# Oracle® Configuration Controls Governor

Integra Codebase Installation Guide
Release 4.2.2

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Oracle Configuration Controls Governor: Integra Codebase Installation Guide



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# Contents

# 1

# Introduction

Integra Codebase provides change tracking, impact analysis, and versioning of files and database objects, including Oracle E-Business Suite forms, reports, menus, libraries, and PL/SQL objects.

This document tells how to install version 4.2.2 of Integra Apps, or how to upgrade to version 4.2.2 from an earlier version. You can install version 4.2.2 directly, or upgrade to it directly from version 3.9 or later. In broad terms, you complete these steps:

- Ensure that several systems run required software. These include:
  - An installing computer, which serves as a staging environment from which the installation program is run.
  - A Codebase Home, which hosts the database used by Codebase.
  - Environments that host business-management applications tracked, analyzed, and versioned by Codebase.
  - A Codebase Server, on which Codebase is installed and from which it is run.
  - User workstations, from which users access the Codebase Server.
- Download files to the installing computer.
- Complete an Integra Installer Worksheet, in which you compile information you will need to provide as you install Codebase.
- Run the Integra Installer from the installing computer, to place Codebase software on the Codebase Server.
- Configure Codebase. (For this purpose, see the *Integra Codebase Administrator Guide*.)

Integra Codebase is one component of Configuration Controls Governor, which is itself an application within the Oracle Governance, Risk, and Compliance Controls Suite. However, Codebase is installed independently of other GRC Controls Suite components. For information on installing other components, see the *Integra Apps Installation Guide*, the *Governance, Risk, and Compliance Controls Suite Installation Guide*, and the *Application Access Controls Governor Installation Guide* for the versions you intend to install.

# 2

# Before You Install or Upgrade

This section contains essential information you need to know before installing Integra Codebase 4.2.2. For a successful installation, be sure to follow all recommendations in this section.

To upgrade from Codebase 3.9 or 4.1install Codebase 4.2.2, then import data from your earlier version into it. Your earlier installation is not affected by the upgrade, and can be used as before. You may install 4.2.2 in the same environment as your earlier version, or in a new environment. Likewise, you may install version 4.2.2 so that it uses the same database instance as your earlier version, or a new one.

## System Requirements

To install and use Integra Codebase 4.2.2, ensure that your systems satisfy the following requirements. All requirements below are mandatory, unless otherwise stated. Do not attempt installation until all requirements have been met. Failure to meet these requirements will lead to errors and delays.

### Installing Computer

The installing computer (the one on which the Integra Installer is run) must meet the following requirements:

- One of the following operating systems:
  - Microsoft Windows
  - UNIX/Linux with X Client
- SQL*Plus and IMP (Oracle Import utility):

  Both must be part of the same Oracle client, and stored in the same directory. The Oracle client must satisfy this requirement:

| If the Codebase Home schema is... | Oracle Client on the Installing Computer must be... |
|---|---|
| Oracle 9i database | Oracle 9i |
| Oracle 10g database | Oracle 9i or 10g |

Both must have SQL*Net connectivity to the Codebase Home (which requires an entry in the Oracle client's network/admin/tnsnames.ora file for the Codebase Home). UNIX/Linux users must have Read and Execute permissions for both.

- Java Runtime Environment J2SE 1.4.2_05 JRE or newer, downloadable from:

  `http://java.sun.com/j2se/1.4.2/download.html`

- If you are installing onto a UNIX/Linux computer: scp capability to transfer files from the installing computer to the Codebase Server.

  We recommend that you test the scp capability by using an scp client to transfer a file (of your choice) from the installing computer to the server that hosts the Codebase Home. Any errors generated by the scp client must be resolved before the Integra Installer is used. Work with your system administrator to find resolutions before continuing.

- The file classes12.jar or classes12.zip, delivered in Oracle's database installation, downloadable from:
  `http://www.oracle.com/technology/software/index.html`

  Download links in this document may not work if you simply click on them. However, each has been tested to work if you copy the URL into the address field of your web browser, and then press the Enter key.

- Jacob

  Oracle's WebUtil uses JACOB as a COM-to-Java bridge. At runtime the primary components used for Oracle's Forms WebUtil are the frmwebutil.jar file and webutil.pll. Some features of WebUtil such as OLE integration also require extra operating system libraries, which will be downloaded to the client on demand. These include the jacob.dll and jacob.jar files for OLE integration. JACOB source code and licensing details can be obtained at

  `http://prdownloads.sourceforge.net/jacob-project`

  Download the file from

  `http://prdownloads.sourceforge.net/jacob-project/jacob_18.zip`

- Enhydra

  Integra Installer 1.3 requires some open-source utilities created and maintained by the Enhydra organization. XAPool source code and licensing details can be obtained at

  `http://xapool.experlog.com/`

  Download the file from

  `http://download.forge.objectweb.org/xapool/xapool-1.4.2.jar`

- Eclipse BIRT

  At runtime Codebase requires BIRT, an open-source report processing engine that is created and maintained by the Eclipse Foundation. BIRT source code and licensing details can be obtained at

  `http://www.eclipse.org/birt`

Download the file from

```
http://www.eclipse.org/downloads/download.php?file=/birt
/downloads/drops/R-R1-2_1_1-200609260959/birt-runtime-
2_1_1.zip
```

- 100 megabytes (MB) of disk space for temporary storage of installation files.

## Codebase Home Schema

The Codebase Home can reside in a new or existing database instance. The database can contain non-Integra schemas, and earlier Codebase schemas, but we recommend choosing an instance that does not contain business-application schemas.

**Platform**

Any of the following operating systems: AIX, HP/UX, Linux, Microsoft Windows, Solaris.

**Software**

- Database. One of the following:
  - Oracle 9i database version 9.2.0.3 or higher
  - Oracle 10g database
- SQL*Plus
- SQL*Net connectivity to each instance managed or used by Integra
- If you are upgrading from Codebase 3.9 or 4.1 with a Home schema running in a Windows environment to Codebase 4.2.2 with a Home schema running in a UNIX/Linux environment, the 3.9/4.1 environment must have an ssh server. The Integra installer uses this server when transferring data from the 3.9/4.1 schema to the 4.2 schema.

**Database**

Once you choose the database that will house the Codebase Home schema, complete the following requirements.

- Disk space: Verify that you have adequate disk space for these tablespaces:

| Tablespace Name | Minimum Size for Each Oracle EBS Instance | Minimum Size for Each Other Instance |
|---|---|---|
| COD_DATA | 3 GB | 800 MB |
| COD_INDX | 2 GB | 500 MB |

The Integra Installer will create these tablespaces, and will create one datafile for each tablespace. If you require more than one datafile per tablespace, create the tablespaces and datafiles before running the Installer. We recommend using the names shown above; in any event, note the names you use, because the Installer will ask you for them.

If you are upgrading from Codebase 3.9 or 4.1, tablespaces with these names may already exist in the database that will house the 4.2.2 Home schema. If so, create new tablespaces with different names (e.g., COD_422_DATA), and ensure that adequate disk space exists for them.

- Database parameter file: Set the following values in INIT.ora:

| Parameter | Value |
|---|---|
| _complex_view_merging | FALSE |
| cursor_sharing | EXACT |
| global_names | false |
| java_pool_size | = 65000000 or greater |
| open_cursors | 4096 |
| undo_retention | 10800 |

- SYSTEM passwords
- If you are upgrading from Codebase 3.9 or 4.1, the Integra Installer will create a DB link between this database and the one that houses the earlier Codebase Home schema (to translate data from the latter to the former). The environments housing the two databases must allow the creation of this link.

## Environments

Each environment that will be configured for use with Integra Codebase must meet these requirements:

**Platform**

Any of the following operating systems: AIX, HP/UX, Linux, Microsoft Windows, Solaris.

**Software**

- Database. One of the following:
  - Oracle 9i database version 9.2.0.3 or higher
  - Oracle 10g database
- SQL*Plus
- SQL*Net connectivity to each instance managed or used by Integra
- SYSTEM password

**Database**

A tablespace with at least 10 MB available. The tablespace can be shared with other applications, or dedicated to Codebase, which uses the table to store data temporarily.

If you are upgrading from Codebase 3.9 or 4.1, this space requirement is in addition to those of the 3.9 or 4.1 installation.

## Codebase Server

The server performs all Codebase actions, including all logic, automation, and serving of the Codebase user interface. It may reside on any computer other than those serving the Environments, and must meet these requirements:

- Platform: Any platform that supports the required application server specified below. Consult the database vendor's documentation for information about supported platforms.
- Software: The following components of Oracle Application Server 10gAS Release 2, installed from Oracle Corporation media to a new Oracle home directory:
  - Apache web server
  - J2EE container
  - Oracle Forms service
- Configuration:
  - The OC4J_BI_Forms Java startup parameters must include the following: –Xx:+AgressiveHeap
  - UNIX/Linux only: The BC4J_Forms DISPLAY variable must be set to Xterm. (This variable can be set through use of the Oracle Enterprise Manager.)
  - UNIX/Linux only: The login user for the application server must have an environment file that specifies the full path to the ls and env commands.
  - Windows only: The Codebase Server must have access to the files and databases on each Environment that is to be managed. The typical way to provide this access is by creating NFS mounts. An alternative is to enable ssh and scp capabilities.
- Database: Adequate disk space must be afforded for the storage of all versions. At the outset, we recommend allocating at least 10 GB. If you plan to version all Oracle E-Business Suite database objects, we recommend allocating 20 GB.

### User Workstations

User workstations must meet the following requirements:

- Platform
  - Computer with network connection
  - Any of these operating systems: AIX; HP/UX; Linux; Windows NT 4.0, 2000, or XP; Solaris
- Software
  - Any of these web browsers: Firefox 1.5 or higher, Microsoft Internet Explorer 5.5 or higher, Mozilla 1.7.12 or higher, Netscape 7 or higher.
  - Adobe Reader 5.0 or higher.

## Preinstallation Checklist

If you are performing a fresh installation of Codebase version 4.2.2, you need not complete any preinstallation steps. If you are upgrading to version 4.2.2 from an earlier version, however, complete the steps in the following section that is appropriate to your version.

## Upgrading from Version 4.2, 4.2.1, or 4.2.1.1

If you are upgrading from version 4.2, 4.2.1, or 4.2.1.1 (the "earlier version") to version 4.2.2, complete the following steps:

1. Take a backup the Codebase Server install directory for the earlier version. (Also called the "Codebase repository," this is the home folder for the Codebase installation on its server, where it stores its physical files. Its location is specified during installation; it corresponds to the "Install directory" entry on page 3-3.)
2. Take a backup of the Codebase application deployed folder for the earlier version, at:

   ```
   <OracleApplicationServer_HOME>/j2ee/<OC4J-container-name>/
   applications/<application delppoyment name>
   ```

3. Take a backup of forms.conf and formsweb.cfg for the earlier version, at:

   ```
   <OracleApplicationServer_HOME>/forms/<server directory>
   ```

## Upgrading from Version 4.1

If you are upgrading from version 4.1 to version 4.2.2, complete the following steps:

1. Add the tnsnames entry for the Codebase 4.1 database instance to the tnsnames.ora file for the version-4.2.2 Codebase Home schema.
2. Log in to the version-4.2.2 Codebase Home instance. Create a "dblink" to the Codebase Home schema of the Codebase 4.1 database instance.

   Make a note of this dblink, as you will need to supply it when you run the Integra Installer (see the "DB Link name" entery on page 3-5).
3. Log in to the version-4.2.2 Codebase Server. On it, create a folder to hold files temporarily, such as "projectsTemp."
4. Log in to the version-4.1 Codebase Server. Go to the Codebase repository (the home folder of the Codebase installation).
5. In that repository, there will be a folder called "projects." Copy the contents of this projects folder to the version-4.2.2 temporary folder you created in step 3. For example:

   ```
   scp -r projects <CB422host-userid>@<CB422Host>:<full path
   of projectsTemp>
   ```

   Note the full path of this temporary folder, as you will need to enter it as you run the Integra Installer (see the "Source Path" entry on page 3-6).

## Upgrading from Version 3.9

If you are upgrading from version 3.9 to version 4.2.2, complete the following steps:

1. Add the tnsnames entry for the Codebase 3.9 database instance to the tnsnames.ora file for the version-4.2.2 Codebase Home schema.
2. Log in to the version-4.2.2 Codebase Home instance. Create a "dblink" to the Codebase Home schema of the Codebase 4.1 database instance.

Make a note of this dblink, as you will need to supply it when you run the Integra Installer (see the "DB Link name" entery on page 3-5).

3. Log in to the version-4.2.2 Codebase Server. On it, create a folder to hold files temporarily, such as "projectsTemp."

4. Log in to each system with a Codebase 3.9 installation, and repeat the following steps for each:

   a Go to the Codebase repository (the home folder of the Codebase installation).

   b In that repository, there will be a folder called "projects." Copy the contents of this projects folder to the version-4.2.2 temporary folder you created in step 3. For example:

   ```
   scp -r projects <CB422host-userid>@<CB422Host>:<full
   path of projectsTemp>
   ```

   Note the full path of this temporary folder, as you will need to enter it as you run the Integra Installer (see the "Source Path" entry on page 3-6).

# 3

# Integra Installer Worksheet

You will use software provided by Oracle — the Integra Installer — to install or upgrade Integra Codebase. The installer will prompt you to provide information about the environments that Integra will use. The following worksheet enables you to gather this information for a more efficient installation. Record the information in the space provided.

The tables in this worksheet correspond to (software) pages presented by the Integra Installer. If you are upgrading from an earlier 4.2 version (4.2, 4.2.1, or 4.2.1.1), the fields in these pages are populated with values entered for that earlier version.

If you are upgrading from an earlier Codebase version, you will (as mentioned earlier) install Codebase 4.2.2. All installation requirements below apply.

*The Codebase Home schema stores all data about your Codebase users, security, and deployments. It must be installed in an existing database. Specify that database here:*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Hostname**<br>Hostname of the database that will house the Codebase Home schema. | |
| **SID (service name)**<br>SID (aka "service name") of the database that will house the Codebase Home schema. | |
| **Port**<br>Port number for accessing database that will house the Codebase Home schema. | |
| **SYSTEM password**<br>Password of the database's SYSTEM user. | |
| **Database version**<br>Version of the database that will contain the Codebase Home schema. | |

*Enter the following information about the Codebase Home schema:*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Home Schema name**<br>Name of the Codebase Home schema. | |
| **Home Schema password**<br>Password of the Codebase Home schema. | |
| **Home Schema already exists**<br>Select this checkbox if you are upgrading to version 4.2.2 from version 4.2, 4.2.1, or 4.2.1.1. Clear the checkbox if you are performing a fresh installation of version 4.2.2, or if you are upgrading to it from version 3.9 or 4.1. | |

*If the Codebase Home Schema does not yet exist, enter the following information:*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Company name**<br>Company or Organization name | |
| **Company mail host**<br>Company or Organization SMTP mail host | |
| **Company mail port**<br>Port number used for sending email. | |
| **Temporary tablespace**<br>Name of temporary tablespace used by the Codebase Home schema | |
| **Create Codebase tablespaces (if they were not created already)**<br>Clear this checkbox if you are upgrading to version 4.2.2 from version 4.2, 4.2.1, or 4.2.1.1. Select the checkbox if you are performing a fresh installation of version 4.2.2, or if you are upgrading to it from version 3.9 or 4.1. | |

*If "Create Codebase tablespaces" was checked above: This installer will create two tablespaces for the Codebase Home Schema, and one datafile for each tablespace. Specify their details here:*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Data Tablespace name**<br>Name of Data Tablespace (we recommend accepting the default value) | COD_DATA |
| **Data Tablespace size (MB)**<br>Size of Data Tablespace in megabytes | |
| **Data File path and name**<br>Full path and name of Data Tablespace's datafile | |
| **Index Tablespace name**<br>Name of Index Tablespace (we recommend accepting the default value) | COD_INDEX |

| Installer Prompt | Record the value you will use: |
|---|---|
| **Index Tablespace size (MB)**<br>Size of Index Tablespace in megabytes | |
| **Index File path and name**<br>Full path and name of Index Tablespace's datafile | |

*If "Create Codebase tablespaces" was* not *checked above: The Codebase Home schema requires the following tablespaces.*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Data Tablespace name**<br>Name of the Data Tablespace | |
| **Index Tablespace name**<br>Name of the Index Tablespace | |

*Enter the following information about your Oracle Application Server:*

| Installer Prompt | Record the value you will use: |
|---|---|
| **OAS server version**<br>Oracle Application Server version | Select one:<br>• Oracle 10g AS Release 1<br>• Oracle 10g AS Release 2 |
| **OAS home directory**<br>Directory of the Oracle Application Server home | |
| **OAS host**<br>Name of the Oracle Application Server host | |
| **OAS port**<br>Number of the Oracle Application Server host port | |
| **Application config name**<br>The application name by which Codebase is deployed in the Oracle Application Server. If you are upgrading from version 4.2, 4.2.1, or 4.2.1.1, you can supply the value configured for the eariler version, or create a new one (such as codebase422). | |
| **Oracle web admin server port**<br>Number of the Oracle Application Server admin host port | |
| **Oracle web admin user name**<br>Oracle Application Server admin name | |
| **Oracle web admin user password**<br>Oracle Application Server admin password | |
| **Oracle form web instance**<br>Oracle Application Server instance | |
| **Install directory**<br>Directory where Oracle Application Server assets are to be installed. If you are upgrading from version 4.2, 4.2.1, or 4.2.1.1, supply the value configured for the earlier version. | |

| Installer Prompt | Record the value you will use: |
|---|---|
| **Operating system**<br>Operating system of the Oracle Application Server | Select one:<br>• Windows<br>• Solaris<br>• HP-Unix<br>• AIX<br>• Linux (Redhat) |
| **Manually deploy EAR file**<br>Select this checkbox if you want to deploy manually the EAR file containing the Codebase application to the Codebase server. (Otherwise, this is done automatically through the use of scp.) | |
| **Manually deploy application files**<br>Select this checkbox if you want to modify configuration files manually. (Normally this is done automatically through the use of scp.) | |
| **Manually create Codebase repository**<br>Select this checkbox if you want to create manually the installation directory specified in the "Install directory" field. (Normally this is done automatically through the use of scp.) | |

*If the application server's operating system (specified above) is UNIX/Linux, the installer copies files to your application server directory. Enter the following information:*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Login user**<br>OS username of the application server | |
| **Login password**<br>OS password of the application server | |
| **OS BIN directory**<br>OS BIN directory of the application server | |
| **User environment script**<br>Script that sets the Login user's environment variables | |

*Enter the following information about the installing computer:*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Oracle BIN directory**<br>Directory where Oracle executables (e.g., SQL*Plus) have been installed on this computer | |
| **TNS entry**<br>TNS entry for the Codebase Home database on this computer | |

*If you are upgrading from Codebase 3.9 or 4.1: To copy data from a Codebase 3.9 or 4.1 environment that already exists, set the options below.*
*If you are upgrading from Codebase 4.2, 4.2.1, or 4.2.1.1 or fresh install of 4.2.2: leave the box below unchecked.*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Copy existing data and settings**<br>Select this checkbox if you want to copy a Codebase 3.9 or 4.1 environment's data and settings to your 4.2 environment. | |
| **Creating 4.2.2 schema in new target database instance**<br>Select this checkbox if you are creating the Codebase 4.2.2 home schema in a database instance other than the one in which the Codebase 3.9 or 4.1 home schema resides. | |
| **Current version**<br>Version from which you are copying data and settings. (If you are performing a fresh installation, select the value *4.2.2*) | Select one:<br>• 3.9<br>• 4.1<br>• 4.2<br>• 4.2.1<br>• 4.2.1.1<br>• 4.2.2 |

*If you are upgrading from Codebase 3.9 or 4.1, enter the following information about the Codebase environment from which you are copying data and settings*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Home schema name**<br>Name of the Codebase Home schema user in the environment from which you are copying | |
| **Home schema password**<br>Password of the Codebase Home schema in the environment from which you are copying | |
| **TNS entry**<br>TNS entry of the Codebase Home schema in the environment from which you are copying | |

*If you are upgrading from Codebase 3.9 or 4.1, enter the following information about the Database Link environment between source and destination databases*

| Installer Prompt | Record the value you will use: |
|---|---|
| **DB Link name**<br>Name of the Database Link created during the preinstallation procedure (see page 2-qq). This prompt appears only if you selected the "Creating 4.2.2 schema in new target database instance" checkbox (above). | |

*If you are upgrading from Codebase 3.9 or 4.1, manually copy files*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Manually copy existiing versions files**<br>Select this checkbox if you want to process manually the existing version 3.9 or 4.1 projects data. (Otherwise, this is done automatically by the installer) | |

*If you are upgrading from Codebase 3.9 or 4.1, enter the following connection informaiton for the Codebase 4.2.2 environment towhich you are copying old projects data*

| Installer Prompt | Record the value you will use: |
|---|---|
| **Host name**<br>Hostname of the Codebase 4.2.2 environment to which you are copying | |
| **System user name**<br>Name of the OS user for the Codebase 4.2.2 environment to which you are copying | |
| **System user password**<br>Password of the OS user for the Codebase 4.2.2 environment to which you are copying | |
| **Source path**<br>Full path to the temporary folder (in the Codebase 4.2.2 environment) to which the existing Codebase 3.9 or 4.1 data has been copied manually during the preinstallation procedure (see page qq-qq). | |
| **Destination path**<br>Full path of the "to directory" in which you will store file versions : <*INSTALL_DIRECTORY*>/*projects,* in which *INSTALL_DIRECTORY* is the path to the directory you entered in the Install Directory field (see page 3-3). | |

# 4

# Install or Upgrade Integra Codebase

Once you have filled in the Integra Installer Worksheet, confirm that you are prepared to run the Installer. To do so, ensure you have met all requirements cited in Chapter 2). Then complete the following steps to upgrade or install Integra Codebase:

1. Obtain Integra Codebase 4.2.2 (integra-422-codebase.zip) from Oracle.
2. Prepare integra-422-codebase.zip for installation:
   a. Create the directory *integra* at the root level on the installing computer, if it does not exist already. The full path to this directory must not contain spaces.
   b. Place integra-422-codebase.zip in the integra directory.
   c. Create a subdirectory of the integra directory (hereafter called "integra/stage") and unzip integra-422-codebase.zip into it.
   d. Inside integra/stage is a subdirectory named lib_stage. Move the following files (downloaded earlier; see pages 2-2 and 2-3) into lib_stage:

      jacob_18.zip
      xapool-1.4.2.jar
      birt-runtime-2_1_1.zip

   e. Run a preinstallation script from integra/stage.

      If you use Windows, enter this command:

      ```
      preinstall.bat
      ```

      If you use UNIX or Linux, enter these commands:

      ```
      chmod +x preinstall.sh
      preinstall.sh
      ```

3. Close all command shell windows.
4. Open a new command shell window. (In Windows XP, click Start, select Run, enter *cmd* in the Open field, and click OK.)
5. Set the following environment variables temporarily on the installing computer:
   - ORACLE_HOME

     Full path to the Oracle client described under "Installing Computer" in the Before You Install chapter (page 2-1). For example:

     ```
     set ORACLE_HOME=c:\oracle\oradbs8i
     ```

- JAVA_HOME

  Full path to the Java Runtime Environment described under "Installing Computer" in the Before You Install chapter (page 2-2). For example:

  ```
  set JAVA_HOME=c:\Program Files\Java\j2re1.4.2_05
  ```

- CLASSPATH

  Prepend the full path to the lib directory of the Java Runtime Environment described above. For example:

  ```
  set CLASSPATH=%JAVA_HOME%\lib;%CLASSPATH%
  ```

6. Verify the installing computer's connection to the Codebase Home schema by entering this command:

   `tnsping` *`TNS-entry`*

   In this command, *TNS-entry* is the value you specified in the Integra Installer Worksheet above, in the section beginning "Enter the following information about the installing computer," on page 3-4.

   If the command returns any error messages, you must resolve them before continuing; work with your system administrator to find resolutions.

7. Go to the integra/stage directory.

8. Launch the Integra Installer by issuing the command appropriate for the installing computer's operating system.

   - For Linux or UNIX:

     `install.sh` *`options`* `-f codebase-422-install.apf`

   - For Windows:

     `install.bat` *`options`* `-f codebase-422-install.apf`

   In this command, *options* are the following

   - `-a` runs the installer in analyze mode, which checks the destination environment without installing.
   - `-c` logs to the console as well as a log file.
   - `-d`*`level`* sets the debug level — a value between 0 and 5. There is no space between *d* and *level*; e.g., d1
   - `-f` *`path`* is shown in the examples above, and specifies the path to the package to be installed. (For this installation, *path* is always *codebase-422-install.apf*.)
   - `-h` displays a list of all flags.
   - `-l` lists the components in the package specified with the -f option.
   - `-x` has been deprecated. Do not use this option.

   For example: `install.sh -f codebase-422-install.apf`

9. Follow the Installer's step-by-step instructions.

10. Use Oracle's Enterprise Manager to restart the Oracle Application server that hosts the Oracle Forms service used by Integra (choose Restart All). Typically, The URL of Enterprise Manager is:

    `http://server.domain:1810`

When installation is complete, configure Codebase. To do so, see the *Integra Codebase Administration Guide*.

# 5

# Postinstallation Steps

After you run the Integra Installer, complete the following steps:

1. Using SQLPlus or another SQL tool, connect to the version-4.2.2 Codebase Home schema.
2. Run the following query:

   ```
   Select * from cb_home_parameters;
   ```

3. In results returned by this query, insure that the UI_CONNECT_STRING and DATABASE_SID values are correct.
   - If the Codebase Home database instance resides in the Codebase Server, the values returned for these parameters should be the same.
   - If the Codebase Home database instance resides apart from the Codebase Server, then the tnsnames.ora file on the Codebase Server must have an entry to the Codebase database. The UI_CONNECT_STRING should be set to the tns name associated with this entry. The entry would contain database SID information, and DATABASE_SID should be set to that SID value.
4. In the Codebase environment file, set the DISPLAY variable to a remote X server to allow for X Client to start. The environment file is usually INSTALL_DIRECTORY/formconfig/codebase.env on the Codebase Server, in which INSTALL_DIRECTORY is the Codebase home directory (see the Install Directory entry on page 3-3). For example:

   ```
   DISPLAY=xserver_host:0.0; export DISPLAY
   ```

5. Copy the CLASSPATH, LD_LIBRARY_PATH, and DISPLAY variables to the environment file fo the application server host (Codebase Server) from INSTALL_DIRECTORY/formconfig/codebase.env
6. Navigate to the Tools subdirectory of the INSTALL_DIRECTORY. In it, edit the cbruncomand.sh file to set the JAVA_HOME to point to your JDK installatin directory. For example:

   ```
   JAVA_HOME=/usr/opt/jdk1.4.2; export JAVA_HOME
   ```

If you are upgrading from version 3.9 or 4.1 to Codebase 4.2.2, also complete the following steps after you run the Integra Installer:

1. On the installing computer, your integra/stage directory contains a file called codebase-422-install.apf. Copy the file as codebase-422-install.zip.
2. Unzip the codebase-422-install.zip file.
3. From the integra/stage directory, navigate to the cb\install\db\upgrade subdirectory. (The unzipping of codebase-422-install.zip in step 2 has created these subdirectories of your integra/stage directory.)
4. The cb\install\db\upgrade subdirectory of integra/stage contains the files nfs_script_doc.doc and nfs_script.sql. Open the nfs_script_doc.doc file and follow its instructions to run nfs_script.sql in the Codebase Home schema for version 4.2.2. This script corrects file locations pf data migrated from version 3.9 or 4.1 of Codebase.

Finally, the Integra Installer will have made certain changes automatically. Complete the following steps to confirm that these changes were made correctly. In all the following steps, INSTALL_DIRECTORY represents the Codebase home directory (see the Install Directory entry on page 3-3).

1. Open the Codebase environment file — usually usually INSTALL_DIRECTORY/formconfig/codebase.env on the Codebase Server. In the CLASSPATH variable, check the frmwebutil.jar entry.
   - The correct entry is `INSTALL_DIRECTORY/webutil/java/frmwebutil.jar`. Add this value if it is not present.
   - Delete the following entry, if it exists: `ORACLE_HOME/forms/java/frmwebutil.jar`
2. Open the forms.conf file in the ORACLE_HOME/forms/server/forms.conf directory.Check for these entries at the end of the file.

   ```
   AliasMatch ^/forms/cbapp/(..*) "INSTALL_DIRECTORY/$1"
   AliasMatch ^/forms/forms/cbapp/(..*) "INSTALL_DIRECTORY/$1"
   ```

   If these entries are not present, add them
3. Open the formsweb.cfg file in the ORACLE_HOME/forms/server/formsweb.cfg directory. Ensure that the following Codebase configuration information has been added at the end of the file:

   ```
   [codebase422]
   form=codebase.fmx
   otherparams=param_dbinstance=database-id param_gwyuid=database-gwyuid
       (ex: CB_ADMIN_public/CB_ADMIN_public)
   separateFrame=True
   lookandfeel=Oracle
   splashScreen=applimation
   logo=amwind
   pageTitle=Integra Codebase 4.2.2
   envfile=INSTALL_DIRECTORY/formconfig/codebase.env
   serverApp=/forms/cbapp/formconfig/cb_registry
   baseHTMLjinitiator=INSTALL_DIRECTORY/webutil/server/webutiljini.htm
   baseHTMLjpi=INSTALL_DIRECTORY/webutil/server/webutiljpi.htm
   baseHTML=INSTALL_DIRECTORY/webutil/server/webutilbase.htm
   webUtilArchive=/forms/cbapp/webutil/java/frmwebutil.jar,/forms/cbapp/w
       ebutil/java/jacob.jar
   ```

4. Open DB.properties from ORACLE_HOME/j2ee/OC4J-container-name/applications/codebase422<application deployment name>/webhome/WEB-INF/config/DB.properties. Ensure that the following values are correct:

```
MASTER.DBHost=Codebase-database-server-name
MASTER.DBPort=Codebase-database-port (typically 1521)
MASTER.DBName=Codebase-database-SID
MASTER.DBUserid=Codebase-database-schema-name (typically CB_ADMIN)
MASTER.DBPswd=Codebase-database-schema-password
MASTER.DBType=oracle
MASTER.DBRelease=9i
MASTER.DBDriverType=4
```

5. Open quartz.properties from ORACLE_HOME/j2ee/OC4J-container-name/applications/codebase422<application deployment name>/webhome/WEB-INF/config/quartz.properties. Ensure that the following values are correct::

```
org.quartz.dataSource.myDS.URL = jdbc:oracle:thin:@Codebase
   database-server-name:Codebase-database-port:Codebase-database-
   SID (ex.:- HAVASU)
org.quartz.dataSource.myDS.user = Codebase-database-schema-name
   (ex. cb_admin)
org.quartz.dataSource.myDS.password = Codebase-database-schema-
   password (ex.:- cb)
```

6. Open webutil.cfg file from INSTALL_DIRECTORY/webutil/server/ webutil.cfg. Ensure that the following values are correct::

```
install.syslib.location=/forms/cbapp/webutil/lib
```

transfer.appsrv.workAreaRoot=INSTALL_DIRECTORY/temp

7. Open the cb_registry.dat file from INSTALL_DIRECTORY/formconfig/cb_registry.dat.:

   Locate the following lines:

```
#The Application Level icon files are relative to the DOCUMENTBASE
#example: icons/
#or an absolute URL.
#Example: http://www.forms.net/~luser/d2k_project/
```

   Verify that the following line is present immediately beneath these lines:

```
default.icons.iconpath=/forms/cbapp/cb_form_ui/icons/
```

   If not, add these lines:

```
default.icons.iconpath=/forms/cbapp/cb_form_ui/icons/
default.icons.iconextension=gif
```