Troubleshooting Operational Issues Using System Comparison

How to identify operational issues in systems and generate reports
How to identify operational issues in systems and generate reports

Red Hat Customer Content Services
Abstract

This workflow example demonstrates how to identify configuration differences between systems and generate CSV reports for analyses. Providing Feedback: If you have a suggestion to improve this document or find an error, submit a Bugzilla report at http://bugzilla.redhat.com against Cloud Software Services (cloud.redhat.com) for the System Comparison component.
Table of Contents

CHAPTER 1. OVERVIEW .................................................................................................................. 3
CHAPTER 2. ACCESSING THE SYSTEM AND BASELINES COMPARISON SERVICE ...................... 4
CHAPTER 3. ADDING SYSTEMS MANUALLY WITHIN SYSTEM COMPARISON ................................. 5
CHAPTER 4. FILTERING SYSTEM FACTS ...................................................................................... 6
CHAPTER 5. EXPORTING SYSTEM COMPARISON OUTPUT .......................................................... 7
In an IT environment, two systems can behave differently although having been configured using the same template. System Comparison enables IT operators to compare system configuration of one system to other systems. To identify configuration differences between two or more systems:

1. Access the System Comparison service.
2. Add systems manually within System Comparison and view profiles.
3. Filter the system facts by state to highlight differences and incomplete data.
4. Export the filtered output to a CSV file for further analysis.
CHAPTER 2. ACCESSING THE SYSTEM AND BASELINES COMPARISON SERVICE

The System Comparison service is part of Red Hat Insights and can be accessed via https://cloud.redhat.com.

Procedure


2. Click Drift in the left-side navigation menu to view the Drift options: Comparison and Baselines.
   - Click Add to comparison to open the Comparison screen where you can add systems or baselines to compare.
   - Click Baselines to open the Baselines screen, where you can create baselines. This screen also lists any baselines that exist.

You can now start adding systems and baselines to compare their facts.
CHAPTER 3. ADDING SYSTEMS MANUALLY WITHIN SYSTEM COMPARISON

Add systems registered in your cloud management services inventory within the System Comparison service.

Procedure

1. On the Red Hat Insights user interface, click Drift Analysis → Comparison in the left-side navigation menu.
2. On the Comparison screen, click Add System.
3. Select the systems to compare from the list. Alternatively, enter the system name in the search box to find by name, then select the system.
4. Click Submit.

NOTE

- At any time, you can add more systems by clicking on the Add System button on the right-side of the systems you have already added for comparison.
- Similarly, you can remove a particular system under comparison by clicking the cross sign on the upper-right corner of the individual system name, or, you can remove all systems under comparison by clicking the options menu located at the top, then clicking Clear all comparisons to start again.
CHAPTER 4. FILTERING SYSTEM FACTS

Filter the system profiles by state to highlight any differences between the systems, and incomplete data.

1. Click the **View** drop-down list and select **Different** to show facts that are different.

2. Click the **View** drop-down list and select **Incomplete Data** to show facts where information is incomplete.

In the example screen capture below, you can see the system comparison data filtered by facts that show a difference across systems. Some facts, such as the **fqdn**, are expected to be different for each system, but the installed packages are expected to be the same. Over time, some packages have been upgraded on system 1, but not on system 2 and system 3, as shown by expanding the fact category **installed_packages**.
CHAPTER 5. EXPORTING SYSTEM COMPARISON OUTPUT

Export the system profiles you filtered above by state to highlight the differences and incomplete data to a comma-separated values (CSV) file.

NOTE

The exported CSV report preserves all your current selections on the system comparison output, including any filters applied. That is, it follows the WYSIWYG (What You See Is What You Get) paradigm. Therefore, you will need to expand any nested fact categories (installed_packages, for example) to be exported in the report.

Procedure

1. On the system comparison output screen for two or more systems, click the options menu located at the top.
2. Click Export as CSV.

Open the CSV file with the tool of your choice so that you can easily compare exported facts and analyze discrepancies in systems.