ORACLE ENTERPRISE MANAGER 12c

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Oracle Best Practices for Managing Siebel: Configuration Management for Siebel in Enterprise Manager Cloud Control 12c

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Executive Overview

The task of managing configuration parameters in a dynamic, multi-target environment can be extremely challenging. A large, production scale environment can have dozens of unique targets, and each target can have several hundred different configuration parameters. Given the number of possible permutations, the task of managing the latest, or correct, values is beyond human capability.

Enterprise Manager 12c Cloud Control (EM 12c), with the Siebel Plug-in, provides advanced, out-of-the-box tools to manage the complexity of Siebel configuration management. EM12c has advanced configuration capture, change detection, and comparison reporting capabilities that can dramatically reduce the amount of time that System Administrators spend on configuration management.

The purpose of this whitepaper is to provide instructions on Oracle's Best Practices for managing Siebel Configurations. It will address the following:

- Understanding Comparison Templates in EM 12c
- Creating Configuration Templates for Siebel Servers, Components Groups, and Components
- Using Configuration Templates to compare Siebel Servers
- Analysis of Configuration Comparison results
- Using Configuration Templates for Siebel Patch Analysis

The benefits of using Configuration Templates to manage Siebel Applications are substantial, and include:

- Easily compare configuration parameters for targets within a Siebel Enterprise, or between two different Siebel Enterprises
- Easily compare configuration parameters for a Siebel target against a gold standard or baseline.
- Define comparison reports once and re-run multiple times

Brief Primer on Siebel Comparison Templates

EM 12c collects a vast amount of configuration parameters for Siebel Applications, and maintains those parameters in its repository. EM 12c is also aware of any changes that are made to Siebel configuration parameters, and collects those changes on a recurring interval, typically every 24 hours.

Configuration Templates allow administrators to define what configuration parameters should be included, or excluded, for any type of comparison analysis. For example, administrators may not necessarily need all of the parameters about a particular Siebel component. In this scenario, administrators can exclude those parameters from their Templates.

For more information on Configuration Templates, please refer to the Lifecycle Management Administrators Guide on the EM 12c documentation site.

Creating Siebel Configuration Templates

This section describes how to create Siebel configuration Comparison Templates for the following Siebel Target Types:

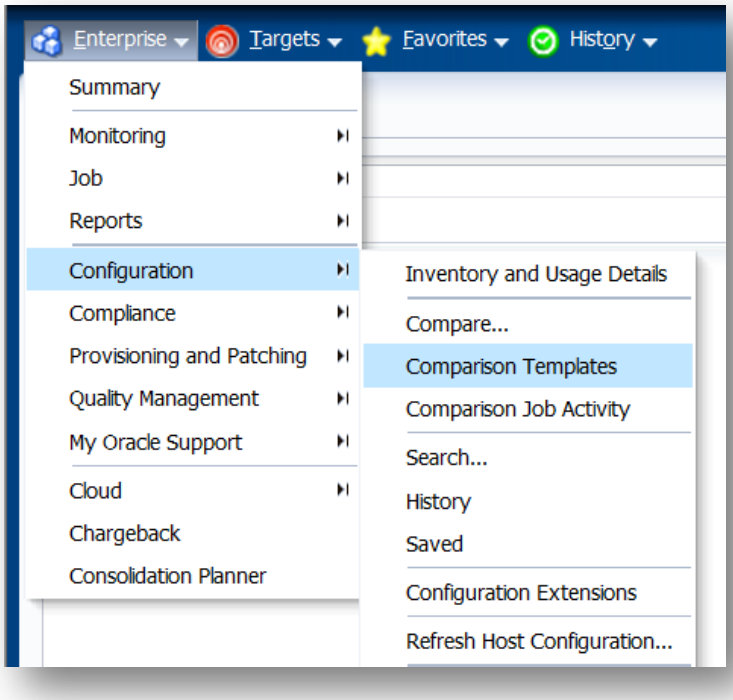
- Siebel Component
- Siebel Component Group
- Siebel Server
- Siebel Workflow
- Siebel Gateway Server

Siebel Component

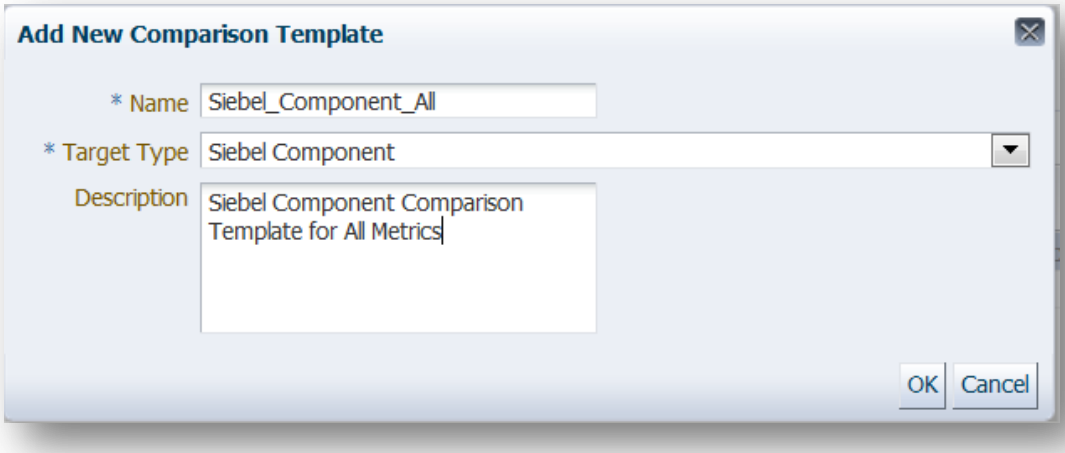
For the Siebel Component Target Type, we will cover two use cases. One is to include all the configuration parameters, and the other is to exclude some of the configuration parameters. For any given target, system administrators might not want to include all of the possible configuration parameters in their analysis. Configuration Templates provide the flexibility for users to exclude certain parameters, depending on the use case.

Capture all Siebel parameters

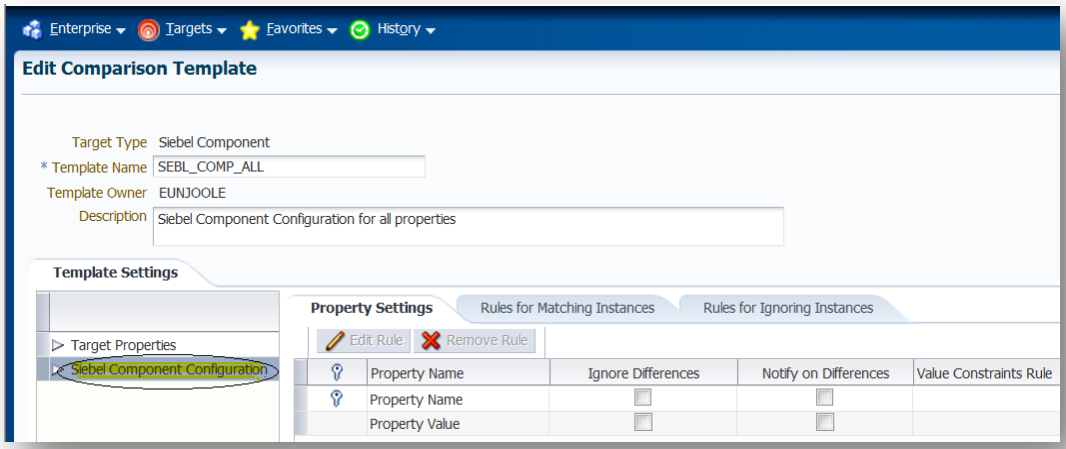
To create the Siebel Component Configuration Template for all configuration parameters, go to **Enterprise > Configuration > Comparison Templates**



1. Click “Create” button and provide a name and select “Siebel Component” for Target Type.



2. Click “OK” and template will be shown under Comparison Templates view.
3. To review or change the Property setting, click “Edit” button on Comparison Templates View. You can change the **Target Properties** or **Siebel Component Configuration** by highlighting it under Template Settings.

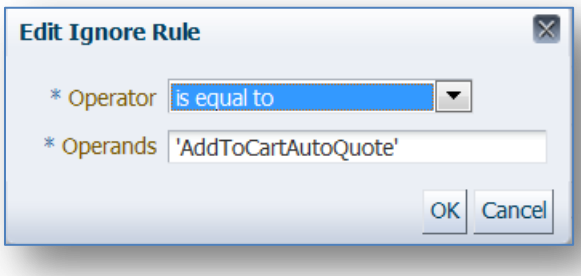


This template includes all of the properties, and therefore we do not need to specify rules for matching or ignoring instances. In our next example, we will specify rules for **Siebel Component Configuration** to exclude some of the properties during component configuration comparison.

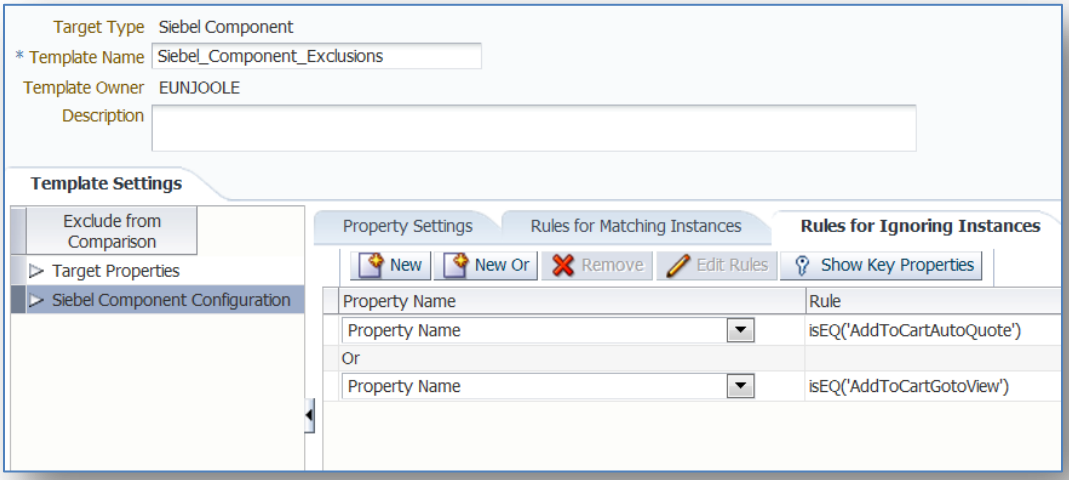
Exclude certain Siebel parameters

Users can elect to exclude certain properties from their Template, thereby reducing the number of records that will be compared. The process for excluding certain properties is accomplished by specifying values in the **Rules for Ignoring Instances** for Siebel Component Configuration. Follow the steps in previous section to create the Siebel Component Template and name the template.

1. Click “Edit” button and select “Siebel Component Configuration” from Template Settings on left panel and select “Rules for Ignoring Instances” tab.
2. Click “New” button and click “Edit Rules”. In this example, two properties are chosen to be excluded – ‘AddToCartAutoQuote’ and ‘AddToCartGotoView’. In order to select these properties, set Operator as “is equal to” and Operands as ‘AddToCartAutoQuote’. Operands can be literals (string literals are enclosed in single quotes), legal numbers or dates.



3. Next, click “New Or” button and click “New” button again to specify the second configuration property for exclusion. Follow the previous step to specify ‘AddToCartGotoView’ property.

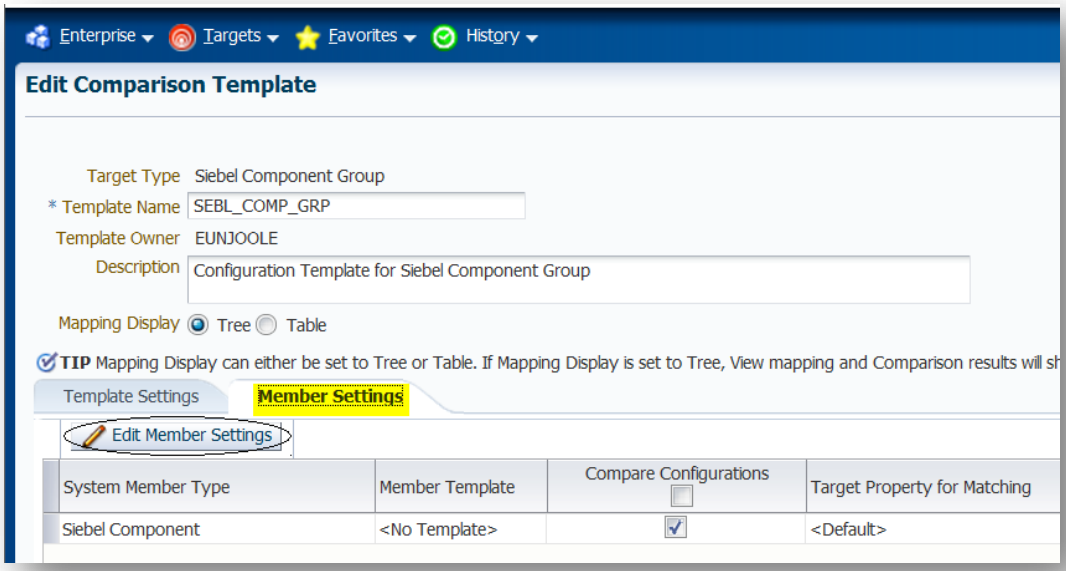


4. Once the rules are set, click “Save” button.

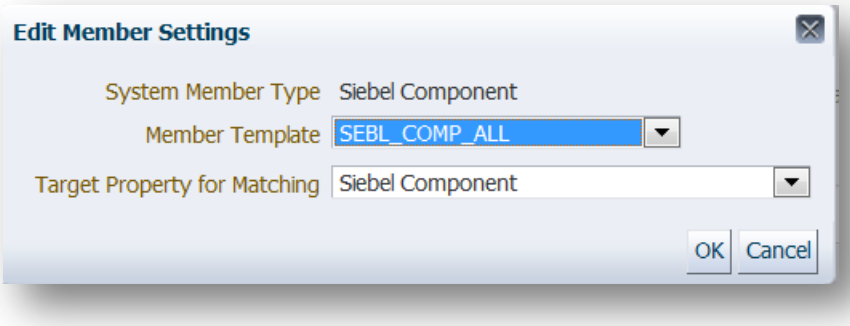
Siebel Component Group

In this example, we will create Siebel Component Group configuration template with name “SEBL_COMP_GRP”.

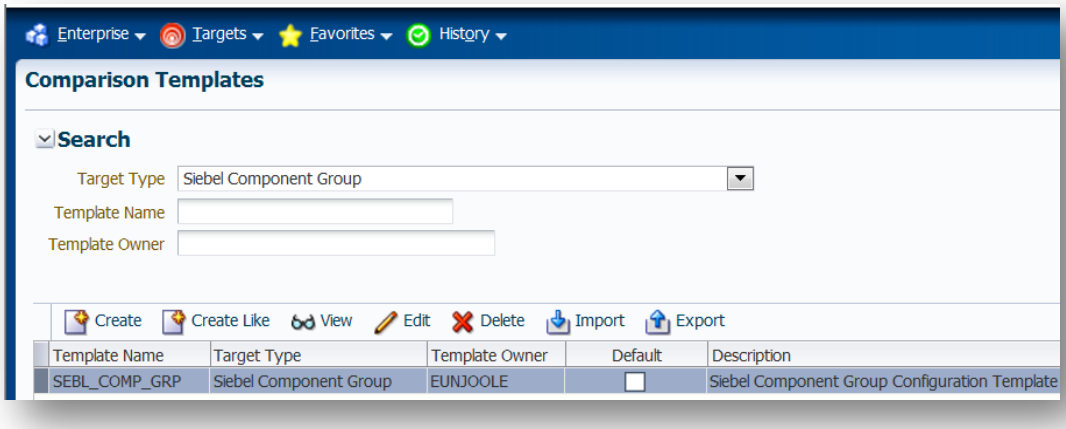
1. Go to Enterprise > Configuration > Comparison Templates and click “Create” button.
2. Select the “Siebel Component Group” under “Target Type”.
3. Click “Edit” button and select “Member Settings” tab.



4. Click “Edit Member Settings”. For Member Template, select the Siebel Component Template that was created previously. In this example, “SEBL_COMP_ALL” is selected. For member types that you are comparing, select a target property to use as a matching key. The default is target name (in this example, Siebel Component), but you can also select a distinguishable property to align comparison entities, such as department or location.



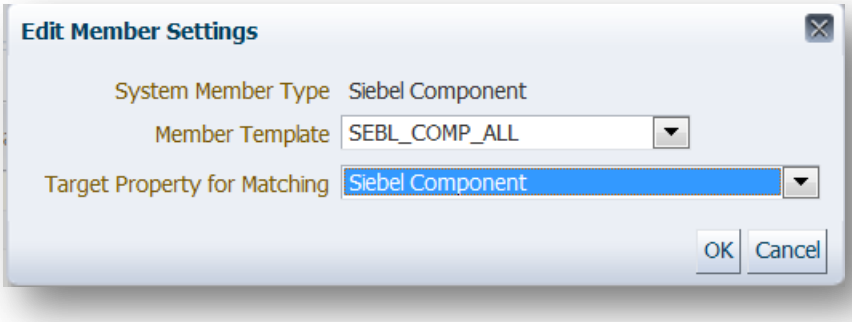
5. Click “Save” button.
6. Once the template is created, it will show up in Comparison Templates search screen.



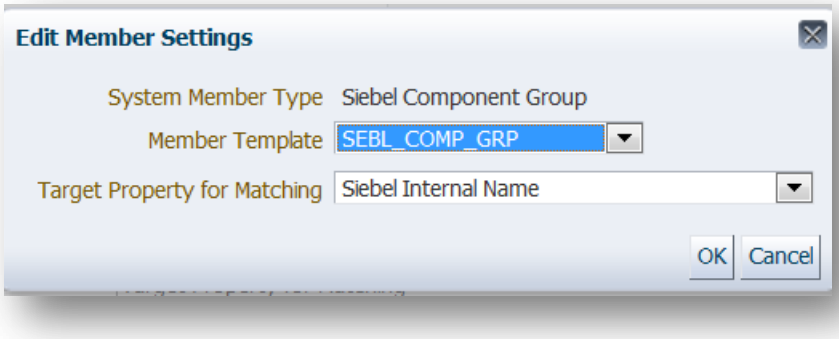
Siebel Server

In this example, we will create Siebel Server configuration template with name “SEBL_SRVR”.

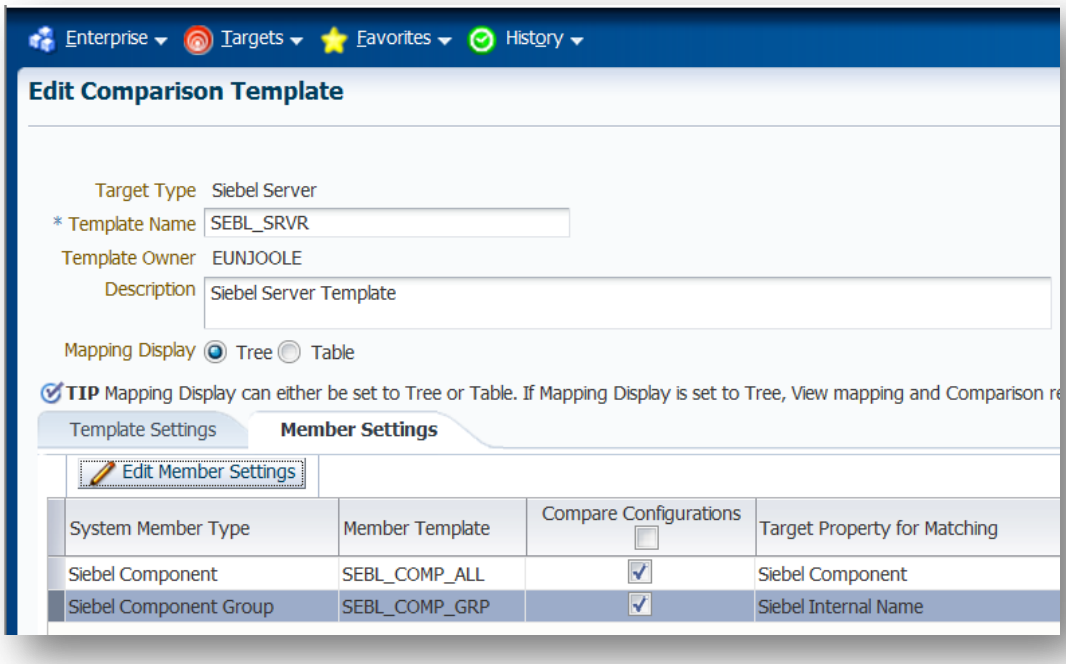
1. Go to Enterprise > Configuration > Comparison Templates and click “Create” button.
2. Select the “Siebel Server” under “Target Type”.
3. Click “Edit” button and select “Member Settings” tab.
4. Click “Edit Member Settings” and highlight the Siebel Component.
5. For Member Template, select the Siebel Component template that you created before. In this example, we choose “SEBL_COMP_ALL”. For **Target Property Matching**, select “Siebel Component”.



6. Next, highlight the Siebel Component Group and set the **Member Template** with Siebel Component Group template that was created previously and select “Siebel Internal Name” for **Target Property for Matching**.



7. Click “Save” button.

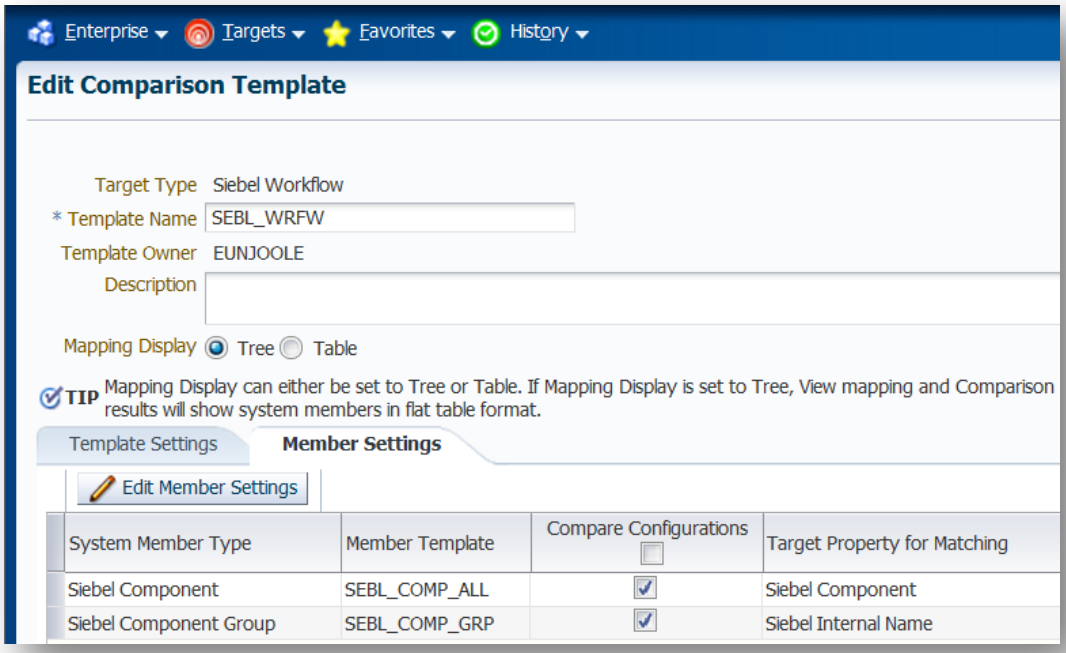


Siebel Workflow

In this example, we create Siebel Workflow configuration template with name “SEBL_WRFW”. Creating Siebel Workflow configuration template is very much same as creating Siebel Server configuration template.

1. Go to Enterprise > Configuration > Comparison Templates and click “Create” button.
2. Select the “Siebel Workflow” under “Target Type”.
3. Click “Edit” button and select “Member Settings” tab.
4. Click “Edit Member Settings” and highlight the Siebel Component.

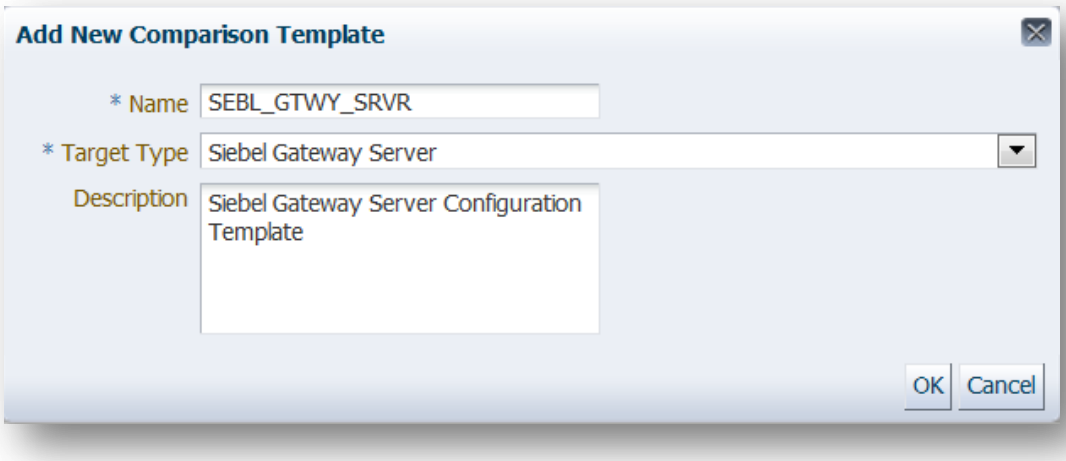
5. For Member Template, select the Siebel Component template that you created before. In this example, we choose “SEBL_COMP_ALL”. For **Target Property Matching**, select “Siebel Component”.
6. Next, highlight the Siebel Component Group and set the **Member Template** with Siebel Component Group template that was created previously and select “Siebel Internal Name” for **Target Property for Matching**. Setting value for **Target Property for Matching** enables configuration management to look for right component group from both servers and match their property, hence eliminates the manual process of creating mapping between two servers.
7. Click “Save” button.



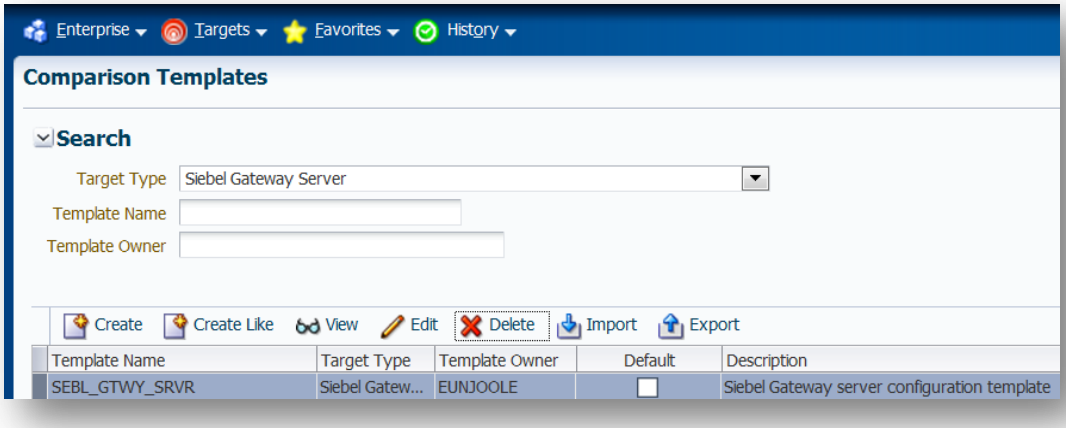
Siebel Gateway Server

In this example, we create Siebel Gateway Server configuration template with name “SEBL_GTWY_SRVR”. Similar to Siebel Component configuration template, Siebel Gateway Server configuration template has no member setting to define.

1. Go to Enterprise > Configuration > Comparison Templates and click “Create” button.
2. Name the comparison template and select “Siebel Gateway Server” for Target Type.



3. Click “OK” and template will be shown under Comparison Templates view.



Configuration Compare Use Cases

Once all of the required templates have been configured, we can start using them for comparison purposes.

We will be highlighting three use cases in this whitepaper:

- Compare one Siebel Server to a different Siebel Server
- Compare one Siebel Server to a gold image (of a Siebel Server)
- Compare Siebel Patch levels between two different Oracle Homes

Compare one Siebel Server to a different Siebel Server

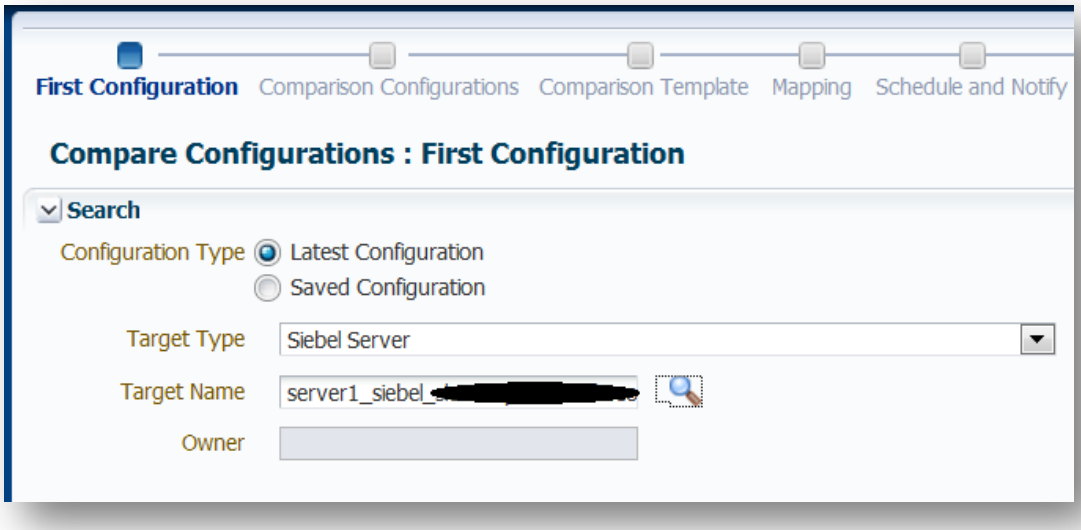
In this use case, we will compare the configuration parameters of two different Siebel Servers (i.e., one-to-one). These servers can be in the same Siebel Enterprise, or in different Enterprises.

Note that it is also possible to compare one Siebel Server to many Siebel Servers (i.e., one-to-many).

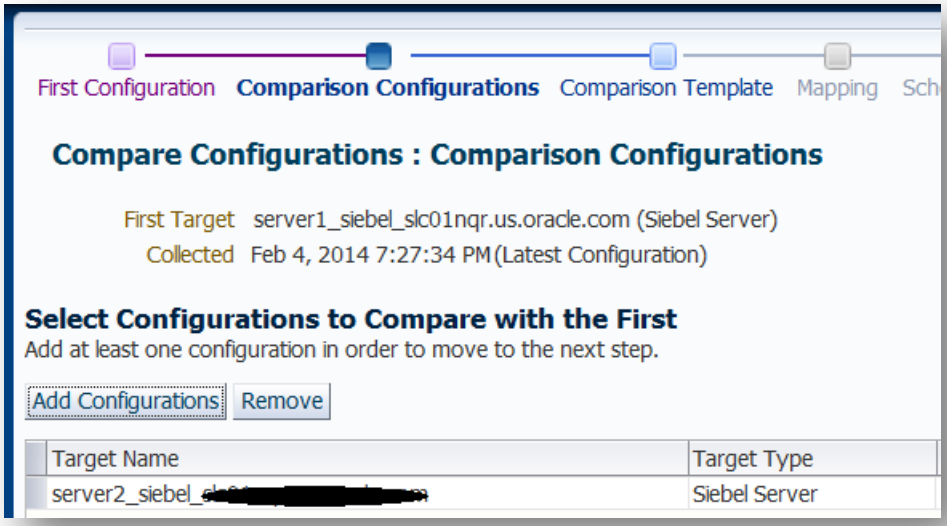
Setting up a comparison involves five steps, six if you are comparing systems. Follow the steps in below to run the Siebel Server configuration comparison testing.

Go to **Enterprise > Configuration > Compare…**

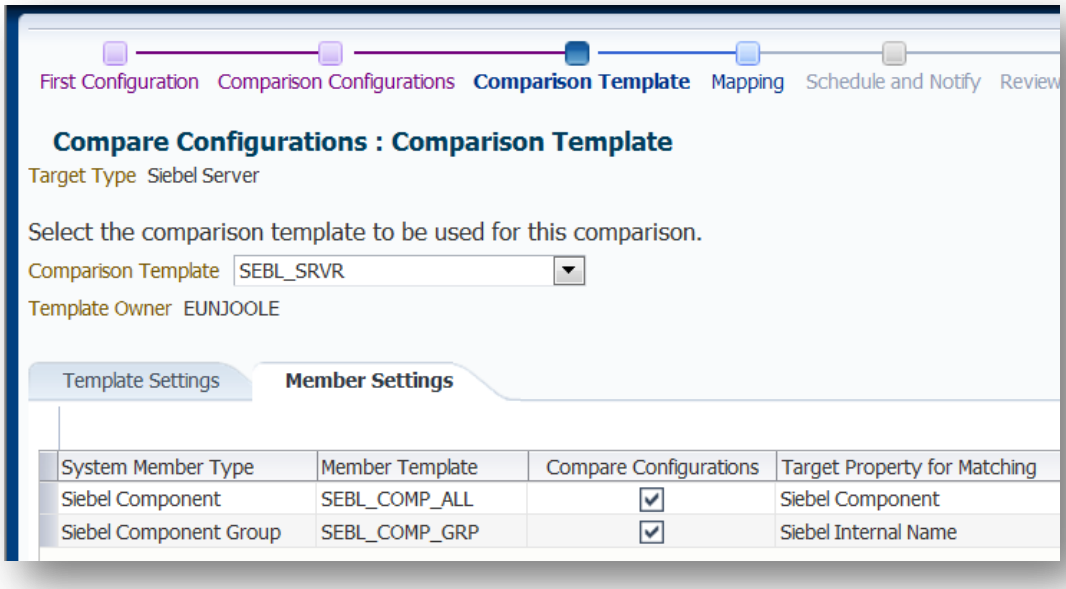
1. The first step (**First Configuration**) is to select the first Siebel Server that you wish to compare. Choose the “Siebel Server” from the **Target Type** drop down menu and click the Icon next to the Target Name. In this use case, we will select the **Latest Configuration** for the Configuration Type.



2. The second step (**Comparison Configuration**) is to select the second Siebel Server that you would like to compare. Click “Add Configurations” to open the Search and Select configurations dialog. In the results list, you can select one or more Siebel Servers. In this use case, we will select Server 2 as our second configuration.

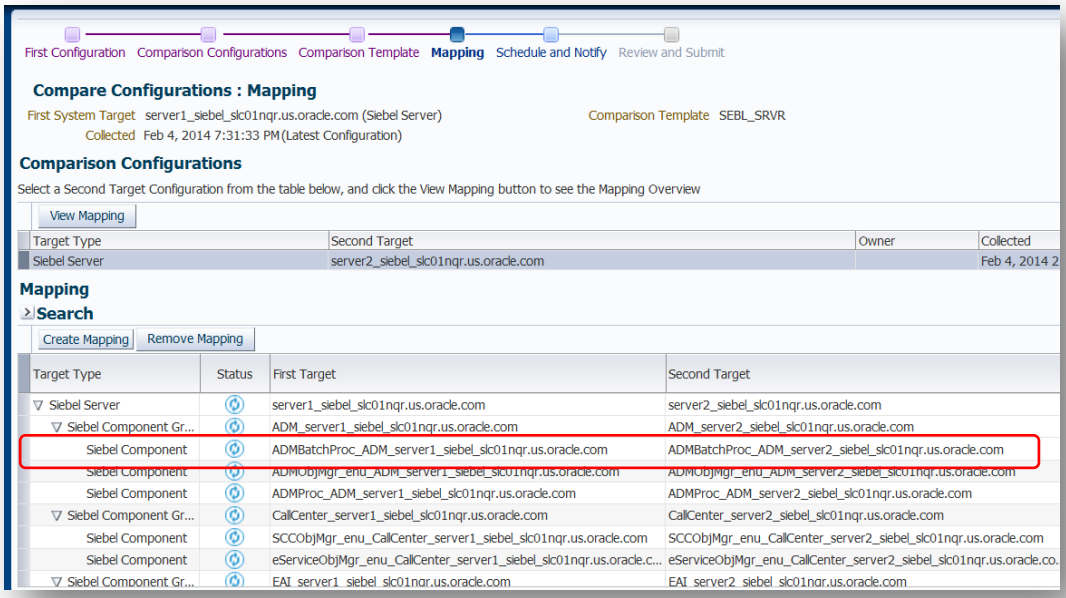


3. The third step (**Comparison Template**) is to select the Comparison Template that can be used for configuration comparison. Click on drop down menu from Comparison Template and select the template for Siebel Server comparison testing. In this use case, we will select the “SEBL_SRVR_GRP” template that was created in Section 3.3.



4. The fourth Step (**Mapping**) is to check the mapping of its members. Mapping is the way that EMCC aligns respective targets from different systems (e.g., Siebel Server system).

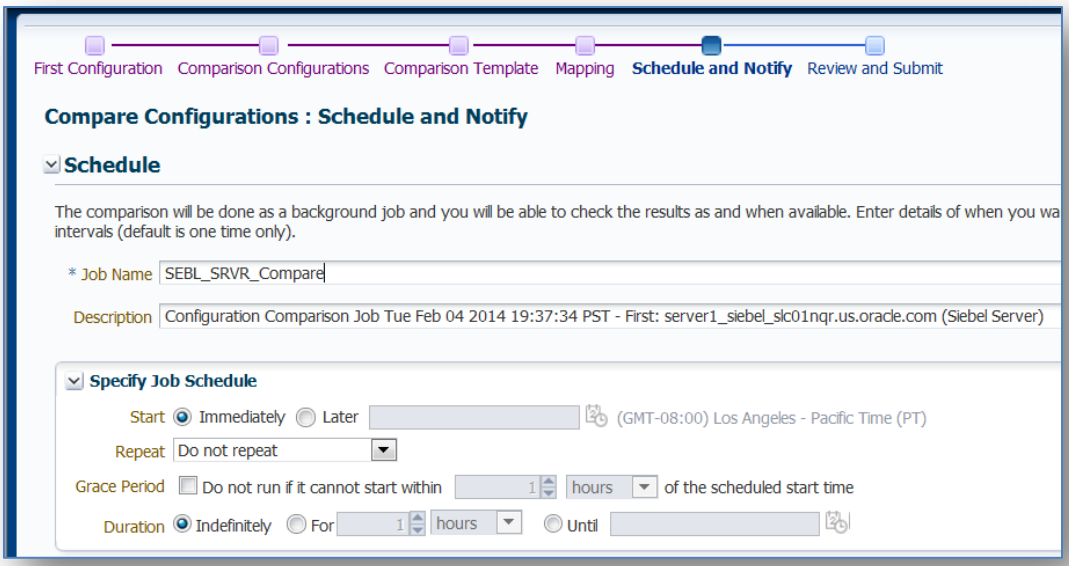
   For example, the way that EMCC knows that the Component “Call_Center” from the first Siebel Server should match up with the “Call_Center” Component in the second Siebel Server is via the Mapping. Highlight the second configuration and click “View Mapping” button to see the mapping overview.



   Note that Template or system based mapping may not be present for all situations or all targets. Click the “**Create Mapping**” button to manually map members in the first system to members in the second system.

5. The fifth step (**Compare Configuration**) is to define the job by specifying job name, job schedule, and notification, and comparison options. The comparison can be one-time-only or run on a recurring basis. You can run the comparison immediately or at some later date. This also is where you can specify the email address to which to send differences notifications.

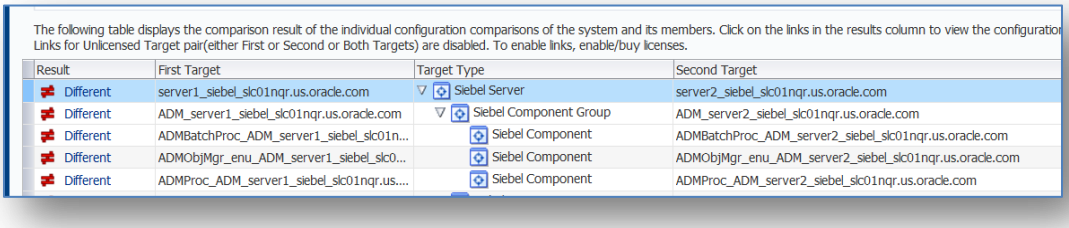
   Best practices recommendation is to check Compare Save Mode as “Save All” under Comparison Options.



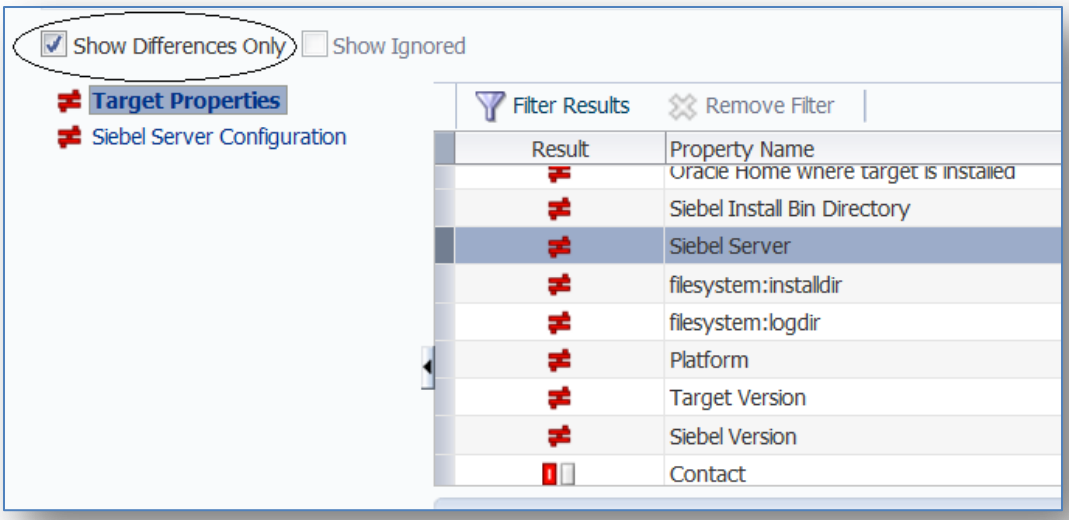
6. The sixth step (**review**) is to review all the settings before submitting the job. If you need to change anything, go back to the appropriate page; otherwise, click "**Submit**" to schedule the comparison job.

Comparison Report Analysis

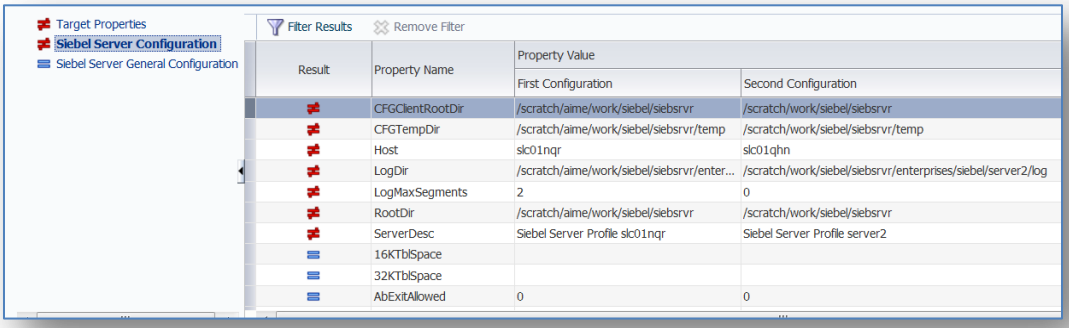
Detailed below is the result of Siebel Server Configuration Comparison report. The tree-view shows the comparison at the Siebel Server level, Component Group level, and Component level. Note that the parent level shows a difference when its child member has a different configuration. You can click the **Different** hyperlink to see the detail information.



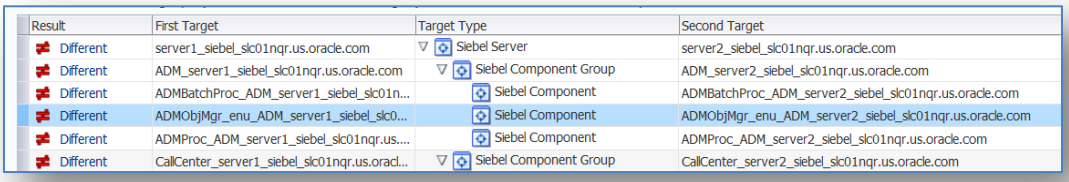
Select a configuration specification on the left to display tables on the right. The following figure shows the difference in Target Properties between two Siebel Servers. Select the **Show Differences Only** check box to focus on just the parameters that are different.



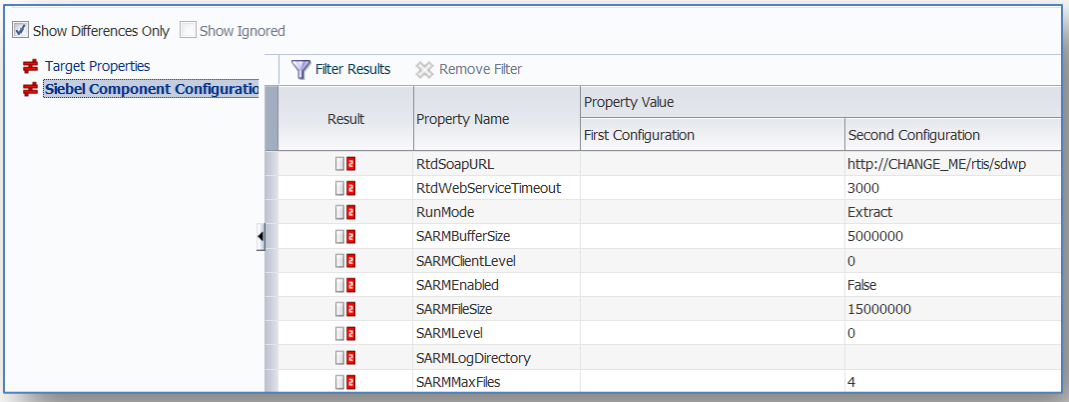
When the **Show Differences Only** is deselected, all configuration parameters (i.e., different and the same) are displayed.



Use the bread crumb link at the top of the details page to return to the system comparison results page. By highlighting the Siebel Component from the system comparison results page, you can examine the comparison result for specific component or component group.



The result column shows comparison results based on the mapping established as part of comparison setup. A Boxed 1 (left only) or 2 (right only) means there was nothing to compare to the first or second member target, respectively.

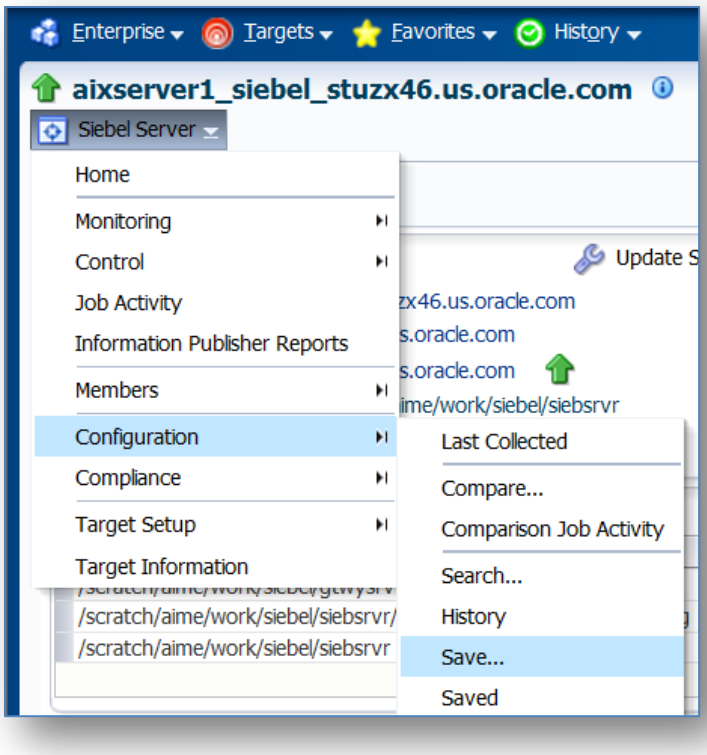


Compare a Siebel Server to a gold image

It is very common for Administrators to maintain one particular Siebel Server as a gold image and, at certain intervals, for them to compare new or modified Siebel Servers against that gold image.

In this use case, we will select the first configuration from a saved configuration. This saved configuration is the Siebel Server that the System Administrator has designated as a gold image.

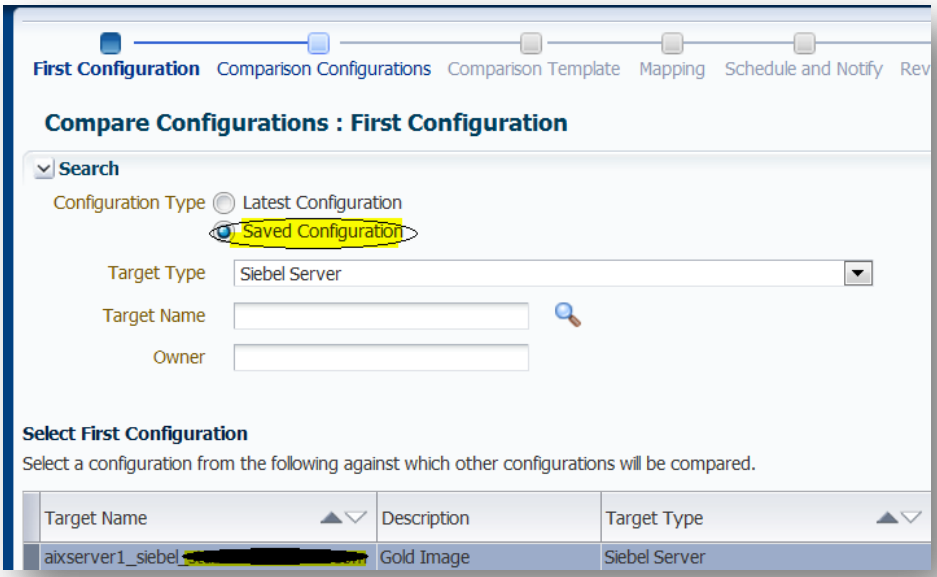
To save particular Siebel Server as a gold image, first select the Siebel Server that you would like to keep it as gold image. Go to **Siebel Server > Configuration > Save**…



The pop-up box shows up with message and by clicking “Submit Job”, you create the gold image for the server that you selected.

Once you saved the configuration, now you can run the comparion testing by going to **Enterprise > Configuration > Compare…**

In the Search criteria, check **Saved Configuration** and select the one you saved as gold image.

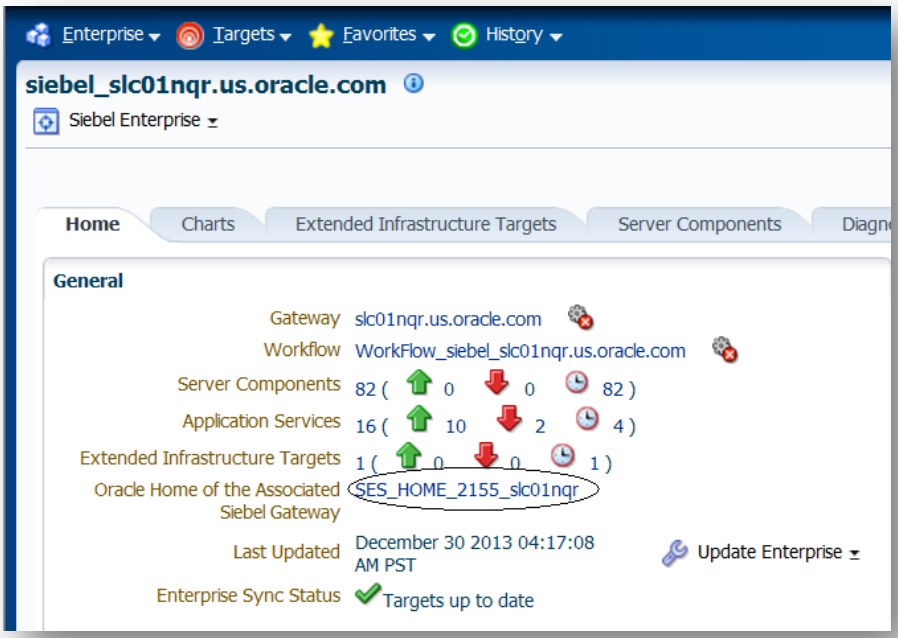


The rest of step of running comparison testing is same as previous use case.

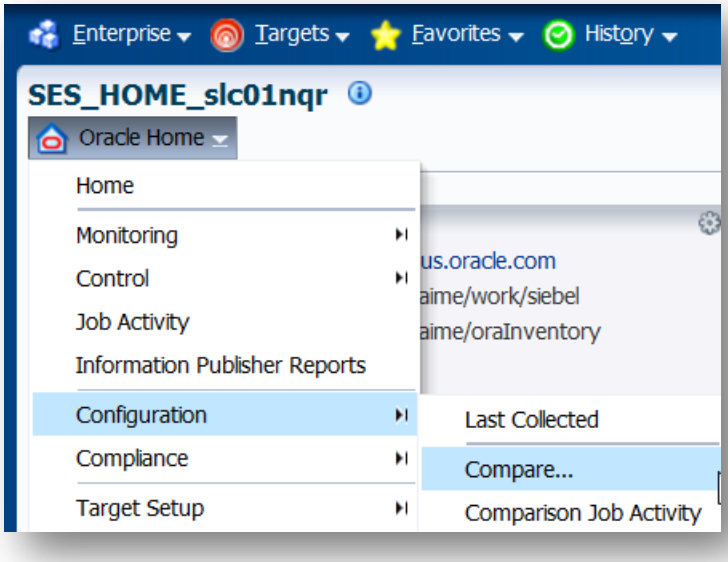
Compare Siebel Patch levels

This use case details the comparison of Siebel Patches between the two Oracle Homes. This use case utilizes the out-of-box Oracle Home Patch template.

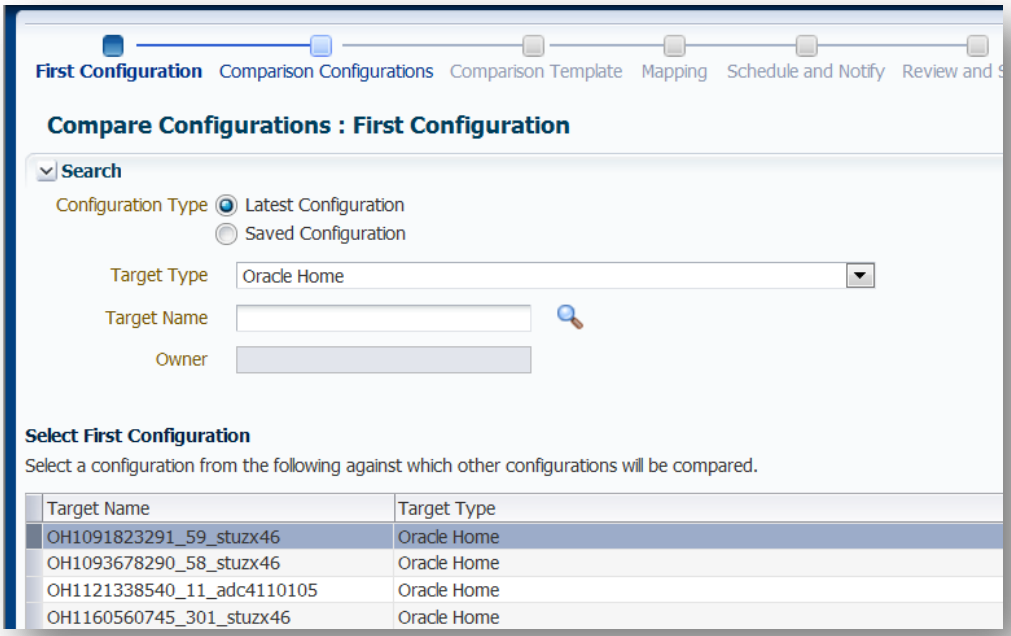
Select the first Siebel Enterprise which you want to compare and click the **Oracle Home of the Associated Siebel Gateway,** in this case SES_HOME_2155_slc01nqr. You can also run the comparison analysis on Siebel Server level by clicking **Associated Oracle Home** link. Please note that **Oracle Home of the Associated Siebel Gateway** and **Associated Oracle Home** is only available for Siebel 8.1.1.10 or higher.



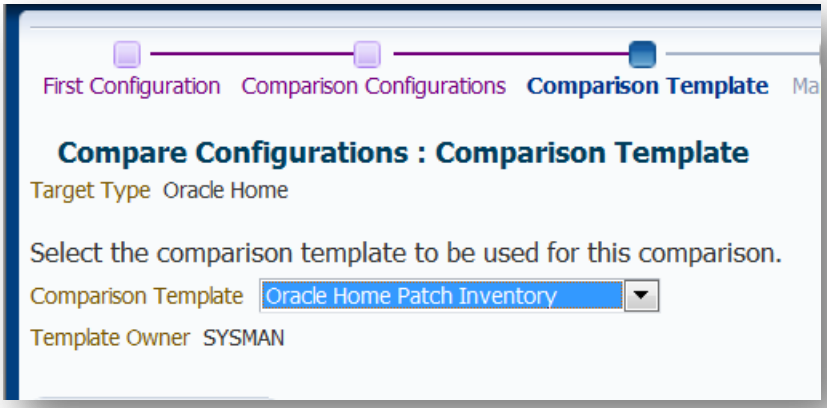
Select **Oracle Home > Configuration > Compare**.



The second step (**Comparison Configuration**) is to select configurations to compare with the first configuration. Click **"Add Configurations"** to open the Search and select the 2nd Oracle Home that you want to compare against the first one.



The third step (**Comparison Template**) is to select the Comparison Template that can be used for configuration comparison. Click on drop down menu from Comparison Template and select the **Oracle Home Patch Inventory** template.



The fourth Step (**Mapping**) will be skipped in this demo since the Oracle Home Patch Inventory template already taken into account the mapping.

The fifth step (**Schedule and Notify**) is to define the job by specifying job name, job schedule, and notification, and comparison options.

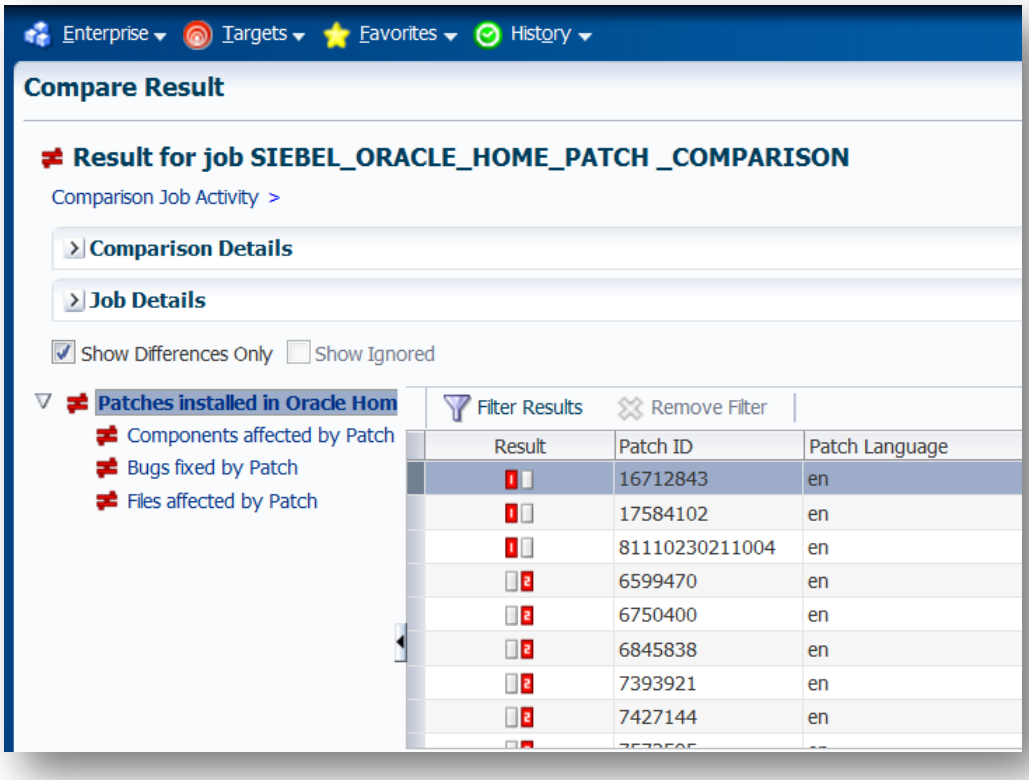
The sixth step (**review**) is to review all the settings before submitting the job. Click “Submit” to schedule or run the comparison job.

Patch Analysis

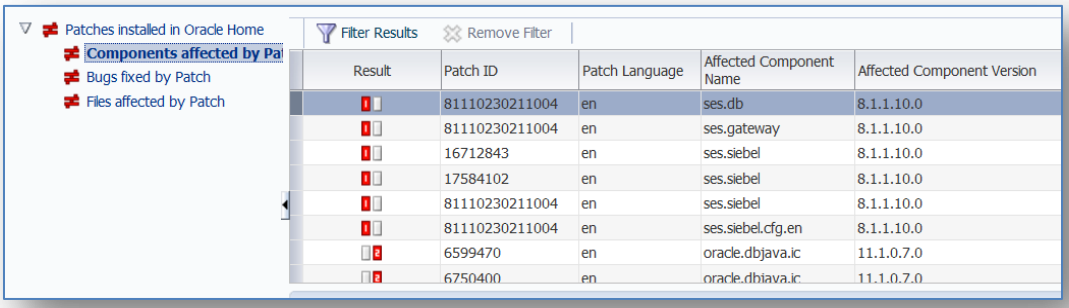
Detailed below are the results of Siebel Oracle Home Patch Comparison. The summary page shows the hierarchical view of Patch information and allows the user to see:

- which components are affected by which patch
- what specific bugs are fixed in the patch
- what files affected by the patch

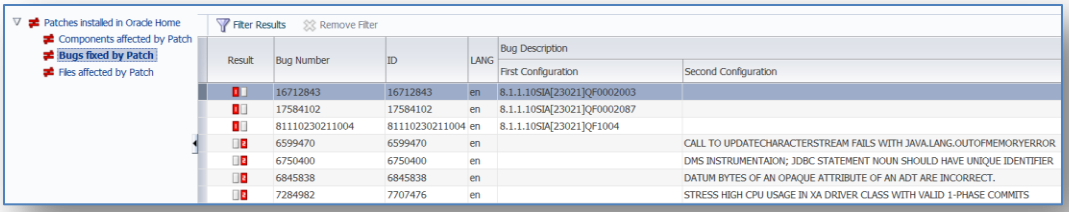
The figure below shows which patch has been applied to which Oracle home.



The **Components affected by Patch** selection shows which Siebel components were affected by the patch.



Bugs fixed by Patch details which specific bugs are fixed on that particular patch.



Conclusion

Enterprise Manager 12c Cloud Control (EM 12c), with the Siebel Plug-in, provides advanced, out-of-the-box tools to manage the complexity of Siebel configuration management. EM12c has advanced configuration capture, change detection, and comparison reporting capabilities that can dramatically reduce the amount of time that System Administrators spend on configuration management.

The benefits of using Configuration Templates to manage Siebel Applications are substantial, and include:

- Ability to include or exclude certain configuration parameters from the Templates, thereby providing a much more focused comparison analysis
- Easily compare configuration parameters for targets within a Siebel Enterprise, or between two different Siebel Enterprises
- Easily compare configuration parameters for a Siebel target against a gold standard or baseline.
- Define comparison reports once and re-run multiple times

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