Oracle® Cloud

Oracle Management Cloud for Siebel

F13054-04
November 2019

ORACLE®

Oracle Cloud Oracle Management Cloud for Siebel,

F13054-04

Contents

Abstract

This guide helps you set up Oracle Management Cloud for Siebel, discover your
Siebel platform and start monitoring your resources.

Preface

Oracle Management Cloud for Siebel provides a platform for monitoring and managing your Siebel applications.

Topics:

*   Audience
*   Related Resources
*   Conventions

Audience

The Oracle Management Cloud for Siebel guide is intended for users who want to discover their Siebel infrastructure, and monitor the performance of their applications.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Resources

For more information, see these Oracle resources:

*   Oracle Cloud

    http://cloud.oracle.com

*   Using Oracle Log Analytics

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Get Started with Oracle Management Cloud for Siebel

Oracle Management Cloud for Siebel enables you to closely monitor the Siebel Infrastructure end to end on a single screen. You can monitor the health of all the tiers and all the components in the Siebel environment and also analyze historical trends and logs to assist with capacity planning.

About Oracle Management Cloud

Oracle Management Cloud is a suite of integrated monitoring, management, and analytics cloud offering. This suite is designed for today's heterogeneous environments: on-premises, Oracle Cloud, and third-party cloud services.

Operational data in IT organizations, including machine-generated data, can be of different types and dimensions, and is often stored in multiple systems. Oracle Management Cloud enables you to store uploaded data in a single unified platform. It automatically analyzes data using machine learning, proactive monitoring, analysis, and correlation across its offerings. Using Oracle Management Cloud, you can eliminate multiple information silos in end-user and infrastructure data, resolve application issues faster, and run IT like a business.

About Siebel

Oracle Siebel is an advanced system of customer relationship management applications, mainly used in companies which have a large customer base, and have to interact with customers regularly. Siebel infrastructure is comprised of numerous components like Siebel servers, databases, database servers, web servers and many applications.

About Oracle Management Cloud for Siebel

With Oracle Management Cloud for Siebel, you can monitor the performance of all your Siebel applications and their components.

Oracle Management Cloud dashboards display the status of all Siebel applications enabling proactive performance monitoring. By providing end to end visibility across the stack, administrators can take corrective action before a possible problem can hamper smooth functioning of the applications. Oracle Management Cloud provides end to end visibility across the stack, helping administrators take corrective action before a possible problem can hamper smooth functioning of the applications.

You can discover your Siebel entity in Oracle Management Cloud once, and all its components can be monitored using the Siebel dashboard.

Users and Roles in Oracle Management Cloud

Once you are an Oracle Cloud customer and you create an Oracle Management Cloud instance, the following user roles are provisioned:

- Oracle Management Cloud Administrator
- Oracle Management Cloud User

For more information about the tasks that the users assigned with the above roles can perform, see Add Users and Assign Roles in *Getting Started with Oracle Management Cloud*.

The following table lists the Oracle Management Cloud roles and the tasks that a user can perform in that role:

Table 1-1   Roles for Oracle Management Cloud

Role	Tasks
Oracle Management Cloud Administrator	The tasks that a user with the *Oracle Management Cloud Administrator* role can perform: • Set up *Infrastructure Monitoring* and *Log Analytics* by deploying and configuring the gateway and cloud agents. • Manage cloud agents. • Add entities to be monitored. • Configure alert rules. • Delete entities. • Disable notifications on alerts (during maintenance periods). • View and monitor infrastructure status and performance. • Receive alert notifications and view alerts. • Create and administer new log sources. • Create and administer new log parsers.
Oracle Management Cloud User	The tasks that a user with the *Oracle Management Cloud User* role can perform: • View and monitor infrastructure status and performance. • Receive alert notifications and view alerts. • Select targets, groups, or systems to explore. • Search and analyze logs. • Save and share log searches. • Build custom dashboards.

2

Set up the Environment

- Perform Prerequisite Tasks
- Discover a Siebel Entity
- Troubleshoot Setup and Discovery

Perform Prerequisite Tasks

This topic lists the prerequisites you will need, and the tasks you need to perform before deploying Oracle Management Cloud in a Siebel environment.

Perform the following tasks in your Siebel environment:

> **✎ Note:**
>
> Oracle Management Cloud for Siebel supports Siebel IP 15/16.

1. Ensure that you have a supported version of Siebel. Oracle Management Cloud currently supports Siebel IP 15/16. Check your "Siebel Installation Guide for UNIX" for more details on how to check your Siebel version.

2. Create or identify an operating system user to be used for the installation of the Oracle Management Cloud agent. This cloud agent is required for discovery of your Siebel environment so we will refer to it as the "discovery cloud agent". Typically, the cloud agent user is the same as the Siebel installation user. If your cloud agent user cannot be the same as the Siebel installation user, follow these steps to create a new user and grant it appropriateprivileges:

    a. Login as root on the host where your Siebel Server resides.

    ```
    useradd -m -d <home directory of new user> <cloud agent username> -
    g <existing Siebel user group>
    ```

    For example, to create a new user cloudagent and add it to the group emsiebel, run the following:

    ```
    /usr/sbin/useradd -m -d /u01/omc/cloudagent cloudagent -g emsiebel
    ```

    b. Grant the Siebel group read and execute permission to the Siebel gateway server and Siebel server directories:

    ```
    chmod -R g+r <gateway server or Siebel server directory>
    ```

For example:

```
chmod -R g+r /u01/siebel/ses/gtwysrvr
```

```
chmod -R g+r /u01/siebel/ses/siebsrvr
```

```
chmod g+x /u01/siebel/ses/siebsrvr/bin/*
```

```
chmod g+x /u01/siebel/ses/gtwysrvr/bin/*
```

   c. Exit the root environment and login as the new cloud agent user you created. Verify that this cloud agent user is able to run `srvrmgr` in the Siebel server. For example, login as `cloudagent` and run:

```
source /u01/siebel/ses/siebsrvr/siebenv.sh; /u01/siebel/ses/
siebsrvr/bin/srvrmgr
```

3. Access Oracle Management Cloud as an OMC Administrator, download the Cloud Agent and Gateway installation files and install:

   a. An Oracle Management Cloud Gateway (optional). To determine if you require a Gateway and for details on installing it see Install a Gateway in *Installing and Managing Oracle Management Cloud Agents*.

   b. An Oracle Management Cloud Agent on your Siebel Server host. This agent will become your "discovery cloud agent". Make a note of your cloud agent port number. For details on installing a cloud agent see Install Cloud Agents in *Installing and Managing Oracle Management Cloud Agents*.

4. Configure your discovery cloud agent:

   a. If you have a firewall, ensure that the ports are open for the cloud agent to connect to Server Manager. Make exceptions in firewall for the cloud agent port number and for protocol TCP-IP/tls1.2 over HTTPS.

   b. After installing the cloud agent, perform these steps on the discovery cloud agent host:

      i. Log in as root and edit the configuration file `/etc/security/limits.conf` or its equivalent file (Example: `/etc/security/limits.d/90-nproc.conf` for RedHat 6 and above). Set the following values:

```
<unix user>      soft    nproc      64000
<unix user>      hard   nproc     64000
```

      ii. Exit the root environment and, as the cloud agent user, edit the file `$AGENT_BASE_DIRECTORY/agent_inst/sysman/config/emd.properties`and set the below property as shown:

```
agentJavaDefines=-Xmx512M -XX:MaxPermSize=160M
```

Then, restart the cloud agent:

```
$AGENT_BASE_DIRECTORY/agent_inst/bin/omcli stop agent
```

```
$AGENT_BASE_DIRECTORY/agent_inst/bin/omcli start agent
```

5. To analyze logs on additional hosts, install cloud agents on these hosts. For example, you may want to install a cloud agent on other Siebel Server hosts, Gateway Server hosts, your database host or OHS host(s). See Install Cloud Agents in *Installing and Managing Oracle Management Cloud Agents*.

6. Verify the installations. See Verify the Gateway Installation and Verify the Cloud Agent Installation in *Installing and Managing Oracle Management Cloud Agents*.

7. Enable Host Monitoring in Oracle Management Cloud. See Enable Host Monitoring. in *Installing and Managing Oracle Management Cloud Agents.*

> ✎ **Note:**
>
> Siebel Monitoring is currently only supported on Linux operating systems. Solaris, Windows and AIX are not supported at this time.

8. Log in to OMC as an OMC Administrator and verify that the hosts where cloud agents are installed are listed in the Entities page.

Discover a Siebel Entity

Siebel Entity Discovery Prerequisites

Before discovering a Siebel entity, ensure you have these requirements in place:

1. To discover and monitor a Siebel database, create a database user and grant the requisite permissions. For further information see: Entity Monitoring: Prerequisites and Credentials.

2. To discover an Oracle HTTP Server, ensure that the prerequisites are met. For further information see: Prerequisites and Credentials: Oracle HTTP Server (OHS).

3. To discover a Tomcat server, ensure that the requirements for Tomcat are in place. Fo further information see: Prerequisites and Credentials: Tomcat

Discover a Siebel Entity

1. Log in to Oracle Management Cloud as an OMC Administrator. In the left pane, select **Administration**.

2. In the left pane, select **Discovery** and select **Add Entity**.

3. In the Add Entity page, provide information about the entity.

4. In the **Entity Type** drop down, choose Siebel.

5. In the **Configuration** drop down, select the configuration type. Provide information about the entity in the fields that follow.
   For details of the information to be provided, see the follwing tables:

Table 2-1   Siebel Entity with Oracle HTTP Server (OHS)

Field	With Oracle HTTP Server configuration
Entity Type	Choose *Siebel*
Configuration	Select *With Oracle HTTP Server*
Entity Name	Specify a name for the entity
Siebel Enterprise Server Name	Name of your Siebel Enterprise Server
Siebel Gateway Hostname	Hostname of the Siebel Gateway
Siebel Gateway Port	Port number of the Siebel Gateway
Siebel Gateway Install Directory	Path to the directory where Siebel Gateway is installed, this must be accessible to the cloud agent
Siebel Server Install Directory	Path to the directory where Siebel Server is installed
Database Host Name	Name of the database host
Database Port	Port of the Database
Database Service Name	Service Name of your database
OHS Host Name	Host name of your OHS
OHS Oracle Name	Name of your OHS
OHS Instance Name	Instance name of your OHS
OHS Component Name	The OHS component name that your Siebel host connects to
OHS Version	OHS version
OHS Listen Port	Listening port of your OHS
Protocol	Connection protocol
Cloud Agent	Name of the cloud agent running on the Siebel server (but not on the Gateway server)

Table 2-2   Siebel Entity without Oracle HTTPS

Field	Without Oracle HTTP Server configuration
Entity Type	Choose *Siebel*
Configuration	Select *Without Oracle HTTP Server*
Entity Name	Specify a name for the entity
Siebel Enterprise Server Name	Name of your Siebel Enterprise Server
Siebel Gateway Hostname	Hostname of the Siebel Gateway
Siebel Gateway Port	Port number of the Siebel Gateway
Siebel Gateway Install Directory	Path to the directory where Siebel Gateway is installed This must be accessible to the cloud agent
Siebel Server Install Directory	Path to the directory where Siebel Server is installed
Database Host Name	Name of the database host
Database Port	Port of the Database
Database Service Name	Service Name of your database

Table 2-2   (Cont.) Siebel Entity without Oracle HTTPS

Field	Without Oracle HTTP Server configuration
Cloud Agent	Name of the cloud agent running on the Siebel server (but not on the Gateway server)

Table 2-3   Siebel Entity with Tomcat

Field	With Tomcat
Entity Type	Choose *Siebel*
Configuration	Select *With Tomcat*
Entity Name	Specify a name for the entity
Siebel Enterprise Server Name	Name of your Siebel Enterprise Server
Siebel Gateway Hostname	Hostname of the Siebel Gateway
Siebel Gateway Port	Port number of the Siebel Gateway
Siebel Gateway Install Directory	Path to the directory where Siebel Gateway is installed This must be accessible to the cloud agent
Siebel Server Install Directory	Path to the directory where Siebel Server is installed
Database Host Name	Name of the database host
Database Port	Port of the Database
Database Service Name	Service Name of your database
Tomcat Host Name	Name of the Tomcat host
JMX Port Number	Java Management Extension port number
Cloud Agent	Name of the cloud agent running on the Siebel server (but not on the Gateway server)

6. In the Monitoring Credentials section, provide the credentials that the cloud agent will use for monitoring the Siebel environment. This includes the credentials for Siebel Server Manager and Database.

> **Note:**
>
> The database user is the user you created as part of the prerequisites at the beginning of this task.

7. Depending on your environment and installation type, you will need to configure credentials:

   • *For Siebel with/without Oracle HTTP Server*: Choose the applicable combination of Cloud Agent and OHS (Oracle HTTP Server) as per your environment and specify the OHS Host credentials.

   • *For Siebel with Tomcat*: Choose the applicable combination of Tomcat without credentials or with JMX credentials as per your environment and specify the Tomcat JMX credentials.

8. In the Entity Attributes section, specify Tags for the entity, select applicable license, and choose whether to associate logs for the entity. This option allows you to view logs for this Siebel entity using Log Analytics. Click **Add Entity**.

The Siebel Entity is now discovered and ready to be monitored.

Troubleshoot Setup and Discovery

Troubleshoot Siebel Discovery

You can troubleshoot discovery of the Siebel entity through these steps:

1. Check the Discovery status window to see if the discovery process has generated *Fatal* or *Critical* errors.

   a. From the left pane in Oracle Management Cloud, select **Administration**.

   b. Click **Discovery** and select **Discovery Job Status**. All the discovered entities are listed along with the status of discovery in the Discovery status window.

   c. For the entity you want to check, click the status. The Discovery status window displays the status of discovery, summary of the discovery process, details of all the validations that were run during the discovery process along with results for each validation, and also a list of tasks on how to manually check the status of discovery.

   d. If the discovery process has thrown some *Fatal / Critical* errors, resolve and retry discovering the entity.

2. If the logs available in the console do not provide enough information, then check the agent logs and in the file `gcagent_sdk.trc` file, look for this message - *Siebel Discovery finished*. If this message doesn't appear, then the discovery might have failed. If you see the message, then monitor `gcagent.log` messages which promotes the entities to agent.

Warning Message: Discovery fails or Protocol is not set

After discovering the Siebel entity, you might see a warning for a Database entity with the message that the Protocol is not set, and the default protocol is selected as TCP. You can ignore this warning.

3

Monitor Your Siebel Environment

Oracle Management Cloud helps you monitor your Siebel environment end to end through the Siebel Monitoring Dashboards and the topology view.

The Siebel Monitoring Dashboards is a set of dashboards providing insights into various aspects about the health of your Siebel landscape. To view the Siebel Monitoring Dashboards, log in to Oracle Management Cloud. In the left pane, click **Dashboards**; select the **Siebel Monitoring Dashboards** icon. The Siebel Monitoriong Dashboards are now displayed.

> **Note:**
>
> Siebel Monitoring is currently only supported on Linux operating systems. Solaris, Windows and AIX are **not** supported at this time.
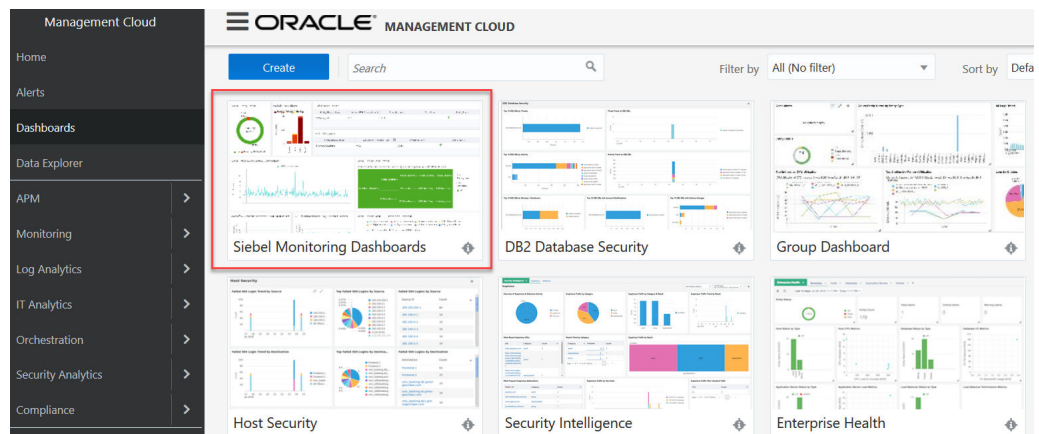
Topology

The Topology dashboard gives you an overall picture of all the Siebel components, indicates status and other details of the various pieces in the Siebel infrastructure.

To view the topology of your Siebel components, navigate to the *Sieble Monitoring Dashboards* and click the **Toggle Topology** button. This will give you a holistic view of all your discovered Siebel components, hover over the cells in the diagram to view details of each individual component.
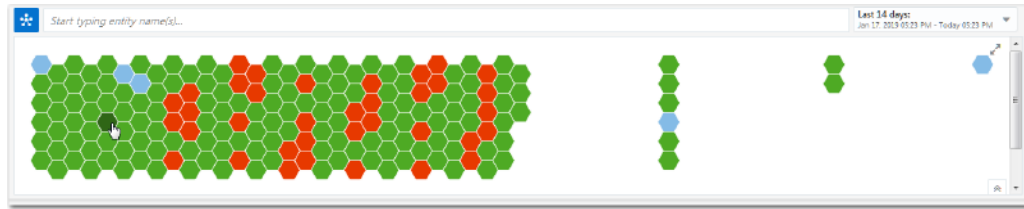
Siebel Health Dashboard

The Siebel Health dashboard provides a high level picture of all Siebel Servers within a Siebel Enterprise. You can view the data, drill down to the specific objects, or view the information in Data Explorer.
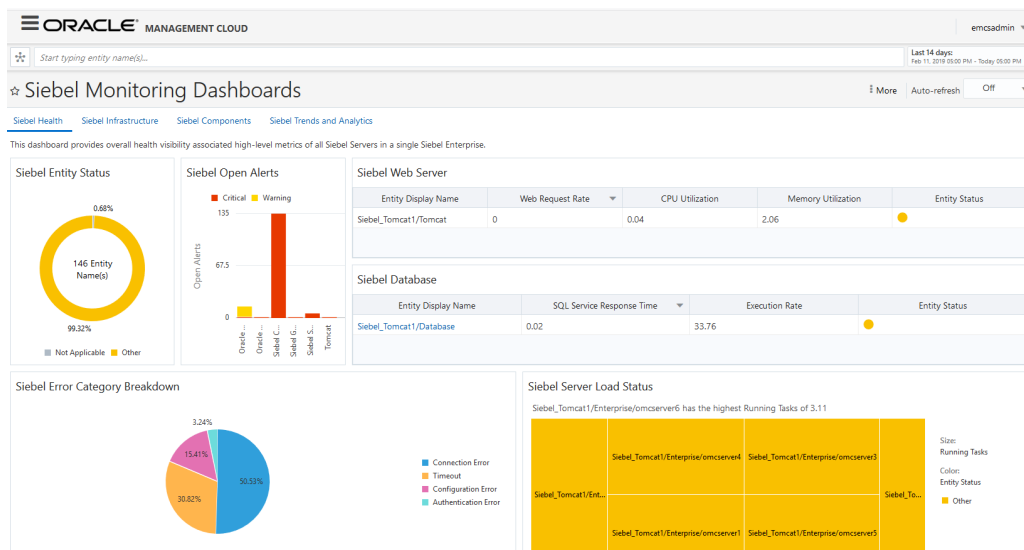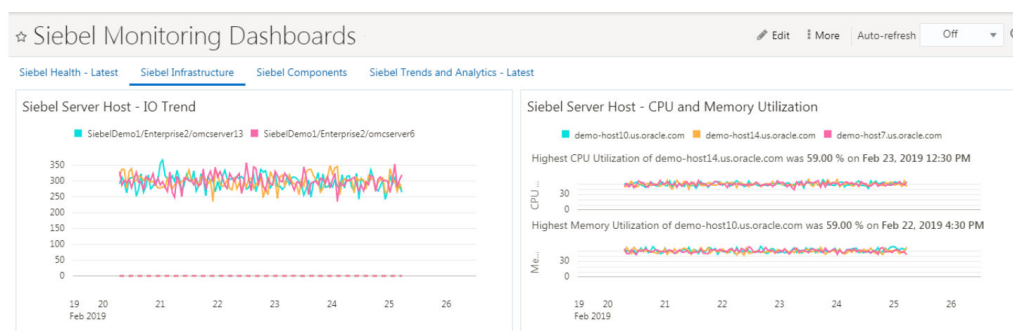

Here's a list of widgets and charts in the Siebel Health dashboard:

1. **Siebel Entity Status widget:** Displays what percentage of your Siebel entities are running. Hover on the chart to view the number of entities that are up and the number of entities that are down.

2. **Siebel Open Alerts widget:** Displays the number of open alerts that need your attention, divided as Warnings and Critical alerts. Hover on the chart to view the number of alerts and the entity type for which the alert is raised.

3. **Siebel Web Server list:** Lists the web servers running currently and shows status and data on utilization of the servers.

4. **Siebel Database list:** Provides data on the response time and execution rate of the database.

5. **Siebel Error Category Breakdown widget:** Displays the shares of various errors. Hover on the chart to view the number of records for each error category.

6. **Siebel Server Load Status widget:** Shows the load each of the Siebel Servers are handling.

7. **Siebel Web Server Web Request Processing Time widget:** Provides data on time taken for web request processing by the web servers.

8. **Siebel Database - Response Trend widget:** Displays the trends on the response times of the database.

9. **Workflow Process Manager - SQL Metrics Trends widget:** Displays data pertaining to the workflow process manager.

10. **EAI Object Manager - SQL Metrics Trends widget:** Displays the metrics for the Enterprise Application Integration.

11. **Siebel Database - Average Wait Time and Total Waits widget:** Provides the average and total numbers for wait times for the database.

Siebel Infrastructure Dashboard

Get a detailed view of all your Siebel Infrastructure components in the Siebel Infrastructure Dashboard. You can view the data, drill down to the specific objects, or view the information in Data Explorer.

Here's a list of widgets and charts in the Siebel Infrastructure dashboard:

1. **Siebel Server Host IO Trend widget:** Displays a graph for the Input-Output trend across the Siebel Server Host. Hover over the graph to view details of the host, and the time stamp.

2. **Siebel Server Host - CPU and Memory Utilization widget:** Displays graphs of CPU and Memory Utilization of the Siebel Server. The highest utilization numbers are highlighted at the top of the graph.

Siebel Components Dashboard

You can view the status of all the Siebel Components across your infrastructure with the Siebel Components Dashboard. You can view the data, drill down to the specific objects, or view the information in Data Explorer.

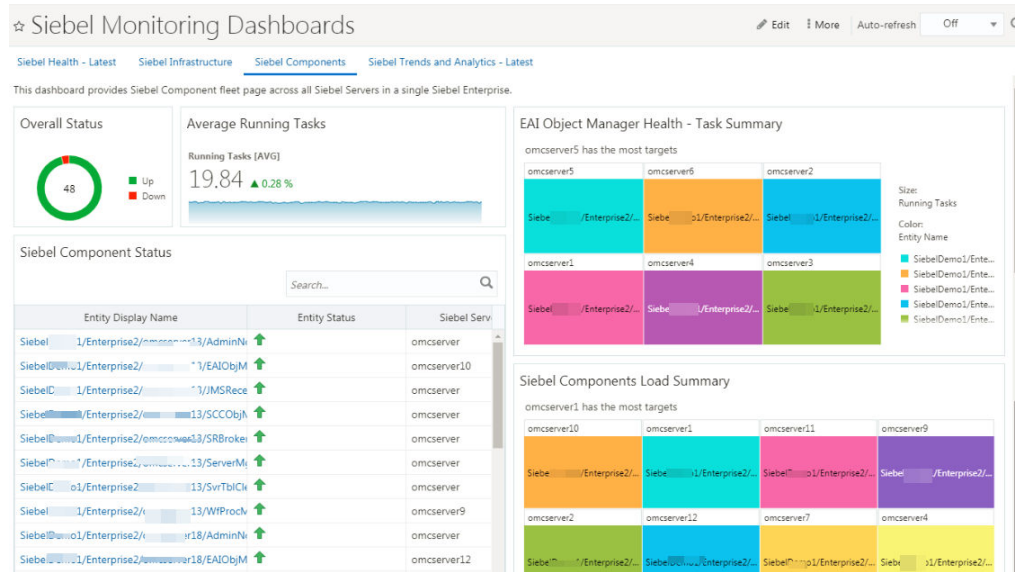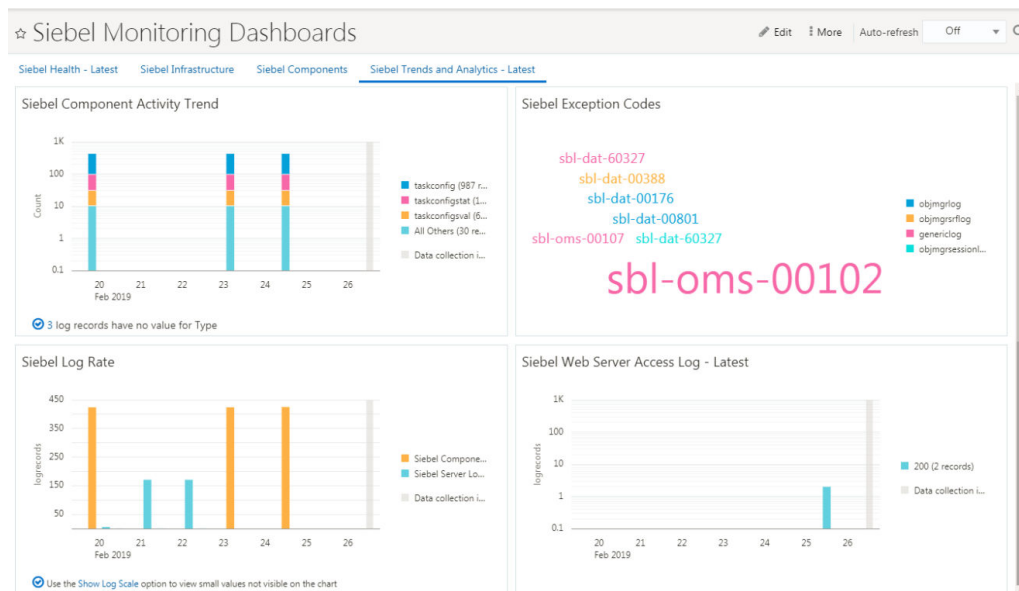Here's a list of widgets and charts in the Siebel Components dashboard:

1. **Overall Status widget:** displays a graph of the overall status of all the Siebel components in the environment, with a percentage of components which are active and the ones that are not running. The total number of components is listed at the center of the graph. Hover over the graph to get the exact number of components that are active or are not running.

2. **Average Running Tasks widget:** displays the average number of tasks running per component. Hover over the widget to graphs of CPU and Memory utilization of the Siebel Server. The highest utilization numbers are highlighted at the top of the graph.

3. **Enterprise Application Integration (EAI) Object Manager Health widget:** provides an overview of the health of the EAI Object Manager.

4. **Siebel Component Status widget:** lists the Siebel components with their status.

5. **Siebel Component Load Summary widget:** displays a graph of how the targets are distributed across components, and the one with most targets is listed on top of the summary. Hover over each cell in the graph to view details of the entity and its ranking.

6. **Top Eight Siebel Components list:** the top eight Siebel components in terms of the number of tasks are listed here.

Siebel Trends and Analytics Dashboard

The Siebel Trends and Analytics Dashboard provides access to logs of Siebel Server and components. You can analyze the logs to derive trends for better planning. You can view the data, drill down to the specific objects, or view the information in Data Explorer.

Here's a list of widgets and charts in the Siebel Trends and Analytics dashboard:

1. **Siebel Component Activity Trend widget:** displays a graph of how active a specific component is, the overall status of all the Siebel components in the environment, with a percentage of components which are active and the ones that are not running. The total number of components is listed at the center of the graph. Hover over the graph to get the exact number of components that are active or are not running.

2. **Siebel Exception codes widget:** lists the most commonly occurring error messages with indicators on how frequently these exception codes appear.

3. **Siebel Log Rate widget:** displays a graph showing the number of log records across Siebel components and servers.

4. **Siebel Web Server Access Logs widget:** displays the number of log records across web servers.

Use Cases

Here are some business use cases where Oracle Management Cloud for Siebel can be effectively employed within your organization.

- Get Complete Visibility into Siebel Infrastructure

- Isolate Problems Faster

- Diagnose with Logs

- Identify Issues using Analytics

Get Complete Visibility into Siebel Infrastructure

Oracle Management Cloud provides a clear picture of all your Siebel components in a single view pane. Giving you complete visibility into your Siebel infrastructure.

You can view the health of the nodes in the Application Tier (Siebel Servers, application servers, and middleware infrastructure), Database Tier (Database

instances, listeners) and Siebel components (Enterprise Application Integration) using the Oracle Management Cloud dashboards.

Oracle Management Cloud helps in proactive monitoring and performance visualization of the complete infrastructure, helps you analyze logs for the entire application from a single console, and drill down to see alerts, logs and metrics of any entity.

Typical tasks to gain complete visibility into the Siebel infrastructure:

- Check the alerts that are displayed in the Siebel Health dashboard, and view the critical alerts. Check the status of various Siebel entities, the response times and trends. For further information, view Siebel Health Dashboardin *Get Started With Oracle Management Cloud for Siebel*.

- In the Infrastructure dashboard, view the input-output trends for the Server, CPU and memory utilization. For further information view Siebel Infrastructure Dashboard in *Get Started With Oracle Management Cloud for Siebel*.

- If you want to ensure the health of the components, the Siebel Components Dashboard provides visibility at the component level. In this dashboard, you can view the percentage of active components, average tasks running per component, the health of the EAI Object Manager, status and load summary of the components. The top eight components in terms of running tasks are compared to their maximum allowed tasks, to provide maximum visibility into any boundary issues. For further information view Siebel Components Dashboard in *Get Started With Oracle Management Cloud for Siebel*.

Isolate Problems Faster

Oracle Management Cloud helps in rapid problem isolation within your Siebel infrastructure.

With numerous components coming together in the Siebel infrastructure, it could be time-consuming to find the exact problem area in case of a dip in performance. Oracle Management Cloud's capabilities provide deep visibility to all the infrastructure components, and can trace end user to back-end or SQL issues. Integration with Infrastructure Logs and Application Logs help in providing all details about an event.

Typical tasks for rapid problem isolation:

- Check for the overall health of the complete infrastructure at the top level using the Siebel Infrastructure Dashboard. For further information view: Siebel Infrastructure Dashboard.

- Check the health of all Siebel components in the Siebel Components Dashboard. For further information view: Siebel Components Dashboard.

- If the logs indicate a possible problem, you can isolate the problem using various logs recorded for the components.For further information view: Siebel Trends and Analytics Dashboard.

Diagnose with Logs

If you would like to view details of a transaction or an entity, Oracle Management Cloud provides logs that can be linked across a common attribute. Using logs, you can identify anomalies across linked events, and cluster logs to find a troublesome event that you might otherwise miss.

Oracle Management Cloud uses machine learning to work with log data from both Oracle Management Cloud and Siebel to identify trends and patterns in the logs. These trends are then associated with Siebel Error Categories which are tagged automatically

Typical tasks to diagnose with logs:

- If the logs indicate a possible problem, you can isolate the problem using various logs recorded for the components. For more details see:Siebel Trends and Analytics Dashboard in *Oracle Management Cloud for Siebel*

Identify Issues using Analytics

With the Analytics capabilities of Oracle Management Cloud, you can proactively identify possible bottlenecks and take corrective action before the issues occur. You can plan for optimum capacity depending on seasons, trends and forecasts.

You can monitor user experience by keeping watch on response times and errors, and by setting alert thresholds that are applicable to your business needs.. You can regularly run synthetic tests on pages, transactions and jobs to monitor application health.

Typical tasks to use Analytics to monitor application health:

- Watch out for problematic response times in the Siebel Health Dashboard. For further information view: Siebel Health Dashboard.

- Analyze trends and view details of transactions recorded in logs with the Siebel Trends and Analytics dashboard. For further information view: Siebel Trends and Analytics Dashboard.