

# Installation Guide

Oracle<sup>®</sup> Health Sciences InForm 6.0



ORACLE<sup>®</sup>

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## Overview of this guide

The *Installation Guide* describes how to install the software and configure the environment for the InForm application and Cognos 8 Business Intelligence software.

After installing the software and configuring the environment, use the *Study and Reporting Setup Guide* for information about how to set up a study and the Reporting and Analysis module.

## Audience

This guide is for database and system administrators who are responsible for installing and configuring the InForm software and the Cognos 8 Business Intelligence software.

## Related information

### Documentation

All documentation is available from the Oracle Software Delivery Cloud (<https://edelivery.oracle.com>) and the Download Center (<https://extranet.phaseforward.com>).

Document	Description
<i>Release Notes</i>	The <i>Release Notes</i> document describes enhancements introduced and problems fixed in the current release, upgrade considerations, release history, and other late-breaking information.
<i>Known Issues</i>	<p>The <i>Known Issues</i> document provides detailed information about the known issues in this release, along with workarounds, if available.</p> <p><b>Note:</b> The most current list of known issues is available on the Extranet. To sign in to the Extranet, go to <a href="https://extranet.phaseforward.com">https://extranet.phaseforward.com</a>.</p>
<i>Upgrade and Migration Guide</i>	The <i>Upgrade and Migration Guide</i> provides instructions for upgrading and migrating the InForm software and InForm Portal software to the current InForm release, and for upgrading the Cognos 8 Business Intelligence software for use with the Reporting and Analysis module. The guide also describes any changes and additions made to the database schema, MedML, and resource files.
<i>Secure Configuration Guide</i>	The <i>Secure Configuration Guide</i> provides an overview of the security features provided with the Oracle® Health Sciences InForm application, including details about the general principles of application security, and how to install, configure, and use the InForm application securely.
<i>Installation Guide</i>	The <i>Installation Guide</i> describes how to install the software and configure the environment for the InForm application and Cognos 8 Business Intelligence software.
<i>Study and Reporting Setup Guide</i>	The <i>Study and Reporting Setup Guide</i> describes how to perform the tasks that are required to set up an InForm study and configure the Reporting and Analysis module for the study.
<i>User Guide</i>	<p>The <i>User Guide</i> provides an overview of the InForm application including details on multilingual studies, how to navigate through the user interface, and how to use the application to accomplish typical tasks you perform while running a clinical study.</p> <p>This document is also available from the Documentation CD and the InForm user interface.</p>

Document	Description
<i>Reporting and Analysis Guide</i>	<p>The <i>Reporting and Analysis Guide</i> provides an overview of the Reporting and Analysis module. It includes a brief overview of the Reporting and Analysis interface, illustrates how to access the Ad Hoc Reporting feature, and describes the study management and clinical data packages available for Reporting and Analysis. It also provides detailed descriptions of each standard report that is included with your installation.</p> <p>This document is also available from the Documentation CD.</p>
<i>Reporting Database Schema Guide</i>	<p>The <i>Reporting Database Schema Guide</i> describes the Reporting and Analysis database schema, and provides information on creating Reporting Database Extracts (RDEs).</p>
<i>Portal Administration Guide</i>	<p>The <i>Portal Administration Guide</i> provides step-by-step instructions for setting up the InForm Portal software, and configuring and managing the InForm Portal application.</p> <p>This document is also available from the Documentation CD.</p>
<i>Utilities Guide</i>	<p>The <i>Utilities Guide</i> provides information about and step-by-step instructions for using the following utilities:</p> <ul style="list-style-type: none"> <li>• PFConsole utility</li> <li>• MedML Installer utility</li> <li>• InForm Data Import utility</li> <li>• InForm Data Export utility</li> <li>• InForm Performance Monitor utility</li> <li>• InForm Report Folder Maintenance utility</li> </ul> <p>This guide also provides reference information for the MedML elements and scripting objects that are used to import and export data to and from the InForm application, as well as sample data import XML.</p> <p>This document is also available from the Documentation CD.</p>
MedML Installer utility online Help	<p>The MedML Installer utility online Help provides information about, and step-by-step instructions for using, the MedML Installer utility, which is used to load XML that defines study components into the InForm database.</p> <p>This guide also provides reference information for the MedML elements and scripting objects that are used to import and export data to and from the InForm application, as well as sample data import XML.</p> <p>This document is also available from the user interface.</p>

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Document	Description
InForm Data Export utility online Help	<p>The InForm Data Export utility online Help provides information about and step-by-step instructions for using the InForm Data Export utility, which is used to export data from the InForm application to the following output formats:</p> <ul style="list-style-type: none"><li>• Customer-defined database (CDD).</li><li>• Name value pairs.</li></ul> <p>This document is also available from the user interface.</p>
InForm Data Import utility online Help	<p>The InForm Data Import utility online Help provides information about and step-by-step instructions for using the InForm Data Import utility, which is used to import data into the InForm application.</p> <p>This document is also available from the user interface.</p>

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## If you need assistance

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

# **PART 1: PREPARING THE DATABASE SERVERS**



## CHAPTER 1

# Preparing to install

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## InForm 6.0 product image

The InForm product image includes folders that contain:

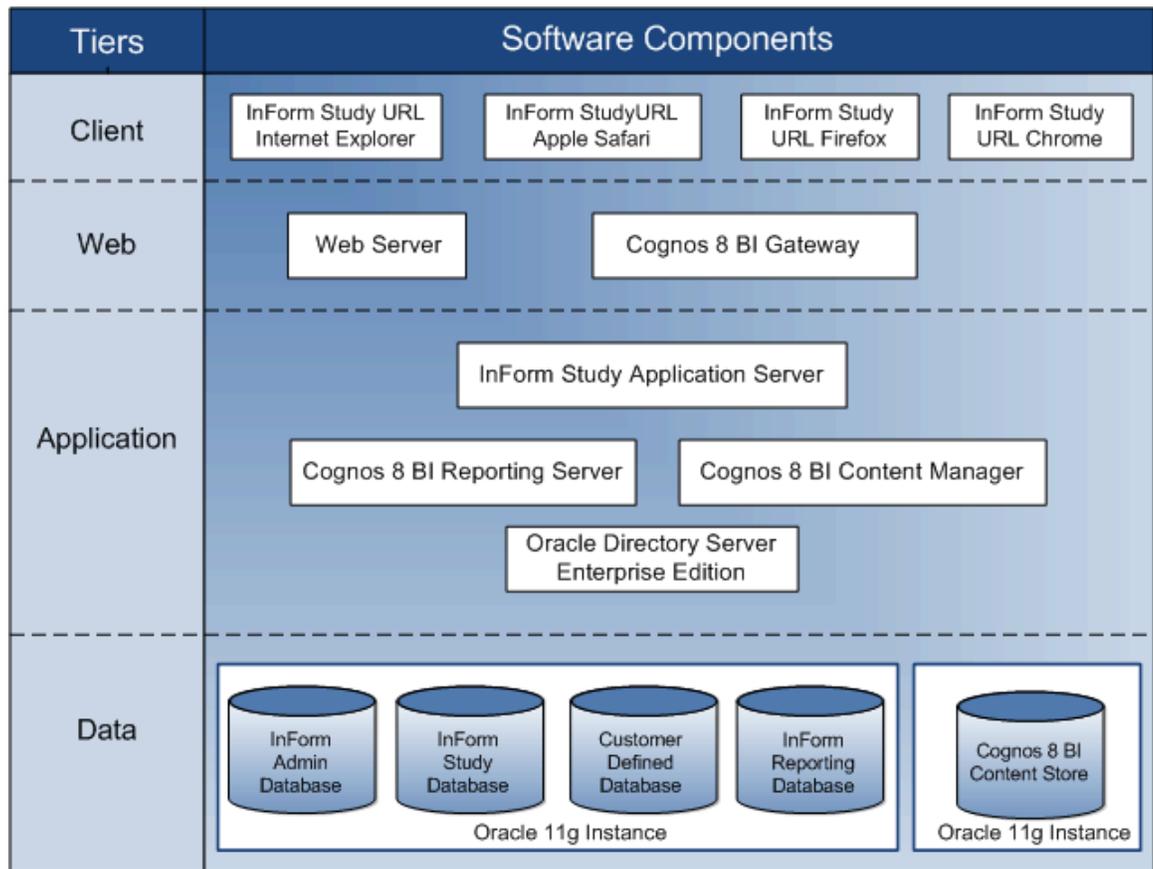
- Native installers—The native installer folder contains setup files that install the base products necessary for the InForm software and the InForm Portal software to run.
- Customization wizards—The customization wizard folders contain setup files you use to apply customizations needed for an installation of the Reporting and Analysis module. Use the customization wizard folders only if you are installing the Reporting and Analysis module.

Folder	Description
InForm	Contains the InForm core and the InForm Portal installation software.
CRNConfig	Contains files used to run the Cognos Customization for InForm wizard.
CRNGatewayConfig	Contains files used to run the Cognos Gateway Customization for InForm wizard.

# InForm software components

## Overview of the InForm system architecture

The InForm software is a four-tiered software design. The following illustration is a logical representation of the system architecture.



Tier	Software component hosted on the tier	Description
Client	Web browser	Displays the pages of a study and receives user input. <b>Note:</b> Cognos 8.4.1 does not support Internet Explorer 9.0, Google Chrome, or Apple Safari.
Web	Web server and gateway software (MS-IIS)	Services requests to and from the web browser.
	Cognos 8 BI Gateway	Manages the transfer of information from the Web server to another server. Provides secure access to the Cognos 8 Business Intelligence (Cognos 8 BI) Server.

Tier	Software component hosted on the tier	Description
Client	Web browser	Displays the pages of a study and receives user input. <b>Note:</b> Cognos 8.4.1 does not support Internet Explorer 9.0, Google Chrome, or Apple Safari.
Application	InForm application server	Logical server that acts as a transaction manager for InForm studies under the InForm Service. The InForm Server handles caching and Microsoft Transaction Server (MTS) packages. Each study is associated with an InForm study application server.
	Cognos 8 BI Reporting server	Runs reporting-related requests for operating system services. There is one Cognos 8 BI Service per physical server machine.
	Cognos Content Manager	Manages the storage of customer application data, including security, configuration data, models, metrics, report specifications, and report output. Content Manager is needed to publish packages, retrieve or store report specifications, manage scheduling information, and manage the Cognos namespace
	Oracle Directory Server	Provides secure Admin access to the InForm Reporting database.
Data	Oracle database instances for:	<ul style="list-style-type: none"> <li>• InForm database—Stores the study components and the clinical data. Studies typically share an instance of the Oracle database with the InForm Admin schema.</li> <li>• InForm Admin database—Used by the InForm Service to manage all the studies on a physical machine. There is one InForm Admin database per InForm Service.</li> <li>• InForm Reporting database—Stores views for Cognos Reporting through the Reporting and Analysis module. The InForm Reporting database can share an instance of the Oracle database with the InForm Admin and study databases or can reside in a separate Oracle database instance. In an installation in which Cognos Reporting is enabled, each InForm study database has a corresponding InForm Reporting database.</li> <li>• Cognos 8 BI Content Store—Stores user-created reporting objects such as folders, saved reports, and saved views. The Content Store usually resides in a separate Oracle database instance.</li> </ul>

## About the Cognos Private Gateway

If you install the Reporting and Analysis module, you must also install a Private Gateway. The Private Gateway provides secure access to certain Cognos 8 Business Intelligence software administrative tasks that are not available through the InForm user interface.

The Private Gateway must be located on a secure, dedicated server (the Cognos Private Gateway Server) that is accessible to a limited number of users with administrative privileges for the Cognos 8 Business Intelligence software. For more information, see *Prepare the Cognos Gateway Server* (on page 80).

## Application server options

You can distribute the software components across multiple application servers to best fit your environment. You can use one of the following deployment options:

- **Minimal server deployment**—Install the InForm software and the Reporting and Analysis module on the fewest possible number of servers.
- **Multiple server deployment**—Install the InForm software and the Reporting and Analysis module on multiple servers.
- **Distributed deployment**—Install the InForm software and the Reporting and Analysis module on separate servers.

### Minimal server deployment

A minimal-server deployment requires four servers:

- InForm Application Server
- A server that hosts the Cognos components and the Oracle Directory Server:
  - Report application
  - Content Manager
  - Gateway
  - Oracle Directory Server
- Private Gateway
- A server for all the database instances.

## Multiple server deployment

In a multiple server deployment, the InForm Server, the Cognos 8 Business Intelligence Server, and the study and reporting databases are on at least six separate server machines that conform to InForm hardware and software requirements.

For example, a multiple server deployment might include eight server machines configured as follows:

- One Cognos Gateway Server machine.
- One Cognos Private Gateway Server machine.
- One Cognos server machine containing the:
  - Cognos Report server.
  - Cognos Content Manager server.
- One InForm Application server machine.
- One Oracle Directory Server machine.
- Three dedicated Oracle database server machines:
  - InForm study.
  - InForm Reporting.
  - Cognos 8 BI Content Store.

**Note:** The InForm application server(s) and the Cognos 8 BI application server(s) must be in the same domain.

## Distributed server deployment

In a distributed server deployment, the InForm Application Server, the Cognos Report Server, the Cognos Content Manager Server, the Cognos Gateway Server, the Oracle Directory Server, and the study and reporting databases are on separate server machines that conform to InForm hardware and software requirements.

For example, a distributed server deployment might include at least nine server machines configured as follows:

- One InForm Application server machine.
- One Cognos Gateway Server.
- One Cognos Private Gateway Server
- One Cognos Report Application Server.
- One Cognos Content Manager Server.
- One Oracle Directory Server machine.
- Three dedicated Oracle database server machines:
  - InForm database instance.
  - InForm reporting database instance.
  - Cognos 8 BI Content Store database instance.

## Database configuration options

You can use different configurations for your database instances when you install the InForm software. You can choose:

- **SameDB**—The InForm database and the InForm reporting database are installed on a single database instance.
- **DiffDB**—The InForm database and the InForm reporting database are installed on separate database instances.
- **Distributed deployment**—The database instances are configured to distribute tablespaces across multiple database servers. For more information, see *Multiple study tablespaces* (on page 35).

### SameDB—Single database instance for InForm and Cognos reporting software

For the default configuration, Oracle recommends installing the InForm software and the Reporting and Analysis module in the same database instance, and installing in different database instances only in certain cases.

- You can install in the same database instance if your study has up to 70 concurrent users and 8 concurrent reporting connections. The 8 reporting connections can be any combination of running an ad hoc query, a standard or custom report, or a report job.
- If your study requires more than 70 concurrent users and 8 concurrent reporting connections, installing in the same database instance may still be acceptable. However, you may want to consider installing the InForm software and the Reporting and Analysis module in different database instances.
- If your study requires 16 or more concurrent reporting connections, Oracle recommends installing in different database instances.

Observe the following architecture rules when setting up a single database instance for the InForm software and the Reporting and Analysis module:

- Only one reporting environment is allowed per study schema.
- A single database can hold multiple reporting schemas.
- The study and reporting schema cannot be installed in the same database as the Content Store database for Cognos 8 Business Intelligence. No other Oracle products, such as the CIS software or the Clintrial software, should already reside in or be added to the study and reporting database.
- The InForm study and reporting database is not required to run in archive log mode.

## DiffDB—Separate database instances for InForm and Cognos reporting software

If you choose to install the InForm and Cognos reporting software on separate database instances, you could use separate database instances for each of the following:

- Each InForm server, which contains one InForm Admin schema and multiple InForm study schemas.
- InForm Reporting schema.
- Cognos 8 BI Content Store schema.
- PFCap Admin schema

**Note:** The PFCap Admin schema can reside in a separate instance or the same instance as the Cognos 8 BI Content Store schema.

Observe the following architecture rules:

- You must install the Reporting and Analysis environment (InForm Reporting database) in a different database instance than the instance for the study.
- The InForm application server(s) and the Cognos 8 BI application server(s) must be in the same domain.
- The Oracle user name for the reporting schema in the reporting database instance must be the same as the Oracle user name for the study schema in the study database instance. Because the users are in different database instances, the user names may have different passwords.
- Only one reporting environment is allowed per study schema.
- A single reporting database can hold multiple reporting schemas. The study schemas that are associated with these reporting schemas might exist in one or in multiple study databases.
- The study and reporting schemas cannot be installed in the same database as the Content Store database for Cognos 8 Business Intelligence. No other Oracle products, such as the CIS software or the Clintrial software, should already reside in or be added to the study and reporting database.
- The study schema must be created with archive log mode enabled.

For more information, see *Archive log mode in a multiple database environment* (on page 30).

## Distributed deployment options

You can distribute your study and reporting databases across multiple disk partitions on the same server or multiple database servers. For more information, see *Multiple study tablespaces* (on page 35).

**Note:** SameDB and DiffDB databases can be deployed in a distributed environment.

## Externally hosted studies

Externally hosted studies must conform to the following requirements, or authentication issues will result.

- The InForm application server(s) and the Cognos 8 BI application server(s) must be in the same domain.
- You must use the fully qualified domain name to access the site.

## Determining resources for multiple studies

You can install one or more studies on an InForm application server or on a physical server. When deciding the load that you will place on a server, consider:

- The number of InForm application servers on each physical server machine.
- The number of studies on each InForm application server.

**Note: Oracle recommends installing only one study per InForm application server in a production environment.**

- The size of the intended InForm application server (each server requires 40 to 50 megabytes of memory).
- The number of studies you intend to run on the server machine.
- The system availability requirements.
- The geographic proximity of sites to the server.

## Guidelines for determining resources

Follow these basic guidelines for determining resources:

- Use separate server machines for production studies and studies that are used for testing and training.
- Consider using one server machine for multiple smaller studies (especially Phase 1 studies) that are on separate InForm application servers.
- Use a separate server machine for each large study (especially Phase 3 studies). Although multiple servers might require additional resources and additional cost, they also provide increased dependability and stability.

Separate server machines can reduce risk. If you have more than one study on a server machine and make an error in setup or configuration, all the studies on that server are affected.

## Sizing the server

When sizing an InForm application server, be aware of the resources that are already being used. Make sure that you monitor the servers during the studies. When sizing your server, consider the average number of:

- Sites.
- Subjects per site.
- CRFs (forms).
- Data items.
- Users.

For each study, consider the following:

- Good Clinical Practice (GCP) status of the study (GCP or non-GCP).
- Study phase.
- Study duration.
- Enrollment rate.
- Geographic proximity of servers to sites.
- System availability requirements.
- Number of sites.
- Number of users.
- Number of subjects.
- Number of unique forms.
- Maximum number of items per form.
- Average number of items per form.
- Maximum number of rules per form.
- Average number of rules per form.
- Total number of forms per subject.

# Configuring client computers

## Browser settings for Internet Explorer

Configure the following Internet Explorer settings to access the InForm application and the Reporting and Analysis module.

Internet Explorer 9.0 is not supported for the Reporting and Analysis module.

- Specify the preferred browser language.
- To view reports in Microsoft Excel format:
  - Set the InForm web site domain and the Reporting and Analysis web site domain as trusted sites.
  - Enable automatic prompting for file downloads.
  - Enable notifications when downloads complete.
- Configure pop-up blocking to allow pop-ups for the InForm web site domain and the Reporting and Analysis web site domain.
- Prevent automatic password completion.
- Specify that you want to save encrypted files to disk.
- Automatically check for newer versions of stored pages.
- Set the amount of disk space to use to 6 MB.
- Set the HTTP and SSL options to use HTTP 1.1 and SSL 3.0.
- Enable printing background colors and images for graphics.
- Modifying security settings:
  - Allow META REFRESH.
  - Enable active scripting.
- Set up tabbed browsing to launch links in a new tab.

For more information, see the Internet Explorer online Help.

## Browser settings for Apple Safari

Configure the following Apple Safari settings to access the InForm application.

Apple Safari is not supported for the Reporting and Analysis module.

- Specify the preferred browser language.
- Configure pop-up blocking to allow pop-ups for the InForm application web server.
- Prevent Safari from using automatic password completion.
- Modify security settings to accept cookies.
- Set up tabbed browsing to launch links in a new tab.

For more information, see the Apple Safari online Help.

## Browser settings for Firefox

Configure the following Firefox settings to access the InForm application and the Reporting and Analysis module.

- Specify the preferred browser language.
- Configure pop-up blocking to allow pop-ups for the InForm web site domain and the Reporting and Analysis web site domain.
- Prevent Firefox from using stored passwords.
- Set the SSL option to use SSL 3.0.
- Modify security settings to accept cookies.
- Set up tabbed browsing to launch links in a new tab.

For more information, see the Firefox online Help.

## Browser settings for Google Chrome

Configure the following Google Chrome settings to access the InForm application.

Google Chrome is not supported for the Reporting and Analysis module.

- Specify the preferred browser language.
- Configure pop-up blocking to allow pop-ups for the InForm web site domain and the Reporting and Analysis web site domain.
- Prevent Chrome from using stored passwords.
- Set the SSL option to use SSL 3.0.
- Modify security settings to accept cookies.
- Set up tabbed browsing to launch links in a new tab.

For more information, see the Chrome online Help.

## Windows Explorer settings

Configure the following Windows Explorer settings to access the InForm application and the Reporting and Analysis module.

- Make sure the files with the XLS and XLSX extensions are not set to Browse in the same window.
- Associate files with the XLS and XLSX extensions with the Microsoft Excel spreadsheet software.

## Performance Options setting in System Properties

If the InForm application server is also the database server for the study database instance, you might receive errors that are related to cache initialization time when installing a study if the system setting for **Processor scheduling** is not set to **Adjust for best performance of Programs**.

- 1 On the InForm application and database server, open the System Properties dialog box, and select **Advanced**.
- 2 In the Performance section, click **Settings**.  
The Performance Options dialog box appears.
- 3 Click **Advanced**.
- 4 In the Processor scheduling section, click **Programs**.
- 5 Click **OK** in both dialog boxes.

**Note:** When the InForm application server and database server are different machines, the system setting for **Processor scheduling** in the System Properties > Performance Options dialog box should be the default value, **Background services**.

## CHAPTER 2

# Installing the Oracle database software

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## About installing the Oracle database software

To install the Oracle database software, refer to your Oracle database documentation.

To ensure a successful installation, make sure your environment is set up correctly. For hardware and software requirements, see the *Release Notes*.

## Install the Oracle database software—SameDB

If you plan to use a SameDB configuration, you must install the Oracle database software on the:

- InForm database server.
- Cognos Content Store database server.

For more information on the SameDB configuration, see:

- *Steps to create database instances—SameDB* (on page 25).
- *Steps to create database users—SameDB and DiffDB* (on page 31).

## Install the Oracle database software—DiffDB

If you plan to use a DiffDB configuration, you must install the Oracle database software on the:

- InForm database server.
- InForm Reporting database server.
- Cognos Content Store database server.

For more information on the DiffDB configuration, see:

- *Steps to create database instances—DiffDB* (on page 25).
- *Steps to create database users—SameDB and DiffDB* (on page 31).

## CHAPTER 3

# Configuring the Oracle database software

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## About configuring the Oracle database software

To configure the Oracle database, you must create the:

- Database instances and tablespaces

For more information, see *Create Oracle Database instances* (on page 26).

- Database users

For more information, see *Create database users* (on page 31).

# Create database instances

## Steps to create database instances—SameDB

If you are using a SameDB configuration, you must:

1 Create instances on the:

- InForm database server.
- Cognos Content Store database server.

For more information, see:

- *Create Oracle Database instances* (on page 26)
- *Creating a database instance for the Cognos 8 BI content store* (on page 27)

2 Set the initialization parameters for the database instances on the InForm database server.

For more information, see *Set the initialization parameters for the database instances* (on page 27).

## Steps to create database instances—DiffDB

If you are using a DiffDB configuration, you must:

1 Create instances on the:

- InForm database server.
- InForm Reporting database server.
- Cognos Content Store database server.

For more information, see:

- *Create Oracle Database instances* (on page 26).
- *Creating a database instance for the Cognos 8 BI content store* (on page 27).

2 Set the initialization parameters for the database instances on the InForm, Reporting, and Content Store database servers.

For more information, see:

- *Set the initialization parameters for the database instances* (on page 27).
- *Study database parameters—Different database instances* (on page 29).
- *Archive log mode in a multiple database environment* (on page 30).

## Create Oracle Database instances

Use the Oracle tools to create the instances required for your configuration.

Use the following character set specifications for the InForm, Reporting, and Content Store instances:

- Database Character Set—AL32UTF8.
- National Character Set—AL16UTF16.

To verify the character set settings:

- 1 Log into SQL\*Plus and type:

```
sqlplus <system_userid>@<connection_string>
```

When prompted, enter the system user password.

- 2 Run the following command:

```
select * from nls_database_parameters
where parameter =
any('NLS_CHARACTERSET','NLS_NCHAR_CHARACTERSET');
```

### Create the InForm database instance

- 1 Set up an Oracle database instance.
- 2 Populate the database instance for the InForm database server with the following tablespaces:
  - SYSAUX
  - SYSTEM
  - UNDOTBS1
  - USERS
  - TEMP
  - TEMPBIG
  - TRIAL\_INDEX\_TS
  - TRIAL\_TABLE\_TS
  - INFORM
  - INFORM\_LOB
- 3 Update the tnsnames.ora file located on the InForm Application Server to contain an alias establishing a connection to the database server.

## Create the reporting database instance

- 1 Set up an Oracle database instance.
- 2 **For a SameDB environment**—The reporting database uses the InForm database instance.  
**For a DiffDB environment**—The reporting database instance on the Reporting database server with the same tablespace names used for the study database.
- 3 Update the tnsnames.ora file to contain an alias establishing a connection to the database server.
  - **For a SameDB environment**, the tnsnames.ora file is located on the InForm Application Server.
  - **For a DiffDB environment**, the tnsnames.ora file is located on the Cognos Report Server.

## Creating a database instance for the Cognos 8 BI content store

- Set up an Oracle database instance on the Content Store database server.

## Set the initialization parameters for the database instances

Depending on your environment, you might need one, two, or three database instances (the study, the Reporting and Analysis module, and Cognos 8 BI can each use an instance).

When creating each InForm Oracle Instance, use the following initialization parameters in the Init.ora file.

**Note:** Additional parameter settings are required if your installation includes Cognos 8 BI and the Reporting and Analysis module in a DiffDB environment (your study and reporting databases are in separate database instances). For more information, see *Study database parameters—Different database instances* (on page 29).

Parameter	Production server values	Development server values
memory_target	Average trial: 1500 MB Large trial: 10 GB Mega trial: 25 GB	Up to 80% of memory available to the Oracle database
cursor_sharing	exact	exact
db_block_size	16384	16384
db_file_multiblock_read_count	16	16
db_cache_size	0	0
See <b>Note 1</b> .		
db_files	Database dependent.	Database dependent.
open_cursors	150	150
See <b>Note 1</b> .		

Parameter	Production server values	Development server values
processes See <b>Note 1.</b>	150 (or maximum number of concurrent processes)	50
session_cached_cursors	150	150
shared_pool_reserved_size	5M	3.5M
streams_pool_size	200M	200M
job_queue_processes	5 minimum: 1 job for each study (the job to update PF_HEARTBEAT table every minute in each study schema) and 1 job for each propagation, plus streams' minimum requirement of 2 and Oracle MTS's requirement of 1)	5 minimum: 1 job for each study (the job to update PF_HEARTBEAT table every minute in each study schema) and 1 job for each propagation, plus streams' minimum requirement of 2 and Oracle MTS's requirement of 1)
statistics_level	Typical	Typical
workarea_size_policy	auto	auto
_optimizer_cost_based_transformation	Off	Off
See <b>Note 2.</b>		
sec_case_sensitive_logon	False	False
_push_join_predicate	False	False
deferred_segment_creation (11g only)	False	False
skip_unusable_indexes	True.	True.
undo_retention	900	900
parallel_max_servers	3	3

**Note 1:** These parameters might need to be adjusted depending on the demands on the database that are created by the InForm application and Streams.

**Note 2:** Workaround provided by Oracle for database issue 5382842.

## Study database parameters—Different database instances

In a DiffDB environment, the Reporting and Analysis module requires you to add or modify several study database parameters. The following table shows the adjustments that must be made to these parameters. All settings are necessary for both production and development servers.

Additionally, it is recommended that you review the **processes** and **sessions** parameters, which are not mandatory for the Reporting and Analysis installation.

For more information, see the Oracle database document, *Oracle Streams Recommendations*.

Parameter	Value	Comments
AQ_TM_PROCESS	1	Must be set on both the study database and the reporting database (streams processing might hang if set to 0).
global_names	TRUE	
job_queue_processes	5 minimum	5 minimum: 1 job for each study (the job to update PF_HEARTBEAT table every minute in each study schema) and 1 job for each propagation, plus streams' minimum requirement of 2 and Oracle MTS's requirement of 1)
log_archive_dest	Destination where the archive logs will be written	You must enter at least one destination.
log_archive_dest_state_1	ENABLE	This enables the archive log destination (log_archive_dest_1). You must enter a state for every destination.
open_links	Four minimum	Four minimum is recommended by Oracle for Streams.
parallel_max_servers	10	Minimum: 3 dependent on the number of parallel apply and/or capture processes.
timed_statistics	TRUE	Recommended by Oracle for collecting elapsed time information for Streams.
undo_retention	900 (minimum value)	
_job_queue_interval	One	Recommended by Oracle for Streams.
deferred_segment_creation	False	(11g only)

## Archive log mode in a multiple database environment

If you are using a DiffDB configuration, you must create the study database with archive log mode enabled. You can create the database with scripts or with the Oracle Database Configuration Assistant utility.

- **Scripts**—Specify **archive log** as part of the **create database** statement.
- **Oracle Database Configuration Assistant**—On the Archive tab, select the **Archive Log Mode** checkbox during the Initialization Parameters step.

**Note:** For more information about the Oracle Database Configuration Assistance utility, see the Oracle database document, *Oracle Administrators Guide* for your platform.

# Create database users

## Steps to create database users—SameDB and DiffDB

If you are using a SameDB or DiffDB configuration, you must:

- 1 Create the InForm database users on the InForm database server.

For more information, see:

- *Required InForm database accounts* (on page 32).

- 2 Create the Cognos PFCapAdmin and the Content database users on the Cognos Content Store database server.

For more information, see:

- *Create a user for the Cognos 8 BI content store database* (on page 33).
- *Create the PFCapAdmin user on the Content Store database server* (on page 34).

- 3 If you are using a DiffDB configuration you must also create the rptinstall user on the Reporting database server.

For more information, see *Create the rptinstall user on the InForm database server and the Reporting database server for DiffDB* (on page 33).

## Required InForm database accounts

The following database accounts are required for each instance of the InForm Service:

- A DBA user for the InForm software. The default name of this user is pfdbadmin.
- A user that can connect to the InForm Admin database. The default name of this user is informadmin.

The recommended way to create these accounts is to select the options to create them in the InForm installation wizard. If you need to create either account at another time, you can run a script.

Default account name	Installation wizard checkbox	Script and where to get information
pfdbadmin	Prep Oracle  For more information, see <b>Step 2: Install the InForm core software on the InForm Application Server</b> (on page 50).	<b>informprepora.vbs</b> (on page 138)  For more information, see the <i>Study and Reporting Setup Guide</i> .
informadmin	Install Admin DB  For more information, see <b>Step 2: Install the InForm core software on the InForm Application Server</b> (on page 50).	<b>admindb</b> (on page 130)  For more information, see the <i>Study and Reporting Setup Guide</i> .

In a multiple server installation of the InForm software, you create the pfdbadmin and informadmin accounts on each server where you install the InForm software.

**Note:** You need to create the pfadmin user only one time per database instance. Therefore, if you uninstall and reinstall the InForm software in the same database instance, you can leave the Prep Oracle checkbox deselected during the second installation.

## Create a user for the Cognos 8 BI content store database

- 1 Verify that the character set for the content store database is Unicode.
- 2 Create a user and grant the user these roles and privileges:
  - Roles
    - CONNECT
    - RESOURCE
  - Privileges
    - CREATE ANY VIEW
    - UNLIMITED TABLESPACE
- 3 Validate the database connection from the Cognos 8 BI server by typing:

```
sqlplus <contentuser_userid>@<tnsnames_alias>
```

At the prompt, enter the content user password.

If the test is successful, a SQL prompt appears, showing that you have logged on to the database server as the content store database user. An unsuccessful test generates an ORA- error. Consult your database administrator for help in troubleshooting errors.

## Create the rptinstall user on the InForm database server and the Reporting database server for DiffDB

- 1 Open a Command Prompt window.
- 2 Log on to the study database with a user that has sysdba privileges. Make sure that the connection is made with the as sysdba clause.
- 3 Run this command:

```
create user rptinstall identified by <dbauser_study_password> default  
tablespace <tablespace_name> temporary tablespace <tablespace_name>
```

<dbauser\_study\_password>—The password for rptinstall, the database user for the study. This password is case-sensitive.

<tablespace\_name>—A valid tablespace name in the database. Oracle recommends that you do not use the SYSTEM tablespace for the default tablespace.

**Note:** The default tablespace does not require additional room for objects, because the rptinstall user does not own objects.

- 4 Type the following at the SQL\*Plus prompt:

```
@grant_dba_privs rptinstall
```

The grant\_dba\_privs.sql script is located in the <Installation\_Directory>\InForm\bin\DBOra folder.

For more information, see *grant\_dba\_privs.sql* (on page 136).

## Create the PFCapAdmin user on the Content Store database server

- 1 Create the user PFCapAdmin on the Content Store database server and grant the user these roles and privileges:
  - Roles
    - CONNECT
    - RESOURCE
- 2 Run the create\_cap\_table.sql script (located in the <Installation\_Directory>\InForm\bin\DBOra folder) to create a table called TRIAL\_URLS within this user/schema.

For more information, see *create\_cap\_table.sql* (on page 133).

**Note: The CAP schema can reside in the content store database instance or a separate database instance.**

- 3 Validate the database connection from the Cognos 8 BI server by typing:

**sqlplus** <contentuser\_userid>@<connection\_string>

When prompted, enter the content user password.

If the test is successful, a SQL prompt appears, showing that you have logged on to the database server as the PFCapAdmin user. An unsuccessful test generates an ORA- error. Consult your database administrator for help in troubleshooting errors.

## Multiple study tablespaces

By default, all study objects are created in the INFORM tablespace. In a production environment, you should distribute each study across multiple tablespaces for improved performance and for maintenance and monitoring. Before you install your study on a production server, set up the study-specific tablespaces.

The following table lists the Oracle table and index tablespaces to create, along with the required parameters. All tablespaces should be locally managed.

**Note:** When creating the study tablespaces, use the names listed in the following table.

Table tablespace	Index tablespace	Size (MB)
%STUDY_NAME%_REF	%STUDY_NAME%_REF_IDX	120
%STUDY_NAME%_HIGH_TXN1	%STUDY_NAME%_HIGH_TXN1_IDX	300
%STUDY_NAME%_HIGH_TXN2	%STUDY_NAME%_HIGH_TXN2_IDX	500
%STUDY_NAME%_HIGH_TXN3	%STUDY_NAME%_HIGH_TXN3_IDX	600
%STUDY_NAME%_HIGH_TXN4	%STUDY_NAME%_HIGH_TXN4_IDX	500
%STUDY_NAME%_TXN	%STUDY_NAME%_TXN_IDX	250

The remaining syntax for each of these tablespaces is:

```
AUTOEXTEND ON NEXT 50M
EXTENT MANAGEMENT LOCAL AUTOALLOCATE;
```

**Note:** The STUDY\_NAME portion of the tablespace name must conform to Oracle database name standards. It cannot start with a numeric character and cannot contain special characters. Additionally, because the Oracle database has an internal limit of 30 characters for a tablespace name, the study name must be 16 characters or fewer.

Oracle provides sample configurations for distributing your tablespaces using from one to five disks.

## Distributed InForm study tablespaces

In a production environment, Oracle recommends distributing tablespaces across multiple disks. This table presents a suggested model. In each configuration, it is recommended that you use the C: partition for the operating system and distribute the database and application components across the remaining partitions. Monitor your system to determine the optimal configuration.

- C: and D: are partitions on one disk.
- INFORM, SYSTEM, TEMPBIG are tablespaces.

**Note:** TEMPBIG is a temp tablespace and the default temporary storage location for the InForm application.

Physical disks	0	1	2	3	4	
Logical disks	C:	D:	E:	F:	G:	H:
1 disk	Windows 2008	Oracle INFORM SYSTEM Study Tables Study Indexes TEMPBIG Redo logs UNDOTBS Archive logs				
2 disks	Windows 2008	Oracle INFORM SYSTEM Study Tables Redo logs	Study Indexes TEMPBIG Redo logs UNDOTBS Archive logs			
3 disks	Windows 2008	Oracle INFORM SYSTEM Redo logs	Study Indexes TEMPBIG Redo logs UNDOTBS Archive logs	Study Tables		
4 disks	Windows 2008	Oracle INFORM SYSTEM Redo logs	TEMPBIG Redo logs UNDOTBS Archive logs	Study Tables	Study Indexes	
5 disks	Windows 2008	Oracle SYSTEM Redo logs	INFORM Redo logs UNDOTBS	Study Tables	Study Indexes	TEMPBIG Archive logs

**Note:** For a Linux database server, the disk and partition names would follow the naming conventions for those environments.

## Creating the INFORM\_LOB tablespace

The INFORM\_LOB tablespace is optional for InForm installation. To create the INFORM\_LOB tablespace, use the following syntax:

```
CREATE TABLESPACE INFORM_LOB
DATAFILE '<path_to_data_file>' SIZE <initial_size>
AUTOEXTEND ON NEXT
EXTENT MANAGEMENT LOCAL AUTOALLOCATE;
```

Tablespace name	Initial size/ autoextend size needed	File extent size/file maximum size	Comments
<b>INFORM_LOB</b>	200M	Make the initial size 200 megabytes, set AUTOEXTEND on and set MAXSIZE to UNLIMITED.	Use of this tablespace is optional, but, if used, the name INFORM_LOB is required for this tablespace. This tablespace can be used to hold large objects.

## Set up Oracle XA Transaction Support

To set up the Oracle database to support MTS transactional components, enable Oracle XA Transaction Support. You must enable Oracle XA Transaction Support for both development and production environments.

- 1 Select the **Prep Oracle** checkbox during the InForm installation. For more information, see *Step 2: Install the InForm core software on the InForm Application Server* (on page 50).

or

Run the **mtsora102.vbs** script during or after the Oracle installation.

You must run the mtsora102.vbs script only if you are manually setting up XA Transaction Support.

For more information, see *mtsora102.vbs* (on page 141).

**Note:** In a multi-tier environment, select the Prep Oracle checkbox during the InForm installation on each InForm application server, and run the mtsora102.vbs script on each InForm database server. Restart the server if the script changes any of the MSDTC\Security or MSDTC\XADLL registry keys.

- 2 Run the **oramtsadmin.sql** command from the ...\oramts\admin folder of the Oracle Client home (where Oracle Services for Microsoft Transaction Server was installed).

You must run it as the SYS user with the SYSDBA role. Run the script against all Oracle instances connected to the InForm Application Server.

For more information, see *oramtsadmin.sql* (on page 143).

## CHAPTER 4

# Installing and configuring the Oracle database client

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## Steps to install and configure the Oracle database client

1 Install the Oracle database client on the:

- InForm Application Server
- Cognos Content Manager Server
- Cognos Report Server

For more information, see your Oracle database documentation.

2 Update the registry settings on each server where you installed the Oracle database client.

For more information, see *Update the National Language Support registry settings on the Oracle database client* (on page 41).

3 Configure the database connection.

For more information, see *Configure the database connection* (on page 42).

4 Validate the database connection.

For more information, see *Validate the database connection* (on page 43).

## Update the National Language Support registry settings on the Oracle database client

The following registry settings are required for the Oracle client home on the InForm Application Server, the Cognos Report Server, and the Cognos Content Manager Server.

The entries are in the following Windows Registry key:

```
HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\<Oracle_client_home_key>
```

Option	Value
NLS_LANG	American_America.AL32UTF8
NLS_SORT	JAPANESE_M

## Configure the database connection

To configure the Oracle client on the InForm Application Server, the Cognos Report Server, and the Cognos Content Manager Server to connect with the database server:

- Update the **tnsnames.ora** file located on the application server so that it contains the alias that is used to establish a connection to the database server.

**Note:** When installing the InForm software, you enter the alias specified in the **tnsnames.ora** file as the database connect string.

## Validate the database connection

To validate the database connection from the InForm Application Server, the Cognos Report Server, and the Cognos Content Manager Server

- Type the following command at the Windows command prompt:

```
sqlplus pfdadmin_userid@tnsnames_alias
```

When prompted, enter the pfdadmin password.

The default user name for the pfdadmin database account is pfdadmin.

If the test is successful, a SQL prompt appears, showing that you have logged on to the database server as the pfdadmin user. An unsuccessful test generates an ORA- error. Consult your database administrator for help in troubleshooting errors.

**Note:** Problems with connections can sometimes be attributed to the database server that contains a single Ethernet card with two nodes. Disabling one of the ports from the card usually solves the problem. Consult your system administrator for help in resolving errors.



# **PART 2: PREPARING THE APPLICATION SERVERS**



## CHAPTER 5

# Preparing the InForm Application Server

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## Steps to prepare the InForm Application Server

All InForm installations use an InForm Application Server.

To prepare the InForm Application Server:

- 1 Verify the Oracle database client.

For more information, see *Steps to install and configure the Oracle database client* (on page 40).

- 2 Install the InForm core software.

For more information, see *Step 2: Install the InForm core software on the InForm Application Server* (on page 50).

- 3 Update the DomainSuffix entry for the AuthenticationFilter registry key.

For more information, see *Step 3: Update the DomainSuffix entry for the AuthenticationFilter registry key on the InForm Application Server—Optional* (on page 56).

If you are using Reporting, you must also update the DomainSuffix entry on the Cognos Gateway Server. For more information, see *Step 4: Update the DomainSuffix entry for the AuthenticationFilter registry key on the Cognos Gateway Server—Public Gateway only* (on page 85).

- 4 Enable SSL—Optional.

For more information, see *About enabling Secure Sockets Layer (SSL)* (on page 104).

- 5 Qualify the installation.

For more information, see *Qualify the installation* (on page 58).

## Step 1: Verify the Oracle database client on the InForm Application Server

Before you begin, ensure that you have followed the instructions in *Installing and configuring the Oracle database client* (on page 39) to make sure the following requirements are met on the InForm Application Server:

- The Oracle database client is installed.
- The language registry settings are updated.
- The database connection is configured and verified.

## Step 2: Install the InForm core software on the InForm Application Server

You install the InForm core software on InForm Application Server only.

- 1 Download and extract the InForm software from the Oracle Download Center.
- 2 Navigate to the location of the installation files on the downloaded image, and double-click **setup.exe**.

The Choose Setup Language page appears.

- 3 Select either **English** or **Japanese** for the language that you want the wizard to use during the installation.

**Note:** Configuration of the language used for application pages occurs later in the installation.

- 4 Click **Next**.

The Preparing Setup progress page appears. When setup is complete, the Welcome page appears.

- 5 Click **Next**.

The Customer Information page appears.

- 6 Type your **User Name** and **Company Name**.

- 7 Click **Next**.

The Choose Destination Location page appears.

- 8 Accept the default location, or click **Change** and browse to the desired location.

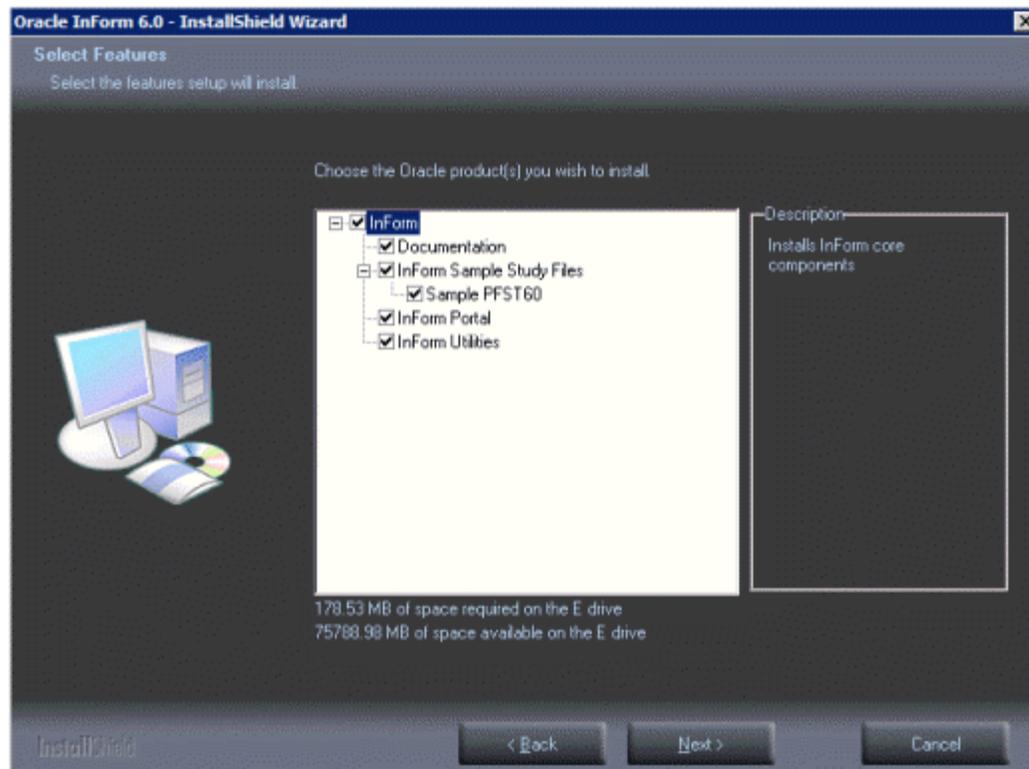
- 9 Click **Next**.

The Setup Type page appears.

- 10 Choose one of the following options, and click **Next**.
  - Complete—Installs all the application components (Default).
  - Minimal—Installs only the required application components and the MedML Installer utility. The InForm Portal, sample study, and other utilities are not installed.
  - Custom—Allows you to select the components to install.

If you select **Complete** or **Minimal**, the Select Product Locale page appears.

If you select **Custom**, the Select Features page appears. Make your choices and click **Next**.



11 Select either **English** or **Japanese** for the Product Locale for the installation.

This determines the language in which the InForm application pages appear after installation.

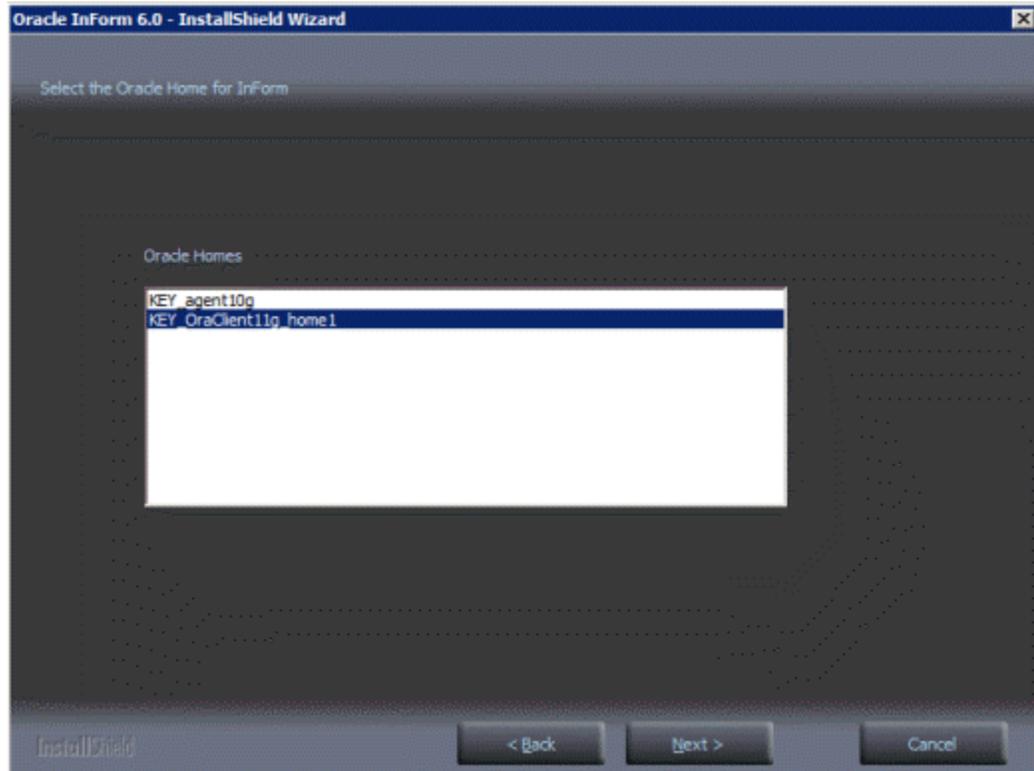
12 Click **Next**.

The Select the Authentication Scheme page appears.

13 Select **Native Authentication**.

14 Click **Next**.

The Select the Oracle Home for InForm page appears. The Oracle Homes you configured during your Oracle installation appear on the page with the prefix **KEY\_** to indicate the Windows registry key.



- 15 Select the entry for the Client Oracle Home registry key.
- 16 Click **Next**.

The Database Configuration page appears.

**Note:** The defaults on this page were set when you configured the Oracle database. The values for your installation might be different. When installing onto a production server, Oracle recommends that you change the pfdbadmin password after running this wizard. For guidelines on choosing a password, see the *Secure Configuration Guide*.

- 17 Enter values or accept the defaults for the configuration fields, and click **Next**.

If any of the information is incorrect (for example, the Database Connection String or InForm Username is wrong), a Database Configuration Error window appears. For more information, see *Oracle MTS configuration is invalid* (on page 164).

Field	Description
Local Machine User	The name of the local machine user. The default is pfUSR_<machinename>.
Local Machine User Password	The password for the local machine user. <b>Note:</b> The password for the local machine user must comply with the password requirements defined in your domain password policy.
Database Connection String	String that the InForm server uses to connect to the Oracle instance for the study.
Oracle SYS DBA User	The name of the Oracle SYS account. This value is only used if you select the <b>Prep Oracle</b> checkbox to create the pfdadmin account.
Oracle SYS DBA Password	Password of the Oracle SYS account. This value is used only if you select the <b>Prep Oracle</b> checkbox to create the pfdadmin account.
Admin Database Username	User name that is required to access the Admin database. The default is <b>informadmin</b> .
Admin Database Password	Password that is required to access the Admin database. The password is case-sensitive. Do not include a hyphen (-) character in the password.

Field	Description
InForm System Username	User name for the study database. If this is a new InForm installation or if you change the user name from the default during the installation, select the <b>Prep Oracle</b> checkbox. This instructs the InForm software installation to create the InForm account using the user name and password you specify.
InForm System Password	Password for the study database. The password is case-sensitive. Do not include a hyphen (-) character in the password.  <b>Note:</b> Oracle recommends that you change the InForm system password after installing the InForm software. For more information, see the <i>Secure Configuration Guide</i> .
Install Admin DB	If selected, creates the: <ul style="list-style-type: none"> <li>informadmin user, using the Admin Database Username and Admin Database Password.</li> <li>InForm Admin database for non-clinical data, such as users, sites, and configuration information.</li> </ul> <b>Note:</b> You must select this checkbox for both installation and upgrades.
Prep Oracle	If selected: <ul style="list-style-type: none"> <li>Runs the <b>informprepora.vbs</b> script, which creates the study database user, using the InForm System Username and InForm System Password.</li> <li>Runs the <b>mtsora102.vbs</b> script, which sets up Oracle XA Transaction Support and sets the MTS Timeout to a minimum of 300 seconds.</li> </ul> If not selected: <ul style="list-style-type: none"> <li>Verifies the study database user and password.</li> </ul> <b>Note:</b> You need to select the <b>Prep Oracle</b> checkbox only the first time you install the InForm software on an instance.

- 18 If the Database Configuration Error window appears, click **Back** to return to the Database Configuration page to fix the incorrect information, and click **Next** when changes are complete.

The Ready to Install the Program page appears.

The installation checks both the .NET framework and ODAC, and if an upgraded version is required, a message appears.

- 19 If you need to upgrade the .NET framework or ODAC, click **Cancel** to make the necessary corrections, and click **Yes** when the Exit Setup dialog box appears.
- 20 If you exited the installation at the previous step, upgrade the .NET framework or ODAC version, and restart the installation wizard.
- 21 Click **Install**.

The Setup Status page appears. The progress of the installation is indicated on the screen.

- 22 If your system does not have the required hardware or software components, the Requirements Not Met message appears. Click **Cancel** to make the necessary corrections, and click **Yes** when the Exit Setup dialog box appears.
- 23 If you exited the installation at the previous step, update the server with the required hardware or software components, and restart the installation wizard.
- 24 When the setup is finished, the Oracle InForm 6.0 Reboot page appears.
- 25 You must reboot the system if any of the following is true:
  - ODAC was upgraded during the installation process.
  - The PATH environment variable was modified.
  - The installation tried to access a locked file.
- 26 Select **Yes** or **No** to indicate whether you want to reboot at this time, and click **Finish**.  
After rebooting, the final configuration process continues.  
When the system configuration is finished, the InstallShield Wizard Complete page appears.
- 27 Click **Finish**.

## Step 3: Update the DomainSuffix entry for the AuthenticationFilter registry key on the InForm Application Server—Optional

If you are installing Cognos Reporting, you must update the DomainSuffix entry for the Oracle AuthenticationFilter registry key if any of the following is true on the InForm Application Server:

- You use proxy servers for the Cognos Gateway Server and the InForm Application Server.
- The fully qualified domain name (FQDN) for either server does not end with a common domain suffix.

The FQDN is registered in the Oracle AuthenticationFilter DomainSuffix entry during installation of the InForm Application Server and the Cognos Gateway Server. If the FQDN for both installations ends in a common domain suffix such as **.net**, **.com**, **.org**, **.edu**, or **.gov** (with or without a country name like **.uk** or **.au**), you do not need to update the DomainSuffix entry unless you use proxy servers.

- The FQDN has just two levels (for example: `<servername>.com`).

**Note:** You must also update the DomainSuffix entry on the Cognos Gateway Server. For more information, see **Step 4: Update the DomainSuffix entry for the AuthenticationFilter registry key on the Cognos Gateway Server—Public Gateway only** (on page 85).

Perform the DomainSuffix configuration on both the Cognos Gateway Server and the InForm Application Server. Both machines *must* have identical AuthenticationFilter entries for DomainSuffix.

- 1 In the **Windows Registry Editor**, navigate to the following Windows Registry key:  
HKEY\_LOCAL\_MACHINE\SOFTWARE\ORACLEHS\AuthenticationFilter
- 2 Update the entry for **DomainSuffix**:
  - a Right-click the entry, and select **Modify**.  
The Edit String dialog box appears.
  - b Enter the new value in the **Value Data** field. Edit the entry:
    - If you use proxy servers, or if the fully qualified domain name for either server does not end with a common domain suffix, remove every part of the domain suffix that is not identical on both computers. For example, if the FQDN includes `<servername>.<companyname>.co.uk`, after the edit, the entry would be `<companyname>.co.uk`.
    - If the InForm software and Cognos 8 BI are installed on the same machine, and the FQDN has only two nodes such as `<servername>.com`, you must include the server name and the domain suffix in the entry. In the above example, the entry would read `<servername>.co.uk`.
  - c Click **OK**.
- 3 Exit the **Windows Registry Editor**.
- 4 Restart IIS.
- 5 On the InForm Application Server, restart the InForm Service.

## Step 4: Enable SSL on the InForm Application Server— Optional

Enabling SSL is optional. For more information, see *About enabling Secure Sockets Layer (SSL)* (on page 104).

## Qualify the installation

Qualifying the installation verifies that the study was installed successfully. The qualification process consists of a set of administrative and clinical activities that perform the basic functionality of the InForm application. The tests are divided into Admin and CRC/CRA tests.

### Qualification prerequisites

- InForm software is installed. For more information, see *Step 2: Install the InForm core software on the InForm Application Server* (on page 50).
- Sample study PFST60 is installed, and the server and study are running. For more information, see the *Study and Reporting Setup Guide*.
- The **pfadmin setserver** command has activated and assigned a password to the **system** user. For more information, see *pfadmin* (on page 144).
- Passwords for **dobrien** and **lhill** users have been changed. For more information, see *Change the passwords of the sample study users* (on page 58).

### Change the passwords of the sample study users

- 1 Log in to the PFST60 study as the **system** user.  
User the password you set for the system user in the **pfadmin setserver** command
- 2 Click **Admin**.
- 3 For the **dobrien** and **lhill** users:
  - a Click the user **Account Name**.
  - b On the Users page, deselect the **User Active** checkbox.
  - c Click **Submit**, and click **OK** in the message box.
  - d Click **Change Password**.
  - e On the Change Password page, type a password in the **New password** and **Confirm new password** fields.

**Note:** Use the passwords you set for **lhill** and **dobrien** when you log in to perform the CRF and CRA qualification tasks.
  - f Click **Submit**, and click **OK** in the message box.
  - g Click **Return**.
  - h On the Basic Info for User page, select the **User Active** checkbox.
  - i Click **Submit**, and click **OK** in the message box.
- 4 Log out.

## Admin—Users test

Pass/Fail	Step	Description
	1	Log in as the <b>system</b> user.
	2	Click <b>Admin</b> .
	3	Select each of the following: <b>Users, Rights, Groups, Sites, Configuration, Events, Rules, and System</b> .
	4	Click <b>Users</b> , and verify that the following users are active: <ul style="list-style-type: none"> <li>• lhill</li> <li>• dobrien</li> <li>• mcarlson</li> </ul>
	5	On the <b>Users</b> page, click <b>Add User</b> .
	6	Enter X in the <b>User Name</b> field. In the <b>User must change password at next login</b> field, select <b>No</b> . Select values in the <b>Product Locale</b> and <b>Preferred Study Locale</b> fields. Click <b>Submit</b> , and click <b>OK</b> in the message box.
	7	Click <b>Return</b> . Verify that user X is shown in the list.
	8	Click the <b>Account Name</b> and the <b>Group</b> tab for user X. Assign a rights group and two user site associations. Click <b>Submit</b> , and click <b>OK</b> in the message box.
	9	Click <b>Return</b> . Click any link for user X.
	10	Click <b>Change Password</b> . Give user X a password with eight characters or more. Click <b>Submit</b> , and click <b>OK</b> in the message box.
	11	Click <b>Return</b> . Select <b>User Active</b> . Click <b>Submit</b> , and click <b>OK</b> in the message box. Log out.
	12	Log in as user X, using the password assigned in Step 10. Click <b>Subjects</b> . Verify that the <b>Site</b> drop-down list contains only the sites selected in Step 8.
	13	Log out.

## Admin—Rights test

Pass/Fail	Step	Description
	1	Log in as the <b>system</b> user.
	2	Select <b>Rights</b> . Click <b>Add Rights Group</b> .
	3	Enter new rights group information. Click <b>Submit</b> , and click <b>OK</b> in the message box.
	4	Click <b>Return</b> . Verify that the rights group that you just created is in the list.

## Admin—Sites test

Pass/Fail	Step	Description
	1	Select <b>Sites</b> . Click <b>Add Site</b> . Enter the new site information. <b>Site Name</b> , <b>Site Mnemonic</b> , and <b>Study Locale</b> are required. Click <b>Submit</b> , and click <b>OK</b> in the message box.
	2	Click <b>Return</b> . Verify that the site that you just created is in the list.

## Admin—Groups test

Pass/Fail	Step	Description
	1	Select <b>Groups</b> . Click <b>Add Group</b> . Select <b>Signature</b> from the <b>Group Type</b> drop-down list, and type the group information. Click <b>Submit</b> , and click <b>OK</b> in the message box.
	2	Click <b>Return</b> . Verify that the signature group you just created is in the list.

Pass/Fail	Step	Description
	3	<p>Click <b>Add Group</b>.</p> <p>Select <b>Query</b> from the <b>Group Type</b> drop-down list, and enter group information.</p> <p>Click <b>Submit</b>, and click <b>OK</b> in the message box.</p>
	4	<p>Click <b>Return</b>.</p> <p>Verify that the query group you just created is in the list.</p>

## Admin—Users and Groups test

Pass/Fail	Step	Description
	1	<p>Select <b>Groups</b>.</p> <p>In the <b>Members</b> column for the signature group that was created in the Admin—Groups test section, click <b>Change</b>.</p> <p>For more information, see <i>Admin—Groups test</i> (on page 60).</p>
	2	<p>Select user X in the <b>Available users</b> list.</p> <p>Click <b>Add</b>.</p>
	3	<p>Verify that user X is in the <b>Users in</b> (signature group) list.</p> <p>Click <b>Submit</b>, and click <b>OK</b> in the message box.</p>
	4	<p>Click <b>Return</b>.</p> <p>Verify that the <b>Member Count</b> column shows 1 (and not 0) for the signature group.</p>
	5	<p>In the <b>Members</b> column for the query group that was created in the Admin—Groups test section, click <b>Change</b>.</p> <p>For more information, see <i>Admin—Groups test</i> (on page 60).</p>
	6	<p>Select user X in the <b>Available users</b> list.</p> <p>Click <b>Add</b>.</p>
	7	<p>Verify that user X is in the <b>Users in</b> (query group) list.</p> <p>Click <b>Submit</b>, and click <b>OK</b> in the message box.</p>
	8	<p>Click <b>Return</b>.</p> <p>Verify that the <b>Member Count</b> column shows 1 (not 0) for the query group.</p>
	9	<p>Log out.</p>

## CRC / CRA tests

- 1 Open two browser windows, using the following URL:  
     `http://machine_name/pfst60`
- 2 Log in to one session as **dobrien** (a CRC) and the other as **ihill** (a CRA).
- 3 Perform the CRC/CRA tests.

### As dobrien (CRC)

Pass/Fail	Step	Description
	1	Click <b>Enroll</b> . Click <b>Add Candidate</b> . A question window appears.
	2	Enter subject information. Click <b>Submit</b> .
	3	Click the <b>Screening Number</b> for the subject who was just entered. Edit one of the fields, and provide a reason for change. Click <b>Submit</b> , and verify that the field you edited is changed.
	4	Click <b>Return</b> .
	5	In the <b>Enrolled</b> column, click the <b>Enroll</b> link.
	6	Enter the subject number (site ID followed by a hyphen and a 3-digit number). Click <b>Submit</b> . The System Enrollment page displays the heading Candidate Meets All Criteria for Enrollment in Study.
	7	At the bottom of the page, click <b>Enroll</b> . Verify that a Subject Schedule (Visit Calculator) page appears for the subject with a default baseline date of the current date.
	8	Change the <b>Start Date</b> . Verify that the associated dates are updated correctly.
	9	Click <b>Go To First Visit</b> .
	10	Complete the DOV form. Click <b>OK</b> . The list of forms for the first visit appears. Navigate to each form in the first visit.
	11	Click the Time and Events arrow at the left end of the visit ruler. View the Time and Events Schedule to check all visits for the new subject.

Pass/Fail	Step	Description
	12	<p>Click the status icon for the Base visit.</p> <p>Click the status icon for the Demographics form.</p> <p>Enter data in the form, and click <b>Submit</b>.</p>
	13	<p>Click <b>Return</b>.</p> <p>Click the status icon for the Vital Signs form.</p> <p>Enter a value of 200.5 degrees Fahrenheit in the Temperature item.</p> <p>Click <b>Submit</b>, and verify that an autoquery is generated. (The background for the question becomes pink and an error message is shown in red.)</p>
	14	<p>Click the comment icon in the right column for an item, and add a comment in the <b>Comment</b> field.</p> <p>Click <b>Submit</b>, and click <b>OK</b> in the message box.</p>
	15	<p>Click <b>Return</b>.</p> <p>Click the query text.</p> <p>On the Queries detail page, click <b>Update Data and Answer</b>.</p> <p>Change the Temperature value to 98.6 and add a reason for change.</p> <p>Click <b>Submit</b>, and click <b>OK</b> in the message box.</p>
	16	<p>Verify that the auto-query is answered. The background for the question changes from pink to gray.</p>
	17	<p>Click the status icon for any form that has data.</p> <p>Select <b>Mark SV Ready</b> from the <b>Select Action</b> list, and click <b>Apply</b>.</p>
	18	<p>Click the status icon for the Demographics form.</p> <p>Select <b>Print Preview</b> from the <b>Select Action</b> list, and click <b>Apply</b>. Verify that the preview of the form appears.</p> <p>Click <b>Print</b>.</p>
	19	<p>Verify that the report prints with the correct information.</p>
	20	<p>Click the <b>Help</b> icon, and select <b>InForm User Guide</b>.</p> <p>Verify that the <i>User Guide</i> is installed and functioning.</p>

## As dobrien (CRC) and Ihill (CRA)

**Note:** Keep both browsers open to make the following steps easier to perform.

Pass/Fail	Step	Description
	1	<p>As <b>Ihill</b>:</p> <p>Click <b>Subjects</b>.</p> <p>In the <b>Subject</b> column, click the link for the subject that was created by dobrien in the CRC test.</p> <p>Click the status icon for the Base visit. The list of forms appears.</p> <p>Click the status icon for the Demographics form.</p> <p>Create an open query on an item entered by dobrien:</p> <p>Click the query icon () for the item, click <b>Create Query</b>, select <b>Create Query in Opened State</b> in the <b>Action</b> list, and select a reason.</p> <p>Click <b>Submit</b>, and verify that the query appears with red text in a pink box under the item.</p>
	2	<p>As <b>dobrien</b>:</p> <p>Click <b>Subjects</b>.</p> <p>In the <b>Subject</b> column, click the link for the subject who was created by dobrien in the CRC test.</p> <p>Click the status icon for the Demographics form.</p> <p>Answer the query:</p> <p>Click the query icon or the red query text.</p> <p>In the Current Value section, click <b>Answer</b>. In the Query section, enter a response to the query.</p> <p>Click <b>Submit</b>, and verify that the query disappears from the form.</p>
	3	<p>As <b>Ihill</b>:</p> <p>Refresh the Demographics form: click the <b>CRF history</b> icon () and select the Demographics form.</p> <p>Re-issue the answered query:</p> <p>Click the query icon, and in the Current Value section, click <b>Reissue as Open</b>.</p> <p>In the Query section, select a reason.</p> <p>Click <b>Submit</b>, and verify that the query reappears.</p>

Pass/Fail	Step	Description
	4	<p>As <b>dobrien</b>:</p> <p>Refresh the Demographics form: click the <b>CRF history</b> icon () , and select the Demographics form.</p> <p>Re-answer the query.</p> <p>Click <b>Submit</b>, and verify that the query disappears from the form.</p>
	5	<p>As <b>Ihill</b>:</p> <p>Refresh the Demographics form: click the <b>CRF history</b> icon () , and select the Demographics form.</p> <p>Close the query:</p> <p>Click the query icon, and in the Current Value section, click <b>Close Query</b>.</p> <p>In the Query section, select a reason.</p> <p>Click <b>Submit</b>, and verify that the query disappears from the form.</p>
	6	<p>Log out of both browser sessions.</p>



## CHAPTER 6

# Preparing the Reporting application servers

### In this chapter

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## About preparing the Reporting application servers

You must perform a specific series of steps on the reporting servers to prepare them for use with the InForm application. Some of the same steps are required on each server, and some steps are unique to the server type.

- Oracle Directory Server

For more information, see *Steps to prepare the Oracle Directory Server* (on page 69).

- Cognos Content Manager Server

For more information, see *Steps to prepare the Cognos Content Manager Server* (on page 72).

- Cognos Report Server

For more information, see *Steps to prepare the Cognos Report Server* (on page 77).

- Cognos Gateway Server

For more information, see *Steps to prepare the Cognos Gateway Server* (on page 80).

# Prepare the Oracle Directory Server

## Steps to prepare the Oracle Directory Server

The Oracle Directory Server is required only if you are using Reporting.

To prepare the Oracle Directory Server:

- 1 Install the Oracle Directory Server.

For more information, see *Step 1: Install the Oracle Directory Server* (on page 69).

- 2 Create the ORACLEHS namespace and crnsysadmin user on the Oracle Directory Server.

For more information, see *Step 2: Create the ORACLEHS organizational unit (OU) and crnsysadmin user on the Oracle Directory Server* (on page 70).

**Note:** You must also create an ORACLEHS namespace and a crnsysadmin user on the Cognos Content Manager Server. For more information, see *Create the ORACLEHS LDAP namespace* (on page 101).

## Step 1: Install the Oracle Directory Server

- 1 Download and install the Oracle Directory Server.
- 2 Configure and deploy the Oracle Directory Server to a supported web server.

For more information, see the Oracle website, the Oracle Directory Server Enterprise Edition documentation, or your Oracle database documentation.

## Step 2: Create the ORACLEHS organizational unit (OU) and crnsysadmin user on the Oracle Directory Server

If you are using Reporting, you must create an ORACLEHS namespace and crnsysadmin user on the Cognos Content Manager Server and the Cognos Report Server. For more information, see *Create the ORACLEHS LDAP namespace* (on page 101).

- 1 On the server where the Oracle Directory Server is installed, use the Cognos Configuration utility to ensure that the Cognos 8 Business Intelligence Service is stopped.
- 2 Launch the URL for the Oracle Directory Server and log in to the Oracle Directory Service Control Center.
- 3 Select the Directory Server tab. In the Directory Servers list, click the server name.  
The Server Operations tab opens.
- 4 Select the Entry Management tab.
- 5 Select the DN from the Browse Data list, and click **New Entry**.  
The New Entry wizard page displays the Specify Entry Location page.
- 6 Make sure that the Entry Parent DN is correct, and click **wizard button next**.  
The Choose Object Class page appears.
- 7 Select **Organizational Unit - (organizationalUnit)** from the Entry Type drop-down list, and click **wizard button next**.  
The Configure Attributes page appears.
- 8 In the Organizational Unit (ou) field, type **ORACLEHS** (all uppercase), and click **wizard button next**.  
The Summary page appears.
- 9 Review the information. If it is correct, click **wizard button finish**.  
The ORACLEHS node is added to the Browse Data list.
- 10 On the Entry Management tab, right-click ou=ORACLEHS in the Browse Data list, and click **New Entry**.  
The New Entry wizard displays the Specify Entry Location page.
- 11 Make sure that the Entry Parent DN is correct, and click **wizard button next**.  
The Choose Object Class page appears.
- 12 Select **User - (inetOrgPerson)** from the Entry Type drop-down list, and click **wizard button next**.  
The Configure Attributes page appears.
- 13 Create a new user for the ORACLEHS namespace as follows:
  - **Full Name (cn)**—crnsysadmin
  - **Last Name (sn)**—crnsysadmin
  - **User ID (uid)**—crnsysadmin
  - **Password (userPassword)**—*<crnsysadmin password>*

- **Confirm Password**—*<crnsysadmin password>*

14 Click **wizard button next**.

The Summary page appears.

15 Review the information. If it is correct, click **wizard button finish**.

The uid=crnsysadmin node is displayed in the Browse Data list on the Entry Management tab.

# Prepare the Cognos Content Manager Server

## Steps to prepare the Cognos Content Manager Server

All InForm installations with Reporting use a Cognos Content Manager Server.

To prepare the Cognos Content Manager Server:

- 1 Verify the Oracle database client.  
This step is performed on multiple servers.  
For more information, see *Step 1: Verify the Oracle database client on the Cognos Content Manager Server* (on page 73).
- 2 Install the Cognos software and updates.  
This step is performed on multiple servers.  
For more information, see *Step 2: Install the Cognos software and updates on the Cognos Content Manager Server* (on page 73).
- 3 Set up JRE.  
This step is performed on multiple servers.  
For more information, see *Step 3: Set up JRE on the Cognos Content Manager Server* (on page 73).
- 4 Set up the Oracle JDBC driver.  
This step is performed on multiple servers.  
For more information, see *Step 4: Set up the Oracle JDBC driver* (on page 74).
- 5 Run the CRNConfig installer.  
This step is performed on multiple servers.  
For more information, see *Step 5: Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) on the Cognos Content Manager Server* (on page 74).
- 6 Create the ORACLEHS LDAP namespaces on the Cognos Content Manager Server.  
This step is performed on multiple servers.  
For more information, see *Step 6: Create the ORACLEHS LDAP namespace on the Cognos Content Manager Server* (on page 74).
- 7 Configure MotioCAP—Optional.  
This step is performed only on the Cognos Content Manager Server.  
For more information, see *Step 7: Change or create a new MotioCAP\_informcap.properties file—Optional* (on page 75).
- 8 Customize the Cognos email settings.  
This step is performed on multiple servers.  
For more information, see *Step 8: Customize the Cognos 8 BI email settings on the Cognos Content Manager Server* (on page 76).
- 9 Enable SSL—Optional.

This step is performed on multiple servers.

For more information, see *Step 9: Enable SSL on the Cognos Content Manager Server—Optional* (on page 76).

## Step 1: Verify the Oracle database client on the Cognos Content Manager Server

Before you begin, ensure that you have followed the instructions in *Steps to install and configure the Oracle database client* (on page 40) so that the following requirements are met on the Cognos Content Manager Server:

- The Oracle database client is installed.
- The language registry settings are updated.
- The database connection is configured and verified.

**Note:** This step is also performed on the Cognos Report Server.

## Step 2: Install the Cognos software and updates on the Cognos Content Manager Server

To install the Cognos software and updates on the Cognos Content Manager Server, you must:

- Install the Cognos core software.
- Upgrade the Fix Pack.
- Install the hotsite updates.

This step is also performed on the Cognos Report Server and the Cognos Gateway Server.

For more information, see *Install the Cognos software and updates—Cognos Content Manager / Cognos Report Server / Cognos Gateway Server* (on page 87).

## Step 3: Set up JRE on the Cognos Content Manager Server

To enable the Cognos software to find the necessary Java components when it runs, you must set the JAVA\_HOME environment variable on the Cognos Content Manager Server.

This step is also performed on the Cognos Report Server and the Cognos Gateway server.

For more information, see *Add the JRE to the JAVA\_HOME environment variable* (on page 92).

## Step 4: Set up the Oracle JDBC driver

Before running the Cognos Customization for InForm wizard, you must set up the Oracle JDBC driver on the Content Manager Server.

- 1 Download the `ojdbc6.jar` file from the Oracle support website.
- 2 Copy the `ojdbc6.jar` file to the `<Cognos_Installation_Directory>\webapps\p2pd\WEB-INF\lib` folder.

## Step 5: Run the Cognos Customization for InForm wizard (`CRNConfig\setup.exe`) on the Cognos Content Manager Server

The Cognos customization wizard copies customization files and modifies files needed to customize the Cognos 8 BI software for the InForm application.

This step is also performed on the Cognos Report Server.

For more information, see *Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe)—Cognos Content Manager / Cognos Report Server* (on page 92).

## Step 6: Create the ORACLEHS LDAP namespace on the Cognos Content Manager Server

This procedure sets up the following namespaces on the Cognos Content Manager Server:

- ORACLEHS

For more information, see *Create the ORACLEHS LDAP namespace* (on page 101).

## Step 7: Change or create a new MotioCAP\_informcap.properties file—Optional

The Cognos Customization for InForm wizard creates the **MotioCAP\_informcap.properties** file. The information in the file is used to configure the custom authentication provider's connection to the Oracle Directory Server (LDAP).

In most cases you do not need to change the **MotioCAP\_informcap.properties** file. However, the following table lists some examples of when you need to make changes to the file.

Circumstances that require changes to file	Required action
LDAP configuration changes after installation.	<p>Change the LDAP properties used for authenticating the admin OU:</p> <ul style="list-style-type: none"> <li>• <b>ldap.url</b>—Enter the URL of the server where LDAP is installed. Change the number of the LDAP port if necessary. <b>Example: ldap.url=ldap://ldap.north.com:389</b></li> <li>• <b>ldap.base.dn</b>—Enter the <b>Parent Node Distinguished Name</b>. <b>Example: ldap.base.dn=dc=north,dc=com</b></li> <li>• <b>ldap.bind.username</b>—Enter the <b>Administrator Distinguished Name</b>. This is used by the Custom Security Provider (CSP) to log on to LDAP. <b>Example: ldap.bind.username=uid=admin,ou=Administrators,ou=TopologyManagement,o=NetscapeRoot</b></li> <li>• <b>ldap.bind.password</b>—Change <b>encrypted</b> to <b>unencrypted</b> and set the password in plain text. The password is encrypted when Cognos Reporting starts up. <b>Example: ldap.bind.password=unencrypted:password</b></li> </ul>
New namespace is added after the Cognos 8 Business Intelligence configuration.	<p>Duplicate and edit the file for each namespace as follows:</p> <p>Copy the <b>MotioCAP_informcap.properties</b> file and save it to the same directory as the original. Name the new copy <b>MotioCAP_&lt;new_namespace_name&gt;.properties</b> and edit the following properties as necessary:</p> <ul style="list-style-type: none"> <li>• <b>ldap.url</b></li> <li>• <b>ldap.base.dn</b></li> <li>• <b>ldap.bind.username</b></li> <li>• <b>ldap.bind.password</b></li> </ul>

Circumstances that require changes to file	Required action
The database user and/or database user password changes after installation.	<p>Change the properties as follows:</p> <ul style="list-style-type: none"> <li>db.user <b>Example: db.user=encrypted:&lt;db_username&gt;</b></li> <li>db.password <b>Example: db.password=encrypted:&lt;db_user_password&gt;</b></li> </ul> <p>Change <b>encrypted</b> to <b>unencrypted</b> and set the password in plain text. The password is encrypted when Cognos Reporting starts up.</p>

## Step 8: Customize the Cognos 8 BI email settings on the Cognos Content Manager Server

The Cognos 8 Business Intelligence installation includes a feature that you can use to send links to report output notifications using email. Normally, you configure email to point to the Cognos Gateway server. However, if your environment uses an F5 switch that requires a generic URL to access the switch, you must configure the SMTP server to use the correct address.

- Using the Cognos Configuration utility, configure the SMTP mail server.  
For more information, see the *Cognos 8 BI Reporting Quick Start Installation and Configuration Guide*.
- Select **File > Save**.  
The Cognos Configuration utility validates the settings and saves the configuration.
- When the validation checks are complete (all items are marked with a green check mark), click **Close**.
- Click **Close**, and close the Cognos Configuration utility window.

## Step 9: Enable SSL on the Cognos Content Manager Server—Optional

Enabling SSL is optional. For more information, see *About enabling Secure Sockets Layer (SSL)* (on page 104).

# Prepare the Cognos Report Server

## Steps to prepare the Cognos Report Server

All InForm installations with Reporting use a Cognos Report Server.

To prepare the Cognos Report Server:

- 1 Verify the Oracle database client.

This step is performed on multiple servers.

For more information, see *Step 1: Verify the Oracle database client on the Cognos Report Server* (on page 78).

- 2 Install the Cognos software and updates.

This step is performed on multiple servers.

For more information, see *Step 2: Install the Cognos software and updates on the Cognos Report Server* (on page 78).

- 3 Set up JRE.

This step is performed on multiple servers.

For more information, see *Step 3: Set up JRE on the Cognos Report Server* (on page 78).

- 4 Set up the JDBC driver.

This step is performed on multiple servers.

For more information, see *Step 4: Set up the Oracle JDBC driver* (on page 78).

- 5 Run the CRNConfig Installer.

This step is performed on multiple servers.

For more information, see *Step 5: Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) on the Cognos Report Server* (on page 79).

- 6 Enable SSL—Optional.

This step is performed on multiple servers.

For more information, see *Step 6: Enable SSL on the Cognos Report Server—Optional* (on page 79).

## Step 1: Verify the Oracle database client on the Cognos Report Server

Before you begin, ensure that you have followed the instructions in *Steps to install and configure the Oracle database client* (on page 40) so that the following requirements are met on the Cognos Report Server:

- The Oracle database client is installed.
- The language registry settings are updated.
- The database connection is configured and verified.

**Note:** This step is also performed on the Cognos Content Manager Server and the Cognos Gateway Server.

## Step 2: Install the Cognos software and updates on the Cognos Report Server

To install the Cognos software and updates on the Cognos Report Server, you must:

- Install the Cognos core software.
- Upgrade the Fix Pack.
- Install the hotsite updates.

This step is also performed on the Cognos Content Manager Server and the Cognos Gateway Server.

For more information, see *Install the Cognos software and updates—Cognos Content Manager / Cognos Report Server / Cognos Gateway Server* (on page 87).

## Step 3: Set up JRE on the Cognos Report Server

To enable the Cognos software to find the necessary Java components when it runs, you must set the JAVA\_HOME environment variable on the Cognos Report Server.

This step is also performed on the Cognos Content Manager Server and the Cognos Gateway Server.

For more information, see *Add the JRE to the JAVA\_HOME environment variable* (on page 92).

## Step 4: Set up the Oracle JDBC driver

Before running the Cognos Customization for InForm wizard, you must set up the Oracle JDBC driver on the Report Content Server.

- 1 Download the ojdbc6.jar file from the Oracle support website.
- 2 Copy the ojdbc6.jar file to the <Cognos\_Installation\_Directory>\webapps\p2pd\WEB-INF\lib folder.

## Step 5: Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) on the Cognos Report Server

The Cognos customization wizard copies customization files and modifies files needed to customize the Cognos 8 BI software for the InForm application.

This step is also performed on the Cognos Content Manager Server.

For more information, see *Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe)—Cognos Content Manager / Cognos Report Server* (on page 92).

## Step 6: Enable SSL on the Cognos Report Server—Optional

Enabling SSL is optional. For more information, see *About enabling Secure Sockets Layer (SSL)* (on page 104).

# Prepare the Cognos Gateway Server

## Steps to prepare the Cognos Gateway Server

All InForm installations with Reporting use a Cognos Gateway Server. The required steps are the same whether you are using a private or public gateway, except where noted.

To prepare the Cognos Gateway Server:

- 1 Install the Cognos software and updates.  
This step is performed on multiple servers.  
For more information, see *Step 1: Install the Cognos software and updates on the Cognos Gateway Server* (on page 81).
  - 2 Set up the JRE on the Cognos Gateway Server.  
This step is performed on multiple servers.  
For more information, see *Step 2: Set up JRE on the Cognos Gateway Server* (on page 81).
  - 3 Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe).  
This step is performed only on the Cognos Gateway Server.  
For more information, see *Step 3: Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe) on the Cognos Gateway Server* (on page 82).
  - 4 Update the DomainSuffix entry for the AuthenticationFilter registry key on the Cognos Gateway Server—Public Gateway only.  
This step is performed on multiple servers.  
For more information, see *Step 4: Update the DomainSuffix entry for the AuthenticationFilter registry key on the Cognos Gateway Server—Public Gateway only* (on page 85).
- Note:** You must also update the DomainSuffix entry on the InForm Application Server. For more information, see *Step 3: Update the DomainSuffix entry for the AuthenticationFilter registry key on the InForm Application Server—Optional* (on page 56).
- 5 Enable SSL—Optional.  
This step is performed on multiple servers.  
For more information, see *Step 5: Enable SSL on the Cognos Gateway Server—Optional—Public Gateway only* (on page 86).

## Step 1: Install the Cognos software and updates on the Cognos Gateway Server

To install the Cognos software and updates on the Cognos Gateway Server, you must:

- Install the Cognos core software.
- Upgrade the Fix Pack.
- Install the hotfix updates.

This step is also performed on the Cognos Content Manager Server and the Cognos Report Server.

For more information, see *Install the Cognos software and updates—Cognos Content Manager / Cognos Report Server / Cognos Gateway Server* (on page 87).

## Step 2: Set up JRE on the Cognos Gateway Server

To enable the Cognos software to find the necessary Java components when it runs, you must set the JAVA\_HOME environment variable on the Cognos Gateway Server.

This step is also performed on the Cognos Content Manager Server and the Cognos Report Server.

For more information, see *Add the JRE to the JAVA\_HOME environment variable* (on page 92).

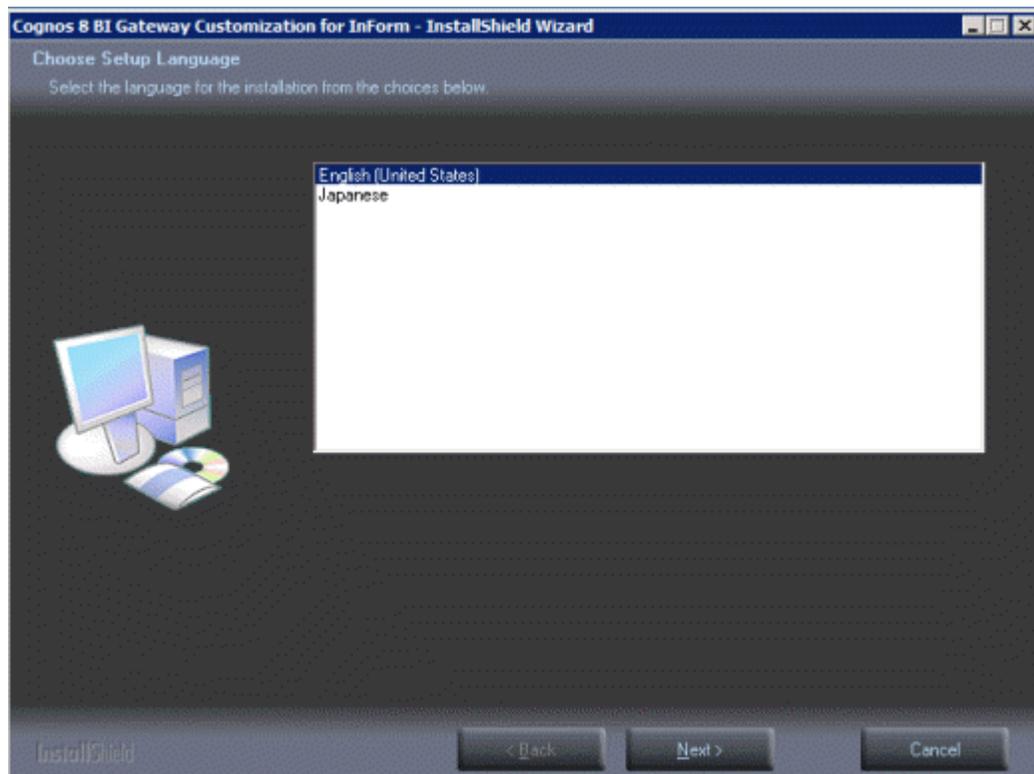
## Step 3: Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe) on the Cognos Gateway Server

The Cognos Gateway Customization for InForm wizard configures the Cognos 8 BI Gateway services component to work with the InForm application.

**Note:** You run this wizard to configure a public gateway to be used with the Reporting and Analysis module, or to configure a private gateway with restricted access to the Cognos 8 Business Intelligence software.

- 1 Copy the CRNGatewayConfig folder from the InForm installation image to a location that you can access from the Cognos Gateway Server.
- 2 On the Cognos Gateway Server, run the CRNGatewayConfig\setup.exe program file.

The Choose Setup Language page appears.



- 3 Select the language you want the wizard to use during setup. Select either English or Japanese. English is the default. Click **Next**.

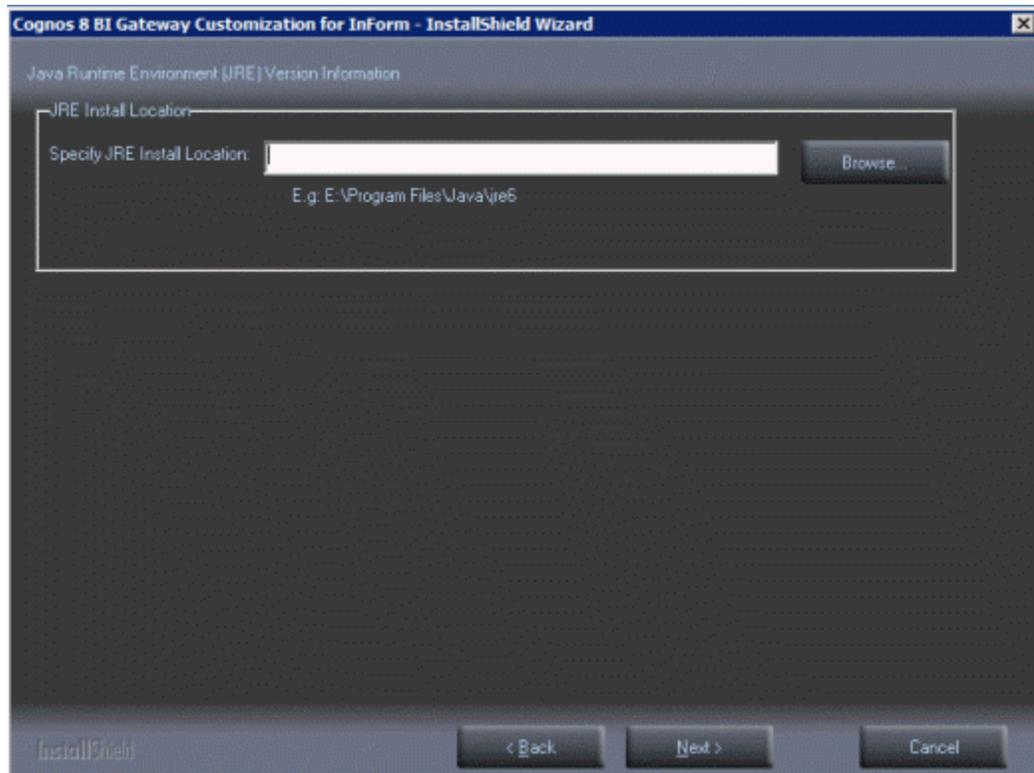
The Cognos 8 BI Welcome Screen appears.

- 4 Click **Next**.

The Cognos 8 BI Installation Location page appears.

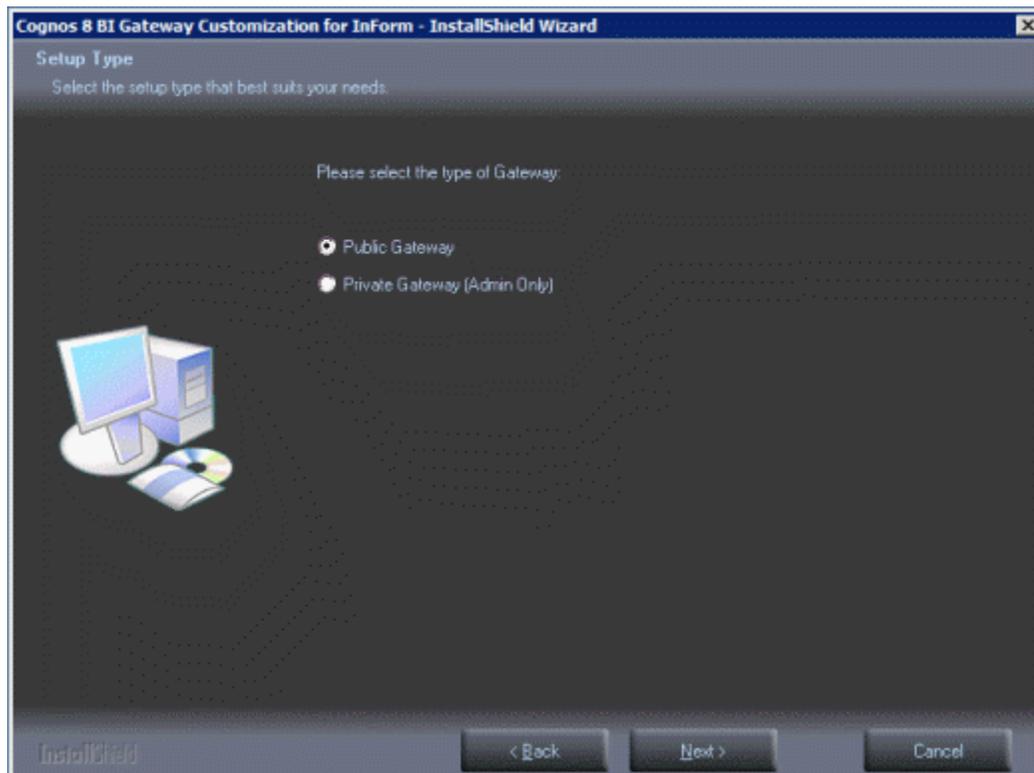
- 5 Specify the path to the location of the Cognos 8 BI software, and click **Next**.

The Java Runtime Environment Information page appears.



- 6 Browse to the location where the JRE is installed, and click **Next**.

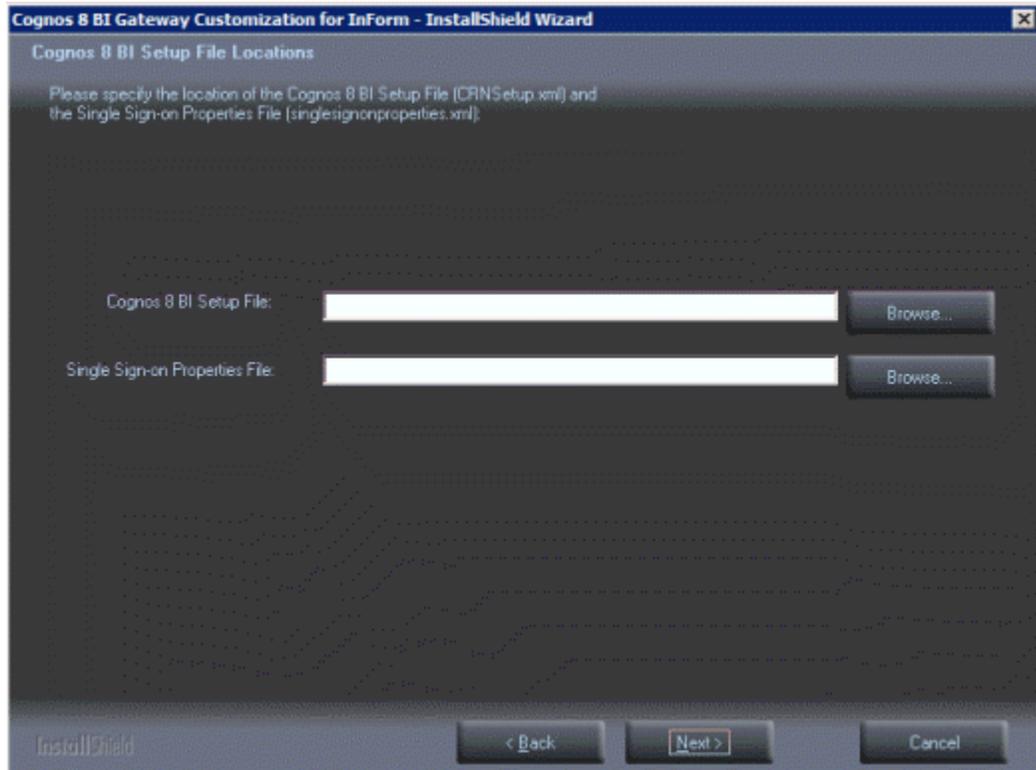
The Setup Type page appears.



- 7 Do one of the following, and click **Next**.
  - Select Public Gateway to set up a gateway to manage communication between the InForm application and the Reporting and Analysis module.
  - Select Private Gateway (Admin Only) to perform administrative functions on the Cognos 8 Business Intelligence software.

**Note:** Access to a Private Gateway server should be restricted to a limited group of users who need to administer the Cognos 8 Business Intelligence software.

The Cognos 8 BI Setup File Locations page appears.



- 8 Browse to the CRNSetup.xml and the singlesignonproperties.xml files that were created by the Cognos 8 BI Customization for InForm wizard, and click **Next**.

The Ready to Install the Program page appears.

- 9 Click **Install**.

The Setup Status page appears.

The program installs, and the World Wide Web Publishing Service restarts.

The Wizard Complete page appears.

- 10 Click **Finish**.

## Step 4: Update the DomainSuffix entry for the AuthenticationFilter registry key on the Cognos Gateway Server—Public Gateway only

If you are installing Cognos Reporting, you must update the DomainSuffix entry for the Oracle AuthenticationFilter registry key if any of the following is true on the Cognos Gateway Server:

- You use proxy servers for the Cognos Gateway Server and the InForm Application Server.
- The fully qualified domain name (FQDN) for either server does not end with a common domain suffix.

The FQDN is registered in the Oracle AuthenticationFilter DomainSuffix entry during installation of the InForm Application Server and the Cognos Gateway Server. If the FQDN for both installations ends in a common domain suffix such as **.net**, **.com**, **.org**, **.edu**, or **.gov** (with or without a country name like **.uk** or **.au**), you do not need to update the DomainSuffix entry unless you use proxy servers.

- The FQDN has just two levels (for example: <servername>.com).

**Note:** You must also update the DomainSuffix entry on the InForm Application Server. For more information, see *Step 3: Update the DomainSuffix entry for the AuthenticationFilter registry key on the InForm Application Server—Optional* (on page 56).

Perform the DomainSuffix configuration on both the Cognos Gateway Server and the InForm Application Server. Both machines *must* have identical AuthenticationFilter entries for DomainSuffix.

- 1 In the **Windows Registry Editor**, navigate to the following Windows Registry key:  
 HKEY\_LOCAL\_MACHINE\SOFTWARE\WoW6432Node\ORACLEHS\AuthenticationFilter
- 2 Update the entry for **DomainSuffix**:
  - a Right-click the entry, and select **Modify**.  
 The Edit String dialog box appears.
  - b Enter the new value in the **Value Data** field. Edit the entry:
    - If you use proxy servers, or if the fully qualified domain name for either server does not end with a common domain suffix, remove every part of the domain suffix that is not identical on both computers. For example, if the FQDN includes <servername>.<companyname>.co.uk, after the edit, the entry would be <companyname>.co.uk.
    - If the InForm software and Cognos 8 BI are installed on the same machine, and the FQDN has only two nodes such as <servername>.com, you must include the server name and the domain suffix in the entry. In the above example, the entry would read <servername>.co.uk.
  - c Click **OK**.
- 3 Exit the **Windows Registry Editor**.
- 4 Restart IIS.
- 5 On the InForm Application Server, restart the InForm Service.

## Step 5: Enable SSL on the Cognos Gateway Server—Optional—Public Gateway only

Enabling SSL is optional. For more information, see *About enabling Secure Sockets Layer (SSL)* (on page 104).

## Common steps for Reporting application servers

### Install the Cognos software and updates—Cognos Content Manager / Cognos Report Server / Cognos Gateway Server

The Cognos 8 BI software installation process installs:

- Cognos 8 BI Application Tier Components
- Cognos 8 BI Gateway services
- Cognos 8 BI Content Manager

You install the Cognos software and updates on the following Reporting servers:

- Cognos Content Manager Server

For more information, see *Step 2: Install the Cognos software and updates on the Cognos Content Manager Server* (on page 73).

- Cognos Report Server

For more information, see *Step 2: Install the Cognos software and updates on the Cognos Report Server* (on page 78).

- Cognos Gateway Server

For more information, see *Step 1: Install the Cognos software and updates on the Cognos Gateway Server* (on page 81).

## Install the Cognos 8.4.1 software

You install the Cognos software on the following reporting servers:

- Cognos Content Manager Server
- Cognos Report Server
- Cognos Gateway Server

1 Download the **BiReportingWin64\_CZAG2ML.tar.gz** file from the Oracle Download Center, extract the archive file, and navigate to the `issetup.exe` file in the `\Win32` folder.

2 Double-click **issetup.exe**.

The Welcome page of the installation wizard appears.

3 Select the language to use for the installation, and click **Next**.

The License Agreement page appears.

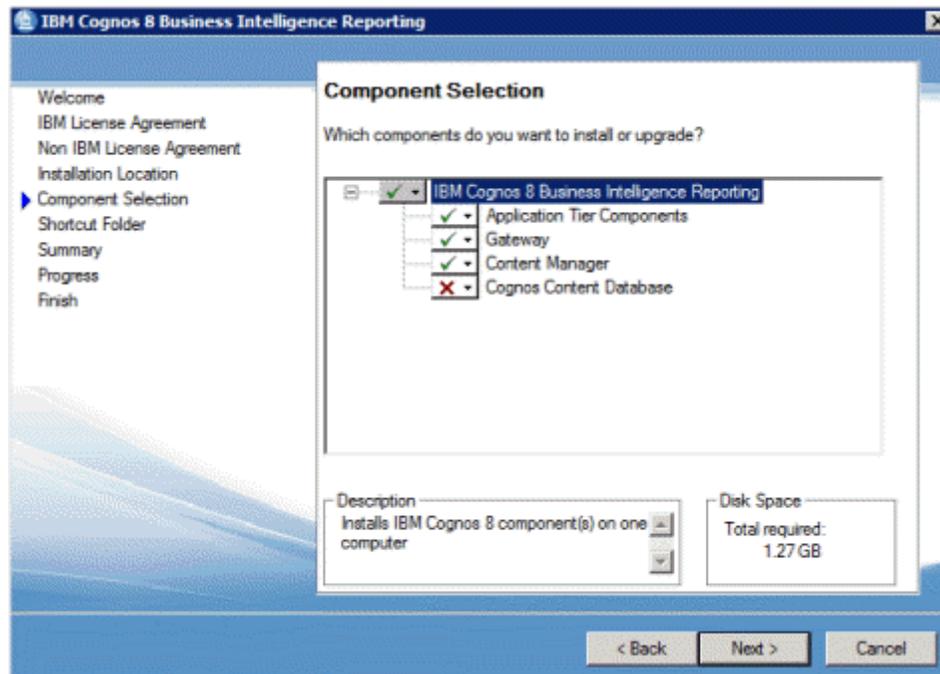
4 Read the license agreement, select **I accept**, and click **Next**.

The Installation Location page appears.

5 In the **Installation Directory** field, browse to or type the drive and destination folder for Cognos 8 Business Intelligence (for example `E:\cognos\c8`), and click **Next**.

If the **Folder does not exist** message appears, click **Yes** to create the folder.

The Component Selection page appears.



- 6 Select the appropriate component or components depending on your server configuration.

For example, in a distributed environment you would:

- Select Application Tier Components for the Cognos Report Server.
- Select Gateway for the Cognos Gateway Server.
- Select Content Manager for the Cognos Content Manager Server.

- 7 Make sure that the Cognos Content Database is not selected, and click **Next**.

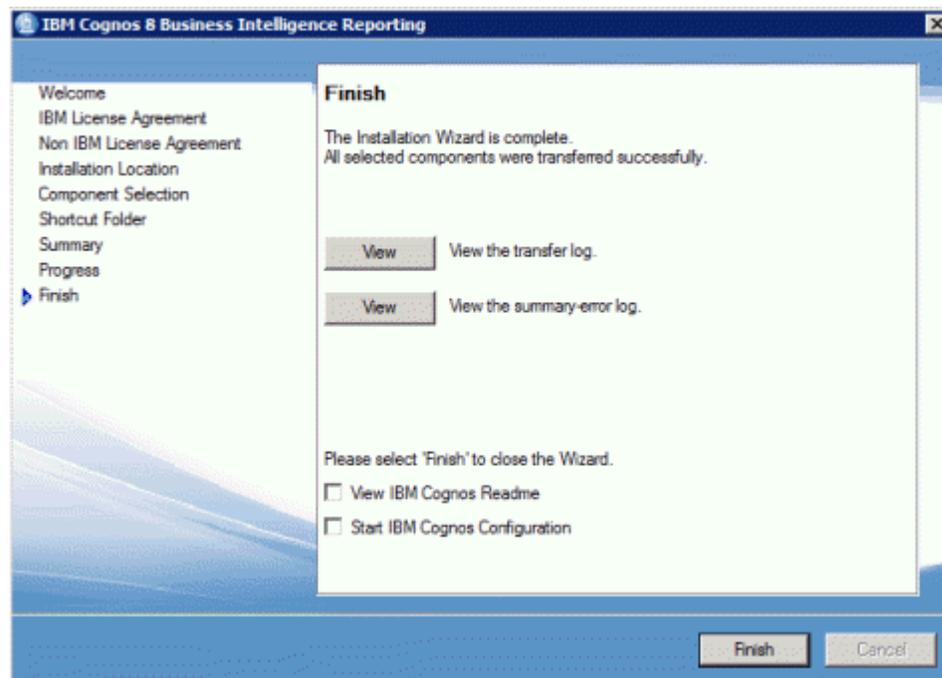
The Shortcut Folder page appears.

- 8 Accept the default Program folder, and click **Next**.

The Installation Summary page appears.

- 9 Review the installation summary, and click **Next**.

The installation program installs the components that you selected. This takes several minutes. When the component installation is complete, the Finish page appears.



- 10 On the Finish page:

- To view the transfer log or the summary-error log, click the appropriate **View** button.
- To view the readme file, select **View Cognos Readme**.
- Verify that **Start Cognos Configuration** is *not* selected.

- 11 Click **Finish**.

## Upgrade Cognos 8.4.1 software to Fix Pack 4

You install the Cognos software fix packs on the following reporting servers:

- Cognos Content Manager Server
- Cognos Report Server
- Cognos Gateway Server

1 Download the **C8\_BI\_8\_4\_1\_Win64\_FP004.tar.gz** file from the Oracle Download Center, extract the archive file into a different folder from the folder where you originally downloaded the Cognos 8.4.1 software, and navigate to the `issetup.exe` file in the `\Win32` folder.

2 Double-click **issetup.exe**.

The Welcome page of the upgrade wizard appears.

3 Select the language to use for the installation. English is the default. Click **Next**.

The License Agreement page appears.

4 Read the license agreement, select **I accept**, and click **Next**.

The Installation Location page appears.

5 In the Installation Directory field, browse to or type the same drive and destination folder that you specified for the initial installation of Cognos 8 Business Intelligence (for example `C:\cognos\c8`), and click **Next**.

The following warning appears:

```
The installation will replace existing files.  
Select 'Yes' to automatically create a backup of all files that are  
replaced.
```

6 Click **Yes**.

The Shortcut Folder page appears.

7 Accept the default Program folder, and click **Next**.

The Installation Summary page appears.

8 Review the installation summary, and click **Next**.

When the installation is complete, the Finish page appears.

9 To review the transfer log or summary-error log, click the appropriate **View** button.

10 Click **Finish**.

## Install the 8.4.1 Fix Pack 4 hotsite updates

In addition to the upgrade to Fix Pack 4 of the Cognos 8 BI software, you must install the following hotsite updates:

- up\_c8bisrvr\_winx64\_8.4.105.1076\_ml.tar.gz
- up\_c8bisrvr\_winx64\_8.4.105.1100\_ml.tar.gz

You install the Cognos software hotsite updates on the following reporting servers:

- Cognos Content Manager Server
- Cognos Report Server
- Cognos Gateway Server

- 1 Download each hotsite TAR file from the Oracle Download Center, extracting each archive file into a different folder from the folder where you originally downloaded the Cognos 8.4.1 software and the other hotsites.

You must perform this procedure for each hotsite update. The following hotsites are required for this Cognos installation, and must be installed in the following order:

- a 8.4.105.1076
- b 8.4.105.1100

- 2 Navigate to the ... \win32 folder for each hotsite, and double-click **issetup.exe**.

The Welcome page of the upgrade wizard appears.

- 3 Select the language to use for the installation, and click **Next**. English is the default language.

The License Agreement page appears.

- 4 Read the license agreement, select **I accept**, and click **Next**.

The Installation Location page appears.

- 5 In the Installation Directory field, browse to or type the same drive and destination folder that you specified for the initial installation of the Cognos 8 Business Intelligence software (for example C:\cognos\c8), and click **Next**.

The following message appears:

```
The installation will replace existing files.
Select 'Yes' to automatically create a backup of all files that are
replaced.
```

- 6 Click **Yes**.

The Shortcut Folder page appears.

- 7 Accept the default Program folder, and click **Next**.

The Installation Summary page appears.

- 8 Review the installation summary, and click **Next**.

When the installation is complete, the Finish page appears.

- 9 To review the transfer log or summary-error log, click the appropriate **View** button.
- 10 Click **Finish**.
- 11 Repeat this procedure for each of the hotspots listed in Step 1.

## Add the JRE to the JAVA\_HOME environment variable

Set the JAVA\_HOME environment variable to the path for the Java Runtime Environment 1.6 (for example, C:\Program Files\Java\jre6) on the following reporting servers:

- Cognos Content Manager Server  
For more information, see *Step 3: Set up JRE on the Cognos Content Manager Server* (on page 73).
- Cognos Report Server  
For more information, see *Step 3: Set up JRE on the Cognos Report Server* (on page 78).
- Cognos Gateway Server  
For more information, see *Step 2: Set up JRE on the Cognos Gateway Server* (on page 81).

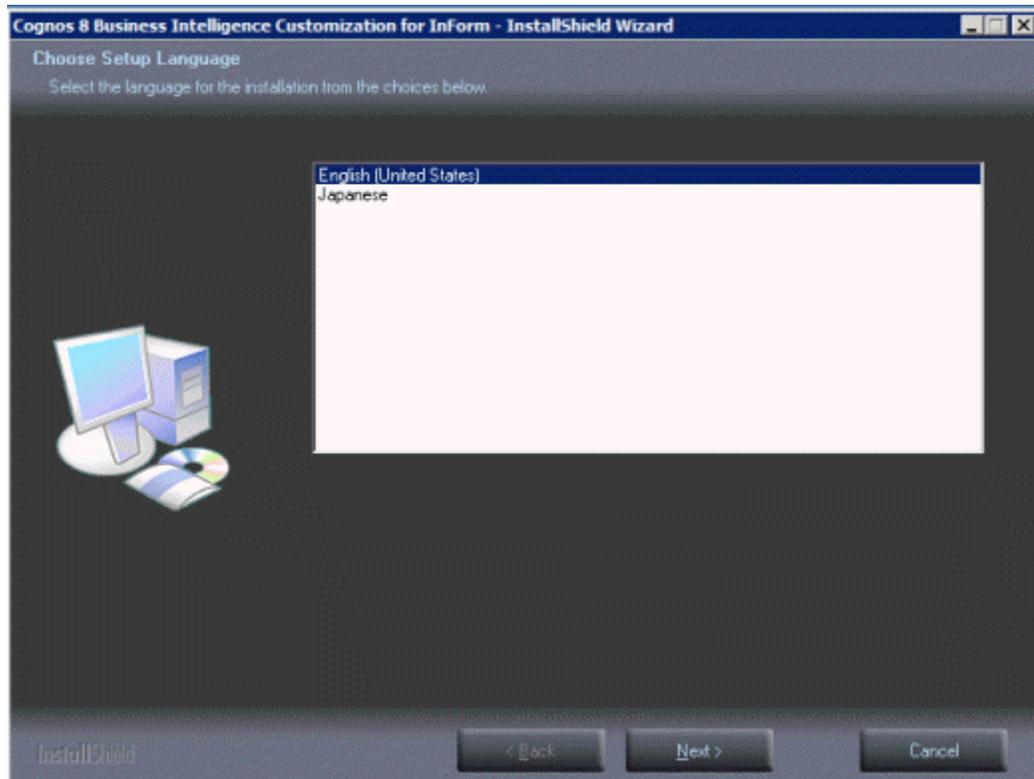
## Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe)— Cognos Content Manager / Cognos Report Server

To customize the Cognos 8 BI software for the InForm environment, you run installation and configuration wizards.

You run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) on the following reporting servers:

- Cognos Content Manager Server  
For more information, see *Step 5: Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) on the Cognos Content Manager Server* (on page 74).
  - Cognos Report Server  
For more information, see *Step 5: Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) on the Cognos Report Server* (on page 79).
- 1 Copy the CRNConfig folder from the InForm installation image to a location that you can access from the Cognos Content Manager Server and the Cognos Report Server.
  - 2 On the Cognos Content Manager Server and the Cognos Report Server, run the **CRNConfig\setup.exe** program file.

The Choose Setup Language window appears.



- 3 Select the language you want the wizard to use during setup. Select either English or Japanese. English is the default. Click **Next**.

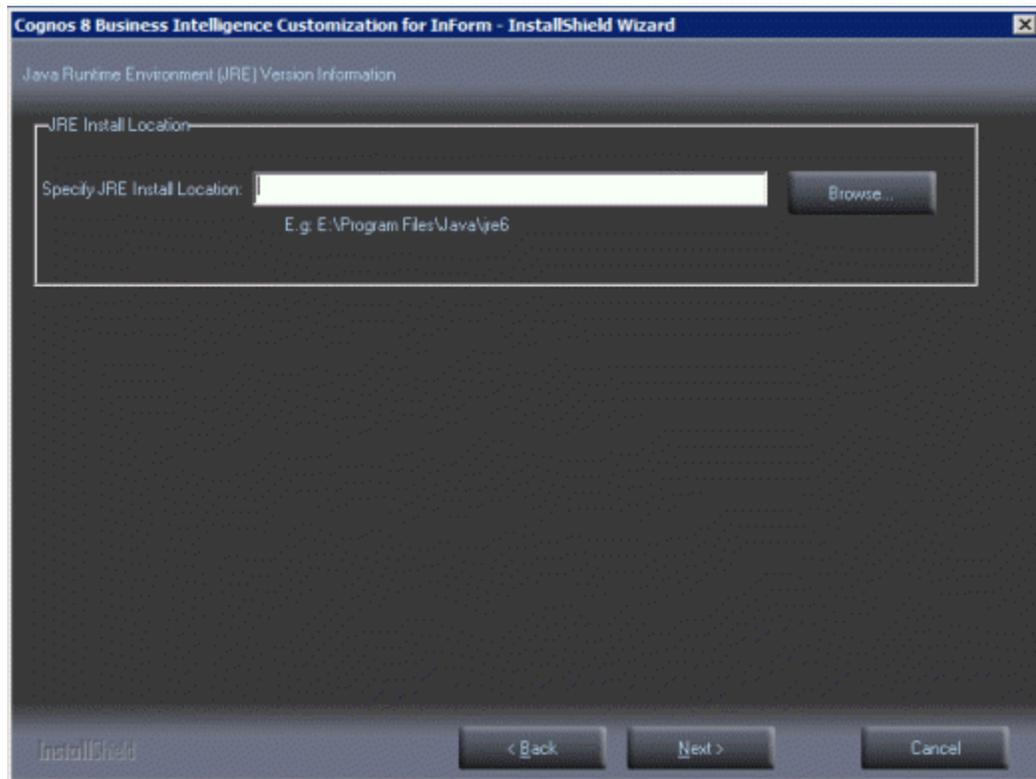
The Welcome page appears.

- 4 Click **Next**.

The Cognos 8 BI Installation Location page appears.

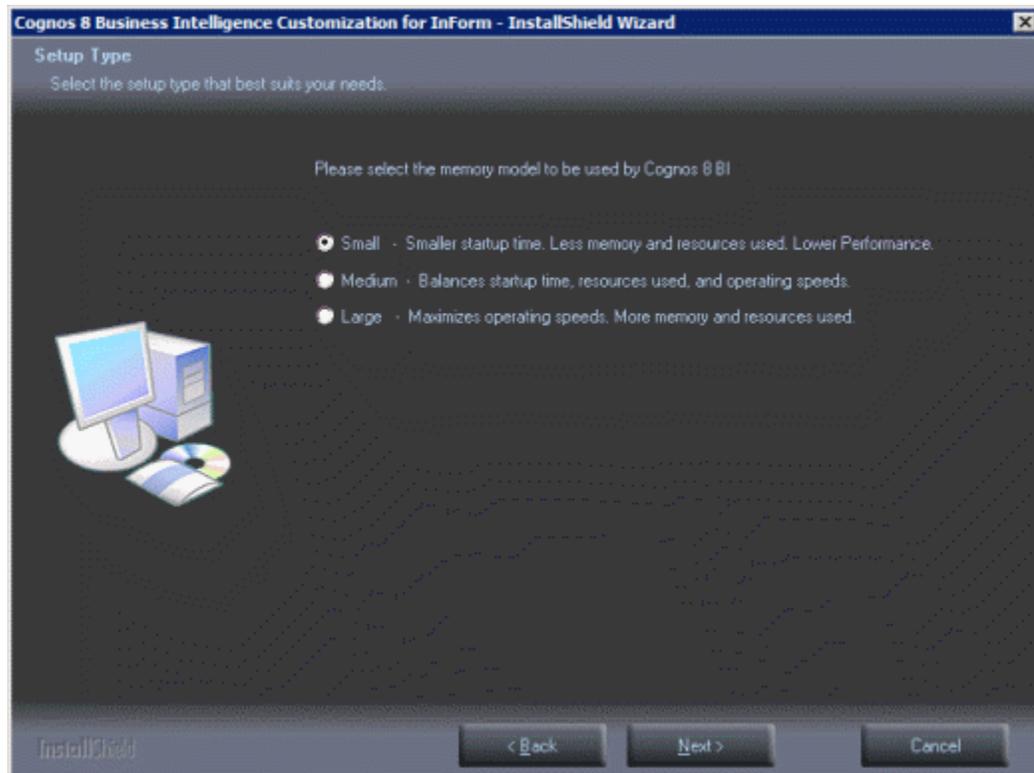
- 5 Specify the folder in which the Cognos 8 BI Content Manager is installed, and click **Next**.

The Java Runtime Environment (JRE) Version Information page appears.



- 6 Browse to the location where the JRE is installed, and click **Next**.

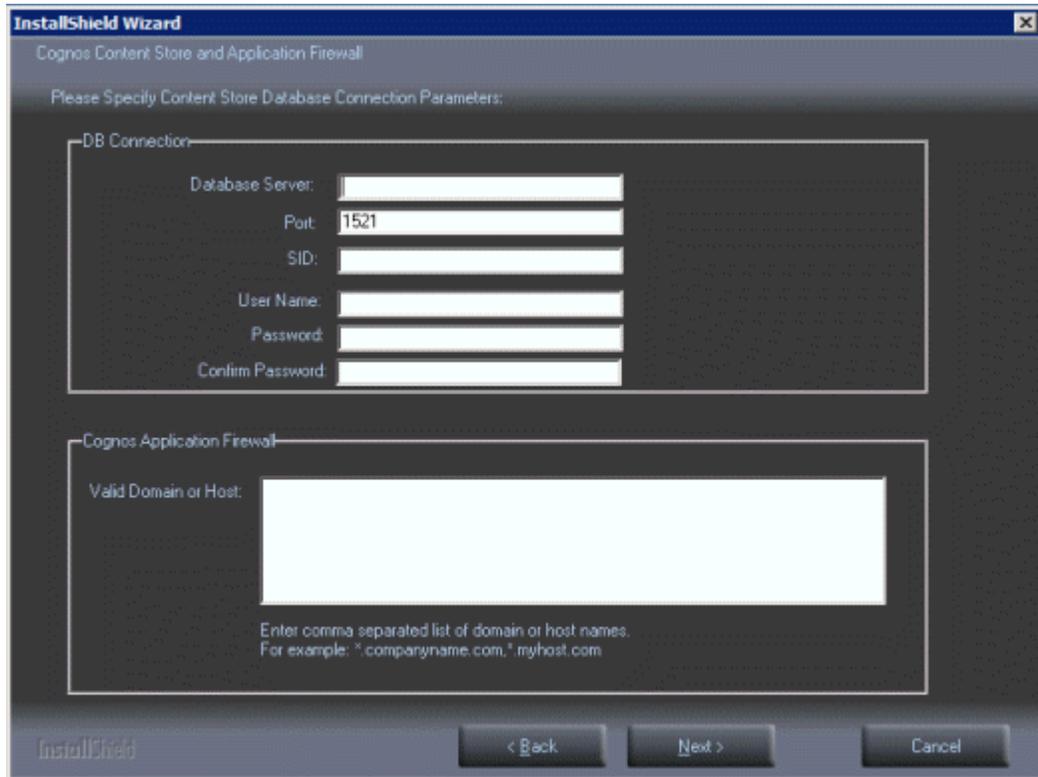
The Setup Type page appears.



- 7 Select the memory model (Small, Medium, or Large) that is most appropriate for your business, and click **Next**.

**Note:** You can change this later if you select the wrong size.

The Cognos Content Store and Application Firewall page appears.



8 Enter the following values.

Field	Description
Database server	Fully qualified domain name of the database server where the Cognos 8 BI Content Store schema is installed.
Port	Port number for communicating with the database server.
SID	SID for communicating with the database server.
User Name	User name of the Oracle user in the Cognos 8 BI content store database. You created this user when you configured the Cognos 8 BI content store database.
Password, Confirm Password	Cognos 8 BI user in the Cognos content store database.
Valid Domain or Host	Comma-separated list of domain or host names, for example <i>*.company.com,*.companycorp.com</i> .

9 Click **Next**.

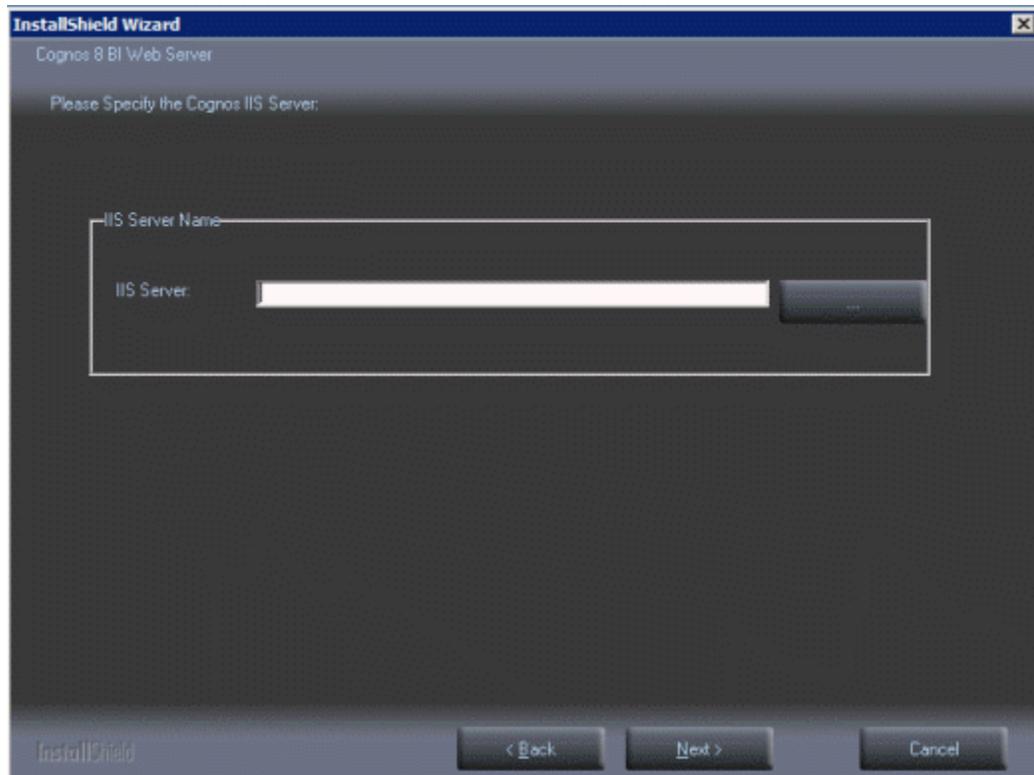
The Custom Authentication Provider Configuration and Single Sign-On Information page appears.

10 Enter the following values.

Field	Description
Database server	Fully qualified domain name of the user that contains the TRIAL_URLS table.
Port	Port number for communicating with the database server.
SID	SID for communicating with the database server.
User Name	The name of the PFCapAdmin user.
Password, Confirm Password	Password of the PFCapAdmin user.
Trust the user for InForm Model Generation Service (No Authentication Required)	Select to allow the pfreportinguser to have access to the InForm Model Generation Service.
Integrated with Single Sign-on	Select to enable Single Sign-on.
Cognos Content Manager Component is installed on the computer	Select if you are enabling SSO, and you are installing the CRNConfig wizard on the Content Manager Server.
OAM ASDK Install Location	If you are using SSO, enter the path to the Oracle Access Management Access SDK location.

- 11 Select Trust the user for InForm Model Generation Service (No Authentication Required).
- 12 Click **Next**.

The Specify the Cognos Web Server (gateway or IIS server) page appears.



- 13 Type the fully qualified domain name of the Cognos 8 BI Gateway server, or click **Browse** to select it from the dialog box.
- 14 Click **Next**.

The LDAP Configuration Information page appears.

The screenshot shows a dialog box titled "Cognos 8 Business Intelligence Customization for InForm - InstallShield Wizard" with the sub-title "LDAP Configuration Information". Below the title is the instruction: "Please enter information necessary to configure authentication through LDAP". The main area contains a form with the following fields:

- LDAP Server: [Empty text box]
- LDAP Port: [389]
- Administrator DN: [Empty text box] (i.e. uid=admin,ou=Administrators,ou=TopologyManagement,=NetscapeRoot)
- Password: [Empty text box]
- Confirm Password: [Empty text box]
- Parent Node DN: [Empty text box] (i.e. dc=MyDomain,dc=MyCompany,dc=com)
- Cognos Admin OU: [Empty text box]

At the bottom of the dialog box are three buttons: "< Back", "Next >", and "Cancel".

15 Enter the following values.

Field	Description
LDAP Server	Fully qualified domain name of the server where the Oracle Directory Server is installed.
LDAP Port	Port number used to communicate with the LDAP server.
Administrator DN	Distinguished Name of the administrator of the server. Use the format and values shown beneath the field.  <b>Note:</b> The Administrator DN value corresponds to an LDAP user who has READ and SEARCH access to the Base Distinguished Name (BDN). The BDN specifies the top level or root of the directory structure, which is the starting place for searches.
Password, Confirm Password	Password of the administrator.
Parent Node DN	Distinguished name of the Parent Node. Use the format shown beneath the field. (Do not enter spaces after the commas between the parts of the domain.)  <b>Note:</b> The Parent Node DN is also known as the Base Distinguished Name (BDN). The BDN specifies the top level or root of the directory structure, which is the starting place for searches.

Field	Description
Cognos Admin OU	The Cognos Admin organizational unit.

---

16 Click **Next**.

The Ready to Install the Program page appears.

17 Click **Install**.

The Setup Status page appears.

The program copies the necessary files and creates the CRNSetup.xml and singlesignonproperties.xml files in an InForm subfolder under the Cognos 8 installation (... \InForm \Config). The name and location of the files appears in a message window. You need to supply the location of these files when you install the Cognos 8 BI Gateway Customization for InForm.

18 The Wizard Complete page appears.

19 Click **Finish**.

## Create the ORACLEHS LDAP namespace

You create the ORACLEHS LDAP namespace on the Cognos Content Manager Server. For more information, see *Step 6: Create the ORACLEHS LDAP namespace on the Content Manager Server* (on page 74).

Run this procedure each time you run the InForm CRNConfig wizard.

- 1 On the server where Cognos 8 BI is installed, select **Start > All Programs > Cognos 8 > Cognos Configuration**.

The Cognos Configuration window appears.

- 2 In the Security tree, right-click **Authentication**, and select **New resource > Namespace**.

The New Resource - Namespace dialog box appears.

- 3 Enter the following values:

- **Name**—ORACLEHS (all uppercase)
- **Type**—LDAP

- 4 Click **OK**.

- 5 Complete the parameters as follows:

- **Namespace ID**—ORACLEHS
- **Host and Port**—*<fullyqualifiedmachinename>*: *<LDAPServerPort>*

(For example, port number: 389)

- **Base distinguished name**—Domain name for your environment. For example, if the network domain is hof.com, ou=ORACLEHS,dc=hof,dc=com

**Note:** Do not enter spaces after the commas between the parts of the domain.

- **User lookup**—(uid=\${userID})

- 6 Select **File > Save**.

The Cognos Configuration utility validates the settings and saves the configuration.

- 7 When the validation checks are complete (all items are marked with a green check mark), click **Close**.

- 8 Click **Close**, and close the Cognos Configuration utility window.



## CHAPTER 7

# Enable Secure Sockets Layer (SSL)

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## About enabling Secure Sockets Layer (SSL)

Secure Sockets Layer (SSL) enables secure communications between servers.

Enabling SSL is optional. However, Oracle recommends that you enable SSL for all InForm installations.

If you choose to use SSL, you must set up your environment to support SSL on all servers, and then you must enable SSL to be active in each study.

If you are using Cognos Reporting:

- You can enable SSL on the InForm servers when you install the InForm core software.
- You can enable SSL on the Reporting servers after you install them, or wait until after the Cognos installations are complete, and then enable SSL on all of the servers.

## Set up your environment to support SSL

To enable your InForm installation to use SSL, perform the following steps on all servers.

- 1 Create and set up a key certificate.
- 2 Install key certificates.
- 3 Import key certificates.
- 4 Verify the key certificate installation.

If you are using Reporting and are using a SameDB configuration, perform the following additional steps on the InForm Application Server and the Cognos Gateway Server:

- 1 Update the ExternalLoginURL on the InForm Application Server.

**Note:** This step is required only if the InForm and Reporting applications are installed on the same application server.

- 2 Configure Cognos Report Server and Cognos Content Manager to use SSL.
- 3 Configure the Cognos Gateway Server to use SSL.

**Note:** This step is required only if you are using Reporting and using a public gateway.

## Steps to perform on all servers

If you choose to use SSL, you must set up key certificates on all servers, regardless of your configuration.

### Create and set up a key certificate for SSL in IIS

- 1 Open **Internet Information Services (IIS) Manager**.
- 2 Open the *<machine\_name>* node.
- 3 Go to the **IIS Group > Feature View** and select **Server Certificate**.
- 4 From the **Actions** view, click **Open Features**.
- 5 From the resulting **Actions** view, select **Create Certificate Request**.
- 6 The Request Certificate Wizard opens.
- 7 Complete the **Request Certificate** page. Specify the name of the study server in the **Common name** field, including the FQDN (for example: *<machine\_name>.north.com*).
- 8 Click **Next**.
- 9 Leave all default values in **Cryptographic Service Provider Properties** and click **Next**.
- 10 Click **Browse**.
- 11 Specify the certificate request name and folder details.
- 12 Click **Save**.
- 13 Click **Open**. The file name appears in the text box.
- 14 Click **Finish**.

## Install a key certificate on the server machine in IIS

- 1 Open your browser and go to the security certificate server URL:  
`http://<Windows_2008_security_certificate_server>/<certificate_request_page>`.
- 2 Click **Request a certificate**.
- 3 Click **Advanced certificate request**.
- 4 Click **Submit a certificate request by using a base-64-encoded**.
- 5 Copy all the text in certreq.txt file in the first text field of the saved request.
- 6 Click **Submit**.
- 7 Select **Base 64 encoded**.
- 8 Click **Download certificate**.
- 9 Save to c:\certnew.cer.
- 10 Click **Download certificate chain**.
- 11 Save to c:\certnew.p7b.
- 12 Go to Internet Information Services Manager to complete the certificate request.
- 13 Select the `<machine_name>` node.
- 14 From the **Feature View**, select **Server Certificate** under IIS group.
- 15 From the **Actions** view, select **Open Feature**.
- 16 From the **Actions** view, select **Complete Certificate Request**.
- 17 Browse to c:\certnew.cer and give the **Friendly name** as machine name, and click **Next**.
- 18 Set the SSL port to the port number for the study server. The default is 443.
- 19 Click **OK**.
- 20 Go to C:\ directory. Right click on c:\certnew.p7b.
- 21 Select **Install Certificate**, and click **Next**.
- 22 Click **Next** again, and click **Finish**.
- 23 Click **Yes** in the **Security Warning** dialog box.
- 24 Click **OK** on the confirmation dialog box.
- 25 Set the **Binding for Default Websites**.
- 26 Go to IIS Manager.
- 27 Select the `<machine_name>` node.
- 28 Open the **Web Sites** node.
- 29 Click **Edit Site > Bindings**, and click **Add**.
- 30 Select the certificate type as **Https** and **SSL**.
- 31 Click **View**. Verify that there is no red exclamation mark for the Certificate.

## Import the new key certificate to the local computer and the current user

- 1 Go to **Start > Run**, and type **mmc**.
- 2 From the Console screen, go to **file > Add/Remove Snap-in**.
- 3 Click **Available snap-ins > Certificates > Add**.
- 4 Select **My user account**, and select **Finish**.
- 5 Click **Available snap-ins > Certificates > Add**.
- 6 Select **Computer account**, select **Next > Finish**, and click **OK**.
- 7 Go to **Certificates > Current User**.
- 8 Expand **Trusted Root Certificate Authorities**.
- 9 Right-click **Certificates** and select **Import**.
- 10 Browse to the certificate you created, select it, and complete the wizard, using all defaults.
- 11 Repeat steps 8 through 10 for **Certificates > Local Computer**.

**Note:** Make sure **<Windows\_2008\_security\_certificate\_server>** is listed in the trusted roots of the certificate store for both the **current user** and the **local computer**. If it is not there, export it from the **current user**, save it to the disk, and import it to the **local computer**.

## Verify the key certificate installation

- 1 Open a browser window.
- 2 Type:  
`https://<machine_name>.<domain_name>.com`  
The Security Alert window appears.
- 3 Verify that the date and name for the certificate are valid.

## Additional steps to perform if you are using Reporting with a SameDB configuration

If you are using Reporting, and you installed the InForm software and the Cognos Reporting software on the same application server, you must configure the Cognos software and reporting servers to use SSL.

### Configure Cognos 8 BI to use SSL—Reporting only

**Note:** This step is required only if you are using Reporting.

Use this procedure to update the Web Content URL and Gateway URI entries for SSL. Perform this procedure on the Cognos Gateway Server where the Cognos 8 BI Gateway services are installed.

- 1 On the Cognos Gateway server, click **Start > All Programs > Cognos8 > Cognos Configuration**.
- 2 After the Cognos Configuration utility is completely loaded, select **Portal Services** and update the **Web Content URI** entry:

```
https://<servername>.<domainname>:<portnumber>/COGNOS8
```

**Note:** Be sure to change the port number to the port for HTTPS.

For example:

```
https://example.north.com:443/cognos8
```

- 3 Select **Environment** and update the **Gateway URI** entry:

```
https://<servername>.<domainname>:<portnumber>/cognos8/cgi-bin/cognosisapi.dll
```

**Note:** Be sure to change the port number to the port for HTTPS.

For example:

```
https://example.north.com:443/cognos8/cgi-bin/cognosisapi.dll
```

- 4 Select **File > Save**.

The Cognos Configuration utility validates the settings and saves the configuration.

- 5 When the checks are complete (all items are marked with a green check mark), click **Close**.
- 6 Click **Close**, and close the Cognos Configuration utility window.

## Configure the Cognos Gateway Server to use SSL—Reporting only

**Note:** This step is required only if you are using Reporting and a public gateway.

If you install Cognos 8 BI on its own dedicated server, you must configure IIS to work with Windows 2008. On the server where the Cognos 8 Business Intelligence Gateway services are installed:

1. Navigate to **Control Panel > Administrative Tools > Internet Information Services (IIS) Manager**, and expand the node for the local computer.
2. Select **Web Service Extensions**.
3. Make sure that the following options are set to **Allowed**:
  - All Unknown CGI Extensions.
  - All Unknown ISAPI Extensions.
  - ASP.NET v1.1.4322.
  - ASP.NET v2.0.50727.
  - WebDAV.
  - Active Server Pages.

## Enable SSL for each study

If you choose to use SLL, you must enable SSL to be active for each study.

After you complete the InForm installation and set up your environment to support SSL, you must enable the SSL System Configuration option for each study. You can set this option in the InForm Admin user interface or with the MedML Installer utility.

### Enable SSL through the InForm Admin user interface

- 1 Log in to the InForm application as a user with system administration rights.
- 2 Click **Admin > Configuration**.
- 3 Set the **Enable SSL** option to **on**.
- 4 If you are setting up the Reporting and Analysis module, change the **Reporting service full url** option to start with **https://** and to include a port number.
- 5 Click **Update**.
- 6 Stop and restart the study with the following commands

```
pfadmin stop trial <studyname>
pfadmin start trial <studyname>
```

### Enable SSL with the MedML Installer utility

- 1 Create an XML file with the following entry:
 

```
<MEDMLDATA>
<SYSCONFIG CONFIGNAME="SSLFLAG" TYPE="0" VALUE="1" />
<MEDMLDATA/>
```
- 2 If you are setting up the Reporting and Analysis module, include the following definition in the XML file, and change the value of URL for the reporting server to start with https://.
 

```
<SYSCONFIG CONFIGNAME="REPORTINGSERVER" TYPE="0" VALUE="https://<url>" />
```
- 3 Stop the study with the following command:
 

```
pfadmin stop trial <studyname>
```
- 4 Install the configuration options with the MedML Installer utility.
- 5 Restart the study with the following command:
 

```
pfadmin start trial <studyname>
```



# **PART 3: POST-INSTALLATION TASKS**



## CHAPTER 8

# Post-installation tasks

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## Enable communication among distributed Cognos 8 BI software components

If you install one or more Application Tier Components on a separate server, to ensure that they can communicate with other Cognos 8 BI reporting components:

- Configure cryptographic properties.
- Specify all Content Manager URIs.
- Specify the Dispatcher URIs.
- Specify the Dispatcher URI for external applications.
- Configure the Cognos Report Server Notification Store property to point to the Content Store database. This is described in the online Help notes in the Cognos Configuration utility.

**Note:** this is only necessary if you are using a multiple server environment where the Cognos Report Server and the Cognos Content Manager are on separate servers.

For more information, see the Cognos 8 BI documentation.

## Enable clinical model generation in a multi-server environment

If your Cognos 8.4 environment contains multiple Cognos servers, set the following on all the dispatchers:

- 1 Log in to the Cognos server using a Private Gateway.

For more information about Private Gateways, see *About the Cognos Private Gateway* (on page 7) and *Prepare the Cognos Gateway Server* (on page 80).

- 2 Select **Launch > Reporting Administration**.

The Administration page appears.

- 3 Click the **Configuration** tab.

- 4 Click **Dispatchers and Services**.

A list of the dispatchers that are registered with the Content Manager appears.

- 5 For each dispatcher, perform these steps:

- a In the Actions column, click the **Set Properties** icon ().
- b Click the **Settings** tab.
- c Set the **Load Balancing Mode** property to **Cluster Compatible**.
- d Click **OK**.

## Start the Cognos 8 BI servers

After completing the Cognos 8 BI installation and configuration steps, you can start the Cognos 8 BI servers. If you have distributed Cognos 8 BI application tier components across multiple servers, see the *Cognos Installation & Configuration Guide* for the specific order for starting the servers.

- 1 On the server where the Cognos 8 BI service is installed, select **Start > All Programs > Cognos8 > Cognos Configuration**.

The Cognos Configuration utility starts.

- 2 Select **Actions > Start**.
- 3 When the server is started, close the Cognos Configuration utility.

# Configure settings for Comma Separated Values (CSV) report output

The Reporting and Analysis module provides settings that allow you to easily use CSV report output files with applications such as the Excel spreadsheet application. Oracle applies these settings for hosted environments, and recommends that you apply them to your environments as well.

**Note:** You must have server administration rights to modify these settings.

- **Delimiter**—Comma-delimited files are widely accepted for use with several applications.
- **Encoding**—Using UTF-8 character encoding allows you to use your CSV output with a wide range of applications.
- **Terminator**—Using carriage return and line feed (CRLF) terminators ensures that the report output is properly organized into columns and rows.

## Configure the CSV settings for reports

- 1 Go to the Reporting and Analysis home page.
- 2 Click **Launch > Reporting Administration**.  
The Administration page appears.  
By default, the **Status** tab is selected.
- 3 In the pane on the left, click **System**.
- 4 In the **Scorecard** section, click the server name.  
The full URL for the server appears below the server name.
- 5 Click the full URL for the server.  
The available services for the server appear.
- 6 Select **Report Service > Set Properties**.  
The Set properties - ReportService dialog box appears.
- 7 Select the **Settings** tab.
- 8 In the **Category** drop-down list, select **Environment**.
- 9 In the **Environment** category, in the **Advanced settings** row, click **Edit**.  
The Set advanced settings dialog box appears.
- 10 Select **Override the settings acquired from the parent entry** checkbox.

- 11 Type the following parameters and values:

Parameter	Value	Description
RSVP.CSV.DELIMITER	,	Separates each data item in the report output with a comma.
RSVP.CSV.ENCODING	UTF-8	Specifies UTF-8 character encoding for report data.
RSVP.CSV.TERMINATOR	CRLF	Separates each row of data with a carriage return and line feed, so that the rows appear in ordered columns.

- 12 Select the checkbox next to each parameter.
- 13 Click **OK**.
- The Set properties - ReportService page appears.
- 14 Click **OK**.

## CHAPTER 9

# Deploy your study

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## Deploy your study

For information on deploying your study, see the *Study and Reporting Setup Guide*. The *Study and Reporting Setup Guide* describes how to perform the tasks that are required to set up an InForm study and configure the Reporting and Analysis module for the study.

## CHAPTER 10

# Uninstalling software components

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## About uninstalling software components

This section describes how to uninstall the core InForm software, the Cognos 8 BI software, and the customizations for Cognos Reporting. For information about removing the reporting elements and an InForm study, see the *Study and Reporting Setup Guide*.

Uninstall the InForm and Cognos 8 BI software in the following order:

- 1 The Cognos Customization for InForm wizard, the Cognos Gateway Customization for InForm wizard, and the InForm Reporting Database scripts.
- 2 The Cognos 8 software.
- 3 The Oracle Directory Server.
- 4 The InForm software.

## Uninstalling the Cognos Customization for InForm and the Cognos Gateway Customization for InForm wizards

To uninstall the files loaded with the Cognos Customization for InForm wizard, you uninstall the Cognos Gateway Customization for InForm wizard.

- 1 On the server where the Cognos Gateway Customization software is installed, select **Start > Control Panel > Programs and Features**.
- 2 Select the **Cognos Gateway Customization for InForm** entry, and click **Uninstall**.  
The Cognos Gateway Customization for InForm installation wizard starts.
- 3 When the confirmation message appears, click **Yes**.
- 4 When the wizard is complete, click **Finish**.

## Uninstalling the Cognos 8 BI software

The Cognos Uninstall Wizard enables you to uninstall the Cognos 8 BI core software and the Cognos 8 BI SDK software. You can uninstall both components together if they are on the same server or uninstall each component separately.

- 1 On the server that hosts the Cognos 8 BI software, select **Start > All Programs > IBM Cognos 8 - 64 > Uninstall IBM Cognos 8 > Uninstall IBM Cognos 8**.

The Uninstall Wizard starts.

- 2 On the Uninstall Language Selection page, select the language you want to use to run the uninstall, and click **Next**.
- 3 On the next page, select the component packages to uninstall, and click **Next**.

The uninstall process starts.

- 4 When the wizard is complete, click **Finish**.

**Note:** The uninstall may leave some folders and files on the computer. You can delete these with the Windows Explorer application.

## Uninstalling the Oracle Directory Server

See the Oracle Directory Server Enterprise Edition documentation, or your Oracle database documentation for instructions on uninstalling the Oracle Directory Server.

## Uninstalling the InForm software

- 1 Stop all InForm servers and studies.
- 2 Stop the InForm Service and the InForm Sync Service.
- 3 Select **Start > Control Panel > Programs and Features**.
- 4 Select **Oracle InForm 6.0**, and click **Uninstall**.  
A confirmation dialog box appears.
- 5 Click **Yes**.
- 6 If a message appears and asks if you want to remove shared files, click **No to All**.  
A message reminds you to back up customized files before continuing.
- 7 To stop uninstalling the software so that you can back up the customized files, click **No**.  
or  
To continue, click **Yes**.  
When the uninstall is complete, the Reboot page appears.
- 8 Click **Finish**.  
The computer reboots.

## APPENDIX A

# Command and script reference

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# admindb

## Purpose

Creates the InForm Admin database if you did not set it up during the InForm core software installation by selecting the **Install Admin DB** checkbox.

## Location

<Installation\_Directory>\InForm\bin\DBOra folder.

## Usage

```
admindb [connection string] [/accountparams:"path_to_password_file"]
```

Option	Description
<code>/accountparams:"path_to_password_file"</code>	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the accountparams option is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is parameter=value. There is a new line for each parameter, and there are no spaces on a line.</p>

## Parameter file contents

The following parameters are required for the admindb command password file:

- `pfdbauid=pfdbadmin user`
- `pfdbapid=pfdbadmin password`
- `admindbuid=informadmin user`
- `admindbpid=informadmin password`

## Example

```
admindb trial1 /accountparams:"E:\scripts\adminpwd.txt"
```

# configandcheckdiffdb

## Purpose

Checks the variable settings in an environment where the study and reporting databases are in different database instances.

## Location

Folder where the reporting software is located, for example, *<Installation\_Directory>\InForm Reporting\DBOra*.

## Usage

```
configandcheckdiffdb [/accountparams:"path_to_password_file"]
```

Option	Parameter
<i>/accountparams:"path_to_password_file"</i>	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the accountparams option is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is parameter=value. There is a new line for each parameter, and there are no spaces on a line.</p>

## Parameter file contents

The following parameters are required for the configandcheckdiffdb command password file:

- trial\_schema\_owner\_password=Password for the study schema owner.
- dbauser\_trial\_password=Password for the study DBA user.
- dbauser\_rep\_password=Password for the reporting DBA user.
- streams\_admin\_user\_rep\_passwd=Password for the reporting streams admin user.
- streams\_admin\_user\_trial\_pwd=Password for the study streams admin user.

If the script passes with no errors, the variables are correct. If there is an error, make corrections and then rerun the script. Do not proceed with the installation until errors have been resolved.

**Note:** The InForm database installation and administration scripts are designed to be run using the InForm Application Server. The scripts can also be run from the Oracle database home on an InForm Reporting Server. Running them from a different Windows Oracle client or from a non-Windows Oracle client or database home may work, but is not supported.

## configdiffdb.sql

### Purpose

Contains reporting variables in an environment where the study and reporting databases are in different database instances. The reporting installation and uninstallation scripts use the configdiffdb.sql file for user name, password, tablespace, and connection information.

### Location

Folder where the reporting software is located, for example,  
<Installation\_Directory>\InForm\bin\DBOra\Reporting.

### Notes

Before running and command that uses the configdiffdb.sql file (for example, configandcheckdiffdb), evaluate each user-defined variable, and change the values as needed to reflect your environment.

**Note:** The configdiffdb.sql file cannot contain any passwords.

## create\_cap\_table.sql

### Purpose

Creates the TRIAL\_URLS table for the PFCAPAdmin user.

### Location

Folder where the reporting software is located, for example, *<Installation\_Directory>\InForm\bin\DBOra\Reporting*.

### Usage

@create\_cap\_table.sql

### Notes

Run from SQL\*Plus with /nolog.

Errors are recorded in the create\_cap\_table.log file.

**Note:** The InForm database installation and administration scripts are designed to be run using the InForm Application Server. The scripts can also be run from the Oracle database home on an InForm Reporting Server. Running them from a different Windows Oracle client or from a non-Windows Oracle client or database home may work, but is not supported.

## deinstall\_reporting\_diffdb

### Purpose

Removes a single reporting schema when the study and reporting schemas are located in different database instances. This script:

- Removes all components associated with the Reporting and Analysis module for a single study and reporting schema combination.
- Uninstalls only one reporting schema at a time. To uninstall multiple reporting schemas, you can run the script as many times as necessary.
- Does not remove the underlying reporting infrastructure, including reporting tablespaces.

### Location

Folder where the reporting software is located, for example, `<Installation_Directory>\InForm\bin\DBOra\Reporting`.

### Usage

```
deinstall_reporting_diffdb [/accountparams:"path_to_password_file"]
```

Option	Parameter
<code>/accountparams:"<i>path_to_password_file</i>"</code>	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the <code>accountparams</code> option is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is <code>parameter=value</code>. There is a new line for each parameter, and there are no spaces on a line.</p>

### Parameter file contents

The following parameters are required for the `configandcheckdiffdb.sql` command password file:

- `trial_schema_owner_password=Password` for the study schema owner.
- `dbuser_trial_password=Password` for the study DBA user.
- `dbuser_rep_password=Password` for the reporting DBA user.
- `streams_admin_user_rep_passwd=Password` for the reporting streams admin user.
- `streams_admin_user_trial_pwd=Password` for the study streams admin user.

## Notes

Before running the `deinstall_reporting_diffdb.sql` script:

- Review the parameters in the `configdiffdb.sql` file to make sure that they contain the same values that you used to install the reporting schema. For more information, see ***configdiffdb.sql*** (on page 132).
- Stop the study.

**Note:** The InForm database installation and administration scripts are designed to be run using the InForm Application Server. The scripts can also be run from the Oracle database home on an InForm Reporting Server. Running them from a different Windows Oracle client or from a non-Windows Oracle client or database home may work, but is not supported.

## grant\_dba\_privs.sql

### Purpose

Grants DBA privileges to the rptinstall user, which is used for install and uninstall operations.

### Location

Folder where the reporting software is located, for example,  
<Installation\_Directory>\InForm\bin\DBOra\Reporting.

### Usage

```
@grant_dba_privs.sql rptinstall
```

### Notes

Log on to the study database as SYSDBA.

The name of the DBA user must be **rptinstall**.

**Note:** The InForm database installation and administration scripts are designed to be run using the InForm Application Server. The scripts can also be run from the Oracle database home on an InForm Reporting Server. Running them from a different Windows Oracle client or from a non-Windows Oracle client or database home may work, but is not supported.

## grant\_user\_privs.sql

### Purpose

Grants database user privileges to the user that owns the study schema.

### Location

Folder where the reporting software is located, for example,  
<Installation\_Directory>\InForm\bin\DBOra\Reporting.

### Usage

```
@grant_user_privs.sql <study schema owner>
```

<study schema owner>—Database user name that holds the study schema.

### Example

```
@grant_user_privs.sql pfst60uid
```

### Notes

Run from SQL\*Plus with /nolog.

Connect to the study database as a user with the privilege to grant user database privileges.

The script produces a log called grant\_user\_privs.log.

**Note:** The InForm database installation and administration scripts are designed to be run using the InForm Application Server. The scripts can also be run from the Oracle database home on an InForm Reporting Server. Running them from a different Windows Oracle client or from a non-Windows Oracle client or database home may work, but is not supported.

# informprepora.vbs

## Purpose

Creates the pfdbadmin user if you did not set it up during the InForm core software installation by selecting the **Prep Oracle** checkbox.

## Location

<Installation\_Directory>\InForm\bin\DBOra folder.

## Usage

```
informprepora.vbs <oracle_connection_string> [/accountparams:"path_to_password_file"]
```

Option	Parameter
/accountparams:"path_to_password_file"	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the accountparams option is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is parameter=value. There is a new line for each parameter, and there are no spaces on a line.</p>

## Parameter file contents

The following parameters are required for the informprepora.vbs command password file:

- orasys\_user=<sys\_userid>
- orasys\_user\_pass=<password\_for\_sys\_user>
- pfdbauid=<pfadbadmin\_userid>
- pfdbapid=<pfadbadmin\_password>

## Example

```
informprepora trialdb /accountparams:"E:\scripts\prep.txt"
```

## Notes

Set scripting to cscript to suppress popup messages. Type:

```
cscript //H:cscript
```

# install\_reporting\_diffdb

## Purpose

Installs the Reporting and Analysis module in an environment where the study and reporting databases are in different database instances.

## Location

Folder where the reporting software is located, for example, *<Installation\_Directory>\InForm\bin\DBOra\Reporting*.

## Usage

```
install_reporting_diffdb [/accountparams:"path_to_password_file"]
```

Option	Parameter
<i>/accountparams:"path_to_password_file"</i>	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the accountparams option is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is parameter=value. There is a new line for each parameter, and there are no spaces on a line.</p>

## Parameter file contents

The following parameters are required for the `install_reporting_diffdb.sql` command password file:

- `trial_schema_owner_password`=Password for the study schema owner.
- `rep_schema_owner_password`=Password for the reporting schema owner
- `dbauser_trial_password`=Password for the study DBA user.
- `dbauser_rep_password`=Password for the reporting DBA user.
- `streams_admin_user_rep_passwd`=Password for the reporting streams admin user.
- `streams_admin_user_trial_pwd`=Password for the study streams admin user.
- `rep_proxy_user_password`=The password for the user that exists in the trial database who has read-only access to the specified trial schema.

## Notes

Before running the installation script, make sure that you have updated the study-specific variable settings with the `configdiffdb.sql` script. For more information, see *`configdiffdb.sql`* (on page 132).

**Note:** The InForm database installation and administration scripts are designed to be run using the InForm Application Server. The scripts can also be run from the Oracle database home on an InForm Reporting Server. Running them from a different Windows Oracle client or from a non-Windows Oracle client or database home may work, but is not supported.

# mtsora102.vbs

## Purpose

Sets up Oracle XA transaction support. During the InForm core software installation, if you check the Prep Oracle checkbox, the installation process sets up Oracle XA transaction support. If you do not set up Oracle XA transaction support during the installation, the mtsora102.vbs script enables you to set it up manually, during or after the Oracle installation.

The mtsora102.vbs file does the following:

- 1 Runs the XAVIEW.sql script as SYS to create the V\$XATRANS\$ view:

```
%ORACLE_HOME%\RDBMS\ADMIN\XAVIEW.SQL
```

- 2 Grants SELECT access to the public on these views:

```
Grant Select on V$XATRANS$ to public
Grant Select on sys.dba_pending_transactions to public
```

**Note:** This example grants SELECT access to public, however in your environment SELECT access should be granted to the profile associated with your database.

- 3 Modifies the following Registry keys in  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\MSDTC\Security

```
"NetworkDtcAccess"=dword:00000001
"NetworkDtcAccessAdmin"=dword:00000001
"NetworkDtcAccessTransactions"=dword:00000001
"XaTransactions"=dword:00000001
"NetworkDtcAccessOutbound"=dword:00000001
"NetworkDtcAccessInbound"=dword:00000001
```

- 4 Modifies the following Registry key in  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\MSDTC\XADLL

```
"mtxoci.dll"="C:\\WINDOWS\\system32\\mtxoci.dll"
```

## Location

<Installation\_Directory>\InForm\bin\DBOra folder.

## Usage

```
mtsora102.vbs <oracle_connection_string> <oracle_client_home_key>
[/accountparams:"path_to_password_file"]
```

Option	Parameter
/accountparams:"path_to_password_file"	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the accountparams option is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is parameter=value. There is a new line for each parameter, and there are no spaces on a line.</p>

## Parameter file contents

The following parameters are required for the mtsora102.vbs command password file:

- orasys\_user=<sys\_userid>
- orasys\_user\_pass=<password\_for\_sys\_user>

## Example

```
cscript mtsora102.vbs dev1 KEY_OraClient10g_CLIENT1 /accountparams:"E:\scripts\mtsora.txt"
```

## Notes

When setting up Oracle XA transaction support manually, run both the mtsora102.vbs script and the oramtsadmin.sql script. For more information, see *oramtsadmin.sql* (on page 143).

Set scripting to **cscript** to suppress popup messages. Type:

```
cscript //H:cscript
```

For a more complete description, refer to one of the following articles:

- **Microsoft Knowledge Base**—Q193893 – Info: Using Oracle with Microsoft Transaction Server and COM+.
- **MSDN Online Library**—Setting up MTS to Access Oracle.
- Microsoft KB Article 899191.
- Microsoft KB Article 817066 and 891801

# oramtsadmin.sql

## Purpose

Creates the MTS administrative user and schedules automatic transaction recovery. You need to run oramtsadmin.sql only if you do not set up Oracle XA transaction support during installation of the InForm core software by selecting the **Prep Oracle** checkbox. If you set up Oracle XA transaction support manually, run oramtsadmin.sql after you run the mtsora102.vbs script.

## Location

%ORACLE\_CLIENT\_HOME%\oramts\admin folder

## Usage

@oramtsadmin.sql

## Notes

Run as the SYS user as SYSDBA.

Run the script against all Oracle instances connected to the InForm application server.

**Note:** The InForm database installation and administration scripts are designed to be run using the InForm Application Server. The scripts can also be run from the Oracle database home on an InForm Reporting Server. Running them from a different Windows Oracle client or from a non-Windows Oracle client or database home may work, but is not supported.

# pfadmin

## Purpose

Sets up the InForm server environment. The parameters are stored in the registry. Therefore, you need local administrator privileges to run the utility.

## Location

<Installation\_Directory>\InForm\bin\DBOra folder.

## Usage

```
pfadmin [ CHECKREG | CONFIG | CREATEREPORTINGMODEL | HELP | KILLSERVER
| PING | PUBLISHREVIEWSCHEMA | RECREATEREVIEWSCHEMA | REMOVE |
RECREATEREPORTINGSCHEMA | SETSERVER | SETUP | SETLANGUAGE | START |
STOP | UNINSTALL | VIEW ] [/accountparams:"path_to_password_file"]
```

### pfadmin command options

Option	Purpose and Syntax
CHECKREG [/Del] [/DelAll]	<p>Displays the current InForm Server COM and MTS components in the NT registry.</p> <p><b>WARNING:</b> Be careful to remove the server(s) or uninstall the service before using either of the delete options:</p> <ul style="list-style-type: none"> <li>• [/Del]—Removes obsolete settings.</li> <li>• [/DelAll]—Removes the settings of all servers.</li> </ul>

pfadmin command options	
Option	Purpose and Syntax
CONFIG Service [/AdminDB <i>DBServer</i> ]   [/AdminDSN <i>DsnName</i> ]   [/AdminDN] [/PfUser]   [/SysDBA]	<p>Configures an existing service.</p> <ul style="list-style-type: none"> <li>• [/AdminDB <i>DBServer</i> [SQL]]—Sets the ODBC DSN for the InFormAdmin database. Make sure that <i>DBServer</i>, <i>UID</i>, and <i>PID</i> are the same ones that were used to create the InFormAdmin database. Use alphabetic or alphanumeric characters for the <i>UID</i> and <i>PID</i>, and begin them with a letter; do not use all numeric characters.</li> <li>• [/AdminDSN <i>DsnName</i>]—Creates the ODBC DSN InForm software with the default database server, using the specified user name and password. Use alphabetic or alphanumeric characters for the <i>UID</i> and <i>PID</i>, and begin them with a letter; do not use all numeric characters.</li> <li>• [/PfUser]—Creates the PfUser_ <i>computername</i> account during the InForm software installation. The account is for Microsoft MTS packages used by InForm servers. In general, you do not need to configure the account. If you change the password through NT User Manager, you must reconfigure the InForm Service with the new password.</li> <li>• [/SysDBA]—Sets the InForm Service DBA user name and password. You can use this command to change the pfdbadmin password as needed.</li> </ul> <p>If you want to change the InForm Service DBA name, modify the provided SQL script InFormPrepORA.sql with the new user name and password, then run the script as SYS. After running the script, use this command option to configure the InForm Service to use the new InForm Service DBA.</p> <p>Use alphabetic or alphanumeric characters for the <i>UID</i> and <i>PID</i>, and begin them with a letter; do not use all numeric characters.</p>
CONFIG Server <i>ServerName</i> [Automatic   Manual]	<p>Configures the startup mode for an existing server as either Automatic or Manual.</p>

pfadmin command options	
Option	Purpose and Syntax
CONFIG Trial <i>TrialName</i> [Automatic   Manual]   [/TriDSN <i>DSN</i>   [/RndDSN <i>DSN</i> ]   [/RndDSN <i>DSN</i> ]   [/Rnd [ <i>MDBFilePath</i> ]   [/Rnd [ <i>MDBFilePath</i> ]   [/Host <i>ServerName</i> ]	Configures an existing study. <ul style="list-style-type: none"> <li>• [Automatic   Manual]—Configures the study startup mode.</li> <li>• [/TriDSN <i>DSN</i>]—Configures the study ODBC DSN. Use alphabetic or alphanumeric characters for the UID and PID, and begin them with a letter; do not use all numeric characters.</li> <li>• [/RndDSN <i>DSN</i>]—Configures the study randomization source dataset name. Use when setting up a Microsoft randomization source database.</li> <li>• [/RndDSN <i>DSN</i>]—Configures the study randomization source dataset name. Use when setting up an Oracle randomization source database. Use alphabetic or alphanumeric characters for the UID and PID, and begin them with a letter; do not use all numeric characters.</li> <li>• [/Rnd [<i>MDBFilePath</i>]]—Creates a study randomization source dataset name to use the given Microsoft Access database file.</li> <li>• [/Rnd [<i>MDBFilePath</i>] ]—Creates a study randomization source dataset name to use the given Oracle database file. Use alphabetic or alphanumeric characters for the UID and PID, and begin them with a letter; do not use all numeric characters.</li> <li>• [/Host <i>ServerName</i>]—Moves the study from current host server to another server in the InForm Service.</li> </ul>
CONFIG CDD <i>TrialName</i> [Enable   Disable]   [DSN [Active   Inactive]]   [DSN <i>StudyLocale</i> ]	Configures an existing CDD: <ul style="list-style-type: none"> <li>• [Enable   Disable]—Enables or disables the CDD for a particular study.</li> <li>• [DSN [Active   Inactive]]—Makes a CDD DSN active or inactive for a particular study.</li> <li>• [DSN <i>StudyLocale</i>]—Specifies the study locale used for the unit symbol translation that is stored in the CDD column for the unit symbol.</li> <li>• <i>path_to_dsn_password_file</i>—Configures an existing CDD DSN with the User ID and password specified. Use alphabetic or alphanumeric characters for the UID and PID, and begin them with a letter; do not use all numeric characters.</li> </ul>

pfadmin command options	
Option	Purpose and Syntax
CONFIG WEBSERVICE <i>TrialName</i> <i>WebServiceName</i> [Add   Remove]	<p>Associates a web service with a study.</p> <ul style="list-style-type: none"> <li><i>WebServiceName</i>—ODMSubmitService</li> <li>[Add   Remove]—Creates or removes an association between a study and a web service</li> </ul>
CREATEREPORTINGMODEL <i>TrialName</i>	Creates the Reporting model from scratch.
HELP	Lists all the options of the pfadmin command.
KILLSERVER <i>ServerName</i>	Stops server MTS packages without stopping studies on the server.
PING <i>MachineName</i> 1   2   3: <i>ServerName</i>   4: <i>ServerName</i>   5: <i>ServerName</i> [Port#]	<p>Pings the InForm Service or a particular server. The ping levels are:</p> <ul style="list-style-type: none"> <li>1—Ping the InForm Service.</li> <li>2—Ping the InForm Service and all InForm server(s).</li> <li>3—Ping the specified server.</li> <li>4—Ping and get information about the specified server.</li> <li>5—Ping the specified server and dump the user session to a server-side file.</li> <li>[Port#]—Allows you to specify the port number the echo server is listening on, if you changed it.</li> </ul>
PUBLISHREVIEWSCHEMA <i>TrialName</i> [/FORCE]	<p>Applies all study version changes to the review schema clinical tables.</p> <p>If you use the /FORCE option, the InForm application does not check to see if there are study version changes that are not applied, and makes sure all study version changes are applied.</p> <p><b>Note:</b> The /FORCE option does not drop and re-create the clinical tables. It makes the clinical tables match the study version. The /FORCE option should only be used if recommended by Oracle.</p> <p>This operation is synchronous. The study is unavailable during the operation.</p>
RECREATEREVIEWSCHEMA [ <i>TrialName StudyLocale_ISO_name</i> ]	<p>Changes the Review Schema study locale.</p> <p>The Review schema study locale is chosen automatically when a trial is first installed, but can be changed using this command.</p>

pfadmin command options	
Option	Purpose and Syntax
REMOVE [Server <i>ServerName</i> ]   [Trial <i>TrialName</i> [/DSN]]   [CDD <i>TrialName</i> [/All   <i>DSN</i> ]]	<p>Removes an existing server, study, or CDD.</p> <ul style="list-style-type: none"><li>• [Server <i>ServerName</i>]—Removes an InForm server from the InForm Service. Studies should be either reconfigured to other servers or removed before this command is run.</li><li>• [Trial <i>TrialName</i> [/DSN]]—Deletes the named study from the InForm Service. The Web virtual directories and folders for the study are physically removed. Use the /DSN option to remove the study-related DSNs.</li><li>• [CDD <i>TrialName</i> [/All   <i>DSN</i>]]—Removes either all CDD DSNs in the specified study or the given CDD by DSN.</li></ul> <p><b>Note:</b> Before using the PFADMIN REMOVE command, verify that IIS is running.</p>

pfadmin command options	
Option	Purpose and Syntax
SETSERVER [Site <i>TrialName MachineName</i> ]   [MedMLInstaller <i>TrialName MachineName</i> ]   [Reporting <i>TrialName ReportingUrn</i> ]   [ReportingAN <i>TrialName AuthenticationNamespace</i> ]   [ReportingUR <i>TrialName UserRoot</i> ]   [ReportingInt <i>TrialName ReportingInternalURI</i> ]   [pfreportinguserpw <i>TrialName</i> ]   [systempw <i>TrialName</i> ]	<p>Changes the MedML and Site servers and sets the Reporting configuration settings</p> <ul style="list-style-type: none"> <li>• [Site <i>TrialName MachineName</i>]—Not supported.</li> <li>• [MedMLInstaller <i>TrialName MachineName</i>]—Not supported.</li> <li>• [Reporting <i>TrialName ReportingUrn</i>]—Set Cognos 8 BI URL for study.</li> <li>• [ReportingAN <i>TrialName AuthenticationNamespace</i>]—Set Cognos 8 BI AuthenticationNamespace for study.</li> <li>• [ReportingUR <i>TrialName UserRoot</i>]—Set Cognos 8 BI UserRoot for study.</li> <li>• [ReportingInt <i>TrialName ReportingInternalURI</i>]—Set the internal URI that the InForm server uses to communicate with the Cognos 8 BI server.</li> <li>• [pfreportinguserpw <i>TrialName</i>]—Run this pfadmin command after the password for the pfreportinguser is changed in the InForm user interface to set a property used by Reporting when it needs the credentials of the pfreportinguser user for building the model.</li> </ul> <p>pfreportinguser is the preferred studyuser to run pfrinit to configure Cognos for each study.</p> <ul style="list-style-type: none"> <li>• [systempw <i>TrialName</i>]—Set the password for the system user for the specified study. The command also activates the system user.</li> </ul> <p><b>Note:</b> The SETSERVER command requires that you set the Default Authentication Level property of the InForm server to Connect:</p> <p>To set this property:</p> <ol style="list-style-type: none"> <li>1 Select Administrative <b>Tools &gt; Component Services &gt; My Computer - Properties</b>.</li> <li>2 Set the <b>Default Properties - Default distributed communication properties - Default Authentication Level</b> value to Connect.</li> </ol>
SETUP Server <i>ServerName</i> [Automatic]	<p>Creates a new InForm server in the InForm Service.</p> <ul style="list-style-type: none"> <li>• [Automatic]—The server is automatically started with the InForm Service. Manual startup is the default.</li> </ul>

pfadmin command options	
Option	Purpose and Syntax
SETUP Trial <i>TrialName</i> <i>ServerName</i> [/DB <i>OracleConnStr</i> ]   [/DSN <i>TriDSN</i> [Automatic]	<p>Creates a study on the given InForm server with the option to either create a new ODBC DSN or use an existing one. The server has to be created. The study startup mode is Manual by default. Use the Automatic option to automatically start the study when the InForm server that hosts the study is started.</p> <ul style="list-style-type: none"> <li>• [/DB <i>OracleConnStr</i> <i>UID</i> <i>PID</i>]—Creates an ODBC DSN <i>TrialName</i> with the given <i>ServerName</i>, <i>UID</i>, and <i>PID</i>. Use alphabetic or alphanumeric characters for the <i>UID</i> and <i>PID</i>, and begin them with a letter; do not use all numeric characters.</li> <li>• [/DSN <i>TriDSN</i> <i>UID</i> <i>PID</i> [Automatic]]—Configures the created study <i>TrialName</i> to use the given study dataset name <i>TriDSN</i>, <i>UID</i>, and <i>PID</i>. The study must be present in the ODBC DSN. Use alphabetic or alphanumeric characters for the <i>UID</i> and <i>PID</i>, and begin them with a letter; do not use all numeric characters.</li> </ul> <p><b>Note:</b> Before using the /DSN command, verify that IIS is running.</p>
SETUP CDD <i>RefName</i> <i>TrialName</i> /DB <i>OracleConnStr</i> <i>DSN</i> [/TBSP <i>OraTBSP</i> ] [Active] [NoSchema]	<p>Sets up a new CDD DSN associated with the given CDD refname. Use alphabetic or alphanumeric characters for the <i>UID</i> and <i>PID</i>, and begin them with a letter; do not use all numeric characters.</p> <ul style="list-style-type: none"> <li>• [/TBSP <i>OraTBSP</i>]—Defines the Oracle tablespace for the CDD schema.</li> <li>• [Active]—Specifies that the DSN is transactional.</li> <li>• [NoSchema]—Indicates that no new CDD schema should be created during setup. The existing database is not touched. By default, the user is dropped and the Oracle database destroyed. Then, a new schema is created and populated based on the <i>RefName</i> that defines the schema.</li> </ul> <p><b>Note:</b> To execute this command successfully, the study must be started.</p>

pfadmin command options	
Option	Purpose and Syntax
SETUP CDD <i>RefName TrialName</i> /DSN <i>DSN</i> [/TBSP <i>OraTBSP</i> ] [Active] [NoSchema]	<p>Sets up an existing DSN associated with the given CDD <i>RefName</i>. Use alphabetic or alphanumeric characters for the UID and PID, and begin them with a letter; do not use all numeric characters. [/TBSP <i>OraTBSP</i>]—Defines the Oracle tablespace for the CDD schema.</p> <ul style="list-style-type: none"> <li>• [Active]—Makes the DSN transactional.</li> <li>• [NoSchema]—Indicates that no new CDD schema should be created during setup. The existing database is not touched. By default, the user is dropped and the Oracle database destroyed. Then, a new schema is created and populated based on the <i>RefName</i> that defines the schema.</li> </ul> <p><b>Note:</b> To execute this command successfully, the study must be started.</p>
SETLANGUAGE [ <i>IsoLanguageName</i> ]   en-US   ja-JP	<p>Sets the InForm product locale language. en-US and ja-JP are currently supported.</p>
START [Server <i>ServerName</i> ]   [Trial <i>TrialName</i> ]	<p>Starts an existing InForm server or study.</p> <ul style="list-style-type: none"> <li>• [Server <i>ServerName</i>]—Starts an existing InForm server by server name.</li> <li>• [Trial <i>TrialName</i>]—Starts an existing study by study name.</li> </ul>
START [Trial <i>TrialName</i> [/Design]]	<p>Starts the study in design mode. This means you can install study components that are not completely designed (strict checking is not in force). By default, the study starts in production mode.</p>
STOP [Server <i>ServerName</i> [/Trials]]   [Trial <i>TrialName</i> [/Anyway]]	<p>Stops an existing InForm server or study.</p> <ul style="list-style-type: none"> <li>• [Server <i>ServerName</i> [/Trials]]—Stops an existing InForm server by server name. By default, a running server can be stopped if there is no study running and no other application connected to it. The <i>Trials</i> keyword stops all running studies, and then stops the server.</li> <li>• [Trial <i>TrialName</i> [/Anyway]]—Stops the named study. The <i>Anyway</i> keyword stops a study regardless of any connections or HTTP requests.</li> </ul>

pfadmin command options	
Option	Purpose and Syntax
UNINSTALL	<p>Removes all InForm servers and studies, and then removes the InForm service settings PfUser_<i>computername</i> and the MTS library package.</p> <p><b>Note:</b> The InForm service must be running for the command to work.</p>
VIEW [Languages]   [Service]   [Server <i>ServerName</i> ]   [Trial <i>TrialName</i> ]   [CDD <i>TrialName</i> ]   [Reporting <i>TrialName</i> ]	<p>Displays a monitoring list of all servers in the InForm service, all studies in servers, or all RefNames for CDD DSNs configured for a study.</p> <ul style="list-style-type: none"> <li>• [Languages]—Lists installed languages without starting the InForm Service.</li> <li>• [Service]             <ul style="list-style-type: none"> <li>▪ Lists all the servers and studies in the InForm service.</li> <li>▪ Lists installed product languages as well as the actual installed product language.</li> </ul> </li> <li>• [Server <i>ServerName</i>]—Lists each server by server name and studies hosted on that server.</li> <li>• [Trial <i>TrialName</i>]—Lists a study by its name.</li> <li>• [CDD <i>TrialName</i>]—Lists the RefNames for each CDD DSN configured for the specified study.</li> <li>• [Reporting <i>TrialName</i>]—Lists the current status of Reporting.             <ul style="list-style-type: none"> <li>▪ States whether the study is configured for Reporting.</li> <li>▪ Specifies the type of reporting setup: samedb or diffdb.</li> <li>▪ Specifies the reporting username.</li> <li>▪ Gives the date of the last Cognos model update.</li> <li>▪ Reports if the Reporting database is up-to-date.</li> <li>▪ States whether Oracle streams are working properly (if applicable).</li> </ul> </li> </ul>

## pfadmin command options

Option	Purpose and Syntax
<code>/accountparams:"<i>path_to_password_file</i>"</code>	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the <code>accountparams</code> option is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is <code>parameter=value</code>. There is a new line for each parameter, and there are no spaces on a line.</p>

## Parameter file contents

The following parameters are required for the pfadmin command password file:

Command	Parameters
• pfadmin setup trial	<code>uid=<i>user name</i></code>
• pfadmin setup cdd	<code>pid=<i>password</i></code>
• pfadmin config cdd	
• pfadmin config service /sysdba	
• pfadmin config service /admindsn	
• pfadmin config service /pfuser	
• pfadmin config trial	
• pfadmin setserver reportingdiffdbpw	<code>pid=<i>password</i></code>
• pfadmin setserver pfreportinguserpw	
• pfadmin setserver systempw	

## Examples

Check the status of InForm Reporting:

```
pfadmin view reporting pfst60
```

Check the status of InForm servers and studies on an InForm Service:

```
pfadmin view service
```

Start the demo InForm server:

```
pfadmin start server demo
```

Start the pfst60 study:

```
pfadmin start study pfst60
```

Stop all studies running on the demo InForm server, and then stop the demo server:

```
pfadmin stop server demo /Trials
```

Set the password and activate the system user account:

```
pfadmin setserver systempw pfst60 /accountparams:"E:\scripts\pwd.txt"
```

## Notes

Any arguments containing commas, equal signs, or spaces must be enclosed within double quotes.

# pfcognosconfig

## Purpose

Configures an InForm study to work with Cognos 8 BI. The PFCognosConfig utility is a command-line alternative to the **InForm Reporting Configuration Wizard**.

PFCognosConfig can be run multiple times to change reporting parameters. If the reporting study user password changes, PFCognosConfig.exe must be run to tell InForm about the new password.

When PFCognosConfig is run multiple times for a study, each run after the first need not specify all the parameters – only the changed parameters need be specified.

## Location

<Installation\_Directory>\InForm\bin\DBOra folder.

## Usage

```
pfcognosconfig "path_to_password_file"
```

Option	Parameter
path_to_password_file	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the parameter file is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is parameter=value. There is a new line for each parameter, and there are no spaces on a line.</p>

## Parameter file contents

The following parameters are required for the pfcognosconfig command password file:

Option	Description
trialname=<studyname>	<p>Name of the InForm study.</p> <p><b>Note:</b> Use the same case as when the study was created by the Central Designer deployment package.</p>
log_file=<outputlog>	<p>Name of output log. <b>Example:</b> nocreatorgcap.log. (Optional).</p>

Option	Description
namespace=<cap_namespace>	<p>Custom Authentication Provider (CAP) namespace. The default is informcap. The case of the value you enter here <i>must</i> be the same case as the entry in the Cognos Configuration utility. For example, if the entry in the Cognos Configuration utility is in lower case (informcap), the &lt;namespace&gt; option <i>must</i> also be informcap.</p> <p>Users can create additional namespaces manually in the Cognos Configuration tool. In this case, the name of the newly created namespace should be used in this field.</p>
gateway_uri=<gateway_uri>	<p>External public URI that communicates with the Cognos 8 BI Gateway Services from an end user's browser. This Cognos parameter is set in the Cognos 8 BI Gateway Customization for InForm wizard. The parameter setting is stored in the cogstartup.xml file.</p> <p><b>Example:</b> http:example.north.com/cognos8</p>
dispatcher_uri=<dispatcher_uri>	<p>Internal URI that the InForm server uses to communicate with the Cognos 8 BI server. This Cognos parameter is set in the InForm CRN wizard. The parameter setting is stored in the cogstartup.xml file and corresponds to the Reporting internal URI value on the Admin &gt; System Configuration page of the InForm application.</p> <p><b>Example:</b> http://example.north.com:9300/p2pd/servlet/dispatch.</p>
root_folder=/ <i>&lt;content&gt;</i> / <i>&lt;folder&gt;</i> [@name='<studyname>']	<p>The top-level reporting folder for the company. Default: /content/folder[@name='&lt;studyname&gt;']</p>
reporting_samedb=<true   false>	<p>True if the study and the Reporting database are on the same server.</p>
reporting_diffdb_server=<servername>	<p>Reporting database connection string (INS Name). Use if Reporting and the InForm study are in different databases.</p>
reporting_diffdb_pass=<rptpid>	<p>Reporting Trial password (reporting database study username must be the same as the InForm database study username, so the username need not be specified). Use if the study and the Reporting database are in different databases.</p>
trial_web_service=<URL>	<p>InForm authentication web service URL. This is a required parameter.</p>
register_db_server=<ServerName>	<p>Name of the server in which the study is registered with Cognos.</p>
register_db_user=<UserName>	<p>Study database user registered with Cognos.</p>
register_db_pass<UserPassword>	<p>Password for the database user registered with Cognos.</p>

Example:

Example command-line with a complete set of parameters to set up reporting DiffDB:

```
pf Cognosconfig "E:\scripts\pfconfigparams.txt"
```

# pfrinit

## Purpose

Performs the following tasks:

- Modifies the default Cognos 8 BI capabilities to fit the InForm reporting environment.
- Creates new Cognos 8 BI groups that match InForm reporting requirements.
- Sets Public folders permissions so that only Publishers can write to this public area.
- Maps study-specific reporting groups to the Cognos 8 BI groups and roles.
- Creates study-specific data connection and set permissions so that it is restricted for the use of study members only.
- Copies the InForm Trial Management (ITM) package present in the InForm folder and renames it as a study-specific ITM package.
- Creates a study folder that contains all the standard folders and reports that point to the study-specific package. Relative paths within reports will be modified to reflect the new location.
- Validates all copied reports so that all successfully validated reports are syntactically correct and able to run against the study-specific packages.

## Location

The InForm Application Server folder of the server where the Cognos Application Tier components are installed. For example, *<Installation\_Directory>\InForm\bin*.

## Usage

```
pfrinit "path_to_password_file"
```

Option	Parameter
path_to_password_file	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the parameter file is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is parameter=value. There is a new line for each parameter, and there are no spaces on a line.</p>

---

The recommended InForm study user for running pfrinit is **pfreportinguser**. You can change the password for this user using the InForm user interface as with any other user. After you change the password, however, you must run the PFADMIN command, using this syntax:

```
PFADMIN SETSERVER PFREPORTINGUSERPW <studyname>
```

When prompted, enter the pfreportinguser password.

This command sets a property used by Reporting when it needs the credentials of the **pfreportinguser**.

For more information, see *pfadmin* (on page 144).

## Parameter file contents

The following parameters are required for the pfrinit command password file:

- sysadmin\_namespace=Oracle Directory Server admin namespace. Type **ORACLEHS** (case-sensitive).
- sysadmin\_uid=User name for the Oracle Directory Server admin namespace. Type **crnsysadmin**.
- sysadmin\_pass=<crnsysadmin\_password> Password you chose when creating the crnsysadmin user.
- publisher\_namespace=Custom Authentication Provider (CAP) namespace. The default is informcap.

**Note:** The case of the value you enter here must be the same case as the entry in the Cognos Configuration utility. For example, if the entry in the Cognos Configuration utility is in lower case (informcap), the <namespace> option must also be informcap.

- publisher\_uid=*InForm\_study\_user*>InForm study user who is a member of the following Reporting groups:
  - Publishers.
  - Either Sponsor Users or Site Users.

**pfreportinguser** is the recommended study user to run pfrinit. This user is created during Reporting and Analysis installation.

- publisher\_pass=Password of the InForm study user.
- dispatcher\_url=Internal URI that the InForm server uses to communicate with the Cognos 8 BI server. This Cognos 8 BI parameter is set in the InForm CRN wizard. The parameter setting is stored in the cogstartup.xml file and corresponds to the Reporting internal URI value on the Admin > System Configuration page of the InForm application.

**Example:** http://<machine\_FQDN>:9300/p2pd/servlet/dispatch.

- trial\_name=Name of the InForm study.

**Note:** Use the same case as when the study was created by the Central Designer deployment package.

- reportdb\_pass=Password for the reporting schema user.

### Example

```
pfrinit "E:\scripts\init.txt"
```

## remove\_streams\_setup\_info\_diffdb

### Purpose

Deletes stream information from the study database and reporting database.

### Location

Folder where the reporting software is located, for example, <Installation\_Directory>\InForm Reporting\DBOra.

### Usage

```
remove_streams_setup_info_diffdb [/accountparams:"path_to_password_file"]
```

Option	Parameter
<code>/accountparams:"<i>path_to_password_file</i>"</code>	<p>When specified, includes the path to a text file that contains the user name and passwords required to run the command.</p> <p>If the accountparams option is not specified, the command prompts for the required user names and passwords.</p> <p>The format of the parameter file is parameter=value. There is a new line for each parameter, and there are no spaces on a line.</p>

### Parameter file contents

The following parameters are required for the remove\_streams\_setup\_info\_diffdb command password file:

- streams\_admin\_user\_rep\_passwd=Password for the reporting streams admin user.
- streams\_admin\_user\_trial\_pwd=Password for the study streams admin user.

### Example

```
remove_streams_setup_info_diffdb /accountparams:"e:\scripts\streampwd.txt"
```



# APPENDIX B

## Troubleshooting

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## Install issues

### Oracle MTS configuration is invalid

If the Oracle registry settings are not correct, you may get the following InForm core installer errors during the installation process:

- Oracle MTS configuration is invalid.
- Registry Settings: INVALID.
- XA Views: INVALID.

Possible solutions:

- If the installation wizard is still open:
  - 1 Click **Back** to display the **Database Configuration** window.
  - 2 Select the **Prep Oracle** checkbox.
  - 3 Click **Next** to proceed.

This runs the `informprepora.vbs` and `mtsora102.vbs` scripts.

- If the installation window has been closed, run `mtsora102.vbs` from the command line. The `mtsora102.vbs` file is in the `InstallSupport` folder of the InForm installation image.

### XA Views: INVALID

If you have tried the solution that is recommended in *Oracle MTS configuration is invalid* and still get this error, or if you run `mtsora102.vbs` from the command line and get a warning, the `xaview.sql` file may not be installed.

**Note:** This can happen for some Oracle client-only installations (multi-tier setup).

Possible solution:

- 1 Copy the `xaview.sql` file from another machine (running the same Oracle version) to your Oracle `rdbms\admin` directory.
- 2 Log in as SYS on a machine with `xaview.sql`.
- 3 Run `xaview.sql` against your InForm core instance.
- 4 Run `mtsora102.vbs` from the command line.

## Database connectivity

If you get a warning about database connectivity, make sure that:

- The connect string value is correct.
- The pfdbadmin password is valid.

If you get a message that the pfdbadmin user does not exist, create the user by doing one of the following:

- Select the **Prep Oracle** checkbox in the InForm installation wizard.
- Run the informprepora.vbs script located in the InstallSupport folder of the InForm installation image.

## Password error on InForm service start up

The InForm installation wizard cannot ensure that the password entered on the Account Configuration Window for the Local Machine User (pfUSR) meets the password requirements set for the machine. If you enter a password that does not conform to the Windows password requirements, an error will prevent the InForm service from starting.

- 1 To change the pfUser password enter the following command at a DOS prompt:  
pfadmin install
- 2 When prompted for the pfUSR password, enter a password that meets the password requirements.
- 3 Run the following command to start the InForm service:  
new start pfservice

Use the pfadmin view service command to verify that the InForm service has started.

## Uninstall issues

### Errors when removing a reporting schema

If you run the **deinstall\_reporting\_diffdb.sql** script to remove a reporting schema, and you receive the message **Reporting deinstallation aborted**, the uninstall fails and no reporting objects are removed.

The probable cause is a problem with the settings in the **configdiffdb.sql** file.

Check the **configdiffdb.sql** file to make sure that the settings are correct for the reporting schema that you want to remove. In particular, the uninstall scripts check for the existence of a tablespace. If the **configdiffdb.sql** file contains variables that refer to nonexistent tablespaces, update the file and rerun the uninstall script.

APPENDIX C

# Running the Cognos Customization wizards in silent mode

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## Steps for running the Cognos Customization wizards in silent mode

For implementations with multiple machines running the Cognos Content Manager, the Cognos Report Server and the Cognos Gateway Server, you can run the Cognos Customizations in silent mode.

To run the CRNConfig and CRNGatewayConfig setup wizards in silent mode:

- 1 Copy the **CRNConfig** and **CRNGatewayConfig** folders from the product image to a location that is accessible to the machines where you will run the wizards.
- 2 Populate the **setup.iss** files in each folder with the options you want to specify for the CRNConfig and CRNGatewayConfig wizards.

You can edit the setup.iss files manually, or you can run the each customization wizard in record mode.

For more information, see:

- *Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) in record mode* (on page 169).
  - *Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe) in record mode* (on page 171).
- 3 Run the configuration wizards in silent mode.

For more information, see:

- *Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) in silent mode* (on page 170).
- *Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe) in silent mode* (on page 172).

## Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) in record mode

- 1 Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) to install the customizations for the Cognos Content Manager Server or the Cognos Report Server.

For more information, see *Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe)—Cognos Content Manager / Cognos Report Server* (on page 92).

- 2 Open a Command Prompt window, and use the following command to run the Cognos Customization for InForm wizard in record mode.

This step records the installation options, and creates the setup.iss response file that you can use to run the wizard again in silent mode, on other machines

```
CRNConfig\setup.exe -r
-f1<path_to_configuration_files>\CRNConfig\setup.iss
```

Parameter	Description
-r	Runs the wizard in record mode. The options you select when the wizard runs are saved in the response file (setup.iss) identified by the -f1 parameter.
-f1	Identifies the location of the response file. There is no space between the -f1 flag and the response file location. For example: -f1E:\ReportingInstallFiles\CRNConfig\setup.iss.

## Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) in silent mode

- 1 Copy the **CRNConfig** folder from the product image to a location that is accessible to the machines where you will run the wizard.
- 2 Populate the **setup.iss** file in the folder with the options you want to specify for the Cognos Customization for InForm wizard.

You can edit the setup.iss files manually, or you can run the customization wizard in record mode. For more information, see *Run the Cognos Customization for InForm wizard (CRNConfig\setup.exe) in record mode* (on page 169).

- 3 Open a Command Prompt window, and run the following command:

```
CRNConfig\setup.exe -s
-f1<path_to_configuration_files>\CRNConfig\setup.iss
-f2<path_to_configuration_files>\CRNConfig\setup.log
```

Parameter	Description
-s	Runs the wizard in silent mode.
-f1	Identifies the location of the response file that contains the options for the wizard. There is no space between the -f1 flag and the response file location. For example:  -f1E:\ReportingInstallFiles\CRNConfig\setup.iss
-f2	Identifies the location of the log file for the wizard. There is no space between the -f1 flag and the log file location. For example:  -f1E:\ReportingInstallFiles\CRNConfig\setup.log

## Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe) in record mode

- 1 Run the Cognos Gateway Customization for InForm wizard (CRNGateway Config\setup.exe) to install the customizations for the Cognos Gateway Server.

For more information, see *Step 3: Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe) on the Cognos Gateway Server* (on page 82).

- 2 Open a Command Prompt window, and use the following command to run the Cognos Gateway Customization for InForm wizard in record mode.

This step records the installation options, and creates the setup.iss response file that you can use to run the wizard again in silent mode, on other machines

```
CRNGatewayConfig\setup.exe -r
-f1<path_to_configuration_files>CRNGatewayConfig\setup.iss
```

Parameter	Description
-r	Runs the wizard in record mode. The options you select when the wizard runs are saved in the response file (setup.iss) identified by the -f1 parameter.
-f1	Identifies the location of the response file. There is no space between the -f1 flag and the response file location. For example: -f1E:\ReportingInstallFiles\CRNConfig\setup.iss.

## Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe) in silent mode

- 1 Copy the **CRNGatewayConfig** folder from the product image to a location that is accessible to the machine where you will run the wizard.
- 2 Populate the **setup.iss** file in the folder with the options you want to specify for the Cognos Gateway Customization for InForm wizard.

You can edit the setup.iss file manually, or you can run the customization wizard in record mode. For more information, see *Run the Cognos Gateway Customization for InForm wizard (CRNGatewayConfig\setup.exe) in record mode* (on page 171).

- 3 Open a Command Prompt window, and run the following command:

```
CRNConfig\setup.exe -s
-f1<path_to_configuration_files>\CRNConfig\setup.iss
-f2<path_to_configuration_files>\CRNConfig\setup.log
```

Parameter	Description
-s	Runs the wizard in silent mode.
-f1	Identifies the location of the response file that contains the options for the wizard. There is no space between the -f1 flag and the response file location. For example:  -f1E:\ReportingInstallFiles\CRNConfig\setup.iss
-f2	Identifies the location of the log file for the wizard. There is no space between the -f1 flag and the log file location. For example:  -f1E:\ReportingInstallFiles\CRNConfig\setup.log