

# Oracle® Enterprise Manager

Getting Started with Application Management Pack for Siebel

10g Release 5 (10.2.0.5.0)

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This document provides a brief introduction to the Siebel Management Pack, and describes the value-added features this pack offers. This document also lists the metrics collected for Siebel targets, and describes some troubleshooting tips you can use to resolve monitoring issues.

In particular, this document covers the following:

- [Introduction to the Oracle Application Management Pack for Siebel](#)
- [Configuring Siebel Enterprise Targets](#)
- [Creating Siebel Service Targets](#)
- [About Siebel Transactions](#)
- [Siebel Performance Diagnostics](#)
- [About Siebel Workflow](#)
- [About Event Logs](#)
- [Siebel Metrics](#)
- [Troubleshooting the Siebel Application Pack for Oracle Enterprise](#)
- [Documentation Accessibility](#)

## 1 Introduction to the Oracle Application Management Pack for Siebel

This section covers the following topics:

- [Functional Overview](#)
- [Siebel-Specific Targets](#)
- [Additional Sources of Information](#)
- [System Requirements](#)
- [Installing Oracle Enterprise Manager 10g Grid Control Release 3 or higher](#)
- [Prerequisites for Installing a Siebel Enterprise in Enterprise Manager](#)
- [Prerequisites for Upgrading Enterprise Manager 10g Grid Control Release 3 \(10.2.0.3\) to Release 4 \(10.2.0.4\) or Release 5 \(10.2.0.5\)](#)

## 1.1 Functional Overview

Oracle Application Management Pack for Siebel (referred to as Siebel pack) is an integrated solution for managing Siebel Customer Relationship Management (CRM) applications. It leverages the capabilities of Oracle Enterprise Manager Grid Control in configuration management, application performance management, automation, and service-level management to help you achieve the high level of performance and availability your Siebel CRM applications require.

With the Siebel pack, you can:

- Manage multiple Siebel environments from a single console.
- Monitor the health and capacity utilization of your Siebel server environment, the hosts for these servers, and the Server Components deployed within the Siebel Application Servers.
- Track configuration changes you have made to Siebel Application Servers and Server Component parameters.
- Monitor actual end-user response time as well as response time from synthetic service test transactions.
- Diagnose performance and availability problems through performance analysis.
- Model, monitor, and report on the service level your Siebel CRM applications deliver.

When combined with other Enterprise Manager packs and plug-ins for managing Oracle and non-Oracle database, middleware, network devices, and hosts, you can achieve complete end-to-end management of your entire Siebel environment.

## 1.2 Siebel-Specific Targets

[Figure 1](#) shows the Siebel targets added to Enterprise Manager in order to facilitate the management of Siebel CRM applications. These targets model the entities within a Siebel environment so they can be managed within Enterprise Manager.

Most of these targets have a direct one-to-one mapping with their counterparts in Siebel. Some are created to facilitate specific management capabilities within Enterprise Manager.

**Table 1 Siebel-specific Targets**

| Enterprise Manager Target | Siebel Entity             | Purpose   |
|---------------------------|---------------------------|---|
| Siebel Enterprise         | Siebel Enterprise         | Representation of Siebel enterprise providing access to metrics and associated Siebel servers.                                      |
| Siebel Server             | Siebel Application Server | Representation of Siebel server providing access to related metrics and configuration information and associated Siebel components. |

**Table 1 (Cont.) Siebel-specific Targets**

| <b>Enterprise Manager Target</b> | <b>Siebel Entity</b>   | <b>Purpose</b>  |
|----------------------------------|--|---|
| Siebel Component Group           | Siebel Component Group                                       | Representation of Siebel component group providing access to metrics and associated Siebel components.                        |
| Siebel Component                 | Siebel Component   | Representation of Siebel component providing access to component metrics and configuration information.                       |
| Siebel Key Components            | -  | Representation of all the Siebel components providing mandatory functionality for the proper function of a Siebel server.     |
| Siebel Functional Components     | -  | Representation of all the Siebel components providing functionality that multiple components may use (for example, Workflow). |
| Siebel Database Repository       | Siebel Database  | Representation of Siebel database providing access to Siebel business metrics.  |
| Siebel Gateway Server            | Siebel Gateway Server  | Representation of Siebel gateway server.  |
| Siebel Application Service (HI)  | Employee Facing Siebel Applications (high interactivity)     | Aggregated service providing information about all the Siebel high interactivity applications.                                |
| Siebel Application Service (SI)  | Customer Facing Siebel Applications (standard interactivity) | Aggregated Service, providing information about all the Siebel standard interactivity applications.                           |
| Siebel Workflow                  | -  | Representation of Siebel Workflow target providing access to workflow processes and component groups.                         |

### 1.3 Additional Sources of Information

Refer to the [Table 2](#) for additional information about the Siebel pack. Because the pack leverages many of Enterprise Manager's underlying capabilities, the base documentation is applicable in many cases.

**Table 2 Additional Documentation for the Siebel Pack**

| Book   | Chapter  | Information Contained Within  |
|--|--|---|
| <i>Enterprise Manager Grid Control Quick Start Guide</i>                           | All  | Introduction to Enterprise Manager Grid Control. It is highly recommended that you review this guide first if you are new to using Oracle Enterprise Manager. |
| <i>Enterprise Manager Concepts Guide</i>   | All  | Overall information on the capabilities of Oracle Enterprise Manager Grid Control.  |
|  | System Monitoring  | Setting up thresholds and alerts.   |
|  | Service Management   | Modeling Siebel Application Services, defining service-level objectives, setting up service tests, and running service-level reports.                         |
|  | Managing Deployments Chapter                                       | Viewing configurations, comparing configurations, taking configuration snapshots, and using configuration policies.   |
|  | Host and Third-Party Target Management                             | Monitoring the operating system and the host.   |
| <i>Siebel 8 System Monitoring and Diagnostic Guide (on the Siebel 8 bookshelf)</i> | Information Publisher  | Creating custom reports.  |
|  | Monitoring and Analyzing Data Using Siebel Diagnostic Tool         | Utilizing server performance analysis, user performance analysis, and event log analysis.   |
| <i>Enterprise Manager Grid Control Installation Guide</i>                          | All  | Installing the Siebel diagnostic tool.  |
|  | All  | Installing the Enterprise Manager Grid Control Server and Agents.   |
| <i>Enterprise Manager Advanced Configuration</i>                                   | All  | Implementing advanced configuration techniques.   |
|  | Sizing and Maximizing the Performance of Oracle Enterprise Manager | Implementing capacity planning and tuning for Enterprise Manager.   |

The documents listed in [Table 2](#) can be accessed from the Enterprise Manager documentation library available at:

<http://www.oracle.com/technology/documentation/oem.html>

Besides the documents listed in [Table 2](#), Enterprise Manager provides comprehensive instructions for using the Siebel pack in the Enterprise Manager online help. To access the Enterprise Manager online help, log into Enterprise Manager, and click the **Help** button at the upper right-hand corner of the home page.

You can also get more information about the product on the Oracle Technology Network (OTN) forums and tutorials area for Enterprise Manager. Information

will be posted on OTN when available. A copy of the Enterprise Manager documentation set is also available on OTN as well at the following site:

<http://www.oracle.com/technology>

## 1.4 System Requirements

- The Siebel pack is supported on the same platforms that support the Siebel software. Currently, the Siebel pack is supported with Siebel 7.7, Siebel 7.8, and all later versions. To learn about the Siebel system requirements, visit the System Requirements and Supported Platforms page: (<http://supportweb.siebel.com/support/private/content/SRSP/enu/SRSPindex.html>)
- The beacons for driving service test transactions against employee-facing (high interactivity) Siebel CRM applications must run on Microsoft Windows-based computers. These beacons rely on Microsoft Internet Explorer for driving transactions to Siebel.
- You must use Microsoft Internet Explorer to connect to Enterprise Manager when recording or updating a service test. This is a requirement whether the test is for customer-facing (high interactivity) or employee-facing (standard interactivity) Siebel applications.

## 1.5 Installing Oracle Enterprise Manager 10g Grid Control Release 3 or higher

Install Enterprise Manager 10g Grid Control Release 3 (10.2.0.3) or higher on at least one host in your network. Oracle recommends that you install the Grid Control components on their own host or hosts. For example, if the Siebel pack middle tier is installed on `host1.us.oracle.com`, install and configure Grid Control on a different host; that is, Oracle Management Service and Oracle Management Repository on `host2.us.oracle.com`.

Install the matching version of the Oracle Grid Control Management Agent on every remote host where the Siebel Enterprise's Application Servers reside. For example, if your Grid Control is version 10.2.0.5, install the 10.2.0.5 Agents on all of the Siebel Application Servers.

**See Also:** *Oracle Enterprise Manager Basic Installation and Configuration for Oracle Enterprise Manager Grid Control 10.2* (<http://www.oracle.com/technology/documentation/oem.html>)

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**IMPORTANT:** If you already have Enterprise Manager 10g Grid Control Release 3 (10.2.0.3) and want to upgrade it to Release 4 (10.2.0.4) or Release 5 (10.2.0.5), before upgrading it, meet the prerequisites discussed in [Section 1.8, "Prerequisites for Upgrading Enterprise Manager 10g Grid Control Release 3 \(10.2.0.3\) to Release 4 \(10.2.0.4\) or Release 5 \(10.2.0.5\)"](#).

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## 1.6 Prerequisites for Installing a Siebel Enterprise in Enterprise Manager

Before you start monitoring Oracle Application Management Pack for Siebel in Enterprise Manager, you must perform the following tasks:

- Install Enterprise Manager Grid Control.

The information required to perform these steps is available in the *Enterprise Manager Grid Control Installation Guide* available at:

<http://www.oracle.com/technology/documentation/oem.html>

- Install an Agent on each of the hosts.

Install an Agent in each of the hosts where the Siebel Gateway Server, Siebel Web Server, Siebel Application Server, Siebel Report Server, Siebel Chart Server, Siebel Search Server, and the Siebel Database run. Also, you should install an Agent on each of the systems where you plan to deploy your Service Test Beacons if these systems differ from the Siebel server hosts.

The information required to perform these steps is available in the *Enterprise Manager Grid Control Installation Guide*.

If you want to monitor additional software, such as LDAP and e-mail servers that you use with Siebel, and you have the proper license for monitoring these targets, install the Agent on these hosts as well.

- Enable the Siebel tab under the **Targets** tab.

To enable the Siebel tab:

1. Click **Preferences** located at the top-right corner of the user interface.

The Preferences page appears.

2. Click the **Target Subtabs** link located on the left pane.

The Target Subtabs page appears.

3. Select **Siebel** from **Available Target Subtabs** and move it to the **Selected Target Subtabs** by clicking the **Move** arrow.

Your selection is moved.

4. Click **Apply**.

- Set the Preferred Credentials for all the hosts on which Oracle Enterprise Manager is installed. This enables Enterprise Manager to execute commands on the computers hosting the Siebel Application Servers.

To set the Preferred Credentials:

1. Click the **Preferences** link located in the Enterprise Manager top-right corner.

2. Click **Preferred Credentials** in the left navigation pane.

3. In the Host Target Type row, click the **Set Credentials** icon.

4. In the Target Credentials table, enter a **Normal Username** and **Normal Password** for the Siebel Server Host.

5. Click **Test**, then click **Apply** if the test succeeds.

6. Return to the Preferred Credentials page.

7. In the Agent Target Type row, click the **Set Credentials** icon.
8. In the Target Credentials table, enter a **Normal Username** and **Normal Password** for the Siebel Server Host's Agent, then click **Apply**.

- *For Release 3 (10.2.0.3) Grid Control Agent environments only, enable the Enterprise Manager Agent to monitor the Siebel target.*

To monitor a Siebel Server using a 10.2.0.3 Enterprise Manager Agent, you must execute a configuration script on the 10.2.0.3 Agent system.

- For Windows systems, you must run the following command in the command line:

```
<agent_dir>\bin\siebelClasspathFix.bat <agent_dir>
```

(<agent\_dir> should be replaced by the installation location of the Enterprise Manager Agent).

Here is an example for an actual command:

```
C:\OracleHomes\agent10g\bin\siebelClasspathFix.bat
```

```
C:\OracleHomes\agent10g
```

- On Unix/Linux systems, you must execute the following command on the command line:

```
<agent_dir>/bin/siebelClasspathFix.sh <agent_dir>
```

(<agent\_dir> should be replaced by the installation location of the Enterprise Manager Agent).

Here is an example for an actual command:

```
/usr/local/OracleHomes/agent10g/bin/siebelClasspathFix  
.sh
```

```
/usr/local/OracleHomes/agent10g
```

---

**Note:** You must execute this command for all 10.2.0.3 Enterprise Manager Agents involved in monitoring Siebel server installations.

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- Enable automation.

To create Enterprise manager beacons for Siebel High Interactivity applications, the Siebel components to be monitored have to be configured to provide Automation support.

Section [Section 1.7, "Enabling Automation"](#) describes how to enable automation support.

- Enable SARM.

To monitor user performance, you must manually enable Siebel Application Response Measurement (SARM). To enable SARM for specific components, access `srvrmgr` and execute the following commands:

```
change param SARMLevel=2 for comp [component_name]  
change param SARMBufferSize=5000000 for comp [component_name]  
change param SARMFileSize=15000000 for comp [component_name]  
change param SARMPERIOD=3 for comp [component_name]
```

---

**Note:** If you want to enable SARM for multiple components, you must execute this sequence of commands for each of the components.

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- To monitor end-user performance using the Service Level Management feature, configure your environment for Siebel deployments on Microsoft Windows.

To enable the beacon to monitor High Interactivity (HI) applications:

1. From the Microsoft Windows Beacon system, click **Start**, then **Control Panel**.
2. Double-click **Administrative Tools**, then double-click **Services**.
3. Scroll down to the **Enterprise Manager Agent** service. Typically, this Agent is named `Oracleagent10gAgent`.
4. Double-click the service entry.
5. On the **Log On** tab, select the **Allow service to interact with the desktop** option.
6. Click **OK** to save your changes.

Also, you must configure an operating system user account on Enterprise Manager. Enterprise Manager uses this user account to grant sufficient permission to the Windows operating system user on the Beacon system. For Enterprise Manager Agents located on Windows-based computers, this user account needs one, special Windows permission that is not granted by default. To grant this permission:

1. From the Microsoft Windows Beacon system, click **Start**, then **Control Panel**.
2. Double-click **Administrative Tools**, then double-click **Local Security Policy**.
3. Under Security Policies in the left pane, expand **Local Policies**, then double-click **User Rights Assignment**.
4. Double-click the **Log on as a batch job** entry.
5. Click the **Add User or Group** button, then enter the Windows operating system user name or a group containing that user.
6. Click **OK**, then click **Apply** and **OK** on the next dialog box to save your changes.

- Enable timed statistics.

If you want to monitor a variety of available Siebel performance metrics through Enterprise Manager, run the following `srvrmgr` command for each of the components:

```
change param TimedStats=true for component [component_name]
```

- To monitor end-user performance using the Service Level Management feature, manually access all applications before recording a new transaction.

Before recording a new transaction you have to manually access all applications and manually satisfy all pop-up windows' requests. If you do not perform this task, the pop-up windows interfere and interrupt your



recording session. This step must be done once on each system where a beacon is going to be deployed, and this is most applicable for HI applications.

Additionally, while recording a new transaction, the URL must include `SWECmd=AutoOn`. This setting allows Enterprise Manager to interact with the Siebel test automation framework.

- Access HI applications from the beacon's computer.

HI applications need to be accessed once from the beacon computer before discovering the Siebel HI Applications in Enterprise Manager.

## 1.7 Enabling Automation

The following sections describes how to enable options for these Siebel versions:

### 1.7.1 Enabling Automation for Siebel Versions 7.7 and 7.8

To enable Automation support, access a server-side configuration file (for example, `uagent.cfg` for Callcenter), search for the `EnableAutomation` variable, and change its value to `TRUE`.

If the variable definition does not exist, locate the `[SWE]` section in the configuration file and add the following line:

```
EnableAutomation = TRUE
```

Save the changed configuration file and restart the Siebel server.

### 1.7.2 Enabling Automation for Siebel Version 8.0

To enable Automation support, execute the following `srvrmgr` command for all High Interactivity components you plan to monitor through Enterprise Manager beacons:

```
change parameter EnableAutomation=True for server server_name comp comp_name
```

After applying the command for all desired components, restart the Siebel server.

## 1.8 Prerequisites for Upgrading Enterprise Manager 10g Grid Control Release 3 (10.2.0.3) to Release 4 (10.2.0.4) or Release 5 (10.2.0.5)

If you already have Enterprise Manager 10g Grid Control Release 3 (10.2.0.3) with Siebel targets and want to upgrade it to Release 4 (10.2.0.4) or Release 5 (10.2.0.5), before you upgrade the release, check that the following patches are present in your environment.

- One-off patch 9453217 on the OMS
- One-off patches 9375245 and 9497046 on the Management Agent

If these patches are not present, delete the Siebel targets, then upgrade Grid Control to Release 4 (10.2.0.4) or Release 5 (10.2.0.5).

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**Note:** Enterprise Manager 10g Grid Control Release 5 (10.2.0.5) supports monitoring of Siebel Workflow targets. However, after you upgrade to 10.2.0.5, on the Siebel Enterprise Home page in the General section, you may not see the link to the Workflow target. To refresh the details and view the link, click **Update Now**.

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## 2 Configuring Siebel Enterprise Targets

This section covers the following topics:

- [Adding a Siebel Enterprise](#)
- [Updating the Siebel Enterprise Topology](#)
- [Adding Non-Siebel Targets to an Existing Siebel Enterprise Target](#)
- [Defining Manually Added Non-Siebel Targets as Critical Targets for a Service](#)
- [Removing Servers or Components from an Existing Enterprise](#)

### 2.1 Adding a Siebel Enterprise

Siebel Enterprise enables administrators to logically organize distributed targets for efficient and effective management and monitoring.

To add a Siebel Enterprise to Grid Control for monitoring, perform the following steps:

1. From the Enterprise Manager Console, click the **Targets** tab.
2. Click the **Siebel** tab.
3. Click the **Add Enterprise** button.

The Add Siebel Enterprise page appears, shown in [Figure 1](#).

4. Define the values for all the parameters and click **OK**.

The progress page notifies you when the Siebel enterprise and its associated targets are created.

**Figure 1 Add Siebel Enterprise Page**

**ORACLE** Enterprise Manager 10g  
Grid Control

Hosts | Databases | Middleware | Web Applications | Services | Systems | Groups | All Targets | PeopleSoft | Siebel | Oracle Applications | BI-EE

### Add Siebel Enterprise

To create a Siebel Enterprise, specify the parameters of the host on which the Siebel Gateway Server is running. If the Siebel Gateway Server is associated with multiple hosts, specify the host name of the primary host.

\* Gateway Server Host

\* Gateway Server Port

Gateway Server Location

Siebel Enterprise Name

\* Siebel Enterprise User Name

\* Siebel Enterprise Password

\* Database User Name

\* Database Password

☒ **TIP** Agents use the Siebel Enterprise credentials (user name and password) to collect metric data for all Siebel targets. This data is stored as Monitoring Properties in the target home page.

### Extended Infrastructure Targets

Add all the Extended Infrastructure targets which are part of this Siebel Enterprise. Enterprise Manager checks the status of Siebel and Extended Infrastructure targets when you click the **Add** button.

| Select Name   | Type | Status |
|---|------|--------|
| No Extended Infrastructure targets are currently added. |      |        |

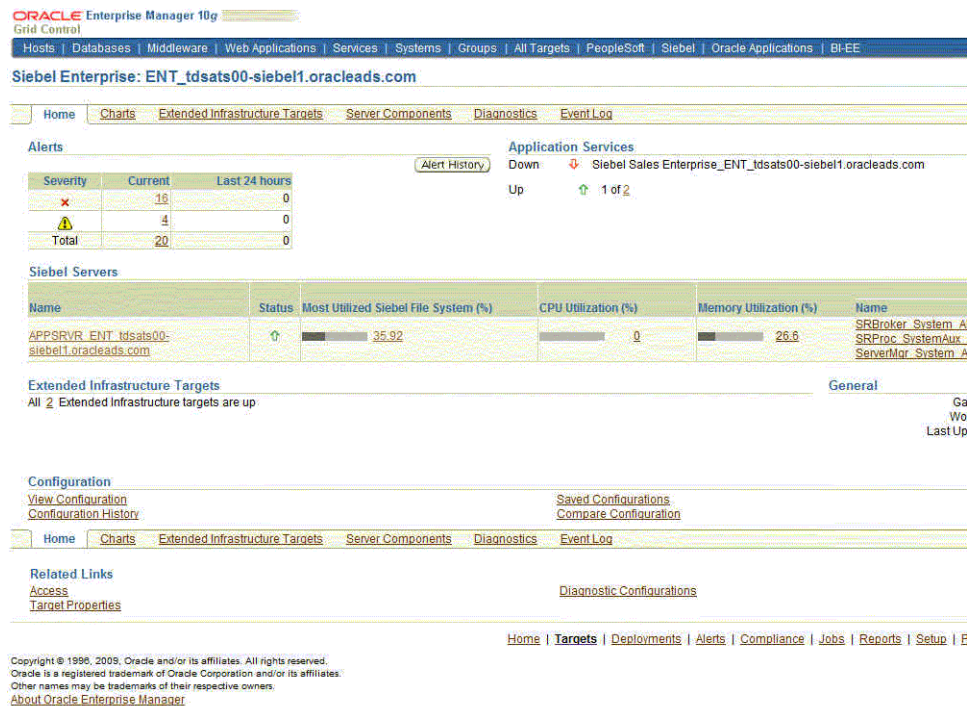
## 2.2 Updating the Siebel Enterprise Topology

After you add or remove Siebel servers or server components from your Siebel enterprise, you must resynchronize the topology maintained by the Gateway with the topology maintained by Enterprise Manager.

Perform the following steps to synchronize both topologies:

1. From the Enterprise Manager Console, click the **Targets** tab.
2. Click the **Siebel** tab.
3. In the Enterprise View, click the Siebel enterprise you want to synchronize.  
The Siebel Enterprise Home page appears, as shown in [Figure 2](#).
4. In the right-bottom corner of the page, click **Update Now**. This functionality rediscovers your Enterprise Manager system topology and generates a comprehensive report.
5. Review the report, and if you agree with the changes to be performed to your Enterprise Manager topology, click **OK**.

**Figure 2 Siebel Enterprise Home Page**



## 2.3 Adding Non-Siebel Targets to an Existing Siebel Enterprise Target

To add Siebel targets to a Siebel enterprise target, you can use the Update Now functionality available at the Siebel enterprise home page.

To add a non-Siebel target to a Siebel enterprise target:

1. Go to the Oracle Technology Network (OTN) site:

<http://www.oracle.com/technology/software/products/oem/index.html>

2. Download the appropriate third party plug-in, and create the respective target in Enterprise Manager.
3. From the Enterprise Manager Console, click the **Targets** tab.
4. Click the **Siebel** tab.
5. Select **Enterprise View** from the **View** list and click the **Configure** button.  
A table appears displaying the existing Enterprise View components.
6. Click **Add** and select the target you created above.

The non-Siebel target you just added is now a part of your Siebel enterprise.

## 2.4 Defining Manually Added Non-Siebel Targets as Critical Targets for a Service

After manually adding non-Siebel targets to an enterprise, if you want to make these targets available to the Root Cause Analysis functionality available in Enterprise Manager, you need to tag these targets as Key Components.

Perform the following steps to make your non-Siebel target a critical target for any Siebel application service:

1. Click the **Targets** tab on the Enterprise Manager Console.
2. Click the **Siebel** tab.
3. Select **Service View** from the **View** drop-down list.
4. Select the Siebel application service and click the **Configure** button.
5. Click **System Configuration**.  
The System Configuration page appears.
6. Mark the newly added target as **Key Component** and click the **OK** button.

## 2.5 Removing Servers or Components from an Existing Enterprise

After creating a Siebel Enterprise target, you can manually remove individual servers or components from the enterprise. However, this deletes the respective target information from the Enterprise Manager repository.

After this entry is deleted, Enterprise Manager does not monitor this target anymore. If you perform a manual resynchronization for this enterprise, Enterprise Manager includes the component in the new system topology.

The two possible paths for manually removing components from an existing enterprise are:

- Go to the **All Targets** tab, search for the server or component you want to delete, select the radio button next to the server or component name, and click the **Remove** button.
- Go to the **Siebel Applications** tab, select **Siebel Enterprise View**, navigate to the enterprise you want to remove, select the radio button next to the enterprise name, and click the **Remove** button.

This option removes the Siebel server, targets, and all the enterprise components.

## 3 Creating Siebel Service Targets

This section covers the following topics:

- [Creating Siebel Application Services](#)
- [Adding a Siebel Service for a Siebel Application](#)
- [Removing a Siebel Service from a Siebel Hierarchy](#)

### 3.1 Creating Siebel Application Services

To create Siebel application services, perform the following steps:

1. From the Enterprise Manager Console, click the **Targets** tab.
2. Click the **Siebel** tab.
3. Click the **Create Application Services** button.

The Create Siebel Application Services page appears, as shown in [Figure 3](#).

4. Define all the service-related parameters.
5. Use the beacons portion of the page to view the existing beacons.

You can define the beacons that will monitor this service hierarchy by clicking the check boxes located in the **Key Beacons** column. Additionally, you can create, add, or delete beacons by using the **Add**, **Create**, and **Delete** buttons. If your Siebel deployment includes High Interactivity applications, such as Call Center, add only the Windows beacons.

6. Click the **OK** button.

The progress page notifies you when the Siebel application services are created.

**Figure 3 Create Siebel Application Services Page**

**Grid Control**  
[Hosts](#) | [Databases](#) | [Middleware](#) | [Web Applications](#) | [Services](#) | [Systems](#) | [Groups](#) | [All Targets](#) | [PeopleSoft](#) | [Siebel](#) | [Oracle Applications](#) | [BI-EE](#)

**Create Siebel Application Services**  
 Use this page to discover all the deployed Siebel applications and create corresponding Siebel application services in Enterprise Manager.

**Webserver Hosts**  
 Specify the hosts that run the webserver in which the Siebel Web Server Extension (SWSE) plugins are installed.

| Name                           | Status | Remove |
|--------------------------------|--------|--------|
| ldsats00-siebel1.oracleads.com | ↑      |        |

**Beacons**  
 This table lists the beacons already defined in Enterprise Manager. Remove the beacons you do not want to use for monitoring this Siebel application services. The beacons marked

| Name            | Status | Key Beacon                          | Remove |
|-----------------|--------|-------------------------------------|--------|
| Austin US, AMER | ↑      | <input checked="" type="checkbox"/> |        |

**Test Properties**  
 Test credentials will be used to create the service tests which inturn will be monitored by the beacons. These credentials can be changed at later point of time using Monitoring Cont

\* Siebel Enterprise Name:

\* Test User Name:

\* Test Password:

**Service Dashboard**  
 As part of Service creation, a service dashboard report will be created. The Service Dashboard provides a consolidated view of the performance, availability and usage for all Siebel s  
 This report can be viewed from Siebel Enterprise home page or EM Reports website or from the Reports tab. The Reports website allows report viewing by people who are not Enter  
 without logging in to Enterprise Manager" option checked.

☒ Allow viewing without logging in to Enterprise Manager  
 Use this option with care as it allows anyone to view the report

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## 3.2 Adding a Siebel Service for a Siebel Application

Before proceeding, note the following advisory information:

- If the application you are recording uses ActiveX objects, pre-load the objects into your Internet Explorer browsers. To do this, log into the application, then log out of the application before starting your recording. You need to do this for each desktop where you want to record, as well as each beacon that is to monitor the transaction you are recording.

- For High Interactive (HI) applications, you must use Internet Explorer and perform the recording of the transactions in the Windows environment.
- If you are defining a service for an HI application, when the transactions page appears during the configuration process, select the **Beacon Running in Windows** option

To add a Siebel service for a Siebel application, perform the following steps:

1. From the Enterprise Manager Console, click the **Targets** tab.
2. Click the **Siebel** tab.
3. From the **View** drop-down list, select **Application Services**.
4. From the **Add Service For** drop-down list, select the type of application and click **OK**.

The Configuration Wizard appears and leads you through the configuration steps.

To make the newly added service visible at the **Siebel** tab:

1. Click the **Targets** tab from the Enterprise Manager Console.
2. Click the **Siebel** tab.
3. Select **Application Services** from the **View** drop-down list.
4. Select the appropriate aggregate service and click **Configure**.
5. Navigate to the **Subservices** section of the page, click **Add**, and select the newly added service.

The newly added service is visible at the **Siebel** tab.

### 3.3 Removing a Siebel Service from a Siebel Hierarchy

To remove a Siebel service from an existing Siebel hierarchy:

1. From the Enterprise Manager Console, click the **Targets** tab.
2. Click the **Siebel** tab.
3. Select **Application Services** from the **View** drop-down list.
4. Select the Siebel service you want to remove and click **Remove**.

The Siebel service is now removed.

## 4 About Siebel Transactions

A Siebel transaction is a series of user actions on a Siebel application. In Enterprise Manager, each user action is referred to as a **step**. Each step can contain multiple related steps.

A typical Siebel transaction might consist of the following steps:

1. You open a browser and enter the URL for the service you want to access.
2. You click the **Sign In** link. The Sign In page appears.
3. You enter a user name and password, and click **OK**.

At this point the application performs a series of actions that range from authenticating your credentials to verifying the privileges you have.

4. The application displays the functionality available for you.
5. You log out.

---

**Note:** Enterprise Manager Grid Control creates a test named "Login Test" after the service discovery is complete. By default, this default test is designed to use siebel and siebel as the operating system username and password, respectively. If you do not have an account with siebel and siebel as the credentials on the beacon host, create the account. Alternatively, edit the default test to set credentials that match with an existing account on the beacon host. If the operating system credentials provided are incorrect, the test appears in pending state.

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## 4.1 Recording Transactions and Testing Availability and Performance

You can record the steps of a particular transaction and store them in the repository. You can then run them to test the availability and performance of your Siebel application.

For example, you can create a transaction using the preceding steps and call it Typical Login. You can then program the appropriate components to run the transaction automatically. The Beacon, a component of the Agent, acts as a client robot and is used to run your recorded transactions at predefined time intervals from strategic locations across your wide area network (WAN).

Beacons are not installed automatically on the Oracle Agents; they have to be created. For monitoring Siebel High Interactive Applications, the administrator needs to create a beacon on an Oracle Windows Agent.

The availability and performance data that beacons collect during service tests include whether a test is successful and the application is available, and the response time of application screens during a given service test.

## 4.2 Adding a Siebel HI test with Transaction Groups to an existing Service

Before proceeding, ensure that you have already added the Siebel service using the instructions in [Section 3.2](#) on page -14.

Besides recording the steps of a transaction, you can also group them to create a separate, logical entity. If you do not group the steps, Enterprise Manager groups them automatically under the "Generic" category.

To record transactions with groups, follow these steps:

1. In Enterprise Manager Grid Control, click **Targets**, then click **Siebel**.
2. On the Siebel page, from the **View** list, select **Application Service**. Enterprise Manager lists all the Siebel services being monitored.
3. Click the name of a Siebel Call Center Service, Siebel Sales Service, or a Siebel Marketing Service. Enterprise Manager displays the Home page of the selected service.
4. Click the **Monitoring Configuration** tab.
5. On the Monitoring Configuration page, click **Service Tests and Beacons**.



The Service Tests and Beacons page appears, as shown in [Figure 4](#).

**Figure 4 Service Tests and Beacons Page**

ORACLE Enterprise Manager 10g  
Grid Control

Hosts | Databases | Middleware | Web Applications | Services | Systems | Groups | All Targets | PeopleSoft | Siebel | Oracle Applications | BI-EE

Siebel Call Center Service, Siebel Universal Agent, EMT, tdata00-siebel1.oracleads.com >

### Service Tests and Beacons

Specify the service tests and beacons to monitor the availability and performance of your service.

#### Service Tests

All enabled service tests are run by the beacons shown below.

Verify Service Test | Enable | Disable | Remove | View | Edit | Test Type: Siebel Transaction | Add

| Select Service Test                         | Test Type          | Enabled | Status | Key S |
|---|--------------------|---------|--------|-------|
| <input checked="" type="radio"/> Login Test | Siebel Transaction | Yes     |        |       |
| <input type="radio"/> Login Group Test      | Siebel Transaction | Yes     |        |       |

#### Beacons

Specify the beacons that will execute the service tests.

Remove | Edit | Add | Create

| Select Name  | Version    | Operating System | Status |
|--|------------|------------------|--------|
| <input checked="" type="radio"/> Austin-USA_Siebel | 10.2.0.5.0 | Windows          |        |

#### Related Links

[Availability Definition](#) | [Monitoring Settings for Tests](#) | [Past Change](#)

Home | [Targets](#) | [Deployments](#) | [Alerts](#) | [Compliance](#) | [Jobs](#) | [Reports](#) | [Setup](#) | P

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6. In the Service Tests section on the Service Tests and Beacons page, from the **Test Type** list, select **Siebel Transaction** and click **Add**.
7. On the Create Service Test page, specify a name for the service test, specify the operating system user name and password of the beacon host, then click **Go**.
  - a. Specify a name for the transaction you are about to record.
  - b. In the Test Parameters section, specify the operating system user name and password of the beacon host, and click **Go**.
8. On the following page, click **Start** to start recording the transaction. Enterprise Manager displays two windows, one for accessing the Siebel application where actions can be performed, and another for creating groups.
9. In the main, larger window, access the Siebel application where you want to record your actions.
10. Log in to the Siebel application using your credentials.
11. After logging in, in the smaller window, specify a name for the group and click **Create**. The log-in actions you performed are recorded under the group name you specify here.
12. Similarly, in the larger window, perform other actions in the Siebel application, and for these actions, in the smaller window, create a group.
13. Log out from the larger window.

14. After you are done with the recording, return to the Siebel Transaction page and click **Stop** to stop recording this transaction, then click **Continue**. Enterprise Manager closes the two windows that were opened for recording the transaction.
15. The page that follows shows the recorded transaction with the grouping of actions that were performed in the Siebel application. Click **Continue**.
16. On the Create Service Test page, go to the Test Parameters section. From the **Collection Granularity** list, select the granularity you want to use, then click **OK**.

## 5 Siebel Performance Diagnostics

The Siebel Performance Diagnostics feature, a part of Siebel Management Framework, helps you monitor, analyze, and diagnose user session data, errors, and performance issues in your deployment of Siebel Business Applications.

Enterprise Manager provides the Diagnostics functionality that enables you to monitor and diagnose the Siebel system and user issues by analyzing server and user performance data, which is collected by SARM (Siebel Application Response Measurement).

This section contains the following topics:

- [Features of Siebel Diagnostics](#)
- [Diagnostic Reports](#)
- [Prerequisites for Diagnostic Reports](#)
- [Creating Diagnostic Reports](#)
- [Using Server Performance Reports](#)
- [Using User Performance Reports](#)

### 5.1 Features of Siebel Diagnostics

Siebel Performance Diagnostics provide you the following features:

- **Server Performance Analysis** — Enables you to diagnose and identify Siebel Server performance issues, one server at a time, by providing access to response time, CPU usage, and memory data for selected server components. You can create and generate reports for analysis.
- **User Performance Analysis** — Enables you to diagnose and identify user session performance issues for requests that a specific user initiates.

You can create and generate reports for server and user performance for analysis.

### 5.2 Diagnostic Reports

You can create a Server Performance report or User Performance report to analyze the performance of the server and components, and of individual users.

A Server Performance report enables you to analyze the performance of one or all Siebel components of a server, and provides information of requests in terms of response time, CPU time, and memory consumption for each request.

A User Performance report enables you to analyze the performance for sessions of a specific user, provides details on the response time, and permits drill-downs into individual user requests.

### **5.2.1 Sample Diagnostic Report Scenarios**

A scenario for each report is provided below, which helps you to understand when you want to create and analyze reports:

#### **Server Performance Report**

Consider a situation where the general performance of the entire application is slow. To remedy this, the administrator must first enable SARM for all the components running on a given server. Next, the administrator logs in to Enterprise Manager and uses the Diagnostics Reports page to analyze the collected SARM data on this server and/or components to identify the performance bottleneck.

#### **User Performance Report**

Consider a situation where users report performance issues with their application sessions. To remedy this situation, the administrator must first enable SARM for the component. Next, the administrator logs in to Enterprise Manager and uses the Diagnostics Reports page to analyze the collected SARM data for a particular user to identify the performance bottleneck.

## **5.3 Prerequisites for Diagnostic Reports**

This topic describes the prerequisites that must be met to create performance diagnostic reports.

To monitor Siebel performance, you have to manually enable Siebel Application Response Measurement (SARM). Refer to the [Enable SARM](#) step on page -7 for details on enabling SARM manually.

You then have to configure the SARM logging parameters and enable SARM for individual Siebel components from the Diagnostic Configuration page in Enterprise Manager. Refer to [Table 3](#) for descriptions of the parameters for SARM configuration and diagnostic report generation.

**Table 3 SARM Parameters**

| Parameter        | Description   |
|------------------|---|
| Logging Level    | <p>Displays the level of logging information required for SARM configuration. The values are:</p> <p>1 - Select this level for general performance monitoring. At this level, SARM collects information such as process and component boundaries, third-party software calls, database measurements, workflow execution, and script performance.</p> <p>2 - Select this level for problem diagnostics. This level captures the information at level 1 as well as detailed information such as steps of workflow execution, construction of large objects, reading of large files, and crossing significant architectural areas.</p> |
| File Max Number  | <p>Indicates the maximum number of SARM files maintained for each Siebel component. When all files are full (that is, all files reach the size specified as File Size), the file that was created first is removed and is replaced by a new file. The range must be between 1 and 256. The default value is 4.</p>  |
| Buffer Size (KB) | <p>Indicates the memory available to cache SARM data by the Siebel processes (that is, the internal buffer to be used by the SARM logger). The default buffer size is 5,000,000 bytes.</p> <p><b>Note:</b> Increasing the buffer size increases memory consumption, but may decrease I/O activity, as buffer flushes are minimized.</p>   |
| File Size (KB)   | <p>Indicates the maximum size of an individual SARM file. Upon reaching the specified file size, SARM creates a new file and starts storing data in the new file. The default size is 15,000,000 bytes (15 MB), and there is no upper limit to the file size.</p>   |
| Interval (min)   | <p>Specifies the maximum amount of time, in minutes, between writing SARM buffer to the disk. For environments with minimal activity, this parameter determines the frequency to write files to the disk. The value should be between 1 and 30 (minutes). The default value is 3.</p>   |

---

**Note:** The configuration of your SARM parameters depends on the diagnostic requirements. The more disk space made available for SARM logging (determined by File Max Count and File Size), the further back in time you can generate data for your reports.

---

After setting the SARM parameters, you can enable the diagnostic configuration for Siebel components by selecting the **Enable SARM** option in the Enable/Disable section of the Diagnostic Configuration page.

## 5.4 Creating Diagnostic Reports

This topic provides the procedure to create Siebel diagnostics reports using Enterprise Manager.

Diagnostic reports help you to analyze how user requests have been processed and also to analyze how servers have performed requests. You can create Server Performance and User Performance reports.

A Server Performance report enables you to analyze the performance of a server and provides information of requests in terms of response time and CPU usage time for each request. While creating such a report, you can select the Siebel Server for which you want the performance report.

A User Performance report enables you to analyze the performance of a user and provides details on the response time for various requests by the user.

To create a User Performance report or Server Performance Report:

1. In Grid Control, click the **Targets** tab.

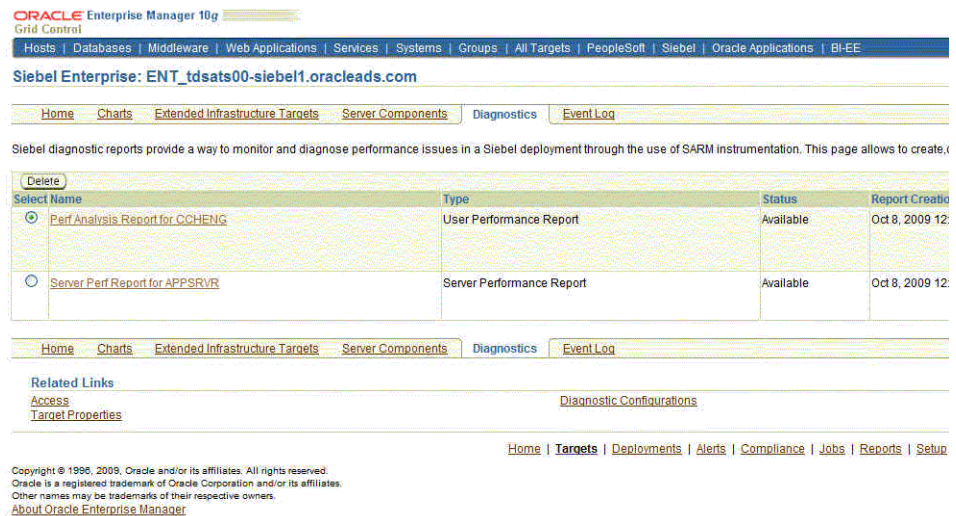
2. Click the Siebel tab.

Enterprise Manager displays the Siebel Enterprise page.

3. From the Siebel Enterprise page, click the **Diagnostics** tab.

Enterprise Manager displays the Diagnostics Reports page, shown in [Figure 5](#), which shows existing performance reports.

**Figure 5 Diagnostics Reports Page**



4. Click **Create Report**.

Enterprise Manager displays the Create Report page, shown in [Figure 6](#), which enables you to create a Server Performance or User Performance report.

5. Select the report type, Server Performance Report or User Performance Report, specify values for the fields, and click **OK**.

A confirmation message is displayed on the Confirmation page. Click **Yes** to create the specified report.

**Figure 6 Create Report Page**

ORACLE Enterprise Manager 10g  
Grid Control  
Hosts | Databases | Middleware | Web Applications | Services | Systems | Groups | All Targets | PeopleSoft | Siebel | Oracle Applications | BI-EE  
ENT\_tdsats00-siebel1.oracleads.com >  
**Create Report**  
Creation of Server Performance or User Performance diagnostic reports involves log file processing on one or more Siebel server machines. In order to minimize the performance c select the desired Siebel component (if applicable).

Report Type: ☒ Server Performance Report ☐ User Performance Report  
Report Name: SRVR\_PERF\_10-03-24\_01:33  
Start Date: Mar 23, 2010 13:33:03  
End Date: Mar 24, 2010 13:33:03  
Notify when report is available: ☐ See Setup link to know more on how to setup notifications.

Siebel Servers  
Select the Siebel server for which the Server performance report has to be created. Optionally Siebel component filter can be specified to narrow down the scope of the report (Ap  
Siebel Server: APPSRVR\_ENT\_tdsats00-siebel1.oracleads.com  
Siebel Component:

Home | Targets | Deployments | Alerts | Compliance | Jobs | Reports | Setup  
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## 5.5 Using Server Performance Reports

Server Performance reports allow you to perform analysis for different servers and server components, one server at a time. This topic describes how to use Server Performance reports to monitor, analyze, and diagnose server and server component data. The following sections describe the pages that help you analyze server diagnostics.

### 5.5.1 Server Performance Report <Report Name> Page

To view this page, from the Diagnostics Reports page, click the name of the Server Performance report you want to view. This page contains the following information:

- **Reports Parameters** — Displays report parameters for the server and the value for each.
- **SARM Response Time** — Displays the response time to process requests measured through the Siebel Application Response Measurement (SARM) facility. SARM is a mechanism for capturing performance data of Siebel Applications at key locations within the Siebel Server infrastructure. Refer to the *System Monitoring and Diagnostic Guide* included in the Siebel documentation for details.

This chart helps you understand the response time to process requests by the Siebel server. The information is displayed in a histogram. Basically, the chart displays buckets in a time range and displays the requests processed for each bucket. You can click the bucket to drill down and view more details from the Server Performance <Report Name> <Bucket> page.

---

**Note:** When you click one of the two most expensive buckets (that is, the buckets with the most expensive requests in terms of Response Time or CPU Time consumption), the page is displayed instantly as the data is pre-fetched. When you click other buckets, the same page is displayed, but only after the job to retrieve SARM data from the log files is completed.

---

- **CPU Time** — Displays the CPU time consumed by requests measured through the SARM network. This helps you understand the CPU time consumed to process requests by the Siebel server. The information is displayed in a histogram. The chart displays buckets in a time range and displays the requests processed for each bucket. You can click the bucket to drill down and view more details from the Server Performance - <Report Name> <Bucket> page.
- **Area / Sub Area Distribution** — Displays performance details for areas or sub-areas of the Siebel server. SARM functions based on points or areas where performance information is generated; for example, the start and end of each database operation. Area specifies the broad area or software layer where a request is processed. For example:
  - **DBC (Database Connector)**: This database layer tracks the percentage of time for requests in database processing.
  - **INFRA (Infrastructure Area)**: This infrastructure area handles all functions related to networking, memory management, and so on.
  - **SWE (Siebel Web Engine)**: This area is active when actual Web pages are built; for example, during assembly of HTML output.
  - **OBJMGR (Object Manager)**: This layer handles object relational mapping, and is where most of the actual application code is executed.
  - **SARM**: the performance diagnostics area.

Also, each of these areas has certain sub-areas; for example, DBC\_EXECUTE, DBC\_FETCH, and others in the DBC area that permit tracking of performance data at a higher level of granularity.

### 5.5.2 Server Performance Report <Report Name> <Bucket> Page

To view this page, from the Server Performance Report <Report Name> Page, click a bucket in the SARM Response Time or CPU Time page. This page contains the following information:

- **Report Parameters** — Displays the report parameters for the server and the value for each.
- **Request Summary** — Displays the summary of requests the Siebel server processes as measured by the Siebel Application Response Measurement (SARM) network. Click **SARM ID** in this page to drill down and view details of the percentage of resource consumed in each of the layers involved in processing a request. Enterprise Manager displays the Server Performance Report <Report Name> <Request ID> page.

### 5.5.3 Server Performance <Report Name> <Request ID> Page

To view this page, click SARM ID in the Request Summary section of the Server Performance Report <Report Name> <Bucket> page. You can use this page to view details about SARM requests serviced by the server. The details displayed in this page are:

- **Report Parameters** — Displays the report parameters for the server and the value for each.
- **Total Response Time Distribution by Area** — Displays the response time by area measured by the SARM framework. This helps you understand the response time taken by each area of the Siebel server to process requests.

- **Total Memory Distribution by Area** — Displays the memory distribution by area measured by the SARM framework. This helps you understand the memory distribution among various areas of the Siebel server while processing requests.
- **Total CPU Distribution by Area** — Displays the CPU distribution by area measured by the SARM framework. You can analyze the CPU time taken by each area of the Siebel server.
- **Area / Sub Area Distribution Section** — Displays performance details for areas or sub-areas of the Siebel server. SARM functions based on points or areas where performance information is generated; for example, the start and end of each database operation. Area specifies the broad area or software layer where a request is processed.

## 5.6 Using User Performance Reports

User Performance reports enable you to analyze the performance for sessions of a specific user, providing details on the response time and allowing drill-downs into individual user requests. This topic describes how to use the User Performance reports to monitor, analyze, and diagnose user data. The following sections describe the pages that help you analyze user diagnostics.

### 5.6.1 User Performance Report <Report Name> Page

To view this page, from the Diagnostics Reports page, click the name of the User Performance report you want to view. This page contains the following information:

- **Reports Parameters** — Displays report parameters for the user and the value for each.
- **Response Time for 'User'** — Displays the response time to process the user's requests measured through the Siebel Application Response Measurement (SARM) network. This helps you understand the response time to process requests by the user. It provides a trend and overview of the response time for the selected user and the specified time; that is, the chart displays requests from oldest to the most recent from right to left.
- **Histograms of Server Response Time for 'User'** — Displays the server response time to process the user's requests. This chart helps you understand the response time to process user requests by the Siebel server. The information is displayed in a histogram. Basically, the chart displays buckets in a time range and displays the requests processed for each bucket. You can click the bucket to drill down and view more details from the User Performance <Report Name> <Bucket> page.

### 5.6.2 User Performance Report <Report Name> <Bucket> Page

To view this page, from the User Performance Report <Report Name> Page, click a bucket in the Histograms of Server Response Time for 'User' chart in the User Performance Report <Report Name> page. This page contains the following information:

- **Report Parameters** — Displays the report parameters for the user and the value for each.
- **Request Summary** — Displays the summary of user requests as measured by the Siebel Application Response Measurement (SARM) network. Click the



**SARM ID** to drill down and view details of the percentage of resource consumed in each of the layers involved in processing a request. Enterprise Manager displays the User Performance Report <Report Name> <Request ID> page.

### 5.6.3 User Performance <Report Name> <Request ID> Page

To view this page, click **SARM ID** in the Request Summary section of the User Performance Report <Report Name> <Bucket> page. You can use this page to view details about SARM requests serviced by the user. The details displayed in this page are:

- **Report Parameters** — Displays the report parameters for the server and the value for each.
- **Total Response Time Distribution by Area** — Displays the response time by area measured by the SARM framework. This helps you understand the response time taken by each area of the Siebel server to process user requests.
- **Total Memory Distribution by Area** — Displays the memory distribution by area measured by the SARM framework. The chart displays the memory distribution among various areas of the Siebel server while processing user requests.
- **Total CPU Distribution by Area** — Displays the CPU distribution by area measured by the SARM framework. The chart displays the CPU time taken by each area of the Siebel server to process user requests.
- **Area / Sub Area Distribution Section** — Displays performance details for areas or sub areas of the Siebel server. SARM functions based on points or areas where performance information is generated; for example, the start and end of each database operation. Area specifies the broad area or software layer where a request is processed.

## 6 About Siebel Workflow

Siebel Workflow is an interactive software tool that enables an organization to automate handling of workflow processes. Workflow uses as its basic model the same processes that organizations use in their sales, marketing, and service departments that determine business workflow. One can use Siebel workflow to promote consistency and adherence to processes through the automatic enforcement of business policies and procedures.

Workflow is comprised of two key constructs:

- Workflow Policies, which trigger actions
- Workflow Processes, which define everything from guided user interface navigation to integration business flows

The engine is comprised of the following six server components. The first three handle Workflow Policies, and the last three handle Workflow Processes:

- **Generate Triggers (GenTrig)** — Generates triggers on the database, which kick off actions when a condition specified through a Workflow Policy is met. GenTrig is run as a batch job after Workflow Policies are updated.
- **Workflow Monitoring Agent (WorkMon)** — Executes Workflow policies. Workflow Monitor Agent monitors Workflow Policies and executes actions after the policy conditions are met.

- **Workflow Action Agent** — Processes requests logged in the action request table (S\_ESCL\_ACTN\_REQ) for a policy group and invokes all actions linked with the Workflow Policy being processed.
- **Workflow Process Manager** — Acts as an interpreter to execute workflow processes.
- **Workflow Process Batch Manager** — Version of Workflow Process Manager that initiates Workflow Processes in batch mode.
- **Workflow Recovery Manager** — Polls the Workflow engine to check workflow instances running on the server. The Workflow Recovery Manager recovers crashed instances and resumes instances that have been waiting beyond a due date.

## 6.1 Discovering and Monitoring Siebel Workflow Targets in Grid Control

The Siebel Workflow target is automatically discovered when the Siebel Enterprise is discovered and added to Grid Control for monitoring. Siebel Workflow is shown as a link in the General section of the Siebel Enterprise Home page in Grid Control. You can click the link to monitor the health of the Siebel Workflow target and also view details about its processes and component groups.

---

**Note:** If you attempt to discover Siebel Enterprise in Grid Control when the Siebel Workflow component group is disabled in siebel configuration, the discovery happens successfully, but the Siebel Enterprise Home page does not show the Siebel Workflow target link in the General section.

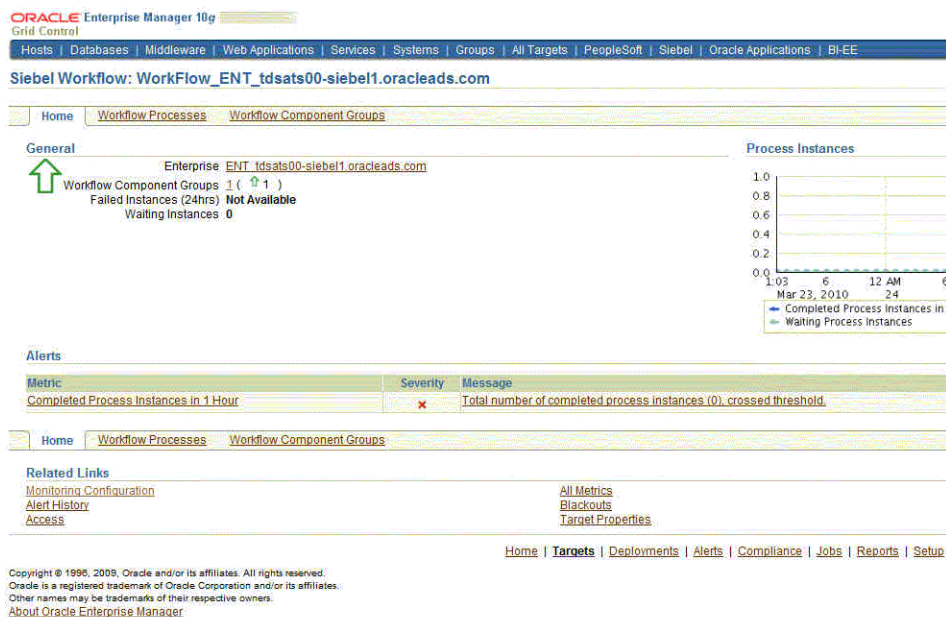
If you enable the Siebel Workflow component group later in siebel configuration and want to add it to Grid Control for monitoring, on the Siebel Enterprise Home page of Grid Control from the General section, click **Update Now**. The page refreshes and shows the link for the Siebel Workflow target. You can click it to navigate to the Siebel Workflow Home page and monitor its processes and component groups.

---

After the Siebel Workflow target is discovered, you can monitor its availability status, view the processing rate of workflow process and policy instances, view alerts generated, monitor its processes and components groups. You can also access the All Metrics page of this target to view a list of metrics collected for it.

Figure 7 shows the Siebel Workflow page.

**Figure 7 Siebel Workflow Page**



## 7 About Event Logs

Event logs help you analyze the events triggered or tasks performed within a user session. Using Enterprise Manager, you can view event logs for a selected server or for all servers, for a selected component or for all components, for a particular period, for a particular user, OS ID, or task ID.

To view event logs, follow these steps:

1. In Grid Control, click the **Targets** tab, then the **Siebel** tab.
2. On the Siebel page, click the name of the Siebel Enterprise being monitored. Enterprise Manager displays the Siebel Enterprise Home page.
3. Click the **Event Log** tab to search and view event logs, as shown in Figure 8.

Username is a mandatory field. If your search query is going to result in a large number of rows, you can specify a smaller time window. To limit the results, you can also specify OS PID or Task ID, although these are not mandatory fields.

4. On the Event Log page, after the results are displayed, click the log file name to view its content.

If the log file is larger than 500 KB, only the last 500 KB of content is shown. For example, if the file is 700 KB, only the last 500 KB of content is shown, while the first 200 KB are not shown. To view the complete file, navigate to the directory where the file resides and access the contents from that location.

**Figure 8 Event Log Search Page**

ORACLE Enterprise Manager 10g  
Grid Control  
Hosts | Databases | Middleware | Web Applications | Services | Systems | Groups | All Targets | PeopleSoft | Siebel | Oracle Applications | BI-EE

Siebel Enterprise: ENT\_tdsats00-siebel1.oracleleads.com

Home | Charts | Extended Infrastructure Targets | Server Components | Diagnostics | Event Log

Event Log Search

Server: APPSRVR\_ENT\_tdsats00-siebel1.oracleleads.com

Component: All

Start Date: Jan 05, 2010 10:34

End Date: Mar 24, 2010 13:34

Username: CCHENG

OS PID:

Task ID:

Go Reset

| Task ID  | User ID | Thread ID | Process ID | Start Time                   | End Time                     |
|----------|---------|-----------|------------|------------------------------|------------------------------|
| 4194632  | CCHENG  | 3840      | 468        | Tue Jan 12 03:46:19 CST 2010 | Tue Jan 12 03:46:21 CST 2010 |
| 4194346  | CCHENG  | 1900      | 468        | Tue Jan 12 01:13:31 CST 2010 | Tue Jan 12 01:13:31 CST 2010 |
| 4194345  | CCHENG  | 232       | 468        | Tue Jan 12 01:13:31 CST 2010 | Tue Jan 12 01:13:31 CST 2010 |
| 4194344  | CCHENG  | 3872      | 468        | Tue Jan 12 01:13:31 CST 2010 | Tue Jan 12 01:13:31 CST 2010 |
| 4194343  | CCHENG  | 2264      | 468        | Tue Jan 12 01:13:31 CST 2010 | Tue Jan 12 01:13:31 CST 2010 |
| 12582922 | CCHENG  | 3864      | 2616       | Tue Jan 12 01:13:04 CST 2010 | Tue Jan 12 03:46:21 CST 2010 |

Home | Charts | Extended Infrastructure Targets | Server Components | Diagnostics | Event Log

Related Links  
[Access](#) [Diagnostic Configurations](#)  
[Target Properties](#)

Home | Targets | Deployments | Alerts | Compliance | Jobs | Reports | Setup

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## 8 Siebel Metrics

This section provides descriptions for all Siebel metric categories, and tables list and describe associated metrics for each category

### 8.1 Siebel Metrics Categories

Siebel metrics consist of the following categories:

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

#### 8.1.1 Siebel Component Metrics

The metrics in this category provide details on the Siebel components, as shown in [Table 4](#).

**Table 4 Siebel Component Metrics**

| Metric  | Description and User Action  | Data Source  |
|---|--|--|
| Average Object Manager response time (in milliseconds)        | <p>The Average Object Manager Response Time shows the average (mean) time required to process a request sent to the Object Manager. It corresponds to the responsiveness of the interactive user sessions. This metric is primarily useful for establishing long-term performance trends and capacity planning. If application performance is deteriorating, the metric value rises.</p> <p>Since response time can be affected by factors such as the efficiency of the code, efficiency of your application configuration, server CPU and memory capacity, end-user behavior and data volume, you need to first identify the root cause of slower response time before taking any action. See the <i>Siebel Performance Tuning Guide</i> for more information.</p>   | Average Object Manager Response Time = Total Object Manager Response Time of all requests on all Object Manager sessions / Total number of requests of all Object Manager sessions |
| Average connect time for Object Manager sessions (in seconds) | In establishing an interactive session with Object Manager, Object Manager needs to perform many tasks such as authentication, initialization, and allocating the necessary resources. The time required to perform all these activities is the connect time. The Average Connect Time for Object Manager sessions is the average amount of time required to establish a connection to a particular Object Manager since the startup of the component. This metric is primarily useful for evaluating connection performance overtime.   | Average Connect Time = Total Connect Time / Total Number of Connections  |
| Average Number of Requests Per Object Manager Session         | <p>Users can perform multiple actions, such as querying records, updating records, and clicking a button to issue a command in a single session. Each of these actions corresponds to one or more requests sent from the user's browser to the Object Manager. The Average Number of Requests for each Object Manager session is the average (mean) number of requests sent to Object Manager in all the Object Manager sessions recorded after the Siebel Enterprise startup.</p> <p>This metric is intended for informational purposes only. You can use it to track the usage pattern of your users to see how much processing load they generate in a session. The information is especially useful over a period of time. When you combine the long-term trending of this metric with Total Object Manager sessions, you can see whether the processing load is increasing or decreasing over time. The information can then be used in making capacity planning decisions.</p> | Average Number of Requests per Object Manager = Total Number of Requests of all Object Manager sessions / Number of Object Manager sessions  |

**Table 4 (Cont.) Siebel Component Metrics**

| <b>Metric</b>                               | <b>Description and User Action</b>   | <b>Data Source</b>  |
|---|--|---|
| Average size of reply messages (in bytes)   | <p>Average Size of Reply Messages shows the size of the response to user-submitted requests to Object Manager. A greater size indicates more data is being passed.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the metric trends up, it shows more data is being passed, which can be caused by factors such as increasing data volume, users issuing queries that return more data, and application configuration changes. You must identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.</p>  | This metric is computed by dividing the Total Size of all reply messages from all requests after the startup of the Object Manager by the number of requests.   |
| Average size of request messages (in bytes) | <p>Average Size of Request Messages shows the size of the request to user-submitted requests to Object Manager. A greater size indicates more data is being passed in submitting the request.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the metric trends up, it shows that more data is being passed, which can be caused by factors such as application configuration changes. You must identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.</p>   | This metric is computed by dividing the Total Size of all request messages from all requests since the startup of the Object Manager by the number of requests. |
| CPU Usage                                   | <p>This metric shows the amount of CPU time consumed by this Siebel component. CPU data comes from two different sources: OS level (process-based statistics gathered by the Oracle Agent) and Srvrmgr statistics.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the value of this metric increases over time, it shows that more intensive processing is occurring on the application server for this component. The change may be caused by application configuration changes or changes to the underlying Siebel software. You need to identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.</p> | The metric is calculated by adding the CPU time of all component tasks for the component after the Siebel Server start up.                                      |
| Max. MTS                                    | This parameter sets the maximum number of multi-threaded shells. You should review the Running MTS Processes metric periodically to learn about the level of running processes. If the number of MTS running is often close to exceeding the limit set through Max MTS, consider increasing the Max MTS value. On the other hand, if the number of MTS is always a fraction of the limit, consider lowering Max MTS.   | The parameter is set on the Siebel Component.   |
| Number Component Process Failures           | This metric provides the count of component tasks that exited with errors. Component Tasks exit with errors for many reasons, ranging from not having the correct business data to work with to failure in the software. If the number of such failures increases dramatically, you must examine what is wrong. Start by examining the Alert log and the Siebel Server Manager to find out the Tasks that exited with errors.  | Component Tasks that exited with errors are counted.  |

**Table 4 (Cont.) Siebel Component Metrics**

| <b>Metric</b>         | <b>Description and User Action</b>   | <b>Data Source</b>  |
|-----------------------|--|---|
| Run State             | The current status of the component. If a component is down or disabled when it is not supposed to be, you should try to restart it or enable it using Siebel Server Manager. Also take a look at the component log file for information on why the component is not working.  | The value of this metric is updated at each sampling period.  |
| Running MTS Processes | The number of running multi-threaded shell (MTS) processes. This metric is intended for informational purposes and can be used for long-term trending to analyze the component usage. If the number of MTS processes trends up, it indicates increased usage of the component. Tuning or capacity adjustment may be required.  | The value of this metric is queried from the Siebel Server at each sampling period.   |
| Start Time            | This metric is intended for informational purposes, and can be used during diagnostics to determine when the component was started.  | The start time of the component. This metric is collected from the Siebel Server during each sampling period. It typically does not change unless the component is restarted. |
| Current Tasks         | This metric shows the current number of running tasks for the component. Since the maximum number of tasks is limited by MaxTasks, this parameter indirectly indicates the number of remaining tasks. If the number of tasks becomes too high relative to MaxTasks, you may need to determine if there are runaway tasks or whether MaxTasks is set too low.   | The value of Current Tasks is updated for each sampling period by querying the Siebel Server.   |
| Max Tasks             | <p>The configuration parameter that determines the maximum number of tasks that can be run for a Siebel Server Component. If the current number of running tasks equals Max Tasks, no new tasks can be spawned. For Interactive Object Managers, it means that no new users can log on. It is very important to make sure that Max Tasks is set to a level higher than the expected maximum number of tasks to be run at a given time. Refer to the <i>Siebel System Administration Guide</i> for more information.</p> <p>You should review the Current Tasks metric periodically to learn about the level of task usage. If the number of tasks running is often close to exceeding the limit set by Max Tasks, consider increasing the Max Tasks value. On the other hand, if the number of tasks is always a fraction of the limit, consider lowering Max Tasks.</p> | This parameter is set using Siebel Server Manager.  |

**Table 4 (Cont.) Siebel Component Metrics**

| <b>Metric</b>  | <b>Description and User Action</b>  | <b>Data Source</b>   |
|--|---|--|
| Average time for SQL execute operations (in seconds) | <p>This metric shows the average (mean) amount of time the database requires to process the SQL statement after the statement is parsed. The metric is only applicable to older Siebel components such as EIM, and does not show the time required to process Object Manager requests.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the value of this metric increases over time, it shows that SQL statements involving more complex operations are being executed, or the database has become less efficient at processing requests. These can be caused by changes to the application, increasing data volume, or tuning changes to the database. You must identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.</p> | This metric is computed by dividing the total time for SQL execution from all requests since the startup of the component by the number of requests.   |
| Average time for SQL parse operations (in seconds)   | <p>This metric shows the average (mean) amount of time the database requires to parse the SQL statements being passed to it. The metric is only applicable to older Siebel components such as EIM, and does not show the time required to process Object Manager requests.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the value of this metric increases over time, it shows that SQL statements have become more complex. Since Siebel generates all SQL statements dynamically, the change could be caused by changes to the underlying Siebel product, to the complexity of the business components, or query specifications you defined. You must identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.</p>       | This metric is computed by dividing the total time for parsing SQL statements from all requests for this component since the startup of the Siebel Server by the number of requests.   |
| Total number of SQL execute operations               | This metric shows the total number of SQL statements executed. The number is aggregated from completed component tasks; that is, it does not reflect SQL statements executed by currently active sessions.  | This metric is intended primarily for establishing long-term performance trends. If the value of this metric increases over time, it shows increased access to the database, which may necessitate tuning or capacity adjustments. |
| Total number of SQL fetch operations                 | This metric shows the total number of SQL fetch operations for the component.   | This metric is queried from the Siebel Server at each sampling period.   |
| Total number of SQL parse operations                 | <p>This metric shows the total number of SQL statements parsed. The metric is only applicable to older Siebel components such as EIM, and does not show the time required to process Object Manager requests. It is used in computing the Average time for SQL Parse operations.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the value of this metric increases over time, it shows increased access to the database, which may necessitate tuning or capacity adjustment.</p>   | This metric is queried from the Siebel Server at each sampling period.   |



**Table 4 (Cont.) Siebel Component Metrics**

| <b>Metric</b>         | <b>Description and User Action</b>  | <b>Data Source</b>  |
|-----------------------|---|---|
| Average CPU Time      | <p>Average CPU Time shows the average (mean) amount of time consumed to process a request. A higher CPU Time indicates more CPU-intensive processing.</p> <p>This metric is primarily useful in establishing long-term performance trends and capacity planning. If the metric trend is up, this indicates more CPU-intensive processing. You may need to add more processing capacity or tune the application configuration if this continues.</p>   | <p>This metric is computed by dividing the Total CPU Time of all requests after the component startup by the Total Number of Requests after the component startup.</p> <p>Average CPU Time = Total CPU Time / Number of Requests.</p> |
| Average Response Time | <p>The Average Response Time shows the average (mean) time required to respond to an end-user action. It corresponds to the responsiveness of the interactive user sessions during a measurement period. This metric is useful for short term monitoring as well as establishing long-term performance trends. If application performance is deteriorating, the metric value increases.</p> <p>Since response time can be affected by factors such as the efficiency of the code, efficiency of your application configuration, server CPU and memory capacity, end-user behavior and data volume, you need to first identify the root cause of slower response time before taking any action. See the <i>Siebel Performance Tuning Guide</i> for more information.</p> | <p>This metric is computed via SARM data, as opposed to Server Component metrics.</p> <p>Average Response Time = Total Response Time all requests / Total number of requests during a measurement period.</p>                         |
| Memory Usage          | <p>Memory usage measures the total amount of memory consumed by the running tasks of the component. The metric is intended primarily for informational purposes, especially in diagnosing memory-related problems. Constantly increasing memory usage may indicate a memory leak.</p>   | <p>Memory consumption for all component processes is retrieved from the operating system.</p>   |
| Number of Requests    | <p>This metric indicates the total number of requests submitted to the component since the start-up of the Siebel Server. This metric is used as the denominator in calculating many other summary metrics.</p> <p>The value is intended for informational purposes and can be used for long-term trending to analyze the usage of the component. If the number of requests trends up, it indicates increased usage of the component. Tuning or capacity adjustment may be required.</p>  | <p>The value of Number of Requests is updated for each sampling period by querying the Siebel Server.</p>   |

**Table 4 (Cont.) Siebel Component Metrics**

| <b>Metric</b>       | <b>Description and User Action</b>   | <b>Data Source</b>   |
|---------------------|--|--|
| Status              | This metric shows the current status of the component. It is the binary representation of the component's availability: 1 = Available, and 0 = Down. If a component is down or disabled when it is not supposed to, you need to attempt to restart it or enable it using Siebel Server Manager. Also, you can review the component log file for information on why the component is not working. | The value of this metric is updated at each sampling period. |
| Total CPU Time      | This metric shows the aggregated CPU time used by all tasks completed for this component since the component was started. This metric is intended only for informational use. In most cases, the current CPU consumption and trends in CPU consumption are more informative. These can be checked with the 'CPU Usage' metric.   | This metric is collected from the Siebel server.             |
| Total Response Time | This metric shows the total response time for the component.   | This metric is from the srvmgr statistics.                   |

### 8.1.2 Siebel Component Group Target Metrics

The metrics in this category provide details on the Siebel component group targets.

**Table 5 Siebel Component Group Target Metrics**

| <b>Metric</b> | <b>Description and User Action</b>  | <b>Data Source</b>   |
|---------------|---|--|
| Start Time    | This metric shows the start time of the component. This metric is intended for informational purposes, and can be used during diagnostics to determine when the component was started.  | This metric is collected from the Siebel Server during each sampling period. It typically does not change unless the component is restarted. |
| Status        | This metric shows the current status of the component. It is the string representation of the state, such as Running, Online, and Shut-down. If a component is down or disabled when it is not supposed to be, you need to attempt to restart it or enable it using Siebel Server Manager. Also, you can review the component log file for information on why the component is not working. | The value of this metric is updated at each sampling period, and it is retrieved using srvmgr.   |

### 8.1.3 Siebel Gateway Target Metrics

The metrics in this category provide details on the Siebel Gateway targets.

**Table 6 Siebel Gateway Target Metrics**

| <b>Metric</b> | <b>Description and User Action</b>                                 | <b>Data Source</b>      |
|---------------|--|-------------------------|
| Response      | This metric shows the response time of the Siebel Gateway.         | Retrieved using srvmgr. |
| Status        | This metric shows the current status of the Siebel Gateway target. | Retrieved using srvmgr. |

### 8.1.4 Siebel Server Target Metrics

The metrics in this category provide details on the Siebel Server targets.

**Table 7 Siebel Server Target Metrics**

| <b>Metric</b>   | <b>Description and User Action</b>  | <b>Data Source</b>  |
|---|---|---|
| File System Usage (%)   | This metric shows the percentage of disk space used for the selected file system. The file systems covered are the Siebel installation directory, Siebel log directory, and Siebel file system used to share documents across Siebel servers. If one of the file systems is close to being exhausted (for example, 95% fill level), the administrator should consider cleaning up the respective file system or adding additional disk space.   | File system monitoring  |
| File System Usage (KB)  | This metric shows the absolute amount of disk space used for the selected file system. The file systems covered are the Siebel installation directory, Siebel log directory, and Siebel file system used to share documents across Siebel servers.  | File system monitoring  |
| Average connect time for Object Manager sessions (in seconds) | In establishing an interactive session with Object Manager, it needs to perform many tasks such as authentication, initialization, and allocating the necessary resources. The time the Object Manager requires to perform all these activities is the connect time. The Average Connect Time for Object Manager sessions is the average amount of time necessary to establish a connection to a particular Object Manager after starting the component. Metrics from all active object managers running inside a Siebel server are aggregated to the Siebel server level to provide this metric. This metric is primarily useful for evaluating connection performance overtime.   | Average Connect Time =<br>Total Connect Time / Total<br>Number of Connection  |
| Average Number of Requests Per Object Manager Session         | <p>Users can perform multiple actions, such as querying records, updating records, and clicking a button to issue a command in a single session. Each of these actions corresponds to one or more requests sent from the user's browser to the Object Manager. The Average Number of Requests for each Object Manager session is the average (mean) number of requests sent to the Object Manager in all the Object Manager sessions recorded after starting the Siebel Enterprise. Metrics from all active object managers running inside a Siebel server are aggregated to the Siebel server level to provide this metric.</p> <p>This metric is only intended for informational purposes. You can use it to track the usage pattern of your users to see how much processing load they generate in a session. The information is especially useful over time. When you combine the long-term trending of this metric with the Total Object Manager session, you can see whether the processing load is increasing or decreasing over time. The information can then be used in making capacity planning decisions.</p> | Average Number of Requests per Object Manager = Total Number of Requests of all Object Manager sessions / Number of Object Manager sessions |

**Table 7 (Cont.) Siebel Server Target Metrics**

| <b>Metric</b>  | <b>Description and User Action</b>   | <b>Data Source</b>  |
|--|--|---|
| Average Object Manager response time (in milliseconds) | <p>This metric shows the average (mean) time necessary to process a request sent to the Object Manager. It corresponds to the responsiveness of the interactive user sessions. Metrics from all active object managers running inside a Siebel server are aggregated to the Siebel server level to provide this metric.</p> <p>This metric is primarily useful for establishing long-term performance trends and capacity planning. If application performance is deteriorating, the metric value increases. Since response time can be affected by factors such as efficiency of code, efficiency of your application configuration, server CPU and memory capacity, end-user behavior and data volume, you need to first identify the root cause for slower response time before taking any action. See the <i>Siebel Performance Tuning Guide</i> for more information.</p> | Average Object Manager Response Time = Total Object Manager Response Time of all requests on all Object Manager sessions of this server / Total number of Requests of all Object Manager sessions |
| Average Size of Reply Messages (in bytes)              | <p>This metric shows the size of the response sent from user-submitted requests to Object Manager. A large size indicates that a large amount is being passed. Metrics from all active object managers running inside a Siebel server are aggregated to the Siebel server level to provide this metric.</p> <p>This metric is intended for establishing long-term performance trends. If this metric trends up, it shows that a large amount of data is being passed, which can be caused by factors such as increasing data volume, users issuing queries that return more data, and application configuration changes. You need to identify the root cause of the problem to address this trend.</p>   | This metric is computed by dividing the Total Size of all reply messages from all requests since the startup of the server by the number of requests.   |
| Average Size of Request Messages (in bytes)            | <p>This metric shows the size of the request to user-submitted requests to Object Manager. A greater size indicates that more data is being passed while submitting the request. Metrics from all active object managers running inside a Siebel server are aggregated to the Siebel server level to provide this metric.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the metric trends up, it shows that more data is being passed, which can be caused by factors such as application configuration changes. You need to identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.</p>  | This metric is computed by dividing the Total Size of all request messages of all requests since the startup of the server by the number of requests.   |

**Table 7 (Cont.) Siebel Server Target Metrics**

| Metric   | Description and User Action  | Data Source  |
|--|--|--|
| Average time for SQL execute operations (in seconds) | <p>This metric shows the average (mean) amount of time the database requires to process the SQL statement after the statement is parsed. The metric is only applicable to older Siebel components such as EIM, and does not show the time required to process Object Manager requests. Metrics from all active object managers running inside a Siebel server are aggregated to the Siebel server level to provide this metric.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the value of this metric increases over time, this shows that SQL statements involving more complex operations are being executed, or the database has become less efficient at processing requests. These can be caused by changes to the application, increasing data volume, or tuning changes to the database. You need to identify the root cause to address the trend. Refer to <i>Siebel Performance Tuning Guide</i> for more information.</p>            | This metric is computed by dividing the total time for SQL execution from all requests after starting the server by the number of requests.  |
| Average time for SQL fetch operations (in seconds)   | <p>This metric shows the average (mean) amount of time it takes the database to fetch records via an SQL statement after the statement is parsed. The metric is only applicable to older Siebel components such as EIM, and do not show the time required to process Object Manager requests. Metrics from all active object managers running inside a Siebel server are aggregated to the Siebel server level to provide this metric.</p> <p>This metric is intended primarily for establishing long-term performance trends. If the value of this metric increases over time, this shows that SQL statements involving more complex operations are being executed, or the database has become less efficient at processing requests. These can be caused by changes to the application, increasing data volume, or tuning changes to the database. You need to identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.</p> | This metric is computed by dividing the total time for SQL execution from all requests since the startup of the server by the number of requests.                                    |
| Average time for SQL parse operations (in seconds)   | <p>This metric shows the average (mean) amount of time the database requires to parse the SQL statements being passed to it. The metric is only applicable to older Siebel components such as EIM, and does not show the time required to process Object Manager requests.</p> <p>This metric is intended primarily for establishing long term performance trends. If the value of this metric increases over time, it shows that SQL statements have become more complex. Since Siebel generates all SQL statements dynamically, the change could be caused by changes to the underlying Siebel product, or changes to the complexity of the business components or query specifications you defined. You need to identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.</p>   | This metric is computed by dividing the total time for parsing SQL statements from all requests for this component since the startup of the Siebel Server by the number of requests. |

**Table 7 (Cont.) Siebel Server Target Metrics**

| <b>Metric</b>                               | <b>Description and User Action</b>   | <b>Data Source</b>  |
|---|--|---|
| CPU usage                                   | This metric shows the amount of CPU time consumed by this Siebel component. This metric is intended primarily for establishing long-term performance trends. If the value of this metric increases over time, it shows that more intensive processing is occurring on the application server for this component. The change may be caused by application configuration changes or changes to the underlying Siebel software. You need to identify the root cause to address the trend. Refer to the <i>Siebel Performance Tuning Guide</i> for more information.   | The metric is computed by adding up the CPU time of all component tasks for the component since the startup of the Siebel Server. |
| File System Free Space (KB)                 | This metric shows the absolute amount of free disk space currently available in the selected file system. The file systems covered are the Siebel installation directory, the Siebel log directory, and the Siebel file system used to share documents across Siebel servers. If the absolute amount of free disk space becomes very small (for example, less than 500 MB), there is a risk that the file system will fill up quickly, which would affect availability of the Siebel server. If this value becomes too low, the file system must be cleaned, or additional disk space needs to be added. | File system monitoring  |
| Memory Usage                                | Memory usage measures the total amount of memory consumed by the processes running as part of the Siebel server. The metric is primarily intended for informational purposes, especially in diagnosing memory-related problems. Constantly increasing memory usage may indicate a memory leak.   | Memory consumption for all Siebel server processes is retrieved from the operating system.  |
| Number Component Process Failures           | This metric provides the count of component tasks that exited with errors. Component Tasks exit with errors for many reasons, ranging from not having the correct business data to work with to failure in the software. If the number of such failures increases dramatically, something is definitely wrong and should be examined. A good place to start would be to examine the Alert log and the Siebel Server Manager to find out which Tasks exited with errors.  | Component Tasks that exited with errors are counted.  |
| Number Component Process Restarts           | This metric provides the count of component tasks that exited with errors. Component Tasks exit with errors for many reasons, ranging from not having the correct business data to work with, to failure in the software. If the number of such failures increases dramatically, something is definitely wrong and should be examined. A good place to start would be to examine the Alert log and the Siebel Server Manager to find out which Tasks exited with errors.   | Component Tasks that exited with errors are counted.  |
| Number of Retries due to DB Connection Loss | When the Siebel Server loses connection to the database, it attempts to retry the operation before giving up and reporting the problem. This metric shows the number of retries. If the number of retries rises dramatically, this indicates problems with the database or the network, and the administrator should examine these components to determine why they are dropping database connections.   |   |

**Table 7 (Cont.) Siebel Server Target Metrics**

| <b>Metric</b>                                   | <b>Description and User Action</b>  | <b>Data Source</b>  |
|---|---|---|
| Number of Retries due to Deadlock Rollbacks     | When the Siebel Server loses connection to the database, it attempts to retry the operation before giving up and reporting the problem. This metric records the number of retry attempts. If the number of retries increases dramatically, this indicates problems with the database or the network, and the administrator should examine these components to determine why they are dropping database connections. |   |
| Number of Times All Retries are Exhausted       | This metric counts the number of retry failures; that is, the number of times the Siebel Server stops the attempts of communicating with the database. A DBA should be called to find out why the Siebel Server cannot communicate with the database.   |   |
| Start Time                                      | This metric shows the start time of the Siebel server.  | Retrieved via <code>srvrmgr</code> from the running Siebel server.                                    |
| Status  | This metric shows the current status of the Siebel server (that is, whether it is available or down). If the status of a Siebel server is shown as unavailable, the administrator should check the reason of the failure and attempt to start the Siebel server again.  | The status of a Siebel server is determined by running the <code>srvrmgr</code> command line utility. |
| Available Disk space (KB)                       | This metric shows the absolute amount of disk space available in the selected file system. The file systems covered are the Siebel installation directory, the Siebel log directory, and the Siebel file system used to share documents across Siebel servers.  | File system monitoring  |
| Total CPU time for component tasks (in seconds) | The total CPU time in seconds for component tasks.  |   |
| Total number of level 0 and 1 errors            | This metric counts the number of fatal errors and regular errors on the Siebel Server. There are always a small number of errors on the Siebel Server. However, if the count develops an upside trend, the administrators should check the alert and error logs.  |   |

### 8.1.5 Siebel Workflow Target Metrics

The metrics in this category provide details on the Siebel Workflow targets.

**Table 8 Siebel Workflow Target Metrics**

| <b>Metric</b>  | <b>Description and User Action</b>  |
|--|---|
| Total Number of Completed Process Instances in Past 1 Hour | This metric shows the total number of workflow process instances that completed in the past hour. The collection frequency is every 15 minutes. |
| Total Number of Workflow Policy Instances in Waiting State | This metric shows the total number of workflow policy instances waiting in a queue. The collection frequency is every 15 minutes.               |

**Table 8 (Cont.) Siebel Workflow Target Metrics**

| <b>Metric</b>   | <b>Description and User Action</b>   |
|---|--|
| Total Number of Workflow Process Instances in Waiting State | This metric shows the total number of workflow process instances waiting in a queue. The collection frequency is every 15 minutes. |
| Number of Monitored Process Instances Failed State          | This metric shows the number of workflow process instances that failed. The collection frequency is every 15 minutes.              |
| Number of Monitored Process Instances in Waiting State      | This metric shows the total number of workflow process instances waiting in a queue. The collection frequency is every 15 minutes. |

## 9 Troubleshooting the Siebel Application Pack for Oracle Enterprise

This section describes common problems you can encounter when monitoring and managing Siebel enterprises with the Siebel pack.

The section contains the following topics:

- [Failure to Discover a Siebel Enterprise](#)
- [Certain Metrics Are Not Collected](#)
- [Business Metrics Are Not Collected](#)
- [All SarmQuery Metrics are '0'](#)
- [Siebel File System Metrics Are Not Collected](#)
- [The Status of Certain Components in Enterprise Manager Differs from the Status of the Same Components in Server Manager](#)
- [The Beacon Does Not Report Correctly the Status of HI Applications](#)
- [Internet Explorer Crashes When Trying to Perform Multiple Recording Transactions for the Same Application](#)

**See Also:** Topic 1074241.1 in My Oracle Support for other information not discussed in this section:

<https://support.oracle.com>

### 9.1 Failure to Discover a Siebel Enterprise

#### Problem

The Siebel enterprise discovery fails and, consequently, Enterprise Manager does not create the corresponding Siebel enterprise targets.

#### Possible Cause

The Siebel enterprise name you provided does not match the actual enterprise you want to discover.

#### Solution

Provide the correct enterprise name.



**Possible Cause**

(Unix only) — The specified port number is incorrect.

**Solution**

Make sure that the specified port number in the discovery pages matches the port number configured for your gateway server.

## 9.2 Certain Metrics Are Not Collected

**Problem**

Although the Siebel enterprise discovery functioned as expected, some metrics are collected, but other metrics are not.

**Possible Cause**

The user name and password credentials provided for this particular Siebel enterprise user are incorrect. Because these credentials are required to retrieve many of the Siebel performance metrics, the wrong credentials prevent the system from collecting these metrics.

**Solution**

Go to the **Siebel** tab, remove the enterprise, and repeat the discovery process.

**Possible Cause**

The Agent uses credentials that do not grant access to the Siebel installation directory or to run the Siebel utilities.

**Solution**

Make sure that the Enterprise Manager Agent uses credentials that allow access to the Siebel installation directory and have sufficient privileges to run Siebel utilities, such as `srvrmgr` and `query`.

**Possible Cause**

For 10.2.0.3 Agents, the `SiebelClasspathFix.bat` or `siebelClasspathFix.sh` file is not executed (Prerequisite).

**Solution**

These files must be executed so that `jmxri.jar` and `empaAgent.jar` entries are added to `$AGENT_HOME/sysman/config/classpath.lst` file. After executing the respective script, the Agent must be restarted.

This is applicable only for 10gR3.

## 9.3 Business Metrics Are Not Collected

**Problem**

Business metrics are not collected.

**Possible Cause**

The database password is not defined.

### **Solution**

Go to the Siebel Database Repository target home page of the corresponding Siebel enterprise target and click **Monitoring Configuration** in the **Related Links** section of the page. Enter the appropriate values in the **Siebel Database User Name** and **Password** fields.

### **Possible Cause**

(Unix only) — Oracle environment variables were not added to the `siebenv.sh` file of the Siebel server used to execute the SQL statements that retrieve business metrics from the Siebel database.

### **Solution**

Add the appropriate Oracle environment variables to the `siebenv.sh` file.

## **9.4 All SarmQuery Metrics are '0'**

### **Problem**

All SarmQuery Metrics are '0'.

### **Possible Cause**

You are using a Siebel version older than Siebel 8.0 and `sarmquery` was not copied to the `$ORACLE_HOME/bin` directory of each of the Agents running on the Siebel server host.

### **Solution**

Download `sarmquery` from My Oracle Support and copy the related files to the `bin` directory of the Enterprise Manager Agent.

### **Possible Cause**

SARM has to be enabled by using `srvrmgr` to allow SARM performance metrics to be collected. If SARM parameters are not configured for your Siebel components, no SARM data is generated.

### **Solution**

Follow the instructions in the [Enable SARM](#) step on page -7.

## **9.5 Siebel File System Metrics Are Not Collected**

### **Problem**

Siebel file system metrics are not collected.

### **Possible Cause**

If a Siebel file system is defined to be accessible exclusively by a group of operating system users, and the Agent does not belong this group of users, the Agent is not able to retrieve information about this file system.

### **Solution**

Make sure that the Enterprise Manager Agent can access all Siebel file systems (log directory, installation directory, and Siebel file system directory) and has at least read access to the Siebel file system.

## **9.6 The Status of Certain Components in Enterprise Manager Differs from the Status of the Same Components in Server Manager**

### **Problem**

The status of components shown in Enterprise Manager differs from the status or performance numbers available through `srvrmgr`.

### **Possible Cause**

Enterprise Manager collects Siebel metrics only at certain intervals (regular metrics every 15 minutes, availability information every 5 minutes). Therefore, information visible in the Enterprise Manager user interface can be out of sync with `srvmgr` for up to 15 minutes.

### **Workaround**

If you are interested in monitoring a certain metric in real-time mode for a certain period of time, go to the **All Metrics** page for a given Siebel target, navigate to the desired metric, and change it to **Realtime** mode.

In this mode, collection occurs more frequently and you can follow statistics more closely.

### **Solution**

You can change the collection frequency for individual metrics. If you want the availability metrics to be collected more often, you can change the collection frequency for your key Siebel components.

## **9.7 The Beacon Does Not Report Correctly the Status of HI Applications**

### **Problem**

The beacon does not report correctly the status of HI Applications.

### **Troubleshooting Tip**

To better troubleshoot this error, view the error entries in the log error file. If your environment is not configured to generate an error file, you can do so by defining the following variables:

`HISIEBEL_DEBUG_LOG`-the log file name including the full path

`HISIEBEL_LOG_LEVEL`-set the log level to `DEBUG` or `ERROR`

It is recommended to have at least one beacon system for each Siebel version.

### **Possible Cause**

When a single beacon accesses two or more different Siebel environments, the recording or playback of a transaction can only be accomplished for the last Siebel environment that was accessed.

For example, if a given beacon accesses a Siebel 7.0 environment and later attempts to access a Siebel 7.7 environment, this beacon cannot revert to a Siebel 7.0 environment to play back or record a new transaction. This happens because each Siebel version registers a different CAB (Siebel) file in the client host, and only the last registered file is active.

#### **Solution**

On the Internet Explorer browser, delete the CAB files of the environment you do not want to use. To delete CAB files on Internet Explorer:

1. Open Internet Explorer, navigate to the **Tools** menu, and select **Internet Options**.

The Internet Options window appears.

2. Navigate to the **Temporary Internet Files** section of the window, and click **Settings**.

The Settings window appears.

3. Click **View Objects**.

The Downloaded Program Files window appears.

4. Delete the unnecessary CAB files.

#### **Possible Cause**

When consecutive record or playback sessions are in progress, the "Session already in progress" page appears and the recording session is terminated. This error is caused by a limitation in the Siebel CAS layer.

#### **Solution**

Use the timeout parameter to limit the amount of time a given service test can run and allow a long length of time between tests so the processes do not interfere with each other.

For example, you might want to set up a test to run every 13 minutes for 1 minute, and another test to run every 17 minutes for 1 minute.

#### **Possible Cause**

The Agent-side components for HI Applications have not been installed properly.

#### **Solution**

Verify the proper installation of these components by doing the following:

1. Check that the `emIEClient.exe` and `emIElib.dll` files are present in the Agent bin directory.
2. Type **regedit** to open the registry and search for `emIElib.dll`; it should point to the location under the Agent bin directory. This indicates that the dll has been properly registered as part of the installation.

## 9.8 Internet Explorer Crashes When Trying to Perform Multiple Recording Transactions for the Same Application

### Problem

Internet Explorer crashes when trying to perform multiple recording transactions for the same application.

### Possible Cause

There is a limitation in the CAS layer.

### Solution

Close and start a new Internet Explorer browser window.

## 9.9 Siebel Enterprise Discovery Does Not Yield Results

### Problem

Siebel Enterprise Discovery does not yield any result.

### Possible Cause

The discovery process depends on the `vpd.properties` files.

Windows:

`C:\WINDOWS\vpd.properties`

Unix:

`\var\adm\siebel\vpd.properties`

Discovery cannot function properly if the file does not exist or is corrupted.

### Solution

Check why `vpd.properties` does not exist. Attempting to use a backup copy of `vpd.properties` file should be located in the same directory. Alternatively, create a dummy version of the file.

### Possible Cause

The `vpd.properties` file is written by multiple installers. If there is an installer problem, the information required to locate the Siebel Gateway server installation may not be in the file any longer, causing the discovery process to fail.

### Solution

Manually create an entry that allows the discovery process to find the Siebel Gateway server installation.

### Possible Cause

If the enterprise name specified on the Add Siebel Enterprise page does not match the names of Siebel enterprises maintained through the specified Siebel Gateway server, discovery does not yield any results.

**Solution**

Check the enterprise name again.

**Possible Cause**

On Unix systems, changing the port number of the Siebel Gateway service is a supported configuration option. If an incorrect port number is specified on the discovery screen, the gateway server installation is not recognized during the discovery process.

**Solution**

Check the gateway port number again.

**Possible Cause**

If Siebel server names contain hyphens, these Siebel servers are not recognized during the discovery process, as server names with hyphens are not supported in the Siebel product. See documentation on naming conventions on the Siebel Support Web.

**Solution**

Reinstall the Siebel servers.

## 9.10 Siebel Enterprise Discovery Fails With Internal Error

**Problem**

Siebel Enterprise Discovery fails with an internal error.

**Possible Cause**

For the Siebel Enterprise discovery to function, Agents have to be installed on all of the Siebel servers belonging to the specified Siebel enterprise. (The concept is that all parts of the Siebel enterprise should be monitored, which is possible only with an Agent on each of the Siebel server systems.)

**Solution**

Ensure that you install an Agent on each of the Siebel server systems. Agents should be associated with the OMS from which the discovery is initiated.

## 9.11 Siebel Application Discovery Does Not Yield Results

**Problem**

Siebel Enterprise Web service discovery does not yield any results or fails due to an error.

**Possible Cause**

The discovery process depends on the `vpd.properties` files.

Windows:

`C:\WINDOWS\vpd.properties`

Unix:

`\var\adm\siebel\vpd.properties`

Discovery cannot function properly if the file does not exist or is corrupted.

#### **Solution**

Check why the `vpd.properties` does not exist. Attempting to use a backup copy of the `vpd.properties` file should be located in the same directory. Alternatively, create a dummy version of the file.

#### **Possible Cause**

The `vpd.properties` file is written by multiple installers. If there is an installer problem, the information required to locate the Siebel Web server extension installation may not be in the file any longer. This causes the discovery process to fail.

#### **Solution**

Manually create an entry that allows the discovery process to find the Siebel Gateway server installation.

## **9.12 Metrics Collection: Siebel Server and Components Shown as Unavailable After Discovery**

#### **Problem**

Siebel server and components are shown as unavailable after discovery.

#### **Possible Cause**

For Enterprise Manager 10.2.0.3, a manual step must be executed before the Agent can monitor any Siebel-related components.

#### **Solution**

For 10.2.0.3 Agents, navigate to `<agentdir>/bin` and execute the script `siebelClasspathFix.bat` (Windows) and/or `siebelClasspathFix.sh` (Linux, Unix), specifying the installation directory of the Agent as a parameter, as shown below:

```
C:\>F:
```

```
F:\>cd F:\OracleHomes4\agent10g\BIN
```

```
F:\OracleHomes4\agent10g\BIN>siebelClasspathFix.bat
```

```
F:\OracleHomes4\agent10g
```

#### **Possible Cause**

If an incorrect Siebel user/password combination was specified on the Add Enterprise page, discovery functions as expected, but collection of metrics through `srvmgr` is not possible.

#### **Solution**

Check the specified user/password combination again.

**Possible Cause**

On Windows systems, the port number of the gateway service may be changed (though this is not officially supported). Discovery functions with any port number provided, but metrics can be collected only with a correctly specified port number.

**Solution**

Check the gateway port number again.

## 9.13 Siebel Service Status Issues

**Problem**

The status of Siebel HI services/applications (for example, callcenter) is shown as down.

**Possible Cause**

The service tests for Siebel High Interactivity applications (for example, callcenter or sales) use Siebel test automation functionality to allow simulation of certain keyboard and mouse events. To enable test automation, the parameter TestAutomation must be enabled for the respective components.

**Solution**

To allow monitoring of the CallCenter application (example), the `srvrmgr` command shown below must be executed, and the component or Siebel server need to be restarted after to activate the parameter change. See [Section 1.7, "Enabling Automation"](#) for details.

**Possible Cause**

If an incorrect Siebel user/password combination was specified on the Add Enterprise page, discovery functions as expected, but collection of metrics through `srvrmgr` is not possible.

**Solution**

1. Start the Services control application and browse to the Enterprise Manager Agent service. Typically, this Agent is named Oracleagent10agent.
2. Double-click the service entry.
3. On the **Log On** tab, select the **Allow service to interact with the desktop** option.
4. Click **OK** to save your changes.

**Possible Cause**

The beacon has to be deployed to a Windows host, where Internet Explorer is available and has been successfully used to connect to a Siebel HI application. If Internet Explorer cannot be located, the service is shown as unavailable.

**Solution**

Deploy the beacon to a Windows system with an existing and working Internet Explorer installation.



## 9.14 Sarm Metrics and Performance Diagnostics Issues

### Problem

SARM metrics not available for components or Diagnostic reports show 'No Data'.

### Possible Cause

For Siebel 7.8, the `sarmquery` utility is not packaged as part of the Siebel product. To gather SARM metrics, the SARM utility must be copied to the Agent installation directory, specifically into the 'bin' sub-directory. If the `sarmquery` utility is not available, or sufficient access rights are not granted, SARM metrics cannot be gathered.

### Solution

Copy the `sarmquery` utility and related DLLs to the `<agent_dir>/agent10g/bin` directory and/or check access rights for the utility and the DLLs.

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