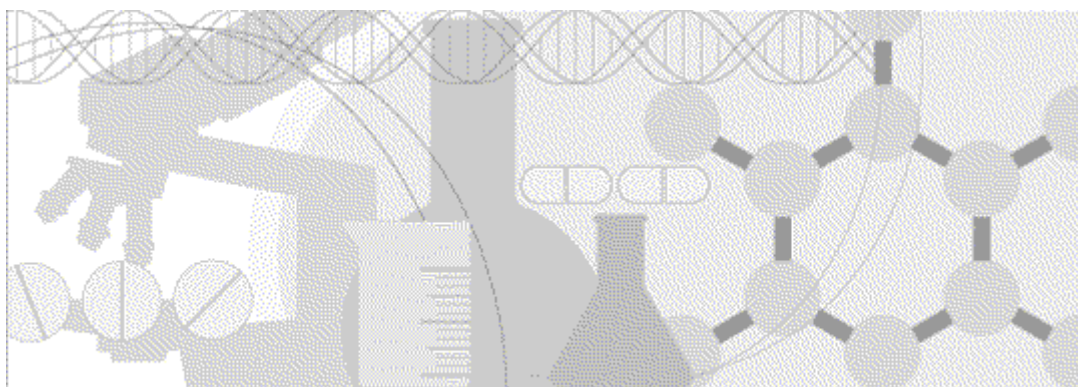


# Upgrade and Migration Guide

Oracle<sup>®</sup> Health Sciences InForm 5.5.2.2



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## Overview of this guide

The *Upgrade and Migration Guide* provides instructions for upgrading and migrating the InForm software and InForm Portal software to the current InForm release, and for upgrading the Cognos software for use with the Reporting and Analysis module.

## Audience

This guide is for database and system administrators who are responsible for upgrading or 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.

# Documentation

The product documentation is available from the following locations:

- **My Oracle Support** (<https://support.oracle.com>)—*Release Notes* and *Known Issues*.
- **Oracle Technology Network** (<http://www.oracle.com/technetwork/documentation>)—The most current documentation set, excluding the *Release Notes* and *Known Issues*.

If the software is available for download, the complete documentation set is available from the Oracle Software Delivery Cloud (<https://edelivery.oracle.com>).

All documents may not be updated for every InForm release. Therefore, the version numbers for the documents in a release may differ.

InForm documentation	
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>	The <i>Known Issues</i> document provides detailed information about the known issues in this release, along with workarounds, if available.
<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>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 software for use with the Reporting and Analysis module.
<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 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>	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.
<i>Reporting and Analysis Guide</i>	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.

InForm documentation	
Document	Description
<i>Reporting Database Schema Guide</i>	The <i>Reporting Database Schema Guide</i> describes the Reporting and Analysis database schema.
<i>Portal Administration Guide</i>	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.
<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>
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>
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>



## Documentation accessibility

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

## If you need assistance

### Access to Oracle Support

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

## Finding InForm information and patches on My Oracle Support

The latest information about the InForm application is on the Oracle Support self-service website, My Oracle Support. Before you install and use the InForm application, check My Oracle Support for the latest information, including *Release Notes* and *Known Issues*, alerts, white papers, bulletins, and patches.

### Creating a My Oracle Support account

You must register at My Oracle Support to obtain a user name and password before you can enter the site.

- 1 Open a browser to <https://support.oracle.com>.
- 2 Click the **Register** link.
- 3 Follow the instructions on the registration page.

### Finding information and articles

- 1 Sign in to My Oracle Support at <https://support.oracle.com>.
- 2 If you know the ID number of the article you need, enter the number in the text box at the top right of any page, and then click the magnifying glass icon or press **Enter**.
- 3 To search the knowledge base, click the **Knowledge** tab, and then use the options on the page to search by:
  - Product name or family.
  - Keywords or exact terms.

### Finding patches

You can search for patches by patch ID or number, product, or family.

- 1 Sign in to My Oracle Support at <https://support.oracle.com>.
- 2 Click the **Patches & Updates** tab.
- 3 Enter your search criteria and click **Search**.
- 4 Click the patch ID number.

The system displays details about the patch. You can view the Read Me file before downloading the patch.

- 5 Click **Download**, and then follow the instructions on the screen to download, save, and install the patch files.

## Finding Oracle documentation

The Oracle website contains links to Oracle user and reference documentation. You can view or download a single document or an entire product library.

## Finding Oracle Health Sciences documentation

For Oracle Health Sciences applications, go to the Oracle Health Sciences Documentation page at <http://www.oracle.com/technetwork/documentation/hsgbu-clinical-407519.html>.

**Note:** Always check the Oracle Health Sciences Documentation page to ensure you have the most up-to-date documentation.

## Finding other Oracle documentation

- 1 Do one of the following:
  - Go to <http://www.oracle.com/technology/documentation/index.html>.
  - Go to <http://www.oracle.com>, point to the **Support** tab, and then click **Product Documentation**.
- 2 Scroll to the product you need, and click the link.

## Finding prerequisite software for Oracle Health Sciences applications

Prerequisite software for Oracle Health Sciences applications is available from the following locations:

- Download the latest major or minor release from the Oracle Software Delivery Cloud (<https://edelivery.oracle.com/>).

For information on the credentials that are required for authorized downloads, click **FAQ** on the main page of the Oracle Software Delivery Cloud portal.

- Download subsequent patch sets and patches from My Oracle Support (<https://support.oracle.com>).

To find patch sets or patches, select the **Patches & Updates** tab.

If a previous version of prerequisite software is no longer available on the Oracle Software Delivery Cloud, log a software media request Service Request (SR). Previous versions of prerequisite software are archived and can usually be downloaded. After you open an SR, you can check its status:

- US customers: Call 1-800-223-1711.
- Outside the US: Check [www.oracle.com/us/support/contact/index.html](http://www.oracle.com/us/support/contact/index.html) for your local Oracle Support phone number.

For more information on logging a media request SR, go to My Oracle Support for Document 1071023.1: Requesting Physical Shipment or Download URL for Software Media (<https://support.oracle.com/epmos/faces/DocumentDisplay?id=1071023.1>).



## CHAPTER 1

# Upgrading and migrating to the InForm

## 5.5.2.2 release

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Hardware and software requirements for the InForm 5.5.2.2 release.....	4

## Overview of upgrading and migrating to this release

You can perform a new installation of the InForm 5.5.2.2 software, or you can upgrade and migrate to the InForm 5.5.2.2 software from a previous version of the InForm software.

To perform a new installation, see the *Installation Guide*.

To perform an upgrade and migration, perform the following steps, as needed:

- **Upgrade the database environment**—Use to upgrade to the Oracle 11g database software.

For more information, see *Upgrading the database environment* (on page 5).

**Note:** This step is required only if you are upgrading from an InForm 4.6, InForm 4.7, or InForm 5.0 study; it is not required if you are upgrading from an InForm 5.5 study.

- **Migrate the InForm studies**—Use to upgrade to the InForm 5.5.2.2 software from the InForm 4.6 SP2 release or later, or from any InForm 4.7, 5.0, or 5.5 release using a series of scripts.

Alternatively, for InForm 5.5.2 and 5.5.2.1 releases, you can perform an in-place upgrade. Oracle does not support an in-place upgrade for any InForm 4.6, 4.7, or 5.0 release, or for 5.5 releases prior to 5.5.2.

For more information, see *Upgrading and migrating the InForm studies* (on page 9).

- **Upgrade the reporting environment (Optional)**—Use to upgrade your reporting environment for any InForm 4.6 SP2 studies or later, or for any InForm 4.7, 5.0, or 5.5 studies using a series of scripts.

Alternatively, for InForm 5.5.2 and 5.5.2.1 releases, you can perform an in-place upgrade. Oracle does not support an in-place upgrade for any InForm 4.6, 4.7, or 5.0 release, or for 5.5 releases prior to 5.5.2.

This step is required only if you are using the Reporting and Analysis module.

For more information, see *Upgrading and migrating the reporting environment* (on page 47).

- **Migrate the InForm Portal software (Optional)**—Use to upgrade or migrate the InForm Portal software to the InForm 5.5.2.2 release.

This step is required only if you are using the InForm Portal software.

For more information, see *Upgrading and migrating the InForm Portal software* (on page 61).

## Requirements for the InForm studies you can migrate

You can upgrade to the InForm 5.5.2.2 software from the InForm 4.6 SP2 release or later, any InForm 4.7 release, any InForm 5.0 release, or any InForm 5.5 release.

There are no limitations on migrating studies from any InForm 4.7 release, any InForm 5.0 release, or any InForm 5.5 release.

However, you can only migrate InForm 4.6 studies that meet the following criteria.

- The study is deployed in the InForm 4.6 SP2 release or later.
- The study must be deployed in the English (en-US) language.

The Study Version in the Central Designer application indicates the study language.

You cannot migrate studies to the InForm 5.5.2.2 release that:

- Use synchronization.
- Were deployed in any of the following InForm releases, even if they were updated to the InForm 4.6 SP2 release:
  - InForm 4.0
  - InForm 4.1
  - InForm 4.5 prior to the InForm 4.5 SP3b release.

# Hardware and software requirements for the InForm 5.5.2.2 release

Before upgrading and migrating to the InForm 5.5.2.2 release, review the hardware and software requirements in the *Release Notes*.



## CHAPTER 2

# Upgrading the database environment

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## Overview of upgrading the database environment

This step is required only if you are upgrading from an InForm 4.6, InForm 4.7, or InForm 5.0 study; it is not required if you are upgrading from an InForm 5.5 study.

If you are upgrading to the InForm 5.5.2.2 release from an environment that uses the Oracle 9i database software, you must upgrade to the Oracle 11g database software.

**Note: Oracle recommends the Oracle 11g database software.**

- For information on which versions of the Oracle database software are supported, see the *Release Notes*.
- For information on installing the Oracle 11g database software, see your Oracle database documentation.
- For information on the database parameter settings, and guidance on installing and configuring the Oracle database software for the InForm environment, see the *Installation Guide*.

**Note: Oracle does not support an in-place or direct upgrade from the Oracle 9i database or Oracle 10g database to the Oracle 11g database software. You must export studies from an Oracle 9i environment or an Oracle 10g environment, import them into an Oracle 11g environment, and then proceed with the rest of the upgrade.**

## Upgrade to a new Oracle database environment

- 1 Create a new Oracle 10.2 database environment or a new Oracle 11.2 database environment.
- 2 Create new study databases in the new Oracle 10.2 environment or new Oracle 11.2 environment.

For more information, see your Oracle database documentation.



## CHAPTER 3

# Upgrading and migrating the InForm studies

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## Preparing to upgrade or migrate the InForm studies

- 1 Review the following topics:
  - *Database and file customizations* (on page 11).
  - *Character set differences* (on page 11).
  - *Query length limitations* (on page 12).
  - *Clinical view names for reports, RDEs, and data mappings* (on page 12).
  - *Oracle 10g database and Oracle 11g database import recommendations* (on page 12).
  - *Changed resource files* (on page 14).
- 2 *Create backup files* (on page 16).
- 3 *Prepare the InForm 4.6 study database schema for backup* (on page 17).
- 4 Back up the InForm study database.
  - *Back up an InForm 4.6, InForm 4.7, or InForm 5.0 study database* (on page 18).
  - *Back up an InForm 5.5 study database* (on page 19).
- 5 *Record study, customer-defined database, and connection information* (on page 20).
- 6 *Create a new Central Designer deployment package* (on page 20).

## Considerations before you migrate

### Database and file customizations

- Database schema objects created or customized outside of the standard InForm application are not supported for upgrade and can cause errors during the migration process.

**Note:** Oracle does not support migrating tables created outside of the standard InForm application schema or by Enterprise Adoption customers. These tables might cause errors when you import the study DMP files.

- Any schema customization must have an upgrade path that results in a valid InForm 5.5 schema at the point in the migration where you create the review schema. For more information, see *Create new database objects for the review schema* (on page 28).

You can record the customizations, and reintroduce them after you complete the standard migration procedures. Such customizations might include changes to:

- Views
- Functions
- Procedures
- Packages
- Triggers

**Note:** If any schema objects such as views, functions, procedures, packages, or triggers are invalid, pfdadmin RECREATEREVIEWSCHEMA fails. You must repair any invalid schema objects before you can rerun pfdadmin RECREATEREVIEWSCHEMA.

- Any study resources that have been customized for deployment must be addressed separately before migration.

The customized changes must be modified to comply with the InForm 5.5 software and InForm 5.5 MedML schema and reinstalled so that the customized changes are not lost due to the upgrade.

### Character set differences

Character set differences between the InForm 4.6 release and the InForm 5.5 releases might cause issues with table column widths.

To prevent these issues, you must prepare the InForm 4.6 database schemas before you migrate.

For more information, see:

- *Prepare the InForm 4.6 study database schemas for backup* (on page 17).
- *Prepare the InForm 4.6 InForm Portal database schema for backup* (on page 62).

## Query length limitations

If you are migrating a study from an InForm 4.6 release, you need to review the query lengths.

If a query includes Latin-1 characters and is close to the query text size limit (4000 bytes), the query may exceed the size limit after the Latin-1 characters are converted to UTF-8 characters during the migration to the InForm 5.5.2.2 release.

If the query size exceeds the field limit, the query will be truncated.

Contact Oracle Global Support if you find any queries that have been truncated during the migration.

## Clinical view names for reports, RDEs, and data mappings

Clinical view names for reports, RDEs, and data mappings that contain more than 30 characters are truncated during the migration, and are appended with a sequence number.

After the migration, any truncated view names may not map to the forms as expected.

The view name is the combination of the form name and the itemset name. Therefore, this can occur if your study contains forms with two or more itemsets with names that are the same for the first 30 characters.

## Oracle 10g database and Oracle 11g database import recommendations

Oracle recommends the following when importing previously exported studies into an Oracle 10g database or Oracle 11g database.

- Use single-user imports for importing study data into the new Oracle database.

**Note: Do not import streams metadata from an Oracle 9i database to an Oracle 10g database, or from an Oracle 10g database to an Oracle 11g database.**

Before you import the study into the study database, set the Oracle database import parameters **STREAMS\_CONFIGURATION** and **STREAMS\_INSTANTIATION** to **N**.

- Do not import the **STRMADMIN** user and **STRMADMIN** proxy user into the Oracle 10g database or the Oracle 11g database.
- Set **grants=N** for the import.

If you set **grants=Y**, grants to the streams proxy user from the Oracle 9i database or the Oracle 10g database may be attempted, but might not work, causing error messages to appear during the import.

- If you are using the Data Pump export and import utilities (**expdp** and **impdp**), apply the **EXCLUDE=OBJECT\_GRANT** parameter when importing study data into the new Oracle database.

**Note: If you are importing study databases that were used in an environment that includes the InForm Adapter application, you might encounter Oracle error 31167: XML nodes over 64K in size cannot be inserted. You can ignore this error.**



**Note:** If an export was done for a study schema that contained the Reporting and Analysis module installed in the same database as the study, messages might appear, saying that the database tables contain a ROWID column, and that values might be obsolete. You can ignore these messages. The messages are related to the materialized views that are being imported. The reporting upgrade script you run later removes the materialized views that were imported.

**Note:** If an export was done for a study schema that contained the Reporting and Analysis module installed in a different database from the study, an error message might appear, saying that the system could not create a database link. You can ignore this message. This database link is not necessary for the study. If it exists after import, it is removed by the reporting upgrade scripts that you run later.

## Changed resource files

If you customized any resource files, back them up before you upgrade to avoid losing your customizations.

After upgrading, you should review any customizations you made to resources in your previous release and determine whether to reapply them to this release. To reinstall customized resource files, use the MedML Installer utility. For more information, see the *Utilities Guide*.

### Files updated in InForm release 5.5.2.2

... \InForm \XMLBase

sysVolume.xml

... \InForm \XMLBase \Help

Version.htm

... \InForm \Resources \Enu and ... \InForm \Resources \Jpn

pfscript.js

calendar.js

### Files updated in InForm release 5.5.2.1

... \InForm \XMLBase

sysVolume.xml

... \InForm \XMLBase \Help

Version.htm

## Files updated in InForm release 5.5.2

...\InForm\Resources\Enu and ...\InForm\Resource\Jpn

FORGOTPWD.HTML

FORGOTPWDCORRECT.HTML

Login.css

Login.html

formhelper.js

resetpwdnotification.txt

...\InForm\XMLBase

sysVolume.xml

sysform\_Password.xml

...\InForm\XMLBase\Help

Version.htm

## Files updated in InForm release 5.5.1

...\InForm\Resources\Enu and ...\InForm\Resource\Jpn

EQACTITLEENROLLAUDITFORM.HTML

EQACTitleNoFrame.html

Formhelper.js

Mainstyles.css

Pfscript.js

Printscripts.js

QueryFormActionBindScript.html

QueryFormActionChangedScript.html

VertDeepNoEditRadioButton.html

VertNoEditRadioButton.html

...\InForm\XMLBase

SysVolume.xml

SysVolume.xmltmpl

...\InForm\XMLBase\Help

Version.html

Version.htmltmpl

## Create backup files

- 1 Stop all studies and servers, using the following command:

```
PFADMIN STOP SERVER <servername> /Trials
```

- 2 Back up all customized screens, images, reports, and database scripts, such as views, so they can be reapplied after the upgrade.

Also, back up any other files you might have created or copied to the InForm folder tree, including files in the **InForm\Trials** folder.

Examples:

- Changes to reason drop-down lists on CRF detail pages.
- Logo files and other images.

For more information, see *Database and file customizations* (on page 11).

- 3 If you are using the Reporting and Analysis module or if you made any customizations, save and back up the current registry settings from all servers, including the InForm server and the Reporting and Analysis server in **HKEY\_LOCAL\_MACHINE\SOFTWARE\Phase Forward\AuthenticationFilter**.

**Note:** These values are reset to their defaults when you re-install the InForm software or when you run the Reporting and Analysis installer.

- 4 Back up all of the files for each study.

These objects are located in the *<InstallationDirectory>*\InForm\Trials folder.

- 5 Create a backup of the Central Designer rule engines.

The rule engine for studies that are created in the Central Designer application is saved in the *<InstallationDirectory>*\InForm\Bin\DesignerVersion<Version\_Number> folder.

- To create a backup, copy all the files in every DesignerVersion<Version\_Number> folder to another location.

These folders include the Central Designer rule engine, external functions, COM interoperability libraries, and configuration files.

- 6 If the CIS software is installed on the InForm application server, you must uninstall it.

Use the **Control Panel > Add/Remove Programs** option to remove the CIS software.

## Prepare the InForm 4.6 study database schema for backup

If you are migrating an InForm 4.6 study, you must prepare the InForm 4.6 study database schema for backup before migrating to the InForm 5.5 release.

**Note:** Character set differences between the InForm 4.6 release and the InForm 5.5 releases might cause issues with table column widths. Perform this step to prevent these issues.

- 1 Copy the InForm\InstallSupport folder from the downloaded ISO image to the InForm 4.6 application server.
- 2 Run **UpgradeTrialSchema.cmd** (located in the InForm\InstallSupport folder) on the InForm 4.6 application server to prepare the InForm 4.6 study schemas for backup, using the following syntax:

```
UpgradeTrialSchema.cmd <TNS_Service_Name> <System_User> <System_Password>
<Trial_UserID> <Trial_User_Password>
```

where:

- **TNS\_Service\_Name**—TNS name for the database instance.
- **System\_User**—Oracle database system user.
- **System\_Password**— Password for the Oracle database system user.
- **Trial\_UserID**—Owner of the study database schema.
- **Trial\_User\_Password**—Password for the owner of the study database schema.

The UpgradeTrialSchema command creates a log file **Install\_upgrade\_log\_<current-date>\_<current-time>.txt** in the current directory.

**Note:** If error messages indicating that the system cannot find the paths specified for the System Product Locale and the System Study Locale appear, disregard the messages and continue with the migration.

- 3 If your InForm 4.6 study has reporting installed, run **deinstall\_reporting\_diffdb.sql** and **remove\_streams\_setup\_info\_diffdb.sql** to remove the reporting objects in the study schema.

**Note:** If you are using a single database for your study and reporting, run only **deinstall\_reporting\_samedb.sql** to remove the reporting objects.

For more information, see *Remove the streams between the InForm study schema and the Reporting schema, and uninstall the Reporting schema* (on page 53).

## Back up the InForm study database

### Back up the InForm 4.6, InForm 4.7, or InForm 5.0 study database

If you are migrating an InForm 4.6, InForm 4.7, or InForm 5.0 study, backing up the InForm study database is required. You will import the DMP file you create in this step during the migration to the InForm 5.5.2.2 release. For more information, see *Import the DMP files* (on page 24).

To back up an InForm 4.6, InForm 4.7, or InForm 5.0 study database to a DMP file:

- 1 Copy the InForm\InstallSupport folder from the downloaded ISO image to the InForm application server.
- 2 Run **ExportDBUpgrade.cmd** (located in the InForm\InstallSupport folder) on the InForm application server to back up each InForm study database as a DMP file, using the following syntax:

```
ExportDBUpgrade.cmd <DMP_file> <TNS_Service_Name> <Trial_UserID>
<Trial_User_Password>
```

where:

- **DMP\_file**—Name of the DMP file, using the full path.

**Note:** Do not include spaces in the DMP file name.

- **TNS\_Service\_Name**—TNS name for the database instance.
- **Trial\_UserID**—Owner of the InForm study database schema.
- **Trial\_User\_Password**—Password for the owner of the InForm study database schema.

Example:

```
ExportDBUpgrade.cmd D:\PFSP46.dmp TRIAL1 PFST46UID PFST46PID
```

The ExportDBUpgrade command creates a log file **<DMP\_file>.log** in the current directory.

**Note:** Customer-defined databases or randomization databases that are not part of the study database must be exported using standard database commands. For more information, see the Oracle Database documentation.

## Back up the InForm 5.5 study database

If you are migrating an InForm 5.5 study, backing up the InForm study database is considered good clinical practice but is not required. You must ensure that the **TNS\_Service\_Name** entry points to the study instance, and that the **Trial\_UserID** and the **Trial\_User\_Password** are the same as those used in the InForm 5.5 installation.

To back up the InForm 5.5 study database to a DMP file:

- 1 Copy the InForm\InstallSupport folder from the downloaded ISO image to the InForm database server.
- 2 Run **ExportDB.cmd** (located in the InForm\InstallSupport folder) on the InForm database server to back up each InForm study database as a DMP file, using the following syntax:

```
ExportDB.cmd <TNS_Service_Name> <Physical_Directory_Path> <DMP_File_Name>
<System_User> <System_User_Password> <Study_User> <Study_User_Password>
<Target_Database_Version>
```

where:

- **TNS\_Service\_Name**—TNS name for the database instance.
- **Physical\_Directory\_Path**—Location of the directory that you created on the InForm database server for the data pump.
- **DMP\_File\_Name**—Name of the DMP file to export.

**Note:** Do not include spaces in the DMP file name.

- **System\_User**—Oracle database system user.
- **System\_Password**—Password for the Oracle database system user.
- **Study\_User**—Owner of the system database.
- **Study\_User\_Password**—Password for the owner of the system database.
- **Target\_Database\_Version**—Version of the database where the DMP file will be exported. This is required if the target database is an older version than the database exporting the DMP file.

For example:

```
ExportDB.cmd trial11 /u01/app/oracle/dp_export pfst46.dmp system oracle
pfst46uid pfst46pid
```

The ExportDB command creates the log file **<DMP\_File>.log**.

**Note:** Customer-defined databases or randomization databases that are not part of the study database must be exported using standard database commands. For more information, see the Oracle Database documentation.

## Record study, customer-defined database, and connection information

- 1 Run the pfadmin command using the following syntax:  

```
pfadmin view service
```
- 2 Record the following information for each server and study:
  - Study name, UID, and PID.
  - CDD DSN, UID, and PID.
- 3 Record the database connection information.

## Create a new Central Designer deployment package

**Note:** This step is required only if you are upgrading the Central Designer application to the Central Designer 2.0.5.1 release or the Central Designer 2.1.1.3 release.

The InForm 5.5.2.2 software requires a new rules engine from the Central Designer application.

- 1 Update the Central Designer project for each study to one of the following versions:
  - Central Designer 2.0.5.1
  - Central Designer 2.1.1.3
- 2 Create a new deployment package to update each study on the InForm application server.

For more information, see the Central Designer *InForm Design Guide*.

**Note:** For each study being updated, make sure all the languages in the original study are selected.



# Upgrading or migrating InForm 4.6, InForm 4.7, or InForm 5.0 studies

Oracle does not support an in-place upgrade for any InForm 4.6, InForm 4.7, or InForm 5.0 release.

To upgrade or migrate a study from the InForm 4.6 SP2 release or later, any InForm 4.7 release, or any InForm 5.0 release to the InForm 5.5.2.2 release on the same or a new machine, perform the following steps:

- 1 ***Uninstall the existing version of the InForm software*** (on page 22).
- 2 ***Install the InForm 5.5.2.2 software*** (on page 22).
- 3 ***Create the database user*** (on page 23).
- 4 ***Grant the database user privileges*** (on page 23).
- 5 ***Create tablespaces other than INFORM*** (on page 23).
- 6 ***Import the DMP files*** (on page 24).
- 7 ***Set up the InForm servers, studies, and customer-defined databases*** (on page 25).
- 8 ***Restore the Central Designer rule engines to the original location*** (on page 26).
- 9 ***Upgrade the study schemas to the InForm 5.5.2.2 release*** (on page 27).
- 10 ***Update the statistics for the InForm studies*** (on page 27).
- 11 ***Start the InForm server*** (on page 27).
- 12 ***Create new database objects for the review schema*** (on page 28).
- 13 ***Set the MEDMLINSTALLER server*** (on page 28).
- 14 ***Upgrade the study resources*** (on page 29).
- 15 ***Set the locale for InForm 4.6 sites and users*** (on page 29).
- 16 ***Perform the final study configuration*** (on page 30).
- 17 ***Restore the Windows registry settings*** (on page 30).
- 18 ***Install or upgrade the InForm Adapter software*** (on page 31).
- 19 ***Start the InForm studies*** (on page 31).
- 20 ***Install the Central Designer deployment package*** (on page 31).
- 21 ***Update the Screening form*** (on page 31).

## Uninstall the existing version of the InForm software

Before you can install the InForm 5.5.2.2 software on the same machine where you installed a previous version of the InForm software:

- 1 Uninstall the previous version of the InForm software. This step is required.
- 2 Optionally, create a database DMP file of each study database.

**Note:** If you are using Reporting, you must uninstall the Reporting schema before you create the DMP file of the study data. For more information, see *Back up the InForm 4.6, InForm 4.7, or InForm 5.0 study database* (on page 18) or *Back up the InForm 5.5 study database* (on page 19).

## Install the InForm 5.5.2.2 software

**Note:** Before you install the InForm 5.5.2.2 software, make sure your environment meets the requirements for this release. For more information, see the *Release Notes*.

- Install and configure the InForm software, using the Installation Wizard, as described in the *Installation Guide*.

On the Database Configuration page:

- Select the **Install Admin DB** option.
- Set the **Prep Oracle** option.
  - Deselect the **Prep Oracle** option if you plan to install the InForm software on the same machine.
  - Select the **Prep Oracle** option if you plan to install the InForm software on a new machine.

## Create the database user

- Run **DropDB.cmd** (located in the `<Installation_Directory>\InForm\Bin\DBOra` folder) to create the database user, using following syntax:

```
DropDB.cmd <TNS_Service_Name> <System_User> <System_Password>
<To_Trial_UserID> <To_Trial_UserID_Password>
```

where:

- **TNS\_Service\_Name**—TNS name for the database instance.
- **System\_User**—Oracle database system user.
- **System\_Password**— Password for the Oracle database system user.
- **To\_Trial\_UserID**—Owner of the study schema created by the import.
- **To\_Trial\_UserID\_Password**—Password for the owner of the study schema created by the import.

For example, the command for the database schema owner PFST46UID is:

```
DropDB.cmd TRIAL1 SYSTEM ORACLE PFST46UID PFST46PID
```

The DropDB command creates the log file **dropdb.err**.

## Grant the database user privileges

- Run **GrantAccess.sql** (located in the `<Installation_Directory>\InForm\Bin\DBOra` folder) using the following syntax:

```
sqlplus <system_user>/<system_password>@<trial_instance> @GrantAccess.sql
<trial_userid>
```

where:

- **trial\_userid**—The name of the database user.

For example:

```
sqlplus system/oracle@trial1 @GrantAccess.sql PFST46UID
```

## Create tablespaces other than INFORM

Create the tablespaces, other than INFORM, used by the original study, using Oracle tools/commands. The INFORM tablespace exists by default.

For more information on creating the additional tablespaces, see the *Installation Guide*.

## Import the DMP files

**Note:** Before importing the DMP files, see *Oracle 10g database and Oracle 11g database import recommendations* (on page 12).

**Note:** Oracle does not support migrating tables created outside of the standard InForm application schema or by Enterprise Adoption customers. These tables might cause errors when you import the study DMP files.

- Run `ImportDBUpgrade.cmd` (located in the `<InstallationDirectory>\InForm\Bin\DBOra` folder) to import the studies from the study schema DMP files, using the following syntax:

```
ImportDBUpgrade.cmd <DMP_file> <TNS_Service_Name> <System_User>
<System_Password> <From_Trial_UserID> <To_Trial_UserID>
<To_Trial_UserID_Password>
```

where:

- **DMP\_file**—Name of the file containing the study backup.
- **TNS\_Service\_Name**—TNS name for the database instance.
- **System\_User**—Oracle database system user.
- **System\_Password**—Password for the Oracle database system user.
- **From\_Trial\_UserID**—Owner of the database schema being migrated.
- **To\_Trial\_UserID**—Owner of the study schema created by the import.
- **To\_Trial\_UserID\_Password**—Password for the owner of the study schema created by the import.

Example:

```
ImportDBUpgrade.cmd D:\PFST46.dmp TRIAL1 SYSTEM ORACLE PFST46UID PFST46UID
PFST46PID
```

The `ImportDBUpgrade` command creates a log file `<DMP_file>.log` (for example, `pfst46.log`).

**Note:** Disregard import errors regarding the database link and the proxy user. These errors only appear if the study that you have exported included the Reporting and Analysis module. In addition, disregard import errors regarding rule triggers. Rule triggers are refreshed during the study schema update.

**Note:** Previously exported customer-defined databases or randomization databases that are not part of the study database must be imported using standard database commands. For more information, see the Oracle Database documentation.

## Set up the InForm servers, studies, and customer-defined databases

- 1 To define each server, use the following command and syntax:

```
PFADMIN SETUP SERVER <servername>
```

- 2 To define each study, use the following command and syntax:

```
PFADMIN SETUP TRIAL <trialname> <servername> /db <oracle_connect_string>
<trialUid> <trialPid>
```

where:

- **trialname**—Name of the study you are defining.
  - **servername**—Name of the server on which the study is located.
  - **oracle\_connect\_string**—String that the InForm server uses to connect to the Oracle Instance for the study.
  - **trialUid**—Owner of the study database schema.
  - **trialPid**—Password for the owner of the study database schema.
- 3 To set up the customer-defined databases using the NoSchema option, use the following command and syntax:

```
PFADMIN SETUP CDD <Refname> <trialname> /db <oracle_connect_string> <DSN>
<trialUid> <trialPid> [NoSchema]
```

where:

- **RefName**—RefName of the CDD.
- **trialname**—Name of the study you are defining.
- **oracle\_connect\_string**—String that the InForm server uses to connect to the Oracle Instance for the study.
- **DSN**—Data Source Name of the CDD.
- **trialUid**—Owner of the study database schema.
- **trialPid**—Password for the owner of the study database schema.
- **[NoSchema]**—Indicates that no new CDD schema should be created during setup.

**Note:** Be sure to use the same RefName, study name, and server name you used for the study before the migration.

## Restore the Central Designer rule engines to the original location

- 1 Copy the DesignerVersion<version number> folder or folders you backed up to the InForm installation directory <InstallationDirectory>/InForm/bin.
- 2 Register the Central Designer rule engine DLL for each DesignerVersion<version\_number> folder that you copied.
  - a Check on your system for the location of the latest copy of RegAsm.exe.
    - For the Central Designer version 1 rule engine—RegAsm.exe version 2.0.50727, typically located at: **C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727**.
    - For the Central Designer version 2 rule engine—RegAsm.exe, version 4.0.30319, typically located at: **C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319**.
  - b For each DesignerVersion1.x.xx.x folder that you restore, execute the following command, all on one command line:

```
C:\Windows\Microsoft.NET\Framework\v2.0.50727\RegAsm.exe /codebase
<InstallationDirectory>\InForm\bin\DesignerVersion<version
_number>\PhaseForward.Designer.InFormRuleEngine.dll
```

For each DesignerVersion2.x.xx.x folder that you restore, execute the following command, all on one command line:

```
C:\Windows\Microsoft.NET\Framework\v4.0.30319\RegAsm.exe /codebase
<InstallationDirectory>\InForm\bin\DesignerVersion<version
_number>\Oracle.Designer.InFormRuleEngine.dll
```

where:

- **InstallationDirectory**—The directory in which the InForm software is installed.
- **DesignerVersion<version\_number>**—The name of each DesignerVersion folder that you copied from the bin folder.

**Note:** The `/codebase` flag is required. If you run RegAsm without the codebase flag, the rule engine registers, but rules do not run properly in the study. This prevents the enrollment of new subjects and the submission of some forms.

- 3 Restore the files contained in the folder <InstallationDirectory>\InForm\Trials\<trial\_name>.

## Upgrade the study schemas to the InForm 5.5.2.2 release

The `UpgradeTrialSchema` command upgrades studies from the InForm 4.6 SP2 release and later, all InForm 4.7 releases, and all InForm 5.0 releases to the InForm 5.5.2.2 release. The command terminates if the InForm release is different from these releases.

- Run `UpgradeTrialSchema.cmd` (located in the `<InstallationDirectory>\InForm\Bin\DBOra` folder) on the InForm 5.5 application server to upgrade each study schema to the InForm 5.5.2.2 release, using the following syntax:

```
UpgradeTrialSchema.cmd <TNS_Service_Name> <System_User> <System_Password>
<Trial_UserID> <Trial_UserID_Password>
```

where:

- **TNS\_Service\_Name**—TNS name for the database instance.
- **System\_User**—Oracle database system user.
- **System\_Password**— Password for the Oracle database system user.
- **Trial\_UserID**—Owner of the study database schema.
- **Trial\_UserID\_Password**—Password for the owner of the study database schema.

For example, to upgrade the study schema PFST50UID

```
UpgradeTrialSchema.cmd TRIAL1 SYSTEM ORACLE PFST50UID PFST50PID
```

The `UpgradeTrialSchema` command creates a log file `Install_upgrade_log_<current-date>_<current-time>.txt` in the current directory.

## Update the statistics for the InForm studies

- Run `updatec.sql` for each study, using the following command and syntax:

```
SQLPLUS PFDBADMIN/PFDBADMIN@<trial_instance> @updatec.sql <trialuserid>
```

## Start the InForm server

- Start the InForm server for the studies, using the following command:

```
PFADMIN START SERVER <servername>
```

## Create new database objects for the review schema

Before you create the new database objects for the review schema, see *Database and file customizations* (on page 11).

**Note:** The review schema requires about two times the space as the study schema. Be sure to check your disk space and tablespace allocations to ensure adequate resources before you create the review schema tables.

**Note:** The time needed for creating the review schema tables is proportionate to the size of your study. This step can take quite a while.

- Run the **pfadmin RECREATEREVIEWSCHEMA** command using the following syntax to apply any fixes to the review schema and to create new tables for the review schema:

```
pfadmin RECREATEREVIEWSCHEMA <Trial_Name> <StudyLocale_ISO_name>
```

where:

- **Trial\_Name**—Name of the study for which you are creating the review schema.
- **StudyLocale\_ISO\_name**—Name of the InForm Study Locale language.  
For InForm 4.6 studies, you must use en-US as the *<StudyLocale\_ISO\_name>*.  
For InForm 5.0 studies you can pick any of the supported Study Locales.

The pfadmin RECREATEREVIEWSCHEMA command creates the following log files in the *<InstallationDirectory>\InForm\Bin\DBOra\ReviewSchema* folder:

- Install\_Clinical\_<trialname>\_<currentdate>\_<currenttime>.txt
- Install\_Fixed\_<trialname>\_<currentdate>\_<currenttime>.txt

**Note:** If any schema objects such as views, functions, procedures, packages, or triggers are invalid, pfadmin RECREATEREVIEWSCHEMA fails. You must repair any invalid schema objects before you can rerun pfadmin RECREATEREVIEWSCHEMA.

## Set the MEDMLINSTALLER server

You must set the MEDMLINSTALLER to the current server in order to install the new resources.

The study must be in Design mode before running the commands.

- 1 Start each study in Design mode, using the following command and syntax:

```
PFADMIN START TRIAL <trialname> /DESIGN
```

- 2 Set the MEDMLINSTALLER machine for each study, using the following commands and syntax:

```
PFADMIN SETSERVER MEDMLINSTALLER <trialname> <computername>
```

```
PFADMIN SETSERVER SITE <trialname> <computername>
```

where:

- **computername**—The unqualified name of the host machine.



## Upgrade the study resources

- 1 Run **UpgradeResources.cmd** (located in the *<InstallationDirectory>\InForm\Bin\DBOra* folder) to upgrade the resources and the XMLBase changes for each study, using the following syntax:

```
UpgradeResources.cmd <trialname> <InForm_version_upgraded_from> [SILENT]
```

where:

- **InForm\_version\_upgraded\_from**—4.6, 4.7, or 5.0.
  - **[SILENT]**—Option that suppresses parameters that are normally supplied interactively with the command.
- 2 During the upgrade process from the InForm 4.6 release or the InForm 4.7 release, you are asked if you want to change the System Config QueryMaxLength parameter to 350 characters.
    - Type **Y** and press ENTER to change the value.

If you used the SILENT option when you ran the command, the QueryMaxLength is changed automatically.

The product locale and study locale of the system user are set to en-US if they do not already exist.

## Set the locale for InForm 4.6 sites and users

This step is required only when you migrate InForm 4.6 studies to the InForm 5.5.2.2 release.

InForm 4.7 studies, InForm 5.0 studies, and InForm 5.5 studies have locale attributes associated with sites and users, but InForm 4.6 studies do not. When you migrate studies from the InForm 4.6 release to an InForm 5.5 release, these properties must be added to existing sites and users.

- 1 Run **PFInFormMigrate.exe** (located in the *<InstallationDirectory>\InForm\Bin* folder) to associate English locale attributes to sites and users, and to create the Upgrade MedML file UpgradeSitesAndUsers.xml, using the following syntax:

```
PFInFormMigrate.exe <TNS_Service_Name> <Trial_UserID>  
<Trial_UserID_Password>
```

where:

- **TNS\_Service\_Name**—TNS name for the database instance.
- **Trial\_UserID**—Owner of the database schema.
- **Trial\_UserID\_Password**—Password for the owner of the database schema.

Example:

```
PFInFormMigrate.exe TRIAL1 PFST46UID PFST46PID
```

The Upgrade MedML file UpgradeSitesAndUsers.xml is created in the *<InstallationDirectory>\InForm\XMLBase* folder.

- 2 Open the **UpgradeSitesAndUsers.xml** file you created in step 1, and check the site MedML definitions for warnings on the TIMEZONE attribute.

If the Time Zone specified for a site in the InForm 4.6 study does not match the time zones defined for the operating system on the InForm application server, the MedML for the given site contains a warning for the TIMEZONE attribute along with the original Time Zone.

- 3 If a warning appears, change the TIMEZONE attribute to a valid Time Zone key name in the InForm server registry before proceeding to the next step.

Time Zones are located at

**HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Time Zones** in the registry.

- 4 Ensure the XML file is well formed after the changes.
- 5 Run **UpgradeSitesAndUsers.cmd** (located in the *<InstallationDirectory>*\InForm\Bin\DBOra folder) to install UpgradeSitesAndUsers.xml, using the following syntax:

```
UpgradeSitesAndUsers.cmd <TrialName>
```

where:

- **TrialName**—The name of the study being migrated.

For example, run the following command to upgrade sample study PFST46:

```
UpgradeSitesAndUsers.cmd PFST46
```

The UpgradeSitesAndUsers command sets the product locale and study locale of all users except the system user to en-US. Similarly, all sites have site locale set to en-US and the User Name Order property set to **F** (given name), **L** (surname).

## Perform the final study configuration

- 1 Finish configuration of the studies related to customer-defined database and randomization.

For more information, see the *Study and Reporting Setup Guide*.

- 2 Reapply any customizations.

For more information, see the *Study and Reporting Setup Guide*.

## Restore the Windows registry settings

- 1 Restore the Windows registry settings for **HKEY\_LOCAL\_MACHINE\SOFTWARE\Phase Forward\AuthenticationFilter**.
- 2 Restart IIS.

## Install or upgrade the InForm Adapter software

Perform this step if you are currently using, or plan to start using, the InForm application with products that require the InForm Adapter software.

To install or upgrade the InForm Adapter software, refer to the InForm Adapter *Installation and Configuration Guide* and the InForm Adapter *Release Notes*.

For information about release compatibility, see the *Release Notes*.

**Note:** The InForm Adapter software and the InForm Server Adapter software, as well as the documentation images, are available from the Download Center.

## Start the InForm studies

- Start each study, using the following command and syntax:

```
PFADMIN START TRIAL <trialname>
```

## Install the Central Designer deployment package

**Note:** This step is required only if you are upgrading the Central Designer application to the Central Designer 2.0.5.1 release or the Central Designer 2.1.1.3 release.

- For each study, download and install the Central Designer deployment package on the InForm application server.

For more information, see the Central Designer *InForm Design Guide*.

## Update the Screening form

**Note:** This step is required only if you are upgrading the Central Designer application to the Central Designer 2.0.5.1 release or the Central Designer 2.1.1.3 release.

After installing the new Central Designer deployment package, you must update the Screening form and the revision number for each study on the InForm application server to complete the upgrade to the InForm 5.5.2.2 release.

- If your studies are self-hosted:
  - Copy **CD\_UpgradeUtility.zip** (available for download from My Oracle Support with the Central Designer software) to the InForm application server and extract the contents.  
CD\_UpgradeUtility.zip contains two files:
    - CD\_UpgradeUtility.bat
    - RWR.sql

- 2 Run the **CD\_UpgradeUtility.bat** command using the following syntax:

```
CD_UpgradeUtility.bat <studyname> <study_userID> <study_userID_password>
<tns_service_name>
```

where:

- **studyname**—Name of the study.
- **study\_userID**—Owner of the InForm study database schema.
- **study\_userID\_password**—Password for the owner of the InForm study database schema.
- **tns\_service\_name**—TNS name for the database instance.

For example,

```
CD_UpgradeUtility.bat pfst55 pfst55uid pfst55pid trial1
```

- 3 Restart the study by typing the following commands in the order listed:

```
PFADMIN STOP TRIAL <studyname>
```

```
PFADMIN START TRIAL <studyname>
```

- If your studies are hosted in the Oracle Cloud for Industry, submit a FastForward request:
  - 1 Complete the FastForward Implementation Instructions form.
    - In the Central Designer Deployment Package section, type the name of the deployment package executable file.
    - In the Command File section, type **CD\_UpgradeUtility.bat**.
  - 2 Submit the ticket and attach both the Deployment Package executable and the CD\_UpgradeUtility.zip file.

For more information, see the Central Designer 2.0.5.1 *Release Notes* or the Central Designer 2.1.1.3 *Release Notes*.

**Note:** After you upgrade to the InForm 5.5.2.2 release, the first subject data submission may take longer than usual to process. After the initial submission, subsequent submissions for that subject should take a normal amount of time.

## Upgrading InForm 5.5 studies in the same environment

To migrate an InForm 5.5 study to the InForm 5.5.2.2 release, perform the following steps:

- 1 *Uninstall the existing version of the InForm software* (on page 34).
- 2 *Install the InForm 5.5.2.2 software* (on page 34).
- 3 *Set up the InForm servers, studies, and customer-defined databases* (on page 35).
- 4 *Restore the Central Designer rule engines to the original location* (on page 36).
- 5 *Upgrade the InForm 5.5 study schemas to the InForm 5.5.2.2 release* (on page 37).
- 6 *Start the InForm server* (on page 37).
- 7 *Create new database objects for the review schema* (on page 38).
- 8 *Upgrade the study resources* (on page 38).
- 9 *Perform the final study configuration* (on page 39).
- 10 *Restore the Windows registry settings* (on page 39).
- 11 *Install or upgrade the InForm Adapter software* (on page 39).
- 12 *Start the InForm studies* (on page 39).
- 13 *Install the Central Designer deployment package* (on page 39).
- 14 *Update the Screening form* (on page 40).

## Uninstall the existing version of the InForm software

Before you can install the InForm 5.5.2.2 software on the same machine where you installed a previous version of the InForm software:

- 1 Uninstall the previous version of the InForm software. This step is required.
- 2 Optionally, create a database DMP file of each study database.

**Note:** If you are using Reporting, you must uninstall the Reporting schema before you create the DMP file of the study data. For more information, see *Back up the InForm 4.6, InForm 4.7, or InForm 5.0 study database* (on page 18) or *Back up the InForm 5.5 study database* (on page 19).

## Install the InForm 5.5.2.2 software

**Note:** Before you install the InForm 5.5.2.2 software, make sure your environment meets the requirements for this release. For more information, see the *Release Notes*.

- Install and configure the InForm software, using the Installation Wizard, as described in the *Installation Guide*.

On the Database Configuration page:

- Select the **Install Admin DB** option.
- Set the **Prep Oracle** option.
  - Deselect the **Prep Oracle** option if you plan to install the InForm software on the same machine.
  - Select the **Prep Oracle** option if you plan to install the InForm software on a new machine.

## Set up the InForm servers, studies, and customer-defined databases

- 1 To define each server, use the following command and syntax:

```
PFADMIN SETUP SERVER <servername>
```

- 2 To define each study, use the following command and syntax:

```
PFADMIN SETUP TRIAL <trialname> <servername> /db <oracle_connect_string>
<trialUid> <trialPid>
```

where:

- **trialname**—Name of the study you are defining.
  - **servername**—Name of the server on which the study is located.
  - **oracle\_connect\_string**—String that the InForm server uses to connect to the Oracle Instance for the study.
  - **trialUid**—Owner of the study database schema.
  - **trialPid**—Password for the owner of the study database schema.
- 3 To set up the customer-defined databases using the NoSchema option, use the following command and syntax:

```
PFADMIN SETUP CDD <Refname> <trialname> /db <oracle_connect_string> <DSN>
<trialUid> <trialPid> [NoSchema]
```

where:

- **RefName**—RefName of the CDD.
- **trialname**—Name of the study you are defining.
- **oracle\_connect\_string**—String that the InForm server uses to connect to the Oracle Instance for the study.
- **DSN**—Data Source Name of the CDD.
- **trialUid**—Owner of the study database schema.
- **trialPid**—Password for the owner of the study database schema.
- **[NoSchema]**—Indicates that no new CDD schema should be created during setup.

**Note:** Be sure to use the same RefName, study name, and server name you used for the study before the migration.

## Restore the Central Designer rule engines to the original location

- 1 Copy the DesignerVersion<version number> folder or folders you backed up to the InForm installation directory <InstallationDirectory>/InForm/bin.
- 2 Register the Central Designer rule engine DLL for each DesignerVersion<version\_number> folder that you copied.
  - a Check on your system for the location of the latest copy of RegAsm.exe.
    - For the Central Designer version 1 rule engine—RegAsm.exe version 2.0.50727, typically located at: **C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727**.
    - For the Central Designer version 2 rule engine—RegAsm.exe, version 4.0.30319, typically located at: **C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319**.
  - b For each DesignerVersion1.x.xx.x folder that you restore, execute the following command, all on one command line:

```
C:\Windows\Microsoft.NET\Framework\v2.0.50727\RegAsm.exe /codebase
<InstallationDirectory>\InForm\bin\DesignerVersion<version
_number>\PhaseForward.Designer.InFormRuleEngine.dll
```

For each DesignerVersion2.x.xx.x folder that you restore, execute the following command, all on one command line:

```
C:\Windows\Microsoft.NET\Framework\v4.0.30319\RegAsm.exe /codebase
<InstallationDirectory>\InForm\bin\DesignerVersion<version
_number>\Oracle.Designer.InFormRuleEngine.dll
```

where:

- **InstallationDirectory**—The directory in which the InForm software is installed.
- **DesignerVersion<version\_number>**—The name of each DesignerVersion folder that you copied from the bin folder.

**Note:** The `/codebase` flag is required. If you run RegAsm without the codebase flag, the rule engine registers, but rules do not run properly in the study. This prevents the enrollment of new subjects and the submission of some forms.

Restore the files contained in the folder <InstallationDirectory>\InForm\Trials\<trial\_name>.



## Upgrade the InForm 5.5 study schemas to the InForm 5.5.2.2 release

The `UpgradeTrialSchema` command upgrades studies from all InForm 5.5 releases to the InForm 5.5.2.2 release. The command terminates if the InForm release is different from these releases.

- Run **UpgradeTrialSchema.cmd** (located in the `<InstallationDirectory>\InForm\Bin\DBOra` folder) on the InForm 5.5 application server to upgrade each study schema to the InForm 5.5.2.2 release, using the following syntax:

```
UpgradeTrialSchema.cmd <TNS_Service_Name> <System_User> <System_Password>
<Trial_UserID> <Trial_UserID_Password>
```

where:

- **TNS\_Service\_Name**—TNS name for the database instance.
- **System\_User**—Oracle database system user.
- **System\_Password**—Password for the Oracle database system user.
- **Trial\_UserID**—Owner of the study database schema.
- **Trial\_UserID\_Password**—Password for the owner of the study database schema.

For example, to upgrade the study schema PFST55UID

```
UpgradeTrialSchema.cmd TRIAL1 SYSTEM ORACLE PFST55UID PFST55PID
```

The `UpgradeTrialSchema` command creates a log file **Install\_upgrade\_log\_<current-date>\_<current-time>.txt** in the current directory.

## Start the InForm server

- Start the InForm server for the studies, using the following command:

```
PFADMIN START SERVER <servername>
```

## Create new database objects for the review schema

Before you create the new database objects for the review schema, see *Database and file customizations* (on page 11).

**Note:** The review schema requires about two times the space as the study schema. Be sure to check your disk space and tablespace allocations to ensure adequate resources before you create the review schema tables.

**Note:** The time needed for creating the review schema tables is proportionate to the size of your study. This step can take quite a while.

- Run the **pfadmin RECREATEREVIEWSCHEMA** command using the following syntax to apply any fixes to the review schema and to create new tables for the review schema:

```
pfadmin RECREATEREVIEWSCHEMA <Trial_Name> <StudyLocale_ISO_name>
```

where:

- **Trial\_Name**—Name of the study for which you are creating the review schema.
- **StudyLocale\_ISO\_name**—Name of the InForm Study Locale language.

For InForm 5.5 studies you can pick any of the supported Study Locales.

The pfadmin RECREATEREVIEWSCHEMA command creates the following log files in the <InstallationDirectory>\InForm\Bin\DBOra\ReviewSchema folder:

- Install\_Clinical\_<trialname>\_<currentdate>\_<currenttime>.txt
- Install\_Fixed\_<trialname>\_<currentdate>\_<currenttime>.txt

**Note:** If any schema objects such as views, functions, procedures, packages, or triggers are invalid, pfadmin RECREATEREVIEWSCHEMA fails. You must repair any invalid schema objects before you can rerun pfadmin RECREATEREVIEWSCHEMA.

## Upgrade the study resources

- Run **UpgradeResources.cmd** (located in the <InstallationDirectory>\InForm\Bin\DBOra folder) to upgrade the resources and the XMLBase changes for each study, using the following syntax:

```
UpgradeResources.cmd <trialname> <InForm_version_upgraded_from> [SILENT]
```

where:

- **InForm\_version\_upgraded\_from**—5.5.
- **[SILENT]**—Option that suppresses parameters that are normally supplied interactively with the command.

## Perform the final study configuration

- 1 Finish configuration of the studies related to customer-defined database and randomization.  
For more information, see the *Study and Reporting Setup Guide*.
- 2 Reapply any customizations.  
For more information, see the *Study and Reporting Setup Guide*.

## Restore the Windows registry settings

- 1 Restore the Windows registry settings for  
**HKEY\_LOCAL\_MACHINE\SOFTWARE\Phase Forward\AuthenticationFilter**.
- 2 Restart IIS.

## Install or upgrade the InForm Adapter software

Perform this step if you are currently using, or plan to start using, the InForm application with products that require the InForm Adapter software.

To install or upgrade the InForm Adapter software, refer to the InForm Adapter *Installation and Configuration Guide* and the InForm Adapter *Release Notes*.

For information about release compatibility, see the *Release Notes*.

**Note:** The InForm Adapter software and the InForm Server Adapter software, as well as the documentation images, are available from the Download Center.

## Start the InForm studies

- Start each study, using the following command and syntax:

```
PFADMIN START TRIAL <trialname>
```

## Install the Central Designer deployment package

**Note:** This step is required only if you are upgrading the Central Designer application to the Central Designer 2.0.5.1 release or the Central Designer 2.1.1.3 release.

- For each study, download and install the Central Designer deployment package on the InForm application server.  
For more information, see the Central Designer *InForm Design Guide*.

## Update the Screening form

**Note:** This step is required only if you are upgrading the Central Designer application to the Central Designer 2.0.5.1 release or the Central Designer 2.1.1.3 release.

After installing the new Central Designer deployment package, you must update the Screening form and the revision number for each study on the InForm application server to complete the upgrade to the InForm 5.5.2.2 release.

- If your studies are self-hosted:
  - 1 Copy **CD\_UpgradeUtility.zip** (available for download from My Oracle Support with the Central Designer software) to the InForm application server and extract the contents.  
 CD\_UpgradeUtility.zip contains two files:
    - CD\_UpgradeUtility.bat
    - RWR.sql
  - 2 Run the **CD\_UpgradeUtility.bat** command using the following syntax:
 

```
CD_UpgradeUtility.bat <studyname> <study_userID> <study_userID_password>
<tns_service_name>
```

where:

    - **studyname**—Name of the study.
    - **study\_userID**—Owner of the InForm study database schema.
    - **study\_userID\_password**—Password for the owner of the InForm study database schema.
    - **tns\_service\_name**—TNS name for the database instance.

For example,

```
CD_UpgradeUtility.bat pfst55 pfst55uid pfst55pid trial1
```
  - 3 Restart the study by typing the following commands in the order listed:
 

```
PFADMIN STOP TRIAL <studyname>
PFADMIN START TRIAL <studyname>
```
- If your studies are hosted in the Oracle Cloud for Industry, submit a FastForward request:
  - 1 Complete the FastForward Implementation Instructions form.
    - In the Central Designer Deployment Package section, type the name of the deployment package executable file.
    - In the Command File section, type **CD\_UpgradeUtility.bat**.
  - 2 Submit the ticket and attach both the Deployment Package executable and the CD\_UpgradeUtility.zip file.

For more information, see the Central Designer 2.0.5.1 *Release Notes* or the Central Designer 2.1.1.3 *Release Notes*.

**Note:** After you upgrade to the InForm 5.5.2.2 release, the first subject data submission may take longer than usual to process. After the initial submission, subsequent submissions for that subject should take a normal amount of time.

## Migrating InForm 5.5 studies to a new environment

To migrate an InForm 5.5 study to the InForm 5.5.2.2 release on a new machine, perform the following steps:

- 1 ***Install the InForm 5.5.2.2 software*** (on page 34).
- 2 ***Create the database user*** (on page 23).
- 3 ***Grant the database user privileges*** (on page 23).
- 4 ***Import the DMP files*** (on page 24).
- 5 ***Set up the InForm servers, studies, and customer-defined databases*** (on page 35).
- 6 ***Restore the Central Designer rule engines to the original location*** (on page 26).
- 7 ***Upgrade the InForm 5.5 study schemas to the InForm 5.5.2.2 release*** (on page 37).
- 8 ***Update the statistics for the InForm studies*** (on page 27).
- 9 ***Start the InForm server*** (on page 37).
- 10 ***Create new database objects for the review schema*** (on page 38).
- 11 ***Set the MEDMLINSTALLER machine*** (on page 28).
- 12 ***Upgrade the study resources*** (on page 38).
- 13 ***Perform the final study configuration*** (on page 39).
- 14 ***Restore the Windows registry settings*** (on page 39).
- 15 ***Install or upgrade the InForm Adapter software*** (on page 39).
- 16 ***Start the InForm studies*** (on page 39).
- 17 ***Install the Central Designer deployment package*** (on page 39).
- 18 ***Update the Screening form*** (on page 40).

## Running an in-place upgrade for InForm 5.5 studies

- 1 Download the InForm 5.5.2.2 ISO file and extract the contents to a location on the InForm application server.
- 2 Open a Command Prompt window.
- 3 Stop the studies and servers, by typing the following commands in the order listed.
 

```
PFADMIN STOP TRIAL <studyname>
PFADMIN STOP SERVER <servername>
```
- 4 Stop all InForm applications and integrations that require the InForm service, for example, the Central Coding application.
- 5 Stop the InForm service.
- 6 Back up the following:
  - The contents of the <Installation\_Directory>\InForm folder.
  - All of the files for each study.

These objects are located in the <Installation\_Directory>\InForm\Trials folder.
- 7 Use **ExportDB.cmd** to back up the:
  - InForm study database for each study.
  - InForm admin database.

For more information, see *Back up the InForm 4.6, InForm 4.7, or InForm 5.0 study database* (on page 18).
- 8 Export the current registry settings from all servers, including the InForm server and the Reporting and Analysis server in HKEY\_LOCAL\_MACHINE\SOFTWARE\Phase Forward.

**Note:** Some of these values are reset to their defaults when you re-install the InForm software or when you run the in-place upgrade.

- 9 Navigate to the folder where you extracted the contents of the ISO file, and run the **setup.exe** file located in the InFormUpgrade folder.
 

The installation wizard opens.
- 10 Follow the prompts to run the wizard.
 

Running the wizard upgrades the core InForm software.

  - If you are not using Reporting, the upgrade is complete. Proceed to Step 12.
  - If you are using Reporting, proceed to Step 11.
- 11 Copy **Op package and reports 5\_5\_2\_2.zip**, located in the <Installation\_Directory>\InForm\Bin\DBOra\Reporting folder on the InForm application server, to the <Installation\_Directory>\deployment folder on the Cognos server.

**Note:** This step upgrades your Reporting environment. For more information, see *Running an in-place upgrade of an InForm 5.5 reporting environment* (on page 60).

- 12 Restore the HKEY\_LOCAL\_MACHINE\SOFTWARE\Phase Forward registry settings from the file you exported in Step 8.
- 13 Start the InForm service.
- 14 Start the installed studies and servers, by typing the following commands in the order listed.  

```
PFADMIN START SERVER <servername>
```

```
PFADMIN START TRIAL <studyname>
```
- 15 If you are upgrading the Central Designer application to the Central Designer 2.0.5.1 release or the Central Designer 2.1.1.3 release:
  - a *Install the Central Designer deployment package* (on page 39).
  - b *Update the Screening form* (on page 40).



## Clear the client-side browser caches

Clear the browser cache for the browser you are using to access the InForm application.

For more information, see the Internet Explorer, Apple Safari, or Mozilla Firefox documentation.



## CHAPTER 4

# Upgrading and migrating the reporting environment

### In this chapter

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## Upgrading the reporting environment for InForm 4.6, InForm 4.7, or InForm 5.0 studies

Oracle does not support an in-place upgrade for any InForm 4.6, InForm 4.7, or InForm 5.0 release. You must install a new Cognos 8.4 environment, and create, export, and then import your export packages.

To upgrade the reporting environment from any InForm 4.6, InForm 4.7, or InForm 5.0 release, perform the following steps:

- 1 *Install and configure the Cognos 8.4 environment* (on page 49).
  - a *Install and customize the Cognos 8.4 software* (on page 49).
  - b *Identify or create the required users for any InForm study* (on page 50).
- 2 *Create an export package and export the data from your Cognos environment* (on page 50).
  - a Review *About the export package* (on page 50).
  - b *Create an export package for each study in the Cognos environment* (on page 51).
- 3 *Remove the streams between the InForm study schema and the Reporting schema, and uninstall the Reporting schema* (on page 53).

**Note:** You must uninstall the Reporting schema before you create the DMP file of the study data. For more information, see *Back up the InForm 4.6, InForm 4.7, or InForm 5.0 study database* (on page 18).

- 4 *Create the streams between the InForm study schema and the Reporting schema, and install the Reporting schema* (on page 54).
- 5 *Import the data exported from the Cognos environment to the new Cognos 8.4 environment* (on page 55).
- 6 *Run the PFCognosConfig utility* (on page 55).
- 7 *Modify the PFRSetupTrial.xml file* (on page 56).
- 8 *Run PFRInit on the InForm application server* (on page 56).
- 9 *Delete obsolete reports* (on page 56).
- 10 *Associate custom reports with the new operational packages* (on page 57).
- 11 *Revalidate custom reports* (on page 57).
- 12 *Update schedules and jobs* (on page 58).
- 13 *Delete the study organizational units from the LDAP configuration* (on page 58).

## Install and configure the Cognos 8 BI environment

### Install and customize the Cognos 8.4 software

- 1 Install the Cognos 8.4 software on the Cognos servers.

**Note:** For information on how to install and customize the Cognos 8.4 software, see the *Installation Guide*.

- 2 Install Fix Pack 5 (FP5) for the Cognos 8.4 software.
- 3 Install the Cognos interim fixes in this order:
  - a up\_c8bisrvr\_win32\_8.4.107.1048\_ml.tar
  - b up\_c8bisrvr\_win32\_8.4.107.1068\_ml.tar
  - c up\_c8bisrvr\_win32\_8.4.107.1078\_ml.tar
  - d up\_c8bisrvr\_win32\_8.4.107.1098\_ml.tar
- 4 Customize the Cognos 8 Business Intelligence 8.4 software on the Cognos servers.
  - a Run the Cognos 8 Customization for InForm wizard (CRNConfig) on all Report and Content Manager servers.
  - b Run the Cognos 8 Gateway Customization for InForm wizard (CRNGatewayConfig) on all Gateway servers.
  - c Start the Cognos 8 Business Intelligence servers.

## Identify or create the required users for any InForm study

Before you start the Cognos upgrade, make sure that the following users exist so that you can log in to the Cognos 8 Business Intelligence server:

- A Cognos user who is a System Administrator.
- An InForm study user who is assigned to a rights group that includes the Reports right and is also a member of the Directory Administrators reporting group.
- An InForm study user (pfreportinguser) who is a member of the Sponsor Users and Publishers reporting group.

The pfreportinguser will be used for the first time by the InForm Model Updater service. The InForm Model Updater service uses the pfreportinguser user name and password to generate the clinical model.

- If necessary, configure the pfreportinguser account.  
For more information, see the *Installation Guide*.
- Change the password for the pfreportinguser using both the user interface and the pfadmin command.
  - Log in to the InForm application and change the password for the pfreportinguser using the user interface.
  - Change the password for the pfreportinguser using the following command:

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

**Note:** Make sure that the password you enter through the user interface and the command line match.

## Create an export package and export the data from your Cognos environment

### About the export package

You must create reporting export packages for each InForm study being migrated to the InForm 5.5.2.2 release while your current InForm and Cognos environments are still active. The export packages contain:

- A study folder.
- An operational package (InForm Trial Management for <trialname>).
- A clinical package (<trialname> Clinical) from the Cognos Public Folders.

You will import these packages into the Cognos 8 BI environment after you install the InForm 5.5.2.2 software and the Cognos 8 BI software.

Because the current Cognos environment remains intact until the Cognos 8 BI environment is active, there is no need to back up any files on the Cognos server except for the export packages.

## Create an export package for each study in the Cognos environment

For each InForm study, ensure that all users move the content in their **My Folders** area to the study folder in **Public Folders**.

**Note:** Content in the **My Folders** area and individual **User Preferences** are not migrated during the export and import steps of the Cognos upgrade.

**Note:** In multi-server Cognos environments, the deployment archives are created on the active Content Manager server.

- 1 Log in to an InForm study as a user who has the Reports right and is a member of the Directory Administrators reporting group.
- 2 Click **Reports**.
- 3 Select **Tools > Logon** to log in to the Cognos 8 Business Intelligence server as a System Administrator.
- 4 In the **User** field, type the user name for the Cognos System Administrator user (for example, crnsysadmin).
- 5 In the **Password** field, type the password for the Cognos System Administrator user, and click **OK**.
- 6 For Cognos 8.2:
  - Select **Tools > Content Administration**.
 For Cognos 8.4:
  - a Select **Launch > Reporting Administration**.
  - b On the Configuration tab, select **Content Administration**.
- 7 Click **New Export**.  
The Export wizard appears.
- 8 Enter a name for the export package, and complete the fields on the **Description** page.
- 9 Click **Next**.
- 10 On the **Choose a deployment method** page, ensure that the **Select public folder and directory content** option is selected, and click **Next**.
- 11 On the **Select the public folders content** page, in the Public Folders content section, select the **trial folder**, the **operational package** (InForm Trial Management for <trial\_name>), and the **clinical package** (<trial\_name> Clinical).

- 12 Update the settings on each page for the export deployment package as listed in the following table.

Section	Option	Setting
<b>Public folders content page</b>		
Public folders content section	Disable after import	Selected for the study folder, the operational package, and the clinical package
Options section	Include report output version	Selected
	Include run history	Selected
	Include schedules	Selected
<b>Directory content page</b>		
Directory content	Include Cognos groups and roles	Deselected
	Include distribution lists and connections	Deselected
	Include data sources and connections	Deselected
<b>General options page</b>		
Access permissions	Include access permissions	Deselected
External namespaces	Do not include references to external namespaces	Selected
Entry ownership	Set the owner to	The user performing the import
	Apply to	New entries only

- 13 Click **Next**.
- 14 On the **Specify a deployment archive** page, click **Next**.
- 15 On the **Review the Summary** page, review the export details, and click **Next**.
- 16 On the **Select an action** page, select **Save and Run once**, and click **Finish**.
- 17 On the **Run with options** page, in the **Time** section, select **Now**, and click **Run**.
- 18 On the next page, after closing the dialog box, select **View the details of this export**, and click **OK**.  
The View an export deployment record page appears, and displays the status of the export.
- 19 Click **Close**.



## Remove the streams between the InForm study schema and the Reporting schema, and uninstall the Reporting schema

Perform the following steps for every study on the InForm 4.6, 4.7, or 5.0 application server.

- 1 Run **deinstall\_reporting\_diffdb.sql**.

**Note: If you are using a single database for your study and reporting, run deinstall\_reporting\_samedb.sql.**

This script uses the configdiffdb.sql file from the previous installation, so make sure the correct file is in place.

Run this script as many times as necessary, to remove each study.

- a Open a Command Prompt window.
- b Log in to SQL\*Plus with /nolog.
- c At the SQL\*Plus prompt, type the following command:  

```
@deinstall_reporting_diffdb.sql
```
- d After you run the script, check for errors by searching for the word Error in the log file.
- e Correct any problems and run the script again until it does not find anything to remove and does not find any errors.

- 2 Run **remove\_streams\_setup\_info\_diffdb.sql**.

**Note: If you are using a single database for your study and reporting, this step is not required.**

This script removes the references of the study from the Streams\_Setup\_Info table.

- a Open a Command Prompt window.
- b Log in to SQL\*Plus with /nolog.
- c At the SQL\*Plus prompt, type the following command:  

```
@remove_streams_setup_info_diffdb.sql
```
- d After you run the script, check for errors by searching for the word Error in the log file.
- e Correct any problems and run the script again until it does not find anything to remove and does not find any errors.

## Create the streams between the InForm study schema and the Reporting schema, and install the Reporting schema

**Note:** You only need to perform this step if your InForm study and the Reporting and Analysis module are installed in different database instances.

- 1 Configure **configdiffdb.sql**.  
For more information, see the *Installation Guide*.
- 2 Re-apply any customizations.
  - a If you customized any files using the **streams\_table\_adds** variable, or by modifying **tabexcludelist.sql** or **tabincludelist.sql**, set the **streams\_table\_adds** variable in **configdiffdb.sql**.  
If these tables already have a prefix of PF\*, CT\*, or RT\*, they will automatically be replicated.
  - b To exclude tables with a prefix of PF\*, CT\*, or RT\* from replication, set the **streams\_table\_exclude** variable in **configdiffdb.sql**.
- 3 Open a Command Prompt window.
- 4 Navigate to the folder in which the Reporting and Analysis software is located (for example, e:\InForm\Bin\DBOra\Reporting).
- 5 Log in to SQL\*Plus with /nolog.
- 6 Run **configandcheckdiffdb.sql**.
- 7 Run **install\_reporting\_diffdb.sql** to install the reporting schema.

## Import the data exported from the Cognos environment to the new Cognos 8.4 environment

Run the ImportUtility command (located in the *<Installation\_Directory>\InForm\bin* on the InForm application server) using the following syntax:

```
ImportUtility -all
```

When prompted, enter the:

- Cognos system administrator user namespace.
- User name for the Cognos system administrator.
- Cognos system administrator password.
- 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.

- Name of the deployment package containing the reporting content you want to import into the Reporting server.
- Password for the deployment package.

**Note:** You can also pass the system administrator namespace, user name, dispatcher URL, and deployment package name in a parameter file. For more information, see the *Installation Guide*.

The ImportUtility command:

- Creates a secure staging folder, accessible to users with system administration privileges.  
The name of the folder is SecureImport\_<timestamp> where the time stamp format is yyyyymmdd\_hhmmss\_sss, where sss represents milliseconds (for example SecureImport\_20130920\_172055\_121).
- Creates a new import specification object, accessible to users with system administration privileges.
- Imports the content of the deployment package to the SecureImport\_<timestamp> folder, and makes it accessible only to users with system administration privileges.
- Copies the imported reporting content to the Reporting and Analysis Public folder.

Deletes the SecureImport\_<timestamp> folder, any content it contains, and the import specification object. For more information, see the *Installation Guide*.

## Run the PFCognosConfig utility

Run the PFCognosConfig utility (located in the *<InstallationDirectory>\InForm\bin* folder) on the InForm 5.5.2.2 application server to configure an InForm study to work with the Cognos 8 Business Intelligence application. For more information, see the *Installation Guide*.

## Modify the PFRSetupTrial.xml file

The PFRSetupTrial.xml file is located in the `<InstallationDirectory>\InForm\Bin` folder.

- 1 In the **TrialFolder** section, change the **UserRoot** tag to **ReportsUpgrade**.  
ReportsUpgrade is a tag that triggers the reporting specification upgrade.
- 2 Change the value of the **connectionstring** from `dbconnectionstring` to the Oracle connection string for the Reporting and Analysis database.  
In a single database configuration, use the study database connection string.
- 3 Update the DBUID parameter with the UserID of the study owner.
- 4 Update the DBPWD parameter with the password of the study owner.

**Note:** You must use the most current version of this file, located in the `\InForm\bin` directory for this release. Do *not* use a backed up version of this file from an earlier release of the InForm software.

## Run PFRInit on the InForm application server

- Run the PFRInit command from the `<InstallationDirectory>\InForm\Bin` folder.  
For more information, see the *Installation Guide*.

The PFRInit command:

- Creates a new operational package called `<studyname> InForm Trial Management` in the Public Folders.
- Upgrades the specifications of standard reports in the trial folder.  
It upgrades only standard reports that are part of this release.
- Sets permissions on the trial folder and packages for a specific study.  
If the command is not run, the packages and the trial folder are only visible to the System Admin user.

## Delete obsolete reports

If you are migrating from an InForm 4.6 release or an InForm 4.7 release, manually delete the following obsolete reports from the study folder:

- CRF Cycle Time Detail by User
- CRF Site Performance Summary by User
- CRF Aging by User
- CRB Completion and Query Summary by User
- Query Volume by Month by User
- Subject Enrollment Status by User

## Associate custom reports with the new operational packages

If you are migrating from the InForm 4.6 release:

- 1 Manually associate the custom reports developed in the InForm 4.6 application using the **InForm Trial Management for <trialname>** operational package with the new operational package in InForm 5.5.2.2 <studyname> **InForm Trial Management**.

For each report:

- a Log in to an InForm study as a user who has the Reporting right and is a member of the Directory Administrators reporting group.
  - b Click **Reports**.
  - c Select **Log On > Log On** to log in to the Cognos 8 Business Intelligence 8.4 server as a System Administrator.
  - d In the **User** field, type the user name for the Cognos System Administrator user (for example, crnsysadmin).
  - e In the **Password** field, type the password for the Cognos System Administrator user, and click **OK**.
  - f Select **Actions > Set Properties**.
  - g In the **General** tab, click **Link to a Package**, and select the new <studyname> **InForm Trial Management** package.
  - h Click **OK**.
- 2 Delete the **InForm Trial Management for <studyname>** operational packages from the InForm 4.6 application.

## Revalidate custom reports

- 1 Revalidate the custom reports and, if necessary, modify the reports for the new operational packages.  
You revalidate the custom reports by running them and comparing the output to the expected output based on the previous release.
- 2 Stop and start the **InForm Model Updater** service to force the immediate clinical model generation.
- 3 Revalidate all the custom clinical or ad hoc reports for the new clinical model in order to access all the enhancements in this release.
  - If you have access to Report Studio, open the custom clinical report in Report Studio, validate, and save the report.
  - If you do not have access to Report Studio, in the Cognos connection:
    - a Navigate to **Set Properties** for a report, and click **Link to a package**.
    - b Select the **<trial name> clinical package**, and click **OK**.
- 4 Run all the custom clinical reports, and compare the output to the expected output based on the previous release.

## Update schedules and jobs

Any user who has scheduled reports must log in to the Reporting and Analysis module and make the necessary changes to the job schedules.

- 1 Select **Launch > Reporting Administration**.
- 2 In the **Status tab**, click **Schedules**.
- 3 Modify and save each listed schedule and job.
  - a Click the drop-down list next to the schedule name.
  - b Click **Modify the Schedule**.
  - c Make any modification (such as changing the start time by one minute), and click **OK**.
- 4 Ensure that study users copy their My Folders content from Public Folder to My Folders.

## Delete the study organizational units from the LDAP configuration

LDAP is not used to authenticate study users in the InForm 5.5.2.2 release.

- Manually delete the study organizational units (OUs) from the LDAP Directory server through the LDAP Configuration and Administration interface.

# Migrating the reporting environment for InForm 5.5 studies to a new machine

To migrate the reporting environment from any InForm 5.5 release to the InForm 5.5.2.2 release to a new Cognos environment, perform the following steps:

- 1 *Install and configure the Cognos 8.4 environment* (on page 49).
  - a *Install and customize the Cognos 8.4 software* (on page 49).
  - b *Identify or create the required users for any InForm study* (on page 50).
- 2 *Create an export package and export the data from your Cognos environment* (on page 50).
  - a Review *About the export package* (on page 50).
  - b *Create an export package for each study in the Cognos environment* (on page 51).
- 3 *Create the streams between the InForm study schema and the Reporting schema, and install the Reporting schema* (on page 54).

**Note:** You only need to perform this step if your InForm study and the Reporting and Analysis module are installed in different database instances.

- 4 *Import the data exported from the Cognos environment to the new Cognos 8.4 environment* (on page 55).
- 5 *Run the PFCognosConfig utility* (on page 55).
- 6 *Modify the PFRSetupTrial.xml file* (on page 56).
- 7 *Run PFRInit on the InForm application server* (on page 56).
- 8 *Revalidate custom reports* (on page 57).
- 9 *Update schedules and jobs* (on page 58).

## Running an in-place upgrade of an InForm 5.5 reporting environment

For information on running an in-place upgrade of any InForm 5.5 Reporting environment, see step 11 in *Running an in-place upgrade* (on page 43).

To complete the upgrade, you need to install the most recent Cognos interim fixes:

- 1 Stop the Cognos 8 Business Intelligence servers.
- 2 Install the Cognos interim fixes in this order:
  - a up\_c8bisrvr\_win32\_8.4.107.1048
  - b up\_c8bisrvr\_win32\_8.4.107.1068
  - c up\_c8bisrvr\_win32\_8.4.107.1078
  - d up\_c8bisrvr\_win32\_8.4.107.1098
- 3 Start the Cognos 8 Business Intelligence servers.



## CHAPTER 5

# Upgrading and migrating the InForm Portal software

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## Preparing to migrate the InForm Portal software

To prepare the InForm Portal software to migrate to the InForm 5.5.2.2 release, perform the following steps:

- 1 *Prepare the InForm Portal 4.6 database schema for backup* (on page 62).
- 2 Back up the InForm Portal database and customized files.
  - *Back up the InForm Portal 4.6, 4.7, or 5.0 database and customized files* (on page 62).
  - *Back up the InForm Portal 5.5 database and customized files* (on page 63).

### Prepare the InForm Portal 4.6 database schema for backup

If you are migrating an InForm 4.6 study, you must prepare the InForm Portal 4.6 database schema for backup before migrating to the InForm 5.5 release. Copy the InForm\InstallSupport folder from the downloaded ISO image to the InForm 4.6 application server.

**Note:** Character set differences between the InForm 4.6 release and the InForm 5.5 releases might cause issues with table column widths. Perform this step to prevent these issues.

### Back up the InForm Portal database and customized files

#### Back up the InForm Portal 4.6, 4.7, or 5.0 database and customized files

- 1 Copy the InForm\InstallSupport folder from the downloaded ISO image to the InForm application server.
- 2 Run **ExportDBUpgrade.cmd** (located in the InForm\InstallSupport folder) on the InForm application server to back up the InForm Portal database as a DMP file, using the following syntax:

```
ExportDBUpgrade.cmd <DMP_file> <TNS_Service_Name> <Portal_UserID>
<Portal_User_Password>
```

where:

- **DMP\_file**—Name of the DMP file, using the full path.

**Note:** Do not include spaces in the DMP file name.

- **TNS\_Service\_Name**—TNS name for the database instance.
- **Portal\_UserID**—Owner of the InForm Portal database schema.
- **Portal\_User\_Password**—Password for the owner of the InForm Portal database schema.

Example:

```
ExportDBUpgrade.cmd D:\PortalDB.dmp TRIAL1 Portal46UID Portal46PID
```

The ExportDBUpgrade command creates the log file **<DMP\_file>.log** in the current directory.

- 3 Back up any InForm Portal files that you customized.

## Back up the InForm Portal 5.5 database and customized files

- 1 Run the **exp** database command on the InForm database server to back up the InForm Portal database as a DMP file, using the following syntax:

```
exp <Study_User>/<Study_User_Password>@<TNS_Service_Name>  
<Path_to_DMP_File>
```

where:

- **Study\_User**—Owner of the system database.
- **Study\_User\_Password**—Password for the owner of the system database.
- **TNS\_Service\_Name**—TNS name for the database instance.
- **Path\_to\_DMP\_File**—Location for the dump file on the InForm database server.

**Note:** Do not include spaces in the DMP file name.

For example:

```
exp pfst46uid/pfst46pid@trial1 /u01/app/oracle/dp_export/pfst46.dmp
```

- 2 Back up any InForm Portal files that you customized.

## Upgrading and migrating the InForm Portal software

To migrate the InForm Portal software to the InForm 5.5.2.2 release, perform the following steps:

- 1 *Upgrade the InForm Portal software in the same database instance* (on page 64).  
or  
*Migrate the InForm Portal software to a new database instance* (on page 65).
- 2 *Reset the InForm Portal Home page* (on page 68).

### Upgrading the InForm Portal software in the same database instance

- 1 Uninstall the previous version of the InForm Portal software.
  - a Manually remove the InForm Portal DSN entries.
  - b Manually remove the InForm Portal virtual directories.
- 2 If you are migrating from any InForm 4.6, InForm 4.7, or InForm 5.0 release, run **Upgrade40toMLInFormPortal.cmd** (located in the `<InstallationDirectory>\InForm\InFormPortal\Scripts\InstallSupport` folder) for each Portal schema, using the following syntax:

```
Upgrade40toMLInFormPortal.cmd <Trial_Name> <TNS_Service_Name>  
<Portal_User_ID> <Portal_UserID_Password>
```

where:

- **Trial\_Name**—Name of the study being migrated.
- **TNS\_Service\_Name**—TNS name for the database instance.
- **Portal\_UserID**—Owner of the Portal database schema created for import.
- **Portal\_UserID\_Password**—Password for the owner of the InForm Portal database schema created for import

Example:

```
Upgrade40toMLInFormPortal.cmd PFST46 TRIAL1 PORTAL46UID PORTAL46PID
```

- 3 Run the Portal Configuration Tool.

Be sure to *deselect* the **Create Portal DB Schema** option, otherwise the Portal Configuration Tool drops the imported database and creates a new one. For more information, see the *Portal Administration Guide*.
- 4 Open a Command Prompt window.
- 5 Connect to the Oracle database by typing the following command:

```
sqlplus <portal_user_id>/<portal_user_password>@<TNS_Service_Name>
```

Example:

```
sqlplus pfst55portaluid/pfst55portalpid@Trial1
```

- 6 Update the database using the following command:

```
update PF_CONFIG set DSN = '<TNS_Service_Name>;'
```

Example:

```
update PF_CONFIG set DSN = 'Trial1';
```

- 7 Enter the following command:

```
commit;
```

- 8 Exit sqlplus by typing the following command:

```
exit
```

- 9 Reset the InForm Portal Home page, if required.

For more information, see *Reset the InForm Portal Home page* (on page 68).

## Migrating the InForm Portal software to a new database instance

- 1 Uninstall the previous version of the InForm Portal software.
  - a Manually remove the InForm Portal DSN entries.
  - b Manually remove the InForm Portal virtual directories.
- 2 Run **DropDB.cmd** (located in the <InstallationDirectory>\InForm\Bin\DBOra folder) to create a database user, using the following syntax:

```
DropDB.cmd <TNS_Service_Name> <System_User> <System_User_Password>  
<To_Portal_UserID> <To_Portal_User_Password>>
```

where:

- **TNS\_Service\_Name**—TNS name for the database instance.
- **System\_User**—Oracle System User.
- **System\_User\_Password**—Oracle System User Password.
- **To\_Portal\_UserID**—Owner of the InForm Portal database schema created by the import.
- **To\_Portal\_User\_Password**—Password for the owner of the InForm Portal database schema created by the import.

Example:

```
DropDB.cmd TRIAL1 PFADMIN PFADMIN PORTAL46UID PORTAL46PID
```

The DropDB command creates the log file **dropdb.err**.

- 3 Import the InForm Portal 4.6, 4.7, or 5.0 database schema, and then proceed to step 5.

**Note: To import an InForm Portal 5.5 database schema, proceed to step 4.**

Run **ImportDBUpgrade.cmd** (located in the *<InstallationDirectory>\InForm\Bin\DBOra* folder) to import the InForm Portal database schema, using the following syntax:

```
ImportDBUpgrade.cmd <DMP_file> <TNS_Service_Name> <System_User>
<System_User_Password> <From_Portal_UserID> <To_Portal_UserID>
```

where:

- **DMP\_file**—Name of the DMP file, using the full path.
- **TNS\_Service\_Name**—TNS name for the database instance.
- **System\_User**—Oracle System User.
- **System\_User\_Password**—Oracle System User Password.
- **From\_Portal\_UserID**—Owner of the portal database schema being migrated.
- **To\_Portal\_UserID**—Owner of the Portal database schema created for the import.

Example:

```
ImportDBUpgrade.cmd D:\PORTAL46.dmp TRIAL1 PFADMIN PFADMIN PORTAL46UID
PORTAL46UID
```

The **ImportDBUpgrade** command creates the log file *<DMP\_file>.log*. For the previous example, the log file is *portal46.log*.

- 4 Import the InForm Portal 5.5 database schema, and then proceed to step 6.
  - a Run the **imp** database command to import the InForm Portal database schema, using the following syntax:

```
imp <System_User>/<System_User_Password>@<TNS_Service_Name>
file=<Path_to_DMP_file> fromuser=<From_User>
touser=<To_User_Password> buffer=9999999 log=<logfile_name>.log
```

where:

- **System\_User**—Oracle database system user.
- **System\_Password**—Password for the Oracle database system user.
- **TNS\_Service\_Name**—TNS name for the database instance.
- **Path\_to\_DMP\_file**—Location of the dump file on the InForm database server.
- **From\_User**—Owner of the system database.
- **To\_User\_Password**—Password for the owner of the study schema created by the import.

For example:

```
imp system/oracle@trial1 file=E:\pfst45portaldump.dmp
fromuser=portalpfst45uid touser=portalpfst45pid buffer=9999999
log=portalpfst45.log
```

- b Run the GrantAccess command to set permissions for the portal user, using the following command:

```
sqlplus
<System_User>/<System_User_Password>@<TNS_Service_Name> @GrantAccess.sql
<portal_user_id>
```

For example

```
sqlplus system/oracle@trial1 @GrantAccess.sql portalpfst45uid
```

- 5 If you are migrating from any InForm 4.6, InForm 4.7, or InForm 5.0 release, run **Upgrade40toMLInFormPortal.cmd**, (located in the <InstallationDirectory>\InForm\InFormPortal\Scripts\InstallSupport folder), using the following syntax:

```
Upgrade40toMLInFormPortal.cmd <Trial_Name> <TNS_Service_Name>
<Portal_User_ID> <Portal_UserID_Password>
```

where:

- **Trial\_Name**—Name of the study being migrated.
- **TNS\_Service\_Name**—TNS name for the database instance.
- **Portal\_UserID**—Owner of the Portal database schema created for the import.
- **Portal\_UserID\_Password**—Password for the owner of the Portal database schema created for the import.

Example:

```
Upgrade40toMLInFormPortal.cmd PFST46 TRIAL1 PORTAL46UID PORTAL46PID
```

- 6 Run the Portal Configuration Tool.

Be sure to *deselect* the **Create Portal DB Schema** option, otherwise the Portal Configuration Tool drops the imported database and creates a new one. For more information, see the *Portal Administration Guide*.

- 7 Open a Command Prompt window.

- 8 Connect to the Oracle database by typing the following command:

```
sqlplus <portal_user_id>/<portal_user_password>@<TNS_Service_Name>
```

Example:

```
sqlplus pfst55portaluid/pfst55portalpid@Trial1
```

- 9 Update the database using the following command:

```
update PF_CONFIG set DSN = '<TNS_Service_Name>';
```

Example:

```
update PF_CONFIG set DSN = 'Trial1';
```

- 10 Enter the following command:

```
commit;
```

- 11 Exit sqlplus by typing the following command:

```
exit
```

- 12 Reset the InForm Portal Home page, if required.

For more information, see *Reset the InForm Portal Home page* (on page 68).

## Reset the InForm Portal Home page

If the InForm Portal Home page URL has changed as part of the upgrade, reset the home URL for each user.

- 1 Log in to the InForm application as an administrator who can modify user settings.
- 2 Update the Home page for each InForm Portal user to **./portal/default.htm**.