these components is updated on receipt of any alert(s) generated from the Dell instrumentation.

**NOTE:** The Dell Instrumentation only generates events. Alerts are different from events. The alerts are generated by the Dell MP on receipt of Dell events.

The status is mapped to colors RED, YELLOW, GREEN which are in turn mapped to the alert severities. The health of a Component is derived by reviewing the non-resolved alerts associated with the component. The status becomes the severity of the most severe, non-resolved alert that has an active problem. If any of the components is not applicable for a specific server, its corresponding state will be shown as white. In order to set the state for the Dell management pack, the Dell service discovery script should run at least once and discovery instances of Dell servers should exist.

The Dell state view will be based upon Roles and components. The Roles are the name of the Dell Agent whose status need to be determined and the components are the parts of the roles which sum up the global health for that particular Role. The state view is based on the below hierarchy.

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**Figure 7: Dell state view**
The health of any Dell server will be dependent on its components’ global health. Component status will be shown in the Dell state view for each of the discovered Dell servers. Hardware component status is updated whenever an event is sent by the managed node Instrumentation service to the Windows Event Log. Server status can also be updated per user action. To update status, the user selects a server, and clicks on the “Update status” task that appears on the right pane view of the MOM Operator’s console.

State changes are triggered by the MOM alert infrastructure. To modify state for a component, an alert must be raised. It is not possible to set state without the use of an alert.

As stated above the Dell state view will be updated on two different scenarios
   (i) Upon receiving an event from the agent
   (ii) Upon user request

Update Dell State view based on Events:
The Dell state view gets updated when ever there is a Dell event. The Dell agents generate an event when a hardware component changes its status. The Dell MP will have an event processing rule to update the status of the components in the state view.

This event processing rule calls a Dell script which is then executed locally on the managed node using the local system account. This script queries the global status of the individual components. Based on the status, an event will be generated for each component by the script.

Another event processing rule will process this script generated event and would generate the state based alert for updating the state view. The below sequence diagram explains the steps for the state view to be updated when an event is generated.
Figure 9: Sequence diagram: Update Dell state in state view using events

Update Dell state view based on user request
The user updates the Dell state view by selecting the computer from the State view for which the status need to be updated and click on the “Update status” task in the task pane view of the MOM Operator’s console. This task would launch the same script which would query the global health of the individual components. The status of all the components on the State view will be updated when the task is executed. The below sequence diagram explains the steps involved for the state view to be updated based on a user request.
Figure 10: Sequence diagram: Update Dell state in state view using tasks

Alerts View:

Dell MP provides two alert views. To locate these views launch the MOM Operator’s console, on the left pane click the Alert tab and expand Dell OpenManage in the MOM Operators Console tree. Two views are displayed,

1. The Dell OpenManage Alerts view: The Dell OpenManage Alerts View displays the warning and critical alerts generated by Server Administrator (including the enhanced Storage Management Service) and Array Manager Events.
2. The Dell State Monitoring Alerts View: The Dell State Monitoring Alerts View displays the warning and critical alerts that change the state of the components in the Dell State View.

Figure 11: Dell OpenManage alerts view

The property page for these alerts provides a detailed description of each alert. To get more information about the alert, select the Product Knowledge tab of the alert properties. The information includes a description of the alert and possible causes for this alert, as well as any action plans to resolve the issue. If the alert is a Dell alert, the Server Administrator launch point and Dell Remote Access Controller (DRAC) launch point are provided in the alert description field after the description of the alert. If you click the Web address, you can launch the Server Administrator Web console and retrieve more information about the system that generated the alert.

If you change the Server Administrator http port number of a managed system, the Server Administrator launch point does not reflect the changed Server Administrator launch point port number in the Dell State Monitoring Alerts.
Similarly if the DRAC IP address of a managed system is changed, the DRAC launch point does not reflect the changed DRAC IP address. To update the URLs, you must manually resolve all Dell State Monitoring Alerts corresponding to the managed system. New alerts will contain the updated URLs.

Diagram View

The Dell Management Pack offers the following diagram views that represent the Dell servers in the network. The Dell MP also performs a service discovery of the hardware properties on computers in addition to discovering the roles and components for each computer.

Dell Computer Group Listing: Displays the Dell Computer Group and the Dell systems that are part of the Computer Group diagrammatically along with the system attributes and status.

Dell Computer Listing: Displays all Dell systems in the network diagrammatically with their attributes and status.

Figure 12: Dell topology view
These diagram views list all discovered Dell servers in the network with their status. The status is the cumulative status of all open alerts generated from the respective computers. All these servers will be represented by a Dell computer icon on the Diagram view. Tool tips of the discovered attributes will be shown in this view when the mouse cursor hovers over the computer icons. The following information will be shown as tooltips in this view:

<table>
<thead>
<tr>
<th>Dell service tag:</th>
<th>An alphanumeric serial number that uniquely identifies each Dell system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell asset tag</td>
<td>An individual code assigned to a system, usually by a system administrator, for security or tracking purposes.</td>
</tr>
<tr>
<td>Dell system IP address</td>
<td>The IP address of the Dell system in the network</td>
</tr>
<tr>
<td>Dell server operating system</td>
<td>The operating system installed on the Dell system</td>
</tr>
<tr>
<td>Dell server model type</td>
<td>The PowerEdge or PowerVault system model name</td>
</tr>
</tbody>
</table>

The Dell asset tag value can be set from the Server Administrator web console by entering a value for the Chassis Asset Tag field in the Information section of Main System Chassis

**Computer view**

Dell MP provides the following computer views:

- **Dell Managed Systems**: Classifies all of the Dell systems on the network on which Server Administrator is installed.
- **Dell Computer Groups**: Displays the Dell-associated computer groups.
The status of Dell systems is displayed in the Dell Managed Systems view. This view lists all of the Dell systems in the network and their corresponding status. The severity level of the system is determined by the severity level of the alerts generated by that system. The severity level is shown as an icon next to the server icon. Systems that have a normal status are displayed without an icon. To view all of the alerts generated by a system, double-click the server icon. A window will display both Dell and non-Dell alerts.

Events View

Dell MP provides the following event views. These event views display all the Dell events which are processed by the Dell MP.

Server Administrator Events: Displays only the Server Administrator events (including the enhanced Storage Management Service events).

Array Manager Events: Displays only the Array Manager events.
The Dell MP supports events from Dell OpenManage Server Administrator including enhanced Storage Management service and Dell OpenManage Array Manager. To monitor and manage the status of the Dell servers, the MOM agent must be installed and running with the latest rules on the Dell servers. Whenever a critical or a warning event is generated by a Dell server, the Dell matching Event Processing Rule generates an alert. This alert is displayed in the Dell OpenManage Alerts View created by the Dell MP. Alerts are listed in descending order of severity.

Once the alert has been resolved, the state of the alert in the MOM console must be resolved manually. If the alert state in the MOM console is not set to “resolved” then the status of the server will not be updated.

**NOTE:** The overall status of the server is the cumulative status of all un-resolved alerts that are generated for that server.

To resolve an alert on the MOM Console, the following steps need to be performed:

1. Open MOM Operators Console; Select Alerts tab in the left pane view.

Figure 14: Dell events view
2. Expand Dell OpenManage -> Dell OpenManage Alerts folder.
3. The right pane will list all the alerts for Dell servers only.
4. Select the alert to be resolved. The alert details view will show the details of that alert. If OpenManage Server Administrator is running on the managed system, the description field of the alert property page will also have a link to launch OpenManage Server Administrator.
5. Click on the link to launch Server Administrator for the server that generated the alert. Login to Server Administrator for one-on-one management of the server. Once the issue has been resolved on the Dell server, proceed to resolve the alert on the MOM Console.
6. Right click on the alert to be resolved in the MOM Console and select “Set Alert Resolution state->Resolved” option in the pop up menu.

![Figure 15: Resolve an alert](image)

If the company Knowledge Base needs to be updated for this alert go to the Company Knowledge tab and click on the “Edit” button before resolving the alert. Enter the knowledge base information specific to this alert and click on the “OK” button.
Figure 16: Update company knowledge base for the alert resolved

The “Resolution state” column for the alert on the right pane view will be set to “Resolved.” Once the alert is resolved the alert will be removed from the Dell OpenManage Alerts view and the updated status will then be propagated to the parent nodes.
Integrating with Dell OpenManage Server Administrator for Better One-On-One Management

The Dell OpenManage Server Administrator must first be installed and running on all the Dell servers that are managed by the Microsoft Operations Manager through Dell MP. Server Administrator can be installed from the Dell OpenManage Systems Management CD Version 3.0 (and later). In addition, the MOM agents must be installed and updated with the latest PRGs.

Dell Servers running Server Administrator and Array Manager will log events (critical, warning and informational) in the Windows Event viewer. Events that match the Dell PRGs criteria will generate an alert that will be forwarded to the management station running the MOM Console. The state of the alert will be set to “New” and the status of the Dell OpenManage public view folder will reflect the updated status.

The Dell MP will not group and manage servers as “Dell Servers” that do not have Server Administrator installed. Dell alerts are customized to include a link to the Server Administrator web console URL. Clicking on this link will launch Server Administrator console to the particular system which generated the alert.

Each of the Dell event processing rules is associated with the DellOMSALaunch custom VB Script. This script is executed when an alert is received from the managed system. The script queries the Dell managed systems for the Server Administrator Secure Port Server port number and appends it to the alert description field to provide the URL link for launching the Server Administrator web console. The URL contains the system name and the port number. For the launch point to work, please make sure that the DNS for the network is configured since the launch point is based on the system name, not the IP address.

To launch Server Administrator for a Dell system:

1. Expand Dell OpenManage folder→ Dell OpenManage Alerts under Public Views folder.
2. The right pane will list all the alerts that are specific to the Dell servers only. Select the alert that needs resolution. This will bring up the alert properties page for that particular alert. Go to the “Description” field of the “Properties”
tab on the property page. The property page will have the description of the event that generated the alert and at the end will have the URL for launching the Server Administrator web console.

If Server Administrator web server is not running on the remote server then the link to launch Server Administrator web console will not be displayed.

![Figure 17: Launch Server Administrator from MOM](image)

3. Click on the link to launch Server Administrator for the server that generated the alert. Login to Server Administrator for one-on-one management of the server. Once the issue has been resolved on the Dell server, proceed to resolve the alert on the MOM Console.

4. Right click on the alert to be resolved and select the “Set Alert Resolution State->Resolved” in the pop-up menu options.

Server Administrator URL can also be found in the alert description field of Dell state monitoring alerts. For the state monitoring alerts you need not explicitly resolve the alert. When the issue is resolved the alert state is automatically set to inactive. The state is set back to active only if the components status changes to a critical or warning state.
Integrating with Dell Remote Access Controller (DRAC) for Remote Management

The Dell™ Remote Access Controller is a systems management hardware and software solution designed to provide remote management capabilities, crashed system recovery, and power control functions for Dell PowerEdge™ systems. The Dell MP supports both 3rd generation and 4th generation RAC cards. The Dell Management Pack provides the launch point for DRAC web console in the Dell alerts description field. The DRAC web console can be used to remotely manage the Dell server.

To have the DRAC launch point, the Dell Managed nodes should have a DRAC card installed and must also have the DRAC agent installed and running on all the Dell servers that are managed by the Microsoft Operations Manager. If you have a DRAC card installed, you must install the DRAC agent using the Dell OpenManage Systems Management CD for Server Administrator versions 1.6 to 1.9 or the Dell PowerEdge™ Installation and Server Management CD for Server Administrator version 2.0. During installation, select Managed Node→ DRAC Agent.

Each of the Dell event processing rules is associated with the Dell RAC Console Launch custom VB Script. Whenever the Dell agent sends an event, the corresponding event processing rule will generate an alert and also execute the Dell RAC Console Launch script. The script queries the Dell managed systems for the remote access card IP address and port number (for DRAC 4 cards only) and appends it to the alert’s description field. The URL contains the system IP address and the port number (for DRAC 4 cards only).

To launch DRAC web console for a particular Dell system:

1. Expand Dell OpenManage folder→ Dell OpenManage Alerts under Public Views folder.
2. The right pane will list all the alerts that are specific to the Dell servers only. Select an alert that had come from the system that had the DRAC card installed. This will bring up the alert properties page for the particular alert. Go to the “Description” field. The property page will have the description of the event that generated the alert and at the end you will have the URL for launching the DRAC web console.
3. Click on the link to launch DRAC web console. Login to DRAC console for remote management of the server.

Figure 18: Launch DRAC web console from MOM

For more details on how to remotely manage the system using the DRAC card, please refer to the DRAC user guide available at http://support.dell.com.
Section 7

Sending Notification to Hardware Support Group

For all critical and warning alerts generated by OpenManage Server Administrator (including the enhanced Storage Management Service) and Array Manager events, a notification message is sent to the hardware support notification groups. Information events are not processed and hence the hardware support group will not be notified for the informational events that come from the Dell servers.

The system administrators need to be added as operators to this hardware support group to be notified by either email or pager whenever a critical or warning alert is generated.

To add the system administrator as an operator follow the below steps:
1. Open MOM 2005 Administrator Console
2. Expand Management Packs->Notification->Operators.
3. Right click on Operator and select “Create operator…” option
4. Enter the operator name in the Operator Properties dialog box and click on Next.
5. Select “Email this operator” check box if the operator need to be notified by email and enter the email address and specified time when this operator need to be notified and click on Next button.
6. Similarly if the operator needs to be notified by a pager or a command enter the necessary information in the subsequent “Page” and “Command” screens and click on the Finish button.

Now configure the Hardware support group to add the system administrator as an operator to this group:

1. Open MOM 2005 Administrator Console
2. Expand Management Packs->Notification->Notification Groups
3. Select Hardware support group.
4. Right click on the group and select properties from the popup menu.
5. Select the system administrator from the Available operators list box and click the left arrow button.
Customization of Dell Management Pack

The Dell MP can be customized to better suit your managed environment. We will be covering two case studies of customizing the Dell MP.

- Create a Dell OpenManage task to launch the Server Administrator web console.
- Customize the Dell state view to see the status of MOM agents and MOM Servers components.

Create a Dell OpenManage Task

If the system administrator would like to launch the OpenManage Server Administrator web console more easily by directly launching it as a task then a new task need to be created under Dell OpenManage.

Steps to create a new task under Dell OpenManage
1. Open the MOM 2005 Administrator Console
2. Expand Management Packs->Tasks->Dell OpenManage
3. Right click on Dell OpenManage and select “Create Task…” option from the pop up menu.
4. Click on Next button of the Welcome screen of Create Task wizard
5. Select “Operators console” option as the Run location and “Command-line” as the Task type. Click on the Next button.
6. Select “Computers” as the View type for this task to get executed when any computer is selected from the Operator’s console.
7. In the Task command line enter the binary path of the active web browser installed in your system. For eg: If I have Microsoft Internet Explorer as my active web browser then:
   “C:\Program Files\Internet Explorer\IEXPLORE.EXE”
8. Enter the below information as a parameter to the web browser in the Task command line
   https://$Computer Name$:$1311

NOTE: The limitation with this task would be that all the servers managed by Dell MP should have the Server Administrator http port number as 1311 (This is the default port number by installation of Server Administrator). If the port number is changed for any server then the web console cannot be launched from this task. But still the updated URL will always be reflected in the Dell alert’s description field.
9. Select `%PROGRAMFILES%` options from the drop down box for the “Start in” field.
10. Select “Do not display output” option from the drop down box for the “Task output behavior” and click on Next.

![Create Task Wizard]

Figure 19: Create task to launch Server Administrator

11. Enter the name for the task as “Launch Server Administrator” and also give the description for this task.
12. You can also configure a shortcut key to execute this task directly from the keyboard without using the mouse. Select CTRL+SHIFT and enter O as the short cut key to launch Server Administrator console.
13. Click on Finish.

To execute this task, close the MOM 2005 Operator’s console (if opened) and open it again. The extreme right pane view shows all the tasks. Expand “Dell OpenManage” you can see the “Launch Server Administrator” task that was just created. Select a Dell server from any of the Dell specific views (Alerts view or Events view or Diagram view or State view or Computer views) and use the shortcut key entered for the task (CTRL+SHIFT+O) or click on the Launch Server Administrator task. This would open up the Server Administrator web console for the selected server.
Customize the Dell state view

The Dell state view can be customized to add new roles like MOM Agents and MOM Server. This customization can help the system administrator to monitor the status of these new added roles MOM agents and MOM Server.

To add the MOM Agent and MOM Server role into Dell State view
1. Open the MOM Operator’s console
2. Select the State view tab in the left pane view
3. Expand Dell OpenManage->Dell State view
4. Right-click on “Dell State view” and select “Properties” from the pop up menu.
5. Select “Roles tab” in the State view properties windows
6. Select the roles (MOM Agent and MOM Server) to be monitored from the Available Roles list box and click on the Add button

Figure 20: Customize Dell state view

7. Click on “Apply” and then click on “OK” to close the properties dialog

Dell State view will now have the new roles added to it.
Conclusion

This white paper gives an in-depth knowledge of Dell Management pack and its working. It also provides few case studies on how to modify the Dell MP to suit the customer’s environment. For more information refer to the User’s Guide or readme file of this Management Pack. This Dell MP can be obtained either from http://support.dell.com or will be part of the MOM 2005 Workgroup Edition CD purchased from Dell.

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