

Oracle® Configuration Controls Governor
Administration Guide
Release 5.5
Part No. E25669-02

March 2013

Oracle Configuration Controls Governor Administration Guide

Part No. E25669-02

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Contents

1 Introduction

2 Quick Start

Log In	2-1
Connecting to Your Email Server	2-2
Configure the System Profile	2-2
Configure CCG for Each ERP Instance	2-3
Define a New ERP Instance	2-3
Create Tablespaces	2-4
Configure CCG Agent	2-6
Configure CCG	2-9
Create Users, Roles, and Security Groups	2-11
Creating Users	2-12
Adding Security Groups	2-14
Schedule Change Tracking Transfer	2-16

3 How To

Create Tablespaces	3-1
Schedule Definitions and Work with Jobs	3-2
Scheduling a Job	3-3
Viewing Job Status or Details	3-6
Modifying a Job	3-7
Reconfigure an Instance	3-8

Maintain the CCG Home Schema	3-9
Database Passwords.....	3-9
Change the CCG Home Schema Password.....	3-10
Change the CCG Agent Schema Password or ERP Schema Password.....	3-10
Patches	3-11
Create Templates	3-12
Purge Occurrences and Definitions	3-14
4 Reference	
Login	4-1
Home Configuration	4-2
Email Alerts	4-3
Security Groups	4-3
Security Groups Definition	4-4
Permissions	4-5
Users	4-5
Users and Roles	4-6
Users Definition	4-6
Roles	4-7
ERP Instances	4-8
ERP Instances Definition	4-9
Component Details	4-9
Tablespaces.....	4-12
Tablespaces Definition	4-12
Datafile Basics	4-13
System Profile.....	4-13
Help	4-14
5 Using MetaBuilder	
How to Create Metadata	5-1
Preparation	5-2
Identify Non-standard Application Objects.....	5-2
Identify Object Data Sources	5-2

Set Up Metadata Structure	5-3
Step 1: Define a Product Family	5-3
Step 2: Define Suites	5-4
Step 3: Define Applications	5-5
Step 4: Assign Applications to Suites.....	5-5
Step 5: License Suites	5-6
Step 6: Assign Applications to ERP Instance	5-7
Step 7: Import Data Dictionary into MetaBuilder	5-7
Create Metadata.....	5-8
Step 8: Create Schemas	5-8
Step 9: Assign Schemas to an Application.....	5-9
Step 10: Add Tables to a Schema	5-10
Step 11: Configure Columns within a Table/View	5-11
Step 12: Assign Translation Details to Columns	5-13
Step 13: Create Objects.....	5-22
Step 14: Synchronize.....	5-27
Step 15: Manage Security Groups	5-28
Step 16: Test Metadata.....	5-28
MetaBuilder Glossary	5-28

Introduction

Oracle Configuration Controls Governor (CCG) monitors setup data in business-management applications. It can take “snapshots” that document application setups; compare snapshots with one another, to show how application setups differ; and employ change tracking to monitor changes.

This *Administration Guide* tells how to configure CCG after it is installed, provides reference information that will enable you to administer the application over time, and tells how to use MetaBuilder — a tool for compiling metadata (detailed information about the data structure of the ERP application database).

As you read through the *Administration Guide* (and use CCG) you may encounter the following terms:

Systems and Databases

- CCG Agent: CCG-installed and owned schema in the ERP instance. Used by CCG for tasks that require access to the instance.
- CCG Home schema: Contains all data about your CCG users, security, and deployments. Usually named AMHOME.
- CCG UI: User interface CCG; i.e., the portion of the application with which most users and administrators work directly.
- ERP application: An enterprise-scale application, such as “General Ledger.”
- ERP application UI: The ERP application’s user interface.
- ERP instance: Database instance that contains ERP application data.
- ERP module: Synonymous with ERP application.
- ERP system: Joins or integrates your ERP applications.

Using CCG

- Definition: Collection of one or more programs and their user-specified parameters.
- Job: A sequence of one or more definitions and/or standalone programs scheduled for execution.

Future jobs are those whose execution has not begun; current jobs are those being executed now; past jobs have been completely executed or terminated.

- Occurrence: Generated when a definition is executed. Contains data about the definition's execution, and reports generated by the definition's programs.
- Program: A batch of steps or instructions that can be scheduled for execution in a job.

Standalone programs can be scheduled independently of other programs (in contrast to the programs that are part of a definition and therefore always scheduled together).

- Change Tracker: Displays all changes collected by change tracking definitions.
- Change Tracking Definition: Definition type that monitors changes to ERP application setups.
- Change Tracking Alert: Email message that describes changes to ERP application setups. Based on change tracking queries.
- Change Tracking Query: Filters the data displayed in the change tracker.
- Change Tracking Trigger: Installed in the ERP instance by the change tracking definition; notes events you specify (inserts, updates, deletes)
- Comparison: Report that identifies differences between two snapshot occurrences.
- Field Description: Field prompt or label that is visible to ERP system users.
- Object: Group of setup tables to be monitored. Helps you choose the information to be monitored without having to grapple with data model or entity relationships. An object is typically associated with an ERP application setup form or page.
- Snapshot Definition: CCG definition type that reports ERP application setup data.
- Template: Determines the data presented in snapshot occurrences.

Quick Start

This chapter shows you step-by-step how to configure Configuration Controls Governor 5.5 for the first time. If you've already configured CCG 5.5, see How To (page 3-1) for tutorials, or Reference (page 4-1) for quick overviews of features and options.

Log In

To log in to CCG:

1. Open a web browser window and visit the Secure Login page:

`http://hostname/web-application-name`

In this URL:

- *hostname* is the domain name of the web server configured to serve CCG
- *web-application-name* is the name of the CCG web application (usually *ccg*).

If you have a CCG icon on your desktop; double-clicking it opens this page.



2. If you already have your own CCG username and password, enter them now. However, if this is the first time your organization has logged into CCG, use the following default login information:

- **Username.** amadmin
- **Password.** amadmin (case sensitive)

You must be assigned the Administrator role to access the Home Configuration page. The amadmin user has this role.

Connecting to Your Email Server

Complete the following procedure to enable your email server to send CCG email alerts — messages that inform users when changes are made to application setups.

1. Select Administrator > Home Configuration from the menu bar. The Home Configuration page appears.

The screenshot shows the 'Home Configuration' page with the 'Email Server' section. The 'SMTP server domain' field contains 'smtp.mycompany.com' and the 'Port' field contains '25'. A 'Test' button is visible to the right of the port field. The breadcrumb trail at the top right reads 'Current Location: Administrator > Home Configuration'.

2. Enter the following information:
 - **SMTP server domain.** The domain name of your mail server. If left blank, CCG cannot send email notifications.
 - **Port.** The port number of your mail server.
3. Click Save.
4. Click Test. The Send Test Message from Email Server page appears.

The screenshot shows the 'Send Test Message from Email Server' page. It includes fields for 'From' (containing 'smtp.mycompany.com'), 'To', and 'Subject' (containing 'Integra: Alerts Test'). The 'Port' is set to '25'. 'Send' and 'Cancel' buttons are at the bottom right. The breadcrumb trail at the top right reads 'Current Location: Administrator > Home Configuration'.

5. Enter From and To addresses, and optionally a Subject, and click Send.

The page is refreshed, displaying Status information. If the test message is sent successfully, but you don't receive it, first verify that the message isn't being treated erroneously as spam by your incoming mail server or mail client.
6. When you're finished, click Back. The Home Configuration page reappears.

CCG does not use the Oracle Alerts product. It sends email messages directly from the database, using Oracle's UTL_SMTP feature.

Configure the System Profile

A system profile records information about this instance of CCG:

1. Select Administrator > System Profile from the menu bar. The System Profile page appears.

The screenshot shows the 'System Profile' page. Under the 'Options' section, there are two input fields: 'CCG Application Path' (containing 'ccg') and 'Company Logo'. A 'Save' button is located at the bottom right. The breadcrumb trail at the top right reads 'Current Location: Administrator > System Profile'.

2. Enter this information:

- **CCG Application Path.** Enter the *web-application-name* portion of the URL that summons the Secure Login page. Typically, this value is *ccg*. (See “Log In” on page 2-1).
- **Company Logo.** Provide the name of the image file displayed in the upper left corner of each page. The file must be located in the images subdirectory of the directory on the CCG UI server where the CCG web application is deployed.

3. Click Save.

Configure CCG for Each ERP Instance

You must configure CCG to work with each ERP instance that you want to manage. Broadly speaking, you will perform these tasks for each instance:

- Define a new instance in CCG.
- Create CCG Agent tablespaces for the instance. The CCG Agent lets CCG perform tasks that require access to the instance’s data.
- Configure CCG Agent parameters.
- Configure CCG parameters.

Define a New ERP Instance

To define a new ERP instance:

1. Select Administrator > ERP Instances from the menu bar. If one or more instances have been defined already, a list of instances appears.

ERP Instance Workbench Current Location: [Administrator](#) > [ERP Instances](#)

View ERP instances: [Revise Search](#)

Results Per Page: Results 1 - 5 Of 10 First | <Prev | [Next](#) > | Last

ERP Instance Name	Description	ERP Version	Service Name	Enabled?	
ag1_r12	flagstaff	Oracle Applications 11.5.10	ag1_r12	Yes	Edit
PSFIN88_Glendale	PS Financials on Glendale	PeopleSoft Financials 8.8	glendale_FDMO	No	Edit
Flagstaff_R12	OA 12.0	Oracle Applications 12	ag1_r12	Yes	Edit
PS9204	NY PS 88 Fin	PeopleSoft Financials 8.8	PS9204	No	Edit
PS88_Glendale	PS on Glendale	PeopleSoft 8.8	glendale_FDMO	Yes	Edit

Results Per Page: Results 1 - 5 Of 10 First | <Prev | [Next](#) > | Last

[Revise Search](#)

[Add ERP Instance...](#)

2. Click Add ERP Instance. A new definition page appears.

ERP Instance Workbench Current Location: [Administrator](#) > [ERP Instances](#)

ERP Instance Basics

ERP Instance: Service Name:

Description: ERP Version:

[Save](#) [Cancel](#)

3. Enter the following information:
 - **ERP Instance.** Short name that identifies the ERP instance
 - **Description.** Longer, more descriptive name for the ERP instance. For example, if Instance name is Dev, Description could be Development Instance
 - **Service Name.** TNSNAMES service name that will be used when CCG creates a database link from the CCG Home schema to the new CCG Agent schema on the ERP instance. This name must be present in the TNSNAMES configuration for the CCG Home instance's Oracle Home.
 - **ERP Version.** ERP application version
4. Click Save. The page is refreshed.

Create Tablespaces






If the following tablespaces already exist, there is no need to recreate them.

1. Select Administrator > Tablespaces from the menu bar. The Tablespaces Workbench appears.

Tablespaces Current Location: [Administrator](#) > [Tablespaces](#)

View tablespaces: [Revise Search](#)

Results Per Page: Results 1 - 5 Of 26 First | [<Prev](#) | [Next>](#) | Last

Tablespace	Type	Instance	Initial Extent (KB)	Next Extent (KB)	Status	
 FLAGSTAFF_APS_DATA01	AMAPS DATA	Flagstaff_R12	64	64	Complete	Delete Edit
 FLAGSTAFF_AGENT_DATA01	AM_AGENT DATA	Flagstaff_R12	64	64	Complete	Delete Edit
 FLAGSTAFF_INDEX01	AM_AGENT INDEX	Flagstaff_R12	64	64	Complete	Delete Edit
 ACC_DATA	ACC DATA	Integra Home	0	0	Complete	Delete Edit
 ACC_INDEX	ACC INDEX	Integra Home	0	0	Complete	Delete Edit

Results Per Page: Results 1 - 5 Of 26 First | [<Prev](#) | [Next>](#) | Last


[Revise Search](#)


[Add Tablespace...](#)

2. Click Add Tablespace. The Tablespaces page appears.

Tablespaces Current Location: [Administrator](#) > [Tablespaces](#)

Tablespace Basics

Instance:  Initial Extent (KB):

Type:  Next Extent (KB):

Name:

[Create Tablespace](#) [Save](#) [Back](#)

3. Enter the following “Tablespace Basics” information:
 - **Instance.** Click the icon and select the ERP instance.
 - **Type.** Click the icon and select AM_AGENT DATA.
 - **Name.** AM_AGENT_D
 - **Initial extent (KB).** 64
 - **Next extent (KB).** 64

Tablespaces will be locally managed with user-defined extents. If you must define a tablespace differently, create it manually and enter its name in the Name field. There will be a warning the tablespace exists; choose *yes* to continue.

4. Click Save. The page refreshes, with a new Datafiles section below Tablespace Basics. The new section contains these fields:

Add Datafile

Datafile Name: Max Size (MB):

5. Enter the following “Add Datafile” information:
 - **Datafile Name:** Enter the full path from the root directory to a new datafile named AM_AGENT_D1.DBF.
 - **Max Size (MB):** 1000
6. Click Save. You will be asked for the system password. After you enter it, the page refreshes again.
7. Click Create Tablespace. A job to create the tablespace will be submitted for immediate execution.
8. Select View > View Current Jobs, and monitor the job’s progress.
9. Once the job has completed, return to the Tablespace Workbench by selecting Administrator > Tablespace Workbench.
10. Create the following additional tablespace(s) using the steps above:

An index tablespace for the AM_AGENT DATA tablespace you’ve already created:

- **Instance.** The ERP instance
- **Type.** AM_AGENT INDEX
- **Name.** AM_AGENT_X
- **Initial extent (KB).** 64
- **Next extent (KB).** 64
- **Datafile Name.** Enter the full path from the root directory to a new datafile named AM_AGENT_X1.DBF
- **Max Size (MB).** 1000

A CCG data tablespace:

- **Instance.** The ERP instance
- **Type.** APS_DATA
- **Name.** APS_AGENT_D
- **Initial extent (KB).** 64
- **Next extent (KB).** 64
- **Datafile Name.** Enter the full path from the root directory to a new datafile named APS_AGENT_D1.DBF
- **Max Size (MB).** 500

A corresponding index tablespace:

- **Instance.** The ERP instance
- **Type.** APS_INDEX
- **Name.** APS_AGENT_X
- **Initial extent (KB).** 64
- **Next extent (KB).** 64
- **Datafile Name.** Enter the full path from the root directory to a new datafile named APS_AGENT_X1.DBF
- **Max Size (MB).** 500

Configure CCG Agent

The CCG Agent is a CCG-installed and owned schema in the ERP instance:

1. Select Administrator > ERP Instances from the menu bar.
2. In the ERP Instance Workbench, click Edit to the right of the ERP instance's name.
3. To the far right of CCG Agent, click Edit. The Configure CCG Agent Component section appears.

Configure CCG Agent Component:

Tablespaces

Data: **AM_AGENT_D**

Index: **AM_AGENT_X**

Attributes

CCG Agent Username:	AM_AGENT
Database Link from HOME to Agent:	or_ag1_5102_AM_AGENT_LINK
ERP Username:	APPS
ERP User Database Link:	or_ag1_5102_ERP_LINK
Temporary Tablespace Name:	TEMP
Database Version:	9.2.0.6
Remote File System Directory of the \$ORACLE_HOME:	/apps/ag1/oapps115102/9.2.0
Remote File System Directory of the UTL_FILE_DIR:	/apps/ag1/oapps115102/9.2.0/appsutil/outbound/ag1_5102
File System Directory of IMP/EXP/SQLPLUS Binaries:	/apps/ag1/oapps115102/9.2.0/bin
Remote Instance File System Directory Delimiter:	/
Export/Import Buffer Value:	100000
ISO Language:	US
Parallel Workers:	4
Database Host:	orlando.whq.logicalapps.com
Database Port:	1531
Database SID:	ag1_5102
Analyze Date Tolerance:	7
APPSORA.env:	APPSORA.env

Configure Remove Save Cancel
Refresh Back

4. Revise the following information if necessary:
 - **CCG Agent Username.** For the CCG Agent schema. Created on the ERP instance if it does not exist.
Default value: AM_AGENT

- **Database Link from HOME to Agent.** Needed to transfer metadata from the CCG Home instance to the ERP instance, and to execute any process on the ERP instance. Created on the CCG Home instance if it does not exist.
The value must contain no more than 20 characters.
- **ERP Username.** Existing ERP instance user with full access to the ERP instance's data.
 - Oracle E-Business Suite: The typical value is APPS
 - PeopleSoft Enterprise: The typical value is SYSADM
 - Siebel CRM Applications: The typical value is SIEBEL
- **ERP User Database Link.** Needed to access ERP application information. Created on the ERP instance if it does not exist.
The value must contain no more than 20 characters.
- **Temporary Tablespace Name.** Name of the ERP instance's temporary Tablespace.
- **Database Version.** ERP instance's database version.
Example: 9.2.0.6
- **Remote File System Directory of the \$ORACLE_HOME.** File system directory that corresponds to the \$ORACLE_HOME of the ERP instance.
- **Remote File System Directory of the UTL_FILE_DIR.** File system directory specified by the UTL_FILE_DIR parameter in the ERP instance's INIT.ORA file.
Tells CCG where to read and write files that reside on the ERP instance.
- **File System Directory IMP/EXP/SQLPLUS Binaries.** File system directory path where these executables reside on the ERP instance.
- **Remote Instance File System Directory Delimiter.** The character used by your ERP instance's file system to separate elements within pathnames.
 - Unix/Linux: / (forward slash)
 - Windows: \ (backslash)
- **Export/Import Buffer Value.** Sets the BUFFER parameter, which is used when invoking the IMP and EXP utilities. Default value: 100000
- **ISO language.** Default value: US
- **Parallel Workers.** Default value: 4
- **Database Host.** Server where database resides.
- **Database Port.** Port for installing and launching the database.
- **Database SID.** Name of the database that contains the ERP application schema.
- **Analyze Date Tolerance:** Default value: 7
Informia Subset users: Subset will not perform a row count if there is an existing one that was created within this many days.
- **APPSORA.env.** Default value: APPSORA.env

5. Click the Save button near the bottom of the page. You will be prompted for the following passwords: AM_AGENT, ERP USER, SYSTEM. Be sure to record your entries for later use.
6. Click the Configure button. An ERP instance configuration job is submitted, and the page is refreshed. The Latest Status column will indicate the job's status. To update the Latest Status column, click the Refresh button at the bottom of the page.
7. When the job completes, the Latest Status indicates that configuration of the CCG Agent either succeeded or failed. If it failed:
 - a. Click Edit to the right of CCG Agent.
 - b. Click the Remove button near the bottom of the page.
 - c. Select Jobs > View Current Jobs from the menu bar. Find the instance configuration job that was created when you clicked the Configure button, and view the job's logs/details to determine the cause of the failure.
 - d. Resolve the cause of the failure.
 - e. Select Administrator > ERP Instances, edit the instance definition, click Edit to the right of CCG Agent, and click the Configure button.

When you configure the CCG Agent, a job containing a number of programs is scheduled for immediate execution. Information about those programs is provided below. All programs (other than the noted exception) must complete without error.

- **Configure CCG Agent [*instance name*]**. The main program that calls other programs to perform specific tasks.
- **Drop SYSTEM Database Link**. Drops the database link in the CCG Home schema to the SYSTEM user on the ERP instance, if one exists.
If one does not exist, this job will end in error. You can safely ignore this error.
- **Create SYSTEM Database Link**. Creates a database link for the CCG Home schema to connect as SYSTEM on the ERP instance. This link is used to create the CCG Agent schema on the ERP instance.
- **Create CCG Agent User**. This user (or schema) will contain all CCG packages and tables.
- **Grant User Privileges and Roles**. Grants necessary privileges and roles to the CCG Agent user.
- **Create CCG Agent Database Link**. Creates a database link for the CCG Home schema user to connect to the CCG Agent schema on the ERP instance. This link is used to create CCG Agent objects.
- **Create CCG Agent Schema Objects**. Creates tables and indexes used by CCG Agent.
- **Compile Target Packages**. Compiles all packages used by the CCG Agent.
- **Install Java Classes and Allocate File Permissions**. Installs Java components used by the CCG Agent.
- **Create ERP Database Link**. Creates a database link for the CCG Home schema user to connect to the ERP User schema on the ERP instance.

- **Populate CCG Agent Seed Data.** Populates the CCG Agent objects' seed data.
- **Drop SYSTEM Database Link.** Drops the database link from the CCG Home schema to the SYSTEM user on the ERP instance.

Configure CCG

To configure CCG:

1. To the far right of Configuration Controls Governor, click Edit. The page is refreshed, and the lower portion displays fields for configuring CCG (depending on your installation, tables might be listed in the Mappings section).

Attributes

APPLSYS Username:

APPLSYS

HR Username:

HR

Remote Instance Directory of the FND_TOP:

<fully-qualified directory name>

Baseline Definition Owner:

Remote Instance Directory for Unix Executables:

/usr/bin

Remote Instance Directory of the APPL_TOP:

<fully-qualified directory name>

Remote Directory for Oracle Supplied LCT Files:

<fully-qualified directory name>

Freeze Table Overlays:

Y

Descriptive Flexfields Flag:

Y

Freeze Definition Flag:

Y

Remote APPLTOP (Y/N):

N

Remote APPLTOP Server Name:

Remote APPLTOP Migration Directory:

Remote APPLTOP OS User:

Remote Instance Directory for SCP/SSH:

Applications

Application	Description	Enabled
<div>Add application</div>	<div>Add suite</div>	

Mappings

Table	Expected Schema	Actual Schema	Enabled
			<div>Configure</div> <div>Remove</div> <div>Save</div>

Refresh

Back

2. Enter the following information:
 - **APPLSYS Username.** Oracle E-Business Suite users: ERP instance's APPLSYS username. PeopleSoft Enterprise users: ERP instance's SYSADM username.
 - **HR Username.** Oracle E-Business Suite users: ERP instance's HR username.
 - **Remote Instance Directory of the FND_TOP.** Oracle E-Business Suite users: ERP instance's \$FND_TOP directory.
 - **Baseline Definition Owner.** CCG User who will own the snapshot and change tracking definitions that will be generated automatically when you complete this configuration process.
 - **Remote Instance Directory of the APPL_TOP.** Oracle E-Business Suite users: ERP instance's \$APPL_TOP directory.

- **Freeze Table Overlays.** If you have moved or renamed any ERP tables or views from their defaults, enter *N* to map them (which will make them visible to CCG). The default value is *Y*.
 - **Descriptive Flexfields Flag.** Oracle E-Business Suite users: Enter *Y* to capture all specific values entered in every Descriptive Flexfield of every setup object in this ERP instance. The default value is *N*. To report on the structure or definition of a Descriptive Flexfield, use the System Administration application's Descriptive Flexfield Segments object.
 - **Freeze Definition Flag.** This value is not used, and so may be set to *Y*, *N*, or blank.
 - **Remote APPLTOP (Y/N).** Oracle E-Business Suite users: Enter *Y* if your APPL_TOP is on a different physical server than the ERP instance. The default value is *N*.
 - **Remote APPLTOP Server Name.** Oracle E-Business Suite users: Name of server, if your APPL_TOP is on a different computer than the ERP instance.
3. Click Save.
 4. Specify the applications that CCG will be able to monitor on this ERP instance. You can:
 - Click Add Application to add applications one-by-one, clicking Save after selecting each application.
 - Click Add Suite to add all applications in a product suite.
 5. Click the Configure button. You will be prompted for the following passwords: AM_AGENT, ERP USER, SYSTEM. Be sure to record your entries for later use.
 6. Once you supply the passwords, an ERP instance configuration job is submitted and the page is refreshed. The Latest Status column indicates the job status. To update the Latest Status column, click the Refresh button at the bottom of the page.
 7. When the job completes, the Latest Status indicates that configuration of CCG either succeeded or failed. If it failed:
 - a. Click Edit to the right of CCG.
 - b. Click the Remove button near the bottom of the page.
 - c. Select Jobs > View Current Jobs from the menu bar. Find the instance configuration job that was created when you clicked the Configure button, and view the job's logs/details to determine the cause of the failure.
 - d. Resolve the cause of the failure.
 - e. Select Administrator > ERP Instances, edit the instance definition, click Edit to the right of CCG, and click the Configure button.

When you configure CCG, a job containing a number of programs is scheduled for immediate execution. Information about those programs is provided below. All programs must complete without error.

- **Configure CCG.** Main configuration program that calls all other programs to perform specific tasks.
- **Create Target Schema Objects (OA 10.7-specific).** Oracle E-Business Suite 10.7 users: Creates CCG Views and Synonyms.

- **Create Target Schema Objects (OA 11.0.3 and 11i-specific).** Oracle E-Business Suite 11.0.3 and 11i users: Creates CCG Views and Synonyms.
- **Create Target Schema Objects.** Creates CCG database objects (e.g., tables, sequences, and indexes).
- **Create tick_ct_target_pkg.** Creates CCG change tracking package specification and body.
- **Run Target Synchronize.** Copies metadata to the ERP instance and verifies that there are no conflicts with the Oracle Data Dictionary.

If, owing to customizations, CCG cannot locate tables or views, or locates the same table name within more than one schema, it will populate the Mappings section.

1. For each item: Click Edit to the item's right and specify the object that CCG should use. If two schemas own tables with the same name, enable only one table.
2. Click the Configure button again and follow the preceding steps.

Create Users, Roles, and Security Groups

Typically, each CCG user has his or her own username and password. This lets you control each user's login access, roles and permissions. Roles determine the menu items the user sees; permissions control the ERP data the user can access. Rather than granting permissions directly to users, you grant them to security groups, then assign users to the security groups. Users who do not belong to any security groups will not be able to access any ERP data. Similarly, users who do not have any roles will not see any CCG menu items.

If you are configuring CCG for the first time, create the users and roles specified in your implementation plan. Then create security groups and assign your users to them.

At minimum, you must:

- Create at least one new user (unless you will be the only person using CCG).
- Assign each possible role to at least one user (unless there are roles that you do not wish to assign to any user).
- Create at least one security group.
- Assign each user to at least one security group (except for users who should not have access to any ERP data).

The simplest possible setup would be to assign all roles to yourself, create one security group with access to all ERP data, and assign yourself to that group.

Creating Users

To create a CCG user:

1. Select Administrator > Users from the menu bar. The Users page appears.

Users Current Location: [Administrator](#) > [Users](#)

View users:

[Revise Search](#)

Results Per Page: Results 1 - 6 Of 6 First | <Prev | Next> | Last

Login Id	User Full Name	Department	Email	Last Logon	Enabled	
AMADMIN	INTEGRA.ADMINISTRATOR	LogicalApps	efried@logicalapps.com	04/19/2007	Yes	Delete Edit
AMDEV	MetaBuilder User	qa	efried@logicalapps.com	04/18/2007	Yes	Delete Edit
EFRIED	Eric Fried	QA	efried@logicalapps.com	04/09/2007	Yes	Delete Edit
JTREADWELL	jtreadwell	QA	jtreadwell@logicalapps.com	04/17/2007	Yes	Delete Edit
SUPPORT	support	support	efried@logicalapps.com	04/12/2007	Yes	Delete Edit
VHOM	vhorn	QA	vhorn@logicalapps.com		Yes	Delete Edit

Results Per Page: Results 1 - 6 Of 6 First | <Prev | Next> | Last

[Revise Search](#)

[Add User...](#)

2. Click the Add User button. A blank definition appears.


Users Current Location: [Administrator](#) > [Users](#)


User Basics

Full Name: Email:

Department:

Login

Login Id: Valid from: 

Password: Valid until: 


Confirm password: Enabled: ☒


[Save](#) [Cancel](#)

3. Enter the following information:
 - **Full name.** User's full name. The name may consist of letters, spaces, ' (apostrophe), and - (hyphen); other characters are not allowed.
 - **Department.** User's department or organization. Use any combination of letters, digits, spaces, and - (hyphen); other characters are not allowed.
 - **Email.** The user will receive alerts at this address.
 - **Login ID.** User's CCG login ID. The ID may consist of letters and digits only; spaces and other characters are not allowed.
 - **Password.** Password for the new user. This data is encrypted before it is stored. Use up to 30 characters, excluding these: ! | / = \$ & @ " ' ` ,
 - **Confirm password.** Re-enter the password to confirm.
 - **Valid from.** First day user can log in
 - **Valid until.** Last day user can log in (optional).
 - **Enabled.** Enables the user to log in; if not checked, the user cannot log in.

4. Click Save. The page is refreshed, and a Roles section is added.
5. In the Roles section, click on the Add Role button. The the following Roles page appears.

Add role:

Role: Valid from: 

Enabled: ☒ Valid until: 

[Save](#) [Cancel](#)

[Back](#)

6. Enter the following information to assign a role to the user:
 - **Role.** Select a role from the drop-down list.
 - **Enabled.** Enables this role for this user.
 - **Valid from.** First day the user will have this role.
 - **Valid until.** Last day the user will have this role (optional).

The following roles are available for CCG 5.5.

- CCG Developer: Create and edit templates. Use MetaBuilder to create metadata — information about ERP objects for which CCG may take or compare snapshots, or track changes.
 - Change Tracking Scheduler: Schedule change tracking definitions for execution.
 - Snapshot Scheduler: Schedule snapshot definitions for execution, and compare snapshot occurrences.
 - CCG User: Create and edit snapshots and change tracking.
 - Administrator. Perform tasks accessible from the Administrator menu bar.
7. Click the Save button. The page refreshes, displaying a summary of the user's roles.

Users Current Location: [Administrator](#) > [Users](#)

SUCCESS Role has been created successfully

User Basics
Login Id: **BGREENHUT** Full Name: **Barry Greenhut**

Roles

Role	Valid from	Valid until	Enabled	
Administrator	04/19/2007		Yes	Edit

[Add Role](#)

[Back](#)

8. To add another role, click Add Role again. The new role is added when you click the Save button. You can add as many roles as you wish.
9. Click the Back button. The definition page reappears.
10. Click the Save button. The new definition is saved and the Users page appears.

Adding Security Groups

To add a security group:

1. Select Administration > Security Groups from the menu bar. The Security Groups page appears.

Security Groups Current Location: [Administrator](#) > [Security Groups](#)

View security groups: [Revise Search](#)

Results Per Page: Results 1 - 2 Of 2 First | <Prev | Next> | Last

Security Group	Description	Instance	Enabled?	
<input type="checkbox"/> tempe_ag1_1159		ag1_59	Yes	Edit
<input type="checkbox"/> flagstaff_ag1_r12	Group for R12 instance on flagstaff	ag1_r12	Yes	Edit

Results Per Page: Results 1 - 2 Of 2 First | <Prev | Next> | Last [Revise Search](#)

[Add Security Group...](#)

2. Click Add Security Group. A blank definition appears.

Security Groups Current Location: [Administrator](#) > [Security Groups](#)

Group Basics

Name: ERP Instance: [Help](#)

Description: Enabled: ☒

[Save](#) [Cancel](#)

3. Enter the following information:
 - **Name.** The group's name.
 - **Description.** A short description of the group.
 - **ERP Instance.** The ERP instance that the group can work with.
 - **Enabled.** When checked, the group is active.
4. Click Save. The page is refreshed, displaying the Permissions and Users sections.

Security Groups Current Location: [Administrator](#) > [Security Groups](#)

SUCCESS Security group "GL ORG2" created successfully for the instance "ag1_59". Add permissions and assign security groups to users.

Group Basics

Name: ERP Instance: [Help](#)

Description: Enabled: ☒

Permissions

Scope	Value	Enabled
Add Permission...		


Users

Full Name	Valid from	Valid until	Enabled
Add User...			

[Save](#) [Cancel](#)

5. Click Add Permission. The Permissions page appears.

Add permission:

Scope:  Values:  Enabled: ☒

(leave blank for all)

6. Enter the following information:

- **Scope and Values.** Each entry in the Scope field is a class of items that give access to ERP data — in Oracle EBS 11i, applications, business groups, organization units, and sets of books; in EBS R12, applications, business groups, organization units, ledger sets, and ledgers; in PeopleSoft, applications and set IDs. The Value field can contain an individual instance of a Scope item — for example, if Scope is Application, Value may be Payables (AP). Select a scope and one of its values to grant access to that value (you can select only one value at a time). Or, select a scope and leave the value blank to select all possible values for that scope.
- **Enabled.** When checked, the permission is active.

7. Click Save. The page refreshes, displaying a summary of the Permission.

Security Groups Current Location: [Administrator](#) > [Security Groups](#)

SUCCESS Permission Application Oracle General Ledger created successfully.

Group Basics
Name: GL ORG2 ERP Instance: ag1_59

Permissions

Scope	Value	Enabled	
Application	Oracle General Ledger	Yes	Edit



8. To add another permission, click Add Permission again, and select another scope and value. (You may select a scope for which you have already selected a value, in order to select another value for it.) The new permission is added when you click Save. You may add as many permissions as you wish.


Before you can add users to a group, you must select each scope item and either select at least one value for it, or leave its Values field blank to select all values.

Add all the permissions you intend to create before adding the first user. Once you add a user, you cannot change the group's permissions.

9. When you are done adding permissions, click Back. The definition page reappears.
10. Click Add User. The Users page appears.

Add user:

User:  Valid from: 

Enabled: ☒ Valid until: 

11. Enter the following information:
 - **User.** Select a user from the pop-up window.
 - **Enabled.** When checked, this user is an active member of the group.
 - **Valid from.** First day the user will be a member of the group.
 - **Valid until.** Last day the user be a member of the group (optional).
12. Click Save. The page refreshes.
13. To add another user, click Add User again. The user is added when you click Save. You may add as many users as you wish.
14. Click the Back button. The definition page reappears.
15. Click Save. The new definition is saved and the Security Groups page appears.

Schedule Change Tracking Transfer

The Change Tracking Transfer program transfers change tracking data from the ERP instances to CCG. When users view the CCG change tracker, they see only the data that has been transferred by this program. You are advised to schedule this program to run as frequently as possible:

1. Select Jobs > Schedule a Job from the menu bar. The Schedule a Job page appears.

Schedule a Job Current Location: [Jobs](#) > [Schedule a Job](#)

Start
☒ Immediately
☐ On at (hh24:mm)

Repeat
☒ None (run once only)
☐ Minute
☐ Day
☐ Week
☐ Month
☐ Year

...until
☒ No End Date
☐ End After Occurrences
☐ End By

Notify when
☐ Completed ☐ Terminated ☐ Error Email

Items To Execute

<div style="display: flex; align-items: center;"> <div style="border: 1px solid #ccc; padding: 2px; margin-right: 5px;">+</div> <div style="border: 1px solid #ccc; padding: 2px; flex-grow: 1;">Apps: Change Tracking Transfer</div> <div style="border: 1px solid #ccc; padding: 2px; margin-left: 5px;">Delete</div> </div>
--

Add Item...

Schedule
Clear

2. Click Add item. The Add Item page appears (as shown in step 4).
3. Click the icon to the right of the Program Name field. An LOV (List of Values) window appears, displaying all standalone programs.

4. Highlight Change Tracking: Transfer and click the Select button. The LOV window disappears, and the Add Item page displays “Change Tracking: Transfer” in its Program Name field.

Schedule a Job

Current Location: [Jobs](#) > [Schedule a Job](#)

Items To Execute

Item

Add Item

Job Type: Standalone

Program Name: Change Tracking: Transfer



Save

Cancel

Back

5. Click Save.
6. Click Back. The Schedule a Job page reappears.
7. Set all scheduling options as desired. You are advised to choose the Repeat: Minute option for frequent updating (perhaps every 60 minutes or less).
8. Click Schedule.

How To

This chapter tells how to complete a variety of administrative tasks in Configuration Controls Governor: create tablespaces, schedule definitions and work with jobs, reconfigure an instance, maintain the CCG Home schema, create templates, and purge occurrences and definitions.

Create Tablespaces

CCG requires the creation and maintenance of several tablespaces. Use the Tablespace Workbench to work with tablespaces. All tablespaces created by CCG are locally managed.

To create a tablespace:

1. Select Administrator > Tablespaces from the menu bar. The Tablespaces Workbench appears.

Tablespaces Current Location: [Administrator](#) > [Tablespaces](#)

View tablespaces: [Revise Search](#)

Results Per Page: Results 1 - 5 Of 26 First | [<Prev](#) | [Next>](#) | Last

Tablespace	Type	Instance	Initial Extent (KB)	Next Extent (KB)	Status	
<input type="checkbox"/> FLAGSTAFF_APS_DATA01	AMAPS DATA	Flagstaff_R12	64	64	Complete	Delete Edit
<input type="checkbox"/> FLAGSTAFF_AGENT_DATA01	AM_AGENT DATA	Flagstaff_R12	64	64	Complete	Delete Edit
<input type="checkbox"/> FLAGSTAFF_INDEX01	AM_AGENT INDEX	Flagstaff_R12	64	64	Complete	Delete Edit
<input type="checkbox"/> ACC_DATA	ACC DATA	Integra Home	0	0	Complete	Delete Edit
<input type="checkbox"/> ACC_INDEX	ACC INDEX	Integra Home	0	0	Complete	Delete Edit

Results Per Page: Results 1 - 5 Of 26 First | [<Prev](#) | [Next>](#) | Last

[Revise Search](#)

[Add Tablespace...](#)

2. Click Add Tablespace. The Tablespaces page appears.

Tablespaces Current Location: [Administrator](#) > [Tablespaces](#)

Tablespace Basics

Instance: Initial Extent (KB):

Type: Next Extent (KB):

Name:

[Create Tablespace](#) [Save](#) [Back](#)

3. Enter the following information:
 - **Instance.** Where the tablespace will reside.
 - **Type.** Choose the appropriate type.
 - **Name.** The name of the tablespace.
 - **Initial extent.** Size of the tablespace's initial extent.
 - **Next extent.** Size of the tablespace's subsequent extents.
4. Click Save. The page refreshes, with a new Datafiles section below Tablespace Basics.

Add Datafile

Datafile Name: Max Size (MB):

5. Enter the following information:
 - **Datafile Name.** The datafile's name, including the file system directory path for where the datafile will be stored.
 - **Max Size.** The maximum size of the datafile. Its initial size will be 10 percent of the amount specified here; it will be allowed to AUTOEXTEND in increments of 10 percent or 200 MB, whichever is less, until reaching the size entered here.
6. Click Save. The page refreshes.
7. To add another datafile to the tablespace, fill in the fields and click Save again. You may add as many datafiles as you wish.
8. Click Create Tablespace. A job to create the tablespace will be submitted for immediate execution; you can monitor it on the Jobs > View Current Jobs page.
9. Repeat the preceding steps to create more tablespaces.

To view or edit a tablespace:

1. Select Administrator > Tablespace Workbench from the menu bar. The Tablespace Workbench appears (see page 3-1).
2. Click Edit to the right of the tablespace you want to view or edit.

To add a datafile to an existing tablespace

1. Edit the tablespace.
2. Fill in the Datafile Name and Max Size fields.
3. Click Save. The page refreshes.
4. Click Alter Tablespace to add the datafile.

Schedule Definitions and Work with Jobs

Many actions, such as scheduling a definition, cause the creation of jobs. Each is a sequence of one or more programs. (A scheduled definition is really a job containing the programs you saw when you created or edited the definition.) Programs are executed in sequence, so if a program cannot be completed, remaining programs in the sequence are not executed.

Each job is scheduled to run on one or more occasions. See “Scheduling a Job” (below) for more information.

All jobs scheduled for the future are listed on the View Future Jobs page (select Jobs > Future Jobs from the menu bar). All jobs that are being executed, or that already have been executed, are listed on the View Current Jobs page (Jobs > Current Jobs). See “Viewing Job Status or Details” (page 3-6) for more information.

Scheduling a Job

Before scheduling a job, prepare all definitions to be included in it. Then:

1. Go to the Schedule a Job page (select Jobs > Schedule a Job from the menu bar or click Schedule as you edit a definition or perform an administrative task).

Schedule a Job

Current Location: Jobs > Schedule a Job

Start

☒ Immediately

☐ On

at

(hh24:mm)

America/Los_Angeles(Pacific Daylight Time)

Repeat

☒ None (run once only)

☐ Minute

☐ Day

☐ Week

☐ Month

☐ Year

...until

☒ No End Date

☐ End After

☐ End By

Occurrences

Notify when

☐ Completed

☐ Terminated

☐ Error

Email

Items To Execute

Add Item...

Schedule

Clear

2. In the upper part of the page, set schedule options. The default is to run the job once, immediately.
3. If you select the On radio button, supply a date, time, and time zone in the fields to its right. You these Repeat options:

- Minute — repeat every *n* minutes

Repeat

☐ None (run once only)

☒ Minute

☐ Day

☐ Week

☐ Month

☐ Year

Every

minutes

- Day — repeat every *n* days, every weekday, or every weekend day

Repeat

☐ None (run once only)

☐ Minute

☒ Day

☐ Week

☐ Month

☐ Year

☐ Every

☒ Every weekday

☐ Every weekend

Days

- Week — repeat every n weeks on specified days

Repeat

☐ None (run once only)
 ☒ Every week(s) on
 ☒ Sunday
 ☒ Monday
 ☒ Tuesday
 ☒ Wednesday
 ☒ Thursday
 ☒ Friday
 ☒ Saturday

☐ Minute
☐ Day
☒ Week
☐ Month
☐ Year

- Month — repeat every n months on a specified day

Repeat

☐ None (run once only)
 ☒ Day Of Every month(s)
 ☐ The First Sunday Of Every month(s)

☐ Minute
☐ Day
☐ Week
☒ Month
☐ Year

- Year — repeat every year on the specified day

Repeat

☐ None (run once only)
 ☒ Every January
☐ The First Sunday Of January

☐ Minute
☐ Day
☐ Week
☐ Month
☒ Year

4. In the lower part of the page, include all items to be executed, in the order you want. To select the first item, click the Add Item button. An Add Item to Job page appears.

Schedule a Job

Current Location: [Jobs](#) > [Schedule a Job](#)

Items To Execute

Item

Add Item

Job Type:

Program Name:

5. Select a Program Name. When you do, additional fields might appear, in which you can set parameters for the job you've chosen. (These vary by program. For example, for a Create Tablespaces job, you specify the instance on which the tablespace is to be created, and its name.) Set all parameters, and click Save.

Schedule a Job

Current Location: [Jobs](#) > [Schedule a Job](#)

Items To Execute

Item

Add Item

Job Type:

Program Name:

Parameters

Instance

Tablespace

6. The following page appears, indicating that the item has been successfully added to the job and offering the opportunity to select more items. To add an item, click the Add Item button. You can add as many items as you like.

Schedule a Job Current Location: [Jobs](#) > [Schedule a Job](#)

SUCCESS Job has been added to the list

Items To Execute

Item
<div style="display: flex; justify-content: space-between;">+ Platform: Create TablespacesDelete</div>

[Add Item](#)

[Back](#)

7. When you are done adding items, click Back. The Schedule a Job page reappears.

Schedule a Job Current Location: [Jobs](#) > [Schedule a Job](#)

Start

☒ Immediately

☐ On at (hh24:mm)

Repeat

☒ None (run once only)

☐ Minute

☐ Day

☐ Week

☐ Month

☐ Year

...until

☒ No End Date

☐ End After Occurrences

☐ End By

Notify when

☐ Completed ☐ Terminated ☐ Error Email

Items To Execute

Item
<div style="display: flex; justify-content: space-between;">+ Platform: Create TablespacesDelete</div>

[Add Item...](#)

[Schedule](#) [Clear](#)

8. When you are done, click Schedule. If the job is scheduled to run immediately, the View Current Jobs page appears.

View Current Jobs Current Location: [Jobs](#) > [View Current Jobs](#)

[Revise Search](#)

Results Per Page

Results 1 - 5 Of 50

First | [<Prev](#) | [Next>](#) | [Last](#)

Job ID	Status	User	Items to Execute	Start Date/Time
+ 5165	✓ COMPLETED	AMADMIN	Apps: Change Tracking Transfer	2007-05-01 03:12:57 America/Los_Angeles
+ 5164	✓ COMPLETED	AMADMIN	Apps: OAR12Bundle11	2007-05-01 03:03:51 America/Los_Angeles
+ 5163	✓ COMPLETED	AMADMIN	Apps: Change Tracking Transfer	2007-05-01 01:44:05 America/Los_Angeles
+ 5162	✓ COMPLETED	AMADMIN	Apps: OAR12Bundle1CT	2007-05-01 01:31:55 America/Los_Angeles
+ 5161	✓ COMPLETED	AMADMIN	Apps: OAR12Bundle1	2007-05-01 01:25:11 America/Los_Angeles

Results Per Page

Results 1 - 5 Of 50

First | [<Prev](#) | [Next>](#) | [Last](#)

[Revise Search](#)

[Schedule...](#)

[Refresh](#)

If the job is scheduled to run in the future, the View Future Jobs page appears.

View Future Jobs Current Location: [Jobs > View Future Jobs](#)

[Revise Search](#)

Results Per Page Results 1 - 1 Of 1 First | <Prev | Next> | Last

User	Items to Execute	Next Start	
<input checked="" type="checkbox"/> ADMINISTRATOR	Platform: Create Tablespaces	2007-05-02 01:30 America/Los_Angeles	Remove

Results Per Page Results 1 - 1 Of 1 First | <Prev | Next> | Last

[Revise Search](#)
[Schedule...](#)

Viewing Job Status or Details

To see the status of:

- A job that's running now, or that ran in the past: Select [Jobs > View Current Jobs](#) from the menu bar. The View Current Jobs page appears (see page 3-5); the most recently scheduled jobs are listed, sorted by Job ID, newest ID first.
- A job that will run in the future: Select [Jobs > View Future Jobs](#) from the menu bar. The View Future Jobs page appears (see above); jobs are sorted by start date/time, most imminent jobs first.

In either case, if you don't see the job you're looking for, you can:

- Increase the number of results per page.
- Click [Next >](#) to see the next page of jobs.
- Click [Revise Search](#), fill in the search form and click the Search button.

On the View Current Jobs page, jobs may be at any of the following statuses: Pending, Running, Paused, Error, Terminating, Terminated, Complete, or Warning. The View Future Jobs page does not display status, because all its jobs have the same status — Pending.

In either page, click on the + icon for a job to see its details and control buttons.

View Current Jobs Current Location: [Jobs > View Current Jobs](#)

[Revise Search](#)

Results Per Page Results 1 - 5 Of 50 First | <Prev | [Next](#)> | Last

Job ID	Status	User	Items to Execute	Start Date/Time																
<input checked="" type="checkbox"/> 5165	✓ COMPLETED	AMADMIN	Apps: Change Tracking Transfer	2007-05-01 03:12:57 America/Los_Angeles																
<table border="1"> <thead> <tr> <th>Program</th> <th>Definition</th> <th>Status</th> <th>Started</th> <th></th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> Change Tracking: Transfer</td> <td></td> <td>✓ Completed</td> <td>2007-05-01 03:12:58 America/Los_Angeles</td> <td>Log</td> </tr> <tr> <td colspan="5"> Started: 2007-05-01 03:12:58 Ended: 2007-05-01 03:12:59 Elapsed: 00.02 min. Status Message: Job completed with success. </td> </tr> </tbody> </table>						Program	Definition	Status	Started		<input checked="" type="checkbox"/> Change Tracking: Transfer		✓ Completed	2007-05-01 03:12:58 America/Los_Angeles	Log	Started: 2007-05-01 03:12:58 Ended: 2007-05-01 03:12:59 Elapsed: 00.02 min. Status Message: Job completed with success.				
Program	Definition	Status	Started																	
<input checked="" type="checkbox"/> Change Tracking: Transfer		✓ Completed	2007-05-01 03:12:58 America/Los_Angeles	Log																
Started: 2007-05-01 03:12:58 Ended: 2007-05-01 03:12:59 Elapsed: 00.02 min. Status Message: Job completed with success.																				
<input checked="" type="checkbox"/> 5164	✓ COMPLETED	AMADMIN	Apps: OAR12Bundle11	2007-05-01 03:03:51 America/Los_Angeles																
<input checked="" type="checkbox"/> 5163	✓ COMPLETED	AMADMIN	Apps: Change Tracking Transfer	2007-05-01 01:44:05 America/Los_Angeles																
<input checked="" type="checkbox"/> 5162	✓ COMPLETED	AMADMIN	Apps: OAR12Bundle1CT	2007-05-01 01:31:55 America/Los_Angeles																
<input checked="" type="checkbox"/> 5161	✓ COMPLETED	AMADMIN	Apps: OAR12Bundle1	2007-05-01 01:25:11 America/Los_Angeles																

Results Per Page Results 1 - 5 Of 50 First | <Prev | [Next](#)> | Last

[Revise Search](#)
[Schedule...](#) [Refresh](#)

Depending on the job status, some of these buttons could appear:

- If execution of the job has been paused: Click Resume Job to resume execution of the paused job.
- If the job is being executed, or if its execution has been paused: Click Terminate Job to cancel the job. Not all jobs can respond to a termination request.

For current/past jobs, one or both of the following links will appear to the right of each program:

- Click Log to view log information, including error messages.
- Click Details to view additional details about the program's execution, and all reports generated by the program.

Modifying a Job

To cancel the current execution of a job:

1. Find the job on the View Current Jobs page.
2. Click the job's Terminate job button. The job's status changes to Terminating. Once the currently running program terminates or completes, the job's status changes to Terminated.

To cancel future execution of a job:

1. Find the job on the View Future Jobs page.
2. Click the job's Remove link.

To examine a job's occurrences:

1. Find the job on the View Current Jobs page.
2. Click Details to the right of any of the definition's programs.

To change a job's schedule:

1. Cancel future execution of the job (see above).
2. Schedule a new job.

To schedule a job again (after all occurrences have completed), simply schedule a new job.

To edit a definition that is scheduled for use in future jobs:

1. On the View Future Jobs page, remove all jobs that use the definition.
2. Edit the definition.
3. Reschedule the jobs that you removed in step 1.

To add or remove definitions or programs from a job, or change their order of execution:

1. Cancel future execution of the job (see above).
2. Schedule a new job.

Reconfigure an Instance

You will need to reconfigure the CCG Agent on an ERP instance when either:

- The CCG Agent no longer exists (e.g., because you have refreshed the instance).
- You have changed the password on the instance for any of these users: ERP USER, SYSTEM, or AM_AGENT.

If you have changed the password for the ERP USER, SYSTEM, or AM_AGENT:

1. Select Administrator > ERP Instances from the menu bar. A list of instances appears.
2. Click Edit to the right of the instance where the password changed.
3. For the Configuration Controls Governor component (not the CCG Agent):
 - a. To the right of the component's name, click Edit.
 - b. Click Remove to remove the component from the business application instance. The page refreshes, and the Latest Status column is updated.
 - c. If Latest Status indicates that removal of the component failed:
 - Select Jobs > View Current Jobs from the menu bar. Find the instance removal job that was created when you clicked the Remove button, and view the job's logs/details to determine the cause of the failure.
 - Resolve the cause of the failure.
 - Repeat the steps above.
4. Repeat step 3 for the CCG Agent.
5. Reconfigure the CCG Agent with the new passwords (see "Configure CCG Agent," page 2-6).
6. Reconfigure the Configuration Controls Governor component. (see "Configure CCG," page 2-9).

During the CCG testing cycle, you may need to refresh your ERP instance. This usually means you reconfigure the CCG Agent and recreate its tablespaces.

You must perform the following steps *before* refreshing the ERP instance:

1. Select Administrator > ERP Instances from the menu bar. A list of instances appears.
2. Click Edit to the right of the instance you want to reconfigure.
3. For the Configuration Controls Governor component (not the CCG Agent):
 - a. To the right of the component's name, click Edit.
 - b. Click Remove to remove the component from the business application instance. The page refreshes, and the Latest Status column is updated.
 - c. If Latest Status indicates that removal of the component failed:
 - Select Jobs > View Current Jobs from the menu bar. Find the instance removal job that was created when you clicked the Remove button, and view the job's logs/details to determine the cause of the failure.
 - Resolve the cause of the failure.
 - Repeat the steps above.
4. Repeat step 3 for the CCG Agent.

You may now refresh the ERP instance. *After* doing so:

1. Make note of the datafile information for each CCG tablespace on the ERP instance. This includes:
 - AM_AGENT_D
 - AM_AGENT_X
 - All CCG-specific tablespaces
2. Delete those tablespaces.
3. Recreate those tablespaces.
4. Reconfigure the CCG Agent with the new passwords (see “Configure CCG Agent,” page 2-6).
5. Reconfigure the Configuration Controls Governor component (see “Configure CCG,” page 2-9).

Your refreshed ERP instance is now reconfigured.

Maintain the CCG Home Schema

The CCG Home schema can affect many operations within your organization, because it stores information about:

- The CCG system as a whole
- The Configuration Controls Governor component and ERP instance

When creating your maintenance plans for the CCG Home database, be sure to consult all:

- CCG Administrators
- IT and business unit managers who use or rely on CCG
- Functional and technical superusers who use CCG
- Designated ERP application end users
- Database administrators

These decision-makers must agree, among other things, on whether to retain or purge the information in the CCG Home during maintenance.

Your DBAs should monitor the size of the CCG Home tables and indexes, to ensure sufficient tablespace capacity to fulfill the needs of your organization.

Database Passwords

The operation of CCG is impacted when any these passwords is changed:

- **CCG Home schema (AMHOME).** The CCG Home schema database password on your CCG Home instance
- **CCG Agent schema (AM_AGENT).** The CCG Agent schema database password on any of your ERP instances

- **CCG Public schema (AMHOME_PUBLIC).** The CCG Public schema database password on your CCG Home instance (if your CCG UI is served by Oracle Forms and Reports servers).
- **ERP instance system.** System password for the ERP instance; e.g., System/Manager.
- **ERP schema password.** Typical values:
 - Oracle E-Business Suite: APPS
 - PeopleSoft Enterprise: SYSADM
 - Siebel CRM Applications: SIEBEL

Once you understand the effect of database password changes on CCG, you will be able to change passwords on schedule or on demand, while keeping CCG available without disruption. However, you are advised to change these database passwords only during scheduled downtime, or after you have broadcast an announcement indicating that CCG will be temporarily unavailable.

Change the CCG Home Schema Password

To ensure that the CCG Home database remains secure, you may choose to change the CCG Home schema database password from time to time. Since end users do not typically perform ad-hoc queries of the CCG Home database, it is unusual for the CCG Home schema database password to be disclosed to anyone other than the database administrator. However, it is easy to change the CCG Home schema password when necessary:

1. Obtain the script `amhome_reset_45.zip` from Oracle Support.
2. Extract the file `amhome_reset_45.sql` from `amhome_reset_45.zip`.
3. Choose a new password for the CCG Home schema. The maximum length for a password is 30 characters. The following characters are not allowed:
! | / = \$ & @ " ' ` ,
4. Connect to the CCG Home database as SYSTEM, and change the CCG Home schema database password. You can use this syntax:

```
ALTER USER AMHOME IDENTIFIED BY <NEW_PASSWORD>;
```

Or, you can use Oracle Enterprise Manager or other methods to change the password, according to your usual database administration procedure.

5. Run the following script against the CCG Home schema:

```
@amhome_reset_45.sql
```

This script prompts for connection information (including the new password that you designated).

Change the CCG Agent Schema Password or ERP Schema Password

To ensure security of the CCG Agent schema(s), you may choose to change the CCG Agent schema database password from time to time, according to your organization's database security policies.

Follow these steps to change the CCG Agent schema or ERP schema passwords:

1. Select Administrator > ERP Instances from the menu bar. A list of instances appears.
2. Click Edit to the right of the instance where the password changed.
3. For the Configuration Controls Governor component (not the CCG Agent):
 - a. To the right of the component's name, click Edit.
 - b. Click Remove to remove the component from the business application instance. The page refreshes, and the Latest Status column is updated.
 - c. If Latest Status indicates that removal of the component failed:
 - Select Jobs > View Current Jobs from the menu bar. Find the instance removal job that was created when you clicked the Remove button, and view the job's logs/details to determine the cause of the failure.
 - Resolve the cause of the failure.
 - Repeat the steps above.
4. Repeat Step 3 for the CCG Agent.
5. Reconfigure the CCG Agent with the new passwords (see "Configure CCG Agent," page 2-6).
6. Reconfigure the Configuration Controls Governor component (see "Configure CCG," page 2-9).

Patches

CCG patches let your organization take advantage of added functionality, increased performance, fixes, or changes related to ERP system patches and upgrades.

There are four patchable elements in the CCG environment. A patch can affect some or all of them:

- Data structure and database packages
- Servers
- Metadata
- Web application

The CCG Home schema contains a table that lists the installed patches. You can see this information by selecting Help > About products from the menu bar.

From time to time, maintenance releases are offered. Each maintenance release is accompanied by a Readme file, which contains a description of the patches included, other changes provided, prerequisites for successful installation, and installation instructions.

Patches are created routinely so that CCG remains compatible with ERP system patches and upgrades. Whenever you patch or upgrade your ERP system, verify that you have installed the latest CCG patch set(s).

Create Templates

Templates let you customize the reports generated by snapshot definitions. You can streamline the information presented in snapshot reports based on your preferences, and display information specific to your needs. Each template governs the display of one CCG object (an object being a group of ERP setup tables to be monitored).

To summarize, you will:

- Create a template.
- Run a snapshot definition that includes the template's object.
- View the report(s), applying the new template.

To create a template:

1. Select Workbench > CCG Templates from the menu bar. A CCG Templates page appears, listing templates if any already exist.

Results Per Page: 10 Results 1 - 1 Of 1 First | <Prev | Next> | Last [Revise Search](#)


Template	Created	Application	Object	Created by	
<input checked="" type="checkbox"/> gl calendar r12 16	03/15/09	GL 12.0.4	Accounting Calendar	BARRY	Edit Delete


Results Per Page: 10 Results 1 - 1 Of 1 First | <Prev | Next> | Last [Revise Search](#)

[Add template...](#)

2. Click Add Template. A blank definition appears.

Template Basics

Name: Object: 

Application: 

[Save](#) [Cancel](#)

3. Enter the following information:
 - **Name.** A short name that will identify this definition.
 - **Application.** ERP application whose setup data will be recorded in the snapshot.
 - **Object.** Group of ERP application setup tables that helps you select information to monitor without having to consider the complexity of the data model or entity relationships. An object is typically associated with an ERP application setup form.

4. Click Save. The page is refreshed based on object, listing the tables belonging to the object; here is an example.

CCG Template Workbench

Current Location: [Workbench](#) > [CCG Templates](#)

Template Basics

Name **Template 1**
Application **FND 11.5.10**

Object **Bill Documents**

Tables

Table	Visible in CCG report	Visible in application	
FND_DOCUMENTS	Yes	Yes	Edit

Sharing

[Share](#)

[Save As](#) [Back](#)

5. Click Edit to the right of any table to change how the template handles the table's data. A page similar to this appears:

CCG Template Workbench

Current Location: [Workbench](#) > [CCG Templates](#)

FND_DOCUMENTS Template: **Template 1** Application: **FND 11.5.10** Object: **Bill Documents**

Table	Visible in CCG report	Visible in application	
FND_DOCUMENTS	Yes	Yes	Edit

Edit Table View:

Column	Visible in application
<input checked="" type="checkbox"/> Category	Yes
<input checked="" type="checkbox"/> Description	Yes
<input checked="" type="checkbox"/> Data Type	Yes
<input checked="" type="checkbox"/> Source File (URL)	Yes
<input checked="" type="checkbox"/> Usage	Yes
<input checked="" type="checkbox"/> Security Type	Yes
<input checked="" type="checkbox"/> Security Owner	Yes
<input checked="" type="checkbox"/> Share	Yes
<input checked="" type="checkbox"/> Effective Date From	Yes
<input checked="" type="checkbox"/> Effective Date To	Yes
<input checked="" type="checkbox"/> Long/Short Text	Yes

[Save](#) [Cancel](#)

[Back](#)

6. Set the following fields if they appear:
 - **Column.** Checking/unchecking this box toggles all the following checkboxes.
 - **Field1, Field2, ... FieldN.** When checked, the column's data is included in the snapshot report.
7. Click Save. The page refreshes.
8. Repeat steps 5–7 for other tables, as desired.
9. Click Back. The definition page reappears.
10. Click Save. You have the option to share the template with other CCG users.

Run a snapshot definition that uses the template's object, and view the resulting snapshot report. (See "Creatubg Snapshots" in the *Configuration Controls Governor User Guide* for instructions about creating and scheduling snapshot definitions, and viewing snapshot reports).

Purge Occurrences and Definitions

The following standalone programs are available:

- **Purge: Change Tracking Data.** Purges unwanted change tracking data from the CCG Home schema. The data to be purged is selected by ERP instance and end date.
- **Purge: Change Tracking Definitions.** Purges unwanted change tracking occurrences and definitions from the CCG Home schema. You can purge only occurrences, or both occurrences and their definitions.

The data to be purged is selected by ERP instance and CCG user.

- **Purge: Migration Definitions.** Purges unwanted Migration definitions from the CCG Home schema. You can purge only occurrences, or both occurrences and their definitions.

The data to be purged is selected by ERP instance.

- **Purge: Snapshots and Comparisons (Administrator).** Purges unwanted snapshot definitions, occurrences, and comparisons from your CCG Home schema. In the case of snapshots, you can purge only occurrences, or both occurrences and their definitions. When you remove a snapshot definition associated with a comparison, you will also remove the comparison.

The data to be purged is selected by ERP instance and CCG user.

- **Purge: Snapshots and Comparisons.** This program functions similarly to Purge: Snapshots and Comparisons (Administrator), but purges only data created by the user who schedules this program.

The data to be purged is selected by ERP instance.

To schedule a program:

1. Select Jobs > Schedule a Job from the menu bar.
2. Click Add Item.
3. Set Job Type to Standalone.
4. Set Program Name to that of the program you want to run.
5. Click Save.
6. Click Back.
7. Set any other options desired, and click Schedule.

Reference

This chapter serves as a reference to several topics: login, home configuration, security groups, users and roles, ERP instances, tablespaces, system profile, and help.

Login

All CCG users must begin by logging in on the Secure Login page.

The URL for this page is:

`http://hostname/web-application-name`

In this URL:

- *hostname* is the domain name of the web server configured to serve CCG
- *web-application-name* is the name of the CCG web application (usually *cgc*).

The upper portion of the page has these fields:

- **Username.** Your CCG Administrator creates your username.
- **Password.** Your CCG Administrator creates your password. To change it, log in, then select Home > User Profile from the menu bar.

The upper portion of the page has this button:

- **Log in.** Verifies your username and password, and displays your Welcome Page. To change your Welcome Page, log in, then select Home > User Profile from the menu bar.

The lower portion of the page displays information about CCG. This content is updated regularly if your server firewall permits HTTP transactions across the Internet.

Security Notice: The Secure Login page is the only CCG page that attempts to send or receive information using the Internet. Once you log in, all communications are restricted to your organization’s internal networks.

Home Configuration

The Home Configuration page contains settings that apply to all of CCG.

Home Configuration

Current Location: Administrator > Home Configuration

Email Server

SMTP server domain: smtp.mycompany.com

Port: 25

Test

Home Instance

Filesystem Directory of the Home \$ORACLE_HOME: /apps/ag1/oapps1159/9.2.0

Filesystem Directory of the Home UTL_FILE_DIR: /usr/tmp

Filesystem Directory Delimiter: /

Oracle Database Version: 9.2.0.3.0

Allow Alerting with Change Tracking: Y

Transfer Polling Interval(minutes): 30

Snapshot Report Title:

Snapshot Functions Per Select: 15

Save

To view the page, select Administration > Home Configuration from the menu bar.

The Email Server (upper) portion of the page contains these fields. If left blank, CCG cannot send email notifications.

- **SMTP server domain.** The domain name of your mail server.
- **Port.** The port number of your mail server.

The Home Instance (lower) portion of the page contains these fields:

- **Filesystem Directory of the AMHOME \$ORACLE_HOME.** File system path to the directory that holds the ERP application database.
Filesystem Directory of the AMHOME UTL_FILE_DIR. Use any valid file system path. We recommend that you create a new directory for this purpose. Ensure that the value is accurate and that the permissions on the specified directory are set properly. An invalid entry or insufficient privileges will result in errors.
- **Filesystem Directory Delimiter.** Backslash (\) for Windows systems, or forward slash (/) for UNIX/Linus.
- **Oracle Database Version.** The database version of the CCG Home instance.
- **Allow Alerting with Change Tracking.** When this field is set to Y, the change tracker lets you configure alerts.

The page contains these buttons:

- **Test.** Displays the Send Test Message from Email Server page (see “Email Alerts,” below).
- **Save.** Saves the changes you make on this page.

Email Alerts

The optional Email Alert feature is used for sending Change Tracking alerts. When you click Test on the Home Configuration page, the Send Test Message from Email Server page appears.

Home Configuration Current Location: Administrator > Home Configuration

Send Test Message From Email Server

SMTP server domain: Port: 25

From: To:

Subject:

To use this page:

1. Enter From and To addresses, and optionally a Subject, and click Send. The page is refreshed, displaying a Status field.
2. To update Status, click Refresh. If the test message is sent successfully, but you don't receive it, first verify that the message isn't being treated erroneously as spam by your incoming mail server or mail client.
3. When you're finished, click Back. The Home Configuration page reappears.

CCG does not use the Oracle Alerts product. It sends email messages directly from the database, using Oracle's UTL_SMTP feature.

Security Groups

Security Groups control users' access to ERP data. To view existing Security Groups or add new ones, select Administrator > Security Groups from the menu bar. You will see a list of existing Security Groups.

Security Groups Current Location: Administrator > Security Groups

View security groups: [Revise Search](#)

Results Per Page: Results 1 - 2 Of 2 First | <Prev | Next> | Last

Security Group	Description	Instance	Enabled?	
<input type="checkbox"/> tempe_ag1_1159		ag1_59	Yes	Edit
<input type="checkbox"/> flagstaff_ag1_r12	Group for R12 instance on flagstaff	ag1_r12	Yes	Edit

Results Per Page: Results 1 - 2 Of 2 First | <Prev | Next> | Last

[Revise Search](#)

You can see more (or different) results by changing Results Per Page, clicking Next >, or clicking Revise Search.

Click Edit to view an existing group, or Add Security Group to add a new one. In either case, the Security Groups page appears.

Security Groups Definition

Security Groups

Current Location: [Administrator](#) > [Security Groups](#)

Group Basics

Name: **flagstaff_ag1_r12**

ERP Instance: **ag1_r12**

Description:

Enabled: ☒

Permissions

Scope	Value	Enabled
Application	ALL	Yes
Business Group	ALL	Yes
Organization Unit	ALL	Yes
Set of Books	ALL	Yes

Users

Full Name	Valid from	Valid until	Enabled	
Eric Fried	04/11/2007		Yes	Edit
INTEGRA ADMINISTRATOR	04/11/2007		Yes	Edit
jtreadwell	04/11/2007		Yes	Edit

[Add User...](#)

[Save](#)

[Cancel](#)

The Group Basics (upper) portion of the page contains these fields:

- **Name.** The group's name.
- **Description.** A short description of the group.
- **ERP Instance.** The ERP instance that the group can work with.
- **Enabled.** When checked, the group is active.



The page contains these buttons and links:

- **Edit.** Appears to the right of each permission or user that has been added. Displays the appropriate page — Group Permissions or Group Users, and lets you revise the permission or user.
- **Add permission.** Visible until the first user is added. Displays the Group Permissions page and lets you add a permission to the group.
- **Add user.** Disabled until you have added at least one permission with each Scope. Displays the Group Users page and lets you add a user to the group.
- **Save.** Saves the changes made to the fields on this page. Does not affect changes to permissions and users, which are saved or discarded while on the Group Permissions and Group Users pages, respectively.
- **Cancel.** Discards the changes made to the fields on this page. Does not affect changes to permissions and users, which are saved or discarded while on the Group Permissions and Group Users pages, respectively.

Permissions

Permissions control the group's access to data. Before you can add users to a group, you must add a permission for each scope. Add all permissions you intend to create before adding a user. Once you add a user, you cannot change the group's permissions.

Add permission:

Scope:  Values:  Enabled: ☒

(leave blank for all)

The page contains these fields:

- **Scope and Values.** Each entry in the Scope field is a class of items that give access to ERP data — in Oracle EBS 11i, applications, business groups, organization units, and sets of books; in EBS R12, applications, business groups, organization units, ledger sets, and ledgers; in PeopleSoft, applications and set IDs. The Value field can contain an individual instance of a Scope item — for example, if Scope is Application, Value may be Payables (AP). Select a scope and one of its values to grant access to that value. Or, select a scope and leave the value blank to select all possible values for that scope.
- **Enabled.** When checked, the permission is active.



The page contains these buttons and links:


- **Edit.** Refreshes the page and lets you revise a permission.
- **Save.** Saves your changes to the permission and refreshes the page.
- **Cancel.** Discards your changes to the permission and refreshes the page.
- **Add permission.** Refreshes the page and lets you add a permission.
- **Back.** Discards any unsaved changes and displays the Security Groups page.

Users

Users must belong to security groups in order to have access to ERP data.

Add user:

User:  Valid from: 

Enabled: ☒ Valid until: 

The page contains these fields:

- **User.** Select a user from the pop-up window.
- **Enabled.** When checked, this user is an active member of the group.
- **Valid from.** First day the user will be a member of the group.
- **Valid until.** Last day the user be a member of the group (optional).

The page contains these buttons and links:

- **Edit.** Refreshes the page and lets you revise a user's information.
- **Save.** Saves your changes to the user's information and refreshes the page.

- **Cancel.** Discards your changes to the user's information and refreshes the page.
- **Add user.** Refreshes the page and lets you add a user.
- **Back.** Discards any unsaved changes and displays the Security Groups page.

Users and Roles

Use the Users page to configure a user's login access and roles. You can also modify a user's access or roles, or disable a user's access. To view existing users or add new ones, select Administrator > Users from the menu bar.

Users Current Location: [Administrator](#) > [Users](#)

View users:

[Revise Search](#)

Results Per Page: Results 1 - 6 Of 6 First | <Prev | Next> | Last

Login Id	User Full Name	Department	Email	Last Logon	Enabled	
+ AMADMIN	INTEGRA ADMINISTRATOR	LogicalApps	efried@logicalapps.com	04/19/2007	Yes	Delete Edit
+ AMDEV	MetaBuilder User	qa	efried@logicalapps.com	04/18/2007	Yes	Delete Edit
+ EFRIED	Eric Fried	QA	efried@logicalapps.com	04/09/2007	Yes	Delete Edit
+ JTREADWELL	jtreadwell	QA	jtreadwell@logicalapps.com	04/17/2007	Yes	Delete Edit
+ SUPPORT	support	support	efried@logicalapps.com	04/12/2007	Yes	Delete Edit
+ VHOM	vhom	QA	vhom@logicalapps.com		Yes	Delete Edit

Results Per Page: Results 1 - 6 Of 6 First | <Prev | Next> | Last [Revise Search](#)

[Add User...](#)

You can see more (or different) results by changing Results Per Page, clicking Next >, or clicking Revise Search.

Click Edit to view an existing user, or Add User to add a new one. In either case, the Users page appears.

Users Definition

Users Current Location: [Administrator](#) > [Users](#)

User Basics

Full Name: Email:

Department:

Login

Login Id: Valid from:

New Password: Valid until:

Confirm New password: Enabled: ☒

Roles

Role	Valid from	Valid until	Enabled	
Apps Developer	04/05/2007		Yes	Edit
Apps User	04/05/2007		Yes	Edit
Transaction Scheduler	04/09/2007		Yes	Edit
Transaction User	04/05/2007		Yes	Edit

[Add Role...](#)

[Save](#) [Restore](#) [Back](#)

The User Basics (upper) portion of this page contains these fields:

- **Full name.** CCG user's full name. The name may consist of letters, spaces, ' (apostrophes), and - (hyphens); other characters are not allowed.
- **Department.** User's department or organization. The department may consist of letters, digits, spaces, and - (hyphens); other characters are not allowed.
- **Email.** The user will receive alerts at this address.

The Login (middle) portion of this page contains these fields:

- **Login ID.** User's CCG Login ID. The ID may consist of letters and digits only; spaces and other characters are not allowed.
- **Password.** Initial password for the new user (30 character length limit). This data will be encrypted before it is stored. The following characters are not allowed:
! | / = \$ & @ " ' ` ,
- **Confirm password.** Re-enter the password to confirm
- **Valid from.** First day user can log in
- **Valid until.** Last day user can log in (optional)
- **Enabled.** Enables the user to log in; if not checked, the user cannot log in.

The page contains these buttons and links:

- **Edit.** Appears when one or more roles have been assigned. Displays the Roles page (see "Roles," below), where you can revise the role.
- **Add role.** Displays the Roles page and lets you add a role.
- **Save.** Saves the changes made on this page. Does not affect changes to roles, which are saved or discarded while on the Roles page.
- **Restore.** Discards the changes made on this page. Does not affect changes to roles, which are saved or discarded while on the Roles page.
- **Back.** Displays the list of Users.

Roles

Each user can have one or more roles. To add a role, click Add Role on the Users page. To revise a role, click Edit to the right of the role's name on the Users page.

Add role:

Role:	<input type="text"/>	Valid from:	<input type="text"/>
Enabled:	<input checked="" type="checkbox"/>	Valid until:	<input type="text"/>

The page contains these fields:

- **Role.** Select a role from the drop-down list.
- **Enabled.** Enables this role for this user.

- **Valid from.** First day the user will have this role.
- **Valid until.** Optional: Last day the user will have this role.

The following roles are available for CCG 5.5.

- **CCG Developer:** Create and edit templates.
- **Change Tracking Scheduler:** Schedule change tracking definitions for execution.
- **Snapshot Scheduler:** Schedule snapshot definitions for execution, and compare snapshot occurrences.
- **CCG User:** Create and edit snapshots and change tracking.
- **Administrator.** Perform tasks accessible from the Administrator menu bar.

The page contains these buttons and links:

- **Edit.** Refreshes the page and lets you revise a role.
- **Save.** Saves your changes to the role and refreshes the page.
- **Cancel.** Discards your changes to the role and refreshes the page.
- **Add role.** Refreshes the page and lets you add a role.
- **Back.** Discards any unsaved changes and displays the Users page.

ERP Instances

You must configure CCG to work with each ERP instance that you want to manage. Broadly speaking, you will perform these tasks for each instance:

- Define a new instance in CCG.
- Create CCG Agent tablespaces for the instance. The CCG Agent lets CCG components perform tasks that require access to data on the ERP the instance.
- Configure CCG Agent parameters.
- Configure parameters for CCG itself.

To view ERP instances or add new ones, select Administrator > ERP Instances from the menu bar. A list of ERP instances appears.

ERP Instance Workbench
Current Location: [Administrator](#) > [ERP Instances](#)

View ERP instances:

Results Per Page:
Results 1 - 5 Of 10
First | [<Prev](#) | [Next>](#) | Last
[Revise Search](#)

ERP Instance Name	Description	ERP Version	Service Name	Enabled?	
ag1_r12	flagstaff	Oracle Applications 11.5.10	ag1_r12	Yes	Edit
PSFIN88_Glendale	PS Financials on Glendale	PeopleSoft Financials 8.8	glendale_FDMO	No	Edit
Flagstaff_R12	OA 12.0	Oracle Applications 12	ag1_r12	Yes	Edit
PS9204	NY PS 88 Fin	PeopleSoft Financials 8.8	PS9204	No	Edit
PS88_Glendale	PS on Glendale	PeopleSoft 8.8	glendale_FDMO	Yes	Edit

Results Per Page:
Results 1 - 5 Of 10
First | [<Prev](#) | [Next>](#) | Last
[Revise Search](#)

Add ERP Instance...

You can see more (or different) results by changing Results Per Page, clicking Next >, or clicking Revise Search.

Click Edit to view an existing instance, or Add Instance to add a new one. In either case, the ERP Instances page appears.

ERP Instances Definition

ERP Instance Workbench Current Location: [Administrator](#) > [ERP Instances](#)

ERP Instance Basics

ERP Instance: **orlandoag1** Service Name: **ag1_5102**

Description: ERP Version: **Oracle Applications 11.5.10**

Enabled: ☒

Component Details

Components	Latest Status	
CCG Agent	Common instance configuration complete. Additional licensed products can be configured.	Edit
Configuration Controls Governor	Configuration for CCG completed successfully.	Edit

[Save](#) [Restore](#) [Back](#)

The ERP Instance Basics (upper) portion of the page contains these fields:

- **ERP Instance.** Short name that identifies the ERP instance
- **Description.** Longer, more descriptive name for the ERP instance. For example, if Instance name is Dev, Description could be Development Instance
- **Service Name.** TNSNAMES service name that will be used when CCG creates a database link from the CCG Home schema to the new CCG Agent schema on the ERP instance. This name must be present in the TNSNAMES configuration for the CCG Home instance's Oracle Home.
- **ERP Version.** ERP application version

The page contains these buttons and links:

- **Edit.** Displays the Components page (see "Component Details," below), where you can configure, remove or reconfigure the component.
- **Save.** Saves the changes made on this page. Does not affect changes to components, which are performed while on the Components page.
- **Restore.** Discards the changes made on this page. Does not affect changes to components, which are performed while on the Components page.
- **Back.** Displays the list of ERP instances.

Component Details

The Component Details area lets you configure or remove the CCG Agent (which lets CCG perform tasks that require access to the instance's data) and a Configuration Controls Governor component (which provides other CCG functionality). The area contains these buttons and links:

- **Remove.** Appears when the component has already been configured. Removes the component from the instance and refreshes the page.

- **Configure.** Configures the component on the instance and refreshes the page. If the component has already been configured, this button updates the configuration.

If you have made changes to values on this page, click Save before clicking Configure.

- **Save.** Saves your changes to the fields on this page without configuring the component, and refreshes the page.
- **Cancel.** Discards your changes and refreshes the page.

These buttons appear at the bottom of the ERP Instances page when working with Component Details:

- **Refresh.** Retrieves the latest status of the instance.
- **Back.** Discards unsaved changes and displays the ERP Instances page.

The fields on this page vary by component. **CCG Agent fields** include:

- **Data.** The data tablespace used by the CCG Agent. Normally, the tablespace is named AM_AGENT_D.
- **Index.** The index tablespace used by the CCG Agent. Normally, the tablespace is named AM_AGENT_X.
- **CCG Agent Username.** For the CCG Agent schema. Created on the ERP instance if it does not exist. Default value: AM_AGENT.
- **Database Link from HOME to Agent.** Needed to transfer metadata from the CCG Home instance to the ERP instance, and to execute any process on the ERP instance. Created on the CCG Home instance if it does not exist.

The value must contain no more than 20 characters.

- **ERP Username.** Existing ERP instance user with full access to the ERP instance's data.
 - Oracle E-Business Suite: The typical value is APPS.
 - PeopleSoft Enterprise: The typical value is SYSADM.
 - Siebel CRM Applications: The typical value is SIEBEL.
- **ERP User Database Link.** Needed to access ERP application information. Created on the ERP instance if it does not exist.

The value must contain no more than 20 characters.

- **Temporary Tablespace Name.** Name of the ERP instance's temporary Tablespace.
- **Database Version.** ERP instance's database version. Example: 8.1.7
- **Remote File System Directory of the \$ORACLE_HOME.** File system directory that corresponds to the \$ORACLE_HOME of the ERP instance.
- **Remote File System Directory of the UTL_FILE_DIR.** File system directory specified by the UTL_FILE_DIR parameter in the ERP instance's INIT.ORA file. Tells CCG where to read and write files that reside on the ERP instance.

- **File System Directory IMP/EXP/SQLPLUS Binaries.** File system directory path where these executables reside on the ERP instance.
- **Remote Instance File System Directory Delimiter.** The character used by your ERP instance's file system to separate elements within pathnames.
 - Unix/Linux: / (forward slash)
 - Windows: \ (backslash)
- **Export/Import Buffer Value.** Sets the BUFFER parameter, which is used when invoking the IMP and EXP utilities. Default value: 100000
- **ISO language.** Default value: US
- **Parallel Workers.** Default value: 4
- **Database Host.** Server where database resides.
- **Database Port.** Port for installing and launching the database.
- **Database SID.** Name of the database that contains the ERP application schema.
- **Analyze Date Tolerance.** Default value: 7
 Informia Subset users: Subset will not perform a row count if there is an existing one that was created within this many days.
- **APPSORA.env.** Default value: APPSORA.env

Configuration Controls Governor component fields include:

- **Data.** Data tablespace used by the CCG Agent. Typically named APS_AGENT_D.
- **Index.** Index tablespace used by the CCG Agent. Typically named APS_AGENT_X.
- **APPLSYS Username.** Oracle E-Business Suite users: ERP instance's APPLSYS username. PeopleSoft Enterprise users: ERP instance's SYSADM username.
- **HR Username.** Oracle E-Business Suite users: ERP instance's HR username.
- **Remote Instance Directory of the FND_TOP.** Oracle E-Business Suite users: ERP instance's \$FND_TOP directory.
- **Baseline Definition Owner.** CCG user who will own the snapshot and change tracking definitions that will be generated automatically when you complete this configuration process.
- **Remote Instance Directory of the APPL_TOP.** Oracle E-Business Suite users: ERP instance's \$APPL_TOP directory.
- **Freeze Table Overlays.** If you have moved or renamed any ERP tables or views from their defaults, enter *N* to map them (which will make them visible to CCG). The default value is *Y*.
- **Descriptive Flexfields Flag.** Oracle E-Business Suite users: Enter *Y* to capture all values entered in every Descriptive Flexfield of every setup object in this ERP instance. The default value is *N*.

To report on the structure or definition of a Descriptive Flexfield, use the System Administration application's Descriptive Flexfield Segments object.

- **Remote APPLTOP (Y/N).** Oracle E-Business Suite users: Enter *Y* if your APPL_TOP is on a different physical server than the ERP instance. The default value is *N*.
- **Remote APPLTOP Server Name.** Oracle E-Business Suite users: Name of server, if your APPL_TOP is on a different computer than the ERP instance.

Tablespaces

CCG requires the creation and maintenance of several tablespaces. Use the Tablespace Workbench to work with tablespaces.

All tablespaces created by CCG are locally managed.

To use the Tablespace Workbench, select Administrator > Tablespaces from the menu bar. A list of existing tablespaces appears.

Tablespaces Current Location: [Administrator](#) > [Tablespaces](#)

View tablespaces: [Revise Search](#)

Results Per Page: Results 1 - 5 Of 26 First | <Prev | [Next>](#) | Last

Tablespace	Type	Instance	Initial Extent (KB)	Next Extent (KB)	Status	
<input type="checkbox"/> FLAGSTAFF_APS_DATA01	AMAPS DATA	Flagstaff_R12	64	64	Complete	Delete Edit
<input type="checkbox"/> FLAGSTAFF_AGENT_DATA01	AM_AGENT DATA	Flagstaff_R12	64	64	Complete	Delete Edit
<input type="checkbox"/> FLAGSTAFF_INDEX01	AM_AGENT INDEX	Flagstaff_R12	64	64	Complete	Delete Edit
<input type="checkbox"/> ACC_DATA	ACC DATA	Integra Home	0	0	Complete	Delete Edit
<input type="checkbox"/> ACC_INDEX	ACC INDEX	Integra Home	0	0	Complete	Delete Edit

Results Per Page: Results 1 - 5 Of 26 First | <Prev | [Next>](#) | Last

[Revise Search](#)

[Add Tablespace...](#)

You can see more (or different) results by changing Results Per Page, clicking Next >, or clicking Revise Search.

Click Edit to view an existing tablespace, Delete to delete a one, or Add Tablespace to add a new one.

Tablespaces Definition

Tablespaces Current Location: [Administrator](#) > [Tablespaces](#)

Tablespace Basics

Instance: **CCG Home** Initial Extent (KB):

Type: **AM DATA** Next Extent (KB):

Name:

Datafile Basics

Datafile Name	Max Size(MB)	Status
/apps/ag1/integra_dbf/am_data.dbf	2000	Complete

Add Datafile

Datafile Name: Max Size (MB): [Clear](#)

[Alter Tablespace](#) [Save](#) [Back](#)

The Tablespace Basics (upper) portion of the page contains these fields:

- **Instance.** Where the tablespace will reside.
- **Type.** Choose the appropriate type.
- **Name.** The tablespace's name.
- **Initial extent.** Size of the tablespace's initial extent.
- **Next extent.** Size of the tablespace's subsequent extents.

The page contains these buttons:

- **Create Tablespace/Alter Tablespace.** Creates all listed datafiles and refreshes the page. If some datafiles already exist, this button updates their configurations.
- **Save.** Saves the changes made on this page. Does not affect changes to datafile configuration settings.
- **Back.** Discards the changes made on this page. Does not affect changes to datafile configuration settings.

Datafile Basics

Each tablespace uses one or more datafiles, and has exclusive use of its datafiles.

The Datafile Basics section contains these fields:

- **Datafile Name.** The datafile's name, including the file system directory path for where the datafile will be stored.
- **Max Size.** The maximum size of the datafile. Its initial size will be 10 percent of the amount specified here; it will be allowed to AUTOEXTEND in increments of 10 percent or 200 MB, whichever is less, until reaching the size entered here.

The section contains a **Clear** button, which clears the Datafile Name and Max Size fields.

The section contains these links:

- **Edit.** Appears to the right of undeployed datafile definitions. Displays the Datafiles page, and lets you revise the datafile's configuration.
- **Delete.** Appears to the right of undeployed datafile definitions. Deletes the datafile.

System Profile

To change the System Profile, select Administrator > System Profile from the menu bar. The System Profile page appears.

System Profile

Current Location: [Administrator > System Profile](#)

Options

CCG Application Path:
Company Logo:

Save

The page contains these fields:

- **CCG Application Path.** Enter the *web-application-name* portion of the URL that summons the Secure Login page. Typically, this value is *ccg*.
- **Company Logo.** Provide the name of the image file that is displayed in the upper left corner of each page. The file must be located in the images subdirectory of the directory on the CCG UI server where the CCG web application is deployed.

The page contains these buttons:

- **Save.** Saves changes made on this page.
- **Restore.** Discards changes made on this page.

Help

Selecting Help > About products from the menu bar displays the following information about each installed component:

- Product (component name)
- Release Number
- Patch Number (latest patch release applied, and patch history)
- Metadata release
- Metadata Patch Number (latest metadata patch release applied), and Patch History

Using MetaBuilder

Metadata is detailed information about the data structure of the ERP application's database.

Configuration Controls Governor comes with predefined metadata, which covers many ERP application versions and modules. MetaBuilder lets you customize this metadata to better serve your business needs.

Because MetaBuilder lets you create metadata for any application, you can also use it to build metadata for applications that are not defined in CCG.

How to Create Metadata

The following pages describe how to create metadata in step-by-step detail. You must perform all steps, in the order shown. Here is a summary of the steps you will perform:

Set up the structure needed to store custom metadata

1. Define a Product Family
2. Define Suites
3. Define Applications
4. Assign Applications to Suites
5. License Suites
6. Assign Applications to ERP Instance
7. Import Data Dictionary into MetaBuilder

Create the metadata needed for snapshots, comparisons and change tracking

8. Create Schemas
9. Assign Schemas to an Application
10. Add Tables to a Schema
11. Configure Columns within a Table/View
 - Insert Phantom Columns
 - Insert Missing Columns

12. Assign Translation Details to Columns
 - Option 1: Column
 - Option 2: Function (Existing)
 - Option 3: Function (New): Create a Translation Function; test the function; apply the function; add multiple SELECTS to the function
 13. Create Objects
 - Cross-Reference an Object to another Application
 - Maintain Column Filters: Security Filters; Suggested Filters
 - Copy a Standard CCG Object
 14. Synchronize
 15. Manage Security Groups
- Test the metadata** by verifying that CCG returns the correct information when using the new or updated metadata
16. Test Metadata

Preparation

Before creating metadata, you must identify non-standard application objects and their data sources.

Identify Non-standard Application Objects

An object is a group of application setup tables that helps users select information to monitor. As a MetaBuilder user, you must identify all objects that you want to work with. Your choice of each object's contents facilitates the use of CCG by those who are familiar with the ERP application. To provide an intuitive look and feel, objects should be closely aligned with the organization of information seen in the ERP application's menus.

For example, the Oracle E-Business Suite General Ledger Define Set of Books form contains fields stored in different tables. This is not apparent, nor typically relevant, to managers and end-users. CCG contains a Set of Books object that aggregates the information in these tables, facilitating reporting and change tracking.

Identify Object Data Sources

Once you identify an object, you must identify the tables associated with it.

Oracle E-Business Suite users: Forms are usually based on database views. Each view usually contains one table that serves as the primary source of information (since it stores a majority of the data), but other tables might need to be included in the object's definition too. You can usually see a setup form's table or view information using the Help Record History menu item; if not, you must do more research. One useful set of resources are the eTRMs (electronic technical reference manual).

PeopleSoft Enterprise users: Pages can be based on either tables or views; use Application Designer to identify them. Typically, objects containing a suffix of _VW indicate that the page is based on a view.

Set Up Metadata Structure

Before creating metadata, you must set up the necessary product family, suites, applications, application licensing and ERP instance configuration, and import your data dictionary.

The following instructions assume that your CCG Administrator has given you the CCG Developer role. If you do not have this role, contact your CCG Administrator.

Step 1: Define a Product Family

A Product Family is a software product that provides a business solution and supports different business functions; Oracle E-Business Suite is an example of a Product Family.

A Product Family often contains more than one Product Family Version. Software makers typically provide more functionality with each new Product Family Version they release.

1. Log into MetaBuilder.
2. From the Navigator, under the CCG Developer role, select Navigate...CCG Metadata...MetaBuilder Workbench. MetaBuilder opens the MetaBuilder Workbench.

The screenshot shows the MetaBuilder Workbench window. At the top, there is a 'Product Family/Version' field with the text 'APPLIMATION_CUSTOM / 5.2' and a 'Refresh' button. Below this is a tabbed interface with 'Products', 'Suites', 'Schemas', 'Tables', 'Applications', and 'Objects'. The 'Products' tab is selected. Inside the 'Products' tab, there are two main sections: 'Product Family' and 'Product Family Version'.

Product Family Section:

Description	Short Name	Copy Security Group From
APPLIMATION_CUSTOM	AM_CUSTOM	ORACLE APPS

Product Family Version Section:

Name	Compatibility	MetaBuilder Model Instance
CUST1159	Oracle Applications 11.5.9	MD9ISE9_APS_1159
5.1	No Oracle Apps Installed	APS11510
5.2	Oracle Applications 11.5.10	APS11510

3. Select the Products tab to define a new Product Family. Use the following information to enter your Product Family details:
 - Description. Name of the Product Family
 - Short Name. Abbreviated version of the Product Family name. You cannot change this value once you have defined the Product Family; if you need to change the name, change the Description instead.

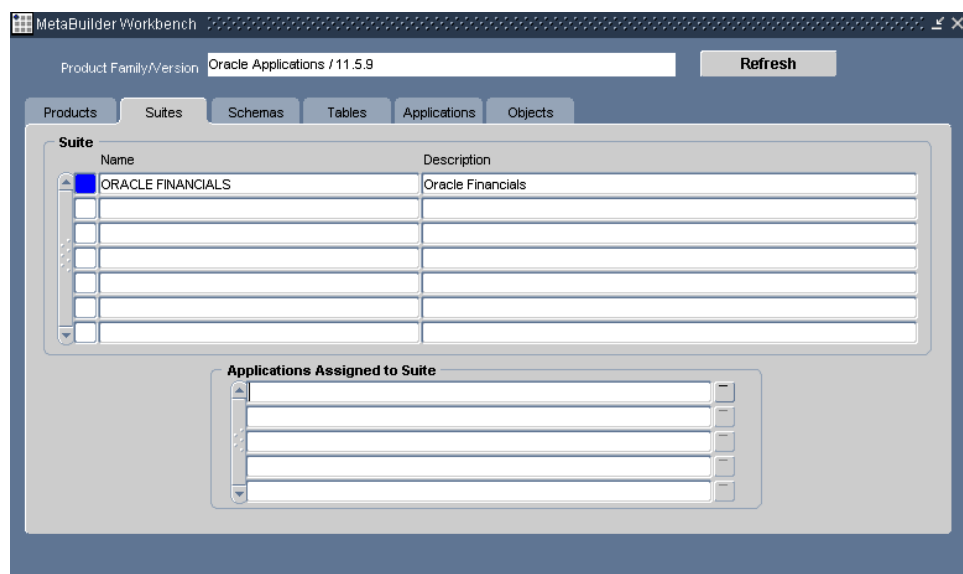
4. Enter the following information in the Product Family Version zone to define a Product Family Version:
 - **Name.** Used within MetaBuilder to describe the Product Family.
 - **Compatibility.** ERP application suite version that the metadata will be compatible with.
 - **MetaBuilder Model Instance.** Database instance where the data dictionary information that you use for metadata development is kept. Contact your Administrator if you want to use a new database instance.
5. Select Action...Save from the menu to save your work.

Step 2: Define Suites

In this step, you will create suites to assign to your Product Family/Version. A suite comprises a number of applications within a product family, usually corresponding to a group of interrelated business processes (e.g., Financials or Manufacturing).

Follow these steps to create a suite:

1. On the MetaBuilder Workbench, select the Product Family and the Version in the Products tab for which you want to define suites.
2. Navigate to the Suites tab. The MetaBuilder Workbench displays the Product Family/Version that you selected from the Products tab in the Product Family/Version field.



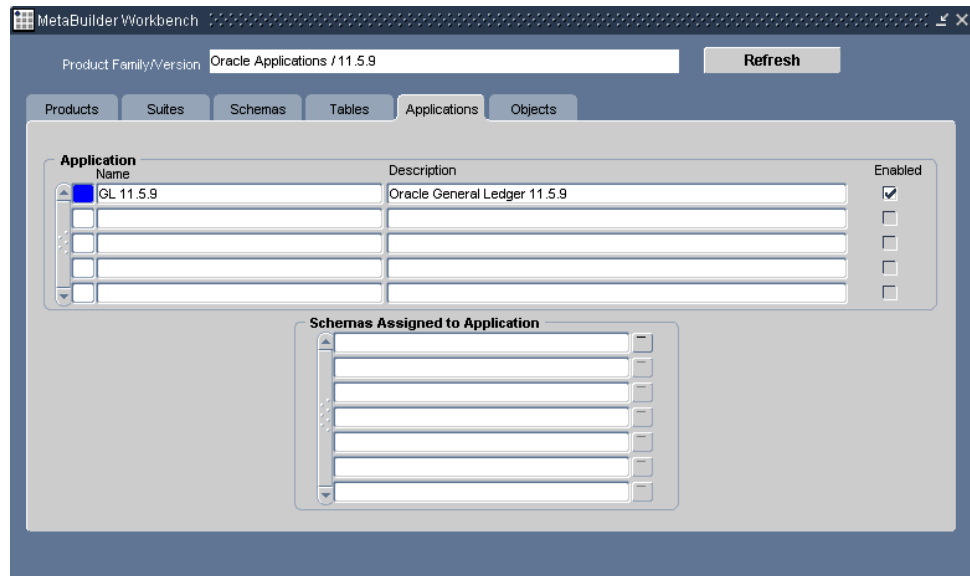
3. Enter the following information in the Suite zone to define a suite:
 - **Name.** Name of the suite.
 - **Description.** Description of the suite you are creating. This Description should represent all the applications that you plan to assign to this suite.
4. Select Row...Insert from the menu and repeat step 3 for each suite that you want to create under this Product Family/Version.
5. Select Action...Save from the menu to save your work.

Step 3: Define Applications

In this step, you will create applications to assign to suites. MetaBuilder suites comprise applications, which usually satisfy a particular business function (e.g., Payables or Receivables).

Follow these steps to define an application:

1. On the MetaBuilder Workbench, navigate to the Applications tab pertaining to a specific Product Family/Version.



2. Enter the following information in the Application zone to define a new application:
 - **Name.** Name of the application.
 - **Description.** Description of the application.
 - **Enabled.** Select this checkbox to enable the application.
3. Select Row...Insert from the menu and repeat step 2 for each application that you want to create under this product family/version.
4. Select Action...Save from the menu to save your work.

Step 4: Assign Applications to Suites

Once you define your applications, you must assign them to one or more suites. An application may be assigned to one or more suites, and a suite may contain one or more applications.

Follow these steps to assign applications to suites:

1. On the MetaBuilder Workbench, navigate to the Suites tab pertaining to a specific product family/version.
2. In the Suite zone, select a suite to which you want to assign your applications.

3. In the Applications Assigned to Suite zone, select an application from the list of values to assign to the selected suite. The list of applications contains only those created in “Step 3: Define Applications” (page 5-5).

MetaBuilder Workbench

Product Family/Version: Oracle Applications / 11.5.9 Refresh

Products Suites Schemas Tables Applications Objects

Suite

Name	Description
ORACLE FINANCIALS	Oracle Financials

Applications Assigned to Suite

GL 11.5.9	

4. Select Row...Insert from the menu and repeat Step 3 for each application that you want to assign to this suite.
5. Select Action...Save from the menu to save your work.

Step 5: License Suites

After assigning your applications to a suite, you must add the suite to the list of licensed suites and applications on the CCG Application Licensing page; this allows your site’s ERP instances to report on the suite’s applications.

You must have access to the CCG Administrator menu to complete this step. If you do not, contact your CCG Administrator.

Follow these steps to assign your suites to the Home Configuration:

1. Log into CCG.
2. Select Administrator > Application Licensing from the menu bar.
3. Click Add Application By Suite. The Add Application By Suite page appears.

Application Licensing Current Location: Administrator > Application Licensing

Add Application By Suite:

ERP Version: 

Application Suite: 

Save Cancel

4. Select the appropriate ERP Version.
5. Select the new application suite.
6. Click Save.

Step 6: Assign Applications to ERP Instance

After licensing suites, you must assign them to each ERP instance where you want to be able to report and track changes.

You must have access to the CCG Administrator menu to complete this step. If you do not, contact your CCG Administrator.

Follow these steps to assign your applications to an ERP instance:

1. Select Administrator > ERP Instances from the menu bar. A list of configured ERP instances appears.
2. Click Edit to the far right of the ERP instance you want to assign applications to. Information about the ERP instance configuration appears.
3. Click Edit to the far right of Configuration Controls Governor. The page is refreshed, and the lower portion now displays fields for configuring CCG.

The screenshot shows the CCG configuration interface. The top section is titled "Applications" and contains a table with columns "Application", "Description", and "Enabled". Below the table are two buttons: "Add application" and "Add suite". The bottom section is titled "Mappings" and contains a table with columns "Table", "Expected Schema", "Actual Schema", and "Enabled". To the right of the table are three buttons: "Configure", "Remove", and "Save". At the bottom right of the "Mappings" section are two buttons: "Refresh" and "Back".

4. Specify the applications CCG can monitor on this ERP instance. You can:
 - Click Add application... to add applications one by one, clicking Save after selecting each application.
 - Click Add suite... to add all applications in a product suite.
5. Click the Configure button. See "Configure CCG" (page 2-9).

Step 7: Import Data Dictionary into MetaBuilder

Before you can create metadata for your database tables and columns, MetaBuilder needs information for the MetaBuilder Model Instance. To retrieve this information, you must run a job to import information stored in the ERP instance data dictionary.

Follow these steps to run this job:

1. Select Jobs > Schedule a Job. The Schedule a Job page appears.
2. Click Add Item... near the bottom of the page. The Schedule a Job page appears.

The screenshot shows the "Schedule a Job" page. At the top, there is a header "Schedule a Job" and a breadcrumb "Current Location: Jobs > Schedule a Job". Below the header is a section titled "Items To Execute" with a table containing one row with the header "Item". Below the table is a section titled "Add Item". In this section, there is a "Job Type" dropdown menu set to "Standalone" and a "Program Name" text input field. To the right of the input field is a small icon of a document. At the bottom right of the "Add Item" section are two buttons: "Save" and "Cancel". At the very bottom of the page is a "Back" button.

3. Set Program Name to MetaBuilder: Import Table Definitions from Target.
4. Enter the following information:
 - **Development Instance.** ERP instance where you want to import your data dictionary from.
 - **Target Schema Name.** Schema from which you want to import. Optional, but you should enter this value to avoid performance and tablespace issues. A list of values does not exist for this field. You must type your schema name precisely as it appears in your database dictionary.
 - **Table/View Name.** Name of a table or view from which you want to import. Optional; leave this field empty if you want to import all metadata associated with a schema.
5. Press the Save button. The page is refreshed.
6. Press the Back button. The Schedule a Job page reappears.
7. Click Schedule. The job is scheduled to run immediately.
8. Select Jobs > View Current/Past Jobs to view the status of your job.
9. Repeat these steps to import more table or view definitions for a schema.

Create Metadata

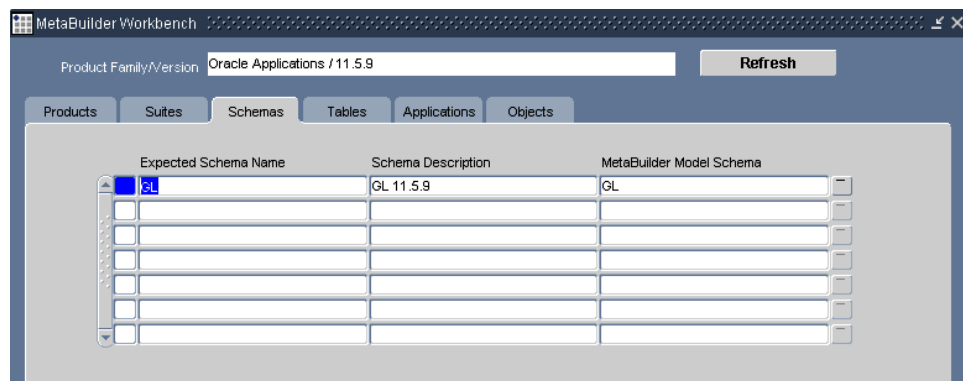
Once you have set up your metadata structure, you can begin creating metadata. You can create metadata pertaining to database schemas, tables and columns.

Step 8: Create Schemas

A schema owns a collection of database objects (tables, stored procedures and functions, triggers, synonyms). GL is an example of an Oracle E-Business Suite schema; it contains the database objects associated with the Oracle General Ledger application.

Follow these steps to create a schema for your application:

1. Log into MetaBuilder.
2. From the Navigator, under MetaBuilder, navigate to the MetaBuilder Workbench.
3. On the MetaBuilder Workbench, navigate to the Schemas tab pertaining to a specific Product Family/Version.

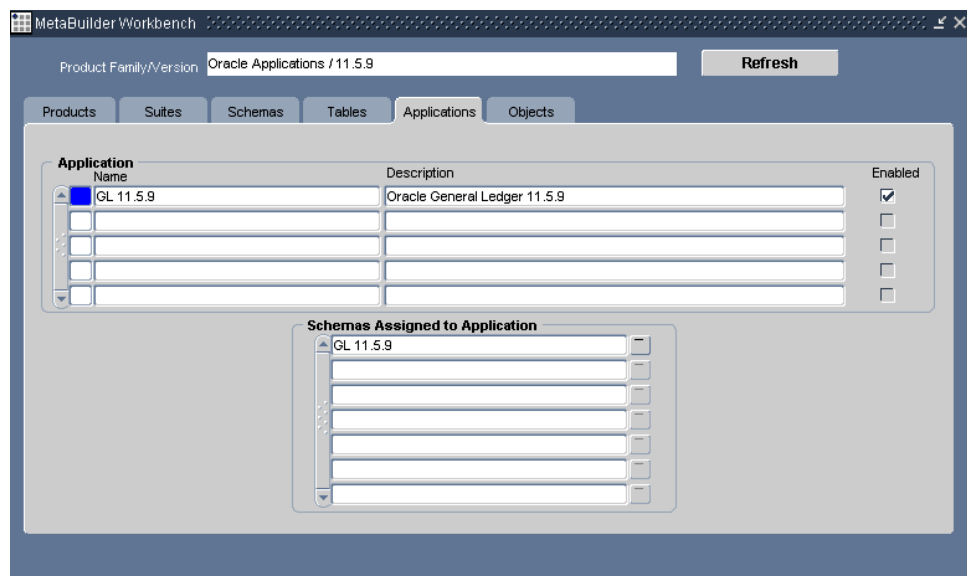


4. Enter the following information to create a schema, using list of values where applicable:
 - **Expected Schema Name.** The precise schema name found in your database dictionary.
 - **Schema Description.** Description of the schema.
 - **MetaBuilder Model Schema.** Schema name pertaining to your expected schema name. The MetaBuilder Model Schema list of values contains only database schema names for which you have run the MetaBuilder: Import Table Definitions from Target job.
5. Select Row...Insert from the menu and repeat step 4 for each schema that you want to create under this product family/version.
6. Select Action...Save from the menu to save your work.

Step 9: Assign Schemas to an Application

An application typically comprises one or many schemas. In order for your applications to connect to the appropriate schemas in MetaBuilder, you must create relationships between applications and schemas. Follow these steps to assign schemas to an application:

1. On the MetaBuilder Workbench, navigate to the applications tab pertaining to a specific Product Family/Version.

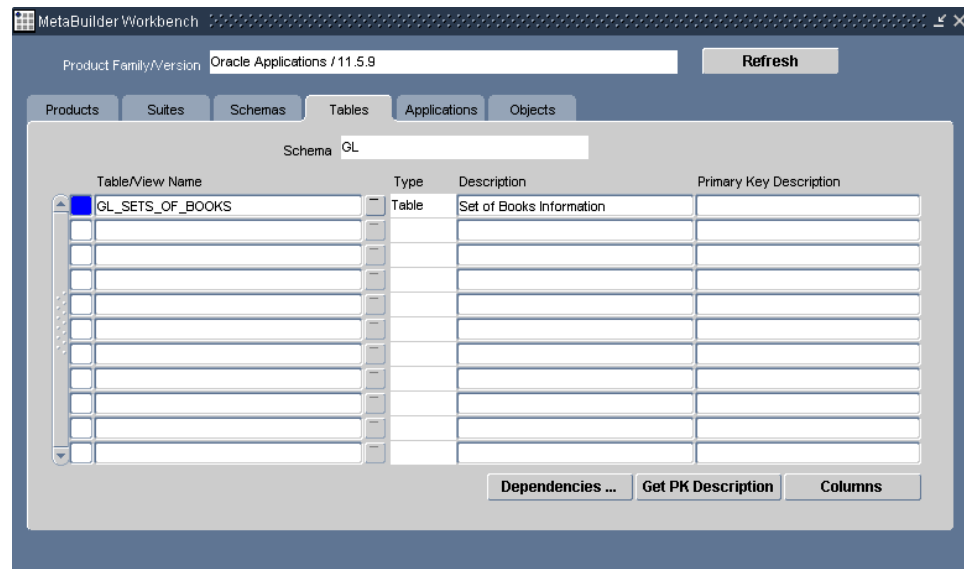


2. In the Application zone, select an application to which you want to assign a schema.
3. In the Schemas Assigned to Application zone, select the schema that you want to assign to this application.
4. Select Row...Insert from the menu and repeat Step 3 for each schema that you want to add to this application.
5. Select Action...Save from the menu to save your work.

Step 10: Add Tables to a Schema

Follow these steps to add tables owned by a schema. You must add the tables for which you want to create metadata.

1. On the MetaBuilder Workbench, navigate to the Schemas tab pertaining to a specific Product Family/Version.
2. Select the Expected Schema Name to which you want to assign a table.
3. Navigate to the Tables tab. The MetaBuilder Workbench displays the schema you selected from the Schemas tab in the Schema field.



You can click the Dependencies... button to view the dependencies from a table/view. MetaBuilder opens the Table *table-name* Dependencies window. This is useful if more than one object is based on the same table/view.

4. Enter the following information to assign a table to a schema:
 - **Table/View Name.** Table that you want to include in your selected schema. The list of values for this field is based on the tables and views that you imported in “Step 7: Import Data Dictionary into MetaBuilder” (page 5-7).
 - **Type.** Read-only: MetaBuilder populates this field when you save, based on the information you selected for the Table/View Name field. The potential values of this field are *Table* and *View*.
 - **Description.** Description of the table.
 - **Primary Key Description.** Primary key description for your table or view. You can enter this field after you complete “Step 11: Configure Columns within a Table/View” (page 5-11).
5. Select Row...Insert from the menu and repeat step 4 for each table that you want to add under this schema.
6. Select Action...Save from the menu to save your work.

Step 11: Configure Columns within a Table/View

Once you have added the Tables/Views to your metadata, you must also add/modify columns. Follow these steps to add/modify columns from a table/view:

1. On the MetaBuilder Workbench, navigate to the Schemas tab pertaining to a specific product family/version.
2. Select the schema from which you want to select a table.
3. Navigate to the Tables tab. The Schema field displays the schema that you selected from the Schemas tab.
4. Select the table to which you want to add/modify columns.
5. Click the Columns button. MetaBuilder opens the columns in Table *table-name* window, listing all the table's columns.

Order	Name	PK	Description	Data Type	Snapshot			Form	
					Audit	Compare	Filter		
1	NAME	<input checked="" type="checkbox"/>	Set of Books	CHAR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	SHORT_NAME	<input type="checkbox"/>	Short Name	CHAR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4	DESCRIPTION	<input type="checkbox"/>	Description	CHAR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	CHART_OF_ACCOUNTS_ID	<input type="checkbox"/>	Chart of Accounts	NUMBER	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	CURRENCY_CODE	<input type="checkbox"/>	Functional Currency	CHAR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	PERIOD_SET_NAME	<input type="checkbox"/>	Calendar Name	CHAR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	FUTURE_ENTERABLE_PERIODS_LIMIT	<input type="checkbox"/>	Calendar Future Periods	NUMBER	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	ACCOUNTED_PERIOD_TYPE	<input type="checkbox"/>	Calendar Period Type	CHAR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10	RET_EARN_CODE_COMBINATION_ID	<input type="checkbox"/>	Fund Balance Account	NUMBER	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Translation Details

Method: None Function Name: Column:

6. Enter or modify the following information to define metadata for the columns:
 - **Order.** Order in which you want this column to appear on CCG reports.
 - **Name.** MetaBuilder populates this field with data dictionary information.
 - **PK.** Select this checkbox if the column is part of the table's primary key. If you do not know whether this column is part of the table's primary key, use step 9 below to retrieve the table's primary key.
 - **Description.** The name of the column as it will appear in CCG reports.
 - **Data Type.** MetaBuilder pre-populates this field with the column's data type from the data dictionary.
7. Select Action...Save from the menu to save your work.
8. Repeat steps 6 and 7 for each column in this table that you want to modify.
9. Click the Get Primary Key button to select the column(s) that will make your record unique. MetaBuilder opens the Choose PK Constraint window, containing a list of unique constraints and their columns.
10. Select the constraints name that you want to specify as your table's primary key.
11. Click the OK button. MetaBuilder enables the PK checkbox for each column that belongs to the unique constraint you selected. You can reset these checkboxes manually at any time.

When creating snapshot reports, CCG uses columns selected as PK to group records. If your table does not have a primary key or a unique constraint defined, ensure that your selection of PK columns makes each record within the table unique. Once you define PK columns, navigate to the Tables tab and click the Get PK Description button to populate this field.

12. Click the Set Flags button to set the Audit, Snapshot, Compare, Form and Filter checkboxes based on predefined rules for each column. You can reset these checkboxes manually at any time.
13. Decide whether to enable each of these checkboxes:
 - **Audit.** Select this checkbox to be able to track changes against the data contained within this column.

Oracle E-Business Suite users: Your table must meet the following conditions to be able to use the CCG change tracking functionality:
 - Your table must contain the standard Who columns (CREATION_DATE, CREATED_BY, LAST_UPDATE_DATE, LAST_UPDATED_BY).
 - Your table's CREATED_BY and LAST_UPDATED_BY columns must be foreign keys of the Oracle Users table (FND_USER).
 - **Snapshot.** Select this checkbox to include this column in CCG snapshot reports when you select Displayed & non-Displayed Fields option when running a report.
 - **Compare.** Select this checkbox to be able to compare this column across points in time or database instances.
 - **Form.** Select this box to include this column in CCG snapshot reports when you select the displayed fields only option when running a report. You should not select this checkbox if you do not select the Snapshot checkbox.
 - **Filter.** Select this checkbox to let CCG users filter on this column when running a snapshot report. You should use this checkbox only when the associated table is a child table of an object. The columns in the object's parent table are automatically available for filtering whenever Form is checked.
14. Select Action...Save from the menu to save your work.
15. Press the Validate Columns button to perform a validation on your column metadata configuration. MetaBuilder verifies your checkbox selections, your metadata, and that you designated a Primary Key.
16. Select Action...Save from the menu to save your work if you made any changes.

Insert Phantom Columns

Phantom columns allow you to add another instance of an existing column to your table in the Columns in Table window. It may be the case that you need to use an existing column for another data translation for your snapshot reports. We refer to columns of this type as phantom columns.

Follow these steps to add a phantom column:

1. Select an Order field of the Column record prior to the order in which you want add the phantom column.

2. Select Row...Insert from the menu to insert a phantom column.
3. MetaBuilder inserts a record and increments the Order field for the subsequent columns.
4. Navigate to the Name field and select the column that you want to add again using the list of values.
5. Configure this phantom column. Refer to the instructions above.
6. Select Action...Save from the menu to save your work.

Insert Missing Columns

You may have inadvertently deleted a column, or you may have upgraded your ERP application version. You can add this new or deleted column using the Insert Missing Columns button.

If you have upgraded your ERP application version and want to add missing columns, verify that you have changed your MetaBuilder model instance to the upgraded ERP instance, and import the table information again using the MetaBuilder: Import Table Definitions from Target program.

Follow these steps to insert a missing column:

1. In the Columns in Table... window, press the Insert Missing Columns button.
2. Configure this column. Refer to the instructions above.
3. Select Action...Save from the menu to save your work.

Step 12: Assign Translation Details to Columns

Your table's columns might require information that is stored in another table, or you might want to use data from a different column within the same table. Use the Translation Details zone to generate this information.

You have three options for translating data:

- **Column:** Assign the column data from another column of the same table.
- **Function (Existing):** assign the column an CCG translation function.
- **Function (New):** Create and assign the column a new CCG translation function.

Column

Use this option if you have an inactive column and want to display another column data of the same table that you already placed a translation function or you already assigned another column data. Thus, you do not have to insert a phantom column.

1. Select the column to which you want to assign the data of another column.
2. In the Translation Details zone, enter the following information:
 - **Method.** Select Column from the drop-down list.
 - **Function Name.** MetaBuilder disables this field for this option.
 - **Column.** Select the column containing the data you want to display.
3. Select Action...Save from the menu to save your work.

Function (Existing)

Use this option if the data that you want to display is stored in more than one table, or if you store data as an ID rather than a value, and would like to provide the full description of the ID in your snapshot reports. An example of a translation function is the conversion of a code combination ID in the Oracle General Ledger to a multi-segment accounting flexfield value.

1. Select the column that you want to assign a translation function.
2. In the Translation Details zone, enter the following information:
 - **Method.** Select Function from the drop-down list.
 - **Function Name.** Select the translation function that you want to apply to this field.

To verify or test the selected function name, click the Translation button to view the translation function's definition.

CCG metadata uses the following name convention:

`tick_app_version.function-name`

In this line:

- *app* is the ERP application's short name.
- *version* is the abbreviated version number (e.g., 107, 1103, 1157, 1158, 1159).
- *function-name* is the descriptive name of the function.

You can find existing functions by navigating to the Translation Function window and clicking the Find button. MetaBuilder opens the Find Function window. Refer to "Function (New)" below for more information.

You can also check which columns, if any, apply this translation function. Navigate to the Translation Function window, and press the Referenced By button.

- **Column.** MetaBuilder disables the column field for this method.
3. Select Action...Save from the menu to save your work.

Function (New)

This option is equivalent to Function (Existing) above in all respects but one: the translation function that you need does not exist yet. You will create a new translation function and apply it to the column that you want to translate.

You may need the assistance of a technical resource (e.g., a developer) to create a data translation using this option.

Follow these steps to create and apply a new translation function:

Begin to Create a Translation Function

1. From the Navigator, under MetaBuilder, select Navigate...Maintain Metadata...Translation Functions. MetaBuilder opens the form shown at the top of the next page.

Translation Functions

Function Name:

Product Family/Version:

Description:

Translation Object Name:

Parameter Types: Unique ☒ N Stored ☐ Incompatible with Filters ☐

Parameter Name	Type	Order	Test Value
<input type="text" value="p_sob_id"/>	<input type="text" value="N"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Assign Select:

Buttons: Find, Referenced By, Delete, SELECT Statement(s)

2. Enter the following information to create a translation function:

- **Function Name.** Name of your translation function. You should name your translation functions logically to facilitate the process of finding and reusing these functions.
- **Product Family/Version.** Select a product family/version to which you want to apply this function.
- **Description.** Description of this function.
- **Translation Object Name.** This is usually a concatenation of a function name and parameter names to be passed to the function.

You must enter the translation object name in the following form, in which *name* is the function name:

```
name(tms.tickvalue)
```

The variable *tms.tickvalue* references the table column record on which you apply the function. If you specify the column name instead of using this variable, you will be unable to apply this function to a column in another table (one that stores the same information but has a different column name).

You can include a maximum of four parameters per translation function (columns 1, 2 and 3 are column names in the source table):

```
name(tms.tickvalue, tms.Column1, tms.Column2, tms.Column3)
```

- **Parameter Types.** Enter the column data types for the parameters that you pass to your translation function. Use one of the following values:
 - **C.** Character
 - **N.** Number
 - **D.** Date

If you have multiple parameters for your translation object name, separate the data types with a comma (.). Other parameter types are not supported.

- **Stored.** If you must store the translation function on your ERP instances, select this check box after completing “Create a Stored Function,” below.

Generally, you do not need to do this. Store functions on your ERP instances only if the Maintain Translation Functions form cannot support the complexity of your function. For example, IF statements and multiple SUBSTRING/INSTRING operations are typically created as stored functions.

- **Incompatible with Filters.** Select this checkbox if the information in the Select Statements For window (see “Finish Creating a Translation Function” on page 5-17) is incompatible with your stored procedure. This disables your ability to update the data in the Select Statements For window. This checkbox works only when the Stored checkbox is selected.
- **Parameter Name.** Name of the parameter.
- **Type.** Data type of the parameter.
- **Order.** Order in which you pass the parameter in the Translation Object Name field.
- **Assign Select.** Enter a function if your translation function contains multiple SELECT statements or you want to manipulate the parameter data that you are passing. Typically, your translation functions will contain only one SELECT statement. In this case, you should leave this field blank.

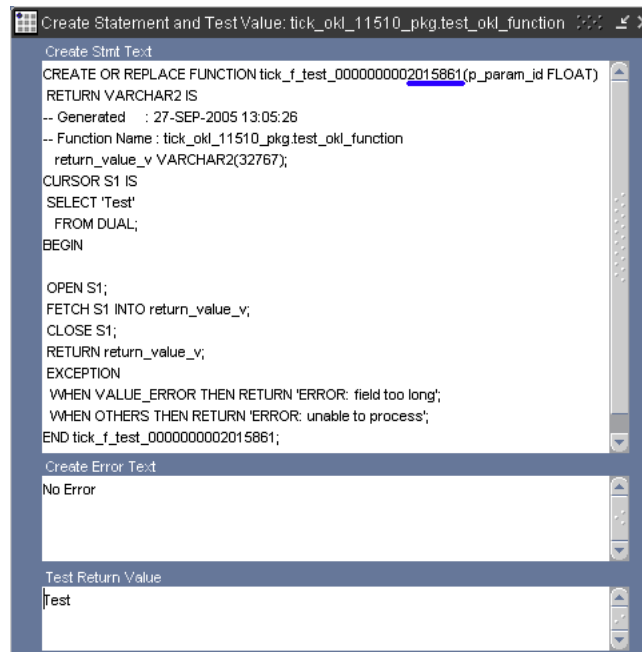
Create a Stored Function

If you are creating a stored function (See the Stored field, above), complete these steps. Otherwise, skip ahead to “Finish Creating a Translation Function” (page 5-17).

1. Click the SELECT Statement(s) button. Enter 'test' (or any other string surrounded by single-quote marks) in Translation Function Return Column Code.

The screenshot displays two windows from the Oracle Configuration Controls Governor Administration Guide. The left window, titled 'Translation Functions', shows the configuration for a function named 'tick_okl_11510_plg_test_okl_function'. It includes fields for 'Product Family/Version' (Oracle Applications (11.5.10)), 'Description', and 'Translation Object Name' (tick_okl_11510_plg_test_okl_function(tms.tickvalue)). Under 'Parameter Types', there is a table with columns 'Parameter Name', 'Type', 'Order', and 'Test Value'. The first row shows 'p_param_id', 'N', '1', and '10'. There are checkboxes for 'Unique', 'Parameter Type Lists', 'Stored', and 'Incompatible with Filters'. The 'Assign Select' field is empty. The right window, titled 'SELECT Statement(s) for tick_okl_11510_plg_test_okl_function', shows the 'SELECT NUMBER' set to 1, 'Translation Function Return Column Code' set to 'Test', and 'No Rows Returned Code' set to an empty field. The 'Order By' field is also empty. The 'From Tables/Views' section has a table with columns 'Alias', 'Table/View Name', 'Order', and 'Exclude'. The 'Where Clause' field is empty. At the bottom of the left window are buttons for 'Find', 'Referenced By', 'Delete', and 'SELECT Statement(s)'.

- Click the Test button and make note of the long number that appears in the first line of Create Stmt Text (underlined in this figure; discard the leading zeroes).



- Using your database editor, find the row in the CCG Home schema's TICK_META_FUNCTION_OVERLOADS table where meta_function_overload_id equals the value noted in the preceding step.
- In the same row, the create_stmt_text column holds the statement that defines the function. Modify the statement as needed to perform the desired function.
- CCG uses an internal function name instead of the name designated in MetaBuilder, employing this format:

tick_f_test_#####

Remove the string test_ from each occurrence of the internal function name (in the first and last lines of the statement).

- Copy the new function name to the function_overload_name column.
- Return to the MetaBuilder Translation Functions form (see page 5-15), and check the Stored checkbox.

Finish Creating a Translation Function

To finish your translation function (stored or otherwise), complete these steps:

- Select Action...Save from the menu to save your work.
(Press the Delete button if you want to delete your translation function.
MetaBuilder raises a message to confirm your command.)

2. Press the **SELECT Statement(s)** button to create a SELECT statement for your translation function. MetaBuilder opens the **SELECT Statements For** window.



SELECT Statement(s) for: tick_gl_1159_pkg.set_of_books_name

SELECT NUMBER: 1

Translation Function Return Column Code: A.name

No Rows Returned Code: DECODE(p_sob_id,NULL,NULL,'There is no name for this set of books id: ' || TO_CHAR(p_sob_id))

Order By:

From Tables/Views:

Alias	Table/View Name	Order	Exclude
A	GL_SETS_OF_BOOKS	1	<input type="checkbox"/>

Where Clause: A.set_of_books_id = p_sob_id

3. Enter the following information to create a SELECT statement for your translation function:
 - **SELECT NUMBER.** MetaBuilder defaults this field to 1. Retain this value for your first SELECT statement. If you need to create another SELECT statement, press the down arrow key and increment the number.
 - **Translation Function Return Column Code.** Database column to be returned by the Function. You also have the option to perform SQL functions on a database column.
 - **No Rows Returned Code.** Enter a message if you want to return a message when your function input value(s) return a NULL value. Your message must be enclosed in single quotes ('').
If your translation function is a valid function and its input values are NULL, MetaBuilder returns a NULL value.
 - **Order By.** Database column name used to sort the results of the SELECT statement. Try to make your SELECT statement identify a unique value. If your statement returns more than one record, CCG uses the first translated value from the sort order.
 - **Alias.** Alias of the table or view from which you are selecting values. You must denote any reference to any table's columns with the column name preceded by the Alias.

- **Table/View Name.** Database table or view from which you are selecting values. If the table or view does not exist in the list of values, you must add your table in the MetaBuilder Workbench and run MetaBuilder: Synchronize to synchronize your ERP instance prior to creating the function.
- **Order.** Number that specifies the order of the tables in the SELECT statement.
- **Exclude.** Select this checkbox for any table from which you are not directly selecting information.
- **Where Clause.** Condition(s) of your SELECT statement. Do not include the word *WHERE* in this field.

4. Select Action...Save from the menu to save your work.

Test the Translation Function

After you define your translation function, you must verify that it compiles. You have the option to specify test values for each input parameter so that you can verify the function's results.

First, synchronize the ERP instance that you will test the function on:

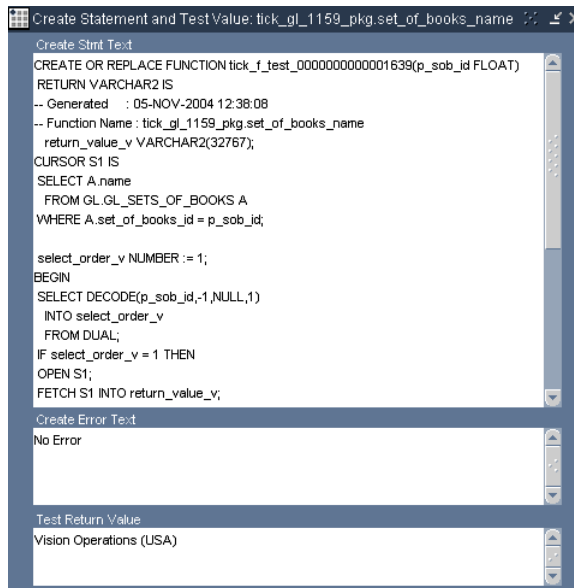
1. Log into CCG.
2. Select Jobs > Schedule a Job. The Schedule a Job page appears.
3. Click Add Item... near the bottom of the page. The Items To Execute page appears.
4. Set Program Name to MetaBuilder: Synchronize.
5. For Tarbet Instance Name, select the ERP instance you want to synchronize.
6. Press the Save button. The page is refreshed.
7. Press the Back button. The Schedule a Job page reappears.
8. Click Schedule. The job is scheduled to run immediately.
9. Select Jobs > View Current/Past Jobs to view the status of your job.

Wait until this program has completed successfully prior to viewing your changes to the reports. The MetaBuilder: Synchronize program also checks that your metadata data structure complies with the data dictionary.

Return to MetaBuilder and follow these steps to test your new translation function:

10. To test the translation function using specific parameter values, enter the values in the Translation Functions window's Test Value fields. Otherwise, leave the Test Value fields empty.
11. Select Action...Save from the menu to save your work.

12. Click the Test button to test your translation function. MetaBuilder opens the Create Statement and Test Value window.



This window contains the following three fields:

- **Create Stmt Text:** Contains the code that CCG runs for this translation function. Use this field to verify that your definition is correct and/or to identify possible mistakes.
- **Create Error Text.** Lists the database error encountered if your translation function contains a syntax error. This field contains the value No error if your translation function compiles on the ERP instance without errors.
- **Test Return Value.** Contains the value returned from your translation function using your Test Value(s). If you did not specify any input parameters, this field is empty.

Apply the New Translation Function

Once you have verified that your translation function compiles and returns the desired output, you must apply this function to your metadata column.

1. In the MetaBuilder Workbench, navigate to the Schemas tab pertaining to a specific product family/version.
2. Select the schema that owns the table containing the column you want to translate.
3. Select the table containing the column you want to translate.
4. Click the Columns button. MetaBuilder opens the Columns in Table window, listing all the columns that define this table.
5. Select the column to which you want to assign a translation function.
6. In the Translation Details zone, enter the following information:
 - **Method.** Select Function from the drop-down list.

- **Function Name.** Select the new translation function. To verify or retest the Function Name that you selected, press the Translation button to view the translation function's definition.
- **Column.** MetaBuilder disables the Column field for this method.

7. Select Action...Save from the menu to save your work.

Add Multiple SELECTS to a Translation Function

The Translation Functions form can handle multiple SELECT statements for a column translation. For example, you may need to create SELECT statements based on the value of another column in the table. If so, use the Assign Select field to handle multiple SELECT statements. Follow these steps:

1. In MetaBuilder, navigate to the Translation Functions form.
2. Query the translation function to which you want to assign SELECT statements.
3. In the Assign Select field, enter a SQL function that assigns the correct SELECT NUMBER to the translation function based on certain conditions. Typically, you should use the DECODE function.
4. Press the SELECT Statement(s) button to create SELECT statements for your function. MetaBuilder opens the SELECT Statement(s) window for your function.
5. In the SELECT NUMBER field, navigate to the next record to create another SELECT statement.
6. Increment the SELECT NUMBER.
7. Enter information for your SELECT statement. See "Create a Translation Function."
8. Repeat steps 4–7 to create additional SELECT statements.
9. Select Action...Save from the menu to save your work.

In the following example, if p_type = LOW, the translation function uses SELECT statement 1. Otherwise, the translation function uses SELECT statement 2.

The screenshot shows two windows from the MetaBuilder application. The main window is titled "Translation Functions" and displays the configuration for a translation function named "tick_gl_1159_pkg.flexfield_acc_concatenated_segments". It includes fields for "Function Name", "Product Family/Version" (Oracle Applications (11.5.9)), and "Description". Below these is the "Translation Object Name" section with two entries: "tick_gl_1159_pkg.flexfield_acc_concatenated_segments(tms.tickvalue, 'HIGH')" and "tick_gl_1159_pkg.flexfield_acc_concatenated_segments(tms.tickvalue, 'LOW')". The "Parameter Types" section shows "p_flexfield_map_id" as type "N" and "p_type" as type "C". The "Assign Select" field contains the SQL function "decode(p_type, 'LOW', 1, 2)". At the bottom are buttons for "Find", "Referenced By", "Delete", and "SELECT Statement(s)".

The secondary window, titled "SELECT Statement(s) for tick_gl_1159_pkg.flexfield_acc_concatenated_seg...", shows the configuration for a specific SELECT statement. It has a "SELECT NUMBER" field set to 1. The "Translation Function Return Column Code" field contains a complex RTRIM function. The "No Rows Returned Code" field contains a decode statement. The "Order By" field is empty. The "From Tables/Views" section lists three tables: "GL_SETS_OF_BOOKS", "FND_ID_FLEX_STRUCTURES", and "GL_CONSOLIDATION". The "Where Clause" field contains a series of AND conditions linking the tables and their IDs.

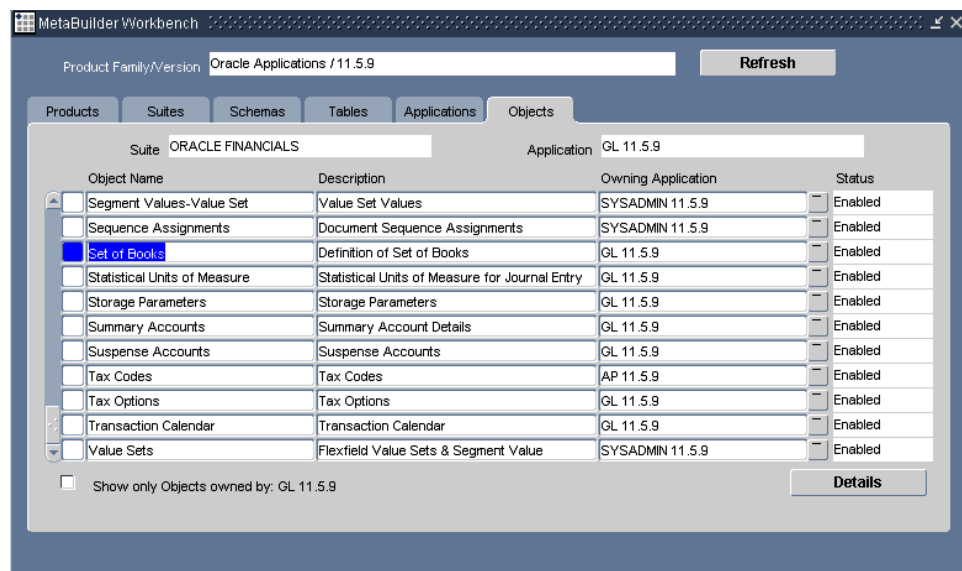
Step 13: Create Objects

A MetaBuilder object is a group of database tables that store information for specific business functions. you must define an object within an application.

You can create objects based on one or more tables. There is no limit to the number of tables that you can link within an object.

Follow these steps to create an object associated with your application:

1. In the MetaBuilder Workbench, navigate to the Applications tab pertaining to a specific product family/version.
2. Select the application for which you want to create objects.
3. Navigate to the Objects tab. The MetaBuilder Workbench displays the application that you selected in the Applications tab along with its associated suite information.



4. Enter the following information to create an object:
 - **Object Name.** Identifiable name for the object.
 - **Description.** Description of the object.
 - **Owning Application.** Application that will own the object.
 - **Status.** Read-only: MetaBuilder defaults this field to Enabled.
5. Select Action...Save from the menu to save your work.
6. Press the Details button to enter your object's table information. MetaBuilder opens the Object window (as shown at the top of the next page). MetaBuilder populates the PK Description field and Parent Table field after you enter your object's table information (in the following step).
7. Select Action...Save from the menu to save your work.

Object "Applimation Employees"

Description: Applimation Employees Information PK Description: Last Name, First Name:

Parent Table: AM_EMPLOYEE

Change Tracking Options

Change Trackable? ☒ Tracked by: Applimation Employees

Object Tables

Order	Table Name	Parent Table Name	Snapshot?
1	AM_EMPLOYEE		<input checked="" type="checkbox"/>
2	AM_ADDRESSES	AM_EMPLOYEE	<input checked="" type="checkbox"/>
3	AM_DEPENDENTS	AM_EMPLOYEE	<input checked="" type="checkbox"/>
			<input type="checkbox"/>

Joins

Parent Column Name	Child Column Name	Meta Child Table Value
	MANAGER	Y

Cross-References

Meta Application Name	Object Displayed Name	Enabled?
AM 5.2.2	Applimation Employees 2	<input checked="" type="checkbox"/>
AM 5.2	Applimation Employees	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

Add Owing App

8. Specify the object's parent table in the Object Tables zone:
 - **Order.** Enter 1 to identify this table as the object's parent table. All other tables must be descendents of this table.
 - **Table Name.** Parent Table. The list of values for this field contains only the tables that you have previously added in "Step 10: Add Tables to a Schema" (page 5-10).
 - **Parent Table Name.** Leave this field empty, because the parent table has no parent.
 - **Snapshot.** Select this checkbox to include this table in snapshot reports.
9. Select the change tracking options for the table:
 - a. Select the Change Trackable? checkbox to allow change tracking for this object. If this is an object that contains tables included in other objects that are change trackable, leave this checkbox unchecked.

Oracle E-Business Suite users: Your table must meet the following conditions to use CCG change tracking functionality:

 - Your table must contain the standard Who columns (CREATION_DATE, CREATED_BY, LAST_UPDATE_DATE, LAST_UPDATED_BY).
 - Your table's CREATED_BY and LAST_UPDATED_BY columns must be foreign keys of the Oracle Users table (FND_USER).
 - b. Select a value for Tracked by Field if this object is not change trackable because another object contains tables from your object. Select the other object that contains your object's tables.

Be sure to include all tables that you want to change track from the object in the tracked by field with the Snapshot? checkbox deselected.

10. Select Action...Save from the menu to save your work.
11. To add more tables if an object comprises more than one table:
 - a. Select Row...Insert from the menu
 - b. Enter the following information to specify an object's child table information in the Object Tables zone:
 - **Order.** Enter a number for the order in which you want the table to appear in snapshot reports.
 - **Table Name.** Child table to add to the object.
 - **Parent Table Name.** Parent table on which the child table is based. This value should be a table that has already been added to the object.
 - **Snapshot?** Select this checkbox to include this table in snapshot reports.
 - c. Enter the following information to link the parent table to the child table in the Joins zone:
 - **Parent Column Name.** Column from the parent table that has a foreign key reference to the child table.
 - **Child Column Name.** Column from the child table that has a foreign key reference to the parent table.
 - **Meta Child Table Value.** Enter a value if you want to constrain on the records returned based on this column value. This field is case-sensitive.
 - d. Set change tracking for the table (see the preceding steps).
 - e. Select Action...Save from the menu to save your work.
 You must verify that all tables used in a translation function for the object are included in the object's tables information, or accounted for in another object.
 - f. Repeat step 11 to insert additional child tables.
 You must add any translated tables associated with your parent and child tables. This allows you to enable change tracking for these translated tables. You should leave the Snapshot? checkbox deselected.
12. Click the Add Owning App button to allow the Owning Application field to view the object. MetaBuilder creates an enabled record in the Cross-references zone for the object.
13. Select Action...Save from the menu to save your work.

Cross-Reference an Object to another Application

Several applications may share the same or similar configuration data. MetaBuilder lets you assign or cross-reference metadata objects across applications to eliminate the need to create duplicate metadata.

Follow these steps to cross-reference an object to another application:

1. In the Object window, navigate to the Cross-References zone.

2. Select Row...Insert from the menu to enter the following information to create a cross-reference object:
 - **Meta Application Name.** Application to which you want to cross-reference the object.
 - **Object Displayed Name.** Name of the object. Typically, this value equals the original object name that you are cross-referencing. You may change this value to reflect the exact object name for the other application.
 - **Enabled?** MetaBuilder selects this checkbox automatically to enable the object in the meta application specified. You may deselect the checkbox if you do not want to run snapshot report for that application's object.
3. To cross-reference additional applications, repeat the preceding step.
4. Select Action...Save from the menu to save your work.

Maintain Column Filters

Security Filters. If you want to add data security to the object, use the Maintain Column Filters form.

Application	Meta Object Name	Meta Table Name	Meta Column Name	Condition Type	Enabled
AM 5.2	Applimation Employees	AM_EMPLOYEE	FIRST_NAME	Suaggestion	<input checked="" type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

Suggested Filter

Description:

Operator:

Expression:

Oracle E-Business Suite users: If your custom objects are associated with organizations and sets of books, you have two options for security:

- **ORG Security.** Create a filter of this type to allow Oracle E-Business Suite organization security. You should only apply this filter type to meta column names that are associated with the ORGANIZATION_ID column in the HR_ALL_ORGANIZATION_UNITS table.
- **SOB Security.** Create a filter of this type to allow Oracle E-Business Suite set of books security. You should only apply this filter type to meta column names that are associated with the SET_OF_BOOKS_ID column in the GL_SETS_OF_BOOKS table.

When you create the object in the MetaBuilder Workbench, the workbench automatically adds a security record in this form for the columns ORGANIZATION_ID, ORG_ID and SET_OF_BOOKS_ID.

PeopleSoft Enterprise users: If your custom objects are associated with SETID, the MetaBuilder Workbench also automatically adds a SETID Security record in this form pertaining to your object.

Create Suggested Filters

You may want to add suggested filters that users can remove when creating definitions. For example, PeopleSoft tables contain historic data that users might not want to view in snapshots. A suggested filter could remove that data; users who want to see only the latest and future data would leave the filter in place, while those who want to view historic data would remove it.

Follow these steps to create a suggested filter:

1. From the Navigator, under the CCG Developer role, select **Navigate...CCG Metadata...Maintain Column Filters**. MetaBuilder opens the **Maintain Column Filters** form.
2. Enter the following information (use **Edit...List of Values** from the menu where applicable):
 - **Application**. Name of the application.
 - **Meta Object Name**. Name of the object.
 - **Meta Table Name**. Name of the table (within the object) on which you want to apply the suggested filter.
 - **Meta Column Name**. Name of the column on which you want to apply the suggested filter.
 - **Condition Type**. Select suggestion from the dropdown list.
 - **Enabled**. Check this box to enable the suggested filter.
 - **Description**. Description of the suggested filter.
 - **Operator**. Operator for the condition that will be applied to the meta column name during the snapshot run. The list of values for this field changes based on the data type.
 - **Expression**. Enter the expression for the condition precisely as you would in a WHERE clause of a SELECT statement. For example, enter single quotes before and after literal values.
3. To create another suggested filter on this object, select **Row...Insert** from the menu and repeat the preceding step. You may create as many suggested filters as you like.
4. Select **Action...Save** from the menu to save your work.

Copy a Standard CCG Object

You may want to modify the metadata of a standard CCG object to better manage your business requirements. This CCG program lets you copy and modify a standard CCG object instead of having to recreate metadata that already exists.

Follow these steps to copy and modify a standard CCG object.

1. Log into CCG.
2. Select **Jobs > Schedule a Job**. The **Schedule a Job** page appears.

3. Click Add Item... near the bottom of the page. The Items To Execute page appears.
4. Set Program Name to MetaBuilder: Copy Standard CCG Object.
5. Enter the following information:
 - **Copy From Product.** Product family version from which you want your application.
 - **From Application.** Application from which you want your CCG object.
 - **From Object.** CCG object you want to copy.
 - **Copy to Product.** Product family version to which you want to your application.
 - **To Application.** Application to which you want to create the object.
 - **New Object Name.** Name for your new object.
6. Press the Save button. The page is refreshed.
7. Press the Back button. The Schedule a Job page reappears.
8. Click Schedule. The job is scheduled to run immediately.
9. Select Jobs > View Current/Past Jobs to view the status of your job.
10. Repeat the steps above to copy additional standard CCG objects.

Use this program only when you have not imported and manually added tables or views that are the underlying metadata of the CCG objects you intend to copy.

Step 14: Synchronize

After you make changes or create new metadata within the MetaBuilder Workbench, you must run a synchronization process to update the metadata for your ERP instances.

Configuration Controls Governor does not display metadata changes if you do not run the following program.

Follow these steps to run this program:

1. Log into CCG.
2. Select Jobs > Schedule a Job. The Schedule a Job page appears.
3. Click Add Item... near the bottom of the page. The Items To Execute page appears.
4. Set Program Name to MetaBuilder: Synchronize.
5. For Target Instance Name, select the ERP instance you want to synchronize.
6. Press the Save button. The page is refreshed.
7. Press the Back button. The Schedule a Job page reappears.
8. Click Schedule. The job is scheduled to run immediately.

9. Select Jobs > View Current/Past Jobs to view the status of your job.

Wait until this program has completed successfully prior to viewing your changes to the reports. The MetaBuilder: Synchronize program also checks that your metadata data structure complies with the data dictionary.

10. Repeat steps 2–9 to synchronize additional ERP instances.

Step 15: Manage Security Groups

Security Groups control the ERP data that users can access. Each group has several permissions; one of them determines the applications whose data can be accessed.

Users who belong to groups with the applications permission left blank can access data from all applications, including the new application you have created in the preceding steps. No other users will have access to the new application's data unless you one of the following

- Add them to a group with the Applications permission left blank
- Create a new Security Group with Applications set to the new application, and add the users to the group

For more information about security groups, see Create Users, Roles, and Security Groups (page 2-11).

Step 16: Test Metadata

Once you have created your metadata, you must verify that CCG monitors your objects accurately when using it. Follow these steps:

1. Log into CCG.
2. Create and schedule one or more snapshot definitions. Verify that their reports contain the data you see in your ERP applications.
3. Compare two snapshot reports and verify the results.
4. Create and deploy one or more change tracking definitions. Schedule and run the Change Tracking Transfer program. Verify that the change tracker contains the correct data.

For instructions on completing steps 2–4, see the *Configuration Controls Governor User Guide*.

MetaBuilder Glossary

Application. An application is a set of forms, menus, reports and other components that satisfies a particular business function. General Ledger is an example of an application. The application stores the accounting and tracking of fixed assets for a site.

Columns. Columns are subdivisions of a table with a column name and data type.

Configure. A configure process configures your ERP instance for your CCG solution component. This process allows your CCG users to run snapshots, translation functions, change tracking and other jobs.

Cross-references. Two or more applications can share configuration data; to eliminate the need to create metadata multiple times, CCG let you assign (cross-reference) metadata objects across applications.

Data Dictionary. A data dictionary is a central source of information for the database itself and for its users. This dictionary contains a comprehensive set of all tables and views within the database.

MetaBuilder — Copy Standard CCG Object. A program that allows a user to copy an object from Standard CCG objects to the user's custom applications.

MetaBuilder — Import Table Definitions from Target. A program used to import information from an ERP instance's database dictionary into an CCG table that stores data dictionary information for which a user would like to track via metadata.

MetaBuilder Model Instance. Database instance where the data dictionary information that you use for metadata development is kept.

MetaBuilder — Synchronize. A program that copies metadata to ERP instances.

Object. An object is a logical grouping of database tables that store information based on specific business functions within an application. Payables Options is an example of a setup object on which a user can base a snapshot definition.

Phantom Column. A phantom column is a duplicate column. Please refer to *Column*.

Product Family. A product family is a software product that provides a business solution. Product families often contain different versions. Software companies typically provide increased functionality within their product with each version that they release. Oracle E-Business Suite is an example of a product family. It is a product that supports many different business functions.

Product Family Version. A product family version is a specific release of a product family. Most applications usually denote versions with numbers. Version 11i of Oracle E-Business Suite is an example of a product family version.

Schemas. A Schema owns a collection of database objects, such as tables, stored procedures and functions, triggers, synonyms, etc. AP is an example of an Oracle E-Business Suite schema. Within the database, the AP schema contains all database objects associated with the Oracle Payables application.

Suite. A suite comprises a number of applications within a product family, usually corresponding to a group of inter-related business processes. Oracle Financials is an example of a suite. The software contains a number of different applications (GL, AP, AR, FA, etc.) to support the financial accounting of a business.

Table. A table is the basic data storage structure in a relational database management system. Tables consist of rows and columns.

Translation Function. If your data is stored as an ID rather than as a literal value, and you would like to provide the full description of the ID on your snapshot definition output, you use a translation function. An example of a translation function is the conversion of a code combination ID (CCID) in the Oracle General Ledger to a multisegment accounting flexfield value.

