OpenManage Essentials – Managing Firmware and Driver Compliance by using Multiple Baselines

This technical white paper provides information about managing hardware revision baseline in a data center by using Dell EMC OpenManage Essentials with different custom catalogs.

Dell EMC Engineering

February 2018
Revisions

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2018</td>
<td>Initial release</td>
</tr>
</tbody>
</table>

The information in this publication is provided “as is.” Dell Inc. makes no representations or warranties of any kind with respect to the information in this publication, and specifically disclaims implied warranties of merchantability or fitness for a particular purpose.

Use, copying, and distribution of any software described in this publication requires an applicable software license.

Copyright © February 2018 Dell Inc. or its subsidiaries. All Rights Reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be the property of their respective owners. Published in the USA [2/2/2018] [Technical White Paper]

Dell believes the information in this document is accurate as of its publication date. The information is subject to change without notice.
Introduction

This technical white paper provides information about the creation and usage of multiple custom catalog baselines. With the increasing demand in datacenter to maintain different group of servers on different firmware and driver baseline, this feature will help datacenter administrator to ease the operation. Primary use case for this feature is to have different catalogs generated by DRM filtered for specific use cases, and use them against the custom groups.

Quick links to the sections in this technical white paper:

- Creating Custom Baseline by using System update portal
- Creating Custom Baseline from Associate baseline wizard
- Listing a Custom Baseline
- Deleting a Custom Baseline
- Associating a Custom Baseline
- Re-Associating / De-Associating Custom Baseline
- Updates made to the System update portal
Managing Firmware & Driver compliance by using Multiple Baselines in OpenManage Essentials 2.4

Figure 1  Managing firmware ad driver compliance by usig multiple baselines in OME 2.4
Creating a Custom Baseline

This section covers the methods to create custom baseline and the points to consider while creating the baseline.

1.1 Creating Custom Baseline by using System update portal

The System update portal of OME has been redesigned by grouping similar actions together. As part of Catalog Baseline Action section, the “Create Catalog Baseline” action is listed.

1. From the Manage menu, select Create Catalog Baseline.

![Create catalog baseline figure]
2. In the Create Catalog Baseline dialog box, type the name for the baseline and select the catalog file to import.

![Create Catalog Baseline dialog box](image)

**Figure 3** Baseline name and repository manager file

By default, OME creates the baseline name based on the current date and time. This is to avoid the duplicate names created for the custom catalog. If required, modify the name based on your requirements.

3. Select the catalog xml/cab file that must be imported as part of the operation.

**Note**: This catalog selection path is referred in the server where OME is installed. If you are using OME from a remote system and trying to import the catalog file from the client system, the operation will fail. Therefore, either copy the catalog xml to the OME server or map the drive in the OME server so the catalog file is locally available to the OME services.

4. After selecting the file, click **Import now** to complete the operation.
1.2 Creating Custom Baseline from Associate baseline wizard

The device portal context menu with respect to the user-created custom group has a new item added as “Associate Custom Baseline”.

1. Click **Manage** → **Devices** → right-click the user-created custom group → select **Associate Custom Baseline**.

![Associate catalog baseline](image)
2. In the Associate Catalog Baseline dialog box, select Create Catalog Baseline.

![Associate Catalog Baseline dialog box](image)

Figure 5  Create catalog baseline

3. Type or select data in the fields as described in Creating Custom Baseline by using System update portal earlier in this technical white paper.
2 Listing a Custom Baseline

This section describes about listing the custom baselines that are created and their association to custom group if exists. After the catalog custom baseline is created, it is shown in the left pane under Catalog Baseline Action and in the working pane under the List of Catalog Baselines table.

Figure 6  List of catalog baselines

Group name column in the table shows the group name if the catalog is associated to one or more groups. If the catalog is associated with more than one group, the baseline will be shown in each row per group. If the catalog is not associated then the group name row is empty.
3  Deleting a Custom Baseline

1. Right-click the baseline name listed under **List of Catalog Baselines**, and then select **Delete**.

   ![Image of baseline management interface](image)

   **Figure 7**  Deleting a catalog baseline

2. When prompted for confirmation, click OK. The baseline is deleted.

3. If the Delete operation fails because the baseline is associated with any of the custom group, deassociate the baseline from the group first, and then retry the operation.

   **Note:** You cannot delete more than one baseline at a time.
4 Associating a Custom Baseline

Creation of custom baseline does not affect the compliance computation until it is associated with the custom group.

1. Click Manage → Devices → right-click the user-created custom group → Associate Catalog Baseline.
2. In the **Associate Catalog Baseline** dialog box, the list of baselines which are already generated is displayed. Select any of them or create new catalog baseline, if necessary.

![List of Catalog Baselines](image)

**Figure 9** List of catalog baseline

**Note**: After the association is done, OME will take some time to reflect the changes because of the time taken to recompute the applicable packages for all the devices under the group.

Associating catalog baseline is possible only with the user-created custom group. This operation is not permitted on the system generated groups. User can associate the baseline only to the first level of custom group. Nested group levels will not have option for association. Only one catalog baseline can be associated against a group. In other words, a group can have a maximum of one catalog association. But same catalog baseline can be associated to different custom groups.
Re-Associating / De-Associating Custom Baseline

After associating the group to a baseline, you can reassociate or deassociate a baseline.

1. To reassociate, select **Associate a Different Catalog Baseline**. Complete the tasks as listed in **Associating a Custom Baseline**.
2. To deassociate, select **De-Associate Catalog Baseline**. The association with the group is removed.

**Note:** If you deassociate baseline from the group then the compliances of all the devices in that group will be computed against the default catalog.
6 Updates made to the System update portal

System update portal is updated to show the multiple associated baselines based compliance & grouped for the actions. New bar graph is added to provide the feature to list all the associated groups compliance.

Figure 11 System update portal

**Note:** Only the user-created custom groups that are associated will be shown in the bar graph along with all the devices. The All Devices group displays the devices against default catalog and all the devices associated to custom catalog.

If the device is associated to custom catalog, it will not be considered against default catalog. If the device is present in more than one custom group that are associated then compliance of such device is computed against each catalog baseline and listed in the group appropriately. By clicking the bar chart you can view the respective page with filtered devices and baseline.
Figure 12  Compliant and noncompliant devices

Non-inventoried systems & Issues and resolutions are added as actionable button items that are not group-specific. When clicked the respective page is displayed.
If you click the **Filtered by** option, the **Select System Update Target Devices and Device Groups** dialog box is displayed.

![Select System Update Target Devices and Device Groups](image)

**Figure 13** System update target devices and device groups

Filter devices either by using query or by using groups. After a group is selected, the pie chart is displayed. But this filtering will not filter based on the baseline. Therefore, if the device is part of two different groups with different baselines associated then the device will be shown twice (one per group/baseline)
System Update : Filtered by: R630

Figure 14  System update portal

**Note:** To view the non-filtered devices and bar chart again, click View System Update Portal.

If you are trying to update such devices, you can select the device only once. If you try to select both groups then OME displays an error message to block the operation.
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>OME</td>
<td>OpenManage Essentials</td>
</tr>
<tr>
<td>OMM</td>
<td>OpenManage Mobile</td>
</tr>
</tbody>
</table>