

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 Siebel Management Pack and describes the value-added features offered by this pack. This document also lists the metrics collected for Siebel targets and describes some troubleshooting tips that 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 required of your Siebel CRM applications.

With the Siebel pack, you can:

- Manage multiple Siebel environments from 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 that 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 delivered by your Siebel CRM applications.

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

The following are 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 that 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

Enterprise Manager Target	Siebel Entity	Purpose
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 may be used by multiple components (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 documentation listed in [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
<i>Enterprise Manager Grid Control Quick Start Guide</i>	All	Introduction to Enterprise Manager Grid Control - It is highly recommended that you go over this piece of documentation 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 Objective, Setting up Service Tests, Running Service Level Reports
	Managing Deployments Chapter	Viewing Configurations, Comparing Configurations, Taking Configuration Snapshots, Using Configuration Policy
	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	Server Performance Analysis, User Performance Analysis, Event Log Analysis
	All	Installing Siebel Diagnostic Tool
<i>Enterprise Manager Grid Control Installation Guide</i>	All	Installing Enterprise Manager Grid Control Server and Agents
<i>Enterprise Manager Advanced Configuration</i>	All	Advanced Configuration Topics
	Sizing and Maximizing the Performance of Oracle Enterprise Manager	Capacity Planning and Tuning for Oracle 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>

In addition to 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 may also get more information about the product on 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. URL to the site is

<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.

Also, 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`, then install and configure Grid Control on a different host, that is, Oracle Management Service and Oracle Management Repository on `host2.us.oracle.com`.

Install Oracle Management Agent 10g Release 3 (10.2.0.3) or higher on every host that includes the components you want to monitor in Grid Control.

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>)

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), then before upgrading it, meet the prerequisites mentioned in [Section 1.7, "Prerequisites for Upgrading Enterprise Manager 10g Grid Control Release 3 \(10.2.0.3\) to Release 4 \(10.2.0.4\) or Release 5 \(10.2.0.5\)"](#).

1.6 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 the Enterprise Manager Grid Control.

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

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

If you would like 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, then install the Agent on these hosts as well.

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

To enable the Siebel **Services** 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 Services** from **Available Target Subtabs** and move it to the **Selected Target Subtabs** by clicking the **Move** arrow.

Your selection is moved.

4. Click **Finish**.

- Set the Preferred Credentials for all the hosts on which Oracle Enterprise Manager is installed.

This can be done by going to the **Preference** link located on the top right corner of the page and selecting the **Preferred Credentials** link located on the left navigation pane.

- Enable Enterprise Manager agent to monitor Siebel target

To monitor a Siebel Server via an Enterprise Manager agent, you must execute a configuration script on the agent machine.

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

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

(<agent_dir> should be replaced by the install location of the EM agent).

Here is an example for an actual command:

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

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

- On Unix/Linux machines, the following command must be executed in the command line:

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

(<agent_dir> should be replaced by the install location of the EM agent).

Here is an example for an actual command:

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

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

Note: This command must be executed for all EM agents that are involved in monitoring Siebel server installations.

- 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 "[Enabling Automation](#)" describes how to enable automation support.

- Enable SARM

Note: You can manually enable SARM by executing commands, but it is recommended that you enable SARM from the Diagnostic Configuration page via Oracle Enterprise Manager. See [Prerequisites for Diagnostic Reports](#) for details on enabling SARM using Enterprise Manager.

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

```
change param SARMLevel=2 for comp [component_name]  
change param SARMBufferSize=5000000 for comp [component_name]  
change param SARMArchiveSize=15000000 for comp [component_name]  
change param SARMPeriod=3 for comp [component_name]
```

Note: If you want to enable SARM for multiple components, then this sequence of commands has to be executed for each of the components.

- Configure your environment for Siebel deployments on Microsoft Windows.

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

1. Start the Services control application and browse to the Enterprise Manager agent service. Typically, this agent is named `Oracleagent10gagent`.
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.

To allow Enterprise Manager to execute commands on the computers hosting the Siebel servers, configure the Enterprise Manager preferred credentials (see the following steps).

Also, you must configure an operating system user account on Enterprise Manager. This user account will be used by Enterprise Manager to perform various tasks. 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 that permission:

1. Navigate to **Administrative Tools** and start the **Local Security Settings** application.
2. Navigate to **User Rights Assignment** located under **Local Policies**.
3. Double-click the Log on as a batch job entry.
4. Click the **Add User or Group** button. Enter the desired user name or a group containing that user.
5. Click **OK** twice to save your changes.

- Enable timed statistics.

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

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

- 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 will interfere and interrupt your recording session. This step has to be done once. This has to be done on each machine where a beacon is going to be deployed and this is most applicable for HI apps.

Additionally, while recording a new transaction, the URL has to 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 have to be accessed once from the beacon computer before discovering the Siebel HI Applications in Enterprise Manager.

Enabling Automation

This topic describes how to enable options for Siebel versions 7.7, 7.8, and 8.0. It contains the following topics:

- [Enabling Automation for Siebel versions 7.7 and 7.8](#)
- [Enabling Automation for Siebel version 8.0](#)

Enabling Automation for Siebel versions 7.7 and 7.8

In Siebel versions 7.7 and 7.8, you may enable Automation by using the server-side configuration files.

To enable Automation, access a 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 your server.

Enabling Automation for Siebel version 8.0

To enable Automation support in Siebel 8.0, execute the following `srvrmgr` command for all High Interactivity components that 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.

1.7 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) and want to upgrade it to Release 4 (10.2.0.4) or Release 5 (10.2.0.5), then before upgrading it, apply the one-off patches mentioned in this section.

- If Siebel targets are being monitored in Enterprise Manager 10g Grid Control Release 3 (10.2.0.3), then delete those Siebel targets from Grid Control, apply the following one-off patches, then discover the Siebel targets in Grid Control, and then upgrade Grid Control to Release 4 (10.2.0.4) or Release 5 (10.2.0.5).
 - One-off patch 9453217 on the OMS
 - One-off patches 9375245 and 9497046 on the Management Agent
- If Siebel targets are not being monitored in Enterprise Manager 10g Grid Control Release 3 (10.2.0.3), then apply the following one-off patches, then discover the Siebel targets in Grid Control, and then upgrade Grid Control to Release 4 (10.2.0.4) or Release 5 (10.2.0.5).
 - One-off patch# 9453217 on the OMS
 - One-off patches 9375245 and 9497046 on the Management Agent

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**.

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 create a Siebel Enterprise, 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 Create Enterprise page appears.

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

Note: You need not specify the Siebel Enterprise name if there is only a single enterprise maintained in the specified Siebel Gateway server

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

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 the 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 that you want to synchronize.

The enterprise home page appears.

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 that will be performed to your Enterprise Manager topology, click **OK**.

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

To add Siebel targets to a Siebel enterprise target, you 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>)
Download the appropriate third party plug-in, and create the respective target in Enterprise Manager.
2. From the Enterprise Manager Console, click the **Targets** tab.
3. Click the **Siebel** tab.
4. Select **Enterprise View** from the **View** list and click the **Configure** button.
A table appears displaying the existing Enterprise View components.
5. Click **Add** and select the target you created in Step 1.
The non-Siebel target that 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

If, after manually adding non-Siebel targets to an enterprise, you want to make those targets available to the Root Cause Analysis functionality available in Enterprise Manager, you have to tag those 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 may manually remove individual servers or components from that enterprise. However, this will delete the respective target information from the Enterprise Manager repository.

After that entry is deleted, Enterprise Manager does not monitor that target anymore. If you perform a manual resynchronization for that enterprise, then Enterprise Manager will include that 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 that 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 a 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 Application Services page appears.

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

You may define the beacons that will monitor this service hierarchy by clicking the check boxes located in the **Key Beacons** column. Additionally, you may 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, then add only the Windows beacons.

6. Click the **OK** button.

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

3.2 Adding a Siebel Service for a Siebel Application

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.

Note: For High Interactive (HI) applications, you must use Internet Explorer, and perform the recording of the transactions in the Windows environment.

Also, when you get to the transactions page during the configuration process, select the **Beacon Running in Windows** option, if you are defining a service for a HI application.

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" once 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, then create one. 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.

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 may then run them to test the availability and performance of your Siebel application.

For example, you may 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 has 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 Recording Transactions with Groups

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**, and 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**.
6. On the Service Tests and Beacons page, in the Service Tests section, from the **Test Type** list, select **Siebel Transaction** and click **Go**.
7. On the Create Service Test page, do the following: specify a name for the service test and provide the cre define a service test to monitor the availability of the service. Based on the test type you select, a set of relevant metrics are collected.
 - a. Specify a name for the transaction you are about to record.

- Workflow Process Manager – The Workflow Process Manager server component act as an interpret to execute workflow processes.
- Workflow Process Batch Manager – A version of Workflow Process Manager designed to kick off Workflow Processes in batch mode.
- Workflow Recovery Manager – The 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.

5.1 Discovering and Monitoring Siebel Workflow Targets in Grid Control

Siebel Workflow target gets automatically discovered when 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 try to discover Siebel Enterprise in Grid Control when the Siebel Workflow component group is disabled in siebel configuration, then 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, then 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.

Once 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.

6 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, and then the **Siebel** tab.
2. On the Siebel page, click the name of the Siebel Enterprise that is being monitored. Enterprise Manager displays the Siebel Enterprise Home page.
3. Click the **Event Log** tab to search and view event logs.

User name is a mandatory field. If your search query is going to result in a large number of rows, then you can specify a smaller time window. To

narrow down the results, you can also specify OS PID or Task ID, although these are not mandatory fields.

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

If the log file is larger than 500KB, then only the last 500 KB of content is shown. For example, if the file is 700 KB, then 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.

7 Siebel Performance Diagnostics

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 an the Diagnostics functionality that allows 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](#)

7.1 Features of Siebel Diagnostics

Siebel Performance Diagnostics provide you the following features:

- **Server Performance Analysis** - allows 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** - Allows you to diagnose and identify user session performance issues for requests initiated by a specific user.

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

7.2 Diagnostic Reports

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

A Server Performance report allows 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 allows you to analyze the performance for sessions of a specific user, provides details on the response time, and allows drill-down into individual user requests.

7.2.1 Sample Diagnostic Report Scenarios

A scenario for each report is provided below that 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. Then, the administrator logs in to Enterprise Manager and uses the Diagnostics Reports page to analyze the collected SARM data on that 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. Then, the administrator logs in to Enterprise Manager and uses the Diagnostics Reports page to analyze the collected SARM data for that user to identify the performance bottleneck.

7.3 Prerequisites for Diagnostic Reports

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

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

Then, you have to configure the SARM logging parameters and enabled SARM for individual Siebel components from the Diagnostic Configuration page in Enterprise Manager. Refer to the table below for descriptions of the parameters for SARM configuration and diagnostic report generation:

Table 3 SARM Parameters

Book	Chapter
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. 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 SARM logger. The default buffer size is 5,000,000 bytes.</p> <p>Note: Increasing the buffer size will increase 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. On 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 (15MB), 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.

7.4 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 allows 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 allows 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 that displays existing performance reports.

4. Click **Create**.

Enterprise Manager displays the Create Report page that allows 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.

7.5 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.

7.5.1 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 - This chart displays the response time to process requests measured via 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 System Monitoring and Diagnostic Guide included in Siebel documentation for details.

This chart helps you understand the response time to process requests by the Siebel server and the information is displayed in a histogram. Basically, the chart displays buckets in 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 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 - This chart displays the CPU time consumed by requests measured via the SARM network. This helps you understand the CPU time consumed to process requests by the Siebel server and the information is displayed in a histogram. The chart displays buckets in 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 - This section displays performance details for areas or sub areas of the Siebel server. SARM works 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): the database layer that tracks the percentage of time for requests in database processing.
 - INFRA (Infrastructure Area): the 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 that takes care of object relational mapping and 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 allow tracking of performance data at a higher level of granularity.

7.5.2 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 processed by the Siebel server 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.

7.5.3 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 - This chart displays the response time by area measured by the SARM framework. It helps you understand the response time taken by each area of the Siebel server to process requests.
- Total Memory Distribution by Area - This chart displays the memory distribution by area measured by the SARM framework. It helps you understand the memory distribution among various areas of the Siebel server while processing requests.
- Total CPU Distribution by Area - This chart 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 - This section displays performance details for areas or sub areas of the Siebel server. SARM works 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.

7.6 Using User Performance Reports

User Performance reports allow you to analyze the performance for sessions of a specific user, provides details on the response time, and allows drill-down 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.

7.6.1 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' - This chart displays the response time to process the users requests measured via the Siebel Application Response Measurement (SARM) network. It 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 charts displays requests from oldest to the most recent from right to left.
- Histograms of Server Response Time for 'User' - This chart displays the server response time to process the users requests. This chart helps you understand the response time to process user requests by the Siebel server and the information is displayed in a histogram. Basically, the chart displays buckets in 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.

7.6.2 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 - This section 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.

7.6.3 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 - This chart displays the response time by area measured by the SARM framework. It helps you understand the response time taken by each area of the Siebel server to process user requests.
- Total Memory Distribution by Area - This chart 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 - This chart 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 - This section displays performance details for areas or sub areas of the Siebel server. SARM works 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.

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

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.

Table 4 Siebel Component Metrics

Metric	Description and User Action	Data Source
Average Object Manager response time (in milliseconds)	The Average Object Manager Response Time shows the average (mean) time it takes 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 goes up. 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 to slower response time before taking any action. See the Siebel Performance Tuning guide for more information.	Average Object Manager Response Time = Total Object Manager Response Time of all requests on all Object Manager sessions / Total number of Request 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 resource. The time it takes to perform all these activities is the connect time. The Average Connect Time for Object Manager sessions is the average amount of time it takes to establish 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 Connection
Average Number of Requests Per Object Manager Session	Users may 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 that are 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. This metric is for informational purpose only. You may 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 session, you can see whether processing load is increasing or decreasing over time. The information may then be used in making capacity planning decisions.	Average Number of Request per Object Manager = Total Number of Request of all Object Manager sessions / Number of Object Manager session

Table 4 (Cont.) Siebel Component Metrics

Metric	Description and User Action	Data Source
Average size of reply messages (in bytes)	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. 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 Siebel Performance Tuning Guide for more information.	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)	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. 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 Siebel Performance Tuning Guide for more information.	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	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 Srvmgr statistics. 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 taking place 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 Siebel Performance Tuning Guide for more information.	The metric is calculated by adding the CPU time of all component tasks for the component after the Siebel Server start up.
Max. MTS	The parameter that sets the maximum number of multi-threaded shell. 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 via 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 right business data to work with to failure in the software. If the number of such failures increases dramatically, you must examine what is wrong. A good place to start would be to take a look at the Alert log and at 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

Metric	Description and User Action	Data Source
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 for informational purpose 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 for informational purpose and maybe used during diagnostic to tell when the component was started.	The start time of the component. This metric is collected from 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 number of tasks becomes too high relative to MaxTasks, you may need to find out if there are run-away tasks or MaxTasks is set too low.	The value of Current Tasks is updated for each sampling period by querying the Siebel Server.
Max Tasks	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 spawn. 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 that is higher than the expected maximum number of tasks that will be run at a given time. Refer Siebel System Administration Guide for more information. 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 via 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.	This parameter is set using Siebel Server Manager.

Table 4 (Cont.) Siebel Component Metrics

Metric	Description and User Action	Data Source
Average time for SQL execute operations (in seconds)	This metric shows the average (mean) amount of time it takes the database to process the 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 that it takes to process Object Manager requests. 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 Siebel Performance Tuning Guide for more information.	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)	This metric shows the average (mean) amount of time it takes the database to parse the SQL statements being passed to it. The metric is only applicable to older Siebel components such as EIM, and do not show the time that it takes to process Object Manager requests. 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 Siebel Performance Tuning Guide for more information.	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 adjustment.
Total number of SQL fetch operations	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	This metric shows the total number of SQL statements parsed. The metric is only applicable to older Siebel components such as EIM, and do not show the time that it takes to process Object Manager requests. It is used in computing the Average time for SQL Parse operations. 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.	This metric is queried from the Siebel Server at each sampling period.

Table 4 (Cont.) Siebel Component Metrics

Metric	Description and User Action	Data Source
Average CPU Time	Average CPU Time shows the average (mean) amount of time it takes to process a request. A higher CPU Time indicates more CPU-intensive processing. This metric is primarily useful in establishing long-term performance trends and capacity planning. If the metric trend is up, it indicates more CPU-intensive processing. You may need to add more processing capacity or tune the application configuration if this continues.	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. Average CPU Time = Total CPU Time / Number of Requests.
Average Response Time	The Average Response Time shows the average (mean) time it takes 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 establishing long-term performance trends. If application performance is deteriorating, the metric value goes up. 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 to slower response time before taking any action. See the Siebel Performance Tuning guide for more information.	This metric is computed via SARM data, as opposed to Server Component metrics. Average Response Time = Total Response Time all requests / Total number of requests during a measurement period.
Memory Usage	Memory usage measures the total amount of memory consumed by the running tasks of the component. The metric is primarily for informational purpose, especially in diagnosing memory-related problem. Constantly increasing memory usage may indicate memory leak.	Memory consumption for all component processes is retrieved from the operating system
Number of Requests	The total number of requests submitted to the component since the startup of the Siebel Server. This metric is used as the denominator in calculating many other summary metrics. The value is for informational purpose 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.	The value of Number of Requests is updated for each sampling period by querying the Siebel Server.
Status	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 may 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	The aggregated CPU time used by all tasks completed for this component since the component was started. Informational only. In most cases, the current CPU consumption and trends in CPU consumption are more informative - these can be checked via the 'CPU Usage' metric.	This metric is collected from the Siebel server.
Total Response Time	The total response time for the component.	This metric is from the <code>srvrmgr</code> 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

Metric	Description and User Action	Data Source
Start Time	The start time of the component. This metric is for informational purpose and maybe used during diagnostics to tell when the component was started.	This metric is collected from Siebel Server during each sampling period. It typically does not change unless the component is restarted.
Status	The current status of the component. It is the string representation of the state, such as Running, Online, and Shutdown. 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 may 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 via svrmgr.

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

Metric	Description and User Action	Data Source
Response	The response time of the Siebel Gateway.	Retrieved via svrmgr.
Status	The current status of the Siebel Gateway target.	Retrieved via svrmgr.

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

Metric	Description and User Action	Data Source
File System Usage (%)	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)	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 resource. The time the Object Manager takes to perform all these activities is the connect time. The Average Connect Time for Object Manager sessions is the average amount of time it takes to establish 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 = Total Connect Time / Total Number of Connection
Average Number of Requests Per Object Manager Session	Users may 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 that are 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. This metric is only for informational purpose. You may 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 overtime. When you combine the long-term trending of this metric with Total Object Manager session, you can see whether processing load is increasing or decreasing over time. The information may then be used in making capacity planning decisions.	Average Number of Request per Object Manager = Total Number of Request of all Object Manager sessions / Number of Object Manager session

Table 7 (Cont.) Siebel Server Target Metrics

Metric	Description and User Action	Data Source
Average Object Manager response time (in milliseconds)	The Average Object Manager Response Time shows the average (mean) time it takes 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. This metric is primarily useful for establishing long-term performance trends and capacity planning. If application performance is deteriorating, the metric value goes up. 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 Siebel Performance Tuning guide for more information.	Average Object Manager Response Time = Total Object Manager Response Time of all requests on all Object Manager sessions of this server / Total number of Request of all Object Manager sessions
Average Size of Reply Messages (in bytes)	Average Size of Reply Messages shows the size of the response sent from user-submitted requests to Object Manager. A large size indicates that a large amounts of 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. This metric is used 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, user issuing queries that return more data, and application configuration changes. You need to identify the root cause of the problem to address this trend.	This metric is computed by taking the Total Size of all reply messages from all requests since the startup of the server, and dividing it by the number of requests.
Average Size of Request Messages (in bytes)	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 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. This metric is intended primarily for establishing long-term performance trends. If the metric trends up, it shows the 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 Siebel Performance Tuning Guide for more information.	This metric is computed by taking the Total Size of all request messages of all requests since the startup of the server, and dividing it 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)	This metric shows the average (mean) amount of time it takes the database to process the 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 that it takes 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. 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 need to identify the root cause to address the trend. Refer to Siebel Performance Tuning Guide for more information	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)	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 that it takes 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. 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 need to identify the root cause to address the trend. Refer to Siebel Performance Tuning Guide for more information.	This metric is computed by taking the total time for SQL execution from all requests since the startup of the server, and divided it by the number of requests.
Average time for SQL parse operations (in seconds)	This metric shows the average (mean) amount of time it takes the database 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 that it takes to process Object Manager requests. 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 gotten 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 Siebel Performance Tuning Guide for more information.	This metric is computed by taking the total time for parsing SQL statements from all requests for this component since the startup of the Siebel Server, and divide it by the number of requests.

Table 7 (Cont.) Siebel Server Target Metrics

Metric	Description and User Action	Data Source
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 taking place 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 Siebel Performance Tuning Guide 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)	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 500MB), 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 has to be cleaned, or additional disk have 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 for informational purpose, especially in diagnosing memory-related problem. Constantly increasing memory usage may indicate 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 right business data to work with to failure in the software. If the number of such failure increases dramatically, something is definitely wrong and should be examined. A good place to start would be to take a look at the Alert log and at 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 right business data to work with, to failure in the software. If the number of such failure increases dramatically, something is definitely wrong and should be examined. A good place to start would be to take a look at the Alert log and at 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 Siebel Server loses connection to the database, it attempts to retry the operation before giving up and reporting the problem. This metric shows that. If the number of retries goes up dramatically, it indicates problems with the database or the network, and the administrator should look into those components to see why they are dropping database connections.	

Table 7 (Cont.) Siebel Server Target Metrics

Metric	Description and User Action	Data Source
Number of Retries due to Deadlock Rollbacks	When 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 goes up dramatically, it indicates problems with the database or the network, and administrator should look into those components to see 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 talking to the database. A DBA should be called to find out why Siebel Server cannot talk to the database.	
Start Time	The start time of the Siebel server.	Retrieved via svrmgr from the running Siebel server.
Status	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 svrmgr command line utility.
Available Disk space (KB)	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

Metric	Description and User Action
Total Number of Completed Process Instances in Past 1 Hour	Total number of workflow process instances that completed in the past one hour. The collection frequency is every 15 minutes.
Total Number of Workflow Policy Instances in Waiting State	Total number of workflow policy instances waiting in a queue. The collection frequency is every 15 minutes.

Table 8 (Cont.) Siebel Workflow Target Metrics

Metric	Description and User Action
Total Number of Workflow Process Instances in Waiting State	Total number of workflow process instances waiting in a queue. The collection frequency is every 15 minutes.
Number of Monitored Process Instances Failed State	Number of workflow process instances that failed. The collection frequency is every 15 minutes
Number of Monitored Process Instances in Waiting State	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 that you may encounter when monitoring and managing Siebel enterprises with the Siebel pack.

It 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](#)

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 that you provide does not match the actual enterprise that you want to discover.

Solution

Provide the correct enterprise name.

Possible Cause

The specified port number is incorrect (Unix only).

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 worked as expected, some metrics are collected, but other metrics are not.

Possible Cause

The user name and password credentials provided for that 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 those 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 `srvmgr` and `query`.

Possible Cause

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 will be added to `$AGENT_HOME/sysman/config/classpath.lst` file. After executing the respective script, the agent has to 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 that is 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 MetaLink 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 steps in [Enable SARM](#).

9.5 Siebel File System Metrics Are Not Collected

Problem

Siebel file system metrics are not collected.

Possible Cause

If the 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, then the agent is not able to retrieve information about that 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 `srvmgr`.

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 may 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 may 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 may 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 machine 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 tries to access a Siebel 7.7 environment, then that beacon will not be able to go back to a Siebel 7.0 environment to playback 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 may 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

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 will not work if the file does not exist or is corrupted.

Solution

Check why vpd.properties does not exist. Attempt to use 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 will allow 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 via the specified Siebel Gateway server, discovery will 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 will not be recognized during the discovery process.

Solution

Check the gateway port number again.

Possible Cause

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

Solution

Reinstall Siebel servers.

9.10 Siebel Enterprise Discovery Fails With Internal Error

Problem

Siebel Enterprise Discovery fails with internal error.

Possible Cause

For the Siebel Enterprise discovery to work, agents have to be installed on all of the Siebel servers belonging to the specified Siebel enterprise (the idea is that all parts of the Siebel enterprise should be monitored, which is possible only with an agent on each of the Siebel server machines).

Solution

Ensure that you install an agent on each of the Siebel server machines - 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 error.

Possible Cause

The discovery process depends on the vpd.properties files (Windows: C:\WINDOWS\vpd.properties, Unix: \var\adm\siebel\vpd.properties). Discovery will not work if the file does not exist or is corrupted.

Solution

Check why the vpd.properties does not exist. Attempt to use 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 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 will allow 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 shown as unavailable after discovery.

Possible Cause

For Enterprise Manager 10.2.0.3, there is a manual step that has to be executed, before the agent can be used to monitor any Siebel related components.

Solution

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 will work as expected, but collection of metrics via svrmgr will not be 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 will work with any port number provided, but metrics can be collected only with a correctly specified port number.

Solution

Check gateway port number again.

9.13 Siebel Service Status Issues

Problem

Status of Siebel HI services/applications (for example, callcenter) 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 has to be enabled for the respective components.

Solution

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

Possible Cause

If an incorrect Siebel user/password combination was specified on the Add Enterprise page, discovery will work as expected, but collection of metrics via `svrmgr` will not be possible.

Solution

1. Start the Services control application and browse to the Enterprise Manager agent service. Typically, this agent is named `Oracleagent10gagent`.
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, then the service will be shown as unavailable.

Solution

Deploy the beacon to a Windows machine 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 has to be copied to the agent install 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 `sarmquery` utility and related dlls to `<agent dir>/agent10g/bin` directory and/or check access rights for the utility and the dlls.

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