

Application Management

Exercises



Contents

1. Module	3
1.1 Objectives.....	3
1.2 Overview.....	3
2. About Application Management.....	4
2.1 Introduction.....	4
2.2 References	4
3. Administration Management	5
3.1 Prerequisites.....	5
3.2 Organizational Users	5
3.3 Roles	8
4. Development Management	11
4.1 Assigning Roles.....	11
4.2 Copy SVN URL.....	11
4.3 Creating a Workspace	11
4.3.1 Setting Application Properties.....	16
4.3.2 Setting the Project Language	17
4.4 Creating Project Design-time Folder Structure	17
4.5 Creating Deployment Folder Structure	18
4.6 Creating Documents	21
4.7 Make Changes Available to SCM	24

5. Learning Report26

1. Module

1.1 Objectives

After completing this course module, you will be able to:

- Manage users in your organization
- Manage roles
- Understand the concept of organizations in Cordys
- Understand the concept of a workspace for developing an application
- Setup the basic structure of a workspace project

1.2 Overview

Both administrators and developers are users of the Cordys platform. An administrator will manage users and organizations on a production server, while a developer needs to manage users on a development server to test the application that he/she is building. This module is a very brief introduction to administration, containing the basics that are needed for anyone to manage his own organization.

2. About Application Management

2.1 Introduction

In this module, you will learn how to set up the working environment of administrators and developers, creating a so-called IDE (Integrated Development Environment) and the deployment of solutions (applications) shipped as Cordys applications.

Users in Organizations

In Cordys, you always act as a so-called *organizational user* i.e. a user within an *organization*. Depending on the roles you have at organizational level, you will have access to specific tools and utilities.

Organizations

Within a Cordys environment, *organizations* are the primary level of grouping users and functionality.

- At **design time**, you will create new content within a workspace but when it is ready for deployment it is distributed as a Cordys application.
- At **runtime** each organization can be seen as a separate (administrative) system. A solution deployed as a Cordys application can be used by a user if he has the relevant role(s) assigned from that particular application. This way, users from multiple organizations can use the same application content.

System Administrator and Organization Administrator

Authentication and authorization work hand-in-hand and operate on two distinct levels:

1. **System** level, this is the overall Cordys level.
2. **Organization** level.

A System Administrator works at system level and manages Cordys licensing, organizations, system service groups (Cordys monitor, LDAP, XML store etc.) and loading & unloading Cordys applications (in ISVP file).

An organizational administrator manages the authorization within the associated organization, for example, which users have access to the organization and which roles do they have within the organization.

2.2 References

More information about this subject is available:

- Online Cordys documentation
Cordys Administration → Managing Organization
Cordys Administration → Managing Security
Cordys Administration → User and Role Management
Developing Applications → Setting Up a Collaborative Workspace
- <http://community.cordys.com>

3. Administration Management

3.1 Prerequisites

Before you can start with this module, note the following prerequisites. The exercises are written based on successful completion of those prerequisites.

You must have completed the following modules

- Cordys User Interface.

You must have ONLY the following roles assigned to yourself

- Administrator

3.2 Organizational Users

In this part of the exercise, you will explore the concept of organizational users.

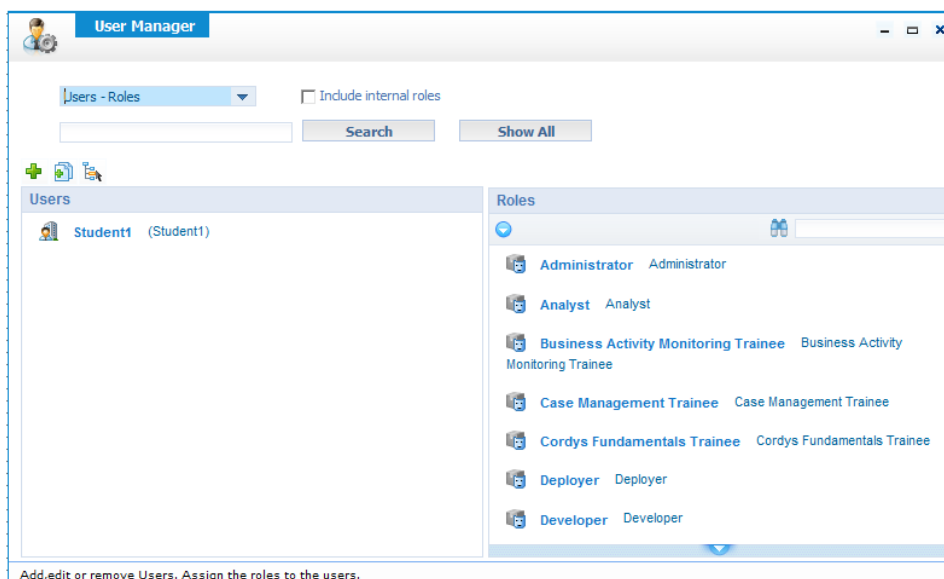
Browsing Organizational Users

1. Open the Cordys Explorer.

To which organizations do you have access?

When would you typically use separate organizations?

2. Open the *User Manager* in your student organization.



3. Select *Users – Roles* from the select box and click the **Show All** button.

Which users have access to this organization?

4. Click your student user name to select it.

Which roles do you have in this organization?

5. Right click your *user name*.

Which options do you have?

6. Select *User Profile*.

Was your answer correct on which roles were assigned to you?


7. Close the User profile window.

The distinguished name (dn) of an organizational user is put in the status line at the bottom of the User Manager screen.

```
cn=Student1,cn=organizational users,o=Organization1,cn=cordys,cn=defaultInst,o=vanenburg.com
```

*Why is it called a **distinguished name**?*

Creating a new user

1. If closed, open the User Manager.
2. In the select box, make sure that *Users – Roles* is selected.
3. Click the **New** button () to add a new user.

4. Add yourself as user by providing the following details:

Field	Value
Authentication Type	Cordys
User Name	Your email address e.g. psmith@acme.com
User Full Name	Your name e.g. Paula Smith
User ID	Your email address e.g. psmith@acme.com
(Confirm) Password	Any password e.g. cordys

Create User*

Authentication Type: ☐ External, ☒ Cordys, ☐ Certificate

User Name: psmith@acme.com

User Full Name: Paula Smith

User ID: psmith@acme.com

Default Organization: Organization1

Assign Password

Password: [masked]

Confirm Password: [masked]

Contact Info

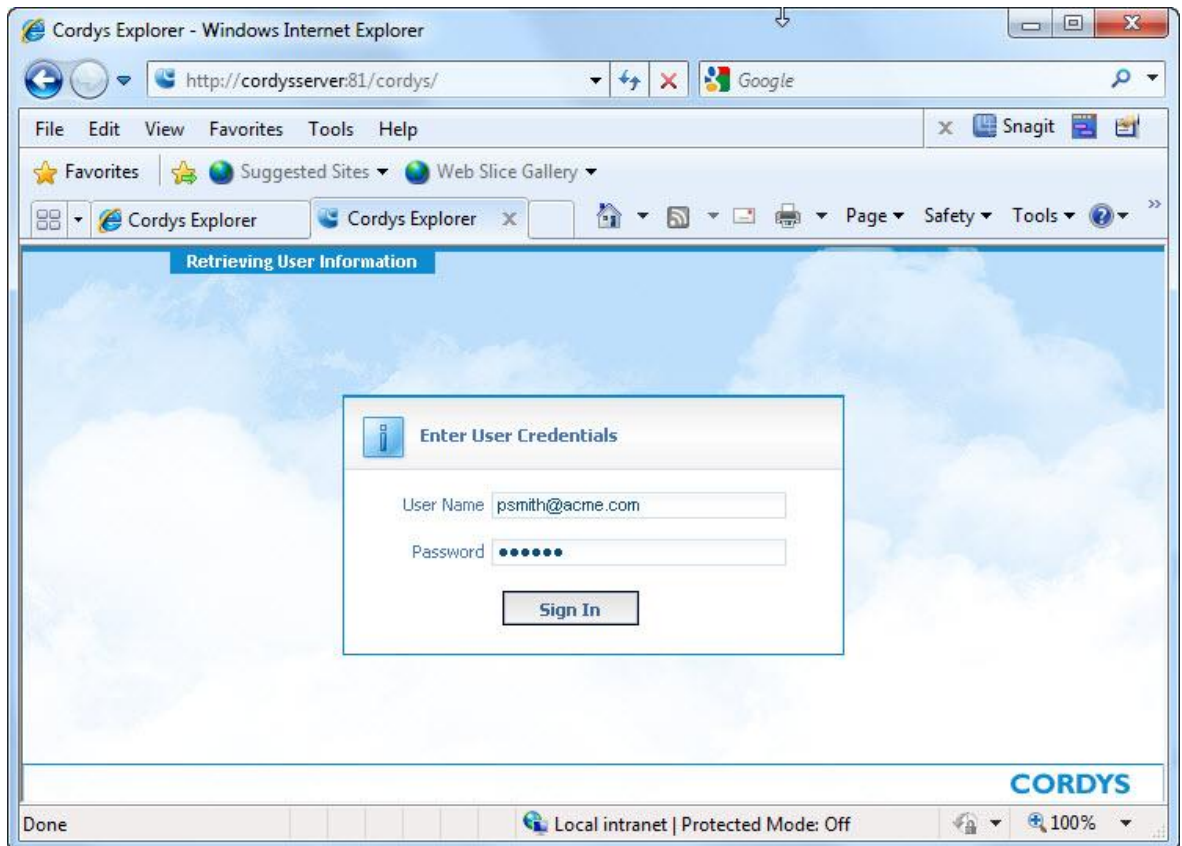
NOTE

The User ID is the login ID for the user. In a Cloud Ecosystem using an email address as login makes it a unique user id.

Keeping the User Name and User ID the same is a best practice but not mandatory.

Why is the **Default Organization** a read-only field?

5. Click **Save**.
6. Open a new browser or browser tab.
7. Connect to the cordysserver using “:81/cordys” at the end e.g. **http://cordysserver:81/cordys**



8. Provide your user credentials e.g. **psmit@acme.com**.
9. Click Sign In.


When you login with your student user you use external authentication, in the training environment authentication is done against the domain user.

10. Return to your student browser.
11. In the User Manager double click your student user to study the configuration for your student user.

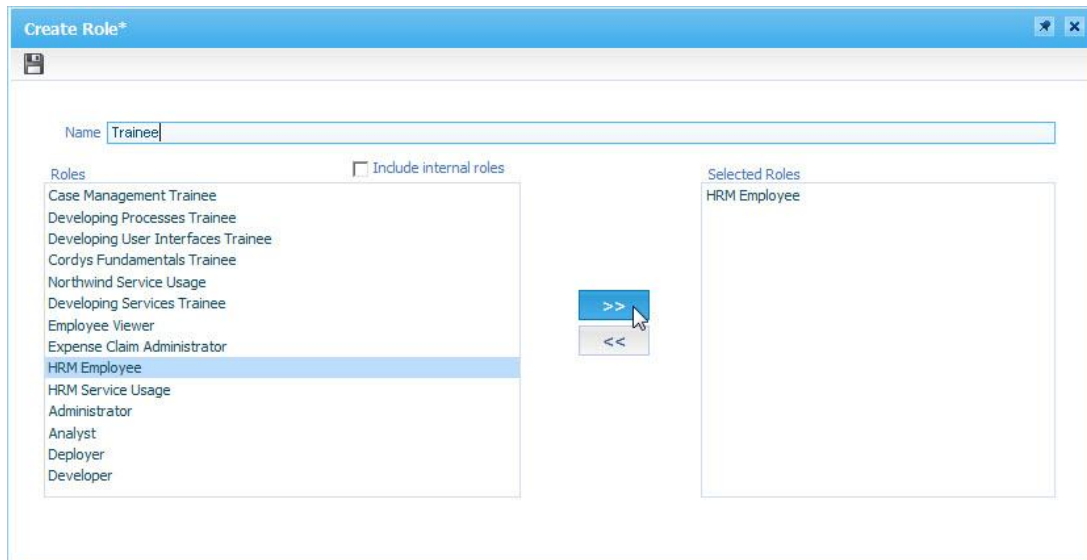
3.3 Roles

In this part of the exercises you will explore the concept of roles.

Creating a New Role in your organization

1. If closed, open the User Manager.
2. In the select box, make sure Roles – Roles is selected.
3. Click the **New** button () to add a new role.
4. Enter the name **Trainee**.

5. Add the role HRM Employee.

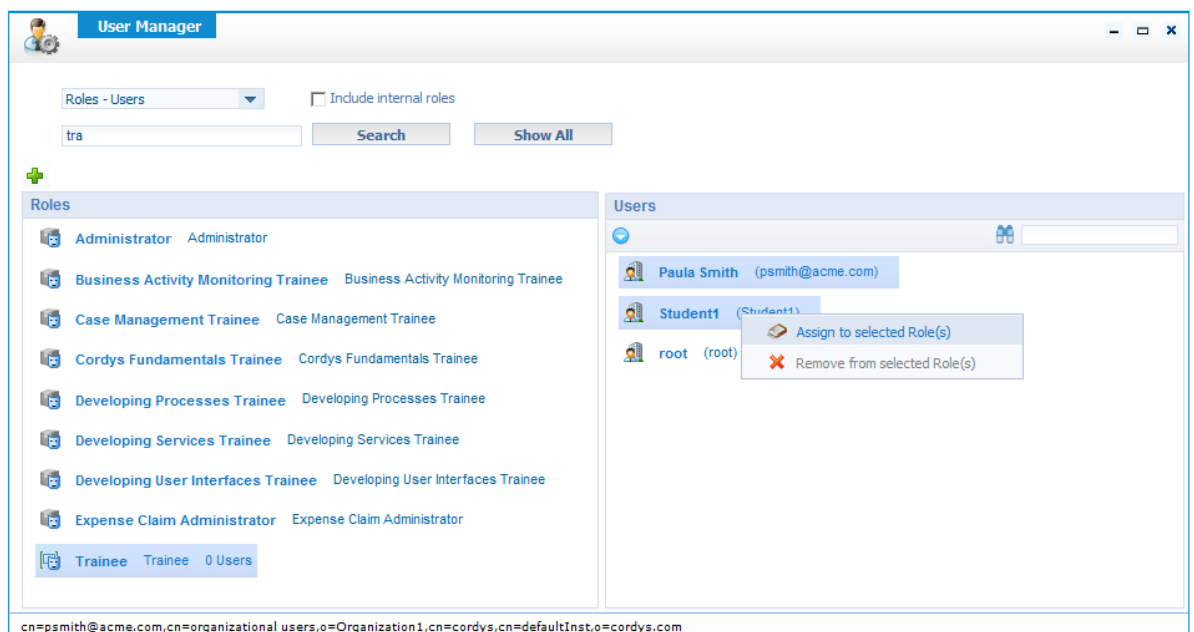


6. Click **Save**.

The role *Trainee* you have just created exists only in your organization and can be assigned to users in your organization only.

Assigning a role

1. In the select box, make sure Roles – Users is selected.
2. Type in tra and click the **Search** button.
3. Select the *Trainee* role in the section *Roles*.
4. Select your student user in the section *Users*.
5. Use CTRL-Click to select also your “email” user e.g. psmith@acme.com.
6. Right click one of the selected users and select *Assign to selected Role(s)*.




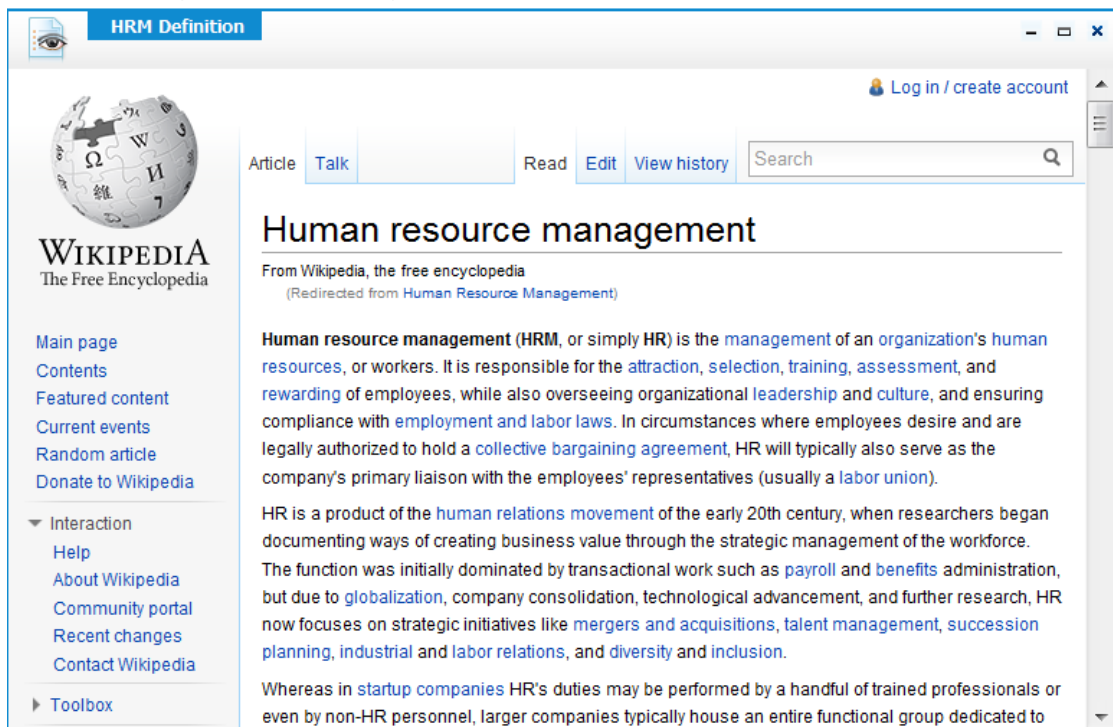
NOTE

Instead of using right click and selecting assign to selected Role(s), you can also select one or more roles in the left pane and then select one or more users in the right pane and then drag and drop the selected users on one of the selected roles in the left pane.

In what other way can you assign a role to a user?

7. Close the User Manager.

8. Open My Applications and click the *HRM Definition* () artifact. The following Wikipedia page opens:



9. Close the *HRM Definition* page.

10. Assign yourself the role *Cordys Fundamentals Trainee*.

11. Open the *Fundamentals Configuration* () artifact.

What is the purpose of this tool?


4. Development Management

In this exercise you will explore the Collaborative Workspace. CWS is a development environment used to build applications in Cordys. A Cordys application typically exists of business process models, user interfaces, services, etc. CWS provides a single design-time view of the development content for your applications and provides the functionality to test your content as well as validate and package your application.

4.1 Assigning Roles

1. Open the *User Manager*.
2. In the select box, make sure *Users – Roles* is selected.
3. Select your own student user account.
4. Right click the **Developer** role and select *Assign to selected User(s)*.
5. Close the *User Manager*.

4.2 Copy SVN URL

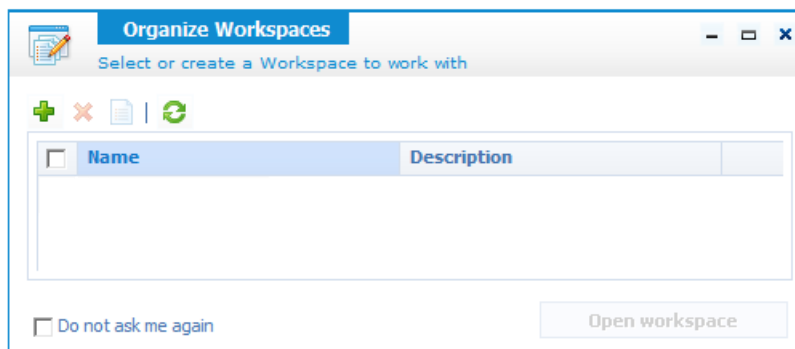
1. In *My Applications*, select the *Fundamentals Configuration* ( *Fundamentals Configuration*)
2. Select the *Application Management* tab.
3. Copy the SVN URL and close the screen.


4.3 Creating a Workspace

The development environment of Cordys is called Collaborative Workspace (CWS). It supports sharing content among several developers, teams and organizations. Furthermore, it supports association of a workspace with a Software Configuration Management (SCM) system, thereby supporting version control. Finally CWS provides a uniform look and feel of all the applications and editors.

1. In *My Applications*, click the *Workspace Documents* ( *Workspace Documents*) artifact.

The first time the Workspace Document Explorer is started, it takes a while to load all required components.



- Click the **Insert** () button to create a new workspace.
Provide the following details:

NOTE

For using SVN as SCM, in combination with the Self Study VMware, see the User Guide that comes with the VMware for instructions.

In a Classroom Training

Fields	Value
Name	Fundamentals training
Description	Workspace used in Fundamentals training
Software Configuration Management type	SVN for team development

New Workspace - Step 1 of 4 ✕

Name

Fundamentals training

Description

Workspace used in Fundamentals training

Annotations

Software Configuration Management type

SVN for team development ▼

< Previous

Next >

Create

Cancel

- Click **Next**

4. Paste the SVN URL copied before.
5. Enter your username and password

New Workspace - Step 2 of 4


URL:

Username:

Password:

☐ Use a proxy server

Test connection

 Creating a workspace may upgrade the content on the SVN repository. Upgraded content will not be compatible with the earlier versions of Cordys BOP-4. Therefore, after the upgrade, all team members working on the same SVN repository need to upgrade their Cordys BOP-4 instances to this version.

The upgrade may fail in case documents are in changed state in other workspaces. Before creating the workspace, the changes in these workspaces either must be 'made available' or 'reverted'.

< Previous Next > Create Cancel

6. Click **Next**.
7. Continue in this course book at *Creating a project*.

When Using the Self Study VMware (or not Using SVN)

Fields	Value
Name	Fundamentals training
Description	Workspace used in Fundamentals training
Software Configuration Management type	No source control

New Workspace - Step 1 of 3*

Name:

Description:

Annotations:

Software Configuration Management type:

< Previous Next > Create Cancel

8. Click **Next**.

Creating a project

In CWS a project corresponds to the application you are building. An application in this context is meant as a deliverable to users. For example, Expense Claim is an application to process expense claims.

Within a project, you will create all types of “documents”, like business process models, services, user interfaces, etc. These all together form an application. When the application is complete i.e. all relevant “documents” have been developed (and tested), you can package this project/application for deployment.

9. Fill in the properties of the project, providing the following values:


Field	Value
Name of the project	My Application Project
Package Owner	CompanyX Where X is your student number
Name of the product	My Application

New Workspace - Step 3 of 4*

Name of the project
My Application Project

Package Owner
Company1

Name of the product
My Application

 To develop an application a project is required. The package owner and the name of the application are properties of the application package for delivery.

< Previous Next > Create Cancel

10. Click **Next**.

11. Review the summary that is shown to you and click **Create** when fully done:

New Workspace - Step 4 of 4*
✕

Below you see the overview of the provided inputs. To create the workspace, press **Create**. To modify any of your choices, press **Previous**.

Workspace Details

Name : Fundamentals training
 Description : Workspace used in Fundamentals training
 SCM Repository : Yes

SCM Details

SCM Type : Subversion
 URL : http://cordysserver:5001/svn/Student1/Fundamentals/trunk
 User : student1

Project Details

Name of the Project : My Application Project
 Owner : Company1
 Name of the Application : My Application

< Previous
Next >
Create
Cancel

12. Click **Close** when the workspace has been created successfully.

When would you create multiple workspaces?

Why would you use a source control application for your workspace?

NOTE

Note that you add project to the name only to visualize the project level in the tree. There is no reason to do so in your actual projects as this project name is also just at other locations.

The Workspace Documents has different views for displaying its contents. The default view is *the Explorer* tab. This view allows developers more control over the structure in a project like the folder structures and the location of documents within the workspace. In this training, you will use the Explorer tab as you will setup solutions, projects and the deployment structure.

The *My Recent Documents* tab is preferred by business users as it does not deal with project, folder structures etc. but only displays documents like processes, forms etc. that are recently used so they are easy to find and open.

NOTE

The workspace documents toolbar contains fewer options when you did not create your workspace with SCM (SVN). Options like 'make available' etc are not available in that situation.

4.3.1 Setting Application Properties

In this part you will set the properties of the application. These properties are used for packing and deploying your application.

1. Right click your project (*My Application project*) and select *Package Properties*.
2. Provide the following values:

Field	Value
Package for	Runtime
Package owner	CompanyX (X is your student number)
Product	My Application
Version	1.0
Build Number	0
Package Name	CompanyX My Application
Package File Name	CompanyX My Application 1.0.0
Package Description	CompanyX My Application 1.0

The screenshot shows the 'Application Package Properties - Package Info*' dialog box with the 'General' tab selected. The fields and their values are as follows:

- Package for: Runtime
- Package Owner: Company1
- Application Name: My Application
- Version: 1.0
- Build Number: 0
- Package Name: Company1 My Application (with a warning icon)
- Package File Name: Company1 My Application 1.0.0.isvp
- Package Description: Company1 My Application 1.0

The OK and Cancel buttons are located at the bottom right of the dialog.

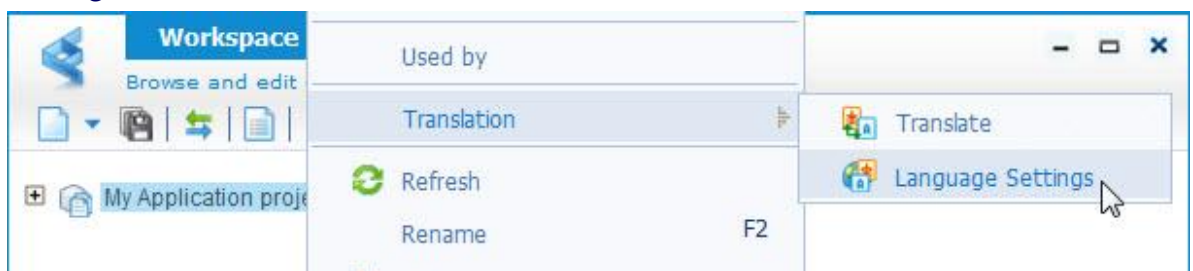
3. Click OK.

Use the Cordys online documentation to find more details on the warning for the Package Name in the Package properties.

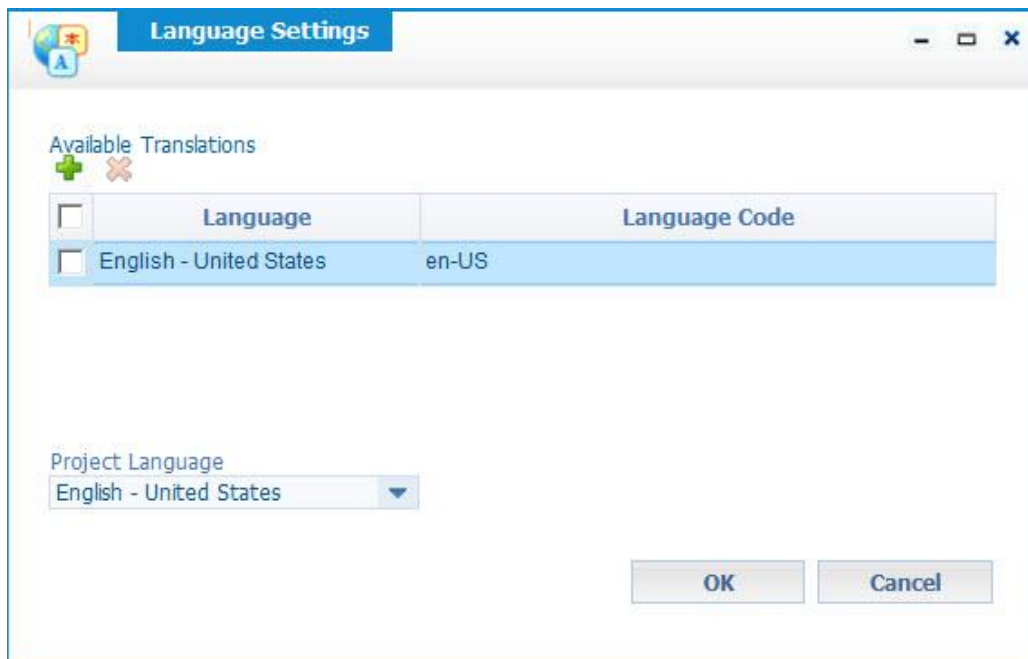
4.3.2 Setting the Project Language

In this part you will set the language in which you develop the project. This means that for example all form labels are linked to this language. Other languages can be added at a later time and the labels can be translated to those languages as well.

1. Right click your project (*My Application project*) and select *Translation → Language Settings*.



2. Verify that your project language is *English – United States*.



4.4 Creating Project Design-time Folder Structure

In your project, you can create folders and documents in any way you want to. Cordys is not enforcing a methodology; however it is important to use standards and naming conventions in your projects. Using a standard way of working improves team productivity and project maintenance.

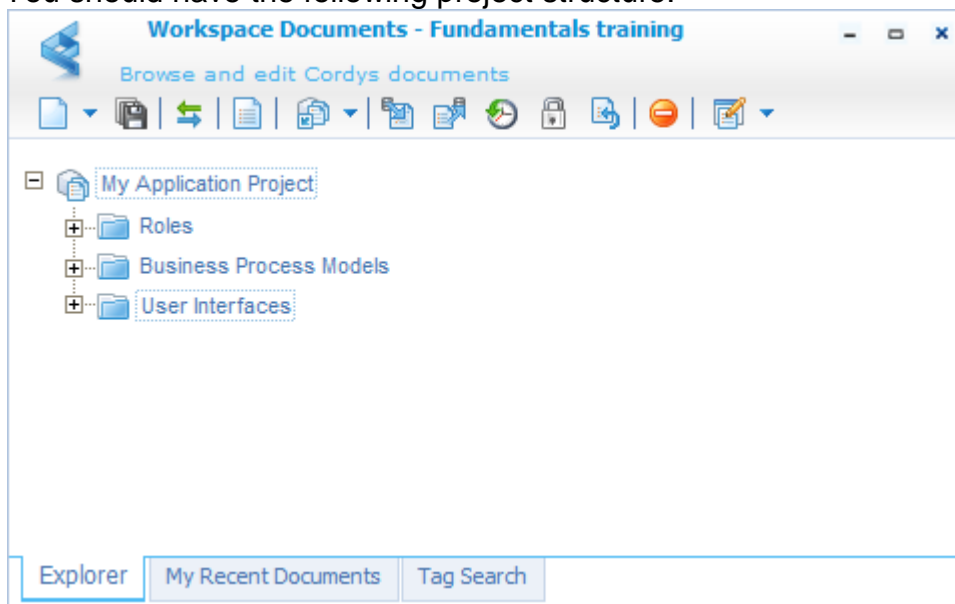
In this part of the exercise you will start with creating the design time folder structure to be able to properly organize your design time documents within your project.

DESIGN-TIME FOLDER STRUCTURE

To organize the content at design time in your project, you will apply the following standard: Create a separate folder for (almost) every document *type* that will be part of your application. The name of the folder will be the document type stored in the given folder in plural (since it will typically contain a number of those documents). For example, for the document type **Role** the folder name will be **Roles**.

1. Right click your project folder and select **New → Folder**.
2. Provide the name **Roles** (as it will contain the application specific roles).
3. Create another project folder **Business Process Models**.
4. Create a project folder **User Interfaces**.

You should have the following project structure:



4.5 Creating Deployment Folder Structure

When you deploy an application, you need to make sure that your application content is unique. For example, when you create a user interface to maintain the employees, you give this document the name *Employees*. It will be very likely that someone else creates another application and also creates a user interface with the name *Employees*. This will conflict when you deploy your application.

To prevent this, you have to be sure that your documents have unique names. How to achieve this depends on the type of document that you are creating, because the deployment of a document varies depending on its type as well. For example, a style for a user interface will be deployed on disk whereas a role will be created in LDAP related to the deployment package. While following this training, we will discuss the deployment effect of the given document type when you create a given document for the first time.

DEPLOYMENT FOLDER STRUCTURE

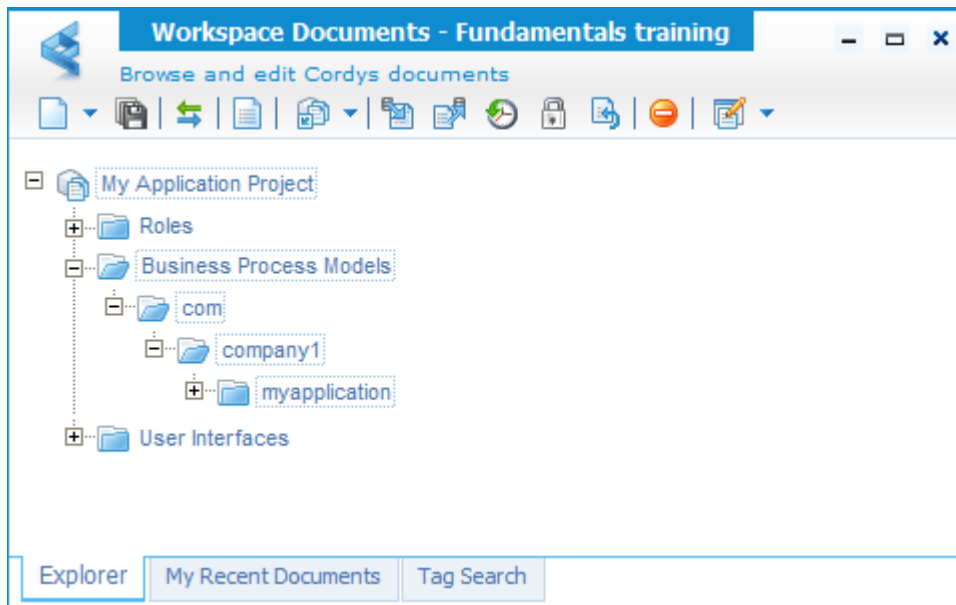
When a document is identified by its path and its name, we will create the following folder structure: Domain → CompanyName → ApplicationName

For example: de.acme.mobility

Business Processes

A business process is identified by its path and name. As you do not want to deploy the folder name **Business Process Models** as well, you need to set this folder as the starting point for deployment (*Start Point of Qualified Name*). This will prevent the folder name to be used in the deployment structure. This enables you to separate the design time structure from the runtime structure.

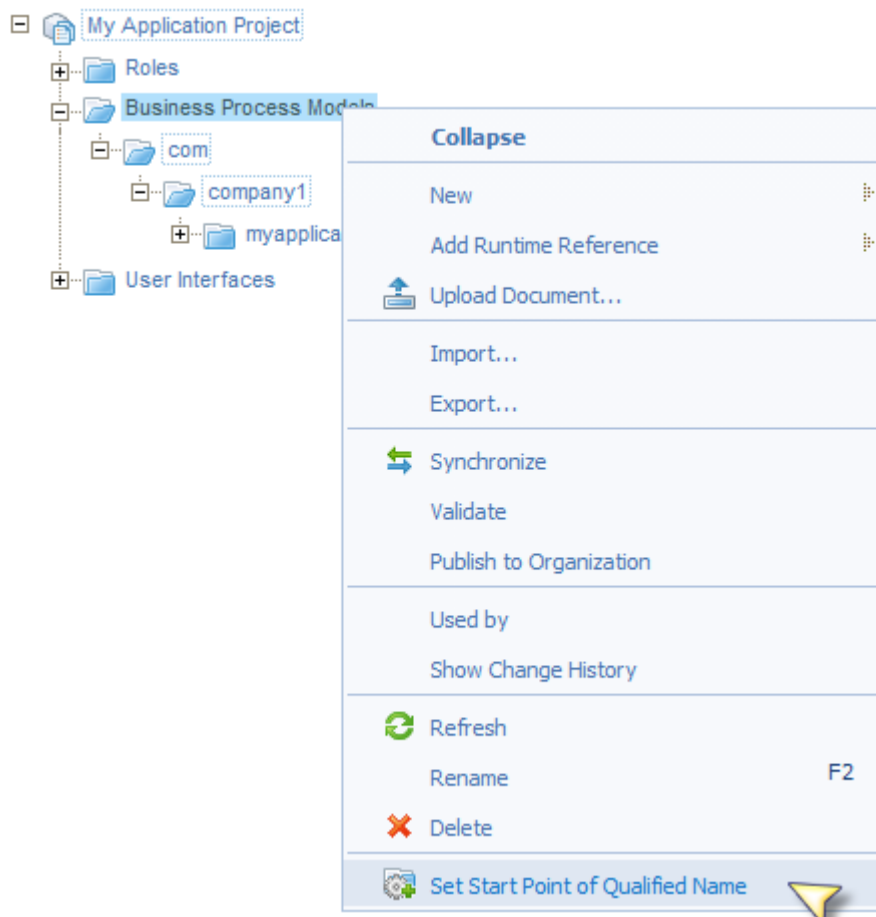
1. In your project, right click the folder *Business Process Models*.
2. Create a folder **com**.
3. In the *com* folder create a folder **companyX**. (where **x** is your student number)
4. In the *company* folder create a folder **myapplication**.



NOTE

As you can see, the name of your project/application is returned in the folder structure, this way the name of the application (project) is sustained when deploying the application.

5. Right click the *Business Process Models* folder and select *Set Start Point of Qualified Name*.



6. A gear is added to the folder icon to identify it as start point of qualified name:

**NOTE**

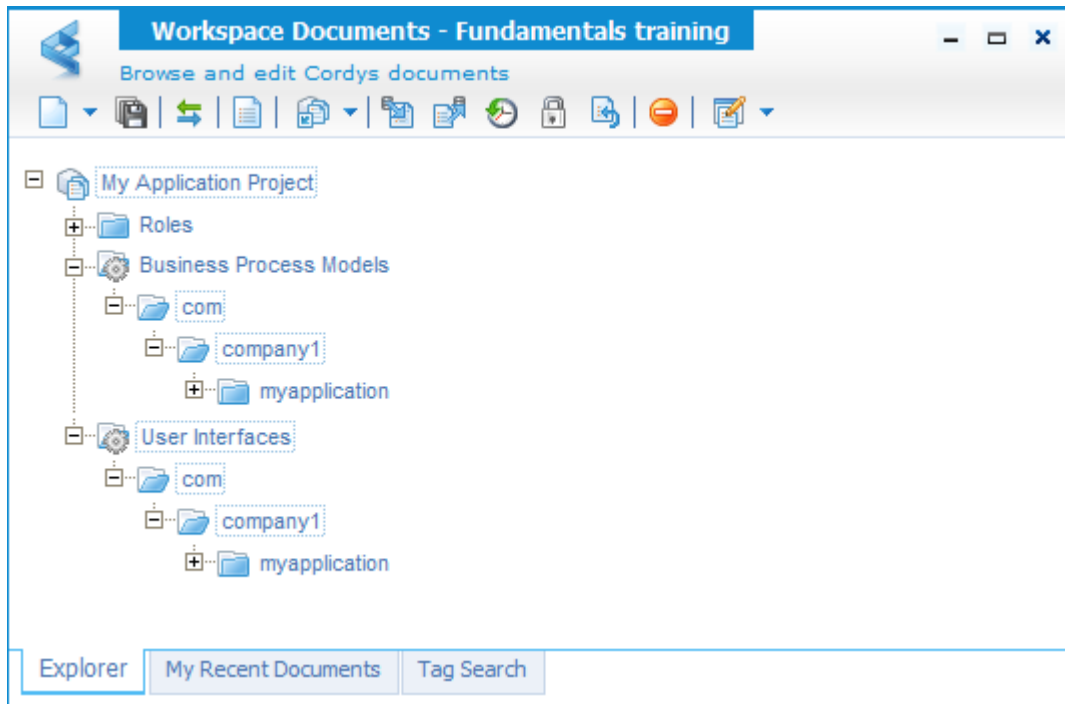
When you package the application the content of the Business Process Model folder is packaged but the folder Business Process Models itself is not.

User Interfaces

At runtime User Interfaces are identified by their name and folder path.

1. Go to the *Workspace Documents*.
2. Within the folder *User Interfaces*, create the same folder structure as within the Business Process Models folder.
3. Define the *User Interfaces* folder as start point of qualified name.

4. Your project structure should look like this:



Roles

At runtime roles are identified by the name and the application package they belong to and therefore do not require an additional folder structure for the qualified domain name.

What is the package name for your application (project)?

*Assume you create a role in the folder **Business Process Models** → **com** → **companyX** → **myapplication**. What would be the effect when you deploy your application?*

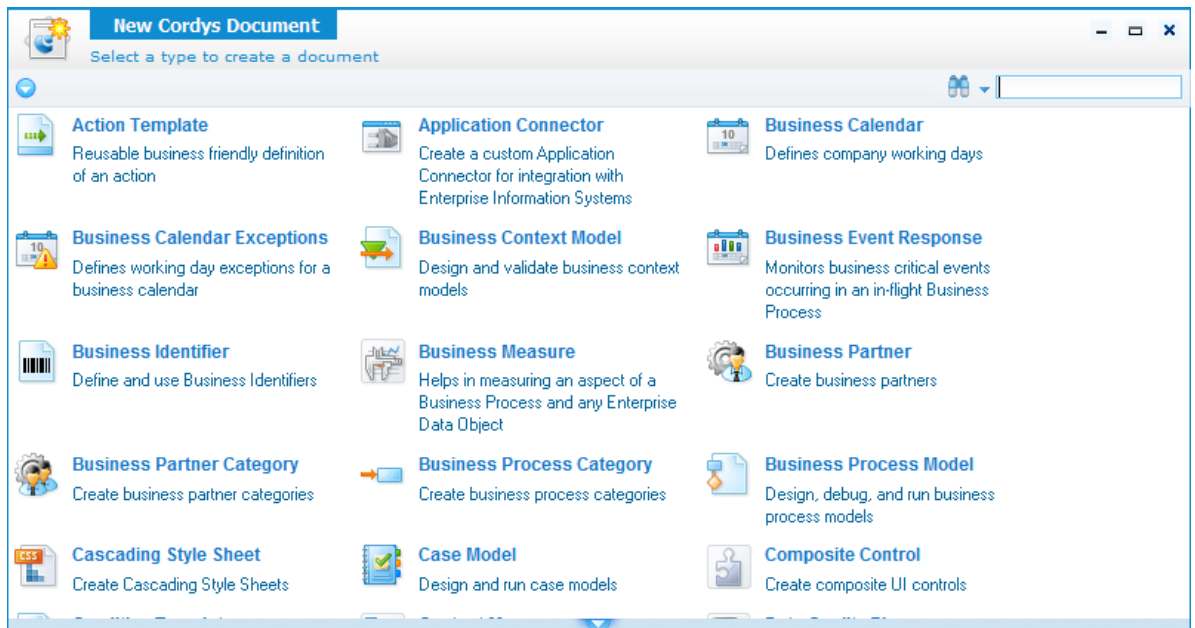
4.6 Creating Documents

To build an application you will design and develop business processes, services, user interfaces, styles, etc. In CWS you create “documents” for each component that you require as part of the application.

1. In your project, navigate to **Business Process Models** → **com** → **companyX** → **myapplication**.
2. Right click **myapplication** and select **New** → **Other**.

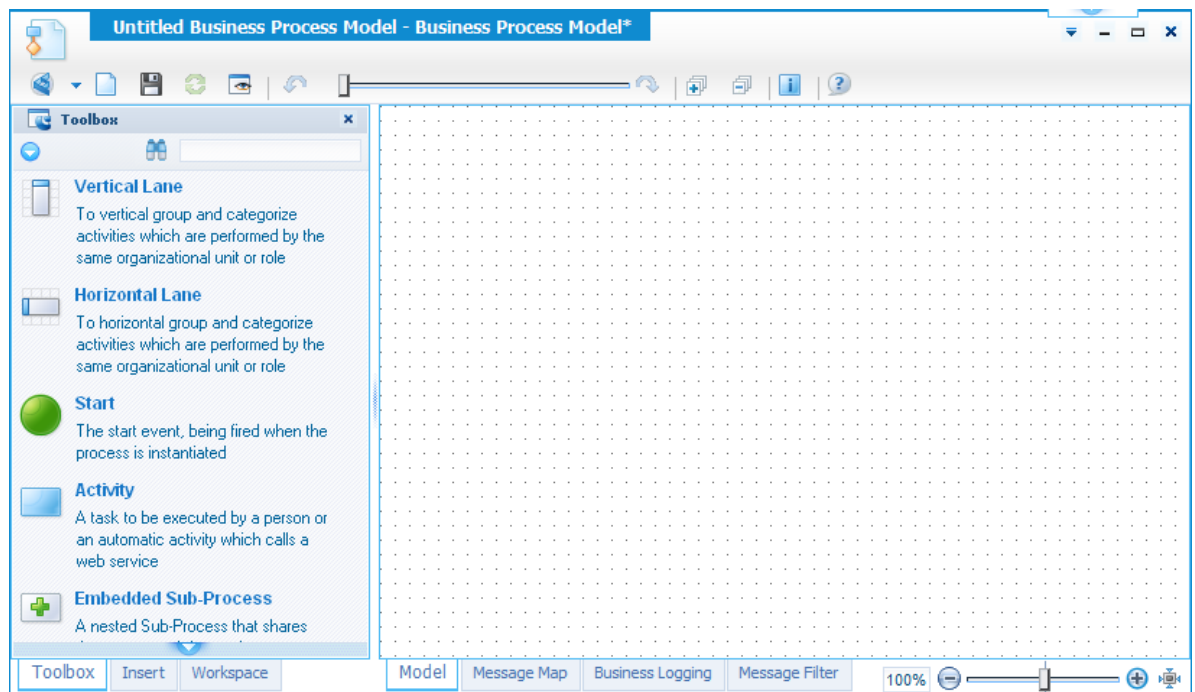
NOTE

You can select a document type directly or use the search box in the top right corner to search for a document type.



3. Click *Business Process Model*.

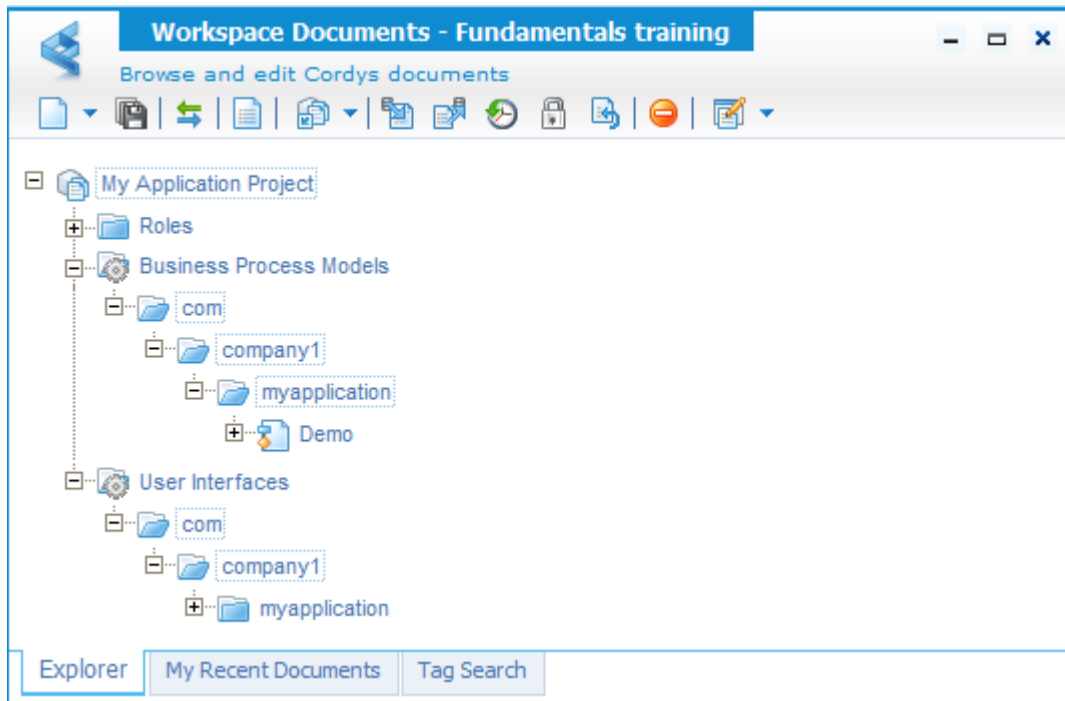
The Business process Model Editor opens to create a new Business Process Model.



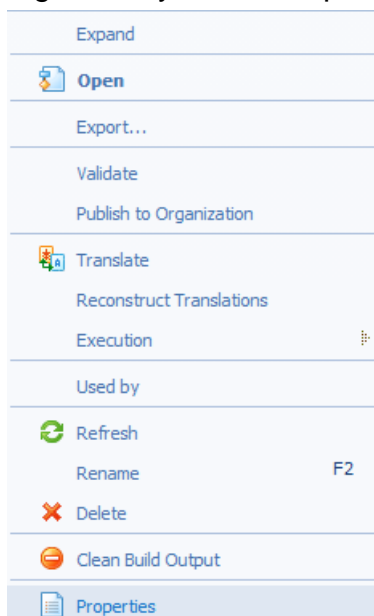
4. Save the process, providing the following values:

Field	Value
Name	Demo
Description	First process
Location	Prefilled with: My Application project/Business Process Models/com/companyX/myapplication

5. Click **Save**.
6. Close the Business Process Model editor.
7. Expand the *myapplication* folder.



8. Right click your *Demo* process.



NOTE

When you are not using SCM with your workspace there may be fewer options in the context menu.

Look at the context menu that is displayed: is this a CWS context menu or a Business Process Model context menu?

.....

.....

9. In the context menu select *Properties*.

What is the Qualified Name of your process?

.....

.....


4.7 Make Changes Available to SCM

In this exercise you will make your developed content/changes available to your team members by sending the changes to the SCM application.


You should only make changes available after you have tested them and made sure everything works. This is to ensure that your team members' work is not affected when they incorporate your changes.

NOTE

This only applies when your workspace is created using an SCM application.

1. If closed open the Workspace Documents.
2. In the toolbar, click **Make Changes Available to Others** ().
A list of the components you have modified in your workspace since the last make available are displayed.

3. Review the modified content:


Workspace used in Fundamentals training - Make changes available
✕

Comment

Application Management

	Action	Type	Name	Location	Original Location
+	Add	Folder	Roles	\\My Application Project	
+	Add	Folder	User Interfaces	\\My Application Project	
+	Add	Mergeable Association	en-US_000C2926-3D44-11E	\\My Application Project	
+	Add	Folder	myapplication	\\My Application Project\\Business Process Model	
+	Add	Business Process Model	Demo	\\My Application Project\\Business Process Model	
+	Add	Folder	company1	\\My Application Project\\Business Process Model	
+	Add	Folder	com	\\My Application Project\\User Interfaces	
+	Add	Folder	company1	\\My Application Project\\User Interfaces\\com	
+	Add	Folder	My Application Project	\\	

Make Available
Cancel

4. Provide as comment **Application Management**.

5. Click **Make Available**.

5. Learning Report

Achievements

- ☐ I know the concept of the system organization
- ☐ I know the concept of an organization
- ☐ I know the concept of a Cordys application
- ☐ I know the concept of an Application Package
- ☐ I know the concepts of users and roles
- ☐ I know the concept of the Collaborative Workspace
- ☐ I can create users and roles
- ☐ I can assign roles to users
- ☐ I can setup the project structure in the Collaborative Workspace

Notes