Siebel Analytics Platform Installation and Configuration Guide

Version 7.8.4

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1 What's New in This Release

What's New in Siebel Analytics Platform Installation and Configuration Guide, Version 7.8.4

Table 1 lists changes described in this version of the documentation to support this release of the software.

Table 1. New Product Features in Siebel Analytics Platform Installation and Configuration Guide, Version 7.8.4

Topic	Description
"Installing and Configuring Siebel Analytics Advanced Reporting Edition" on page 225	Added a section on installing Advanced Reporting, a reports development environment that leverages the Siebel Analytics Server metadata to define and build reports that reside in Siebel Analytics dashboards. Users can navigate, drill down, and pass dashboard prompt values to these reports.
"Installing Siebel Open Intelligence Interface" on page 85	Added a section on installation of the Open Intelligence Interface. This stand-alone installer installs only the Open Intelligence Interface ODBC connectivity and the Analytics Client tools NQClient and NQCMD. There is no additional license key requirement for this installer.
"Installing Siebel Business Analytics in Unattended or Silent Mode" on page 68	Added new topic about installing Siebel Analytics platform using batch files.

2 Analytics Platform Installation and Configuration Topic Areas

This area contains topics relating to the scope and use of the *Siebel Analytics Platform Installation and Configuration Guide*:

- Scope of Topic Areas for Analytics Platform Installation and Configuration on page 14

This area also contains topics relating to the use of the book:

- Organization of Topic Areas for Platform Installation and Configuration on page 16
- About Topic Applicability Tags on page 17
- About File Path and Command Conventions on page 18

This area also contains topics relating to the general subject of Siebel Analytics documentation:

- Accessing Related Siebel Analytics Documentation on page 20
- Important Planning Resources for Installation and Configuration Processes on page 22

Related Topic

Chapter 3, “Siebel Analytics Licensing and Installation Options”

Scope of Topic Areas for Analytics Platform Installation and Configuration

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

The following general processes are described in this book:

- Setting up your operating system for your Siebel Analytics deployment.

  See the topic "Process of Planning the Installation," especially the subtopic "Determining Analytics Installation Requirements" on page 46.

- Running the Siebel Analytics installation wizard. See the following topic areas:
  - Roadmap for Installing Siebel Analytics Platform on page 39
  - Process of Installing the Siebel Analytics Platform on page 63
- Configuring the various Siebel Analytics servers for your specific deployment. See the following topics or topic areas:
  - Roadmap for Configuring Siebel Analytics Platform on page 40
  - Process of Configuring Siebel Analytics Server
  - Configuring the Siebel Analytics Data Sources
  - Configuring Analytics Web on page 130
  - Configuring Siebel Analytics Scheduler Server
- General Siebel Analytics server administration tasks that depend on your operating system.

  See the topic area "Administering Analytics Servers."

- Optional platform configuration topics, such as authentication and localization.

  See the following topic areas:
  - Chapter 11, "Clustering Siebel Analytics Servers"
  - Appendix A, "Localizing Siebel Analytics Deployments"
  - Appendix B, "User Authentication Support in Siebel Analytics"
  - Appendix C, "Installing Siebel Analytics Ancillary Client Programs"

The following processes are not described in this book:

- Configuring the Siebel Analytics repository and Siebel Analytics Web catalog.
  - See the *Siebel Analytics Server Administration Guide*.
  - See the *Siebel Analytics Web Administration Guide*.
- Configuring and administering the Siebel Data Warehouse, including security settings.

  See the *Siebel Analytics Applications Installation and Administration Guide*.

- Configuring Siebel Analytics to work with Siebel CRM Applications or Siebel Analytic Applications, including security settings.

  See the *Siebel Analytics Applications Installation and Administration Guide*.

- Upgrading Analytics platform components.
  - See the *Siebel Analytics Platform Upgrade Guide*.

TIP: A list of all the books you may need for a full enterprise installation is shown in "Accessing Related Siebel Analytics Documentation" on page 20 and in "Important Planning Resources for Installation and Configuration Processes" on page 22.

Organization of Topic Areas for Platform Installation and Configuration

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

Use the roadmap and process topics in the "Preparing ..." and "Installing ..." chapters to guide you through the installation process. These topics provide a checklist of the steps required to complete an installation, in the order you must perform them. Each step includes a link to a topic that explains how to complete the step. The remaining chapters of the *Siebel Analytics Platform Installation and Configuration Guide* are organized according to the major components of the installation.

NOTE: Topics in the chapters may not follow the order you perform them during the installation.

The order of topics in a chapter is as follows:

- **Roadmap topic**. A roadmap is a numbered list of processes.

  For example, "Roadmap for Configuring Siebel Analytics Platform" is a list of the processes required to install Siebel Analytics, numbered in the order in which each process should occur.

- **Process topics**. A process topic consists of a number of tasks with a common result.

  For example, "Process of Installing the Siebel Analytics Platform" lists the tasks required to install Siebel Analytics. Sometimes, not all tasks are necessary for a particular deployment. These topic headings frequently (but not always) begin with "Process of...".

- **Task topics**. Task topics explain how to do each step in an installation or configuration process, and typically include a procedure.

  Task topics begin with a gerund. For example, "Configuring Analytics Web."

- **Concept topics**. Concept topics explain key concepts required to perform groups of tasks, or background material.

  These topic headings usually begin with "About...". For example, "About Updating Row Counts in Native Databases." Concept topic headings do not begin with a gerund, "Process of," or "Roadmap for."

About Topic Applicability Tags

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

The applicability of topics in the book is listed at the beginning of each topic. Table 2 lists the applicability categories and their meaning.

For each topic, only the relevant categories are listed.

Table 2. Topic Applicability Categories

Applicability Category	Meaning
Licenses	Lists the license type (Integrated data applications or Platform) to which the topic applies. For example, the topic applicability tag **Analytics License:** Platform means the topic applies to the installation of Siebel Analytics platform and not to the installation of Analytics integrated with the Siebel Pharma CRM application. For a description of Analytics licensing, see the topic "Analytics Product Licensing" on page 26.
Operating Systems	Lists the operating system platform to which the topic applies. For example, the topic applicability tag **Operating System:** Windows means the topic does not apply to UNIX operating system platforms. **NOTE:** The applicability tag "All" means all operating systems supported by Siebel Systems, as described in the *Siebel System Requirements and Supported Platforms*.
Databases	Lists the databases to which the topic applies. For example, the topic applicability tag **Databases:** IBM DB2 means the topic does not apply if you are running a Microsoft SQL database. **NOTE:** The applicability tag "All" means all *supported* databases, as described in the *Siebel System Requirements and Supported Platforms*.

About File Path and Command Conventions

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

Environment variables and path placeholders for both Windows and UNIX paths are used throughout the *Siebel Analytics Platform Installation and Configuration Guide*.

Table 3 on page 18 shows the format conventions for paths, navigation, and command execution used in this Guide.

TIP: All versions of the UNIX operating system are case-sensitive. If you are running Siebel Analytics under UNIX, treat all filenames, directory names, path names, parameters, flags, and command-line commands as lowercase, unless you are instructed otherwise in the product. If your deployment currently runs under Windows, but you might switch to a UNIX environment or deploy UNIX servers in the future, follow this same practice to avoid having to rename everything later.

Table 3. Conventions Used in Siebel Analytics Platform Installation and Configuration Guide

Reference Category	Windows Platforms	UNIX Platforms
Paths	$INSTALLDIR is the absolute path of the Analytics Server installation directory. When you install Siebel Analytics, the installation script queries for the drive and path to the installation directory. The script then installs the Siebel Analytics Servers on that drive and path. For example, if you specified drive D: as the installation drive, then $INSTALLDIR is D:\SiebelAnalytics.	$INSTALLDIR is an environment variable that defines the absolute path of the Analytics Server installation directory. When you install Siebel Analytics, the installation script queries for the path to the installation directory. The script then installs Siebel Analytics in a subdirectory of this path. For example, if you specified /usr/local as the installation directory, then $INSTALLDIR is /usr/local/SiebelAnalytics. The definition of $INSTALLDIR and other environment variables required for doing an installation are located in /sa.sh. The Siebel Analytics installation script sets environment variable definitions in this shell script. Do not edit or delete this file.

Table 3. Conventions Used in Siebel Analytics Platform Installation and Configuration Guide

Reference Category	Windows Platforms	UNIX Platforms
Path Navigation (Procedural steps that ask you to navigate to a specified directory.)	Open a Command Prompt window and use the cd command to make the specified directory the current directory. **NOTE:** Do not use the Windows File Explorer to navigate to the directory. For help with the cd command, enter the word help in the Command Prompt window and click Enter.	In a shell window, make the specified directory the current directory.
Command Execution (Procedural steps that ask you to execute a command, unless specified otherwise.)	In a Command Prompt window, verify the current directory is correct and enter the command. Do not run the command by entering it in the Run window in the Start Menu.	**TIP:** Before performing command line procedures, source sa.csh first. This refreshes the environment variables required to run commands. **NOTE:** Under UNIX, run .csh scripts in a C shell, and run .sh script in Korn, Bourne, or bash shell. In a shell window, perform the following steps: ■ Verify the current directory is correct. ■ Source the siebenv script. ■ Enter the command.

Accessing Related Siebel Analytics Documentation

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

This topic lists the books that are cross-referenced from the *Siebel Analytics Platform Installation and Configuration Guide*. Books that apply in general to installation, configuration, and use of Siebel Business Applications are listed in the topic "Important Planning Resources for Installation and Configuration Processes" on page 22.

Related Siebel Analytics book titles:

- *Siebel Analytics Server Administration Guide*
- *Siebel Analytics Web Administration Guide*
- *Siebel Analytics Scheduler Guide*
- *Siebel Analytics Applications Installation and Administration Guide*

  NOTE: This book was formerly titled *Siebel Data Warehouse Installation and Administration Guide*.
- *Siebel Analytics User Guide*
- *Siebel Enterprise Analytic Applications User Guide*
- *Siebel Customer-Centric Enterprise Warehouse Installation and Configuration Guide*

Related *Siebel Bookshelf* titles:

- *Security Guide for Siebel Business Applications*
- *Siebel Portal Framework Guide*
- *Global Deployment Guide*
- *Data Mining Deployment Guide*
- *Siebel Tools Online Help*

Accessing Siebel Analytics Documentation

These books are available on Siebel SupportWeb Knowledge Base. The following procedure explains how to access Siebel documentation.

To access Siebel Analytics documentation

1. Log onto SupportWeb.
2. In the Self Service area, click the link *Browse/Search Knowledge Base (English)*.
3. In the left browser pane, click the link *Product Documentation*.

4 Under Product Documentation, click the *Siebel Bookshelf* link.

5 In the Siebel Business Analytics Applications area, click the applicable *Siebel Bookshelf* version, and then click the All Product Lines link.

In addition, third-party documentation, such as that for Informatica, is provided on the *Siebel Business Applications Third-Party Bookshelf* CD-ROM (shipped with the *Siebel Bookshelf* CD-ROM).

Accessing Siebel Analytics System Requirements Documentation

Use the following procedure to locate *Siebel System Requirements and Supported Platforms*.

To access Siebel Analytics System Requirements documentation

1 Log onto SupportWeb.

2 In the Self Service area, click the link *Browse/Search Knowledge Base (English)*.

3 In the left browser pane, click the link *Product Documentation*.

4 Under Product Documentation, click the link *Siebel System Requirements and Supported Platforms*.

5 In the Siebel Business Analytics area, click the applicable version.

Important Planning Resources for Installation and Configuration Processes

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

Your Siebel implementation team performs a number of actions to install and implement Siebel Business Applications that are described in several Siebel publications on the*Siebel Bookshelf*. The following list describes Siebel applications documentation. Book specific to Siebel Business Analytics (or Siebel Analytics) are listed in the topic "Accessing Related Siebel Analytics Documentation" on page 20.

- *Siebel Deployment Documentation Suite*
  - *Deployment Planning Guide*
  - *Siebel Installation Guide for Microsoft Windows: Servers, Mobile Web Clients, Tools*
  - *Siebel Installation Guide for UNIX: Servers, Mobile Web Clients, Tools*
  - *Going Live with Siebel Business Applications* for information about how to migrate customizations from the development environment to the production environment
  - *Siebel System Administration Guide* for details on how to administer, maintain, and expand your Siebel Servers
  - *Performance Tuning Guide*
  - *Configuring Siebel Business Applications* for information about configuring Siebel Business Applications in Siebel Tools
- **Product Documentation**. Product documentation is collectively called the *Siebel Bookshelf*. The *Siebel Bookshelf* is available on CD-ROM. It is also available on SupportWeb under Product Documentation. See the topic "Accessing Related Siebel Analytics Documentation" on page 20.
- **Siebel SupportWeb**. This is the Siebel technical support Web site. It provides search engine access to the *Siebel Bookshelf*. Technical Notes, Siebel Alerts, troubleshooting information and other important information.
  SupportWeb is located at https://ebusiness.siebel.com/supportweb/.
  - *Release Notes.* Release Notes contain late-breaking information that the *Siebel Analytics Platform Installation and Configuration Guide* does not yet include. Release Notes regarding installation are located on SupportWeb at Product Documentation > Release Notes.
  - *Maintenance Release Guides*. Maintenance Release Guides contain important information about updates to applications in maintenance releases. Maintenance Release Guides are located on SupportWeb at Product Documentation > Maintenance Release Guides.
  - *Documentation Updates*. Typically, the *Siebel Bookshelf* is updated monthly. During the month, PDF updates are posted to SupportWeb > Product Documentation > Documentation Updates.

- *Technical Notes*. Technical notes provide important information on specific installation issues. Technical Notes related to installation are located on SupportWeb at Technical Notes > Product Areas > Siebel Analytics.
- *Siebel Alerts*. Alerts provide time-critical information on key product behaviors and issues. Siebel Alerts about installation issues are located on SupportWeb at Siebel Alerts > Product Areas > Siebel Analytics.
- *Troubleshooting Steps*. Troubleshooting Steps contain information about how to troubleshoot common error messages and unwanted behavior in Siebel applications. Troubleshooting Steps are for installation list error messages found in installation logs and describe how to resolve them. Troubleshooting Steps are located on SupportWeb at Troubleshooting Steps > Product Areas > Siebel Analytics.
- *Siebel Weekly Content Notification Service*. This service notifies you weekly by email of important content changes on SupportWeb. This includes new product documentation, technical notes, alerts, and troubleshooting steps. To subscribe, see the Siebel Weekly Content Notification banner on the SupportWeb search page.

- **Technical Account Manager.** If you need assistance planning your installation or encounter problems during the installation, your Technical Account Manager can advise you on how best to use available Siebel resources.
- **Siebel Expert Services**. Siebel Expert Services offers detailed implementation planning and technical consulting services. They also provide rapid response and resolution for critical technical issues affecting Siebel deployments.

3 Siebel Analytics Licensing and Installation Options

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

NOTE: Siebel Analytics is also called Siebel Business Analytics.

Siebel Analytics Platform Installation and Configuration Guide provides information on installing and configuring all components of Siebel Analytics on approved operating system platforms and deployments for Platform (or "Stand-Alone") product configurations.

TIP: This version of the guide applies to Platform releases of Siebel Analytics. A Siebel Analytics Platform release installs the platform components, but not the applications components.

Your particular deployment of Siebel Analytics depends on several related product licensing and deployment considerations.

TIP: When you are finished with this chapter, proceed to Chapter 4, "Preparing to Install Siebel Analytics."

Related Topics

The topic Analytics Product Licensing on page 26 describes the two licensed Siebel Analytics products.

The topic Analytics Installation Options on page 29 describes the Siebel Analytics components that are installed with each installation option.

The topic Optional Analytics Product Choices in the Installer on page 32 describes how the installer limits the additional options.

The topic Siebel Analytics Server Licensing Required by Other Siebel Programs on page 34 describes Siebel Systems software that is dependent on your Siebel Analytics Server license.

Analytics Product Licensing

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

This topic is part of Siebel Analytics Licensing and Installation Options.

Siebel Analytics has several licensed products. These products are described in the following sections.

Siebel Analytics Platform

The Siebel Analytics platform product consists of servers, programs, and tools used to build Analytics applications. Using the Siebel Analytics platform, you can develop your own integrated business intelligence application solution. Installing the Siebel Analytics platform without other Siebel applications is also called Siebel Analytics Stand-Alone.

In this book, any installation or configuration topic that is specifically for a platform installation has the following topic applicability tag after the heading: **Analytics License:** Platform only.

The following are the Siebel Analytics platform components:

- Siebel Analytics Server
- Siebel Analytics Web Server
- Siebel Analytics Scheduler Server
- Siebel Data Warehouse Administration Console (Client and Server)
- Related component programs:
  - Siebel Analytics Server Administration Tool
  - Siebel Analytics Catalog Manager
  - Siebel Analytics ODBC Client
  - Siebel Analytics Client Tools
  - Chart image server

Siebel Analytics Applications

Siebel Analytics Applications are prebuilt business intelligence solutions. Siebel Analytics applications are of two types:

- Siebel Analytics Applications (CRM)
- Siebel Analytic Applications (Enterprise)

Siebel Analytics Applications (CRM)

These Analytics applications support Siebel CRM applications, such as Siebel Sales, Siebel Service, and Siebel Marketing. If you already own a Siebel CRM application, you can purchase Siebel Analytics platform and Siebel Analytics applications to work with the Siebel CRM application. For further information, see the topic "Siebel Analytics Interoperability with Siebel Business Applications" on page 35.

This book does not usually describe any installation or configuration topic that is specifically for Siebel Analytics installed with Siebel Analytics Applications components. However, in a few cases a topic has the following topic applicability tag after the heading: **Analytics License:** Analytics Applications only.

NOTE: For details of configuring Siebel Analytics Applications and Siebel Analytic Applications, see *Siebel Analytics Applications Installation and Administration Guide*.

The Siebel Analytics Applications (CRM) components are described in Table 4.

Table 4. Siebel Analytics Applications (CRM) components

Component	Description
DAC metadata repository files	This content includes repository objects such as tables, subject areas, execution plans, and tasks, and is contained in XML files.
Embedded Informatica ETL Tool	This is a third-party application that performs the extract, transform, and load operations for the Data Warehouse.
Prebuilt Informatica content	This content includes Extract-Transform-Load (ETL) repository objects, such as mappings, sessions, and workflows, and is contained in the Informatica repository file (Siebel_DW_Rep.rep).
Prebuilt metadata content	This metadata content is contained in the Siebel Analytics repository file (SiebelAnalytics.rpd).
Prebuilt reports and dashboard content	This content is contained in the Siebel Analytics Web Catalog file (SiebelAnalytics.webcat).
Prebuilt Siebel Data Warehouse	The Siebel Relationship Management Warehouse (RMW) is also referred to as the Siebel Data Warehouse.

Siebel Analytic Applications (Enterprise)

Siebel Analytic Applications (Enterprise) are analytics applications that provide complete support for Enterprise data, including financial, supply chain, and workforce sources. These enterprise applications typically source from non-Siebel data sources (such as SAP, Oracle, or PeopleSoft). They are separate products and licensed separately from the Siebel Analytics Applications (CRM). Siebel Analytics Enterprise Applications do not operate directly with Siebel Business Applications, but they can be integrated with Siebel CRM solutions. For further information, see the topic "Siebel Analytics Interoperability with Siebel Business Applications" on page 35.

Siebel Enterprise-related Analytics Applications components are described in Table 5.

Table 5. Siebel Analytic Applications (Enterprise) Components

Component	Description
Embedded Informatica ETL Tool	This is a third-party application that performs the extract, transform, and load operations for the Data Warehouse.
Prebuilt Informatica content	This content includes Extract-Transform-Load (ETL) repository objects, such as mappings, sessions, and workflows. This content is sourced from SAP R/3, Oracle, PeopleSoft applications, and other data sources. This content is contained in the Informatica repository file (Shell.rep).
Prebuilt metadata content	This metadata content is contained in the Siebel Analytics repository file (SiebelAnalytics.rpd).
Prebuilt reports and dashboard content	This content is contained in the Siebel Analytics Web Catalog file (SiebelAnalytics.webcat).
Prebuilt Siebel Customer-Centric Enterprise Warehouse	**NOTE:** This data warehouse is not to be confused with the Siebel Relationship Management Warehouse (RMW) or Siebel Data Warehouse.

Siebel Analytics Platform with Siebel Analytics Applications

If any installation or configuration topic can be applied to either product license, that topic has the following topic applicability tag after the heading: **Analytics License:** All licenses.

Related Topics

The topic Analytics Installation Options on page 29 describes the Siebel Analytics components that are installed with each installation option.

The topic Optional Analytics Product Choices in the Installer on page 32 describes how the installer limits the additional options.

The topic Siebel Analytics Server Licensing Required by Other Siebel Programs on page 34 describes Siebel Systems software that is dependent on your Siebel Analytics Server license.

Analytics Installation Options

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

This topic is part of Siebel Analytics Licensing and Installation Options.

The Siebel Analytics product includes an installer program that uses the product license key you have purchased to install one or more product components, based on your licensing. The license is in the form of an XML file.

Before beginning any installation, you should determine which of the product components are allowed by your Siebel Analytics licenses, and the values for each of the installation options.

- Table 6 on page 30 shows the Siebel Analytics Platform components that are installed with each installation option.
- Table 7 on page 32 shows the licenses required for different installation options.
- To install only ODBC clients on remotely-connected laptop computers, see also the topic "Installing Siebel Open Intelligence Interface" on page 85.
- To install Siebel Analytics Advanced Reporting Edition, begin the installation process with the topic "Installing and Configuring Siebel Analytics Advanced Reporting Edition" on page 225.

NOTE: For the Siebel Analytics Applications components installation, see the *Siebel Analytics Applications Installation and Administration Guide*
Depending on your product licensing, you may have a full Siebel Analytics repository or a sample. See the topic "About the Siebel Analytics Repository" on page 94.

Table 6. Siebel Analytics Installation Wizard Options

Installation Option	Platform Components Installed
Complete (Platform or Stand-Alone)	■ Siebel Analytics Server ■ Data Mining Engine Server ■ Analytics Administration Tool ■ Siebel Analytics Job Manager ■ Siebel Analytics Clustering Server ■ Siebel Analytics Scheduler ■ Siebel Analytics Client ■ Siebel Analytics ODBC Driver ■ Siebel Analytics Web Server ■ Image Server ■ Siebel Analytics Web Plug-in ■ Siebel Analytics Catalog Manager ■ Data Warehouse Administration Console (DAC)
Siebel Analytics Server	■ Siebel Analytics Server, including Data Mining Engine Server ■ Siebel Analytics Clustering Server ■ Siebel Analytics Scheduler ■ Siebel Analytics Server Administration Tool ■ Siebel Analytics Job Manager ■ Siebel Analytics ODBC Driver
Siebel Analytics Web Server **NOTE:** The Web server is also referred to as the Siebel Analytics Presentation Server.	■ Siebel Analytics Web Server ■ Image Server ■ Siebel Analytics Web Plug-in ■ Siebel Analytics Catalog Manager The Siebel Analytics Web Catalog stores the application dashboards and report definitions, and also contains information regarding group permissions and accessibility of the dashboards. See the topic "About the Siebel Analytics Web Catalog" on page 95. ■ Siebel Analytics ODBC Driver

Table 6. Siebel Analytics Installation Wizard Options

Installation Option	Platform Components Installed
Siebel Analytics Client Tools **NOTE:** The ODBC driver can be installed by itself.	■ Siebel Analytics Server Administration Tool ■ Siebel Analytics Client ■ Siebel Analytics ODBC Driver ■ Siebel Analytics Catalog Manager
Data Warehouse Application Console (DAC)	■ DAC Server ■ DAC Client
Custom	All the above components as individual options, plus the following component: ■ Disconnected Client **NOTE:** In the user interface, these names may be different from those shown here. For example, Siebel Mobile Analytics is referred to as Disconnected. ■ Siebel Disconnected Analytics Application Manager ■ Local version of the Siebel Analytics Server ■ Local version of the Siebel Analytics Web Server ■ Siebel Disconnected Analytics Client ■ Siebel Analytics ODBC Driver **NOTE:** This option appears only if you have a license for Mobile Analytics. ■ Data Mining Engine **NOTE:** This option appears only if you have a license for Analytics Data Mining Engine.

Related Topics

The topic Analytics Product Licensing on page 26 describes the two licensed Siebel Analytics products.

The topic Optional Analytics Product Choices in the Installer on page 32 describes how the installer limits the additional options.

The topic Siebel Analytics Server Licensing Required by Other Siebel Programs on page 34 describes Siebel Systems software that is dependent on your Siebel Analytics Server license.

Optional Analytics Product Choices in the Installer

This topic is part of Siebel Analytics Licensing and Installation Options.

The installation choices that appear in the installer are limited by the license file you use.

Some optional product components, such as Data Mining Engine for Real-Time Scoring or Mobile Analytics Client, are not available as choices during the installation unless you have entered the appropriate license name. Others, such as Advanced Reporting Edition, are not part of the regular Siebel Analytics installer. Table 7 provides details of these licensing restrictions.

Table 7. Installer Restrictions Based on Licensing

Feature	Licensing Note
Siebel Analytics Disconnected Client	If you plan to install the Siebel Analytics Mobile (or Disconnected) Client, it must be installed on a separate machine from the Siebel Analytics Server installation. This client installation can be configured by the Administrator so it is invisible to the end user. See the topic "Installing and Configuring Mobile Analytics Client" on page 214 and the information on setting up Mobile Analytics in *Siebel Analytics Server Administration Guide*.
Siebel Data Mining Engine	Data Mining Engine is licensed under the Siebel Analytics Server. If you plan to install Data Mining Engine for Real-Time Scoring, see the *Data Mining Deployment Guide*. The installation choice for Data Mining Engine alone is under the Custom Setup type. See the topic "Analytics Platform Installer Wizard Screens and Prompts" on page 74.
Siebel Excel Add-In	Siebel Analytics Excel Add-In is a Windows application that is an optional license under the Analytics Web Server. See the topic "Installing Siebel Analytics Excel Add-In" on page 223.
Siebel Analytics Advanced Reporting Edition	The Advanced Reporting Edition feature is a component licensed from Actuate Corporation that is used to create highly formatted Siebel Business Analytics reports. The Advanced Reporting Edition installer is separate from the regular Siebel Analytics installer. It permits the configuration of Actuate version 8 iServer and Active Portal to provide advanced reporting solutions to Siebel Analytics. **NOTE:** If your deployment includes this feature, you must run this installer before running the regular Siebel Analytics installer. See the topic "Installing and Configuring Siebel Analytics Advanced Reporting Edition" on page 225.

NOTE: Not all components can be deployed on all platforms. For specific platform support information, see *Siebel System Requirements and Supported Platforms*, located on the SupportWeb Knowledge Base. To download the Siebel System Requirements and Supported Platforms document, see the procedure under the topic "Accessing Related Siebel Analytics Documentation" on page 20.

Related Topic

The topic Siebel Analytics Server Licensing Required by Other Siebel Programs on page 34 describes Siebel Systems software that is dependent on your Siebel Analytics Server license.

Siebel Analytics Server Licensing Required by Other Siebel Programs

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

This topic is part of Siebel Analytics Licensing and Installation Options.

Your license agreement with Siebel describes the scope of your program license and therefore your permitted use of the Siebel Analytics Server. Some of the functions of the Siebel Analytics Server described in this document may be outside the scope of, or may not apply to, your specific program license. The Siebel programs shown in the following list require the installation and use of the Siebel Analytics Server:

- Siebel Analytics Platform Server–CRM Edition
- Siebel Marketing Server–CRM Edition
- Siebel Marketing Server–Enterprise Edition
- Siebel Usage Accelerator Platform Server

Related Topic

The topic Optional Analytics Product Choices in the Installer on page 32 describes how the installer limits the additional options.

Siebel Analytics Interoperability with Siebel Business Applications

Siebel Analytics Platform and Siebel Analytics Applications are compatible with Siebel Business Applications. Table 8 shows the versions of Siebel Analytics that are compatible with versions of Siebel Business Applications. In addition, the Siebel Analytics Bridge is shown, if required.

You may be required to upgrade from an older version of Siebel Analytics in order for your data to make use of later Siebel Analytics platform enhancements. See the *Siebel Analytics Platform Upgrade Guide*.

Table 8. Interoperability Between Versions of Siebel Analytics and Siebel Business Applications

Siebel Business Application	Siebel Analytics Platform	CRM Analytics Applications (RMW)	Analytics Bridge
6.3.x	7.8.4	7.8.4	6.3
7.0.x	7.8.4	7.8.4	7.0
7.5.x	7.8.4	7.8.4	7.5
7.7.x	7.8.4	7.8.4	7.7
7.8.x	7.8.4	7.8.4	Not Required

4 Preparing to Install Siebel Analytics

The area of preparation for installation of Siebel Analytics describes the steps to prepare a Windows or UNIX environment to run the Siebel Analytics installer. In addition, background topics give you information you need to know before you run the installer. The area is organized into the following topics:

- "Process of Planning the Installation" on page 38
- "Roadmap for Installing Siebel Analytics Platform" on page 39
- "Roadmap for Configuring Siebel Analytics Platform" on page 40
- "Diagrams of Siebel Analytics Deployments" on page 41
- "Determining Analytics Installation Requirements" on page 46

TIP: Print out each of the preceding topics to use as checklists.

NOTE: For all hardware and software requirements for Siebel Analytics and for clients connecting to Siebel Analytics, see *Siebel System Requirements and Supported Platforms* on Siebel SupportWeb.

Process of Planning the Installation

Analytics License: All licenses.

Operating Systems: All.

This process is part of the "Roadmap for Configuring Siebel Analytics Platform" on page 40.

To plan the installation, perform the following tasks:

1. Determine your Siebel Analytics Licensing and Installation Options
   - Analytics Product Licensing on page 26
   - Analytics Installation Options on page 29
   - Optional Analytics Product Choices in the Installer on page 32
   - Siebel Analytics Server Licensing Required by Other Siebel Programs on page 34
2. Determining Analytics Installation Requirements on page 46
   - Configuring Internet Information Server for Analytics (Windows) on page 52
   - Installing the Microsoft Data Access Components for Windows on page 54
   - Siebel Analytics Components Supported Under UNIX on page 56
   - Installation Requirements for All UNIX Platforms on page 57
   - Installation requirements for specific UNIX platforms:
     - Installation Requirements for HP-UX on page 59
3. If you have an earlier version of Siebel Analytics platform installed, you may need to uninstall it before you install a more recent version. See the section on uninstalling previous versions of Siebel Analytics in the *Siebel Analytics Platform Upgrade Guide*.
4. Back up configuration files. See "Backing Up Analytics Folders and Files" on page 49.
5. UNIX administrators need to install some Siebel Analytics components under Windows systems. For example, the third-party installer is available for Windows only. Also, UNIX systems must have some Windows-based components installed, as shown in the following table.

Component Function	Required Windows-Based Component
Repository Manager	Siebel Analytics Administration Tool
Siebel Data Warehouse ETL	Installer for Informatica
Siebel Answers, Siebel Delivers, Siebel Scheduler	Scheduler Job Manager

Roadmap for Installing Siebel Analytics Platform

Analytics License: All licenses.

Operating Systems: All.

This is a roadmap. Complete the processes for installing Siebel Analytics Platform in the order shown:

1. Determining Analytics Installation Requirements
2. Upgrading Siebel Analytics Components

   See the *Siebel Analytics Platform Upgrade Guide*.
3. Process of Installing the Siebel Analytics Platform
4. Initializing the Siebel Analytics Installation
5. Installing Siebel Analytics Ancillary Client Programs

After installation is complete, there may be configuration required. Refer to the roadmap "Roadmap for Configuring Siebel Analytics Platform" on page 40.

Roadmap for Configuring Siebel Analytics Platform

Analytics License: All licenses.

Operating Systems: All.

This is a roadmap. After Siebel Analytics is installed, complete the processes for configuring Siebel Analytics in the order shown:

1. Configuring the Siebel Analytics Server
2. Configuring the Siebel Analytics Data Sources
3. Configuring Siebel Analytics Web Server
4. Configuring Siebel Analytics Scheduler Server
5. User Authentication Support in Siebel Analytics
6. Clustering Siebel Analytics Servers
7. Localizing Siebel Analytics Deployments

Refer to "Diagrams of Siebel Analytics Deployments" as necessary.

Related Topic

Roadmap for Installing Siebel Analytics Platform on page 39

Diagrams of Siebel Analytics Deployments

Operating Systems: All.

Databases: All databases.

The diagrams in this topic are based on an out-of-the-box deployment and assume no unusual configuration requirements, as shown in the following diagrams:

- Platform ("Stand-Alone") Deployment Diagram on page 42

  This diagram shows all the Siebel Analytics product components and the connecting elements for a platform-only deployment, including the Web and data components. This type of deployment is also called Stand-Alone Siebel Analytics.

- Applications Deployment Diagram on page 44

  This diagram shows all the Siebel Analytics product components and the connecting elements for a deployment integrated with Siebel CRM applications and the Siebel Data Warehouse.

  TIP: The details of configuring a Siebel Analytics Applications installation are given in the *Siebel Analytics Applications Installation and Administration Guide*.

NOTE: Your own deployment may differ from those shown in the diagrams.

Platform ("Stand-Alone") Deployment Diagram

Analytics License: Platform only.

Figure 1 on page 43 shows all the Siebel Analytics product components and the connecting elements, including the Web and data components, for an Analytics Platform deployment. This type of deployment is also called Stand-Alone Siebel Analytics.

The meaning of the colors, lines, and typefaces used in this diagram is shown in Table 9.

Table 9. Key to Siebel Analytics Platform Deployment Diagram

Color	Symbol	Meaning
Green	(Area)	Siebel Analytics platform.
	White box, solid green border	Siebel Analytics platform components.
	White box, green-dashed border	Third-party product licensed as part of the Siebel Analytics product.
Yellow	(Area)	Network or Web components.
	Green box	Siebel Analytics network or Web component.
	Grey box	Third-party or generic Network or Web component.
Pink	(Area)	Siebel Analytics data source components.
Black	Line	A connection between components. The connection is two-way unless the line terminates in an arrow (see Arrow).
	Arrow	A one-way connection.
Blue	Italicized name	Name of the protocol used for the connection.
	Italicized number	Port number for the connection, if defined.

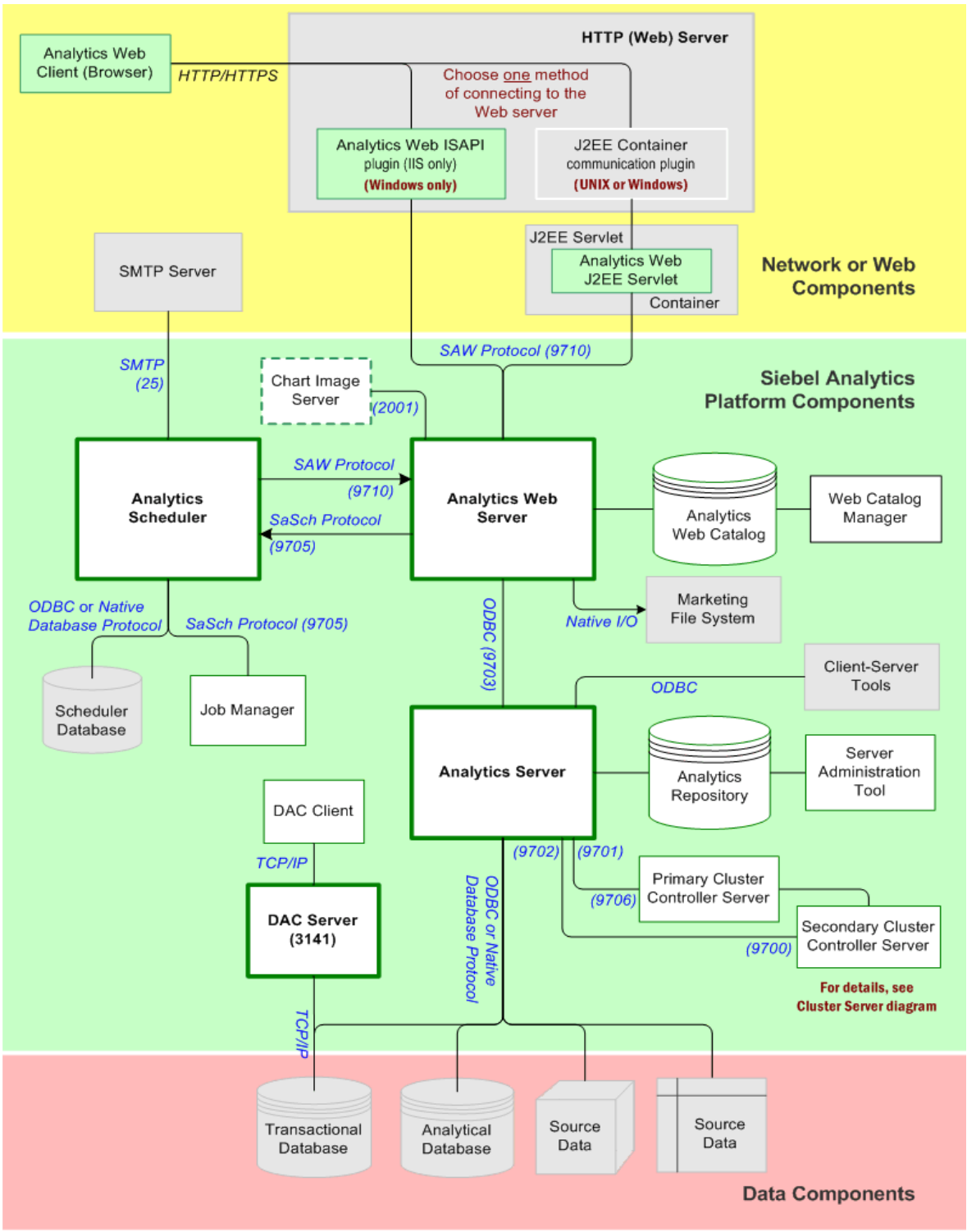

Figure 1. Overview Diagram of Siebel Analytics Platform ("Stand-Alone") Deployment

Applications Deployment Diagram

Analytics License: Analytics Applications only.

Figure 2 on page 45 shows all the Siebel Analytics platform components and the connecting elements for a deployment integrated with Siebel CRM applications and the Analytics applications. The meaning of the colors, lines, and typefaces used in this diagram is shown in Table 10.

Table 10. Key to Siebel Analytics Applications Deployment Diagram

Color	Symbol	Meaning
Green	(Area)	Siebel Analytics platform.
	White box, solid green border	Siebel Analytics platform components.
	White box, green-dashed border	Third-party product licensed as part of the Siebel Analytics product.
Yellow	(Area)	Network or Web components.
	Green box	Network or Web component for Siebel Analytics.
	Blue box	Network or Web components for Siebel operational application.
	Grey box	Third-party or generic Network or Web component.
Blue	(Area)	Siebel operational (CRM) application components. **NOTE:** This area is oversimplified and shows only components that connect to the Siebel Analytics and data source components.
	White box, solid blue border	Siebel Analytics CEW or Siebel CRM Application component.
Pink	(Area)	Data source components for Siebel Analytics.
	White box, solid blue border	Data components for Siebel CRM Application.
	White box, maroon-dashed border	Third-party product licensed as part of the Siebel Data Warehouse product.
	Grey box	Non-Siebel data source.
Black	Line	A connection between components. The connection is two-way unless the line terminates in an arrow (see Arrow).
	Arrow	A one-way connection.
Blue	Italicized name	Name of the protocol used for the connection.
	Italicized number	Port number for the connection, if defined.

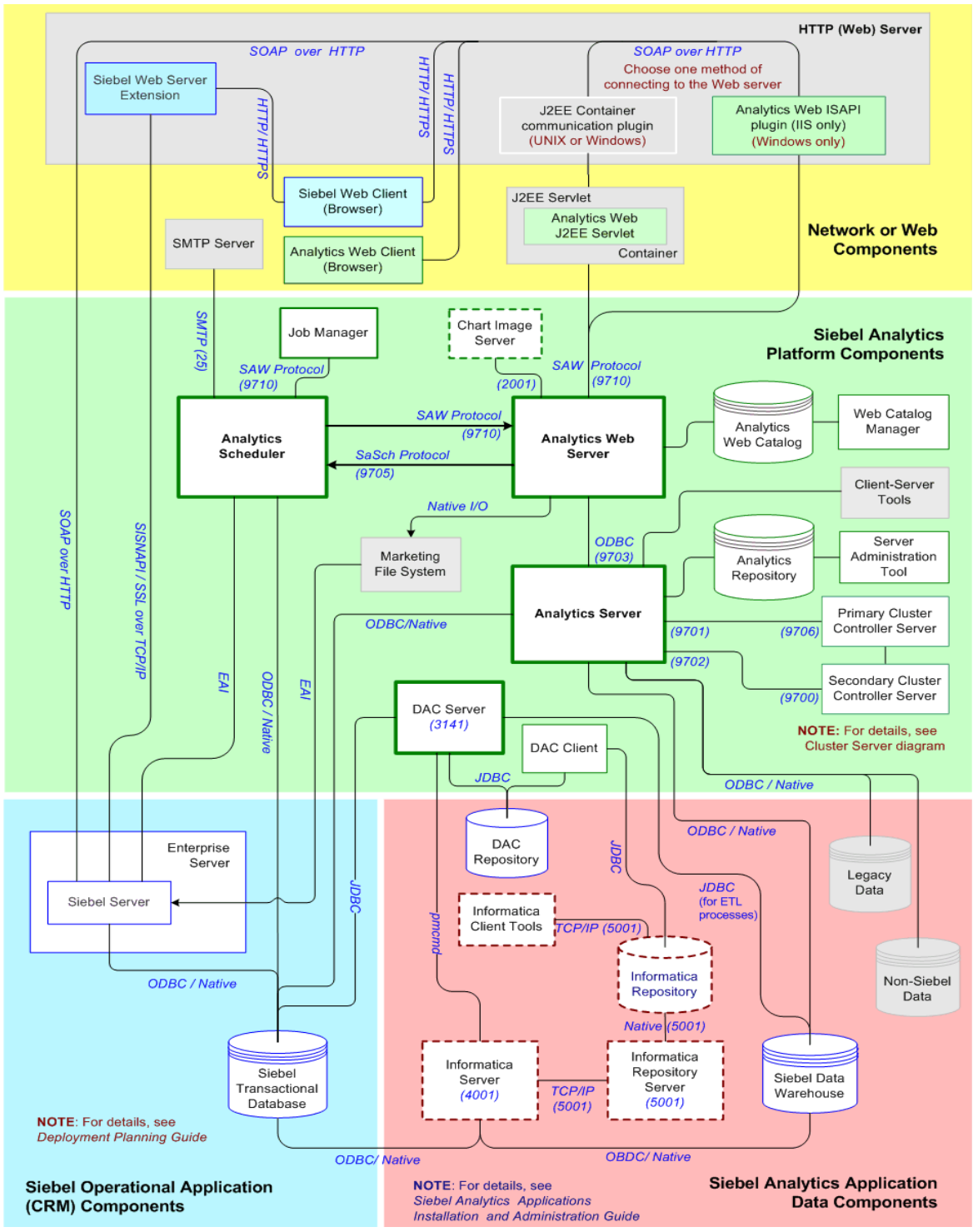

Figure 2. Overview Diagram of Siebel Analytics Applications (CRM) Deployment

Determining Analytics Installation Requirements

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform.

In addition to the hardware and operating system requirements shown in *Siebel System Requirements and Supported Platforms*, you must have completed the following requirements:

- "Obtaining Appropriate Permissions" on page 47
- "Installing Third-Party Products" on page 47
- "Uninstalling Older Analytics Versions" on page 48
- "Obtaining Product License Key Information" on page 48
- "Backing Up Analytics Folders and Files" on page 49
- "Installing Siebel Analytics Platform Components Before CRM Analytics Applications" on page 51

Obtaining Appropriate Permissions

This topic is part of the process "Determining Analytics Installation Requirements."

Before you install Siebel Analytics, you must have the appropriate permissions for installing and configuring on your company system, as shown in Table 11.

Table 11. System Component Permissions Required for Installing Siebel Analytics

System Component	Permission Type
Network	Network Administrator
Windows	Administrator for individual machines
UNIX	System administrator or root privileges
Database	DBMS Administrator

Installing Third-Party Products

This topic is part of the process "Determining Analytics Installation Requirements."

Before you run the Siebel Analytics installer, you should have completed the component installations shown in Table 12. The number of third-party software components required to be installed or configured depends on the details of your particular deployment. Third-party software documentation is available on the *Siebel Business Applications Third-Party Bookshelf*, available on CD-ROM.

Table 12. Third-Party Installations Required for Installing Siebel Analytics

Component Installation	Notes
Java SDK 1.4.1 or higher **CAUTION:** Java SDK must be running before you run the Siebel Analytics installer, otherwise key components will fail to work.	Java must be installed on the same machine on which you are installing Siebel Analytics. **NOTE:** You need this information during the installation. Make a note of the directory where Java is installed. For example, /usr/j2sdk1.4.2_04.
	To discover if Java JDK is installed, and which Java version may be used, see the topic "About Locating the Java SDK in a UNIX Environment" on page 61.

Table 12. Third-Party Installations Required for Installing Siebel Analytics

Component Installation	Notes
Microsoft Data Access Components (MDAC)	If MDAC is not on your system, install it using the procedure in the topic "Installing the Microsoft Data Access Components for Windows" on page 54.
Integration Web Server for Siebel Analytics Web	You must install a Web server integration server before you install Siebel Analytics Web. If the Windows-based Siebel Analytics Web integration server is IIS, see the topic "Configuring Internet Information Server for Analytics (Windows)" on page 52.

Uninstalling Older Analytics Versions

This topic is part of the process "Determining Analytics Installation Requirements."

Before you run the Siebel Analytics installer, you must uninstall existing Siebel Analytics installations that are older than version 7.7.1. See the section on uninstalling previous versions of Siebel Analytics in the *Siebel Analytics Platform Upgrade Guide*.

Obtaining Product License Key Information

This topic is part of the process "Determining Analytics Installation Requirements."

Before you install Siebel Analytics, you must have access to the licensing information shown in Table 13, which you will need during the installation.

Table 13. Licensing Information Required for Installing Siebel Analytics

Licensing Information	Location Notes
Siebel Analytics license key	In the licensing letter sent you by Siebel Systems, Inc.
XML file corresponding to installation type	Corresponds to your license, and emailed to you, or installed on your corporate server. Make a note of the directory where this XML file is installed.

Backing Up Analytics Folders and Files

This topic is part of the process "Determining Analytics Installation Requirements." Before uninstalling or upgrading any Siebel Analytics software, it is recommended that backups of key configuration files be made, and the files moved to a temporary location. The following sections show the locations of the configuration files under Windows and UNIX platforms.

Windows Platforms

The installer automatically backs up the Windows files shown in Table 14. The backup files are saved to the directory $INSTALLDIR\Install_Backup\<installation_date>.

Table 14. Locations of Configuration Files Backed Up Under Windows

File or Folder Name	Location
DBFeatures.INI file	$INSTALLDIR\Config
NQSConfig.INI file	$INSTALLDIR\Config
NQClusterConfig.INI file	$INSTALLDIR\Config
Instanceconfig.xml file	SiebelAnalyticsData\Web\config
Repository (.rpd) file	$INSTALLDIR\Repository
Web Catalog (.webcat) file	See the Note following these tables
\SiebelAnalyticsData\Web\catalog\Deliveries folder	Siebel Analytics Web Server machine

NOTE: The Siebel Analytics Web Catalog stores the application dashboards and report definitions and contains information regarding permissions and accessibility of the dashboards by groups. If you are upgrading a Siebel Analytics Web Catalog from an earlier version, see *Siebel Analytics Web Administration Guide* before installing Siebel Analytics.

UNIX Platforms

The installer automatically backs up the UNIX files shown in Table 15. The backup files are saved to the directory $INSTALLDIR/Install_Backup/<installation_date>. (For example, SiebelAnalytics/Install_Backup/05.13.2005_16.40.20.)

Table 15. Locations of Configuration Files Backed Up Under UNIX

File or Folder Name	Location
DBFeatures.INI file	$INSTALLDIR\Config
NQSConfig.INI file	$INSTALLDIR\Config
NQClusterConfig.INI file	$INSTALLDIR\Config
Instanceconfig.xml file	SiebelAnalyticsData\Web\config
Repository (.rpd) file	$INSTALLDIR\Repository
user.sh file	$INSTALLDIR/setup
user.csh file	$INSTALLDIR/setup
odbc.ini file	$INSTALLDIR/setup
Web Catalog (.webcat) file	See the Note following this table
\SiebelAnalyticsData\Web\catalog\Deliveries folder	Siebel Analytics Web Server machine

NOTE: The Siebel Analytics Web Catalog stores the application dashboards and report definitions and contains information regarding permissions and accessibility of the dashboards by groups. If you are upgrading a Siebel Analytics Web Catalog from an earlier version, see *Siebel Analytics Web Administration Guide* before installing Siebel Analytics.

Installing Siebel Analytics Platform Components Before CRM Analytics Applications

This topic is part of the process "Determining Analytics Installation Requirements."

Your deployment may include several Siebel CRM applications components (see "Siebel Analytics Licensing and Installation Options"). Before you install Siebel Analytics applications components, you must complete the installations shown in Table 16.

Table 16. Siebel Platform Components Required for Installing Siebel Analytics Applications Components

Platform Component	Notes
Siebel operational CRM application	For example, before installing Siebel Sales Analytics, you must install Siebel Sales.
Siebel Data Warehouse	The Siebel Data Warehouse itself has several prerequisites, including: ■ Creating the data warehouse ■ Setting up of the Java environment For details, see *Siebel Analytics Applications Installation and Administration Guide*.
Informatica PowerCenter	■ PowerCenter Server ■ PowerCenter Repository Server ■ PowerCenter Client

Configuring Internet Information Server for Analytics (Windows)

Analytics License: All licenses.

Operating System: Windows only.

This topic is part of a roadmap. See the topic "Determining Analytics Installation Requirements" on page 46.

If your operating system is Windows, and you are required to change the settings for Microsoft Internet Information Server for your Siebel Analytics installation, perform the following procedure.

NOTE: If IIS is not already installed on your system, refer to Microsoft documentation for the latest information on how to install the version of IIS required for your operating system.

To add or change IIS components on Windows

1. Start Microsoft Management Console.

   Use the command C:\WINDOWS\system32\compmgmt.msc.

2. From the Microsoft Management Console tree (left panel), expand Services and Applications.
   - In the console tree, expand Internet Information Services.
   - In the console tree, expand Web Sites.
3. Select the Default Web Site icon. Right-click and choose New > Virtual Directory.
4. In the New Virtual Directory Wizard, as the name for the alias to be used to access the Siebel Answers application, enter Analytics, and then click Next.
5. Use the Browse button to navigate to the directory in which the Siebel Analytics Web components are installed.

   NOTE: The Analytics Web directory is typically `$INSTALLDIR\Web\Apps`.
6. Select the following options, then click Finish:
   - Allow Read Access
   - Allow Script Access
   - Allow Execute Access
7. Select the newly created Siebel Analytics Web script icon, and then right-click and choose Properties.
   - On the Directory Security tab, click Edit in the Enable anonymous access to edit the authentication methods area. This opens the Authentication Methods dialog box.
   - Make sure the option Integrated Windows Authentication is *not* selected.

- (Optional) Click Browse and select a user that has access to the network and click OK.

  In most cases, the default user IUSR_*machinename* is sufficient, but you may need to enter a domain account with more network privileges. This account needs full access to both the Siebel Analytics installation directory and the Siebel Analytics temporary data directory, as described in the topic "Obtaining Appropriate Permissions" on page 47.

  NOTE: When configuring the Siebel Analytics Web component on Windows 2000, the anonymous user account specified must have Read and Write access to the Siebel Analytics directory. Write access is required to access Siebel Analytics Server through ODBC.

- Select the option Allow IIS to control password and click OK.

8 Click OK successively until you exit to the Microsoft Management Console, and then close the console.

NOTE: The user *IUSR_machinename* must match the true name of the machine being used. Servers that have been installed from a mirror image with IIS preinstalled typically do not meet this condition. Because this *IUSR_machinename* is created during the IIS installation process, the administrator may need to uninstall and reinstall IIS.

Related Topic

If the IIS and Siebel Analytics Web servers are to run on different machines, or if the Siebel Analytics Web server is to be configured to use a different TCP/IP port, see the topic "Configuring the ISAPI Plug-In for Siebel Analytics Web" on page 137.

Installing the Microsoft Data Access Components for Windows

Analytics License: All licenses.

Operating System: Windows only.

This topic is part of a roadmap. See the topic "Determining Analytics Installation Requirements" on page 46.

If your operating system is Windows, before you install any Siebel Analytics server components, you must have Microsoft Data Access Components (MDAC) installed.

NOTE: Siebel Analytics server components are described in the topic "Analytics Installation Options" on page 29.

MDAC is considered a Windows system component and is included with many applications, so MDAC may already be installed. If you are installing the Siebel Analytics Cluster Server feature, MDAC is not required on machines that host only Cluster Controllers.

TIP: If you do not need to install MDAC, proceed to the topic, "Configuring Analytics Web" on page 130.

Checking for an Existing Installation of MDAC

Analytics License: All licenses.

Operating System: Windows only.

Use the following procedure to determine if the appropriate version of MDAC is already installed. If it is not installed, complete the MDAC installation before beginning the Siebel Analytics installation. For the appropriate version to use, see *Siebel System Requirements and Supported Platforms* on Siebel SupportWeb.

To check for an existing installation of Microsoft Data Access Components

1. Search for the files msdadc.dll and oledb32.dll (optional).

   These files are generally located in the C:\Program Files\Common Files\System\OLE DB folder.

2. When you locate the files, right-click and select Properties from the context-sensitive menu.

   The version information is shown on the Version tab.

If the version is not the one specified in *Siebel System Requirements and Supported Platforms*, you need to install MDAC according to the following procedure.

NOTE: Refer to the Microsoft Web site for further instructions or any problems during installation.

Installing MDAC

Analytics License: All licenses.

Operating System: Windows only.

If MDAC is not installed, install MDAC using the following procedure.

To install Microsoft Data Access Components

1. Point your browser to the Microsoft Web site.

   In the Search box, type the words *MDAC download* and press Enter.

2. Navigate to and select the MDAC type that conforms with the type specified in *Siebel System Requirements and Supported Platforms*.

   Click Download.

3. After the program has downloaded, locate the file mdac_typ.exe and click it.

   This starts the MDAC installer.

4. Follow the prompts to complete the MDAC installation.

Siebel Analytics Components Supported Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

This process is part of a roadmap. See the process "Determining Analytics Installation Requirements" on page 46.

The following Siebel Analytics components are supported under UNIX platforms:

- Siebel Analytics Server
- Siebel Analytics Server Clustering
- Siebel Analytics Web:
  - Siebel Intelligence Dashboard
  - Siebel Answers
  - Siebel Delivers
  - Siebel Analytics Web Plug-in
- Siebel Analytics Scheduler

  NOTE: Analytics Scheduler scripts (custom Jscript and VBScript scripts) are supported only under Windows platforms. Only iBots are supported under UNIX.
- Siebel Analytics Client

  NOTE: Siebel Analytics Client consists of the Siebel Analytics ODBC driver only. This driver allows any application to connect to the Siebel Analytics Server. Siebel Analytics Web also uses this driver to connect to the Siebel Analytics Server.

See also "Siebel Analytics Licensing and Installation Options" for related information about supported components.

About Installing and Configuring the Analytics Repository

Analytics License: Analytics Applications only.

Operating System: UNIX only.

Although the Siebel Analytics repository and Web catalog are transferable to UNIX platforms, you must first install and configure the repository file (.rpd file) on a Windows platform using the Server Administration Tool, then transfer the repository file to the UNIX platform using FTP. The Server Administration Tool is currently supported only on the Windows platform.

Installation Requirements for All UNIX Platforms

Analytics License: All licenses.

Operating System: UNIX only.

This process is part of a roadmap. See the process "Determining Analytics Installation Requirements" on page 46.

The following tasks should be completed before installing Siebel Analytics software under UNIX:

1. If you are planning to run the UNIX installation remotely, or on a PC-based machine, install third-party X Window software. See also the following Note.

   NOTE: Newer versions of Siebel Analytics have a graphics-based installer option for UNIX platforms. To use this graphics-based installer, you must have an X Window program installed on a Windows machine.
   Otherwise, you can still run the Siebel Analytics installer under UNIX in console mode, which does not require an X Window system.

2. Determine the installation directory. The installation script's default installation directory is /usr/local/SiebelAnalytics. Your installation directory may be different.

   NOTE: You may need to contact your UNIX Administrator to create this directory and give you write permission.

3. Choose a user ID that can run all Siebel Analytics processes.

   NOTE: You may need to contact your UNIX Administrator to create this user ID.

4. If you are reinstalling or installing a new version of Siebel Analytics, you may have to uninstall the previous version. See the section on uninstalling previous versions of Siebel Analytics in the *Siebel Analytics Platform Upgrade Guide*.

NOTE: The installation script creates the essential environment settings.

Running MainWin for Analytics Under Solaris

Analytics License: All licenses.

Operating System: Solaris only.

This topic is part of a roadmap. See "Determining Analytics Installation Requirements" on page 46.

This topic applies if you are running a Siebel operational application on a Solaris machine on which you plan to install Siebel Analytics. The Siebel Server has its own MainWin software, and the location of MainWin is included in the PATH environment variable.

In order to run Siebel Analytics and a Siebel operational application on the same machine, you must perform one or the other of the following tasks:

- Remove the Siebel Server (Siebsrvr) Mainwin path from the PATH environment variable
- Install the Siebel Analytics software under a different account.

If Analytics is subsequently installed on the same machine as the Siebel Server, the Analytics version of MainWin is added to the end of the PATH environment variable. Therefore, when Analytics calls the MainWin software components, the Siebel Server MainWin components are used instead of the Analytics MainWin components, causing licensing-based errors.

Installation Requirements for HP-UX

Analytics License: All licenses.

Operating System: UNIX only.

This topic is part of a roadmap. See "Determining Analytics Installation Requirements" on page 46.

For successful Siebel Analytics Server operations on HP-UX operating systems, check the following factors:

- Some kernel parameters, such as those listed in the following table, may need to be adjusted.

Kernel Parameter Name	Value
max_thread_proc	1024
maxdsiz	0xC0000000
maxssiz	16777216
maxtsiz	0x40000000
shmseg	120
swapmem_on	1
maxfiles	2048
maxfiles_lim	2048
dbc_max_pct	50

  These parameters and their corresponding values are provided as examples and rough guidelines only. You can adjust these and other parameters based on actual system load, usage patterns such as the number of concurrent users and sessions, the types of queries, query frequency, database sizes, and so on.

- There may be HP operating system patches that must be installed. Failure to install these patches could lead to extremely long Siebel Analytics Server startup times. For a list of these patches, see *Siebel System Requirements and Supported Platforms* on Siebel SupportWeb.

About Analytics Server Environment Variables for IBM AIX

Analytics License: All licenses.

Operating System: IBM AIX only.

The sa.sh script, and all AIX scripts for server and client environment variable settings, contain the following environment variables for AIX:

- export MW_GMA_VADDR=0xb0000000

- export LDR_CNTRL=IGNOREUNLOAD@LOADPUBLIC@PREREAD_SHLIB@MAXDATA=0X60000000
- export AIXTHREAD_SCOPE=S
- export AIXTHREAD_MNRATIO=1:1
- export AIXTHREAD_MUTEX_DEBUG=OFF
- export AIXTHREAD_RWLOCK_DEBUG=OFF
- export AIXTHREAD_COND_DEBUG=OFF
- unset RT_GRQ
- export SPINLOOPTIME=1000
- export YIELDLOOPTIME=4
- export MALLOCMULTIHEAP=considersize,heaps:4
- export MALLOCTYPE=buckets

NOTE: If you are localizing your AIX deployment to Japanese, see also the topic "Changing Configuration File Settings for Japanese Localizations Under AIX" on page 200.

About Locating the Java SDK in a UNIX Environment

Analytics License: All licenses.

Operating System: UNIX only.

To determine if JDK is already installed on the machine and configured in the environment, use the following command:

```
$which java
```

To discover the Java version that is installed, run the Java executable with the -version option:

```
$java -version
```

5 Installing Siebel Analytics

This area describes the process of running the installer wizard for the Siebel Analytics Platform, and is part of the Roadmap for Installing Siebel Analytics Platform. The main topic is "Process of Installing the Siebel Analytics Platform."

NOTE: Before proceeding with this process, you must have read "Preparing to Install Siebel Analytics."

Process of Installing the Siebel Analytics Platform

Analytics License: All licenses.

Operating Systems: All.

This topic describes the process of installing the Siebel Analytics Platform.

The Siebel Analytics Platform uses a standard installation program for installation. When you are finished with the tasks described in this area, the components listed in Table 6 on page 30 are installed.

In general, the process of installing the Siebel Analytics software consists of the following tasks:

1. Determining your deployment and licensing.

   See the topic "Understanding Siebel Analytics Installer Wizard Options" on page 65.

2. Locating the installation software (on DVD or network) and license files, and then downloading them.

   See the topic "Downloading Siebel Analytics Installation Files" on page 66.

3. Running the setup command file. See one or more of the following topics:

   - "Running the Analytics Installer Under Windows" on page 71
   - "Installing Siebel Business Analytics in Unattended or Silent Mode" on page 68
   - "Running the Analytics Installer Under UNIX" on page 72

4. Responding to installer wizard prompts.

   See the topic "Analytics Platform Installer Wizard Screens and Prompts" on page 74.

5 When the Platform installer is finished, perform one of the following tasks:

- If you are installing a Siebel Analytics application, run the application installer wizard. See one of the following books, as applicable:
  - *Siebel Customer-Centric Enterprise Warehouse Installation and Configuration Guide*
  - *Siebel Analytics Applications Installation and Administration Guide*
- Initialize Siebel Analytics. See the topic "Initializing the Siebel Analytics Installation" on page 88.

6 Checking the installation log files.

See the topic "Checking the Installation Files" on page 89.

Understanding Siebel Analytics Installer Wizard Options

This task is part of the "Process of Installing the Siebel Analytics Platform." The Siebel Analytics installation wizard can be used to install more than one type of Siebel Analytics. The installation type depends on the following factors:

- The product license.

  See the topic "Analytics Product Licensing" on page 26.

- The number of components you are installing.

  - Table 6 on page 30 shows the Siebel Analytics components that are installed with each installation option. See also the "Optional Analytics Product Choices in the Installer" on page 32, which describes how the installer limits the options you may choose from.
  - Table 7 on page 32 shows the licensing requirements for the various product choices.

  NOTE: For the purpose of this guide, it is assumed you are installing the complete Siebel Analytics suite. Other options include partial installation and ODBC client installation.

  - The topic "Installing Selected Analytics Components" on page 84 discusses partial or incremental component installations.
  - The topic "Installing Siebel Open Intelligence Interface" on page 85 covers the distribution of client connectivity to remote clients that cannot otherwise access Siebel Analytics.

Downloading Siebel Analytics Installation Files

Analytics License: All licenses.

Operating Systems: All.

This task is part of the "Process of Installing the Siebel Analytics Platform." The following procedures show how to download the installation files for Siebel Analytics.

Downloading Installation Files Under Windows

The following procedure must be done by a Siebel Administrator with sufficient privileges.

To download Siebel Analytics installation files under Windows

1. Insert the Siebel Analytics Server installation DVD.
2. Change to the directory where the installation DVD is mounted (or change directory to the downloaded software).
3. Download the Analytics files by copying them to the desired server and directory.
4. After the files are downloaded, make sure that the read/write/execute permissions are set for all users on the files.

Downloading Installation Files Under UNIX

The following procedure must be done by a UNIX administrator or by a Siebel Administrator with sufficient privileges.

To download Siebel Analytics installation files under UNIX

1. Log in as the user who is to run the Analytics processes.
2. Insert the Siebel Analytics Server installation DVD.
3. Change to the directory where the installation DVD is mounted (or change directory to the downloaded software).
4. Download the Analytics files by using FTP to copy them to the desired server and directory.

   NOTE: Make sure you FTP them in binary mode.
5. After the files are downloaded, set the read/write/execute permissions for all users on the files.
   a. Run the command chmod 777 *.
   b. Run the command ls -la.

      Confirm that all the files have permissions resembling the following entry:

      ```
      -rwxrwxrwx  1  an7715  other  1209  Feb 10 11:02  setup.sh
      ```

6 FTP a copy of your license XML file to the desired directory.

NOTE: Make sure you FTP this file in binary mode.

7 Set the DISPLAY variable using one of the shell commands shown in the following table.

NOTE: If you plan to install Siebel Analytics in console mode, you do not need to perform this step.

Shell	Command Syntax
C	`setenv DISPLAY="<IP_address>":0.0`
Korn and bash	`export DISPLAY="<IP_address>":0.0`

Installing Siebel Business Analytics in Unattended or Silent Mode

Analytics License: All licenses.

Operating System: Windows only.

This task is part of the "Process of Installing the Siebel Analytics Platform."

In unattended or silent mode, Siebel Analytics is installed across a network by running two batch files:

- createResponseFile.bat
- installWithResponseFile.bat

These files are included in the Siebel Analytics installation directory containing setup.exe.

Running the createResponseFile.bat file performs a default installation on an Administrator machine. During this installation, all the installation options selected and settings created are written to the text file response.txt, in the Siebel Analytics installation directory. See the topic "Running the createResponseFile.bat File" on page 68.

NOTE: You cannot use the createResponseFile.bat file to install a Custom Setup type of installation.

Then an Administrator runs installWithResponseFile.bat, which uses the response.txt file to install the same Siebel Analytics components to other servers and client workstations. See the topic "Running the installWithResponseFile.bat File" on page 69.

Running the createResponseFile.bat File

This file (an InstallShield options file) initiates an installation and creates an annotated response.txt file of all input during the installation.

To create a response.txt file

1. Perform an installation that contains the required Siebel Analytics components, using the file createResponseFile.bat.
2. The file response.txt is created in the same directory.

   Response.txt has all the InstallShield required responses recorded during this installation.
3. Proceed to the topic "Running the installWithResponseFile.bat File" on page 69.

Running the installWithResponseFile.bat File

The installWithResponseFile.bat file, when run from the command line, installs Siebel Analytics silently on other machines, using the responses created in response.txt.

There are two options for porting the response.txt to other computers. The procedure for distributing the silent installation depends on the porting option you deploy:

- Installing Siebel Analytics silently from the target computer or computers.

  Use the procedure described in "To install Siebel Analytics silently from a target computer."

- Installing Siebel Analytics silently from a network-accessible computer.

  Use the procedure described in "To install Siebel Analytics silently from a network-accessible computer."

NOTE: Without modification, the response.txt file is portable only to other installation computers having the identical Siebel Analytics directory structure (including logical drives) as the initial installation computer.

To install Siebel Analytics silently from a target computer

1. The entire Siebel Analytics installation image must be on the target computer.
2. The response.txt file created from the default installation must be copied to the Siebel Analytics installation root directory (in the same directory as the installWithResponseFile.bat file on the target computer).
3. If the Siebel Analytics installation directories and Siebel Analytics installation image location on the target computer are configured exactly as the initial installation computer, proceed to Step 6.
4. If the Siebel Analytics installation root directory path differs from the root directory path for the default installation, modify the following response.txt parameter to point to the target root directory path:

   ```
   -W LicenseFileLocPanelBean.FileName="<Logical Drive>:
   \<$INSTALLDIR>\Licenses\<Analytics license file>"
   ```

5. If the target directory paths for the Siebel Analytics installation differ from the directory paths for the default installation, modify the following response.txt parameter to reflect the target directory paths:

   ```
   -W TempPanelBean.Destination="<Logical Drive>:\<target path>\SiebelAnalytics"
   ```

   ```
   -W TempPanelBean.TempDir="<Logical Drive>:\<target path>\SiebelAnalyticsData"
   ```

6. Install Siebel Analytics using installWithResponseFile.bat.

   The installation is done when the DOS prompt returns.

   NOTE: This batch file does not force a computer reboot; this must be done manually after the installation completes.

To install Siebel Analytics silently from a network-accessible computer

1. The entire Siebel Analytics installation image must reside on the network computer on a drive that is accessible to all computers that perform a Siebel Analytics installation.

2 Copy the response.txt file created from the master installation to this Siebel Analytics installation root directory (in the same directory as the installWithResponseFile.bat file).

3 On each target installation computer, map a logical drive to the network computer Siebel Analytics installation image root directory.

NOTE: The drive letter for this map must be the same on all target installation computers.

4 On the network computer, modify the response.txt file as follows:

- Change the following response.txt parameter to use the mapped logical drive common to all target installation computers:

```
-W LicenseFileLocPanelBean.FileName="<Logical Drive>:\<Siebel Analytics
installation root directory>\Licenses\<Siebel Analytics license file>"
```

For example, -W LicenseFileLocPanelBean.FileName="s:\Licenses\<Siebel Analytics license file>"

- Change the following response.txt parameters to use the Siebel Analytics installation directory paths common to all target installation computers:

```
-W TempPanelBean.Destination="<Logical Drive>:\<target path>\SiebelAnalytics"
```

For example, d:\SiebelAnalytics

```
-W TempPanelBean.TempDir="<Logical Drive>:\<target path>\SiebelAnalyticsData"
```

For example, d:\SiebelAnalyticsData

5 Open a DOS prompt on the target installation computer and change directory to the mapped logical drive that points to the Siebel Analytics installation image directory on the network computer.

6 Run installWithResponseFile.bat from this DOS prompt.

Installation is done when the DOS prompt returns.

NOTE: This batch file does not force a computer reboot; this must be done manually after the installation completes.

Running the Analytics Installer Under Windows

Analytics License: All licenses.

Operating System: Windows only.

This task is part of the "Process of Installing the Siebel Analytics Platform."

To run the Siebel Analytics installation wizard under Windows

1. Access the installation files, and then run the program setup.exe.

   To run the installer in console (or text) mode, run the command setup.exe -console.

   NOTE: You do not see dialogue screens in console installation mode. Instead, you enter input as plain text in the terminal window when prompted.

2. The installation wizard window appears and prompts you through each screen. If you are in console mode, various text prompts appear.

   The meanings and default for each screen and prompt for the complete Siebel Analytics Platform installation under Windows are listed in Table 17 on page 74.

   NOTE: The particular screens or prompts that are visible depend on the Analytics license and installation options you choose.

3. Perform one of the following substeps, depending on whether you are running the installer with a graphical user interface or running the installer in console mode:

   - Running the installer with a graphical user interface:
     Provide the requested input for each screen.

     To continue to the next screen, click Next. To return to a previous screen, click Back.

   - Running the installer in console mode:
     Follow the prompts in the installation script

     In the console mode, each prompt ends with the following choices and their defaults in square brackets:

     Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay

4. Proceed to "Initializing the Siebel Analytics Installation."

Running the Analytics Installer Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

This task is part of the "Process of Installing the Siebel Analytics Platform."

For UNIX platform installations, the following are significant areas of difference from Windows platform installations:

- The default installation directory is /usr/local/SiebelAnalytics. Your installation directory may be different. You may need to contact your UNIX Administrator to create this directory and give you write permission.
- Default ports are used for installation. If you want to modify the port numbers, see the "NQSConfig.INI File Reference."

To run the Siebel Analytics installation wizard under UNIX

1. Make sure that you have set the DISPLAY environment variable.
2. Change directory to the installation directory.
3. To run the installer in graphics mode, use the following command:

   ./setup.sh

   To run the installer in console (or text) mode, use the following command:

   ./setup.sh -console

   NOTE: In console mode of installation, you enter input as plain text in the terminal window when prompted. You do not see dialogue screens, and therefore you do not need to set the DISPLAY variable.

   The following screens or messages appear:

   InstallShield Wizard
   Initializing InstallShield Wizard...
   Preparing Java(tm) Virtual Machine

   NOTE: The JVM preparation takes several minutes.

   Welcome to the InstallShield Wizard for Siebel Analytics
4. Perform one of the following sub steps, depending on whether you are running the installer with a graphical user interface or running the installer in console mode:
   - Running the installer with a graphical user interface:
     Provide the requested input for each screen.

     To continue to the next screen, click Next. To return to a previous screen, click Back.

- Running the installer in console mode:
  Follow the prompts in the installation script

  In the console mode, each prompt ends with the following choices and their defaults in square brackets:

  Press 1 for Next, 2 for Previous, 3 to Cancel or 4 to Redisplay

  The meanings and default for each screen and prompt are shown in Table 18 on page 79.

NOTE: The particular screens or prompts that are visible depend on the Analytics license and installation options you choose.

5 Proceed to "Initializing the Siebel Analytics Installation" on page 88.

Analytics Platform Installer Wizard Screens and Prompts

This topic is part of the "Process of Installing the Siebel Analytics Platform."

- The screens for the complete Siebel Analytics Platform installation under Windows are listed in Table 17 on page 74.
- The screens or prompts for the complete Siebel Analytics Platform installation under UNIX are listed in Table 18 on page 79.

Screens and Prompts for a Complete Installation (Windows)

Analytics License: Platform only.

Operating System: Windows only.

Table 17 lists the screens for a complete Siebel Analytics Platform installation under Windows operating systems.

Table 17. Screens or Prompts for a Platform Installation of Siebel Analytics Under Windows

Screen	Your Action	Notes
Welcome	Click Next.	
License Agreement	Select "I accept..." and click Next.	
License File	Select the appropriate XML file in the License File screen. Click Next.	The License file is an XML file corresponding to the installation type you are licensed for. This file is emailed to you, or installed on your corporate server.
Installation Directories	Type the path for the installation directories: ■ SiebelAnalytics ■ SiebelAnalyticsData	To accept the default installation (to the C:\ drive), click Next. **TIP:** To change the default (recommended), click Browse and establish the installation path, then click Next.

Table 17. Screens or Prompts for a Platform Installation of Siebel Analytics Under Windows

Screen	Your Action	Notes
Setup Type	Choose the setup type. The choices are the following: ■ Complete Suite (includes all of the following types) **NOTE:** For the purpose of this procedure, it is assumed that you have selected Complete Suite. ■ Siebel Analytics Server: ■ Siebel Analytics Server ■ Siebel Analytics Server Administration Tool ■ Siebel Analytics Clustering Server ■ Siebel Analytics Scheduler ■ Siebel Analytics ODBC Driver ■ Siebel Analytics Web Server: ■ Siebel Analytics Web Server ■ Siebel Analytics Web Plug-in ■ Siebel Analytics Catalog Manager ■ Siebel Analytics ODBC Driver ■ Siebel Analytics Client Tools: ■ Siebel Analytics Clients ■ Siebel Analytics Server Administration Tool ■ Siebel Analytics ODBC Driver ■ Siebel Analytics Catalog Manager ■ Disconnected Client ■ Data Warehouse Administration Console	The setup type you choose affects the number and type of screens that subsequently appear. See the topic "Optional Analytics Product Choices in the Installer" on page 32. **TIP:** Some installation types, such as Data Mining Engine, require that you select the Custom setup.

Table 17. Screens or Prompts for a Platform Installation of Siebel Analytics Under Windows

Screen	Your Action	Notes
Setup Type (continued) **NOTE:** In the user interface, Siebel Mobile Analytics is referred to as Disconnected.	Custom: ■ Siebel Analytics Server ■ Data Mining Engine ■ Siebel Analytics [Server] Administration Tool ■ Siebel Analytics Clustering Server ■ Siebel Analytics Scheduler ■ Siebel Analytics Client ■ Siebel Analytics ODBC Driver ■ Siebel Analytics Web Server ■ Siebel Analytics Web Plug-in ■ Siebel Analytics Catalog Manager ■ Disconnected Client ■ Data Warehouse Administration Console Click Next.	Custom setup should be used by experienced Administrators. See also the topic "Installing Selected Analytics Components" on page 84. **NOTE:** By default, the Disconnected Client is not selected.
Service Start Type	Choose startup type for these servers: Analytics Server Analytics Scheduler Analytics Cluster Analytics Web Analytics Web Java Host Click Next.	Siebel Analytics Services start automatically or need to be started manually at machine startup **TIP:** An Automatic startup may slow down other processes on the same machine. ■ Server default : Automatic ■ Scheduler default: Manual ■ Cluster default: Manual ■ Web default: Automatic ■ Java Host default: Automatic

Table 17. Screens or Prompts for a Platform Installation of Siebel Analytics Under Windows

Screen	Your Action	Notes
Error Message Language	Click Next.	The default is English. The error messages from the Siebel Analytics Server are in only one language. Typically, these are relational server-side messages only. The Siebel Analytics Administrator can choose which language to display these messages in using this option.
Analytics Cluster Server Account Name	Default: LocalSystem Click Next.	The Windows server account name that each of the servers should run under. This account name should be the same on all clustered servers. Accept the default or specify the account name (in the format domain\user) and the password.
Scheduler Server Name	Click Next.	If the Scheduler runs on the same machine as the Analytics Web Server, leave this field blank. The default is the name of the machine on which Analytics Scheduler is being installed.
Java Home Directory	Type the path for the directory where Java is installed.	Java SDK 1.4.1 or higher must already be installed on your installation machine, otherwise the installation fails.
Please Wait		This is a placeholder screen that appears while the installer accepts all the choices you have made.
Summary Information	Click Next.	This is a list of all the features you have chosen, and the directory where they are to be installed. **TIP:** This information should correspond to the information given in Table 8 on page 29.

Table 17. Screens or Prompts for a Platform Installation of Siebel Analytics Under Windows

Screen	Your Action	Notes
Installing	Click the Next button when it is no longer greyed out.	This is a placeholder that appears while the features you have selected are installed.
Restart Computer	Choose whether or not to immediately restart your computer. Click Finish.	■ If you click Yes, the computer shuts down and restarts. ■ If you click No, you need to restart the computer before you use Siebel Analytics.

Screens and Prompts for a Complete Installation (UNIX)

Analytics License: Platform only.

Operating System: UNIX only.

Table 18 lists the screens or prompts for a complete Siebel Analytics Platform installation under UNIX operating systems.

Table 18. Screens or Prompts for a Platform Installation of Siebel Analytics Under UNIX

Screen or Prompt Text	Default Value and Notes
There may be port numbers in use that Siebel Analytics Web uses for charting [2000-2004]. Please consult the documentation if you wish to change these port numbers after installation.	**Console**: [1] **Screen**: OK
License Agreement - Siebel Systems, Inc.	**Console**: [q] Press ENTER key to read the license agreement. Type q to display the next prompt.
(License Agreement) Please choose from the following options: [ ] 1 - I accept the terms of the license agreement. [ ] 2 - I do not accept the terms of the license agreement.	**Console**: [1] To select an item enter its number. To accept the default choice, type 0. Typing 2 terminates the installation. **Screen**: Select the "I accept ..." radio button
Please select the license file Click Next to install "Siebel Analytics" to the following directories, or click Browse to install to the different directories.	Type the full path to the license key file you downloaded in Step 6 on page 67 of "Downloading Siebel Analytics Installation Files." Click Next or select 1 to continue.
Product Directory Name Data Directory Name	[/usr/local/SiebelAnalytics] Change this path as necessary and press Enter. [/usr/local/SiebelAnalytics/Data] Change this path as necessary and press Enter.

Table 18. Screens or Prompts for a Platform Installation of Siebel Analytics Under UNIX

Screen or Prompt Text	Default Value and Notes
Choose the setup type that best suits your needs. [X] 1 - Complete [ ] 2 - Siebel Analytics Server [ ] 3 - Siebel Analytics Web Server [ ] 4 - Siebel Analytics Client Tools [ ] 5 - Data Warehouse Administration Console [ ] 6 - Custom See also the topic "Installing Selected Analytics Components" on page 84.	**Console**: [1] To select an item enter its number. To accept the default choice, type 0. **Screen**: Next ■ Complete All Siebel Analytics features are installed: ■ Siebel Analytics Server ■ Siebel Analytics Clustering Server ■ Siebel Analytics Scheduler ■ Siebel Analytics Web Server ■ Siebel Analytics Web Plug-in ■ Siebel Analytics Client ■ Data Warehouse Administration Console ■ Siebel Analytics Server Only server components are installed: ■ Siebel Analytics Server ■ Siebel Analytics Clustering Server ■ Siebel Analytics Scheduler ■ Siebel Analytics Web Server Only Web client components are installed: ■ Siebel Analytics Web Server ■ Siebel Analytics Web Plug-in ■ Siebel Analytics Client Tools Only Siebel Analytics Client components are installed. ■ Data Warehouse Administration Console (DAC) Only DAC components are installed. Click Next or select 1 to continue. ■ Custom The program is installed with the features you choose. **TIP:** Recommended for advanced users.

Table 18. Screens or Prompts for a Platform Installation of Siebel Analytics Under UNIX

Screen or Prompt Text	Default Value and Notes
Select a language for presentation of error messages. All the choices are: [ ] 1 - Chinese (Simplified) [ ] 2 - Chinese (Traditional) [ ] 3 - Czech [ ] 4 - Danish [ ] 5 - Dutch [X] 6 - English (US) [ ] 7 - Finnish [ ] 8 - French [ ] 9 - German [ ]10 - Italian [ ]11 - Japanese [ ]12 - Korean [ ]13 - Portuguese (Brazilian) [ ]14 - Portuguese (European) [ ]15 - Spanish [ ]16 - Swedish	The error messages from the Siebel Analytics Server are in one language only. Typically, these are relational server-side messages only. The Siebel Analytics Administrator can choose which language to display these messages in. The default is English (US). To select an item enter its number. Click Next or select 1 to continue.
The caching option is turned on automatically. Enter the cache Size (MB)	Default is 500 MB. **Console**: Select 1 to continue. **Screen**: Click Next to continue.
Siebel Analytics Scheduler machine name	Enter the name of the machine where the Scheduler is to run. If the Scheduler is to run on the same machine as the Web server, leave this blank. (Default.)
Java Home Directory Java SDK 1.4.2 or higher is required.	Enter the full path to the directory in which Java SDK is installed and press Enter. For example, /usr/j2sdk1.4.2
Please Wait.	Several minutes elapse before the installer proceeds to the next prompt.
Siebel Analytics will be installed in the following location: *[directory path]* with the following features: *[features list]* for a total size: *[size of installation in MB]*	The directory path is the one specified at the Product Directory Name prompt. **TIP:** The features listed correspond to the Setup Type you selected. **Console**: Select 1 to continue. **Screen**: Click Next to continue.

Table 18. Screens or Prompts for a Platform Installation of Siebel Analytics Under UNIX

Screen or Prompt Text	Default Value and Notes
Installing Siebel Analytics. Please wait...	The amount of time required for the installation depends on your machine and its environment.
The InstallShield Wizard has successfully installed Siebel Analytics.	**Console**: Select 1 to continue. **Screen**: Click Next to continue. You return to the UNIX prompt.

Installing Analytics Components on Different Machines

This topic is part of the "Process of Installing the Siebel Analytics Platform."

The Analytics Web, Analytics Client, and Analytics Server components can be installed to run on separate machines. If you are planning to install Siebel Analytics Web Server and Siebel Analytics Server on separate machines, run the Analytics installer the number of times necessary for each machine to have its own installation. For example:

- On the Web Server Machine:

  Select the Analytics Web Server installation option.
  This installs the ODBC driver, ODBC Client, Answers, and Delivers files.

  If Siebel Analytics Web is installed on a different machine than Siebel Analytics Server, configure the Siebel Analytics Web machine as shown in the topic "Configuring Analytics Web Installed on a Separate Machine from Analytics Server" on page 131.

  NOTE: It is also possible to choose the Complete installation and not make use of the server components on this machine.

- On the Siebel Analytics Server Machine:

  Select the Siebel Analytics Server installation option.

See also the topic "Installing Selected Analytics Components" on page 84.

Installing Selected Analytics Components

This topic is part of the "Process of Installing the Siebel Analytics Platform," and applies if you have already installed one or more Siebel Analytics components.

For example, you can have Siebel Analytics Server only already installed, or you might also be installing different components on separate machines. (See also the topic "Installing Analytics Components on Different Machines" on page 83.) If you run the installer again to install the Data Warehouse Administration Console, you see the following additional prompts or screens. After you enter the name of the license file, you are asked to select one of the two following options.

- Keep Current Configuration

  Selecting the Keep... option refers to those configuration files listed in "Backing Up Analytics Folders and Files" on page 49. These configurations are not changed.

- Reset to Default Configuration

  Selecting the Reset... option changes the configuration files back to the Siebel Analytics default (for example, C:\SiebelAnalytics).

Installing Siebel Open Intelligence Interface

Analytics License: All licenses.

Operating System: Windows only.

This topic is part of the "Process of Installing the Siebel Analytics Platform." It may apply if your deployment includes remote machine connection to Siebel Analytics servers over a network.

Some sites use third-party analytical tools, such as spreadsheets and databases, which require connectivity to the Siebel Analytics Server. Some of these sites have client connections to the corporate network using a modem. The Open Intelligence Interface (ODBC) client connectivity and the client connectivity tools NQCMD.exe and NQClient.exe are a means of distributing client connectivity to these remote clients that cannot otherwise access Siebel Analytics.

Only the Open Intelligence Interface ODBC connectivity client and the NQClient.exe and NQCMD.exe utilities are installed. The latter two utilities are necessary for debugging and technical support issue identification. The installer includes a silent mode option to automatically install the Open Intelligence Interface ODBC client on the remote machine. This installer does not require a license key.

The Open Intelligence Interface installer installs the following components to remote client machines:

Directory	Folders
SiebelAnalytics	\Bin
	\Document
	\Locale
	\Log
	\UninstallODBCClient
SiebelAnalyticsData	\Temp (empty)

Running the Open Intelligence Interface Installer Wizard

This topic is part of the "Process of Installing the Siebel Analytics Platform," and applies if you plan to deploy only the Open Intelligence Interface ODBC client on remote client machines.

To run the Open Intelligence Interface Installer wizard under Windows

1 Access the installation files, and then run the program setup.exe.

2 The installation wizard window appears and prompts you through each screen.

The meanings and default for each screen and prompt for the Siebel Open Intelligence Interface installation under Windows are listed in Table 19.

3 Provide the requested input for each screen. To continue to the next screen, click Next. To return to a previous screen, click Back.

Open Intelligence Interface Installer Wizard Screens and Prompts

The screens for the Open Intelligence Interface ODBC client installation are listed in Table 19.

Table 19. Screens or Prompts for Installing Siebel Analytics Client and ODBC Driver

Screen	Your Action	Notes
Welcome	Click Next.	
License Agreement	Select “I accept...” and click Next.	
Installation Directories	Type the path for the installation directories: ■ SiebelAnalytics ■ SiebelAnalyticsData	To accept the default installation (to the C:\ drive), click Next. **TIP:** To change the default (recommended), click Browse and establish the installation path, then click Next.
Error Message Language	Click Next.	The default is English. The error messages from the Siebel Analytics Server are in only one language. Typically, these are relational server-side messages only. The Siebel Analytics Administrator can choose which language to display these messages in using this option.
Please Wait		Placeholder screen that appears while the installer accepts the preceding input.
Summary Information	Click Next.	List of the components and the directory where they are to be installed.
Installing		Placeholder that appears during installation.

Table 19. Screens or Prompts for Installing Siebel Analytics Client and ODBC Driver

Screen	Your Action	Notes
Summary Information	Click Next.	Confirmation of a successful installation.
Restart Computer	Choose whether or not to immediately restart your computer. Click Finish.	■ If you click Yes, the computer shuts down and restarts. ■ If you click No, you need to restart the computer before you use Siebel Analytics.

Initializing the Siebel Analytics Installation

Analytics License: All licenses.

This task is part of the "Process of Installing the Siebel Analytics Platform."

Initializing Siebel Analytics Under Windows

Operating System: Windows only.

After the Installation Wizard has ended, you must restart your computer in order for the installation to take effect, before using the Siebel Analytics software. If you did not select Yes at the installation prompt, you must restart the computer now.

NOTE: If you attempt to run Siebel Analytics without restarting your computer, several services may fail to work correctly.

After the computer has been restarted, proceed with the configuration of data components.

Initializing Siebel Analytics Under UNIX

Operating System: UNIX only.

After the Installation Wizard has ended, there is no special initialization required for Siebel Analytics itself.

Checking the Installation Files

Analytics License: All licenses.

Operating System: UNIX only.

This topic is part of the "Process of Installing the Siebel Analytics Platform."

Location of Installation Files

As explained in "About File Path and Command Conventions," Table 3 on page 18, $INSTALLDIR is the absolute path of the Analytics Server installation directory. It is the path you entered in response to the installer prompt for Product Directory Name (see Table 18 on page 79).

If you did not enter a path, the installer used the default path of /usr/local/. In this case, $INSTALLDIR/Install.log = /usr/local/Install.log.

Location of Log Files

When each of the Siebel Analytics servers starts, it puts standard output messages in the files or directories shown in Table 20 on page 89.

Table 20. Location of Siebel Analytics Log Files

Log for Server or Service	Location
Siebel Analytics Server	`$INSTALLDIR/Log/NQServer.log`
Analytics Scheduler Server	`$INSTALLDIR/Log/NQScheduler.log`
Siebel Analytics Web Server	`$INSTALLDIR/Data/web/log/`
Siebel Analytics Web Server	`$INSTALLDIR/Log/sawjavahost.log`
If Clustering is enabled, a Siebel Analytics Server Cluster Log is created	`$INSTALLDIR/Log/NQCluster.log`
If iBots debugging is turned on, each iBot creates its own log	`$INSTALLDIR/Log/[iBotname].log`

TIP: Proceed to "Configuring the Siebel Analytics Server."

Troubleshooting the Analytics Installation Under Windows

Analytics License: All licenses.

Operating System: Windows only.

This topic is part of the "Process of Installing the Siebel Analytics Platform," and details some common problems observed during installation. Possible solutions are suggested. To resolve the problem, look for it in the Symptom/Error Messages column in Table 21 on page 90.

Related Topic

"Troubleshooting the Analytics Installation Under UNIX" on page 91

Table 21. Common Problems and Solutions for Analytics Installation Under Windows

Symptom/Error Messages	Diagnostic Steps/Cause	Solution
In some cases, the desktop icon in the "Please Select a License File" screen does not function.	Java software problem.	Instead of using the desktop icon, select the license file from the tree browser.
ERROR: Couldn't Launch Server on Port #n	■ The TCP/IP settings are not correct on your computer. ■ The specified port is not available. ■ Image server may already be running.	■ Make sure that your TCP/IP settings are correct. ■ Pick another port number. ■ Check to see if image server is already started and running as a service on NT. ■ If you just upgraded the image server from a previous version on NT 4 or NT 2000 OS, reboot the server while the image server runs as a service.

Troubleshooting the Analytics Installation Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

This topic is part of the "Process of Installing the Siebel Analytics Platform," and details some common problems observed during installation. Possible solutions are suggested. To resolve the problem, look for it in the Symptom/Error Messages column in Table 22 on page 91.

Related Topic

"Troubleshooting the Analytics Installation Under Windows" on page 90

Table 22. Common Problems and Solutions for Analytics Installation Under UNIX

Symptom/Error Message	Diagnostic Steps/Cause	Solution
The Siebel Analytics Server startup operation fails.	Look in the log files for messages indicating possible reasons. Log files are located in the $INSTALLDIR/Log/ subdirectory. You can use a text editor to view a log file. (Set your viewer to UTF-8 to avoid seeing garbled text.)	Make sure that the syslog service is running, and look for any system or Siebel Analytics-related messages. The log files contain messages indicating why the server startup failed. For example, if there were a syntax error in the NQSConfig.INI file, both the operating system's log and the NQServer.log file would contain messages about the syntax error. After examining the log messages, correct the problem and start the server again.
	You are running a localized installation on AIX.	For AIX platforms localized for Japanese, see the topic "Changing Configuration File Settings for Japanese Localizations Under AIX" on page 200.

Table 22. Common Problems and Solutions for Analytics Installation Under UNIX

Symptom / Error Message	Diagnostic Steps / Cause	Solution
Charts do not appear.	Analytics Web is unable to communicate with the image server. **NOTE:** This note applies if you are upgrading from Siebel Analytics 7.5 versions. The location, structure, and content of the Corda image server directory have changed from Siebel Analytics version 7.5. The image server is now installed under the main installation directory. Also, the file key.txt is no longer required.	1 Make sure that the image server is running. 2 Make sure that the port value of PCS_Port in $INSTALLDIR/Corda50/config/server_config.txt is the same as the port number specified in the $INSTALLDIRData/web/config/instanceconfig.xml setting: WebConfig/ServerInstance/Charts/POP/ServerPrefix. 3 Make sure that the Web or application server's name is valid and accessible from the user's browser. **NOTE:** It is possible for Analytics Web and the image server to run on separate machines, but for administrative as well as performance reasons, it is recommended that they be installed on the same machine.
Charts do not appear in Delivers and running iBots appear to hang.	The image server has not been configured properly.	Make sure that you can see charts outside of Delivers; for example, in Answers or on other dashboards. If charts are otherwise visible, contact Siebel Technical Support.
Unable to log on to Siebel Analytics Web. Message: `Siebel Analytics ODBC returned the error: (No error info available)`	The Analytics Server process nqservice.exe is not running or is terminated abruptly.	Kill the process nqscomgateway.exe manually and restart the Analytics server by running the command ./run-sa.csh start from the following location: $INSTALLDIR/setup.
Hourglass icon remains in processing state when trying to log on to Siebel Analytics Web.	This database that the user.csh file points to is incorrect, or is a corrupted database. This may also happen due to the abrupt disconnection of the database in the middle of processing.	Open the file user.csh (located at $INSTALLDIR/setup. Check for the database parameters. Using the command sqlplus, check whether or not the connection is being established.

Table 22. Common Problems and Solutions for Analytics Installation Under UNIX

Symptom/Error Message	Diagnostic Steps/Cause	Solution
When starting the Scheduler, you receive an error.	Set the DISPLAY variable for Scheduler.	See the topic "Siebel Analytics Scheduler As a Background Process (UNIX)" on page 150.
No Login Screen - No Errors	Incorrect configuration or incomplete shutdown/ memory allocation.	■ Make sure that Web server is running. ■ Make sure that the empty.htm file in the installed virtual server can be accessed from a browser. If this fails, the virtual server path is incorrectly defined. ■ Shutting down the server and Web server usually requires that the script mwcleanup be executed prior to restarting.
No login Screen - Web server errors	Conflicting ports used	Make sure that the Analytics Web does not use the same port numbers as existing software (for example, accidentally picking the same port number as an existing Web server).
No Login Screen - Analytics Server restarted	Analytics Web lost connection to the Analytics Server	Ideally, Analytics Web should be shut down prior to the server and restarted after the Siebel Analytics Server has been restarted.
nQSError: 77006 (Not Found: The requested object does not exist on this server...)	Siebel Analytics Web Server parameter is not set correctly in schconfig.exe—Configure iBots.	Make sure that the Siebel Analytics virtual Web server is correctly configured. Reconfigure the Siebel Analytics Web Server parameter as http://<host:port>/CUSTOM/saw.dll, where CUSTOM is the custom path specified in web.xml.
The URL http://<server:port>/analytics results in a server error, and Web server logs contain errors about JSP compilation.	The Web server is unable to access a scratch directory to handle the JSP.	Set up a Web server scratch directory. See the topic "Testing the Analytics Web Server" on page 138.

About the Siebel Analytics Repository

Analytics License: All licenses.

Operating Systems: All.

This topic gives more information on the procedures in the area "Installing Siebel Analytics."

Depending on your product licensing, you may have a full Siebel Analytics repository or a sample.

- The default platform-only Analytics repository is demo1.rpd (under Windows) or ORA_northwind.rpd (under UNIX).

  This repository is given as a sample only.

- The default Siebel Analytics repository for Siebel Analytics applications is SiebelAnalytics.rpd.

  You generate this repository using the Server Administration Tool. Analytics applications licensing permits you to access only those Siebel Analytics dashboards, subject areas, and reports for which you have purchased licenses.

The following topics also should be considered when using a Siebel Analytics repository. For complete details of configuring and administering the repository file, see the *Siebel Analytics Server Administration Guide*.

How Analytics Applications Licensing Affects Repository Size

Analytics License: Analytics Applications only.

Operating Systems: All.

If you have purchased a Siebel Analytics application, the license keys for that application generate the Siebel Analytics repository (.rpd) file. For example, if you did not license Siebel Delivers, this product is not installed. Siebel Analytics licensing may significantly affect the repository file size, depending on the specific Siebel Analytics application that you purchased. For example, if you have licensed Siebel Sales Analytics, you are able to view and use only those Siebel Analytics dashboards, subject areas, and reports related to Sales Analytics. You can also edit the repository file and make it smaller to provide improved performance.

The Siebel Analytics application licensing feature trims only the repository. However, licensing does not affect the size of the Analytics Web Catalog. It is recommended as a best practice that you do trim the Web Catalog and remove those dashboards that are not relevant to your business needs. Dashboards and reports are organized in shared folders according to the business areas. For example, all objects included under Marketing Analytics are stored in the folder /shared/Marketing.

About Installing and Configuring the Analytics Repository Under UNIX

Analytics License: Analytics Applications only.

Operating System: UNIX only.

Although the Siebel Analytics repository and Web catalog are transferable to UNIX platforms, you must first install and configure the repository file (.rpd file) on a Windows platform using the Server Administration Tool, then transfer the repository file to the UNIX platform using FTP. The Server Administration Tool is currently supported only on the Windows platform.

About the Siebel Analytics Web Catalog

Analytics License: All licenses.

Operating System: UNIX only.

This topic gives more information on the procedures in the area "Installing Siebel Analytics."

The Siebel Analytics Web Catalog stores the application dashboards and report definitions. It also contains information regarding permissions and accessibility of the dashboards by groups.

The SiebelAnalytics.webcat is installed automatically in the $INSTALLDIR/Data/web/catalog folder when you install an integrated version from the Apps_UNIX folder.

NOTE: If you are upgrading from an earlier version of Siebel Analytics, see the *Siebel Analytics Web Administration Guide* before installing Siebel Analytics.

6 Configuring the Siebel Analytics Server

After the Siebel Analytics installer is finished with the Analytics platform installation, there are a number of additional tasks you must complete in order to properly configure Siebel Analytics Siebel Analytics server components. The Roadmap for Configuring Siebel Analytics Platform on page 40 lists the processes for configuring Siebel Analytics immediately after installation of the software.

NOTE: This Roadmap assumes that the installation setup option chosen is Complete.

The number of postinstallation configuration tasks you must complete depends on the following factors:

- The number and types of platforms you are using
- The complexity of your network setup
- The types of installation options you have chosen
- Whether or not your deployment is localized

For example, if you are installing only the Siebel Analytics platform, you have fewer configuration tasks to perform than if you are installing Siebel Analytics to work with a Siebel Industry Application with a Siebel Relationship Management Warehouse, using several localized languages.

NOTE: Almost all of the Siebel Analytics Server installation is through the Server Administration Tool. See the *Siebel Analytics Server Administration Guide* or *Siebel Analytics Server Administration Tool Online Help*.

Process of Configuring Siebel Analytics Server

Analytics License: Platform only.

Operating Systems: All.

Databases: All databases.

The following tasks configure the Siebel Analytics Server components:

- “Starting or Restarting Analytics Servers” on page 98
- “Localizing Sort Order Settings Under UNIX” on page 197

  NOTE: For deployments under UNIX systems, see also the task “Setting SORT_ORDER_LOCALE Under UNIX” on page 199.
- “Postinstallation Tests of Analytics Client and Server” on page 101

Starting or Restarting Analytics Servers

This task is part of a roadmap. See the topic "Process of Configuring Siebel Analytics Server."

The order in which the services are stopped, then restarted, is important. Use the following sequence.

1. Siebel Analytics Server service.
2. Siebel Analytics Web Server service.
3. Siebel Analytics Scheduler Server service.

- Starting or restarting servers under UNIX involves running the shell scripts listed in the topics "Siebel Analytics Scripts for Korn, Bourne, or Bash Shells" on page 154 and "Siebel Analytics Scripts for C Shell" on page 156.

  CAUTION: If you do not use the run-sa.sh shell script to start the server, you must make certain that the variables are set. If the variables are not set, you can expect poor performance from the Siebel Analytics Server, or the Analytics Server may crash.

  The shell scripts are located in the directory $INSTALLDIR/setup.

  NOTE: Siebel Analytics does not support more than one server instance on the same machine at one time.

- Starting or restarting servers under Windows involves stopping the related Siebel Analytics Windows services. See the topics:
  - "Stopping the Analytics Servers" on page 166
  - "Restarting the Analytics Servers" on page 169

Updating Configuration Settings

Analytics License: All licenses.

Databases: All databases.

This task is part of a roadmap. This task is normally executed automatically after installation. However, if you want to configure a new installation or to reconfigure the settings with your changes to the instanceconfig.xml file, this topic becomes part of the process "Process of Configuring Siebel Analytics Server."

NOTE: Before editing the instanceconfig.xml file, see the topic "About the Analytics Web instanceconfig.xml File" on page 100.

To update the configuration settings under Windows

1. Stop the servers.

   See the topic "Stopping Analytics Servers (Windows)" on page 166.

2. Make changes in the instanceconfig.xml or NQSConfig.INI files and save the files.

3. Restart the servers.

   See the topic "Restarting the Servers Under Windows" on page 169.

To update the configuration settings under UNIX

- Run one of the scripts shown in the following table.

Shell	Command
Bourne, Korn, or bash	sa-init.sh
C	sa-init.csh

NOTE: If your Siebel Analytics Server is installed on a UNIX machine, see the topic "About Editing the Siebel Analytics Initialization File Under UNIX" on page 105.

About the Analytics Web instanceconfig.xml File

Analytics License: All licenses.

Operating Systems: All.

Configuration settings for Siebel Analytics Web are located in the XML file instanceconfig.xml. You can customize Siebel Analytics Web by modifying the entries in instanceconfig.xml and adding new entries to override internal default settings.

You need to make changes to instanceconfig.xml only if you want to change default parameters, such as the name of the Siebel Analytics Web Catalog, or override internal default settings, such as the time for client connections to expire.

- For UNIX, this file is located at $INSTALLDIR/SiebelAnalyticsData/web/config
- For Windows, this file is located at $INSTALLDIR\SiebelAnalyticsData\Web\config

For information about the entries you can make to customize Siebel Analytics Web, and general information about customizing the instanceconfig.xml file, see *Siebel Analytics Web Administration Guide*.

About Localizing Siebel Analytics Server

If your deployment of Siebel Analytics is to be localized, see also the topics in the area "Localizing Siebel Analytics Deployments":

- "Changing Localization Variables in the Siebel Analytics Repository" on page 196
- "Localizing Sort Order Settings Under UNIX" on page 197
- "Process of Maintaining Translation Tables for Analytics" on page 201

Postinstallation Tests of Analytics Client and Server

Analytics License: All licenses.

Databases: All databases.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform.

After installing Siebel Analytics, you should perform tests of the Siebel Analytics Server and Siebel Analytics client installations, as detailed in the following topics:

- “Testing the Siebel Analytics Server Installation” on page 102
- “Testing the Analytics Client Installation” on page 103

While testing the Siebel Analytics Server installation, you may need to change connection pool settings for items such as the name of the database, the user ID and password, and other settings for the several repositories bundled with applications versions of Siebel Analytics. See the topic “Changing the Analytics Database Type” on page 112.

Testing the Siebel Analytics Server Installation

This task is part of the process "Postinstallation Tests of Analytics Client and Server."

Use the procedure that corresponds to your operating system to test the server setup.

Testing the Siebel Analytics Server Installation Under Windows

Operating System: Windows only.

Analytics License: All licenses.

Databases: All databases.

By default, the Siebel Analytics Server starts automatically when the machine it is installed on is rebooted. If you selected the startup type Manual during the installation, the following procedure tests your installation of the Siebel Analytics Server on Windows machines.

To test the Siebel Analytics Server installation under Windows

1. Navigate to Start > Programs > Administrative Tools > Services.
2. Select the Siebel Analytics Server service.
3. Start the service.

Testing the Siebel Analytics Server Installation Under UNIX

Operating System: UNIX only.

Analytics License: All licenses.

Databases: All databases.

The following procedure tests your installation of the Siebel Analytics Server on UNIX machines.

To test the Siebel Analytics Server installation under UNIX

1. Log out and close your X Window shell, then start a new X Window shell.
2. Start the Siebel Analytics Server from the $INSTALLDIR/setup directory by running one of the UNIX shell commands shown in the following table.

UNIX Shell Used	Command
Korn, Bourne, or bash	./run-sa.sh start
C	run-sa.csh start

Testing the Analytics Client Installation

This topic is part of the process "Postinstallation Tests of Analytics Client and Server."

To test the Siebel Analytics client setup under your operating system, use one of the following procedures.

Testing the Siebel Analytics Client Installation Under Windows

Operating System: Windows only.

Analytics License: All licenses.

Databases: All databases.

The following procedure tests your installation of the Siebel Analytics client on Windows machines.

To test the Siebel Analytics client installation under Windows

1 Navigate to Start > Programs > Siebel Analytics.

2 Select Siebel Analytics Administration.

Testing the Siebel Analytics Client Installation Under UNIX

Operating System: UNIX only.

Analytics License: All licenses.

Databases: All databases.

The following procedure tests your installation of the Siebel Analytics client on UNIX machines.

To test the Siebel Analytics client installation under UNIX

1 Run Siebel Analytics Client by opening another session. From the setup directory $INSTALLDIR/setup, run one of the UNIX shell commands shown in the following table.

UNIX Shell Used	Command
Korn, Bourne, or bash	. sa-cli.sh
C	source sa-cli.csh

To test the client/server connectivity, run:

nqcmd.exe

2 If the test is successful, press the Enter key several times to quit nqcmd.exe.

If the test is not successful, proceed to Step 3 on page 104.

3 Make sure all clients are disconnected from the Siebel Analytics Server, and then stop the server by running one of the UNIX shell commands shown in the following table.

UNIX Shell Used	Command
Korn, Bourne, or bash	run-sa.sh { start | {stop -d <data source name> -u <user name> -p <password>}}
C	run-sa.csh { start | {stop -d <data source name> -u <user name> -p <password>}}

For example:

```
run-sa.csh stop -d AnalyticsWeb -u Administrator -p SADMIN
```

About Editing the Siebel Analytics Initialization File Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

This topic gives more information on the procedures in the area "Configuring the Siebel Analytics Server."

The Siebel Analytics Server software uses an initialization file to set parameters upon startup. This initialization file is the NQSConfig.INI file. Under UNIX platforms, this file is located in the directory $INSTALLDIR/Config. If you change an entry when the server is running, you need to shut down and then restart the server for the change to take effect.

For more information on changing the NQSConfig.INI file, see the topic "Changing Analytics Configuration File Parameter Entries" on page 245.

7 Configuring the Siebel Analytics Data Sources

You must configure your data sources to work with Siebel Analytics. This process is part of the Roadmap for Configuring Siebel Analytics Platform.

After the Siebel Analytics installer is finished with the Analytics platform installation, there are a number of additional tasks you must complete in order to properly configure Siebel Analytics Siebel Analytics server components. The number of postinstallation data source configuration tasks you must complete depends on the following factors:

- The number and types of database platforms you are using
- The complexity of your network setup
- Whether or not your deployment is localized

For example, if you are installing only one DBMS on the Siebel Analytics platform, you have fewer configuration tasks to perform than if you are installing Siebel Analytics to work with a Siebel Industry Application using a Siebel Relationship Management Warehouse, deploying several DBMS, or using one or more localized languages.

Process of Changing the Analytics Database Settings

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

The database you use with Siebel Analytics may require that you change the Siebel Analytics database type or database connections settings. If this is the case for your deployment, perform the following tasks:

- Verify the database type and connection properties.
  - See the topic "About Locating the Database Setup Script Under UNIX" on page 110.
  - **Physical database type.**

    See the topic "Changing the Analytics Database Type" on page 112. For more details, see the topics about setting up database objects in *Siebel Analytics Server Administration Guide*.
  - **Database connection properties.**

    Your SiebelAnalytics.rpd application repository contains preconfigured database connections. You must reconfigure database connections to match your environment. See the topics "Changing the Siebel Analytics Database Connection Pool Settings" on page 113 and "About Changing Database Connection Pool Settings Under UNIX" on page 115.

    For more details, see the topics about setting up and managing connection pools in *Siebel Analytics Server Administration Guide*.
- After you reconfigure your database connections, you may need to perform the following tasks:
  - **Copying the repository file to the UNIX machine.**

    If you use AIX, HP-UX, or Solaris, copy the repository file to the UNIX machine.
- If you are using the Update Rowcount functionality and running a heterogeneous environment (servers on UNIX and Analytics Administration Tool on Windows), see the topic "About Updating Row Counts in Native Databases" on page 127.
- If you use Oracle DBMS, you may need to perform the following tasks:
  - "Setting the ORACLE_HOME Variable for Solaris" on page 118
  - "About Oracle Database Configuration in Siebel Analytics Server Under UNIX" on page 119
  - "Configuring Oracle Databases for the Siebel Analytics Server Under Windows" on page 120
  - "Configuring HP-UX with Oracle 9i Clients" on page 121
- If you use IBM DB2 DBMS, you may need to perform the following tasks:
  - "Configuring DB2 Connect Under UNIX" on page 117

- If you use ODBC, you need to perform the following task:
  - "Configuring an Analytics ODBC Data Source Under UNIX" on page 122
  - Under Windows, configuring Siebel Analytics ODBC Data Source Names is done through the Server Administration Tool. See the topic in the *Siebel Analytics Server Administration Guide*.
- If you use Teradata, you need to perform the following task:
  - "Configuring Teradata Data Source for Analytics Under UNIX" on page 124

About Locating the Database Setup Script Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

Databases: All databases.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform.

You must verify the validity of the database setup script, because it is called from the Siebel Analytics startup script. Edit the file to include the environment settings for the database client of your choice. Put your database-related setup script in one of the following files, as appropriate:

- $INSTALLDIR/setup/user.sh
- $INSTALLDIR/setup/user.csh

  Examples of valid database setup scripts:

  - Excerpts from user.sh

```
#For Oracle, Uncomment the following
# ORACLE Parameters
#--------------------------

# ORACLE_HOME=/export/home/siebel/oracle/9.0.1
# export ORACLE_HOME
# TNS_ADMIN=$ORACLE_HOME/network/admin
# export TNS_ADMIN
# PATH=$ORACLE_HOME/bin:/opt/bin:$PATH
# export PATH
# SHLIB_LIBRARY_PATH=$ORACLE_HOME/lib:$SHLIB_PATH:/opt/j2se/jre/lib/hp700

#--------------------------
# DB2 Parameters
#--------------------------

# The following line sources the db2profile. If your instance name differs
# from db2inst1, you must modify two locations in the following code examples

   . ~db2inst1/sqllib/db2profile

# Include lib32 at the beginning of the LIBPATH until such time as Siebel
# supports the native 64bit DB2 Client

   export LIBPATH=/home/db2inst1/sqllib/lib32:$LIBPATH
```

- Excerpts from user.csh

```
#For Oracle, Uncomment the following
# ORACLE Parameters
#--------------------------
# setenv ORACLE_HOME /export/home/siebel/oracle/9.0.1
# setenv TNS_ADMIN ${ORACLE_HOME}/network/admin
# setenv PATH ${ORACLE_HOME}/bin:/opt/bin:${PATH}
# setenv SHLIB_PATH ${ORACLE_HOME}/lib:${SHLIB_PATH}:/opt/j2se/jre/lib/hp700

#--------------------------
#DB2 Settings
#--------------------------
# The following line sources the db2profile. If your instance name differs
# from db2inst1, you must modify two locations in the following code examples
   . ~db2inst1/sqllib/db2profile

# Include lib32 at the beginning of the LIBPATH until such time as Siebel
#  supports the native 64bit DB2 Client
   export LIBPATH=/home/db2inst1/sqllib/lib32:$LIBPATH
```

NOTE: The two shell script excerpts shown in are examples only and are not recommendations for particular software platforms. See *Siebel System Requirements and Supported Platforms*.

Changing the Analytics Database Type

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

If you are using other database types than the default types shipped with Siebel Analytics, follow these steps to change the database type.

To change the database type

1 On a Windows computer, open the Server Administration Tool in offline mode.

NOTE: By default, the user name for the repository is Administrator, and the password for the repository is SADMIN. However, your administrator may have changed the default password. For information on how to use the Server Administration Tool, see *Siebel Analytics Server Administration Guide*.

2 In the Physical layer, double-click a database connection to open the Properties window.

3 Use the Data Source Definition drop-down list to choose the database type.

After making the database type change, click OK.

CAUTION: Be sure to change the default password before migrating to production.

Changing the Siebel Analytics Database Connection Pool Settings

Analytics License: All licenses.

Operating Systems: All.

Databases: All databases.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

The database you use with Siebel Analytics may require that you change the Siebel Analytics database connection pool settings.

While testing the Siebel Analytics Server installation, you may also need to change connection pool settings for items such as the name of the database, the user ID and password, and other settings for the several repositories bundled with applications versions of Siebel Analytics.

To change the Analytics database connection pool settings

1. On a Windows computer, open the Server Administration Tool in offline mode.

   NOTE: By default, the user name for the repository is Administrator, and the password for the repository is SADMIN. However, your administrator may have changed the default password.

2. In the Physical layer, double-click a database connection to open the Properties window. Expand the database connection to view the connection pool.

3. Double-click the Connection Pool and select the appropriate Call Interface.

   The default recommended call interface is automatically updated based on your connection type. Check the supported call interfaces before changing the default one.

   The preconfigured Connection Pool values are shown in the following table:

Connection Pool	Default DSN Name
OLAP Database	VALUEOF(OLAP_DSN)
OLTP Database	VALUEOF(OLTP_DSN)
OLAP User Name	VALUEOF(OLAP_USER)
OLTP User Name	VALUEOF(OLTP_USER)
User Password	db2

   Update the user password according to your environment. For more information on how to manage database connections, see *Siebel Analytics Server Administration Guide*.

4 For each database connection of your Siebel Analytics applications, repeat Step 3 of this procedure.

NOTE: If you are running Oracle, make sure that all Initialization Block connection pools are configured to use the correct logon, in order to prevent logon failures (for example, Pharma Initialization Blocks) for Siebel operational applications.

5 Save the repository.

6 For UNIX deployments, copy the repository file to the UNIX machine.

About Changing Database Connection Pool Settings Under UNIX

Analytics License: Analytics Applications only.

Operating System: UNIX only.

Databases: All databases.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

For Siebel Analytics deployments that use integrated data applications, you must reconfigure all the database connections appropriate to your environments. Reconfiguration includes the following steps:

- Changing the database types
- Changing the database connections
- Updating the user names and passwords

To reconfigure the database connections, follow the procedure shown in "Changing the Analytics Database Type" on page 112.

The application repository file SiebelAnalytics.rpd) contains multiple, preconfigured database connections. By default the database type is IBM DB2. When you start the Siebel Analytics Server, you receive linker errors in the NQServer.log, such as the following:

> [54009] Unable to create connection pool Internal System Connection Pool in repository Star.ld.so.1: /t3fs4/AN1393/SiebelAnalytics/Bin/nqsserver.exe: fatal: libdb2.so.1: open failed: No such file or directory
>
> [nQSError: 46029] Failed to load the DLL /t3fs4/AN1393/SiebelAnalytics/Bin/libnqsdbgatewaydb2cli35.so. Check if 'DB2 CLI' database client is installed.

This behavior is expected.

NOTE: Connection pool settings can be changed only in the Server Administration Tool, which is available only under Windows platforms. Edit the repository on a Windows platform and transfer it to the UNIX platform using FTP.

About Configuring Initialization Blocks

Typically, initialization blocks do not have to be reconfigured if you use one of the supported database platforms. The SQL for the applications repository initialization blocks and all selected tables are set for the Siebel Analytics-supported database versions of the following DBMS:

- IBM DB2
- Oracle
- Microsoft SQL Server
- Teradata

The SiebelAnalytics.rpd file uses initialization blocks that set dynamic session and repository variables. To prevent logon failures when running Oracle databases, make sure that all initialization blocks are configured to use the correct logon for Siebel operational applications.

For more information about variables, initialization blocks, and adding custom SQL in initialization blocks, see *Siebel Analytics Server Administration Guide*.

NOTE: To test your installation, you may need to change connection pool settings for items such as the name of the database, user ID, and password.

Configuring DB2 Connect Under UNIX

Analytics License: All licenses.

Operating System: z/OS or s/390 only.

Databases: IBM DB2 only.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

IBM DB2 Connect does not support the option of automatically disconnecting when an application using it receives an interrupt request. If you are running a relational database that uses DB2 Connect workstation, then you must change the setting of the parameter INTERRUPT_ENABLED. This parameter must be changed on any Siebel Analytics Server machine if the database or any data source resides on IBM DB2 on a mainframe running z/OS or s/390 platforms.

NOTE: If IBM DB2 is used, DB2 Connect must be installed on the Siebel Analytics Server machine. The version of DB2 Connect used must match the most recent DB2 instance, configured as a data source.

To configure the INTERRUPT_ENABLED parameter

1. Configure a database alias to be used as the native CLI Data Source Name. For example, create a new database entry using DB2 Configuration Assistant.
2. Using the database alias created and the name of the actual target DB2 database, set the INTERRUPT_ENABLED parameter using the following syntax:

   ```
   uncatalog dcs db local_dcsname
   catalog dcs db local_dcsname as target_dbname parms \",,INTERRUPT_ENABLED\"
   ```

   where:

   - *local_dcsname* represents the local name of the host or database (database alias name).
   - *target_dbname* represents the name of database on the host or database system.

   NOTE: Be sure to use backslashes to pass the quote marks as part of the string.

   The following example uses an OS390 DB2 instance:

   ```
   uncatalog dcs db DB2_390
   catalog dcs db DB2_390 as Q10B parms \",,INTERRUPT_ENABLED,,,,,\"
   catalog database DB2_390 as DB2_390 at node NDE1EF20 authentication dcs
   ```

Setting the ORACLE_HOME Variable for Solaris

Analytics License: All licenses.

Operating System: Solaris only.

Databases: Oracle only.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

If you are using some Oracle clients on Solaris, make sure that the ORACLE_HOME variable is set to specify 32-bit Oracle OCI libraries. The Oracle 9i client installation lib directory contains the 64-bit libraries, but Siebel Analytics only supports 32-bit operations.

To set the ORACLE_HOME variable for Oracle 9i clients

1 Specify the path to the lib32 directory in LD_LIBRARY_PATH, not the path to the lib directory.

```
setenv ORACLE_HOME /export/home/oracle/9202
setenv TNS_ADMIN /export/home
setenv PATH ${ORACLE_HOME}/bin:/opt/bin:${PATH}
setenv LD_LIBRARY_PATH ${ORACLE_HOME}/lib:${LD_LIBRARY_PATH}:/opt/j2se/jre/lib/
sparc
```

2 Run the following command:

```
setenv LD_LIBRARY_PATH export/home/oracle/9202/lib32:$LD_LIBRARY_PATH
```

3 From $INSTALLDIR/Bin, run the following command:

```
ln -s /export/home/oracle/9202/lib32/libclntsh.so libclntsh.so.9.0
```

NOTE: Only certain specific versions of Oracle clients are supported. See *Siebel System Requirements and Supported Platforms*.

About Oracle Database Configuration in Siebel Analytics Server Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

Databases: Oracle only.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

If your native database is Oracle, the following conditions must be true:

- The machine running Siebel Analytics Server must have the Siebel Analytics-supported Oracle Client installed.
- In the tnsnames.ora file, the Oracle database alias (the defined entry name) must be the same as the repository connection pool's CONNECT_DATA Data Source Name setting.
- In the repository file, the Oracle database alias used in the connection pools must also be the same as the Data Source Name.

To check your repository connection pool settings against the Oracle tnsnames.ora settings, see the procedure in "Changing the Analytics Database Type" on page 112.

Configuring Oracle Databases for the Siebel Analytics Server Under Windows

Analytics License: All licenses.

Operating System: Windows only.

Databases: Oracle only.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

When the native database is Oracle, the machine running Siebel Analytics Server must have the Siebel Analytics-supported Oracle Client installed. In the tnsnames.ora file, the defined entry name must match the Data Source Name used in the connection pools used in all Siebel Analytics repository physical Oracle databases.

For example, in the following example of a tnsnames.ora entry, the corresponding Siebel Analytics repository connection pool Data Source Name is ITQA2.

```
ITQA2 =
  (DESCRIPTION =
    (ADDRESS_LIST =
      (ADDRESS = (PROTOCOL = TCP)(HOST = ITQALAB2)(PORT = 1521))
  (CONNECT_DATA =
    (SERVICE_NAME = ITQALAB2.corp)
    )
  )
```

The following procedure shows how to check repository connection pool settings against the Oracle tnsnames.ora settings.

To check that an Oracle database refers to the Siebel Analytics Server machine

1. Log on to the Server Administration Tool.
2. In the physical layer, double-click on the appropriate OLTP cylinder icon. Expand it.
3. Double-click the appropriate OLTP Connection Pool to open the Connection pool window.
4. In the Connection Pool window, check that the following is true:
   - The Call Interface field displays the appropriate value for the release of Oracle being used.
   - The Data Source Name displays the Oracle alias that you have defined in the tnsnames.ora setting.

   NOTE: This Data Source Name is not the DSN name defined in Settings > Control Panel > Data Sources (ODBC).
5. In the Oracle folder, open the tnsnames.ora file.
6. Check that a valid entry name exists with the following characteristics:
   - Matches the Siebel Analytics repository's connection pool settings for the Data Source Name
   - Specifies the targeted Oracle physical database

Configuring HP-UX with Oracle 9i Clients

Analytics License: All licenses.

Operating System: HP-UX only.

Databases: Oracle only.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

Make this change only for HP-UX platforms using Oracle 9i clients.

To configure HP-UX platforms using Oracle 9i clients

1 Specify the path to the lib32 directory in SHLIB_PATH, not the path to the lib directory.

The Oracle 9i client installation lib directory contains the 64-bit libraries, but Siebel Analytics only supports 32-bit operations.

Example of these modifications (may not be true for your deployment):

```
/export/home/oracle/9.2.0.2/lib32:/vol1/hpbuild1/SiebelAnalytics/Bin:/vol1/hpbuild1/
SiebelAnalytics/mainsoft/odbc/ux11/lib:/vol1/hpbuild1/SiebelAnalytics/mainsoft/mw/lib-
ux11:/vol1/hpbuild1/SiebelAnalytics/mainsoft/mw/lib-ux11_optimized:/vol1/hpbuild1/
SiebelAnalytics/setup:/opt/j2se/jre/lib/
```

2 Modify the setting of the SHLIB_PATH in the user.sh or user.csh file so that the path to the lib32 directory appears at the beginning:

- For user.sh:

  ```
  SHLIB_PATH=$ORACLE_HOME/lib32:$SHLIB_PATH:/opt/j2se/jre/lib/hp700
  ```

- For user.csh:

  ```
  setenv SHLIB_PATH ${ORACLE_HOME}/lib32:${SHLIB_PATH}:/opt/j2se/jre/lib/hp700
  ```

Configuring an Analytics ODBC Data Source Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

Databases: NQSODBC only.

The following task is required if ODBC is the only data source of Siebel Analytics Server. The task is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

Under UNIX, the file odbc.ini contains the standard or clustered Siebel Analytics ODBC connection details that are used by the Siebel Analytics Web Server and nqcmd processes.

To configure ODBC as the single Siebel Analytics Server data source

1. Log on as a separate telnet session.
2. Go to the Siebel Analytics installation directory /$INSTALLDIR/setup.
3. Open the odbc.ini file.

   NOTE: The following table shows ODBC data source values for both the standard Siebel Analytics and the clustered Siebel Analytics configurations.
4. In the odbc.ini section [AnalyticsWeb], edit the name values as shown in the following table.

   NOTE: The string [$libsuffix] represents the library suffix appropriate to the specific UNIX operating system you are using.
   For example, for Solaris or AIX, use libnqsodbc.so; for HP-UX, use libnqsodbc.sl.

Standard Analytics Values	Clustered Analytics Values
Data Source Name=ODBC Data Source	Data Source Name=ODBC Data Source
AnalyticsWeb=Siebel Analytics Server	AnalyticsWeb=Siebel Analytics Server
Driver=[client $INSTALLDIR]/Bin/ libnqsodbc.[$libsuffix]	Driver=[client $INSTALLDIR]/Bin/ libnqsodbc.[$libsuffix]
Description=Siebel Analytics Server	Description=Siebel Analytics Server
ServerMachine=local	ServerMachine=local
Port=9703	Port=9703
Repository=	Repository=
Catalog=	Catalog=
UID=	UID=

Standard Analytics Values	Clustered Analytics Values
PWD=	PWD=
	FinalTimeOutForContactingCCS=7
	InitialTimeOutForContacting
	PrimaryCCS=1
	IsClusteredDSN=Yes
	PrimaryCCS=[Primary Cluster Controller Name]
	PrimaryCCSPort=9706
	SecondaryCCS= [Secondary Cluster Controller Name]
	SecondaryCCSPort=9706 **NOTE:** The primary CCS and secondary CCS should not be on the same machine.
	Regional=No

Configuring Teradata Data Source for Analytics Under UNIX

Analytics License: Analytics Applications only.

Operating System: UNIX only.

Databases: Teradata only.

This topic is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

This task is required if Teradata is to be configured as the only data source of Siebel Server.

Before beginning the following procedure, you must know the following information:

- The default installation directory paths for Teradata on UNIX, as shown in the following table of Teradata installation default paths under UNIX.

Platform	Default Installation Path
Solaris, HP/UX	/usr/odbc
AIX	/usr/lpp/tdodbc

- The IP address of the Teradata server.

To configure Teradata as a Siebel Server data source

1. Log on as a separate telnet session.
2. Go to the Siebel Analytics installation /setup directory.
3. Using vi or another text editor, open the odbc.ini file and add the following section to odbc.ini:

   Data Source Name=[Name of the DSN]

   Driver=<Teradata ODBC driver Path>/drivers/tdata.[$libsuffix]

   Description=NCR 3600 running Teradata V2R5.2r

   DBCName=<Teradata Server IP Address>

   LastUser=

   Username=

   Password=

   Database=

   DefaultDatabase=<name of target database or user>

   NOTE: The string [$libsuffix] represents the library suffix appropriate to the specific UNIX operating system you are using.
   For example, for Solaris or AIX, use libnqsodbc.so; for HP-UX, use libnqsodbc.sl.

Example 1. The following is true:

- Teradata server is running on IP 172.20.129.42
- Teradata ODBC driver is installed at /usr/odbc

Therefore, for Example 1, add the following section to odbc.ini:

```
[Terav502]
Driver=/usr/odbc/drivers/tdata.sl
Description=NCR 3600 running Teradata V2R5.2
DBCName=172.20.129.42
LastUser=
Username=
Password=
Database=
DefaultDatabase=<name of target database or user>
```

Example 2. The following is true:

- Teradata server is running on IP 172.20.129.42
- Teradata ODBC driver is installed on /usr/lpp/tdodbc

Therefore, for Example 2, add the following section to odbc.ini:

```
[Terav502]
Driver=usr/lpp/tdodbc/odbc/drivers/tdata.so
Description=NCR 3600 running Teradata V2R5.2
DBCName=172.20.129.42
LastUser=
Username=
Password=
Database=
DefaultDatabase=<name of target database or user>
```

NOTE: The DefaultDatabase parameter may be left empty only if you have checked the entry *Require fully qualified table names* in the Repository Connection Pool for this Data Source.

4 In the same file, in the section [ODBC Data Sources], add the following entry:

Terav502=tdata.[$libsuffix]

Example: The new Teradata DSN is Terav502. Therefore, add the DSN entry to odbc.ini:

[ODBC Data Sources]

AnalyticsWeb=Siebel Analytics Server

SnowFlake=Siebel Analytics Server

AutoSnowFlake=Siebel Analytics Server

DimSnowFlake=Siebel Analytics Server

DimSnowFlake=Siebel Analytics Server

Star=Siebel Analytics Server

Terav502=tdata.[$libsuffix]

NOTE: The string [$libsuffix] represents the library suffix appropriate to the specific UNIX operating system you are using.
For example, for Solaris or AIX, use libnqsodbc.so; for HP-UX, use libnqsodbc.sl.

5 Open the user.sh script in the same directory and add the library path line (based on the operating system and shell) to configure the Siebel Analytics data source, as shown in the following table of library path commands:

Operating System	Shell	Library Path
AIX	Korn Bourne bash	LIBPATH=$LIBPATH:/usr/lpp/tdodbc/odbc/drivers:/usr/lpp/tdodbc/odbc/ lib export LIBPATH
	C	setenv LIBPATH $LIBPATH: /usr/lpp/tdodbc/odbc/drivers:/usr/lpp/tdodbc/odbc/lib
Solaris	Korn Bourne bash	LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/odbc/drivers:/usr/odbc/lib export LD_LIBRARY_PATH
	C	setenv LD_LIBRARY_PATH $LD_LIBRARY_PATH:/usr/odbc/drivers:/usr/odbc/lib

6 Using the Siebel Analytics Administration Tool, open the Repository and add the new DSN you created as the Connection Pool Data Source Name for the appropriate physical databases.

In the example, add Terav502.

7 Start the Analytics server or, if it is running, stop and restart it.

About Updating Row Counts in Native Databases

Analytics License: All licenses.

Operating System: UNIX only.

This topic applies if you are using the Update Rowcount functionality and running a heterogeneous environment, such as Siebel Analytics Server and database under UNIX, while remote Administrator users run the Server Administration Tool on Windows machines.

When using the Update Rowcount functionality, the Server Administration Tool uses local ODBC sources on the client machine, *not* the server ODBC sources. Therefore, Oracle or DB2 data sources must be configured on the Windows machine running Server Administration Tool so that the following conditions are true:

- Data sources point to the same DBMS identified in the Siebel Analytics user.csh or user.sh file on the UNIX server.
- The name of the local data source also must match the name of the data source defined in the Connection Pool object in the physical layer of the Siebel Analytics repository (.rpd) file.

If these conditions are not true, and if the server and client data sources are pointing at different databases, then erroneous updated row counts or incorrect results appear.

8 Configuring Siebel Analytics Web Server

Analytics License: All licenses.

Operating Systems: All.

This process is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

This process describes the configuration of the components required to run Siebel Analytics Web. If you included the Siebel Analytics Web component during the Siebel Analytics Platform installation, you should follow this process.

The Siebel Analytics Web server functions as the connection between any user of Siebel Analytics and the processes of the Siebel Analytics Server processes. After the Siebel Analytics installer is finished with the Analytics platform installation, there are a number of additional tasks you must complete in order to properly configure Web server components.

Configuration of the Siebel Analytics Web components consists the following tasks:

- "Configuring Analytics Web" on page 130
- "Configuring HTTP Web Servers for Analytics" on page 132
- "Testing the Analytics Web Server" on page 138

About Siebel Analytics Web Server Components

Siebel Analytics Web consists of the Siebel Analytics Web Server and the Web (or HTTP) integration server running as separate processes.

NOTE: The Analytics Web, Analytics Client, and Analytics Server components can be installed to run on separate machines.

- The Analytics Web Server process (sawserver.exe) hosts most of the business logic of Siebel Analytics Web and performs all the functions.
- The Web (HTTP) integration server is a J2EE application server that hosts a Java servlet, which creates socket connections to Siebel Analytics Web server and uses TCP/IP to redirect HTTP requests to Siebel Analytics Web server.

  The servlet conforms to the Java Servlet 2.2 specification, and therefore part of the installation process involves deployment of this servlet.

The Web integration server communicates with Analytics Web server using a proprietary TCP/IP based protocol. In this protocol the HTTP server acts as a client and initiates new connections, while the Analytics Web server listens for incoming requests.

NOTE: Make sure that this special TCP/IP protocol is allowed by all firewalls or proxy servers in use. The default TCP/IP listening port for Analytics Web server is 9710.

Configuring Analytics Web

Analytics License: All licenses.

Operating Systems: All.

This task is part of the process "Configuring Siebel Analytics Web Server."

After installing Siebel Analytics Web, the general process of configuring the Analytics Web server with the HTTP server is as follows:

1 Configure a third-party Web integration server.

- "Configuring HTTP Web Servers for Analytics" on page 132
- "Testing the Analytics Web Server" on page 138

2 Create a link to the Siebel Analytics Web server from the third-party Web server.

- If Siebel Analytics Web is installed on a different machine than Siebel Analytics Server, configure the Siebel Analytics Web machine as shown in the topic "Configuring Analytics Web Installed on a Separate Machine from Analytics Server" on page 131.
- If you plan to use Microsoft ISAPI, or if the IIS and Siebel Analytics Web servers are to run on different machines, see the topic "Configuring the ISAPI Plug-In for Siebel Analytics Web" on page 137.

NOTE: If you are deploying Web servers under UNIX systems, you should deploy a WAR file. If you are deploying Web servers under Windows systems, you should deploy the ISAPI extension.

Configuring Analytics Web Installed on a Separate Machine from Analytics Server

Analytics License: All licenses.

Operating Systems: All.

This task is part of the process "Configuring Siebel Analytics Web Server."

If Siebel Analytics Web is installed on a different machine than Siebel Analytics Server, configure the Siebel Analytics Web machine as shown in the following procedure.

To configure Siebel Analytics Web installed on a different machine from the Siebel Analytics Server

1. On the machine where Siebel Analytics Web is installed, modify the odbc.ini file (located in the folder $INSTALLDIR/setup) as follows:

   [AnalyticsWeb]

   Driver=[client $INSTALLDIR]/Bin/libnqsodbc.[$libsuffix]

   NOTE: The string [$libsuffix] represents the library suffix appropriate to the specific UNIX operating system you are using.
   For example, for Solaris or AIX, use libnqsodbc.so; for HP-UX, use libnqsodbc.sl.

   Description=Siebel Analytics Server

   ServerMachine=<Hostname of the Analytics Server machine>

   Port=<Analytics Server port>

2. Save and close the file.

Configuring HTTP Web Servers for Analytics

Analytics License: All licenses.

Operating Systems: All.

This task is part of the process "Configuring Siebel Analytics Web Server."

There are two basic methods to configure a third-party Web integration (or HTTP) server to work with Siebel Analytics Web:

Using a WebArchive (WAR) File (standard—supported by all Java servers)

- "Editing the web.xml File" on page 133
- "Creating a WebARchive (WAR) File for Siebel Analytics Web" on page 134
- "Deploying a WAR File for Siebel Analytics Web" on page 135

Using a Web Share (supplemental—not supported by all Java servers)

- "Creating a Web Share for Siebel Analytics Web" on page 136

NOTE: If you are deploying Web servers under UNIX systems, you should deploy a WAR file. If you are deploying Web servers under Windows systems, you should deploy the ISAPI extension.

Editing the web.xml File

Analytics License: All licenses.

Operating Systems: All.

This task is part of the process "Configuring Siebel Analytics Web Server."

If you are configuring a third-party Web integration (or HTTP) server to work with Siebel Analytics Web using the method "Creating a WebARchive (WAR) File for Siebel Analytics Web," perform this task first, because the edited web.xml file is included in the generated analytics.war file.

You edit the web.xml file to reconfigure the Analytics Web server location and listening port if one of the following conditions is true for your deployment:

- The HTTP server and the Analytics Web server are running on different machines
- The Analytics Web server is configured to use a different TCP/IP port from the default (9710)

CAUTION: Make sure that XML syntax is strictly followed when editing this file. Any XML syntax errors may result in your virtual server failing to start.

In the web.xml file, the XML elements that configure the SAWBridge servlet are shown in the following excerpt:

```
<servlet>
  <servlet-name>SAWBridge</servlet-name>
    <servlet-class>com.siebel.analytics.web.SAWBridge</servlet-class>
      <init-param>
        <param-name>com.siebel.analytics.web.SAWServer.Host</param-name>
        <param-value>localhost</param-value>
      </init-param>
      <init-param>
        <param-name>com.siebel.analytics.web.SAWServer.Port</param-name>
        <param-value>9710</param-value>
      </init-param>
</servlet>
```

To edit the web.xml file

1. Using a text file, open the web.xml file, located in the $INSTALLDIR/web/app/WEB-INF directory.
2. Change the values of the following <param-name> parameters to reflect the correct settings:
   - com.siebel.analytics.web.SAWBridge
   - com.siebel.analytics.web.SAWServer.Port
3. Save and close the web.xml file.

Creating a WebARchive (WAR) File for Siebel Analytics Web

Analytics License: All licenses.

Operating Systems: All.

This task is part of the process "Configuring HTTP Web Servers for Analytics."

A default prepackaged analytics.war file is included with the Siebel Analytics Web installation, located as shown in the following table.

However, if you modify the web.xml file (for example, to reconfigure the Analytics Web server location and listening port), then you should recreate the analytics.war file. This task uses the jar utility included in the Java JDK 1.4 package (found in the <JDK Root>/bin directory).

NOTE: Perform the procedure "Editing the web.xml File" on page 133 before performing this procedure, because the edited web.xml file is included in the generated analytics.war file.

TIP: You may need to have access to a JDK (not just a JRE) for creating the WAR file. Make sure that JDK\bin is in your PATH.

This procedure uses the following file locations and commands:

	Windows Platform	UNIX Platform
Location of analytics.war file	`$INSTALLDIR\SiebelAnalytics`	`/usr/local/SiebelAnalytics`
Jar command	`jar -cf Analytics.war -C Web .`	`jar -cf Analytics.war -C web/app .`

To create or recreate a WAR file

1. Navigate to the Siebel Analytics installation directory shown in the preceding table.
2. To create the WAR file, run the jar command shown in the preceding table.

   NOTE: You must include the period at the end of the command.

Deploying a WAR File for Siebel Analytics Web

Analytics License: All licenses.

Operating Systems: All.

This task is part of the process "Configuring HTTP Web Servers for Analytics."

If you are configuring a third-party Web integration (or HTTP) server to work with Siebel Analytics Web using the method Creating a WebARchive (WAR) File for Siebel Analytics Web, the specific WAR file you modify depends on the Web application server you are using. Consult your Web server documentation for product-specific instructions, and follow the following general steps.

NOTE: To configure the Siebel Analytics Web ReportUI Portlet for WebSphere, see *Siebel Analytics Web Administration Guide*.

To deploy a WAR file for Siebel Analytics Web

1. Using HTTP Web server-specific tools, deploy the Web application contained in the analytics.war file.
2. Assign the URL /analytics to the analytics.war file.

About Web Server Scratch Directories for Servlet Containers (UNIX)

Analytics License: All licenses.

Operating System: UNIX only.

The default server page for the Siebel Analytics Web servlet is default.jsp. The Web server tries to access a scratch directory to handle the Java server page. If there is no scratch directory set up, exceptions appear in the Web server logs. See your Web server documentation for how to set up a scratch directory or working directory for a Web application.

Creating a Web Share for Siebel Analytics Web

Analytics License: All licenses.

Operating Systems: All.

This task is part of the process "Configuring HTTP Web Servers for Analytics."

This method is simpler than that described in "Creating a WebARchive (WAR) File for Siebel Analytics Web" on page 134, but is not supported by all Java Web servers. Apache Tomcat server and some versions of Sun One server do support this method.

You can use this method if your Web server supports creation of Web shares by mapping the root URL to a directory on the hard drive.

To create a Web share

- Assign the URL /analytics to the <Analytics Root>/web/app directory.

Configuring the ISAPI Plug-In for Siebel Analytics Web

Analytics License: All licenses.

Operating System: Windows only.

This topic is part of the process "Configuring Siebel Analytics Web Server."

This task is necessary if one of the following is true:

- You are using the Microsoft ISAPI Web extension or plug-in to create a link between Analytics Web and HTTP Web servers
- The Siebel Analytics Web and IIS servers are to run on different machines, thus separating the HTTP Server Components from the Siebel Analytics Platform Components

Then this topic becomes a task in the process "Configuring Analytics Web."

The ability to separate the Analytics Web ISAPI plug-in and the Analytics Web service onto different machines provides control over network and resource allocation and partitioning when firewalls are used. All of the settings can be configured through the Windows registry file. The J2EE Container plug-in ties the supported Web server on UNIX to Siebel Analytics Web.

To configure an ISAPI plug-in for Siebel Analytics Web

1. In the registry located on the Web server, add the following entry:

   TIP: HKEY_LOCAL_MACHINE\SOFTWARE\Siebel Systems, Inc.\Siebel Analytics\Web\7.8\ISAPI\ServerConnectString

2. Create the following value:

   sawtcp://<*this is the fully-qualified domain name of the Analytics Web server*>:<*and the Analytics Web server listening port*>. For example, sawtcp://sastest:9710

   Port 9710 is the default port on which the Analytics Web Service listens to remote procedure calls from one or more plug-ins.

   NOTE: Make sure that the fully-qualified domain name of the Web server is set up as a host with its own IP address.

3. Save the file when you are done.

Testing the Analytics Web Server

Analytics License: All licenses.

Operating Systems: All.

This task is part of the process "Configuring Siebel Analytics Web Server."

After configuring the HTTP integration server, test the Siebel Analytics Web server.

To test the Web server installation

1. Start the Siebel Analytics Web server.

   (See the topic "Restarting the Servers Under UNIX" on page 170.)

2. Start the integration server process being used for Analytics Web.

3. Open a Web browser and attempt to browse to the location where you have installed Analytics Web.

   In the example, the URL is:

   http://<*ServerName*>:<*port number*>/analytics/saw.dll?Dashboard

   Replace <*ServerName*> with the correct server name and <*port number*> with the appropriate port number.

   If you see a login page, you have successfully installed Siebel Analytics Web server.

9 Configuring Siebel Analytics Scheduler Server

This process is part of the Roadmap for Configuring Siebel Analytics Platform on page 40.

After the Siebel Analytics installer is finished, there are a number of additional tasks you must complete in order to properly configure Siebel Analytics Scheduler server components. umber of additional tasks you must complete in order to properly configure Web server components.

TIP: If you are migrating a Siebel Analytics environment to a new system, make sure you also migrate the Siebel Analytics Server repository file and the Scheduler tables. The Scheduler tables are required for iBots.

Siebel Analytics Scheduler Server Components

The Scheduler components consist of:

- Scheduler Job Manager
- The command line executable saschconfig.exe
- The command line executable saschinvoke.exe

What the Scheduler Server Does

Scheduler uses a single commercial back-end database to store pertinent information about a job, its instances, and its parameters. The Scheduler works with all the supported databases for Siebel Analytics. For the complete list of supported databases, see *Siebel System Requirements and Supported Platforms*.

The Scheduler service starts only if the back-end database satisfies the following conditions:

Back-End Database Requirement	Notes
Configured	There is a one-to-one relationship between the back-end database and Siebel Analytics Scheduler. Do not configure multiple Siebel Analytics Scheduler applications to use a single back-end database.
Operational	For information about the specific back-end databases supported by Siebel Analytics Scheduler, see *Siebel System Requirements and Supported Platforms* on Siebel SupportWeb.
Mixed Authentication Mode	For example, if the database is SQL Server, then the security mode should be set to allow both SQL Server and Windows Authentication for logon. Do not use operating system authentication for the back-end database login. If you do, the Scheduler service may not start in some cases.

Configuring the Siebel Analytics Scheduler Components

Depending upon your specific licensing and deployment situation, you may need to use one or more of the following Analytics Scheduler configuring topics:

- "Process of Configuring Scheduler Server for Stand-Alone Analytics" on page 141
- "Creating Analytics Scheduler Databases and Tables" on page 142
- "Configuring Scheduler and Analytics Web Servers Installed on Separate Machines" on page 145
- "Configuring Scheduler Under UNIX Platforms" on page 147
- "Changing Scheduler Table Names Under Windows" on page 148
- "Changing Scheduler Table Names Under UNIX" on page 149
- "Siebel Analytics Scheduler As a Background Process (UNIX)" on page 150
- "Updating the Scheduler Configuration (UNIX)" on page 151

For all other Scheduler Server configuration tasks, see the *Siebel Analytics Scheduler Guide*, located under the Windows directory $INSTALLDIR\SiebelAnalytics\Document.

Process of Configuring Scheduler Server for Stand-Alone Analytics

Analytics License: Platform only.

Operating System: Windows only.

This topic is part of the process "Configuring Siebel Analytics Scheduler Server."

The process described in this topic is only for sites that are running the Siebel Analytics platform only and using Siebel Analytics Scheduler.

NOTE: If you are not using Scheduler, you do not need the information in this topic.

- If you are using Scheduler, also see *Siebel Analytics Scheduler Guide*.

The process of creating and configuring Scheduler tables consists of the following tasks:

- "Creating Analytics Scheduler Databases and Tables" on page 142
- "Creating Analytics Scheduler Databases and Tables for a Relational Database" on page 143

  NOTE: If you are running Siebel Analytics applications, you do not have to manually create the relational database tables.

TIP: If you are upgrading from any version of Siebel Analytics prior to version 7.5, contact Siebel Technical Support for assistance. For versions 7.7 and later, the Analytics Scheduler tables are included in the Siebel operational applications transactional database.

Creating Analytics Scheduler Databases and Tables

Analytics License: Platform only.

Operating System: Windows only.

Databases: All databases.

This task is part of the "Process of Configuring Scheduler Server for Stand-Alone Analytics." You can either create a new database in which to store the tables or use an existing database.

NOTE: Before you create a database and tables, you must have an administrative sign-on account.

To create a database and tables for use by Analytics Scheduler

1. Make sure that you have a valid administrative account to create a database and tables.
2. Create the database, or use an existing database.
3. Create the Scheduler tables by executing SAJOBS.*xxx*.sql (where *xxx* is the database type).

   Use the appropriate procedure for your back-end database, as shown in "Creating Analytics Scheduler Databases and Tables for a Relational Database" on page 143.

   If you are using usage statistics, create the table in SAACCT.*xxx*.sql.

Table 23 gives brief descriptions of the database tables used by Siebel Analytics Scheduler.

Table 23. Tables Used by Analytics Scheduler

Table Name	Table Description
S_NQ_JOB	This table is used by Scheduler to store information about scheduled jobs.
S_NQ_INSTANCE	The S_NQ_INSTANCE table stores information about scheduled job instances.
S_NQ_ERR_MSG	This table stores error messages for Scheduler job instances that do not complete successfully.
S_NQ_JOB_PARAM	This table holds information about Scheduler job parameters for scheduled jobs.

In addition to the database tables shown in Table 23, Analytics Scheduler uses the S_NQ_ACCT table.

NOTE: The S_NQ_ACCT table. is independent of Scheduler.

If usage tracking is enabled in NQSConfig.INI, Siebel Analytics Server generates Usage Tracking data files. A sample JavaScript is provided, which extracts information from the Usage Tracking files and loads them to a table in the relational database. The S_NQ_ACCT table stores all the information regarding Accounting Data. (For information about usage tracking, see *Siebel Analytics Server Administration Guide*.)

Creating Analytics Scheduler Databases and Tables for a Relational Database

Analytics License: Platform only.

Operating Systems: All.

This task is part of the "Process of Configuring Scheduler Server for Stand-Alone Analytics."

The following procedures describe how to create a database and tables for specific relational databases:

- Microsoft SQL Server
- Oracle
- IBM DB2

  NOTE: Teradata is not supported in this version of Scheduler.

Creating a Scheduler Database and Tables for SQL Server

Databases: MS SQL Server only.

Use the following procedure to create a Scheduler database and tables for Microsoft SQL Server.

NOTE: For usage statistics, create the table in SAACCT.MSSQL.sql.

To create a database and tables for Microsoft SQL Server

1. Create a database named S_NQ_SCHED using Enterprise Manager. Make sure that you have enough free disk space to accommodate Siebel Analytics Tables (a minimum of 500 MB for Siebel Analytics applications).
2. Using S_NQ_SCHED as the current database, use Query Analyzer to open the file SAJOBS.MSSQL.sql and execute it to create the Siebel Analytics Scheduler tables.
3. Open the file SAACCT.MSSQL.sql and execute it to create the Accounting table.

Creating a Scheduler Database and Tables for Oracle

Databases: Oracle only.

Use the following procedure to create a Scheduler database and tables for Oracle.

NOTE: For usage statistics, create the table in SAACCT.Oracle.sql.

To create a database and tables for Oracle

1. Proceed in one of the two following ways:
   - Create a new database named S_NQ_SCHED, and create a user named S_NQ_SCHED.
   - In one of your existing databases, create a user named S_NQ_SCHED.

2 Provide your own password to the user S_NQ_SCHED.

3 Using the Oracle client configuration tool, create an Oracle Service to the current S_NQ_SCHED database with this user ID and password.

4 Using the SQL Worksheet, open the file SAJOBS.Oracle.sql and execute it to create Siebel Analytics Scheduler tables.

5 Open the file SAACCT.Oracle.sql and execute it to create the Accounting table.

Creating a Scheduler Database and Tables for IBM DB2

Databases: IBM DB2 only.

Use the following procedure to create a Scheduler database and tables for IBM DB2.

NOTE: For usage statistics, create the table in SAACCT.DB2.sql.

To create a database and tables for IBM DB2

1 Create a database named S_NQ_SCHED with a valid user ID and password.

2 Using Command Center, open the file SAJOBS.DB2.sql and execute it to create Siebel Analytics Scheduler tables.

3 Open the file SAACCT.DB2.sql and execute it to create the Accounting table.

Configuring Scheduler and Analytics Web Servers Installed on Separate Machines

Analytics License: All licenses.

Operating Systems: All.

This topic is part of the process "Configuring Siebel Analytics Scheduler Server."

When the Scheduler and the Analytics Web Server are not installed on the same machine, the instanceconfig.xml setting must be specified on the Analytics Web Server machine to point to the Scheduler machine address.

Changing the ScheduleServer Configuration Setting

Use the following procedure for changing ScheduleServer on Windows and UNIX machines.

To change the ScheduleServer registry setting

1 Navigate to Siebel Analytics data directory at the location shown in the following table:

Platform	Data Directory Location
Windows	\SiebelAnalyticsData\Web\config
UNIX	/SiebelAnalyticsData/web/config

Locate the file instanceconfig.xml and make a backup copy.

2 Using a text editor, open the file instanceconfig.xml.

3 After the <ServerInstance> tag, create the tag pair <Alerts> and </Alerts>.

4 Between the Alerts tags, create the tag pair <ScheduleServer> and </ScheduleServer>.

5 Between the ScheduleServer tags, insert the text shown in the following table:

Platform	Scheduler Server Location
Windows	Machine name of the Scheduler machine running Analytics Web Server. For example: <Alerts> <ScheduleServer>\\SAWmachine</ScheduleServer> </Alerts>

Platform	Scheduler Server Location
UNIX	Machine IP address of the Scheduler machine running Analytics Web Server. For example: <Alerts> <ScheduleServer>127.20.174.100</ScheduleServer> </Alerts>

6 Save the file when you are done.

Your changes take effect when the Analytics Web Server service is restarted.

Configuring Scheduler Under UNIX Platforms

Analytics License: All licenses.

Operating System: UNIX only.

This topic is part of the process "Configuring Siebel Analytics Scheduler Server."

You do not need to use Job Manager to configure the Scheduler service under UNIX platforms. Instead, you can use Siebel Analytics Web settings in the instanceconfig.xml file, as shown in the following procedure. Otherwise, it will raise the following error message when starting Scheduler service:

[nQSError: 12008] Unable to connect to port 9705 on machine localhost.

To configure the Scheduler service under UNIX platforms

1. Open the instanceconfig.xml file.
2. Add the following lines between <ServerInstance> and </ServerInstance> tags :

```
<Alerts>
  <Enabled>Yes</Enabled>
</Alerts>
<ScheduleServer> [SchedulerMachine_IP_address] </ScheduleServer>
```

3. Save and close the instanceconfig.xml file.

Changing Scheduler Table Names Under Windows

Analytics License: All licenses.

Operating System: Windows only.

This topic is part of the process "Configuring Siebel Analytics Scheduler Server."

You can change the names of the tables that Scheduler uses by adding settings to the Windows registry, as shown in the following example.

NOTE: For this example, a new key named DB Column Names has been created.

To change table names for Analytics Scheduler (Windows)

1. In the registry, navigate to HKEY_LOCAL_MACHINE\SOFTWARE\Siebel Systems, Inc.\Siebel Analytics\Scheduler\7.8\.
2. Create a new key, DB Column Names.
3. Under the DB Column Names key, add the subkey and string values shown in the following table.

Name	Type	Data
TABLE_JOBS	REG_SA	S_NQ_JOB
TABLE_INSTANCES	REG_SA	S_NQ_INSTANCE
TABLE_PARAMS	REG_SA	S_NQ_JOB_PARAM
TABLE_ERRMSGS	REG_SA	S_NQ_ERR_MSG

The values you created in the data string become the values used for Scheduler table names.

NOTE: Changing the table names requires a restart of Scheduler.

Changing Scheduler Table Names Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

This topic is part of the process "Configuring Siebel Analytics Scheduler Server."

NOTE: Before modifying the instanceconfig.xml file, set up the UNIX environment with the command scripts sa.sh or sa.csh, as described in "Siebel Analytics Scripts for Korn, Bourne, or Bash Shells" on page 154 and "Siebel Analytics Scripts for C Shell" on page 156.

Set the UNIX display, then continue with the following procedure.

To change table names for Analytics Scheduler (UNIX)

1. Navigate to Siebel Analytics data directory at the following location:

   /SiebelAnalyticsData/web/config

2. Locate the file instanceconfig.xml and make a backup copy.
3. Using a text editor, open the file instanceconfig.xml.
4. After the <ServerInstance> tag, create the tag pair <DBColumnNames> and </DBColumnNames>.
5. Between the DBColumnNames tags, create the tag pairs shown in the following table.

Tag Pair	Value
<TableJobs> </TableJobs>	S_NQ_JOB
<TableInstances> </TableInstances>	S_NQ_INSTANCE
<TableParams> </TableParams>	S_NQ_JOB_PARAM
<TableErrmsgs> </TableErrmsgs>	S_NQ_ERR_MSG

   Between each of these tag pairs, enter the values shown in the table. These are the values used for Scheduler table names. For example:

```
<DBColumnNames>
  <TableJobs>S_NQ_JOB</TableJobs>
  . . .
</DBColumnNames>
```

6. Save the file when you are done.
7. From the Analytics /setup directory, run the following command to import the modified configuration file:

   $ sa-cli.sh

   Your changes take effect when the Analytics Web Server service is restarted.

Siebel Analytics Scheduler As a Background Process (UNIX)

Analytics License: All licenses.

Operating System: UNIX only.

This topic is part of the process "Configuring Siebel Analytics Scheduler Server."

Under UNIX systems, starting Siebel Analytics Scheduler as a background process requires that you perform the following procedure.

To start Scheduler as a background process under UNIX

1. Export the display to an X Window server that is always running.
2. Run the initialization script.
3. Run the Siebel Analytics Scheduler executable.

Shell	Command Syntax
C	setenv DISPLAY="<my_account>":0.0 sa.sh nqscheduler.exe
bash	$ export DISPLAY="<my_account>":0.0 sa.sh nqscheduler.exe &

You may need to modify these examples for other shells or to use DISPLAY options.

Updating the Scheduler Configuration (UNIX)

Analytics License: All licenses.

Operating System: UNIX only.

This topic is part of the process "Configuring Siebel Analytics Scheduler Server."

After the tables have been created, update the Scheduler configuration using the command:

schconfig.exe

10 Administering Analytics Servers

This area contains tasks or commands to administer the Siebel Analytics server interactions with your operating system. These topics apply to administration tasks for both Windows and UNIX platforms:

- "Siebel Analytics Scripts for Korn, Bourne, or Bash Shells" on page 154
- "Siebel Analytics Scripts for C Shell" on page 156
- "Default Settings for Siebel Analytics Server Configuration Files" on page 158
- "Stopping the Analytics Servers" on page 166
- "Restarting the Analytics Servers" on page 169
- "Changing the Account Under Which a Windows Service Runs" on page 171
- "Siebel Analytics Executable Files" on page 172

TIP: If you are licensed for Siebel CRM applications, proceed to the set of tasks for integrating Analytics Dashboards and operational applications data. See the *Siebel Analytics Applications Installation and Administration Guide*.

NOTE: For administration of the Siebel Analytics repository and Siebel Analytics Web catalog, see the *Siebel Analytics Server Administration Guide* and the *Siebel Analytics Web Administration Guide*.

Siebel Analytics Scripts for Korn, Bourne, or Bash Shells

Analytics License: All licenses.

Operating System: UNIX only.

Scripts are provided for basic UNIX settings of Siebel Analytics Server. The Analytics scripts for Korn, Bourne, or bash shells are shown in Table 24 on page 154. These scripts are located in the directory $INSTALLDIR/setup.

Table 24. Siebel Analytics Scripts for Korn, Bourne, or Bash Shells

Script	Purpose
run-sa.sh start	Automatically calls sa.sh and user.sh and starts the Siebel Analytics Server. **CAUTION:** Siebel Analytics does not support more than one server instance on the same machine at one time.
run-sa.sh stop	Stops the Siebel Analytics Server.
sa.sh	Sets up the environment for manual management. Run this under the current shell (source the script). Under this mode, you can run the Siebel Analytics Server manually. **NOTE:** This file sets environment variables and must be executed appropriately for those variables to be exported to the current shell. Usage: . sa.sh
run-saw.sh start	Automatically calls saw.sh and starts the Siebel Analytics Web Server.
saw.sh	Sets up the environment for manual management of Siebel Analytics Web. Run this under the current shell (source the script). Under this mode, you can run the Siebel Analytics Web Server manually.
run-sch.sh	Starts the Scheduler. Usage: run-sch.sh { start | stop -p <password>} **NOTE:** If there is no terminal on the machine, you must define a DISPLAY environment variable in order for Scheduler to start. If the machine running Scheduler has a monitor running X Window, point it to itself. If it has no monitor, point it to another machine running X Window.
run-ccs.sh	Starts the cluster controller. Usage: run-ccs.sh { start | stop | forcestop }

Table 24. Siebel Analytics Scripts for Korn, Bourne, or Bash Shells

Script	Purpose
sa-cli.sh	Sets up the environment for running the Siebel Analytics Client. Run this under the current shell (source the script). If you are managing the server manually, you need to open a separate session to do this. **NOTE:** This file sets environment variables and must be executed appropriately for those variables to be exported to the current shell. Usage: . sa-cli.sh
sa-init.sh	Sets up basic Siebel Analytics Server settings. Run this command to keep settings up to date after you make any changes to instanceconfig.xml or other configuration files. These changes include changes to files used by the Siebel Analytics Web (for example, when you change the Web Catalog path).
user.sh	Sets up user-specific items such as the database. You do not need to run this script separately. It is called from run-sa.sh.

Siebel Analytics Scripts for C Shell

Analytics License: All licenses.

Operating System: UNIX only.

Scripts are provided for basic UNIX settings of Siebel Analytics Server. The Analytics scripts for C shell are shown in Table 25 on page 156. These scripts are located in the directory $INSTALLDIR/setup.

Table 25. Siebel Analytics Scripts for C Shell

Script	Purpose
run-sa.csh start	Automatically calls sa.csh and user.csh and starts the Siebel Analytics Server.
run-sa.csh stop	Stops the Siebel Analytics Server.
sa.csh	Sets up the environment for manual management. Run this under the current shell (source the script). Under this mode, you can run the Siebel Analytics Server manually. **NOTE:** This file sets environment variables and must be executed appropriately for those variables to be exported to the current shell. Usage: source sa.csh
run-saw.csh	Automatically calls saw.csh and starts the Siebel Analytics Web Server.
saw.csh	Sets up the environment for manual management of Siebel Analytics Web. Run this under the current shell (source the script). Under this mode, you can run the Siebel Analytics Web Server manually.
run-sch.csh	Starts the Scheduler. Usage: run-sch.csh { start | stop -p <password>} **NOTE:** If there is no terminal on the machine, you must define a DISPLAY environment variable in order for Scheduler to start. If the machine running Scheduler has a monitor running X Window, point it to itself. If it has no monitor, point it to another machine running X Window.
run-ccs.csh	Starts the cluster controller. Usage: run-ccs.csh { start | stop | forcestop }

Table 25. Siebel Analytics Scripts for C Shell

Script	Purpose
sa-cli.csh	Sets up the environment for running the Siebel Analytics Client. Run this under the current shell (source the script). If you are managing the server manually, you need to open a separate session to do this. **NOTE:** This file sets environment variables and must be executed appropriately for those variables to be exported to the current shell. Usage: source sa-cli.csh
sa-init.csh	Sets up basic Siebel Analytics Server settings. Run this command to keep settings up to date after you make any changes to instanceconfig.xml or other configuration files. These changes include changes to files used by the Siebel Analytics Web (for example, when you change the Web Catalog path).
user.csh	Sets up user-specific items such as the database. You do not need to run this script separately. It is called from run-sa.sh.

CAUTION: Do not disable the RPC service. If you attempt to start Siebel Analytics Server on a machine where the RPC services or processes are not running, the application does not start and a log is not generated.

Default Settings for Siebel Analytics Server Configuration Files

Analytics License: All licenses.

Operating Systems: All.

This topic is part of "Administering Analytics Servers."

When you install Siebel Analytics, the installer automatically sets some Analytics Server parameter. Table 26 on page 158 briefly summarizes these default settings.

NOTE: In some cases, the default values for the settings are different for Windows and UNIX installations. In these cases, the parameter is listed twice.

For more details of these parameter settings, see "NQSConfig.INI File Reference" and "NQClusterConfig.INI File Reference."

Table 26. Default Siebel Analytics Configuration File Settings

Section	Parameter	Default Value	Other Valid Values (if not binary) or Notes
Repository	Star [**UNIX**]	ORA_Northwind.rpd	
	Star [**Windows**]	demo1.rpd	

Table 26. Default Siebel Analytics Configuration File Settings

Section	Parameter	Default Value	Other Valid Values (if not binary) or Notes
Cache	ENABLE	NO	
	DATA_STORAGE_PATHS [**UNIX**]	"$INSTALLDIR/SiebelAnalyticsData/Cache"	Cache size is 500 MB
	DATA_STORAGE_PATHS [**Windows**]	"$INSTALLDIR\SiebelAnalyticsData\Temp\Cache"	Cache size is 256 MB
	METADATA_FILE [**UNIX**]	"$INSTALLDIR/SiebelAnalyticsData/Cache/MetaData"	
	METADATA_FILE [**Windows**]	"$INSTALLDIR\SiebelAnalyticsData\Temp\Cache\Metadata"	
	REPLACE_ALGORITHM	LRU	
	BUFFER_POOL_SIZE	1 MB	
	MAX_ROWS_PER_CACHE_ENTRY	100000	0 is unlimited size.
	MAX_CACHE_ENTRY_SIZE	1 MB	
	MAX_CACHE_ENTRIES	1000	
	POPULATE_AGGREGATE_ROLLUP_HITS	NO	
	METADATA_BACKUP_FREQUENCY_MINUTES	1440	If periodic metadata backups are not done, use 0.

Table 26. Default Siebel Analytics Configuration File Settings

Section	Parameter	Default Value	Other Valid Values (if not binary) or Notes
General	LOCALE	"english-usa"	Chinese-simplified, Chinese-traditional, Czech, Danish, Dutch, Finnish, French, German, Italian, Japanese, Korean, Portuguese, Portuguese-Brazilian, Spanish, Swedish
	SORT_ORDER_LOCALE	"english-usa"	
	SORT_TYPE	"binary"	
	CASE_SENSITIVE_ CHARACTER_COMPARISON	OFF	Must match the remote target database.
	NULL_VALUES_SORT_ FIRST	OFF	■ SQL Server sorts nulls first. ■ Oracle sorts nulls last.
	DATE_TIME_DISPLAY_ FORMAT	"yyyy/mm/dd hh:mi:ss"	
	DATE_DISPLAY_FORMAT	"yyyy/mm/dd"	
	TIME_DISPLAY_FORMAT	"hh:mi:ss"	
	WORK_DIRECTORY_PATHS [**UNIX**]	"$INSTALLDIR/Data/tmp"	
	WORK_DIRECTORY_PATHS [**Windows**]	"$INSTALLDIR\SiebelAnalyticsData\Temp"	
	SORT_MEMORY_SIZE	4 MB	
	SORT_BUFFER_ INCREMENT_SIZE	256 KB	
	VIRTUAL_TABLE_PAGE_ SIZE	128 KB	
	USE_LONG_MONTH_ NAMES	NO	
	USE_LONG_DAY_NAMES	NO	
	UPPERCASE_USERNAME_ FOR_INITBLOCK	NO	

Table 26. Default Siebel Analytics Configuration File Settings

Section	Parameter	Default Value	Other Valid Values (if not binary) or Notes
Security	DEFAULT_PRIVILEGES	READ	NONE
	PROJECT_INACCESSIBLE_COLUMN_AS_NULL	NO	For platform or Stand-Alone Analytics, the default is NO.
	MINIMUM_PASSWORD_LENGTH	0	
	AUTHENTICATION_TYPE	NQS	■ DATABASE ■ BYPASS_NQS
Server	SERVER_NAME	Siebel_Analytics_Server	
	MAX_SESSION_LIMIT	2000	
	MAX_REQUEST_PER_SESSION_LIMIT	500	
	SERVER_THREAD_RANGE	40–100	100–100
	SERVER_THREAD_STACK_SIZE	0	Default value of 0 assigns 1 MB per thread.
	DB_GATEWAY_THREAD_STACK_SIZE	0	Default value of 0 assigns 256 KB per thread.
	MAX_EXPANDED_SUBQUERY_PREDICATES	8192	
	MAX_QUERY_PLAN_CACHE_ENTRIES	1024	
	MAX_DRILLDOWN_INFO_CACHE_ENTRIES	1024	
	MAX_DRILLDOWN_QUERY_CACHE_ENTRIES	1024	
	INIT_BLOCK_CACHE_ENTRIES	20	
	CLIENT_MGMT_THREADS_MAX	5	
	RPC_SERVICE_OR_PORT	9703	
	ENABLE_DB_HINTS	YES	
	PREVENT_DIVIDE_BY_ZERO	YES	

Table 26. Default Siebel Analytics Configuration File Settings

Section	Parameter	Default Value	Other Valid Values (if not binary) or Notes
Server (continued)	CLUSTER_PARTICIPANT	NO	If value is YES, add the following parameters: ■ REPOSITORY_PUBLISHING_DIRECTORY ■ REQUIRE_PUBLISHING_DIRECTORY
	REPOSITORY_PUBLISHING_DIRECTORY	"<dirname>"	Use when CLUSTER_PARTICIPANT = YES
	REQUIRE_PUBLISHING_DIRECTORY	YES	
	DISCONNECTED	NO	
	AUTOMATIC_RESTART	YES	
Dynamic Library	ODBC200	nqsdbgatewayodbc	The dynamic libraries are categorized by the CLI they support.
	ODBC350	nqsdbgatewayodbc35	
	OCI7	nqsdbgatewayoci7	
	OCI8	nqsdbgatewayoci8	
	OCI8i	nqsdbgatewayoci8i	
	DB2CLI	nqsdbgatewaydb2cli	
	DB2CLI35	nqsdbgatewaydb2cli35	
	NQSXML	nqsdbgatewayxml	
	XMLA	nqsdbgatewayxmla	
User Log	USER_LOG_FILE_SIZE	10 MB	Logs query activity when enabled for a user.
	CODE_PAGE	"UTF8"	ANSI, 1252, and others.

Table 26. Default Siebel Analytics Configuration File Settings

Section	Parameter	Default Value	Other Valid Values (if not binary) or Notes
Usage Tracking	ENABLE	NO	Collects usage statistics on each logical query submitted to the Analytics Server.
	STORAGE_DIRECTORY	"<full directory path>"	
	CHECKPOINT_INTERVAL_MINUTES	5	
	FILE_ROLLOVER_INTERVAL_MINUTES	30	
	CODE_PAGE	"ANSI"	UTF8, 1252, and others.
	DIRECT_INSERT	YES	Inserts data into a table. If DIRECT_INSERT is YES, then PHYSICAL_TABLE_NAME, CONNECTION_POOL, BUFFER_SIZE, BUFFER_TIME_LIMIT_SECONDS, NUM_INSERT_THREADS and MAX_INSERTS_PER_TRANSACTION all apply.
	PHYSICAL_TABLE_NAME	"<Database>"."<Catalog>"."<Schema>"."<Table>"	SQL Server databases use "<Database>"."<Catalog>"."<Schema>"."<Table>" Oracle databases use "<Database>"."<Schema>"."<Table>"
	CONNECTION_POOL	"<Database>"."<Connection Pool>"	
	BUFFER_SIZE	10 MB	
	BUFFER_TIME_LIMIT_SECONDS	5	
	NUM_INSERT_THREADS	5	
	MAX_INSERTS_PER_TRANSACTION	1	
Optimization Flags	STRONG_DATETIME_TYPE_CHECKING	ON	

Table 26. Default Siebel Analytics Configuration File Settings

Section	Parameter	Default Value	Other Valid Values (if not binary) or Notes
Cube Views	DISTINCT_COUNT_ SUPPORTED	NO	
	STATISTICAL_FUNCTIONS_ SUPPORTED	NO	
	USE_SCHEMA_NAME	YES	
	USE_SCHEMA_NAME_FROM _RPD	YES	
	DEFAULT_SCHEMA_NAME	"SIEBEL"	Name used as the table schema name, if either the repository schema name can not be determined, or if USE_SCHEMA_NAME_ FROM_RPD is set to NO.
	CUBE_VIEWS_SCHEMA_ NAME	"SIEBEL"	The Cube Views metadata is created under this schema.
	LOG_FAILURES	YES	
	LOG_SUCCESS	NO	
	LOG_FILE_NAME	"\SiebelAnalytics\Log\ CubeViews.Log"	Or other valid path.
Cluster (found in NQCluster Confg.INI file)	ENABLE_CONTROLLER	NO	Analytics Server clustering is enabled via NQSConfig.INI.
	PRIMARY_CONTROLLER	"<machine_name>"	DNS name of Primary Cluster Controller.
	SECONDARY_CONTROLLER	"<machine_name>"	Secondary Cluster Controller; must be distinct from PRIMARY_CONTROLLER.
	SERVERS	"<analytics_server_ name01>"	<analytics_server_name02> List up to 16 unique Siebel Analytics Server machines.
	MASTER_SERVER	"<analytics_server_name>"	DNS of the Analytics Server machine holding master copies of repositories. **NOTE:** Must be in SERVERS list.

Table 26. Default Siebel Analytics Configuration File Settings

Section	Parameter	Default Value	Other Valid Values (if not binary) or Notes
Cluster (continued)	SERVER_POLL_SECONDS	5	Polling frequency: Analytics Server to Cluster Controller.
	CONTROLLER_POLL_SECONDS	5	Polling frequency: Cluster Controller to Cluster Controller.
	CLIENT_SERVER_PORT	9703	Outfacing port for ODBC connections on the Analytics servers (called RCP_SERVICE_OR_PORT in the NQSConfig.INI file). Replaces SERVER_PORT. **NOTE:** Not registered with IANA; must be verified.
	CLIENT_CONTROLLER_PORT	9706	Outfacing port for clustered ODBC connections on the Cluster Controllers. Replaces CONTROLLER_PORT. **NOTE:** Not registered with IANA; must be verified.
	MONITOR_CONTROLLER_PORT	9700	TCP/UDP port for intracluster communication with clustered Analytics Servers. **NOTE:** Not registered with IANA; must be verified.
	MONITOR_SERVER_PORT	9701	
	SERVER_MANAGER_PORT	9702	Port used by the Server Manager. **NOTE:** Needed only on UNIX.

Stopping the Analytics Servers

This topic is part of "Administering Analytics Servers."

If you want to make changes to the configuration (NQSConfig.INI) file, Web Catalog (SiebelAnalytics.webcat) file, the repository (.rpd) file, and other files, you must first stop the Siebel Analytics Server, then restart it, before those changes can take effect.

The following topics describe how to stop the Siebel Analytics servers under both Windows and UNIX platforms:

- "Stopping Analytics Servers (Windows)" on page 166
- "Stopping Analytics Servers Normally (UNIX)" on page 167
- "Stopping Siebel Analytics Server When Regular UNIX Commands Fail" on page 168
- "Stopping Scheduler Server When Regular UNIX Commands Fail" on page 168

Related Topic

"Restarting the Analytics Servers" on page 169

Stopping Analytics Servers (Windows)

Analytics License: All licenses.

Operating System: Windows only.

Stopping servers under Windows involves running Windows Services.

To run Windows Services, use the command C:\WINDOWS\system32\services.msc or navigate to Start > Programs > Administrative Tools > Services.

To stop the servers under Windows

1. Stop the Siebel Analytics Web service.

   NOTE: This may take several minutes.

2. Stop the World Wide Web Publishing service.
3. Stop the Siebel Analytics Server service.

Stopping Analytics Servers Normally (UNIX)

Analytics License: All licenses.

Operating System: UNIX only.

This procedure is the regular method of stopping the servers under UNIX. The UNIX commands you use to start and shut down the servers depend on the UNIX shell being used.

NOTE: When you first set up the environment, you must source sa.sh or sa.csh.

The order in which the services are stopped, then restarted, is important.
Use the following sequence.

To stop the Siebel Analytics Servers using regular UNIX commands

1 Stop the Siebel Analytics Server service, using one the UNIX shell commands shown in the following table.

Shell	Order of Stopping	Command
■ Korn	1 Siebel Analytics Server	`run-sa.sh stop`
■ Bourne	2 Siebel Analytics Web Server	`run-saw.sh stop`
■ bash	3 Siebel Analytics Scheduler Server	`run-sch.sh stop -p <password>`
■ C	1 Siebel Analytics Server	`run-sa.csh stop`
	2 Siebel Analytics Web Server	`run-saw.csh stop`
	3 Siebel Analytics Scheduler Server	`run-sch.csh stop -p <password>`

2 If the regular UNIX commands do not work, see the following topics:

- “Stopping Siebel Analytics Server When Regular UNIX Commands Fail” on page 168
- “Stopping Scheduler Server When Regular UNIX Commands Fail” on page 168

Stopping Siebel Analytics Server When Regular UNIX Commands Fail

Analytics License: All licenses.

Operating System: UNIX only.

When the Siebel Analytics Server starts, the process utilizes additional processes and resources that may fail to stop cleanly when the Siebel Analytics Server is shut down, for one of the following reasons:

- The environment has been set up with sa.sh or sa.csh, and you are using the command:

  nqsshutdown.exe -u Administrator

- Shared memory may be used by the user ID running Siebel Analytics Server.

  NOTE: Check IPC resources using the command ipcs, and use the command ipcrm to remove the resource.

If you cannot shut down the Siebel Analytics Server cleanly with the regular commands, use the following procedure.

To stop the Siebel Analytics Server using forcestop

1. Set up DISPLAY.
2. While running telnet, use one of the commands in the following table.

Shell	Command
Bourne, Korn, or bash	run-sa.sh forcestop
C	run-sa.csh forcestop

Stopping Scheduler Server When Regular UNIX Commands Fail

Analytics License: All licenses.

Operating System: UNIX only.

If the regular commands fail, you may run the following command:

mwcleanup

Restarting the Analytics Servers

This topic is part of "Administering Analytics Servers."

After you have made configuration changes to the Analytics server, you must restart the server for the changes to take effect. Restarting the Analytics server under both Windows and UNIX platforms is described in the following procedures:

- "Restarting the Servers Under Windows" on page 169
- "Restarting the Servers Under UNIX" on page 170

Related Topic

"Stopping the Analytics Servers" on page 166

Restarting the Servers Under Windows

Analytics License: All licenses.

Operating System: Windows only.

Stopping and starting servers under Windows involves running C:\WINDOWS\system32\services.msc.

To restart the servers under Windows

1. Restart the Siebel Analytics Server, which appears under Services.

   The Siebel Analytics Server takes about ten minutes to start.

   NOTE: In the Microsoft Windows environment, the Services Manager returns a false error that it is unable to start the server. This is a known Microsoft Services Manager issue, which causes the Services Manager to time out after five minutes. However, the Siebel Analytics Server is still starting, as you can see after you refresh the Services window.
   If the Siebel Analytics Server fails to start, it logs an error in nqServer.log file in the Log directory.

2. Restart the World Wide Web Publishing service.
3. In the ODBC Driver Manager, test that the DSN called AnalyticsWeb (of type Siebel Analytics Server) connects to the Siebel Analytics Server.

   See the topic "About the Siebel Analytics Web ODBC DSN" on page 173.

   Use the user name Administrator and the password SADMIN.

   NOTE: Be sure to change the default password before migrating to production.

4. Restart the Siebel Analytics Web service. This may take several minutes.

Restarting the Servers Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

Starting servers under UNIX involves running the shell scripts listed in the following topics:

- "Siebel Analytics Scripts for Korn, Bourne, or Bash Shells" on page 154
- "Siebel Analytics Scripts for C Shell" on page 156

The order for starting the servers is shown in the topic "Starting or Restarting Analytics Servers" on page 98.

NOTE: The order in which the services are stopped, then restarted, is important.

Restarting the Siebel Analytics Server When a Database Goes Down

If a Siebel Analytics Server database goes down and is restarted, the users who were connected at the time of the drop will be unable to refresh or proceed, because the connection is lost. However, logging out and logging in again should fix this.

Changing the Account Under Which a Windows Service Runs

Analytics License: All licenses.

Operating System: Windows only.

This topic is part of "Administering Analytics Servers."

In the Windows environment, the Siebel Analytics services run as Windows services. The Siebel Analytics Server service, for example, is initially configured to run as a local SYSTEM account, unless you are using the Siebel Analytics Cluster Server feature. If the service needs to access any remote machines, you must run it using a valid user ID and password with sufficient network privileges to access remote databases. This user ID must also have Windows Administrator privileges on the local machine.

NOTE: The credentials for the Analytics Web service should be identical to the permissions for the user running all Siebel Analytics processes.

To change the account under which a Windows service runs

1. On the machine in which Siebel Analytics is installed, open the Services list.
2. Select the Siebel Analytics service and click Startup. The Service dialog box opens.
3. In the Log On As portion of the Services dialog, select the option This Account and then click the button to the right of the text box. The Add User dialog opens.
4. Select the user account in which you want the service to run, click Add, and then click OK.
5. Enter the password for the user in the Services dialog, confirm the password, and then click OK.

The service is now configured to run under the new account. The next time you start the service, it attempts to use the new account to start up the service.

Siebel Analytics Executable Files

Analytics License: All licenses.

Operating Systems: All.

This topic is part of "Administering Analytics Servers."

The installation directory contains all of the executable files invoked by Siebel Analytics Server components, as well as some utilities that are described in *Siebel Analytics Server Administration Guide*. It also contains some command-line utilities. Table 27 on page 172 shows the commands for each operating system platform.

CAUTION: It is recommended that you contact Siebel Technical Support *before* using any of the following listed utilities. Some are not supported, and can damage your data or Siebel Analytics installation if not used properly. Use these utilities with caution.

Table 27. Siebel Analytics Command Utilities

Operating System	Folder	Commands
Windows	$INSTALLDIR\SiebelAnalytics\Bin	nQcmd.exe
		NQSChangePassword.exe
		nQSecUDMLGen.exe
		nQSShutDown.exe
		nQUDMLCli.exe
		nQUDMLExec.exe
		nQUDMLGen.exe
		SchConfig.exe
		SchShutdown.exe
		SASchInvoke.exe
UNIX	$INSTALLDIR/Bin	nqcmd.exe
		nqschangepassword.exe
		nqsecudmlgen.exe
		nqsshutdown.exe
		nqudmlcli.exe
		nqudmlexec.exe
		nqudmlgen.exe
		schconfig.exe
		schshutdown.exe

About the Siebel Analytics Web ODBC DSN

Analytics License: All licenses.

Operating System: UNIX only.

Siebel Analytics Web accesses a Siebel Analytics Server repository with a single Siebel Analytics Server data source name (DSN). The installation process configures a DSN named AnalyticsWeb for this purpose.

NOTE: Siebel Analytics Web must use a single DSN.

- For information on configuring a new or existing DSN under Windows, see the *Siebel Analytics Server Administration Guide*.
- For information on configuring a new or existing DSN under UNIX, see the topic "Configuring an Analytics ODBC Data Source Under UNIX" on page 122.

If you change the name of the DSN, you need to update the Siebel Analytics Web XML configuration file instanceconfig.xml to use the new name. For information about updating the configuration file, see *Siebel Analytics Web Administration Guide*.

11 Clustering Siebel Analytics Servers

This area contains topics about installing and configuring the Cluster Server feature of Siebel Analytics.

NOTE: The Cluster Server feature works for Siebel Analytics Server only. Analytics Web Server cannot be clustered in the same way as the Siebel Analytics Server, because metadata is stored in a single location (Web Catalog) on the Web server file system. However, see also the following Tip.

TIP: Although the Analytics Web Server itself cannot be clustered, Siebel Analytics Web contains utilities to support replication of Web catalog content among multiple Analytics Web servers. For more information about these Web Replication utilities, see the *Siebel Analytics Web Administration Guide*.

For a list of all hardware requirements for clustered Siebel Analytics Servers, cluster controllers, and the shared file system used as the Siebel Analytics repository publishing directory, see *Siebel System Requirements and Supported Platforms* on Siebel SupportWeb.

Analytics Server Cluster Components

Figure 3 on page 176 shows a typical small cluster server setup. A small cluster consists of the following components:

- **Primary Cluster Controller.** The role of the primary cluster controller is to monitor the operation of the servers in the cluster and to assign sessions within the cluster.
- **Secondary Cluster Controller.** The secondary cluster controller assumes the role of the primary cluster controller if the primary controller is unavailable.
- **Master Server.** The master server is a clustered Analytics Server to which the Administration Tool connects for online repository changes.
- **Cluster Manager.** The Cluster Manager is available in the Administration Tool when a repository is open in online mode. Server nodes can be stopped, started and quiesced from the Cluster Manager.
- **Repository Publishing Directory.** This directory is shared by all Analytics Servers participating in a cluster. It holds the master copies of repositories edited in online mode. The Clustered Analytics Servers examine this directory upon startup for any repository changes. The directory typically resides on a shared file system visible to all servers in the cluster.

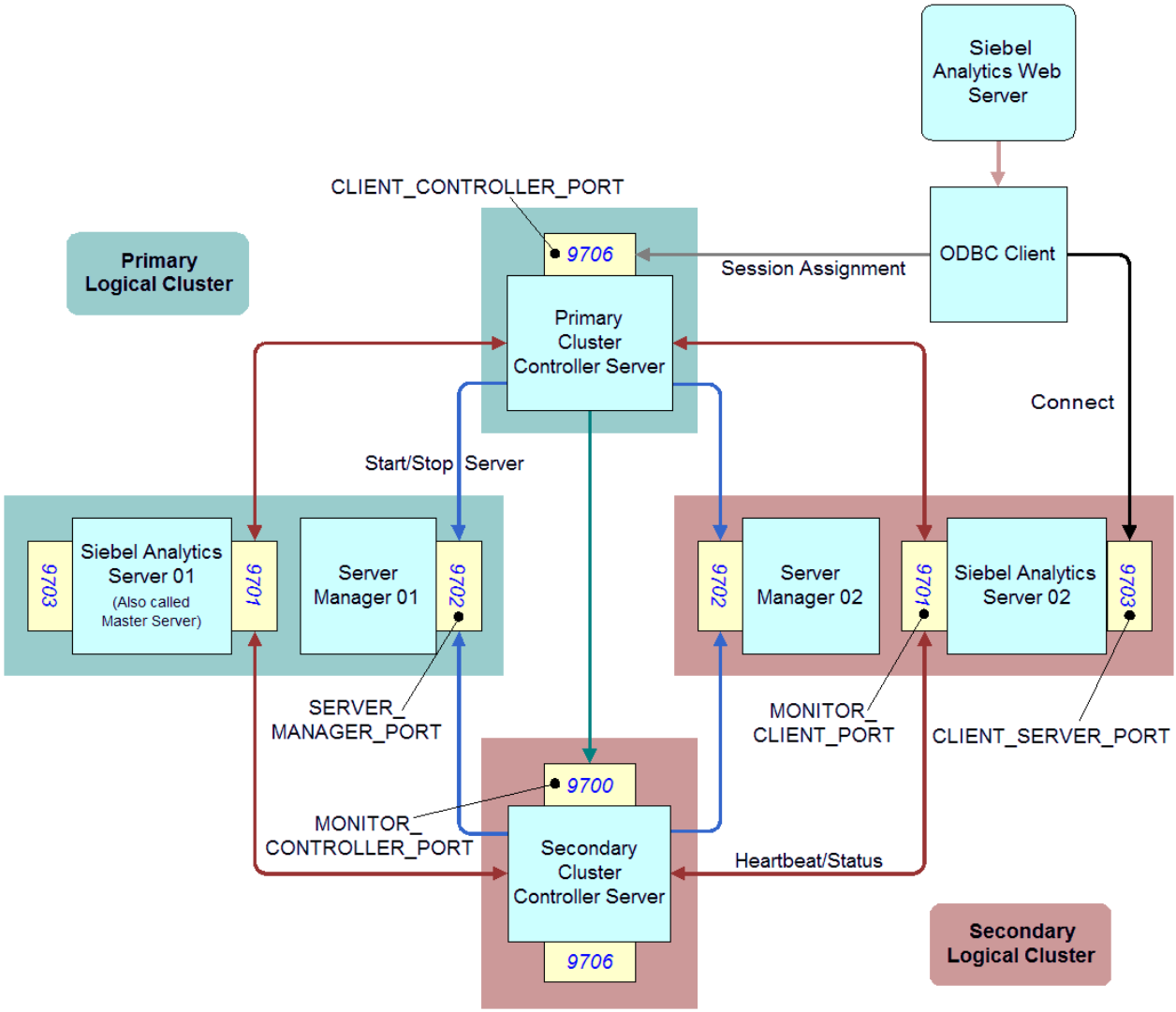

Figure 3. A Typical Cluster Controller Setup

Cluster Controller Functions

The cluster controller server performs the following functions:

- Services new ODBC requests:

  When a new ODBC request comes into either the primary or secondary cluster controller server, the following events occur:

  - One of the cluster controller servers responds with a Siebel Analytics Server name and port number.
  - The ODBC client uses this returned Siebel Analytics Server name and port number to connect to the Siebel Analytics Server directly.
  - The ODBC request goes through the Siebel Analytics Server CLIENT_SERVER_PORT (9703 in Figure 3 on page 176).
  - The session assignment goes to the primary cluster controller's CLIENT_CONTROLLER_PORT (9706 in Figure 3 on page 176).

- Monitors the health of the Siebel Analytics Server nodes that participate in this cluster:

  - Each Siebel Analytics Server node loads the repository, so the server knows which database to get data from.
  - Siebel Analytics Server nodes use a heartbeat mechanism over TCP/IP.
  - The Siebel Analytics Server nodes include a Server Manager.
  - The Server Manager starts, stops, and restarts the Siebel Analytics Server for the cluster controller server.

Installation Requirements for the Analytics Cluster Server Feature

Analytics License: All licenses.

Operating Systems: All.

This topic is part of "Clustering Siebel Analytics Servers."

The requirements of a clustered Siebel Analytics Server are shown in Table 28.

Table 28. Installation Requirements for Clustered Siebel Analytics Servers

Component	Requirement
Software	All Siebel Analytics Server and cluster controller computers participating in the cluster need to run identical versions of the Siebel Analytics software.
Network	All computers participating in the cluster need to be within the same domain and on the same LAN subnet. Geographically separated computers are not supported.
Configuration	If data source names (DSN) are used in the connection pools, these DSN should point to the same data source on each of the Siebel Analytics Servers that participate in the cluster. That is, the connection pool DSN should be the same on each Siebel Analytics Server node in the cluster.
	First configure one repository, and then copy it to the other Siebel Analytics Servers participating in the cluster.
Synchronization	The clock on each server participating in a cluster must be kept in synchronization. Out-of-sync clocks can skew some cluster-related reporting. To synchronize server clocks, use one of the following: ■ **Windows:** Use a synchronization software program ■ **UNIX:** Use a time daemon such as NTP

Process of Installing the Siebel Analytics Server Clustering Feature

This topic is part of "Clustering Siebel Analytics Servers."

In the Windows environment, perform the following tasks to install the Siebel Analytics Cluster Server feature:

- "Identifying the Siebel Analytics Clustering Components" on page 179
- "Granting the Analytics Log On As a Service Right (Windows)" on page 180
- "Installing the Server Clustering Feature" on page 183

Identifying the Siebel Analytics Clustering Components

Analytics License: All licenses.

Operating Systems: All.

This task is part of the "Process of Installing the Siebel Analytics Server Clustering Feature." The task identifies the components of the cluster controller.

To identify the clustering components

1. Identify the computer that you use to host the primary cluster controller.

   Optionally, identify the computer you use to host the secondary cluster controller. See the descriptions of the following parameters in "NQClusterConfig.INI File Reference":

   - PRIMARY_CONTROLLER on page 278
   - SECONDARY_CONTROLLER on page 278

2. Identify each computer that hosts a clustered Siebel Analytics Server.

   See the description of the parameter SERVERS on page 279 in "NQClusterConfig.INI File Reference."

3. Identify a Domain account under which all clustered Siebel Analytics Servers and cluster controllers run. This Domain account must have the following requirements:

   - Membership in the local Windows Administrators group on each computer in the cluster. Do not use the LocalSystem account.
   - Read and write access to the repository publishing directory (specified in the parameter REPOSITORY_PUBLISHING_DIRECTORY in the NQSConfig.INI file).

Granting the Analytics Log On As a Service Right (Windows)

Analytics License: All licenses.

Operating System: Windows only.

This task is part of the "Process of Installing the Siebel Analytics Server Clustering Feature."

This Domain account must also have the *Log on as a service* right. Members of the Administrators group do not have this right by default. Therefore, if the cluster controllers are running under a Windows operating system, grant the Log on as a service right explicitly to this account on each computer using one of the following methods.

NOTE: The Domain account for the clustered Siebel Analytics Server and cluster controllers must have the *Log on as a service* right explicitly granted on each computer running the servers and cluster controllers. However, the Siebel Analytics Web Server can be run under a different account or domain, as long as the Web Server login has the appropriate privileges.

Use one of the following procedures to perform the task of granting the Log on as a service right, based on your specific Windows platform.

Granting the Analytics Log On as a Service Right (Windows XP)

To grant the Log on as a service right under a Windows XP platform, use the following procedure.

To grant the Log on as a service right under Windows XP

1. Choose Administrative Tools from the Control Panel and click Local Security Policy.
2. In the Local Security Settings window, expand the Local Policies tree in the left pane and double-click User Rights Assignment.
3. Locate the Log on as a service right, double-click it to open the Log on as a service Properties window, and click Add User or Group.
4. In the Select Users or Groups window, in the field From this location, make sure the correct domain for the account is displayed.

   If it is not, click Locations and select the domain that the account is in. Locate the account in the Name list, highlight it, and click OK.
5. Type the name of the account in the field labeled Enter the object names to select.

   Click the Check Names button to verify that it is correct. Click OK.
6. Click OK again to return to the Local Security Settings window.

   The Log On as a service right has been added to the account. Close this window.

Granting the Analytics Log On as a Service Right (Windows NT)

This task is part of the "Process of Installing the Siebel Analytics Server Clustering Feature." To grant the Log on as a service right under a Windows NT platform, use the following procedure.

To grant the Log on as a service right under Windows NT

1. Choose Start > Programs > Administrative Tools (Common) > User Manager.

   The User Manager window appears.

2. From the Policies menu, choose the option User Rights.

   This opens the User Rights Policy window.

3. Select the option Show Advanced User Rights and, from the drop-down list, select the Log On as a service right, and then click Add.

   The Add Users and Groups window appears.

4. In the List Names From drop-down list, select the domain the account is in, and then click Show Users.

5. Locate the account in the list and click Add.

   The domain and account should be shown in the Add Names window.

6. Click OK to return to the User Rights Policy window.

   The User Rights Policy window shows the Log On as a service right, and the Grant To window shows the domain and account.

7. Click OK to return to the User Manager window and close the window.

Granting the Analytics Log On as a Service Right (Windows 2000)

This task is part of the "Process of Installing the Siebel Analytics Server Clustering Feature." To grant the Log on as a service right under a Windows 2000 platform, use the following procedure.

To grant the Log on as a service right under Windows 2000

1. Choose Administrative Tools from the Control Panel and click Local Security Policy.

   The Local Security Settings window appears.

2. Expand the Local Policies tree in the left pane and double-click User Rights Assignment.

3. Locate the Log on as a service right, double-click it to open the Local Security Policy Setting window, and click Add.

   The Select Users or Groups window appears.

4. From the Look In drop-down list, select the domain that the account is in.

5. Locate the account in the Name list, highlight it, and click Add.

   Click OK.

6 Click OK to return to the Local Security Settings window.

The Log on as a service right has been added to the account. Close this window.

Installing the Server Clustering Feature

Analytics License: All licenses.

Operating Systems: All.

This task is part of the "Process of Installing the Siebel Analytics Server Clustering Feature."

Perform the following procedure on each computer that is to host a Siebel Analytics cluster controller.

To install the clustering feature

1. Run the Siebel Analytics installer wizard according to the procedure in "Installing Siebel Analytics."

   In the wizard Setup Type window, select one of the following options, depending on the Siebel Analytics components you want to install on that particular computer:

   - Server
   - Complete
   - Custom

   For example, if a computer hosts both a Siebel Analytics Server and a Cluster Controller, select the Custom option, and then select the Siebel Analytics Cluster feature. All other features are selected by default in this screen.

2. Complete the installation.

3. Reboot the computer when prompted.

   NOTE: Using the default configuration created by the installation process, the Cluster Controllers fail to start. This failure to start is addressed in later steps in this procedure.

4. Copy any required repository files to the Repository subdirectory in the Siebel Analytics software installation directory on each computer.

   NOTE: All Siebel Analytics Servers in the cluster must have identical copies of all repository files.

5. Install and configure any necessary relational database access packages.

   For example, sites using SQL Server need to configure SQL Server DSN referenced by the repositories.

Process of Configuring Clustered Servers, Clients, and Controllers

This topic is part of "Clustering Siebel Analytics Servers."

After installing the clustering feature, you need to configure the Siebel Analytics Servers and cluster controllers that participate in a cluster. This process consists of the following tasks:

- "Configuring Clustered Servers and Cluster Controllers" on page 185
- Modifying a Clustered ODBC Under UNIX.
  See the topic "Configuring an Analytics ODBC Data Source Under UNIX" on page 122.
- "Forcing Siebel Analytics Web to Use a Clustered ODBC" on page 187

TIP: When you use the Server Administration Tool and have a repository open, you can use the Cluster Manager to monitor and manage the operations of the cluster, including starting and stopping Siebel Analytics Servers and Cluster Controllers. Access the Cluster Manager by choosing the menu option Manage > Clusters. For more information, see *Siebel Analytics Server Administration Guide*.

Configuring Clustered Servers and Cluster Controllers

Analytics License: All licenses.

Operating Systems: All.

This task is part of the "Process of Configuring Clustered Servers, Clients, and Controllers," and describes how to configure the clustered servers and cluster controllers.

To configure clustered servers and cluster controllers

1 Stop any Siebel Analytics Servers and cluster controllers that are running.

   This can be done from the Services control panel on each computer, or by using the net command from a Windows command window. For example:

   ```
   net stop "Siebel Analytics Server"
   net stop "Siebel Analytics Cluster"
   ```

2 On each computer that is hosting a Siebel Analytics Server, edit the NQSConfig.INI file.

   The NQSConfig.INI file is located in the Config folder in the Siebel Analytics software installation folder. See "NQSConfig.INI File Reference."

   NOTE: You can make a copy of the NQSConfig.INI file, edit it, transfer it to the Config folders of the remaining computers, and then make computer-specific changes where necessary.

   - Set the parameter "CLUSTER_PARTICIPANT" to Yes.
   - Uncomment and supply valid values for the parameters "CLUSTER_PARTICIPANT" and "REPOSITORY_PUBLISHING_DIRECTORY".
   - Make sure that nonclustering parameters, such as those set in the Cache and Repository sections of the NQSConfig.INI file, are substantially identical across all Siebel Analytics Servers in a cluster.

3 On each computer that is hosting a Siebel Analytics Server, edit one copy of the NQClusterConfig.INI file to supply valid values for the clustering parameters.

   For detailed instructions, see "NQClusterConfig.INI File Reference."

4 Copy the NQClusterConfig.INI file to the Config folders of each computer hosting a Siebel Analytics Server or a Cluster Controller.

5 Using the wizard described in *Siebel Analytics Server Administration Guide*, configure Siebel Analytics Server data source names for clustering.

   See *Siebel Analytics Server Administration Tool Online Help*.

6 Manually start all the Siebel Analytics Server and Siebel Analytics Cluster Server services in the cluster.

This can be done from the Services control panel on each computer or by using the net command from a Windows command window. For example, use:

```
net start “Siebel Analytics Server”
net start “Siebel Analytics Cluster”
```

You can also use a third-party tool designed for remote service manipulation.

7 Using a text editor, examine the NQServer.log file and the NQCluster.log in the Log folders, and verify that all computers started without errors and joined the operational cluster configuration successfully.

Correct any errors noted in the log files and start the computers again.

NOTE: The log entries are written in UTF-8 format. To view the contents of these files, set your viewer to UTF-8. If you do not, you may see garbled text.

Forcing Siebel Analytics Web to Use a Clustered ODBC

This task is part of the "Process of Configuring Clustered Servers, Clients, and Controllers." In order to use Siebel Analytics Web with clustered Siebel Analytics Servers, you must use a different procedure for each operating system platform.

Forcing Clustering (UNIX)

Analytics License: All licenses.

Operating System: UNIX only.

The following procedure is to force clustering under UNIX platforms.

To use clustering under UNIX

1. Modify the $INSTALLDIR/Data/web/config/instanceconfig.xml file.
2. In the instanceconfig.xml file, use the data source name (DSN) that was created in "Configuring an Analytics ODBC Data Source Under UNIX" on page 122.

   NOTE: See also the topic on working in the Siebel Analytics Web configuration file in *Siebel Analytics Web Administration Guide*.
3. To use the new clustered DSN, restart Siebel Analytics Web and the Web server.

Forcing Clustering (Windows)

Analytics License: All licenses.

Operating System: Windows only.

The following procedure is to force clustering under Windows platforms.

To use clustering under Windows

1. Using the wizard described in *Siebel Analytics Server Administration Guide*, create a clustered data source name.

   Note the name of the clustered DSN.
2. Using regedit, open the registry file.

   Modify HKEY_LOCAL_MACHINE\SOFTWARE\Siebel Systems, Inc.\Siebel Analytics\Web\7.8\DSN to be the name of the clustered DSN that you have just created.
3. Restart Siebel Analytics Web and IIS to use the new clustered DSN.

A Localizing Siebel Analytics Deployments

Siebel Analytics is designed to allow users to dynamically change their preferred language and locale preferences. This area contains topics on how to configure Siebel Analytics for deployment in one or more language environments besides English.

In order to support multiple languages, the Siebel Analytics Server must be set up appropriately. The NQSConfig.INI file—General section contains those parameters required for localization, internationalization and other default parameters used to determine how data is returned from the Siebel Analytics Server to a client.

The following topics describe some of the tasks necessary to localize the Siebel Analytics Server for all types of installation:

- "Localization of Analytics Components" on page 190
- "Configuring Unicode Support for Analytics Charts" on page 193
- "Changing Localization Variables in the Siebel Analytics Repository" on page 196
- "Localizing Sort Order Settings Under UNIX" on page 197
- "Setting SORT_ORDER_LOCALE Under UNIX" on page 199
- "Changing Configuration File Settings for Japanese Localizations Under AIX" on page 200
- "Process of Maintaining Translation Tables for Analytics" on page 201

Localization of Analytics Components

To receive localized message strings for Siebel Analytics Server, you must set the locale during the platform installation, in the Error Message Language screen, as described in “Analytics Platform Installer Wizard Screens and Prompts” on page 74.

The primary mechanism for displaying localized table and column names is Externalize Metadata Strings. To determine which table and column names are localized, see the topic “Using the Externalize Strings Utility for Localization” on page 202.

Table 29 lists the Siebel Analytics components that are localized or not localized.

Table 29. Analytics Components and Localization

	Analytics Component
Localized	Siebel Analytics Web interface
	Siebel Analytics Web messages: ■ error ■ warning ■ information
	Siebel Analytics Server functions: ■ DayName ■ MonthName **NOTE:** If a query is issued using the DayName or MonthName function, but the function is not shipped to a back-end database, then the day or month name is returned in the localized language but the column name remains in English (or may be affected by other localization controls). As an example of this situation, if the LOCALE parameter is set for German, the MonthName query returns the string “Mai” but the column header remains "Name of Month."
	Siebel Analytics Server and Scheduler messages: ■ error ■ warning ■ information
	Log files: ■ nQServer.log for Siebel Analytics Server ■ nqQuery.log for Siebel Analytics Server ■ If Clustering is enabled, nQCluster.log for Analytics Server Cluster
	Metadata: ■ Siebel Analytics Web dashboards and reports (SiebelAnalytics.webcat) ■ Presentation table and column names (SiebelAnalytics.rpd) ■ Informatica (ENU and JPN locales only)
	Disconnected Client interface

Table 29. Analytics Components and Localization

	Analytics Component
Not Localized	Server Administration Tool interface
	Scheduler Job Manager interface
	Data Warehouse Administration Console
	ODBC client tools: ■ nqcmd.exe (UNIX) ■ nQCmd.exe (Windows) ■ nQClient.exe (Windows)
	Installer
	ODBC setup (see "Configuring an Analytics ODBC Data Source Under UNIX" on page 122)

Configuring Unicode Support for Analytics Charts

Analytics License: All licenses.

Operating Systems: All.

This process is part of "Localizing Siebel Analytics Deployments."

Siebel Analytics itself supports Unicode. However, some third-party products and platforms may not fully support Unicode. For example, the charting image server for displaying charts in Analytics Web is unable to show East-Asian characters in its standard mode. Before you can see Asian characters in the Siebel Analytics Web charts, you must configure some charting templates and convert fonts.

These tasks are described in the following topics:

- "Converting Chart Fonts for Analytics Web Charts" on page 194
- "Adding Converted Fonts to Charting Image Server" on page 195

Converting Chart Fonts for Analytics Web Charts

This topic is part of the process "Configuring Unicode Support for Analytics Charts."

This task shows how to convert Unicode font for use with the Corda PopChart image server. You use Corda Font Converter 5.0 to convert the desired TrueType font (TTF) to a Corda .fsd file.

To convert a font using the Corda Font Converter

1. Run CordaFontConverter.exe.

   NOTE: This converter is in $INSTALLDIR\Corda50\bin.

2. From the Fonts window, select the font you want to convert. Select the conversion options, and accept the default display name or create your own.

   For example, Arial.

   NOTE: The display name selected is the one you specify in the task "Adding Converted Fonts to Charting Image Server" on page 195.

3. Click convert.

   The conversion may take a few minutes.

4. Click Exit.

To continue with the process of configuring the Web chart image server to display Asian fonts, see the topic "Adding Converted Fonts to Charting Image Server" on page 195.

Adding Converted Fonts to Charting Image Server

This topic is part of the process "Configuring Unicode Support for Analytics Charts."

This task shows how to add a font to the PopChart image server. Corda chart template (pcxml) files describe various chart types.

TIP: Corda chart template files are located in the directory containing the chart server files, $INSTALLDIR\Web\App\Res\s_Siebelxx\PopBin (where xx represents a number corresponding to the Siebel software release, such as 78 for release 7.8.x).

In these files, by default, a font name is not referenced but font size is. You edit a pcxml file to refer to the font newly converted during the task "Converting Chart Fonts for Analytics Web Charts" on page 194. Any text editor can be used to edit the pcxml files.

CAUTION: Back up this directory before editing any pcxml files.

To add a font to PopChart image server templates

1. Open the pcxml file in the text editor (for example, pie.pcxml).
2. In the file, search for the word Font.
3. Add the display name of the font that was specified during the font conversion.

   For example, to add the Arial font to pie.pcxml, search for the word Font:

   <Properties TransparentFill='True' BorderType='None' **Font='Size:11**; Style:Bold;'/>

   Add the font display name attribute so that the line reads:

   <Properties TransparentFill='True' BorderType='None' **Font='Name:Arial;** Size:11; Style:Bold;'/>
4. Save and close the pcxml file.

   NOTE: Perform Steps 1 through 4 for each pcxml file.
5. Stop and restart the Siebel Analytics Web Server and PopChart server in order to see the changes.

Changing Localization Variables in the Siebel Analytics Repository

Analytics License: All licenses.

Operating Systems: All.

This topic is part of "Localizing Siebel Analytics Deployments."

If you have localized Siebel Analytics for one or more languages other than English, you must also configure these localizations in the Siebel Analytics repository (.rpd) file, as described in the following procedure.

To configure localizations in the Siebel Analytics repository

1. Using the Server Administration Tool, open the .rpd file.
2. Go to Manage > Variables and edit the variables shown in the following table of localized Siebel Analytics repository values.

Variable Type	Variable Name	Change to ...
Repository—Dynamic	OLTP_LANG_ID	Siebel three-letter language code
	DW_CURRENCY	OLTP Currency (for example, EUR)
	ETL Base Exchange Currency	OLTP Currency (for example, EUR)
Session—System	LOCALE	Siebel Analytics two-letter language code (shown in the LOCALE parameter entry of "NQSConfig.INI File Reference")

Localizing Sort Order Settings Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

This task is part of a roadmap. If you are localizing your deployment of Siebel Analytics, this topic is part of the "Process of Configuring Siebel Analytics Server."

The Analytics Server sets the C-runtime locale during server startup. If you are localizing your deployment of Siebel Analytics, you must configure the settings for the following parameters:

- LOCALE
- SORT_ORDER_LOCALE
- SORT_TYPE
- CASE_SENSITIVE_CHARACTER_COMPARISON

These settings are interrelated and help determine how the Siebel Analytics Server sorts data:

- For the UNIX-specific SORT_ORDER_LOCALE parameter settings, see the topic "Setting SORT_ORDER_LOCALE Under UNIX" on page 199.
- For all locale settings, see the topic "General Section Parameters in the Configuration File" on page 251.
- For details of all server parameters, see the topic "NQSConfig.INI File Reference."

Table 30 shows the mappings from the platform-independent name to the specific name for each of the supported UNIX platforms. For example, Chinese-simplified uses the setting zh_TW.utf8 under HP-UX.

Table 30. SORT_ORDER_LOCALE Parameter Settings for UNIX Platforms

SORT_ORDER_LOCALE	Solaris	AIX	HP-UX
Chinese-simplified	zh_CN.UTF-8	ZH_CN.UTF-8	zh_CN.utf8
Chinese-traditional	zh_TW.UTF-8	ZH_TW.UTF-8	zh_TW.utf8
Czech	cs_CZ.UTF-8	CS_CZ.UTF-8	univ.utf8
Danish	da_DK.UTF-8	DA_DK.UTF-8	univ.utf8
Dutch	nl_NL.UTF-8@euro	NL_NL.UTF-8	univ.utf8
English-US	en_US.UTF-8	EN_US.UTF-8	univ.utf8
Finnish	fi_FI.UTF-8@euro	FI_FI.UTF-8	univ.utf8
French	fr_FR.UTF-8@euro	FR_FR.UTF-8	fr_FR.utf8
German	de_DE.UTF-8@euro	DE_DE.UTF-8	de_DE.utf8
Italian	it_IT.UTF-8@euro	IT_IT.UTF-8	it_IT.utf8

Table 30. SORT_ORDER_LOCALE Parameter Settings for UNIX Platforms

SORT_ORDER_LOCALE	Solaris	AIX	HP-UX
Japanese	ja_JP.UTF-8	JA_JP.UTF-8	ja_JP.utf8
Korean	ko_KR.UTF-8	KO_KR.UTF-8	ko_KR.utf8
Portuguese European	pt_PT.UTF-8@euro	PT_PT.UTF-8	univ.utf8
Portuguese-Brazilian	pt_BR.UTF-8	PT_BR.UTF-8	univ.utf8
Spanish	es_ES.UTF-8@euro	ES_ES.UTF-8	es_ES.utf8
Swedish	sv_SE.UTF-8	SV_SE.UTF-8	sv_SE.utf8

NLS Locale Not Supported Error Message

If you do not have the proper locale installed, the Siebel Analytics Server does not start, and the NQSServer.log file contains the following error:

[47013] NLS locale *xxx* is not supported by the operating system.

In this error message, *xxx* is the locale specified in the NQSConfig.INI file for the SORT_ORDER_LOCALE parameter. The responses to this error shown in Table 31.

Table 31. Responses to NQSServer.log file error 47013

Platform	Response to Error
UNIX	Install the locale indicated in the table for the requested language.
Windows	Add the corresponding language pack using the Regional Settings dialog box.

Setting SORT_ORDER_LOCALE Under UNIX

Analytics License: All licenses.

Operating System: UNIX only.

This task is part of the "Process of Configuring Siebel Analytics Server."

A value for the C-runtime locale during server startup is specified using the SORT_ORDER_LOCALE parameter in the NQSConfig.INI file. This parameter is set according to the following procedure.

To set the SORT_ORDER_LOCALE parameter under UNIX

1. Stop the Siebel Analytics Server.
2. Using a text editor, open the NQSConfig.INI file.

   The NQSConfig.INI file is located in the $INSTALLDIR/Config directory.
3. In the General section, at the SORT_ORDER_LOCALE parameter, enter a platform-independent name and the corresponding platform-specific name, as shown in Table 30 on page 197.
4. Save and close the NQSConfig.INI file.
5. Restart the Siebel Analytics Server.

Changing Configuration File Settings for Japanese Localizations Under AIX

Analytics License: All licenses.

Operating System: IBM AIX only.

This process is part of "Localizing Siebel Analytics Deployments."

For Japanese localizations on AIX platforms, the Siebel Analytics Server may not start. You may need to perform the following steps.

To change configuration settings for Japanese localization

1. Make sure that locale JA_JP.UTF-8 is installed. If it is not, install it.
2. Open the NQConfig.INI file and change the following:
   - LOCALE = "Japanese";
   - SORT_ORDER_LOCALE = "Japanese";

   NOTE: These settings are case-sensitive.
3. Save and close the NQConfig.INI file and try restarting the Siebel Analytics Server.

Related Topics

"Localizing Sort Order Settings Under UNIX" on page 197

"About Translating Web Catalog Strings" on page 204

Process of Maintaining Translation Tables for Analytics

Analytics License: All licenses.

Operating Systems: All.

This process is part of "Localizing Siebel Analytics Deployments."

The presentation layer of the Siebel Analytics Server Administration Tool supports multiple translations for any column name. When working with Siebel Answers or rendering a dashboard, English-speaking and French-speaking users see their local language strings in their reports. There are two kinds of application strings requiring translation in Siebel Analytics:

- Metadata

  Metadata strings are Analytics-created objects in the Siebel Analytics repository such as Subject Area, Metrics, and Dimensions. If your deployment includes a Siebel Analytics CRM application, you need to perform further tasks for localization. See the *Siebel Analytics Applications Installation and Administration Guide* section on localization.

- Web Catalog

  Web Catalog objects are end-user created objects such as Reports, Dashboards, and Pages. Translations for Web catalog strings are stored in the SiebelAnalytics.webcat file. For more information on accessing these strings and changing the translations, see *Siebel Analytics Web Administration Guide*.

This process includes the following tasks for Stand-Alone deployments of Siebel Analytics:

- "Using the Externalize Strings Utility for Localization" on page 202
- "Displaying Localized Column Field Names for Siebel Miner or Data Mining Workbench" on page 203

Using the Externalize Strings Utility for Localization

Analytics License: All licenses.

Operating Systems: All.

This task is part of the "Process of Maintaining Translation Tables for Analytics."

The Server Administration Tool's Externalize Strings utility is primarily for use by translators or by the Siebel Analytics repository administrator. If you use a language other than English (US), you must use Externalize Strings to see the names of catalogs, tables and columns, and their descriptions if present, in their own language.

NOTE: Before using the Externalize Strings utility, translators should consult Siebel Systems.

To perform the string translation process using Externalize Strings

1. In the repository presentation layer, right-click a Catalog Folder.
2. Select the options Externalize Display Names and Externalize Descriptions.
3. From the Toolbar, choose Tools > Utilities > Externalize Strings and click the Execute button.
4. Click on the Catalog Folders in the left pane.

   In the right pane, the translated values and the original strings (names) appear. These translated values are placed in session variables for use by Siebel Analytics Web.
5. Click the Save button to save the strings in the format you want.
6. Click the Close button to end the utility.

Displaying Localized Column Field Names for Siebel Miner or Data Mining Workbench

Analytics License: All licenses.

Operating Systems: All.

This task is part of the "Process of Maintaining Translation Tables for Analytics."
It applies only if the following conditions are true:

- Your site is licensed for Siebel Miner or Data Mining Workbench
- Your site is deploying Siebel Analytics in a localized environment

The column field names in Siebel Miner or Data Mining Workbench remain displayed in English unless you change the locale in the Siebel Analytics repository, as shown in the following procedure.

To display column field names in the localized language

1. Stop the Siebel Analytics Server.
2. Using the Server Administration Tool, open the Siebel Analytics repository.
3. In the menu, click on Manage > Variables.
4. Double-click Sessions > LOCALE.
5. Change the value in the Default intializer field from 'en' to the code for the localized language (for example, 'ja' for Japanese). (Include the single quotes.)

   For a list of language codes, see Table 37 on page 251.
6. Click OK and close the Variable Manager window.

   Save the repository.
7. Restart Siebel Analytics Server.

About Translating Web Catalog Strings

Analytics License: All licenses.

Operating Systems: All.

This topic gives more information on the subject of localizing Siebel Analytics Applications deployments.

The translations for such Web Catalog objects as report and page names are embedded in the SiebelAnalytics.webcat file. In multiple language deployment mode, if you add any additional Web Catalog objects, such as reports and new dashboard pages, you also need to add the appropriate translations. Add these translations using the Catalog Manager tool. For more information on using this utility, see *Siebel Analytics Web Administration Guide*.

About the WEBLANGUAGE Session Variable

Analytics License: Analytics Applications only.

Operating Systems: All.

This topic gives more information on the subject of localizing Siebel Analytics Applications deployments.

The session variable WEBLANGUAGE is passed from Siebel Analytics Web to the Siebel Analytics server. In an integrated Siebel Analytics application environment, the value of the WEBLANGUAGE variable is what determines the value of the LOCALE variable for externalized display names.

WEBLANGUAGE is set to the language of the user's browser when a user first logs on to an integrated Siebel Analytics application. For example, if a user with a browser language set to French logs on to Answers for the first time, the value for WEBLANGUAGE is French, and the metadata is translated to French.

In the Siebel Analytics platform, WEBLANGUAGE is set by the user choosing a language on the logon window. After the first logon, WEBLANGUAGE is reset or changed in the My Account page of Siebel Analytics Web.

B User Authentication Support in Siebel Analytics

Analytics License: All licenses.

Operating Systems: All.

This area describes the configuration of LDAP and ADSI servers for user authentication in the Siebel Analytics platform.

Authentication is separate from permission security. Siebel Analytics Server supports the methods of authentication shown in Table 32.

Table 32. Siebel Analytics Authentication Methods

Method	Description
Database authentication	The Siebel Analytics repository is preconfigured for database authentication. This may be changed using the Server Administration Tool. See the *Analytics Server Administration Tool Online Help*.
LDAP (Lightweight Directory Access Protocol) server authentication	Siebel Analytics Server supports LDAP in both Secure Socket Layer (SSL) and regular (non-SSL) modes. An LDAP server treats Siebel Analytics Server as a regular LDAP client. Siebel Analytics Server supports authentication against multiple LDAP servers. See the topic "Setting Up LDAP Authentication in Analytics" on page 211.
ADSI (Active Directory Service Interfaces) authentication	Siebel Analytics Server supports ADSI in both Secure Socket Layer (SSL) and regular (non-SSL) modes. An Active Directory Server treats Siebel Analytics Server as a regular LDAP client. Siebel Analytics Server supports authentication against multiple Active Directory servers. **NOTE:** Siebel Analytics Server is still a LDAP client when it runs against ADSI.

Process of Configuring LDAP and ADSI for Analytics Authentication

Analytics License: All licenses.

Operating Systems: All.

This topic is part of "User Authentication Support in Siebel Analytics."

Authentication on LDAP and ADSI servers uses Siebel Analytics Server session variables. Some session variables, such as PASSWORD, are populated automatically. They receive their values when a user begins a session by logging on. Instead of storing user names and passwords in a Siebel Analytics Server repository, the Siebel Analytics Server passes the user's user name and password to an LDAP server for authentication.

Some session variables, such as GROUP, need to be manually created in the Siebel Analytics repository. Initialization blocks specify the attributes to be retrieved in session variables. Certain session variables, called *system* session variables, have special uses. For more information about session variables, the USER system variable, and the Variable Manager, see the appropriate topics in *Siebel Analytics Server Administration Guide* or *Analytics Server Administration Tool Online Help*.

The following key restrictions apply to LDAP and ADSI authentication:

- Importing of user information into the repository is supported on regular LDAP servers, but not supported on ADSI servers.
- Groups are defined in the repository. However, if lists of users are stored on LDAP servers, the group membership information must be obtained from a database table.
- When a User exists in both the repository and in an external source (such as LDAP servers), the local repository User definition takes precedence. This restriction allows the Siebel Analytics Server Administrator to override users that exist in an external security system.

The process of configuring Analytics users on an LDAP or ADSI server consists of the following tasks:

1. "Configuring IKeyMan for CMS Key Generation" on page 207

   Use the GSKit utility IkeyMan to create a key database file, and store it under the Siebel Analytics configuration directory.

   NOTE: For ADSI authentication only, GSKit is not required.

2. "Generating a CMS Key Database File" on page 209
3. "Setting Up LDAP Authentication in Analytics" on page 211

Configuring IKeyMan for CMS Key Generation

Analytics License: All licenses.

Operating Systems: All.

This topic is part of "User Authentication Support in Siebel Analytics," and a task of the "Process of Configuring LDAP and ADSI for Analytics Authentication."

IBM's IKeyMan, a Java-based tool, is used to create key database files for LDAP authentication over SSL (Secure Sockets Layer). A key database file stores digital certificates based on the X.509 standard.

IKeyMan can generate several kinds of key database files, but an LDAP client can use only key database files of the CMS type. The extension of this file type is .kdb.

NOTE: An IBM or an IBM-equivalent JDK must already be installed. The correct version of Java is required for IKeyMan to work properly. For installation of IBM GSK iKeyMan, see *Security Guide for Siebel Business Applications*. For supported versions of the Java runtime engine, see *Siebel System Requirements and Supported Platforms*.

To configure IKeyMan to allow creation of CMS key database files

1. Set JAVA_HOME to point to the directory where JDK was installed.

   For example:

   - On Windows, set JAVA_HOME=C:\Progam Files\IBM\Java142.
   - On UNIX, export JAVA_HOME=/usr/opt/IBMJava1_4_2.

2. Remove the gskikm.jar and ibmjcaprovider.jar files from your ${JAVA_HOME}/jre/lib/ext directory.

3. Make sure that ${JAVA_HOME}/jre/lib/ext has the following jar files:

   - ibmjceprovider.jar
   - ibmpkcs.jar
   - ibmjcefw.jar
   - local_policy.jar
   - US_export_policy.jar
   - ibmjlog.jar
   - ibmjsse.jar

   Copy these jar files from the GSKit installation path /classes/jre/lib/ext.

4. Register the IBM JCE and IBM CMS service providers.

   Update the file ${JAVA_HOME}/jre/lib/security/java.security to add the IBMJCE provider and IBMCMS provider after the Sun provider. For example:

- security.provider.1=sun.security.provider.Sun
- security.provider.2=com.ibm.spi.IBMCMSProvider
- security.provider.3=com.ibm.crypto.provider.IBMJCE

A sample java.security file is in GSKit Installation path \classes\gsk_java.security.

Generating a CMS Key Database File

Analytics License: All licenses.

Operating Systems: All.

This topic is part of "User Authentication Support in Siebel Analytics," and a a task of the "Process of Configuring LDAP and ADSI for Analytics Authentication."

The utility for generating a CMS key database is IkeyMan, located in the GSKit\bin directory.

NOTE: Be sure that you complete the configuration of GSKit and set up the JAVA_HOME before running the key-generation command.

To generate a CMS key database file

1. Run gsk6ikm.exe under Windows or gsk6ikm under UNIX.
2. Enter a password.

   NOTE: Do not check the box Stash the password to a file, because the password is entered in an LDAP object in the repository file.

   For details on generating a key database file, see the IBM Directory Server administration guide's chapter on securing the directory, in the section on using gsk6ikm.
3. After creating the CMS key database file, store it in the Siebel Analytics Server configuration directory.

   NOTE: This key file must be stored on all other machines used to connect to the LDAP server, such as the computer running the Server Administration Tool. Store the key file under the Siebel Analytics Server configuration directory (the directory containing NQSConfig.INI).

Generating CMS Key Database Files in GSKit 6

Releases of GSKit 6.x IKeyMan utility have certificates that expired January 6, 2004. This certificate expiration prevents IKeyMan from creating CMS key database files. If you are using GSKit 6.x, then perform one of the following procedures on the machine running IKeyMan.

Setting Back the System Clock

Before generating the CMS file, perform the following procedure to set back the system clock.

To create CMS files by setting back the system clock

1. Turn back the system clock on the machine to a date before January 6, 2004.
2. Run IKeyMan and create a CMS key database file.
3. Save this key database file as a CMS file.
4. Restore the system clock.

Creating and Converting Key Files

The following procedure first creates key files in another format, then converts them to CMS files.

To create non-CMS files without expired certificates

1. Run IKeyMan.
2. Create a key database file that is not of CMS type.

   For example: JKS, JCEKS and PKCS12.
3. Delete the expired certificates.
4. Save this key database file as a CMS file.

Setting Up LDAP Authentication in Analytics

Analytics License: All licenses.

Operating Systems: All.

This topic is part of "User Authentication Support in Siebel Analytics," and a task of the "Process of Configuring LDAP and ADSI for Analytics Authentication."

External authentication is determined by the presence of a defined session system variable USER. Associating USER with an LDAP initialization block determines that USER is authenticated by LDAP. Whenever a user logs into Siebel Analytics Server, the user name and password are passed to the LDAP server for authentication. After the user is authenticated successfully, other session variables for the user might also be populated from information returned by the LDAP server.

To configure LDAP authentication, you perform the following tasks:

1. Create an LDAP initialization block.

   For details of how to create an initialization block, see the topics on session variables in *Siebel Analytics Server Administration Guide*.)

2. Associate this initialization block with an LDAP server.
3. Define a system variable called USER.
4. Associate the USER system variable with the LDAP initialization block.

NOTE: To provide other forms of authentication, you associate the USER variable with an initialization block associated with an external database or XML source. For details of how to set up other forms of authentication, see the topics on session variables in *Siebel Analytics Server Administration Guide*.)

About Using CMS Key Database Files for LDAP Authentication

An LDAP server usually allows two kinds of authentication over SSL:

- Server authentication
- Server and client authentication

Siebel Analytics Server uses server authentication. You must configure an LDAP server to allow client-side server authentication. For server authentication, you generate a CMS key database file with the Certificate Authority (CA) certificate and mark it as trusted. The CA is also the CA that issued the LDAP server's certificate. See the topics "Configuring IKeyMan for CMS Key Generation" on page 207 and "Generating a CMS Key Database File" on page 209.

About GSKit (Global Security Kit)

IBM's GSKit (Global Security Kit) is a Java-based utility that provides CMS key database files for LDAP authentication over Secure Sockets Layer.

NOTE: See *Siebel System Requirements and Supported Platforms* for the supported version of the Java runtime engine.

Before configuring LDAP authentication, make sure that GSKit is installed on the same machine as the Siebel Analytics Server, and that GSKit is configured for your operating system. See the topic "Configuring IKeyMan for CMS Key Generation" on page 207.

If GSKit is not already installed, see *Security Guide for Siebel Business Applications* for the installation procedure.

C Installing Siebel Analytics Ancillary Client Programs

This area describes tasks for installing additional ancillary client programs that work with Siebel Analytics. The ancillary programs are Windows-only applications:

- Siebel Mobile Analytics Client

  This is the only ancillary client program that is installed by the Siebel Analytics installer. See the topic "Installing and Configuring Mobile Analytics Client" on page 214.

- Siebel Briefing Book Reader

  This ancillary client program is included on the Siebel Analytics DVD in the folder \Client_Ancillary. See the topic "Installing Briefing Book Reader" on page 222.

  NOTE: This program is not installed by the Siebel Analytics installer. You must use the installation procedures referred to.

- Siebel Analytics Excel Add-In

  This ancillary client program is included on the Siebel Analytics DVD in the folder \Client_Ancillary. See the topic "Installing Siebel Analytics Excel Add-In" on page 223.

  NOTE: This program is not installed by the Siebel Analytics installer. You must use the installation procedures referred to.

- Siebel Analytics Advanced Reporting Edition

  This ancillary client program is included on the Siebel Analytics DVD in the folder \Client_Ancillary. See the topic "Roadmap for Installing and Configuring the Advanced Reporting Edition" on page 226.

  NOTE: This program is not installed by the Siebel Analytics installer. You must use the installation procedures referred to.

These ancillary programs require additional Siebel licensing. See the topic "Optional Analytics Product Choices in the Installer" on page 32.

Installing and Configuring Mobile Analytics Client

Analytics License: Analytics Applications only.

Operating System: Windows only.

This topic is part of "Installing Siebel Analytics Ancillary Client Programs."

NOTE: The product Siebel Mobile Analytics is referred to as Disconnected Client in the user interface. Both terms refer to the same product.

You install the Siebel Mobile Analytics Client on laptop computers. Siebel Mobile Analytics Client allows laptop users to access data and reports when not connected to the network-based Siebel Analytics Server.

After the Mobile Analytics Client installation, an online help file, *Disconnected Analytics Online Help*, is available in the directory $INSTALL\Document\. See this online help for information about how laptop users typically use the Mobile Analytics Client.

NOTE: Do not confuse Siebel Mobile Analytics Client installation with the enterprise (Siebel Analytics Server) installation. See also the information on setting up Mobile Analytics in *Siebel Analytics Server Administration Guide*.

The process of installing or configuring Analytics Mobile or Disconnected Client is described in the following topics:

- "Additional Web Server Requirements for Mobile Analytics Client" on page 215
- "Installing the Analytics Mobile Client" on page 216
- "Setting Up Mobile Client to Run in Silent Mode" on page 218
- "Upgrading Mobile Client Silently" on page 219
- "Configuring Mobile Analytics Client ODBC DSN for Authentication" on page 220
- "Configuring Sun ONE Web Server for Analytics Mobile Client" on page 221

Installation Restrictions for Analytics Mobile Client

The Mobile Analytics Client installation has the following restrictions:

- Install the Mobile Analytics Client before or after you have installed the other Siebel Analytics components.
- Install the Mobile Analytics Client application components on the same machine as the Siebel Analytics Server.

Additional Web Server Requirements for Mobile Analytics Client

Analytics License: Analytics Applications only.

Operating Systems: All.

This topic is part of the process "Installing and Configuring Mobile Analytics Client."

Mobile Analytics Client requires the following additional Web server configuration in order to function properly:

- Install the standard Siebel Analytics Server on a network machine in order to work with Mobile Analytics.
- If the Web server is Sun ONE (formerly iPlanet) and it is running on Solaris, configure this server as shown in "Configuring Sun ONE Web Server for Analytics Mobile Client" on page 221.

Installing the Analytics Mobile Client

Analytics License: Analytics Applications only.

Operating System: Windows only.

This topic is part of the process "Installing and Configuring Mobile Analytics Client."

When you run the Siebel Analytics installer wizard, you are prompted to select the setup type. If you purchased Siebel Mobile Analytics, the installer detects this from the license key information and displays the Siebel Mobile Analytics Client option.

NOTE: Use the same license key for server and for Disconnected Client installation.

To install the Siebel Analytics Mobile Client

1. Access the installation files, and run the program Setup.exe.
2. The installation wizard window appears and prompts you through each screen, as shown in the following table of installation wizard screens for the Mobile Client.

   To continue to the next screen, click Next. If you need to return to a previous screen, click Back.

Screen	Your Action
Welcome	Click Next.
License Agreement	Select "I accept ..." and click Next.
License File	The License file is an XML file corresponding to the installation type you are licensed for. This file is emailed to you, or installed on your corporate server. Select the appropriate XML file in the License File screen (for example, HorizontalDisc.xml). Click Next.
Installation Directories	To change the default installation drive (recommended), click browse and establish the installation path, then click Next. **CAUTION:** Do not install the Mobile Client on the same machine with Siebel Analytics. Install them on two separate machines.
Setup Type	■ Choose the option Custom. ■ Check the box corresponding to Siebel Disconnected Analytics Client. ■ Click Next.
Selection Error Message Language	The error messages from the Siebel Analytics Server are in one language only. Typically, these are back-end server side messages only. The Siebel Analytics Administrator can choose which language to display these messages in. The default is English. Click Next.

Screen	Your Action
Java Home Directory	Type the path for the directory where Java SDK 1.4.1 or higher is installed. Click Next.
Please wait	Placeholder screen appearing while the installer accepts all the choices you have made.
Summary Information	A list of the Siebel Disconnected Analytics Client components and the directory where they are to be installed. Confirm that this information is correct.
Installing	Placeholder screen that appears while the installer installs all the features you have selected.
Summary Information	Acknowledgement that the installation wizard has finished installing Siebel Analytics. Choose whether or not to immediately restart your computer and click Finish. ■ If you click Yes ..., the computer shuts down and restarts. ■ If you click No..., you need to restart the computer before you use Siebel Analytics.

Setting Up Mobile Client to Run in Silent Mode

Analytics License: Analytics Applications only.

Operating System: Windows only.

This topic is part of the process "Installing and Configuring Mobile Analytics Client."

After you install Siebel Analytics Mobile Client, you can make it run automatically in silent mode (in the background). In order to run Mobile Client in silent mode easily, create a new Start menu shortcut, as shown in the following procedure.

To create a Start menu shortcut for Mobile Client silent mode

1. Right-click Start and select Explore.
   The directory Start Menu should be highlighted in the directory tree.
2. In the right pane, double-click Programs.
3. In the right pane, double-click Siebel Analytics.
4. Right-click Siebel Disconnected Analytics and select Create Shortcut.
5. Rename the new shortcut to Siebel Disconnected Analytics Silent Mode.
6. Right-click Siebel Disconnected Analytics Silent Mode and select Properties.
   - In the Shortcut tab Target field, at the end of the existing command, add a space, then add the following, being sure to include a leading space before the slash:

     /s

   - Click Apply, then click OK.

After you have created the shortcut, use it to start Mobile Analytics Client, as shown in the following procedure.

To start Mobile Client in silent mode

- Navigate to Start > Programs > Siebel Analytics > Siebel Disconnected Analytics Silent Mode.

Upgrading Mobile Client Silently

Releases: Release 7.7.1 only.

Analytics License: Analytics Applications only.

Operating System: Windows only.

This topic is part of the process "Installing and Configuring Mobile Analytics Client."

If you have release 7.7.1 of Siebel Disconnected Client installed and running, you can perform the following procedure to upgrade this component silently (that is, to run the installer without user interaction).

To silently install a Mobile Client upgrade

1 Run the following command:

```
setup.exe -W CopyrightPanelBean.selection="1" -W
LicenseFileLocPanelBean.FileName="$INSTALLDIR/Licenses/StandAlone.xml" -W
InitJavaHome.propertyValue="C:/j2sdk1.4.2_03" -W
setupTypes.selectedSetupTypeId="DisconnectedClient" -G
replaceExistingResponse="yesToAll" -G replaceNewerResponse="yesToAll" -silent
```

where the options have the following values:

Option Value	Meaning
`-W CopyrightPanelBean.selection="1"`	Accept the general Siebel license agreement.
`-W LicenseFileLocPanelBean.FileName="$INSTALLDIR/Licenses/StandAlone.xml"`	Specify the location of Siebel Analytics license file. **NOTE:** $INSTALLDIR is the location of the Siebel Analytics installation. For example, /usr/local/SiebelAnalytics.
`-W InitJavaHome.propertyValue="C:/j2sdk1.4.2_03"`	Specify the required Java SDK location.
`-W setupTypes.selectedSetupTypeId="DisconnectedClient"`	Specify the installation setup-type is DisconnectedClient.
`-G replaceExistingResponse="yesToAll"`	These two settings tell the installer to take the rest as default, and continue to the end.
`-G replaceNewerResponse="yesToAll"`	
`-silent`	Run the installation in silent mode.

2 Restart the computer on which the Mobile Client was upgraded.

Configuring Mobile Analytics Client ODBC DSN for Authentication

Analytics License: Analytics Applications only.

Operating System: Windows only.

This topic is part of the process "Installing and Configuring Mobile Analytics Client."

The Mobile Analytics client for a Siebel Analytics application must be configured for authentication. Whenever a Mobile Analytics client user logs on to Mobile Analytics, the user name and password are authenticated using SQL Anywhere against a Siebel transactional database table. In order for the Mobile Analytics client to work in an integrated environment, you must configure SIEBEL_OLTP (the ODBC Data Source Name or DSN) on the client machine.

NOTE: For the Siebel Pharma applications, Pharma Field Analytics is a prebuilt Mobile Analytics application for Siebel Pharma Sales.

The following configuration provides connectivity between the Mobile Analytics client and the mobile client Siebel transactional database.

To configure the Siebel Mobile Analytics client SIEBEL_OLTP DSN

1. Navigate to Start > Programs > Administrative Tools > Data Sources (ODBC).

   Click System DSN tab.
2. Click Add button.
3. Select Adaptive Server Anywhere 8.0.

   Click Finish.
4. In Data source name field, enter SIEBEL_OLTP.

   NOTE: Make sure the user has appropriate Analytics responsibilities checked.
5. Click Database tab, and then click Browse.

   In the Database file field, point to the local database on the client machine.
6. Click OK to exit the Administrative Tool.

Configuring Sun ONE Web Server for Analytics Mobile Client

Analytics License: All licenses.

Operating System: UNIX only.

This topic is part of the process "Installing and Configuring Mobile Analytics Client."

If you are using Sun ONE on Solaris as the Web server supporting Analytics Mobile Client laptop machines, you must further configure Sun ONE Web server as shown in the following procedure.

NOTE: The third-party product referred to is Sun ONE, but the installation paths and directories refer to its older name, iPlanet.
This procedure assumes that Sun ONE is installed in $INSTALLDIR.

To configure Sun ONE as a Web server for the Mobile Client

1. Open the server.xml file in the directory /$INSTALLDIR/https-localhost/config.
2. In the server.xml file, change the following line:

   <CONNECTIONGROUP id="group1" matchingip="default" servername="localhost" defaultvs="https-localhost"/> NOTICE: servername is localhost

   to

   <CONNECTIONGROUP id="group1" matchingip="default" servername="<machine_name>" defaultvs="https-localhost"/> NOTICE: servername is actual name of the machine.
3. Save and close the server.xml file.

Installing Briefing Book Reader

Analytics License: Briefing Book.

Operating System: Windows only.

This topic is part of "Installing Siebel Analytics Ancillary Client Programs."

Siebel Analytics Briefing Book Reader is installed on laptop computers. It is a Windows application that provides a way to save static and linked dashboard content for review offline. Users specify dashboard pages for immediate or scheduled download. Key reports and dashboards can be reviewed and evaluated while disconnected from the network.

The installation program for Briefing Book Reader is located on the Siebel Analytics Windows installation DVD.

To install the Siebel Analytics Briefing Book Reader under Windows

1. From the installation DVD folder Siebel_Briefing_Book_Reader, or from the network location that contains the Briefing Book Reader files, run the program Win32Setup.exe.
2. The installation wizard window appears and prompts you through each screen.

   To continue to the next screen, click Next. If you need to return to a previous screen, click Back.

Screen	Your Action
Welcome	Click Next.
License Agreement	Select "I accept..." and click Next.
Installation Directories	To accept the default installation (C:\Program Files\SABBReader\), click Next. To change the default (recommended), click browse and establish the installation path, then click Next.
License File	The License file is an XML file corresponding to the installation type you are licensed for. This file is emailed to you, or installed on your corporate server. Select the appropriate XML file in the License File screen. Click Next.
Summary Information	The directory where Briefing Book Reader is to be installed is shown. Click Next.
Installing	Placeholder screen that appears while the installer installs all the features you have selected. When done, click Finish to exit the installation wizard.

For information on creating and using Briefing Books, see *Siebel Analytics User Guide*.

Installing Siebel Analytics Excel Add-In

Analytics License: Excel Add-In only.

Operating System: Windows only.

This topic is part of "Installing Siebel Analytics Ancillary Client Programs."

Siebel Analytics Excel Add-In is a Windows application that is an optional license under the Analytics Web Server. The Add-In provides a way to browse the Analytics catalog, select a report, and then drop that report into Excel. This spreadsheet may be saved and the data refreshed as needed. For information on how to use the Excel Add-In feature, see the *Siebel Analytics User Guide*.

The installation program for Excel Add-In is located on the Siebel Analytics Windows installation DVD.

Before installing this feature, the following programs must be installed on the client machines that run the Excel Add-In:

- .NET Framework
- Microsoft Excel
- An appropriate version of Microsoft Office (see *Siebel System Requirements and Supported Platforms*)

To install the Siebel Analytics Excel Add-In under Windows

1. From the installation DVD folder Siebel_Analytics_Excel_Add_In, or from the network location that contains the Excel Add-In files, run the program setup.exe.
2. The installation wizard window appears and prompts you through each screen.

   To continue to the next screen, click Next. If you need to return to a previous screen, click Back.

Screen	Your Action
Welcome	Click Next.
License Agreement	Select "I accept..." and click Next.
Installation Directories	To accept the default installation (C:\Program Files\SiebelAnalytics\SAExcelAddIn), click Next. To change the default (recommended), click browse and establish the installation path, then click Next.
Siebel Analytics Web Server URL	The Web location from which data is to be retrieved. The format should be as in the following example: http://SAWHost/analytics
Summary Information	The directory where the Excel Add-In is to be installed is shown. Click Next.

Screen	Your Action
Installing	Placeholder screen that appears while the installer installs the Excel Add-In. When done, click Next.
Summary Information	Choose whether or not to immediately restart your computer and click Finish. ■ If you click Yes ..., the computer shuts down and restarts. ■ If you click No..., you need to restart the computer before you use Siebel Analytics.

Installing and Configuring Siebel Analytics Advanced Reporting Edition

Analytics License: Siebel Analytics Advanced Reporting Edition only.

Operating System: Windows only.

This topic is part of "Installing Siebel Analytics Ancillary Client Programs."

The Siebel Analytics Advanced Reporting Edition feature utilizes a third-party product licensed from Actuate Corporation that is used to create highly formatted Siebel Business Analytics reports.

NOTE: Analytics Advanced Reporting Edition is unrelated to advanced reporting for Siebel CRM applications. For information about supported configurations and limitations for Analytics Advanced Reporting Edition, read the *Siebel System Requirements and Supported Platforms for Siebel Analytics* release 7.8.4, available on SupportWeb.

The Siebel Analytics Advanced Reporting Edition installer installs and configures the following products:

- Actuate iServer 8
- Actuate Active Portal JSP 8
- Advanced Reporting Server Extensions
- Siebel Business Analytics style sheets and custom JSPs

NOTE: Siebel Business Analytics Advanced Reporting Edition reports do not support Briefing Books, Siebel Answers, Siebel Delivers, or Siebel Mobile Analytics.

"Roadmap for Installing and Configuring the Advanced Reporting Edition" shows the order of performing tasks for installing Siebel Analytics 7.8.4 with Advanced Reporting Edition.

Roadmap for Installing and Configuring the Advanced Reporting Edition

This topic is part of the process of Installing and Configuring Siebel Analytics Advanced Reporting Edition, and provides a list of the overall tasks required to provide end users with Siebel Analytics Advanced Reporting:

- "Installing Advanced Reporting Edition" on page 226
- "Configuring Advanced Reporting Edition" on page 226
- "Designing an Actuate Report" on page 228

Installing Advanced Reporting Edition

The following list shows the overall tasks required to install Advanced Reporting Edition.

The Advanced Reporting Edition installs and configures the following Actuate products and functionality:

- **Actuate iServer**. The iServer is responsible for generating, managing and distributing Actuate reports. Actuate Management Console, installed as part of iServer, manages and configures the Actuate Encyclopedia, which stores reports, users, roles, and access privileges.
- **Actuate Active Portal**. The Actuate Active Portal is JSP application that is used to provide Web-based access to the Actuate iServer.

Tasks for installing Advanced Reporting Edition

1. Run the Siebel Analytics Advanced Reporting Edition installer. See the topic "Running the Advanced Reporting Edition Installer" on page 229.
2. Run the Siebel Advanced Reporting Workbench installer. This installer file setup.exe is located in the folder Client_Ancillary\Siebel_Analytics_Advanced_Reporting\erdpro.
3. Run the Actuate Localization and Online Help Installer. This installer file setup.exe is located in the folder Client_Ancillary\Siebel_Analytics_Advanced_Reporting\l10nandonlinedocumentation\windows.

Configuring Advanced Reporting Edition

The following list shows overall tasks required to configure Advanced Reporting Edition.

Tasks for configuring Advanced Reporting Edition

1. Modify the instanceconfig.xml files to establish the connectivity between Siebel Analytics and Actuate products. See the topic "Configuring Siebel Analytics and Actuate iServer for Advanced Reporting" on page 237.

2 Specify permissions for advanced reports in Siebel Analytics Web Administration. See the topic "Specifying Permissions for Advanced Reporting" on page 239.

3 Make sure that the Siebel Analytics Open Intelligence Interface (ODBC) client is installed on every machine on which the following Actuate components are installed:

- Actuate iServer
- Siebel Advanced Reporting Workbench

4 Make sure that the Analytics.rol library file is copied to every machine on which Siebel Advanced Reporting Workbench is installed. The Analytics.rol file is located in the iServer installation /etc directory.

This library file contains connectivity information for the Siebel Analytics Server and parameters that are required for reports to work in Siebel Analytics Web.

NOTE: Do not modify this library file. Always include this file in every report design based on Siebel Analytics Server metadata.

5 Map users in the Actuate Encyclopedia to users in the Siebel Analytics Server by creating a new initialization block and assigning it new session variable, NQ_SESSION.ACTUATEUSERID.

For information about creating initialization blocks and session variables, see *Siebel Analytics Server Administration Guide*.

6 After assigning user privileges to Actuate content, set the appropriate access privileges defined in the Siebel Analytics Web server.

The Siebel Analytics Web default settings for viewing and scheduling privileges are configured so that everyone can view and schedule the reports for the Advanced Reporting Edition.

7 Add an Advanced Report Object to a dashboard using the Dashboard Editor in Siebel Intelligence Dashboards.

The dashboard builder can specify whether reports will be embedded in the dashboard page or will be presented as a link in the dashboard page. If the report is available as a link, the report will appear in a new browser window when a user clicks the link.

NOTE: Only one Advanced Report object can be added to a given dashboard page.

For information about adding an Advanced Report to an Intelligence Dashboard, or interacting with Advanced Reports, read the section about working with the Advanced Reporting objects in the *Siebel Analytics User Guide*.

8 Manage the reports using the Actuate Management Console.

Launch the Actuate Management Console from the Siebel Analytics Web Administration page by clicking on the link Manage Advanced Reporting.

For information about accessing the Actuate Administration Console from within Siebel Analytics Web, see *Siebel Analytics Web Administration Guide*.

Designing an Actuate Report

After connectivity to the Siebel Analytics server is established (see Step 1 of "Configuring Advanced Reporting Edition" on page 226), report designers use Siebel Advanced Reporting Workbench, a Windows-based desktop tool, to create highly complex, formatted reports to include in Siebel Analytics dashboards. For information on report design guidelines, see the Actuate documentation on the *Siebel Business Applications Third-Party Bookshelf* CD-ROM.

The following list shows the general tasks performed by a report designer or an administrator with report designing capabilities. Details of configuration are contained in the *Siebel Analytics Web Administration Guide*.

Tasks for designing a report

1. Install Siebel Advanced Reporting Workbench if your deployment does not already include it.

   NOTE: The Advanced Reporting Edition installer does not install Siebel Advanced Reporting Workbench. This product is available on the DVD, but must be installed separately by executing the Siebel Advanced Reporting Workbench installer.

2. Report developers design the reports.

   For information about designing reports, see the Actuate documentation on the *Siebel Business Applications Third-Party Bookshelf* CD-ROM.

3. After the report formatting requirements are met, publish the report to the Actuate iServer using the Actuate Management Console.

   NOTE: Using the Actuate Management Console makes sure that the connectivity between the Actuate server and the Siebel Analytics Server is established, and that the report output meets the design requirements.

Running the Advanced Reporting Edition Installer

This topic is part of the process of Installing and Configuring Siebel Analytics Advanced Reporting Edition. The installation program for Siebel Analytics Advanced Reporting Edition is located on the Siebel Analytics DVD in the folder \Client_Ancillary.

NOTE: If you deploy Actuate iServer and Actuate Active Portal on separate computers, you must run the Advanced Reporting Edition installer twice, that is, once for each computer running an Actuate product.

To run the Siebel Analytics Advanced Reporting Edition installation wizard

1. If your deployment already includes installed Actuate 8 components, make sure that the following Windows Services are running, or start them:
   - Actuate Process Management Daemon 8
   - Actuate HTTP Service 8

   NOTE: Make sure your deployment of Actuate products is the correct version. Advanced Reporting Edition is certified to work only with Actuate iServer 8 and Active Portal 8.
2. Access the Siebel_Analytics_Advanced_Reporting installation folder, and then run the program setup.exe.

   NOTE: Be sure to run only the setup.exe program from the folder Siebel_Analytics_Advanced_Reporting, not from the other folders.
3. Install Advanced Reporting Edition on the same machines on which iServer 8 and Active Portal 8 are installed.
4. The installation wizard window appears and prompts you through each screen.

   The meanings and default for each screen and prompt for the Siebel Analytics Advanced Reporting Edition installation are listed in the topic "Analytics Advanced Reporting Edition Installer Screens and Prompts" on page 230.

   NOTE: The screens or prompts that are visible depend on your particular Actuate product deployment.
5. Restart the computer for the installation to take effect.

   After restarting the computer, the Actuate components iServer and Active Portal run automatically as Windows Services:
   - iServer runs as Actuate Process Management Daemon 8
   - Active Portal runs as Actuate HTTP Service 8

Analytics Advanced Reporting Edition Installer Screens and Prompts

This topic is part of the task "Running the Advanced Reporting Edition Installer."

The screens for the following types of Siebel Analytics Advanced Reporting Edition installation are listed in this topic:

- Installing Advanced Reporting Edition, Actuate iServer, and Actuate Active Portal.

  You are using Advanced Reporting Edition to install and configure the Actuate products.

- Installing Advanced Reporting Edition only.

  Your deployment already includes a working installation of Actuate iServer (with Actuate Management Console) and Actuate Active Portal.

  NOTE: Make sure your deployment of Actuate products is the correct version. Advanced Reporting Edition is certified to work only with Actuate iServer 8 and Active Portal 8.

- Installing Advanced Reporting Edition and Actuate iServer.

  You have already deployed Actuate Active Portal on this machine, or are deploying Active Portal on a separate machine from iServer.

- Installing Advanced Reporting Edition and Actuate Active Portal.

  You have already deployed Actuate iServer on this machine, or are deploying iServer on a separate machine from Active Portal.

  NOTE: The second through fourth types of Advanced Reporting Edition installation are subsets of the first type. All the screens and recommended actions for these types are included in Table 33 on page 231.

Screens and Prompts for Installing Advanced Reporting Edition with Actuate iServer and Actuate Active Portal

In this type of installation, Actuate iServer and Actuate Active Portal are installed, and Advanced Reporting Edition configures the Actuate components to work with Siebel Analytics. Table 33 on page 231 lists the screens for this type of installation.

Provide the requested input for each screen. To continue to the next screen, click Next. To return to a previous screen, click Back.

Table 33. Screens and Prompts—Advanced Reporting Edition with Actuate iServer and Actuate Active Portal

Screen	Your Action	Notes
Welcome	Click Next.	
License Agreement	Select "I accept..." and click Next.	
Select Product Configuration	Verify that the radio button selected is Install Actuate iServer 8 and Active Portal JSP 8 and Advanced Reporting extensions for both (Default). Click Next.	If you deploy Actuate iServer and Actuate Active Portal on separate computers, you must run the Advanced Reporting Edition installer twice—once for each server.
Confirm Actuate iServer Installation	Select the radio button Install Actuate iServer 8 (Default). Click Next.	Clicking Next starts the installation of Actuate iServer.
(Actuate) Welcome	Click Next.	The screen should say that the installation is for Actuate iServer.
(Actuate) License Agreement	Select "I accept..." and click Next.	
(Actuate) Setup Type	Choose the Typical setup type and select the destination folder.	The Typical setup is recommended. If you select Custom, see the Actuate documentation on the *Siebel Business Applications Third-Party Bookshelf*.
(Actuate) License File Details	Specify the directory in which the Actuate iServer license file is located. Click Next.	

Table 33. Screens and Prompts—Advanced Reporting Edition with Actuate iServer and Actuate Active Portal

Screen	Your Action	Notes
(Actuate) Locale Information	Accept the default, or select the language and time zone settings. Click Next.	
(Actuate) Specify Profiles	■ Accept or change the user name ■ Enter the user password ■ Check or uncheck the Services settings. Click Next.	See the Actuate documentation for details.
(Actuate) Configure Actuate System Admin Password	Enter the password to be used by the Administrator who is to use iServer. Click Next.	
(Actuate) Start Copying Files	Review the iServer settings. Click Next.	This is a text summary of all the choices made during the iServer installation process to this point. If one or more settings needs to be changed, click the Back button and change the setting for that screen.
(Actuate) Setup Status		A progress bar appears while the components you have selected are installed.
(Actuate) Setup.txt file		This file contains configuration instructions for iServer. Close the file when you are finished reading.
(Actuate) Summary of successful installation	Check or uncheck whether or not to view the ReadMe file. Click Finish.	Clicking Finish returns to the Advanced Reporting Edition installer.
Information message	Click OK.	
iServer Installation Directory	Specify the directory on which iServer components are installed. Click Next.	Click Browse and establish the installation path. Be sure to include \iServer in the path.

Table 33. Screens and Prompts—Advanced Reporting Edition with Actuate iServer and Actuate Active Portal

Screen	Your Action	Notes
Installation Volume Name	Specify the iServer volume name. The default volume name is the same as the name of the machine on the network. Click Next.	To locate the volume name, go to the Actuate root directory (for example, \Program Files\Actuate8) and, from the subdirectory \iServer\etc, open the file acserverconfig.xml. The Name attribute value for the XML element Volume is the volume name.
Confirm Actuate Active Portal Installation	Select the radio button Install Actuate Active Portal JSP 8 (Default). Click Next.	Clicking Next starts the installation of Actuate Active Portal.
(Actuate) Welcome	Click Next.	The screen should say that the installation is for Actuate Active Portal.
(Actuate) License Agreement	Select “I accept...” and click Next.	
(Actuate) Setup Type	Choose the Typical setup type and select the destination folder.	The Typical setup is recommended. If you select Custom, see the Actuate documentation on the *Siebel Business Applications Third-Party Bookshelf*.
(Actuate) Locale Information	Accept the default, or select the language and time zone settings. Click Next.	
(Actuate) HTTP Service Destination	Specify the directory on which Actuate HTTP Service is to be installed. Click Next.	
(Actuate) HTTP Service Information	The HTTP port which Actuate HTTP Service uses. The default is 8700. Click Next to accept the default, or specify another port.	

Table 33. Screens and Prompts—Advanced Reporting Edition with Actuate iServer and Actuate Active Portal

Screen	Your Action	Notes
(Actuate) HTTP Service Account Name	Accept or change the user name and enter the user password. Click Next.	See the Actuate documentation for details.
(Actuate) iServer Information	Specify the iServer host name and port number. The host name is the same as the name of the machine on the network. The default port number is 8000. Click Next.	
(Actuate) Volume Name	Specify the iServer volume name to be used as the default volume name if no volume name is specified in a URL request. The volume name is the same as specified in the preceding screen. Click Next.	See the Actuate documentation for details.
(Actuate) Start Copying Files	Review the Active Portal settings. Click Next.	This is a text summary of all the choices made during the Active Portal installation process to this point. If one or more settings needs to be changed, click the Back button and change the setting for that screen.
(Actuate) Setup Status		A progress bar appears while the components you have selected are installed.
(Actuate) Summary of successful installation	Check or uncheck whether or not to view the ReadMe file. Click Finish.	Clicking Finish returns to the Advanced Reporting Edition installer.
Information message	Click OK.	
Active Portal Installation Directory	Specify the directory on which Active Portal components are installed. Click Next.	Click Browse and establish the installation path. Be sure to include \ActivePortalJSP in the path.

Table 33. Screens and Prompts—Advanced Reporting Edition with Actuate iServer and Actuate Active Portal

Screen	Your Action	Notes
Confirm Product Configuration	Verify that the radio button selected is Install Actuate iServer 8 and Active Portal JSP 8 and Advanced Reporting extensions for both (Default). Click Next.	By default, the radio button selected is the same as that in the Select Product Configuration screen.
Summary Information	Click Next.	A list of the Advanced Reporting extensions, specified volume name, and the directory where they are to be installed.
Installing		A progress bar appears while the Advanced Reporting extensions are installed.
Summary of successful installation	Click Next, then click Finish.	Reboot the machine after the window closes.

Configuring Analytics Advanced Reporting Edition

This topic is part of the process of Installing and Configuring Siebel Analytics Advanced Reporting Edition.

After the installation wizard is finished installing the Siebel Analytics Advanced Reporting extensions, the installer automatically performs the following configuration to iServer:

- Copies the security extension library/DLL nqsawodbcrsse2r.dll to $ACTUATE_ISERVER_INSTALL_DIR/bin.
- Modifies the file acserverconfig.xml in the folder $ACTUATE_ISERVER_INSTALL_DIR/etc according to the specified volume name. This registers the security extension library/DLL for use by iServer.
- Copies the Analytics.rol file to the folder $ACTUATE_ISERVER_INSTALL_DIR/etc, to permit the Siebel Advanced Reporting Workbench to publish Siebel Analytics-compatible reports to this iServer.

  NOTE: Make sure that the Analytics.rol file is copied to every machine running Siebel Advanced Reporting Workbench in the directory $ACTUATE_INSTALL_DIR\eRDPro\lib.

The installer also performs the following configuration to Actuate Active Portal, in order to change the Active Portal user interface to match the look and feel of Siebel Analytics:

- Backs up and copies the following files:
  - $ACTUATE_ACTIVE_PORTAL_JSP_INSTALL_DIR/login.jsp
  - $ACTUATE_ACTIVE_PORTAL_JSP_INSTALL_DIR/viewer/viewnavigation.jsp
  - $ACTUATE_ACTIVE_PORTAL_JSP_INSTALL_DIR/private/common/errors/error.jsp
  - $ACTUATE_ACTIVE_PORTAL_JSP_INSTALL_DIR/WEB-INF/skin-access.config
- Copies the folder SiebelAnalytics to $ACTUATE_ACTIVE_PORTAL_JSP_INSTALL_DIR/private/skins.

Administrators must perform additional configuration steps manually. These tasks are described in the topics:

- “Configuring Siebel Analytics and Actuate iServer for Advanced Reporting” on page 237
- “Specifying Permissions for Advanced Reporting” on page 239

NOTE: When changing configuration settings, use an XML editor to edit the files acserverconfig.xml and instanceconfig.xml.
For information about editing the Siebel Analytics configuration file instanceconfig.xml, see the *Siebel Analytics Web Administration Guide*.

The relationship between Siebel Analytics product components and the Advanced Reporting components is shown in “Diagram of Siebel Analytics Advanced Reporting Deployment” on page 241.

Configuring Siebel Analytics and Actuate iServer for Advanced Reporting

This section provides the additional configuration steps that administrators must perform by making entries in the Siebel Analytics and in the Actuate configuration files:

- The first step must be performed in the instanceconfig.xml file for all deployments of Advanced Reporting Edition.
- The second step, necessary only if you are adding an iServer volume, must be performed in the acserverconfig.xml file.

To configure Siebel Analytics Web for Advanced Reporting

- On the machine where Siebel Analytics Web is installed, add the information shown in the following code example to the file instanceconfig.xml.

  The tag <AdvancedReporting> configures the connection between the Actuate iServer and the Siebel Analytics Web Server.

```
<?xml version="1.0" encoding="utf-8"?>
<WebConfig>
   <ServerInstance>
     <AdvancedReporting>
         <ServerURL> http://[machine_name]:8000</ServerURL>
         <Volume> [volume_name]</Volume>
         <ServerAnalyticsODBCDSN>AnalyticsWeb</ServerAnalyticsODBCDSN>
         <WebURL>http://[machine_name]:8700/acweb/</WebURL>
         <AdminURL>http://[machine_name]:8900/acadmin</AdminURL>
         <JavaHostServiceString>sawtcp://[machine_name]:9810
           </JavaHostServiceString>
         <ConnectStringParameter>ConnectString</ConnectStringParameter>
         <AuthIdExpiry>5</AuthIdExpiry>
     </AdvancedReporting>
   </ServerInstance>
</WebConfig>
```

  The configuration values in the preceding code sample are summarized in the following table.

Tag Name	Default Value	Explanation
AdminURL	http://[server_name_or_ip_address]:8900/acadmin	The URL for the Actuate Management Console, used to manage Advanced Reporting users, permissions, jobs, files and folders.
WebURL	http://[server_name_or_ip_address]:8700/acweb	The URL for the Actuate JSP, which renders the Actuate content in Iframes on the Dashboard pages.

Tag Name	Default Value	Explanation
ServerURL	http://[server_name_or_ip_address]:8000	The location of the Actuate iServer.
Volume		The name of the Encyclopedia containing the Actuate reports and documents accessed by the Actuate iServer.
ServerAnalyticsODBCDSN	AnalyticsWeb	The DSN for the Siebel Analytics Server as set up on the Actuate iServer host. The DSN is used by the RSSE plugin to authenticate users against the Siebel Analytics Server.
ConnectString Parameter	ConnectString (For example, DSN=AnalyticsWeb;UID=Administrator;PWD=SADMIN;NQVAR:NQ_SESSION.WEBLANGUAGE=en)	The parameter present in every report that is set at run time to enforce visibility rules, defined using the library Analytics.rol.
JavaHostServiceString	sawtcp://[server_name_or_ip_address]:9810	The location of the machine that is running the Javahost process.
AuthIdExpiry	5	The value in minutes of the expiration period of the authentication ID obtained from Actuate.

Advanced Reporting normally uses your deployment's installed Actuate iServer volume for authentication. If you are adding another volume, then you must perform the following step to the acserverconfig.xml file to create new volume and security settings for Analytics Advanced Reporting.

To configure Actuate iServer for Advanced Reporting

- On the machine where iServer is installed, add the information shown in the following code example to the file acserverconfig.xml. The tag <Volume> configures authentication between the iServer and the Siebel Analytics Server.

```
...
   <Volumes>
     <Volume>
       Name="[machine_name]"
       RSSELibrary=”nqsawodbcrsse2r.dll”
       EnableOpenSecurity=”true”
     ...
     </Volume>
   ...
   </Volumes>
```

Specifying Permissions for Advanced Reporting

Before administrators and end users can work with Advanced Reports, they need to have the appropriate permissions granted.

Administrators need privileges in both Siebel Analytics and in Actuate. For more information on Actuate permissions, read Actuate's *Managing iServer Guide*.

Users may need one or more of the following file system read and write permissions:

- For access to the Advanced Reports screen, end users must be able to schedule reports, which execute based on the schedule that the users define.
- For report execution, reports are executed in real time on the Actuate server.
- For report viewing, users are able to view cached content.

  Grant the appropriate users the permissions shown in Table 34 on page 239.

Table 34. User Permissions for Advanced Reports

Permission	Where
Execute, read, and write	Folder containing ROI and ROX files
Execute	ROV file (parameters file created by Actuate during report access
Read	ROI and ROX files

Table 35 on page 239 lists the Siebel Analytics privileges that relate to Advanced Reports.

Table 35. Privileges and Default Settings for Advanced Reports

Component	Privilege	Description	Web Group Granted Permission
Access	Access to Siebel Advanced Reporting	Controls the access to the Siebel Advanced Reports feature. If this is privilege is not granted, the Advanced Reports link does not appear in the dashboard.	Everyone
Admin: General	Manage Advanced Reporting	Controls the link to the administration page in the Actuate Reporting interface.	Web Administrators

Table 35. Privileges and Default Settings for Advanced Reports

Component	Privilege	Description	Web Group Granted Permission
Siebel Advanced Reporting	Add Advanced Reports to Dashboard	Permits dashboard developers to add Actuate reporting content to dashboards. If this privilege is not granted, the Advanced Report object is not available in the Edit Dashboard page.	Everyone
	Schedule Advanced Reports	Enables link to Actuate's scheduling interface.	Everyone
	View Advanced Reports	Allows end users to view cached Actuate reports.	Everyone

Diagram of Siebel Analytics Advanced Reporting Deployment

The diagram in Figure 4 on page 242 shows the Siebel Analytics product components and the connecting elements for an out-of-the-box Advanced Reporting deployment.

The meaning of the colors, lines, and typefaces used in this diagram is shown in Table 36 on page 241.

Table 36. Key to Siebel Analytics Advanced Reporting Deployment Diagram

Color	Symbol	Meaning
Yellow	(Area)	Web and network components.
	Green box	Siebel Analytics Web component.
	White box, green dashed border	Advanced Reporting network component.
Green	(Area)	Siebel Analytics platform components.
	White box, solid green border	Siebel Analytics platform server component.
Black	Line	A two-way connection between components.
Blue	Italicized name	Name of the protocol used for the connection.
	Italicized number	Port number for the connection, if defined.

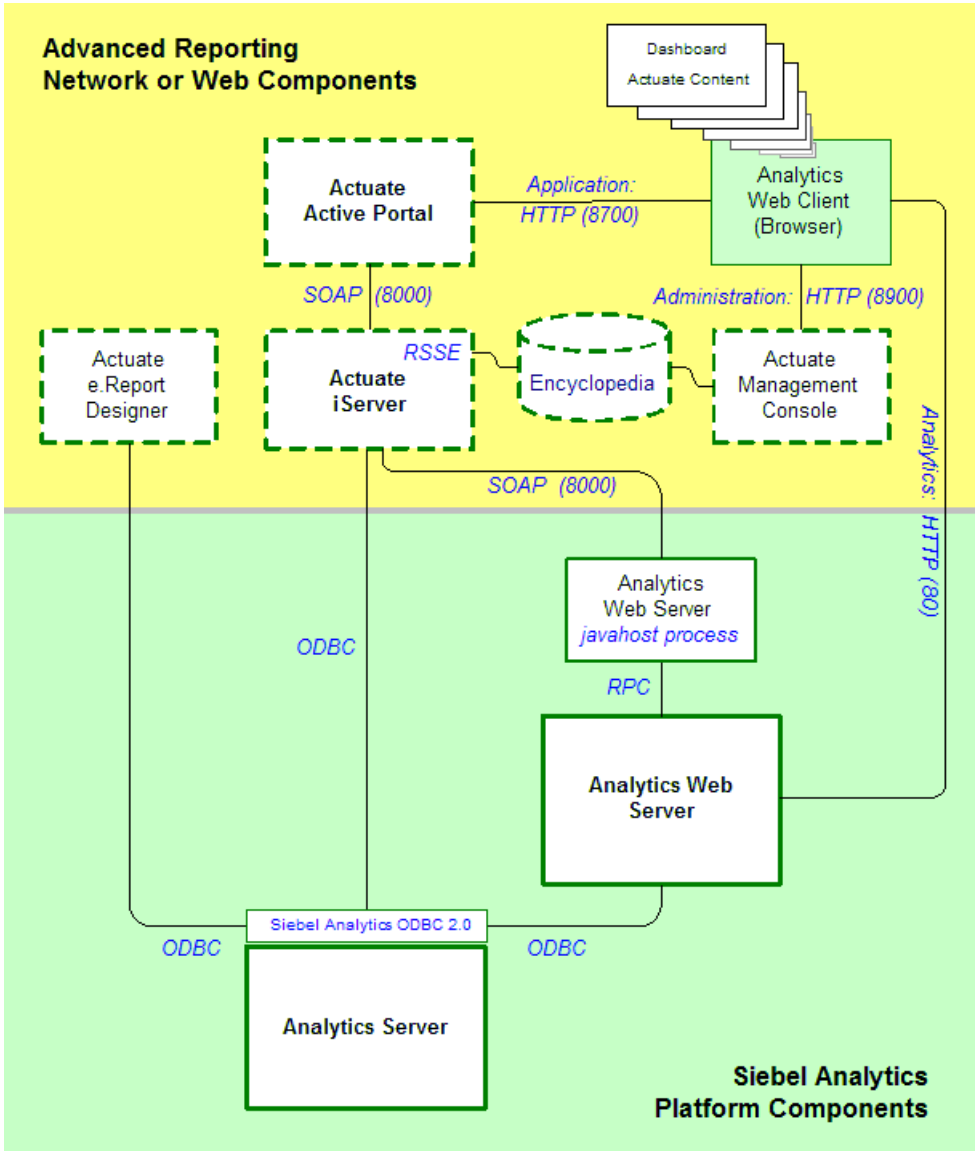

Figure 4. Diagram of Advanced Reporting and Siebel Analytics Platform Configuration

D NQSConfig.INI File Reference

The Siebel Analytics Server software uses an initialization file to set parameters upon startup. This initialization file, the NQSConfig.INI file, includes parameters to customize behavior based on the requirements of each individual installation. This area lists the rules for using the file and provides the definitions and syntax of each parameter, under the following topics:

- "Location of the Siebel Analytics Configuration Initialization File" on page 243
- "Rules for Siebel Analytics Configuration File Parameters" on page 244
- "Changing Analytics Configuration File Parameter Entries" on page 245
- "Siebel Analytics Configuration File Parameters and Syntax" on page 246

NOTE: For information about the clustering configuration file, see NQClusterConfig.INI File Reference.

Location of the Siebel Analytics Configuration Initialization File

Analytics License: All licenses.

Operating Systems: All.

The NQSConfig.INI file is located in the subdirectory $INSTALLDIR\Config.

CAUTION: Do not change the name of the file or its location.

To review your own NQSConfig.INI file, navigate to the Config subdirectory and open the file.

For detailed explanations of the parameters, see the topic "Siebel Analytics Configuration File Parameters and Syntax" on page 246. All parameter explanations are targeted towards the Windows environment.

Rules for Siebel Analytics Configuration File Parameters

Analytics License: All licenses.

Operating Systems: All.

Observe the following rules for entries in the NQSConfig.INI file:

- Each parameter entry in the NQSConfig.INI file must be within the section to which the parameter belongs (Repository, Cache, General, and so on).
- Each entry needs to be terminated with semi-colon (;).
- The Siebel Analytics Server reads the initialization file each time it is started.

NQSConfig.INI File Errors

Some notes about syntax errors in the NQSConfig.INI file:

- Any syntax errors prevent the Siebel Analytics Server from starting up. The errors are logged to the NQServer.log file, located in the Siebel Analytics installation directory /Log subdirectory.

  There may also be a summary message in the system log relating to the error.
- You need to correct the error and start the Siebel Analytics Server again. Repeat this process until the server starts with no errors.

Changing Analytics Configuration File Parameter Entries

Analytics License: All licenses.

Operating Systems: All.

Parameter entries are read when the Siebel Analytics Server starts up. When you change an entry when the server is running, you need to shut down and then restart the server for the change to take effect.

To edit the NQSConfig.INI initialization file

1 Use a text editor to edit this file.

NOTE: The examples in this appendix assume you are editing a Windows version of this file, so make the necessary substitutions in terms of UNIX file system paths and conventions.

2 Save and close the NQSConfig.INI file.

Adding Comments to the Analytics Configuration File

Analytics License: All licenses.

Operating Systems: All.

You can add comments anywhere in the NQSConfig.INI file. Comments need to begin with either of the following:

#

//

Any text following these comment characters up to the end of the line is ignored when the Siebel Analytics Server reads the initialization file.

Siebel Analytics Configuration File Parameters and Syntax

Analytics License: All licenses.

Operating Systems: All.

This topic lists the NQSConfig.INI file parameters and gives a brief description and any required syntax for each parameter. The parameters are generally listed in the order they appear in the configuration file.

The parameters are grouped into the following sections:

- "Repository Section Parameters in the Configuration File" on page 247
- "Cache Section Parameters in the Configuration File" on page 248
- "General Section Parameters in the Configuration File" on page 251
- "Security Section Parameters in the Configuration File" on page 258
- "Server Section Parameters in the Configuration File" on page 260
- "Dynamic Library Section Parameters in the Configuration File" on page 266
- "User Log Section Parameters in the Configuration File" on page 267
- "Usage Tracking Section Parameters in the Configuration File" on page 268
- "Optimization Flags Section Parameters in the Configuration File" on page 272
- "Cube Views Section Parameters in the Configuration File" on page 273

Repository Section Parameters in the Configuration File

The Repository section contains one entry for every repository that is loaded when the server starts up.

Syntax: <*logical_name*> = <*repository_name.rpd*> ;

Optional syntax: <*logical_name*> = <*repository_name.rpd*>, DEFAULT ;

where:

logical_name	A logical name for the repositories. Client tools use this name to configure the ODBC data sources that connect to the repository. If you want to use a reserved keyword, such as OCI7 or OCI8, for the name, enclose it in single quotes.
repository_name.rpd	The file name of the repository. The file name needs to have the .rpd file extension, and the file needs to reside in the Repository subdirectory in the Siebel Analytics software installation directory.

When DEFAULT is specified for a repository, connections that do not specify a logical repository name in the DSN connect to the default repository.

Example: Star = SiebelAnalytics.rpd ;

Cache Section Parameters in the Configuration File

The parameters in the Cache section provide configuration information for Siebel Analytics Server caching. For information about caching, see the chapter on query caching in *Siebel Analytics Server Administration Guide*.

ENABLE

Specifies whether the cache system is enabled.

When set to NO, caching is disabled. When set to YES, caching is enabled.

Example: ENABLE = NO ;

DATA_STORAGE_PATHS

Specifies the directory paths for where the cached data is stored and the maximum capacity in bytes, kilobytes, megabytes or gigabytes. The maximum capacity for each path is 4 GB. For optimal performance, the directories specified should be on high performance storage systems.

NOTE: Siebel Analytics Servers defined as clustered servers do not share cached data. The DATA_STORAGE_PATHS entry needs be unique for each server defined as a cluster participant.

Each directory listed needs to be an existing, fully-qualified, writable directory pathname, with double quotes (") surrounding the pathname. Specify mapped directories only. UNC path names and network mapped drives are allowed only if the service runs under a qualified user account. To change the account under which the service is running, see the topic "Changing the Account Under Which a Windows Service Runs" on page 171.

Specify multiple directories with a comma separated list. When you specify more than one directory, they should reside on different physical drives. (If you have multiple cache directory paths that all resolve to the same physical disk, both available and used space may be double-counted.)

Syntax: DATA_STORAGE_PATHS = "<*full_directory_path_1*>" sz[, "<*full_directory_path_2*>" sz{, "<*full_directory_path_n*>" sz}] ;

Example: DATA_STORAGE_PATHS = "d:\SiebelAnalytics\cache" 256MB, "f:\SiebelAnalytics\cache" 200MB ;

NOTE: Specifying more than one directory per drive does not improve performance, because file input and output (I/O) takes place through the same I/O controller. In general, specify only one directory per disk drive. Specifying multiple directories on different drives may improve the overall I/O throughput of the Siebel Analytics Server internally by distributing I/O across multiple devices.

The disk space requirement for the cached data depends on the number of queries that produce cached entries and the size of the result sets for those queries. The query result set size is calculated as row size (or the sum of the maximum lengths of all columns in the result set) times the result set cardinality (that is, the number of rows in the result set). The expected maximum should be the guideline for the space needed.

This calculation gives the high-end estimate, not the average size of all records in the cached result set. Therefore, if a result set's size is dominated by variable length character strings and if those strings' lengths have a normal distribution, you would expect the average record size to be about half of the maximum record size.

METADATA_FILE

Specifies the name of the file that contains information about queries for which data is cached. The filename needs to be a fully qualified pathname with a .dat extension.

NOTE: Siebel Analytics Servers defined as clustered servers do not share cached data. The METADATA_FILE entry needs be unique for each server defined as a cluster participant.

Example: METADATA_FILE = "d:\SiebelAnalytics\metadata_file.dat" ;

REPLACE_ALGORITHM

Specifies the algorithm used to replace existing entries in the cache. Currently, the only supported algorithm is LRU (Least Recently Used).

Example: REPLACE_ALGORITHM = LRU ;

BUFFER_POOL_SIZE

Specifies the size of the buffer pool to use to store information from the cache metadata file in memory to improve the cache response time. Specify KB for kilobytes, MB for megabytes, and no units for bytes.

Example: BUFFER_POOL_SIZE = 1 MB ;

MAX_ROWS_PER_CACHE_ENTRY

Specifies the maximum number of rows in a query result set to qualify for storage in the query cache. If the query results have more rows than specified, the results are not stored in the cache.

When set to 0, there is no limit to the number of rows per cache entry.

Example: MAX_ROWS_PER_CACHE_ENTRY = 100000 ;

MAX_CACHE_ENTRY_SIZE

Specifies the maximum size for a cache entry. Potential entries that exceed this size are not cached. The default size is 1 MB.

Specify GB for gigabytes, KB for kilobytes, MB for megabytes, and no units for bytes.

Example: MAX_CACHE_ENTRY_SIZE = 1 MB ;

MAX_CACHE_ENTRIES

Specifies the maximum number of cache entries allowed in the query cache. When the limit is reached, old entries are replaced by new entries according to the mechanism specified by the REPLACE_ALGORITHM parameter. The actual limit of cache entries might vary slightly depending on the number of concurrent queries. The default value is 1000.

Example: MAX_CACHE_ENTRIES = 1000 ;

POPULATE_AGGREGATE_ROLLUP_HITS

Specifies whether to aggregate data from an earlier cached query result set and create a new entry in the query cache for rollup cache hits. The default value is NO.

A Siebel Analytics user may have a cached result set containing information at a particular level of detail (for example, sales revenue by ZIP Code). A second query may ask for this same information, but at a higher level of detail (for example, sales revenue by state). Siebel Analytics can satisfy this second query by aggregating data from the first result set stored in the cache. That is, Siebel Analytics sales revenue for all ZIP Codes in a particular state can be added to obtain the sales revenue by state. This is referred to as a rollup cache hit.

Normally, a new cache entry is not created for queries that result in cache hits. You can override this behavior specifically for cache rollup hits by setting POPULATE_AGGREGATE_ROLLUP_HITS to YES. Nonrollup cache hits are not affected by this flag. If a query result is satisfied by the cache—that is, the query gets a cache hit—then this query is not added to the cache. When this parameter is set to YES, then when a query gets an aggregate rollup hit (for example, "sales by region" is answered from "sales by district, region") then the result is put into the cache. Setting this parameter to TRUE may result in better performance, but results in more entries being added to the cache.

Example: POPULATE_AGGREGATE_ROLLUP_HITS = NO ;

METADATA_BACKUP_FREQUENCY_MINUTES

Specifies the amount of time, in minutes, between each backup of the cache metadata file. When caching is enabled, the cache metadata file is always backed up upon server startup and is backed up again at the interval specified in the parameter. The server automatically uses the backup file after a sudden server shutdown occurs (for example, a power failure or a crash). The backup file is created in the same directory as the cache metadata file and is named the same as the cache metadata file with a .bak extension appended to the name.

When the backup file is used, any entries cached after the backup file was created are automatically purged from the cache. If any entries have been purged or aged out of the cache after the backup file was created, those entries are not recovered. To force the creation of a new cache metadata backup file, cleanly shut down and restart the server as described in the chapter on administering the query environment in *Siebel Analytics Server Administration Guide*.

The default value is 1440 minutes (24 hours). The maximum value is 10080 minutes (7 days).

A value of 0 indicates that no periodic backups of the cache metadata file are performed.

Example: METADATA_BACKUP_FREQUENCY_MINUTES = 1440 ;

General Section Parameters in the Configuration File

The parameters in the General section contains general server default parameters, including localization and internationalization, temporary space and memory allocation, and other default parameters used to determine how data is returned from the Siebel Analytics Server to a client.

NOTE: The settings for the parameters LOCALE, SORT_ORDER_LOCALE, SORT_TYPE and CASE_SENSITIVE_CHARACTER_COMPARISON, described in the following topics, are interrelated. They help determine how the Siebel Analytics Server sorts data.

LOCALE

Specifies the locale in which data is returned from the server. This parameter also determines the localized names of days and months. For example, if the LOCALE=”dutch,” then names of days and months are returned from the server in Dutch. The localized message strings are written to various log files as well as returned to the user as error messages. See also the topic area Appendix A, “Localizing Siebel Analytics Deployments.”

The default LOCALE is "english-usa". If you want to use a setting other than the default, you need to explicitly set the value of this parameter.

NOTE: Do not confuse these two-letter Siebel Analytics language extensions with the Siebel operational applications three-letter language codes shown in *Siebel System Requirements and Supported Platforms* on the Siebel SupportWeb Knowledge Base.

The supported languages and language extension values are shown in Table 37 on page 251.

Table 37. Supported Languages and Language Extensions for LOCALE and SORT_ORDER_LOCALE

Supported Language	Language Extension
Chinese (Simplified)	zh
Chinese (Traditional)	zh-tw
Czech	cs
Danish	da
Dutch	nl
English (US)	en
Finnish	fi
French	fr
German	de
Italian	it
Japanese	ja
Korean	ko

Table 37. Supported Languages and Language Extensions for LOCALE and SORT_ORDER_LOCALE

Supported Language	Language Extension
Portuguese (European)	pt
Portuguese (Brazilian)	pt-br
Spanish	es
Swedish	sv

For more information about Analytics Catalog Manager and language extensions, see *Siebel Analytics Web Administration Guide*.

SORT_ORDER_LOCALE

Used to help determine whether the Siebel Analytics Server can function-ship an ORDER BY clause (used in sorting) to an relational database.

Every database defined in the Physical Layer in the Server Administration Tool has a features table associated with it. If you want to override the default value in the Features table for a particular type of relational database, you need to do it for all occurrences of it in the Physical Layer.

In the Server Administration Tool, the Database dialog > Features tab > Features table specifies the features and functions that the relational database supports. The settings for SORT_ORDER_LOCALE in the Features table and in the NQSConfig.INI file should match only if the database and the Siebel Analytics Server sort data in the same way.

For the relational database and the Siebel Analytics Server to sort data the same way, they must be in agreement on the parameters shown in Table 38 on page 252.

Table 38. Critical SORT_ORDER_LOCALE Parameters

Functional Category	Specific Parameters
Base language	LOCALE
	SORT_ORDER_LOCALE **NOTE:** The default value for SORT_ORDER_LOCALE in both the Features table and in the NQSConfig.INI file is english-usa. If the Siebel Analytics Server and the database sort data differently, the Features table entry SORT_ORDER_LOCALE for the database needs to be set to a different value than english-usa.
Case	CASE_SENSITIVE_CHARACTER_COMPARISON
Binary versus linguistic comparison	SORT_TYPE

The SORT_ORDER_LOCALE entries in the Features table and in the NQSConfig.INI file match only if the database and the Siebel Analytics Server have matching settings in these areas. If the settings do not match, wrong answers can result when using multidatabase joins, or errors can result when using the Union, Intersect and Except operators, which all rely on consistent sorting between the back-end server and the Siebel Analytics Server.

Example: SORT_ORDER_LOCALE = "english-usa" ;

SORT_ORDER_LOCALE Under UNIX Operating Systems

The Analytics Server sets the C-runtime locale during server startup. A value for the setting is specified using the SORT_ORDER_LOCALE entry in the NQSConfig.INI file. See the topic "Setting SORT_ORDER_LOCALE Under UNIX" on page 199.

SORT_TYPE

Specifies the type of sort to perform. The default value is BINARY. Binary sorts are faster than nonbinary sorts.

Valid values are BINARY and DEFAULT. If you specify DEFAULT, a nonbinary sort is performed; this yields better sort results for data that contains accented characters.

Example: SORT_TYPE = "BINARY" ;

CASE_SENSITIVE_CHARACTER_COMPARISON

Specifies whether the Siebel Analytics Server differentiates between uppercase and lowercase characters when performing comparison operations.

Valid values are ON and OFF. When set to OFF, case is ignored. When set to ON, case is considered for comparisons. For binary sorts, case sensitivity for the server and for the relational database should set the same way.

This setting affects all comparisons that occur within the Siebel Analytics Server. The following operators are affected:

- Order By
- Group By
- Distinct
- Join
- comparisons (<, >, =, <=, >=, <>)

For example, consider the following three terms:

- ACME
- DELTA
- acme

An Order By with case-sensitive setting results in rows in the order shown in the preceding example. An Order By with case-insensitive setting results in ACME and acme being adjacent.

If the term is case-sensitive and you perform a duplicate remove (Distinct), the result is three rows. If the term is not case-sensitive, then the Distinct result is two rows.

CASE_SENSITIVE_CHARACTER_COMPARISON should be set to correspond with how the back-end database deals with case. For example, if the back-end database is case-insensitive, then Siebel Analytics Server should be configured to be case-insensitive. If Siebel Analytics Server and the back-end database are not similarly case-sensitive, some subtle problems can result.

Example: CASE_SENSITIVE_CHARACTER_COMPARISON = OFF ;

NULL_VALUES_SORT_FIRST

Specifies if NULL values sort before other values (ON) or after (OFF). ON and OFF are the only valid values. The value of NULL_VALUES_SORT_FIRST should conform to the underlying database. If there are multiple underlying databases that sort NULL values differently, set the value to correspond to the database that is used the most in queries.

Example: NULL_VALUES_SORT_FIRST= OFF ;

DATE_TIME_DISPLAY_FORMAT

Specifies the format for how date/time stamps are input to and output from the Siebel Analytics Server.

Example: DATE_TIME_DISPLAY_FORMAT = "yyyy/mm/dd hh:mi:ss" ;

DATE_DISPLAY_FORMAT

Specifies the format for how dates are input to and output from the Siebel Analytics Server.

NOTE: Specify the year as either 2-digit (yy) or 4-digit (yyyy). Separators can be any character except y, m, or d.

Example: DATE_DISPLAY_FORMAT = "yyyy/mm/dd" ;

TIME_DISPLAY_FORMAT

Specifies the format for how times are input to and output from the Siebel Analytics Server.

Example: TIME_DISPLAY_FORMAT = "hh:mi:ss" ;

WORK_DIRECTORY_PATHS

Specifies one or more directories for temporary space.

Each directory listed needs to be an existing fully-qualified, writable directory pathname, with double quotes (") surrounding the pathname. Specify mapped directories only. UNC path names and network mapped drives are allowed only if the service runs under a qualified user account. To change the account under which the service is running, see the topic “Changing the Account Under Which a Windows Service Runs” on page 171.

Specify multiple directories with a comma separated list. Valid values are any fully qualified pathname to an existing, writable directory.

For optimum performance, temporary directories should reside on high performance storage devices. If you specify more than one directory, they should reside on different drives.

Syntax: WORK_DIRECTORY_PATHS = "<*full_directory_path_1*>" [, "<*full_directory_path_2*>"{, "<*full_directory_path_n*>"}] ;

Example 1: WORK_DIRECTORY_PATHS = "C:\Temp" ;

Example 2: WORK_DIRECTORY_PATHS = "D:\temp", "F:\temp" ;

NOTE: Specifying more than one directory per drive does not improve performance because file I/O takes place through the same I/O controller. In general, specify only one directory per disk drive. Specifying multiple directories on different drives improves the overall I/O throughput of the Siebel Analytics Server because internally, the processing files are allocated using a round-robin algorithm that balances the /O load across the given disk drives.

SORT_MEMORY_SIZE

Specifies the maximum amount of memory to be used for each sort operation. Multiple operations can each use memory up to the value specified. The limit for SORT_MEMORY_SIZE is determined by the physical memory of the server machine and on the number of sort operations that might occur simultaneously. Specify KB for kilobytes, MB for megabytes, and no units for bytes.

Example: SORT_MEMORY_SIZE = 4 MB ;

Related Topic

See the topic How the SIZE Parameters Affect Siebel Analytics Performance on page 256.

SORT_BUFFER_INCREMENT_SIZE

Specifies the increment that the sort memory size is increased by as more memory is needed. As more memory is required, the size increases by the value specified until it reaches the value of SORT_MEMORY_SIZE.

Example: SORT_BUFFER_INCREMENT_SIZE = 256 KB ;

Related Topic

See the topic How the SIZE Parameters Affect Siebel Analytics Performance on page 256.

VIRTUAL_TABLE_PAGE_SIZE

Specifies the size of a memory page for the Siebel Analytics Server internal processing. A higher value reduces I/O but increases memory usage, especially in a multiuser environment.

Example: VIRTUAL_TABLE_PAGE_SIZE = 128 KB ;

Related Topic

See the topic How the SIZE Parameters Affect Siebel Analytics Performance on page 256.

How the SIZE Parameters Affect Siebel Analytics Performance

This topic explains the interrelationships among the SIZE parameters and how they affect the performance of Siebel Analytics.

- SORT_MEMORY_SIZE and SORT_BUFFER_INCREMENT_SIZE

  The size specified by SORT_MEMORY_SIZE sets the upper limit on how large the sorting buffer can be in the Siebel Analytics Server. When this limit is exceeded, data is sorted in allotments of the size set by SORT_MEMORY_SIZE and the sorted sets are merged together. For example, suppose SORT_MEMORY_SIZE is set to 4 MB and the size of the data to be sorted is 32 MB. The server performs the sort once per each 4 MB of data, for a total of eight sort operations, and then merge the results into a single result set. This technique allows the Siebel Analytics Server to sort data of indefinite size.

  The merge process itself is generally not costly in terms of resources, but it does include a read and write of each result set in a temporary file. To reduce the time this takes, increase the SORT_MEMORY_SIZE. This parameter can be tuned over time by taking into consideration the data size of the query and the number of concurrent users.

- SORT_BUFFER_INCREMENT_SIZE

  Defines the increment in which SORT_MEMORY_SIZE should be reached. For example, suppose SORT_MEMORY_SIZE is set to 4 MB and the data to be sorted is just one megabyte. As data is fed into the sort routine, the size of the sort buffer increases only by the increment size, rather than the full size allowed by SORT_MEMORY_SIZE. This mechanism allows the Siebel Analytics Server to sort smaller result sets efficiently without wasting memory.

- VIRTUAL_TABLE_PAGE_SIZE

  Several operations—sort, join, union and database fetch—can require memory resources beyond those available to the Siebel Analytics Server. To manage this condition, the server uses a virtual table management mechanism that provides a buffering scheme for processing these operations. When the amount of data exceeds the VIRTUAL_TABLE_PAGE_SIZE, the remaining data is buffered in a temporary file and placed in the virtual table as processing continues. This mechanism supports dynamic memory sizes and ensures that any row can be obtained dynamically for processing queries.

  When VIRTUAL_TABLE_PAGE_SIZE is increased, I/O operations are reduced. Complex queries may use 20 to 30 virtual tables, while simple queries may not even require virtual tables. The default size of 128 KB is a reasonable size when one considers that the size for virtual paging in Windows NT is 64 KB. This parameter can be tuned depending on the number of concurrent users and the average query complexity. In general, setting the size higher than 256 KB does not yield a corresponding increase in throughput due to the 64 KB size limit of Windows NT system buffers, as each I/O still goes through the system buffers.

Related Topics

The topic SORT_MEMORY_SIZE on page 255 describes a parameter that affects performance in the manner described in this topic.

The topic SORT_BUFFER_INCREMENT_SIZE on page 255 describes a parameter that affects performance in the manner described in this topic.

The topic VIRTUAL_TABLE_PAGE_SIZE on page 255 describes a parameter that affects performance in the manner described in this topic.

USE_LONG_MONTH_NAMES

Specifies whether month names are returned as full names, such as JANUARY and FEBRUARY, or as three-letter abbreviations, such as JAN and FEB. Valid values are YES and NO. Specify YES to have month names returned as full names or NO to have months names returned as three-letter abbreviations. The default value is NO.

Example: USE_LONG_MONTH_NAMES = NO ;

USE_LONG_DAY_NAMES

Specifies whether day names are returned as full names, such as MONDAY and TUESDAY, or as three-letter abbreviations, such as MON and TUE. Valid values are YES and NO. Specify YES to have day names returned as full names or NO to have day names returned as three-letter abbreviations. The default value is NO.

Example: USE_LONG_DAY_NAMES = NO ;

UPPERCASE_USERNAME_FOR_INITBLOCK

Specifies whether the users are authenticated with case sensitivity. The default value is NO (or false internally). When it is set to YES, then all user names are changed to uppercase for authentication purposes in the SiebelAnalytics.rpd file. Otherwise, case is maintained.

Example: UPPERCASE_USERNAME_FOR_INITBLOCK = NO ;

Security Section Parameters in the Configuration File

The security parameters specify default values for the Siebel Analytics Server security features. For more information about security, see the chapter on security in *Siebel Analytics Server Administration Guide*.

DEFAULT_PRIVILEGES

Specifies the values users and groups are assigned when they are initially created.

Valid values are NONE and READ. The default value is READ.

Example: DEFAULT_PRIVILEGES = READ ;

PROJECT_INACCESSIBLE_COLUMN_AS_NULL

The default value for PROJECT_INACCESSIBLE_COLUMN_AS_NULL changes based on the type of install. If you are running the Siebel Analytics platform only, the value is NO.

The flag PROJECT_INACCESSIBLE_COLUMN_AS_NULL must be set to TRUE to enable the SQL command CHOOSE.

The SQL command

CHOOSE(*expr1, expr2, ... exprn*)

selects the first valid expression from a list of expressions. A valid expression here is an expression in which all referenced columns are accessible by the current query user.

MINIMUM_PASSWORD_LENGTH

A security measure used to enforce strong passwords. The minimum length is enforced when a user logs in. For example, if MINIMUM_PASSWORD_LENGTH is set to 6, then any user's password is rejected unless it has at least 6 characters.

The default value is zero.

Example: MINIMUM_PASSWORD_LENGTH = 6 ;

AUTHENTICATION_TYPE

Specifies the type of authentication the Siebel Analytics Server uses to authenticate the Siebel Analytics Server users.

Valid values are NQS, DATABASE, and BYPASS_NQS. The default authentication mechanism is NQS.

The consequences of each authentication type is shown in Table 39 on page 259.

Table 39. Siebel Analytics Server Authentication Types

Type	Description
NQS	Authentication is done by the Siebel Analytics Server. **NOTE:** For Siebel Analytics applications, the Siebel Analytics Server in turn can be set up to authenticate using Microsoft ADSI, an LDAP server, or a database. See the topic "Setting Up LDAP Authentication in Analytics" on page 211.
DATABASE	Specify the database name in the Physical Layer of the repository to be used for database authentication. The first connection pool for this database is used for authentication. When the user logs into the Siebel Analytics Server, the submitted logon name and password is used to connect to the database. If this connection succeeds, the user is considered to be successfully authenticated.
BYPASS_NQS	Authentication is against the database to which user queries are sent, using the submitted user name and password. For example, if a user runs a query tool against the Siebel Analytics Server with the user name of "Test" and a password of "Test," this user name and password are used to connect to the underlying database server. If this represents a valid user to the underlying database server, the user is considered authenticated. The user's privileges are enforced by the underlying database server based upon the user name used to log in, as appropriate.

Example 1: AUTHENTICATION_TYPE = NQS ;

Example 2: DATABASE = "Goldmine" ;

Server Section Parameters in the Configuration File

The parameters in the Server section define defaults and limits for the Siebel Analytics Server.

SERVER_NAME

A logical name identifying the Siebel Analytics Server.

About the SERVER_THREAD_RANGE and MAX_SESSION_LIMIT Parameters

The size of the connection pool determines the number of available Siebel Analytics Server connections and the number of available threads for processing physical queries. A logical query may generate multiple physical queries, each of which could go to different connections.

Siebel Analytics Server creates a number of server threads up to the specified maximum using the parameter SERVER_THREAD_RANGE. All the threads available at any time are used to process queries from one or more sessions as needed.

Typically, the number of sessions specified (MAX_SESSION_LIMIT) is higher than the number of available threads (SERVER_THREAD_RANGE).

In summary:

- MAX_SESSION_LIMIT specifies the number of sessions that can be connected to Siebel Analytics Server even if inactive. The sessions and the corresponding queries are queued to the threads for processing as they become available.
- Connection pool size specifies the number of threads and connections that process physical queries.
- SERVER_THREAD_RANGE specifies the number of threads that process the logical queries—the number of queries that can be active in Siebel Analytics Server at any time.

MAX_SESSION_LIMIT

Specifies the maximum number of connections allowed by the server. When this number is exceeded, the server refuses the connection request.

The limit is 65,535 connections.

Example: MAX_SESSION_LIMIT = 2000 ;

MAX_REQUEST_PER_SESSION_LIMIT

Specifies the maximum number of logical requests per session. This is how many open requests there are, per session, at the same time.

The limit is 65,535 logical requests per session.

NOTE: Usually, individual users have only one open request per session at the same time. Application programs and Siebel Analytics Web, however, typically have more than one open at the same time. In general, the default value of 500 should be sufficient for most environments, but this parameter should be tuned based on the application environment and the client tools in use.

Example: MAX_REQUEST_PER_SESSION_LIMIT = 500 ;

SERVER_THREAD_RANGE

For each Siebel Analytics Server request, SERVER_THREAD_RANGE specifies configuration information for thread allocation. The lower number in the range specifies the number of threads initially allocated, and the higher number in the range specifies the maximum number of threads to be allocated. The thread pool grows and shrinks in 5 thread increments until the upper or lower bound is reached. If there are fewer threads than sessions, sessions share the available number of threads on a first come-first served basis.

Set both values the same to maximize the benefits of thread pooling.

Example: SERVER_THREAD_RANGE = 100-100 ;

SERVER_THREAD_STACK_SIZE

Specifies the memory stack size allocated for each server thread.

The default of 0 sets the stack size as 1 MB per server thread.

Example: SERVER_THREAD_STACK_SIZE = 0 MB ;

DB_GATEWAY_THREAD_STACK_SIZE

Specifies the memory stack size allocated for each Siebel Analytics Server Database Gateway thread. The default of 0 sets the stack size as 256 KB per server thread.

Example: DB_GATEWAY_THREAD_STACK_SIZE = 0 KB ;

MAX_EXPANDED_SUBQUERY_PREDICATES

Controls the maximum number of values that may be in an IN value list populated by a subquery. The default is 8,192 values.

Example: MAX_EXPANDED_SUBQUERY_PREDICATES = 8192;

NOTE: For the parameters MAX_QUERY_PLAN_CACHE_ENTRIES, MAX_DRILLDOWN_INFO_CACHE_ENTRIES, and MAX_DRILLDOWN_QUERY_CACHE_ENTRIES, the default values are set to 1024 by default. These values should not be raised without consulting Siebel Support.

MAX_QUERY_PLAN_CACHE_ENTRIES

Controls the number of cached compiler query plans. The query plan cache is an internal performance feature that increases the speed of the query compilation process by caching plans for the most recently used queries.

Example: MAX_QUERY_PLAN_CACHE_ENTRIES = 1024 ;

MAX_DRILLDOWN_INFO_CACHE_ENTRIES

Controls the number of cached Action Link information entries per repository. This increases the speed of computing Action Link information by caching the Action Link information for the most recently used queries.

Example: MAX_DRILLDOWN_INFO_CACHE_ENTRIES = 1024 ;

MAX_DRILLDOWN_QUERY_CACHE_ENTRIES

Controls the number of cached Action Link query entries per repository. This increases the speed of drilling down by caching the Action Link results for the most recently used queries.

Example: MAX_DRILLDOWN_QUERY_CACHE_ENTRIES = 1024 ;

INIT_BLOCK_CACHE_ENTRIES

Controls the number of initialization block result sets that are cached with respect to row-wise initialization. The cache key is the fully instantiated initialization block SQL.

The default value is 20. Because this parameter affects internal operations for localized versions of the Siebel Analytics software, it is recommended that you do not change this value unless instructed to do so.

Example: INIT_BLOCK_CACHE_ENTRIES = 20 ;

CLIENT_MGMT_THREADS_MAX

Specifies the number of management threads to allocate for managing Siebel Analytics Server client/server communications. The default client/server communication method for Siebel Analytics Server is TCP/IP.

The default value of 5 is sufficient for server communications with the Server Administration Tool and when Siebel Analytics Web is the only main client process.

To support this method, a Port field has been added to the Enter Logon Information screen in Siebel Analytics ODBC Wizard. (Siebel Analytics D/COM support is limited; it is recommended that you use TCP/IP by default.)

Each client process consumes a management thread. If you plan to run multiple Analytics Web client instances or multiple third-party client instances, increase the number of management threads to match the number of client instances. When the number of running client instances exceeds the number of management threads allocated, worker threads are consumed.

Example: CLIENT_MGMT_THREADS_MAX= 10 ;

RPC_SERVICE_OR_PORT

Specifies the Remote Procedure Call (RPC) Service or TCP/IP port the Siebel Analytics Server should use for client/server communications.

The default is 9703.

NOTE: Do not disable the RPC Service. If you attempt to start Siebel Analytics Server on a machine where the RPC services or processes are not running, the application does not start and a log is not generated.

When using the Analytics ODBC Wizard to set up ODBC data sources for the Siebel Analytics Server, the port number specified in the Port field on the Enter Logon Information screen should match the port number specified here. If you change the port number in the configuration file, remember to reconfigure any affected ODBC data sources to use the new port number.

Example: RPC_SERVICE_OR_PORT= 9703 ;

ENABLE_DB_HINTS

Enables optional hints to be passed along with a SQL statement to an Oracle database. Database hints are discussed in *Siebel Analytics Server Administration Guide*.

The default is YES.

PREVENT_DIVIDE_BY_ZERO

Controls the behavior for when a division by zero occurs. When set to YES, then a NULL value is returned. When set to NO, then the query is terminated and an appropriate error is returned to the user.

CLUSTER_PARTICIPANT

Specifies whether the Siebel Analytics Server that is using this configuration file is a member of a Siebel Analytics Server cluster.

Valid values are YES and NO. The default value is NO.

If the server is to be a member of a Siebel Analytics Server cluster, uncomment the parameters "REPOSITORY_PUBLISHING_DIRECTORY" on page 263 and "REQUIRE_PUBLISHING_DIRECTORY" on page 264, and supply valid values for them.

NOTE: When CLUSTER_PARTICIPANT is set to YES, this server needs to have a valid, configured NQClusterConfig.INI file in the Config subdirectory, located in the Siebel Analytics software installation directory. For more information, see NQClusterConfig.INI File Reference.

Example: CLUSTER_PARTICIPANT = YES;

REPOSITORY_PUBLISHING_DIRECTORY

When the parameter CLUSTER_PARTICIPANT is set to YES, REPOSITORY_PUBLISHING_DIRECTORY specifies the location of the repository publishing directory shared by all Siebel Analytics Servers participating in the cluster. There is no default value for this parameter.

When a repository is updated in online mode, it is published to this location. All clustered servers examine this location upon startup for any repository changes. This needs to be a valid location visible to all servers in the cluster even if you anticipate that no repositories are updated in online mode.

The directory should reside on a shared file system. The directory needs to be a valid fully-qualified directory pathname, with double quotes (") surrounding the pathname. Both UNC and mapped directories are supported. Do not specify a relative path name, or the Repository subdirectory (located in the Siebel Analytics software installation directory) as the location of the repository publishing directory.

This REPOSITORY_PUBLISHING_DIRECTORY parameter is required on every Siebel Analytics Server that is to participate in the cluster. The Siebel Analytics Server designated as the master server for online repository changes (from he MASTER_SERVER parameter in the NQClusterConfig.INI file) needs to have read and write access to this directory. The Siebel Analytics Servers in the cluster (from the SERVERS parameter in the NQClusterConfig.INI file) need to have read and write access to this directory as well. All entries need to reference the same actual directory, although different names can be specified to accommodate differences in drive mappings.

These are examples:

```
REPOSITORY_PUBLISHING_DIRECTORY = “z:\SiebelAnalytics\Publish”;
REPOSITORY_PUBLISHING_DIRECTORY = “\\ClusterSrv\Publish”;
```

REQUIRE_PUBLISHING_DIRECTORY

When the parameter CLUSTER_PARTICIPANT is set to YES, REQUIRE_PUBLISHING_DIRECTORY specifies that the repository publishing directory (from the parameter REPOSITORY_PUBLISHING_DIRECTORY) needs to be available in order for this Siebel Analytics Server to start up and join the cluster.

The default value is YES.

When set to YES, if the publishing directory is not available at startup or if an error is encountered while the server is reading any of the files in the directory, an error message is logged in the NQServer.log file and the server shuts down.

To allow this Siebel Analytics Server to start up and join the cluster even if the publishing directory is not available, set this value to NO. When set to NO, the server joins the cluster and a warning message is logged in the NQServer.log file. Any online repository updates is not reflected in the server’s Repository directory (located in the Siebel Analytics software installation directory). This could result in request failures, wrong answers, and other problems. However, this could be useful in situations where online repository editing is done infrequently and the goal is to keep the cluster operational even if some servers have stale repositories.

Example: REQUIRE_PUBLISHING_DIRECTORY = YES;

DISCONNECTED

When Siebel Analytics Server is being run as part of Mobile Analytics, the DISCONNECTED parameter must be set to YES. The default is NO.

When DISCONNECTED is set to YES, only Mobile Clients running on the same machine as the Mobile Siebel Analytics Server are able to connect to it. Any Mobile Client running on a different machine is unable to connect to the Mobile Analytics server.

Example: DISCONNECTED = NO ;

AUTOMATIC_RESTART

Specifies whether the Siebel Analytics Server should be automatically restarted after a crash. Automatic restart is applies only to an Analytics Server platform; it does not apply to a clustered Analytics server environment, or to a Mobile Analytics server. The default is YES.

Example: AUTOMATIC_RESTART = YES ;

Dynamic Library Section Parameters in the Configuration File

This section contains one entry for each dynamic link library (DLL) used to make connections to the Siebel Analytics Server:

Syntax: <*logical_name*> = <*dynamic_library*> ;

where:

logical_name	A logical name for the dynamic link library. These logical names also appear in the Connection Pool dialog.
dynamic_library	The name of the associated dynamic library. These are located in the Bin subdirectory in the Siebel Analytics software installation directory.

Example: ODBC200 = nqsdbgatewayodbc ;

CAUTION: Do not make any changes to this section unless instructed to do so by Siebel Technical Support.

User Log Section Parameters in the Configuration File

The user log NQQuery.log is kept in the $INSTALLDIR\Log directory (together with the Install.log file and the NQServer.log file). It logs activity about queries when enabled for a user. Entries can be viewed using a text editor or the nQLogViewer executable.

For each log parameter, the following valid values apply:

Function Enabled	Function Disabled
ON	OFF
YES	NO

For more information about the NQQuery.log file, see the chapter on administering the query environment in *Siebel Analytics Server Administration Guide*.

NOTE: The NQServer.log file logs activity automatically about the Siebel Analytics Server, including information about server startup failures and queries that result in time limits or row limits being exceeded when the Status Max Time or Status Max Rows option is set to Warn. The Install.log file logs activity automatically about installation activities. You can view these log files using a text editor such as Windows Notepad.

USER_LOG_FILE_SIZE

Specifies the size to which the NQQuery.log file is allowed to grow. The default size is 10 MB. When this limit is reached, the log file closes, the log file is renamed to NQQuery.log.old, and logging resumes to a newly created NQQuery.log file.

Example: USER_LOG_FILE_SIZE = 10 MB ;

CODE_PAGE

Specifies the type of code page being used. The default is UTF8. Other values include any valid code page, such as ANSI, 1252, and so on. Enclose the value in double quotes.

Example: CODE_PAGE = "UTF8" ;

Usage Tracking Section Parameters in the Configuration File

The usage tracking parameters define default values for collection of usage tracking statistics on each logical query submitted to the Siebel Analytics Server. For more information about usage tracking, see the chapter on administering the query environment in *Siebel Analytics Server Administration Guide*.

ENABLE

Enables or disables collection of usage tracking statistics.

Valid values are YES and NO. The default value is NO. When set to NO, statistics are not accumulated. When set to YES, statistics are accumulated for each logical query.

Example: ENABLE = NO ;

DIRECT_INSERT

Specifies whether statistics are inserted directly into a database table or written to a local file.

- When DIRECT_INSERT is set to NO, data is written to a flat file.
- When DIRECT_INSERT is set to YES, data is inserted into a table.

NOTE: This parameter is operative only if ENABLE = YES.

Direct insertion into a database table is recommended, therefore the default value is YES.

Certain other parameters become valid, depending whether DIRECT_INSERT is set to YES or to NO. These parameters are summarized in Table 40 on page 268, and described following the table.

Table 40. Valid Parameters for DIRECT_INSERT Settings

DIRECT_INSERT Setting	Parameters Used	Parameter Setting
NO	STORAGE_DIRECTORY	"<full directory path>"
	CHECKPOINT_INTERVAL_MINUTES	5
	FILE_ROLLOVER_INTERVAL_MINUTES	30
	CODE_PAGE	"ANSI"

Table 40. Valid Parameters for DIRECT_INSERT Settings

DIRECT_INSERT Setting	Parameters Used	Parameter Setting
YES	PHYSICAL_TABLE_NAME	"<Database>"."<Catalog>"."<Schema>"."<Table>" or "<Database>"."<Schema>"."<Table>"
	CONNECTION_POOL	"<Database>"."<Connection Pool>"
	BUFFER_SIZE	10 MB
	BUFFER_TIME_LIMIT_SECONDS	5
	NUM_INSERT_THREADS	5
	MAX_INSERTS_PER_TRANSACTION	1

STORAGE_DIRECTORY

Specifies the full path to the directory used to store usage tracking log files. The directory listed needs to be a valid fully-qualified, writable directory pathname, with double quotes (") surrounding the pathname. Specify mapped directories only. UNC path names and network mapped drives are allowed only if the service runs under a qualified user account. To change the account under which the service is running, see the topic "Changing the Account Under Which a Windows Service Runs" on page 171.

Valid values are any fully qualified pathname to an existing, writable directory.

The parameter STORAGE_DIRECTORY is valid only if the parameter DIRECT_INSERT is set to NO. When usage tracking is enabled, but no storage directory is specified, the files are written to the Log subdirectory in the Siebel Analytics software installation directory.

Example: STORAGE_DIRECTORY = "C:\Temp\UsageTracking" ;

CHECKPOINT_INTERVAL_MINUTES

Specifies how often the usage tracking data is flushed to disk. Setting this interval higher increases the amount of data that may be lost in the event of an abnormal server shutdown. Setting this interval lower incurs additional overhead.

The default is 5 minutes.

NOTE: When the interval is set to 0, the Siebel Analytics Server attempts to write usage tracking data to disk with minimal time between attempts. This can negatively affect server performance, and is strongly discouraged.

Example: CHECKPOINT_INTERVAL_MINUTES = 5 ;

FILE_ROLLOVER_INTERVAL_MINUTES

Specifies the time, in minutes, before the current usage tracking log file is closed and a new file created. For example, if this entry is set to 60 minutes, then 24 usage tracking log files are created each day.

The default is 240 minutes (4 hours).

When the checkpoint interval equals or exceeds the rollover interval, only the rollover occurs explicitly; the checkpoint only occurs implicitly when the old usage tracking log file is closed.

NOTE: When the checkpoint interval is set to 0, the Siebel Analytics Server attempts to close current usage tracking log files and open new log files with minimal time between attempts. This can negatively affect server performance and result in a large number of usage tracking log files in the storage directory. Setting this interval to 0 is strongly discouraged.

Example: FILE_ROLLOVER_INTERVAL_MINUTES = 240;

CODE_PAGE

For multilingual repositories, this specifies the type of output code page to use when writing statistics to disk. Valid values include any valid code page number (such as 1252), and other globally recognized output code page types.

The default value is ANSI. The type depends upon the database loader being used. For example, to support multilingual repositories for database loaders used by Oracle and DB2, specify UTF8. Enclose the value in double quotes. USC-2 is currently not supported.

Example: CODE_PAGE = "ANSI";

PHYSICAL_TABLE_NAME

Specifies the table in which to insert records corresponding to the query statistics. The table name is the fully qualified name as it appears in the physical layer of the Server Administration Tool.

The general structure of this parameter depends on the type of database being used:

- For SQL Server databases, use the following general structure:

  PHYSICAL_TABLE_NAME = "<Database>"."<Catalog>"."<Schema>"."<Table>" ;

  Example:

  PHYSICAL_TABLE_NAME = "Siebel Analytics Usage"."Catalog"."dbo"."S_NQ_ACCT" ;

- For Oracle databases, use the following general structure:

  PHYSICAL_TABLE_NAME = "<Database>"."<Schema>"."<Table>" ;

  Example:

  PHYSICAL_TABLE_NAME = "Siebel Analytics Usage"."dbo"."S_NQ_ACCT" ;

  Example:

  PHYSICAL_TABLE_NAME = "Siebel Analytics Usage"."Catalog"."dbo"."S_NQ_ACCT" ;

CONNECTION_POOL

Specifies the connection pool to use for inserting records into the usage tracking table. This is the fully qualified name as it appears in the physical layer of the Server Administration Tool.

Example: CONNECTION_POOL = "Siebel Analytics Usage"."Connection Pool" ;

BUFFER_SIZE

Specifies the amount of memory used to temporarily store insert statements. The buffer allows the insert statements to be issued to the usage tracking table independently of the query that produced the statistics to be inserted. When the buffer fills up, then subsequent queries' statistics are discarded until the insert threads service the buffer entries.

Example: BUFFER_SIZE = 10 MB ;

BUFFER_TIME_LIMIT_SECONDS

Specifies the maximum amount of time that an insert statement remains in the buffer before it is issued to the usage tracking table. This time limit ensures that the Siebel Analytics Server issues the insert statements in a timely manner even during periods of extended quiescence.

Example: BUFFER_TIME_LIMIT_SECONDS = 5 ;

NUM_INSERT_THREADS

Specifies the number of threads that remove insert statements from the buffer and issue them to the usage tracking table. The number of threads should not exceed the total number of threads assigned to the connection pool.

Example: NUM_INSERT_THREADS = 5 ;

MAX_INSERTS_PER_TRANSACTION

Specifies the number of records to group together as a single transaction when inserting into the usage tracking table. Increasing the number may slightly increase performance but also increases the possibility of inserts being rejected due to deadlocks in the database.

Example: MAX_INSERTS_PER_TRANSACTION = 1 ;

Optimization Flags Section Parameters in the Configuration File

There is one parameter in the Optimization Flags section. It is a special parameter to override the behavior of the Siebel Analytics Server in certain situations.

STRONG_DATETIME_TYPE_CHECKING

Use this parameter to relax strong type checking to prevent some date/time data type incompatibilities in queries from being rejected. For example, a query of the form “date/time op string-literal” technically contains a date/time data type incompatibility and would normally be rejected by the Siebel Analytics Server.

Valid values are ON and OFF. The default value is ON, which means that strong type checking is enabled and queries containing date/time data type incompatibilities are rejected. This is the recommended setting.

To relax the strong type checking, set the value to NO. Note that invalid queries or queries with severe date/time incompatibilities are still rejected. Note also that the query could still fail, for example, if the relational database implements a similar strong type checking.

Example: STRONG_DATETIME_TYPE_CHECKING=ON;

Cube Views Section Parameters in the Configuration File

Siebel Analytics CubeViews Generator is a feature that enhances the OLAP functionality of a database, allowing the database to store metadata about the logical relationships of the data residing in the database, and optimizing queries made against that database. The CubeViews Generator parses the logical layer of a repository, extracts the table sources, and converts the metadata into Cube Models for DB2 DBMS. The Cube Views optimizer generates scripts to create Materialized Query Tables (MQT), which can enhance the performance of queries.

The Cube Views section of the configuration file sets the following initial values for this feature.

The CubeViews Generator functions like a metadata bridge that converts the Siebel Analytics proprietary metadata into an XML format that can be used by IBM DB2 Cube Views.

NOTE: The term IBM DB2 Cube Views is a registered trademark of IBM.

DISTINCT_COUNT_SUPPORTED

The recommended setting and default value is NO. When set to YES, allows measure containing the "DISTINCT-COUNT" aggregation to be exported.

Example:

```
DISTINCT_COUNT_SUPPORTED = NO ;
```

STATISTICAL_FUNCTIONS_SUPPORTED

The recommended setting and default value is NO. When set to YES, allows measures containing the aggregation STDDEV to be exported.

USE_SCHEMA_NAME

The default value is YES.

When set to YES, the Cube Views metadata attributes has columns from tables under a schema name, which are then specified in the parameters . When set to NO, the schema names for these tables are empty.

USE_SCHEMA_NAME_FROM_RPD

The default value is YES. When set to YES, the table schema names are used as they are used in the repository.

DEFAULT_SCHEMA_NAME

This name is used as the table schema name, if either of the following is true:

- The repository schema name cannot be determined

- The value of USE_SCHEMA_NAME_FROM_RPD is set to NO

  Example:

  "SIEBEL" ;

CUBE_VIEWS_SCHEMA_NAME

The Cube Views metadata is created under this schema.

Example:

"SIEBEL" ;

LOG_FAILURES

When set to YES, the log file lists the metadata that was invalidated under a certain rule. The default value is YES.

LOG_SUCCESS

When set to YES, the log file lists the metadata which has checked under each rule and has passed the check. The default value is NO.

LOG_FILE_NAME

A valid path needs to be provided, otherwise an error is thrown.

Example:

"C:\SiebelAnalytics\Log\CubeViews.Log" ;

E NQClusterConfig.INI File Reference

The Siebel Analytics Server software uses an initialization file to set cluster configuration parameters upon startup for the Siebel Analytics Cluster Server feature. This initialization file, the NQClusterConfig.INI file, includes parameters to customize behavior based on the requirements of each individual installation. This appendix lists the rules for using the file and provides definitions and syntax for each parameter, under the following topics:

- "Location of the Siebel Analytics Cluster Configuration Initialization File" on page 275
- "Rules for Siebel Analytics Cluster Configuration File Parameters" on page 276
- "Rules for Siebel Analytics Cluster Configuration File Parameters" on page 276
- "Cluster Section Parameters in the Configuration File" on page 278

NOTE: For information about the NQSConfig.INI file, see NQSConfig.INI File Reference.

Location of the Siebel Analytics Cluster Configuration Initialization File

Analytics License: All licenses.

Operating Systems: All.

The NQClusterConfig.INI file is located in the subdirectory $INSTALLDIR\Config.

CAUTION: Do not change the name of the file or its location.

NOTE: All Siebel Analytics Servers and cluster controllers that are to participate in the cluster need to have configured NQClusterConfig.INI files.

The Siebel Analytics Server administrator needs to make sure that a configured NQClusterConfig.INI file resides in the Config subdirectory of every Siebel Analytics Server and cluster controller that is to participate in the cluster. In general, it is easiest to configure the file once, copy it to the Config directories of the machines in the cluster, and then make machine-specific changes when required. When you correct an error, make sure the correction is propagated to the NQClusterConfig.INI files of all affected machines.

Rules for Siebel Analytics Cluster Configuration File Parameters

Analytics License: All licenses.

Operating Systems: All.

The Siebel Analytics Server reads the NQClusterConfig.INI file after it reads the NQSConfig.INI file (when CLUSTER_PARTICIPANT is set to YES in the NQSConfig.INI file). Cluster Controllers also read this file.

Observe the following rule for entries in the NQClusterConfig.INI file:

- Entries need to be within the Cluster section and contained within the NQClusterConfig.INI file. Do not add the Cluster section to the NQSConfig.INI file.

NQClusterConfig.INI File Errors

If a Siebel Analytics Server detects a syntax error while reading the file, it logs the error to its NQServer.log file, located in the Log subdirectory in the Siebel Analytics software installation directory. If a Cluster Controller detects an error while reading the file, the error is logged to its NQClusterConfig.INI file, located in the Log subdirectory in the Siebel Analytics software installation directory. If a machine is hosting both a Siebel Analytics Server and a Cluster Controller, messages are written to both logs. There may also be a summary message in the system log relating to the error.

Some notes about syntax errors in the NQClusterConfig.INI file:

- Any syntax errors prevent the Siebel Analytics Cluster Server feature from starting up. If a Siebel Analytics Server detects a syntax error while reading the file, it logs the error to its NQServer.log file. If a cluster controller detects an error while reading the file, the error is logged to its NQCluster.log file.
- You need to correct the error and start the Siebel Analytics Server or Cluster controller again. Repeat this process until the server starts with no errors.

Changing Analytics Cluster Configuration File Parameters

Analytics License: All licenses.

Operating Systems: All.

Parameter entries are read when the Siebel Analytics Server starts up. When you change an entry when the server is running, you need to shut down and then restart the server for the change to take effect.

To edit the NQClusterConfig.INI initialization file

1 Use a text editor to edit this file.

NOTE: The examples in this appendix assume you are editing a Windows version of this file, so make the necessary substitutions in terms of UNIX file system paths and conventions.

2 Save and close the NQClusterConfig.INI file.

Adding Comments to the Siebel Analytics Cluster Configuration File

Analytics License: All licenses.

Operating Systems: All.

You can add comments anywhere in the NQClusterConfig.INI file. Comments need to begin with either of the following:

#

//

Any text following these comment characters up to the end of the line is ignored when the initialization file is read.

Cluster Section Parameters in the Configuration File

Analytics License: All licenses.

Operating Systems: All.

The parameters in the Cluster section provide configuration information for the Siebel Analytics Cluster Server feature. The NQClusterConfig.INI file parameters are described in this topic. The parameters are listed in the order they appear in the configuration file.

ENABLE_CONTROLLER

This parameter is for machines that host a Cluster Controller. (A single machine can host a Cluster Controller, a Siebel Analytics Server, or one of each.) When set to YES, it specifies that the Cluster Controller functionality is enabled on this machine (the parameters "PRIMARY_CONTROLLER" and "SECONDARY_CONTROLLER" determine whether this machine is to act as the primary or secondary Cluster Controller). Valid values are YES and NO.

When set to NO, or commented out, the Cluster Controller functionality is not enabled. Upon startup, a log entry is generated in the NQCluster.log file indicating this. The NO setting allows the Siebel Analytics Server administrator to temporarily disable a Cluster Controller if, for example, the machine is being serviced.

Example: ENABLE_CONTROLLER = YES;

PRIMARY_CONTROLLER

Identifies the computer that is to act as the primary Cluster Controller. This is the computer that has primary responsibility for monitoring the operational configuration of the servers in the cluster and assigning session requests within the cluster. This parameter is required.

A machine can host one Siebel Analytics Server, one Cluster Controller, or one of each. The machine acting as the primary Cluster Controller needs to be on the same subnet as the other machines in the cluster.

Specify the machine name of the computer that is to be the primary Cluster Controller. This needs to be the NetBIOS name (computer name) of the machine. Double or single quotes are not required if the value consists of only nonkey, nonreserved words, or alphanumeric characters.

Example: PRIMARY_CONTROLLER = SERVER01;

SECONDARY_CONTROLLER

Identifies the machine acting as the secondary Cluster Controller. This is the computer that assumes responsibility for monitoring the operational configuration of the servers in the cluster and assigning session requests within the cluster if the primary Cluster Controller is unavailable.

A machine can host one Siebel Analytics Server, one Cluster Controller, or one of each. The machine acting as the secondary Cluster Controller needs to be on the same subnet as the other machines in the cluster. It also needs to be a physically different machine than the primary Cluster Controller.

This parameter is optional. If you do not specify a secondary Cluster Controller, the cluster is not operational if the primary Cluster Controller is unavailable, although sessions already assigned do continue to operate.

Specify the machine name of the computer that is to be the secondary Cluster Controller. This needs to be the NetBIOS name (computer name) of the machine. Double or single quotes are not required if the value consists of only nonkey, nonreserved words, or alphanumeric characters. Do not specify the same machine name as that used in the PRIMARY_CONTROLLER parameter.

Example: `SECONDARY_CONTROLLER = SERVER02;`

SERVERS

Identifies the Siebel Analytics Servers that belong to this cluster. A cluster can contain a maximum of 16 Siebel Analytics Servers. A server can belong to only one cluster. This parameter is required.

Specify the machine names of the Siebel Analytics Server machines in this cluster. This needs to be the NetBIOS name (computer name) of the machine. Separate the machine names with a comma (,). Double or single quotes are not required if the value consists of only nonkey, nonreserved words, or alphanumeric characters.

If the names of the machines you specified as the primary and secondary Cluster Controllers are also hosting Siebel Analytics Servers, make sure to include their names in this list as well.

Example: SERVERS = SERVER01,SERVER02,SERVER03,SERVER04, SERVER05,SERVER06,SERVER07;

MASTER_SERVER

Identifies the Siebel Analytics Server in the cluster that is to function as the master server for the cluster for online repository editing. This is the Siebel Analytics Server in the SERVERS list that the Server Administration Tool connects to for online repository changes. When the changes are saved, the resulting repository is published so the changes can be propagated to the servers in the cluster. (For more information about the location of the publishing directory, see the parameter "REPOSITORY_PUBLISHING_DIRECTORY" on page 263.)

This parameter is required. Only one server may be specified as the master server.

Specify the machine name of the Siebel Analytics Server computer that is to be the master server. This needs to be the NetBIOS name (computer name) of the machine. Double or single quotes are not required if the value consists of only nonkey, nonreserved words, or alphanumeric characters.

Example: MASTER_SERVER = SERVER03;

SERVER_POLL_SECONDS

This specifies the frequency of heartbeat messages between the cluster controller and each Siebel Analytics Server in the cluster. This parameter is required.

Valid values are 1 to 60 seconds. The default is every 5 seconds. This is the recommended value. Specify the number of seconds as a whole integer.

NOTE: Increasing the value causes failures to be detected less rapidly. Decreasing the value may increase system overhead.

Example: SERVER_POLL_SECONDS = 5;

CONTROLLER_POLL_SECONDS

This specifies the frequency of heartbeat messages between the primary Cluster Controller and the secondary cluster controller (if one is defined). If no secondary cluster controller is defined, this parameter is ignored.

Valid values are 1 to 60 seconds. The default is every 5 seconds. This is the recommended value. Specify the number of seconds as a whole integer.

NOTE: Increasing the value causes failures to be detected less rapidly. Decreasing the value may increase system overhead.

Example: CONTROLLER_POLL_SECONDS = 5;

MONITOR_CONTROLLER_PORT

Specifies the TCP port number to use for intracluster communication to the cluster controller. This parameter is required.

The default port is 9700.

NOTE: The default port numbers in the NQClusterConfig.INI file have not been registered through the Internet Assigned Numbers Authority (IANA), nor, as of the date this document was prepared, have these ports been assigned to any specific use by IANA.

When assigning a port number, use the following guidelines:

- Port numbers may be in the range of 1024 to 49151.
- Before selecting a port number, verify that no installed application uses the port number on any machine in the cluster.
- When installing additional software packages, do not assign the port number used in Siebel Analytics clustering communications to other applications as TCP ports.

  NOTE: Do not specify the same port number as that specified for the MONITOR_SERVER_PORT (described below).

  Example: MONITOR_CONTROLLER_PORT = 9700;

MONITOR_SERVER_PORT

Specifies the TCP port number to use for intracluster communication to the clustered servers. This parameter is required.

The default port is 9701.

NOTE: The default port numbers in the NQClusterConfig.INI file have not been reserved through the Internet Assigned Numbers Authority (IANA), nor, as of the date this document was prepared, have these ports been assigned to any specific use by IANA.

When assigning a port number, use the following guidelines:

- Port numbers may be in the range of 1024 to 49151.
- Before selecting a port number, verify that no installed application uses the port number on any machine in the cluster.
- When installing additional software packages, do not assign the port number used in Siebel Analytics clustering communications to other applications as TCP ports.

  NOTE: Do not specify the same port number as that specified for the MONITOR_CONTROLLER_PORT (described above).

  Example: MONITOR_SERVER_PORT = 9701;

CLIENT_SERVER_PORT

Specifies the TCP port number to use for ODBC connections on the clustered servers. This parameter is required.

The default port is 9703.

NOTE: The default port numbers in the NQClusterConfig.INI file have not been reserved through the Internet Assigned Numbers Authority (IANA), nor, as of the date this document was prepared, have these ports been assigned to any specific use by IANA.

When assigning a port number, use the following guidelines:

- Port numbers may be in the range of 1024 to 49151.
- Before selecting a port number, verify that no installed application uses the port number on any machine in the cluster.
- When installing additional software packages, do not assign the port number used in Siebel Analytics clustering communications to other applications as TCP ports.

  NOTE: Do not specify the same port number as that specified for the CLIENT_CONTROLLER_PORT.

  Example: CLIENT_SERVER_PORT = 9703;

CLIENT_CONTROLLER_PORT

Specifies the TCP port number to use for ODBC connections on the cluster controllers. This parameter is required.

The default port is 9706.

NOTE: The default port numbers in the NQClusterConfig.INI file have not been reserved through the Internet Assigned Numbers Authority (IANA), nor, as of the date this document was prepared, have these ports been assigned to any specific use by IANA.

When assigning a port number, use the following guidelines:

- Port numbers may be in the range of 1024 to 49151.
- Before selecting a port number, verify that no installed application uses the port number on any machine in the cluster.
- When installing additional software packages, do not assign the port number used in Siebel Analytics clustering communications to other applications as TCP ports.

  NOTE: Do not specify the same port number as that specified for the CLIENT_SERVER_PORT.

  Example: CLIENT_CONTROLLER_PORT = 9706;

SERVER_MANAGER_PORT

Specifies the TCP port number to use for intracluster communication. This parameter is required only under UNIX.

The default port is 9702.

NOTE: The default port numbers in the NQClusterConfig.INI file have not been reserved through the Internet Assigned Numbers Authority (IANA), nor, as of the date this document was prepared, have these ports been assigned to any specific use by IANA.

When assigning a port number, use the following guidelines:

- Port numbers may be in the range of 1024 to 49151.
- Before selecting a port number, verify that no installed application uses the port number on any machine in the cluster.
- When installing additional software packages, do not assign the port number used in Siebel Analytics clustering communications to other applications as TCP ports.

  Example: SERVER_MANAGER_PORT= 9702;

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