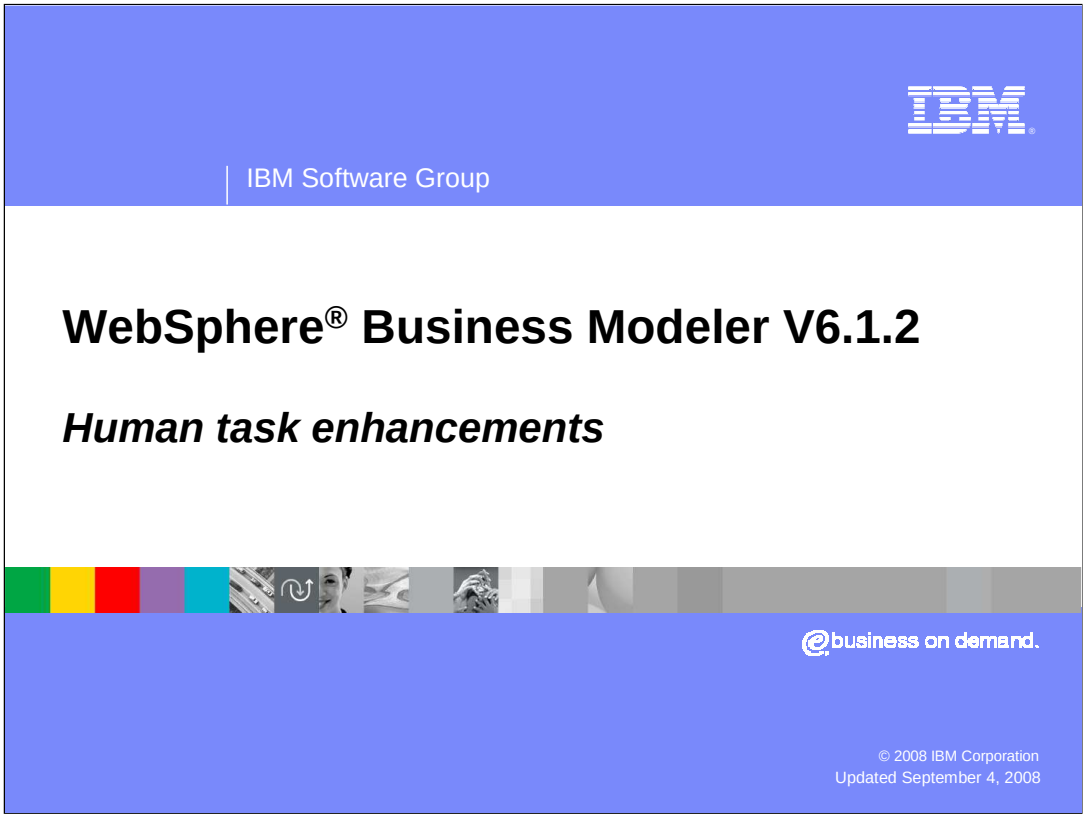


This education module will discuss the human task enhancements to the WebSphere Business Modeler for version 6.1.2

Introduction

- Human task enhancements
  - Business calendar support
  - Direct deploy
- Neither of these enhancements has a large impact on the look, feel or direct behavior in modeler
- The impact is in WebSphere Integration Developer

Support for human tasks was introduced in WebSphere Business Modeler 6.1. With version 6.2 several enhancement have been introduced.

One is the ability to fully use the modeler timetables when modeling for implementation.

Two is the ability to directly deploy a human centric business model to WebSphere Integration Developer 6.2 and run it without modifications.

Three is the ability to simulate human centric business models.

The first two enhancements are discussed in this presentation and human centric simulation is covered in a separate module. The enhancements discussed here are improvements to the model driven development scenario.

Business calendar support

- Rich calendaring support has been available with WebSphere Business Modeler for several releases
- The human tasks in WebSphere Integration Developer have had some calendaring support
  - And it just got better
- Now the calendar information that is gathered as part of the business process analysis can be carried forward to the implementation phase
- Model synchronization supported

WebSphere Business Modeler provides rich calendaring support in the form of timetables. The modeler timetables are used for managing the availability resources in simulations. WebSphere Integration Developer also has calendaring support which is used with the human tasks. Until now, the calendars that were created in modeler were not used when the model was imported into WebSphere Integration Developer.

When a version 6.1.2 human centric business model with timetables associated to the human tasks is exported and then imported into WebSphere Integration Developer 6.1.2, the timetables are converted to business calendars. The business calendars in WebSphere Integration Developer 6.1.2 are fully exploited by the business process choreographer.

By having a common calendar object between WebSphere Business Modeler and WebSphere Integration Developer changes can be made on either side and be synchronized using the model synchronization features of both tools.

Example

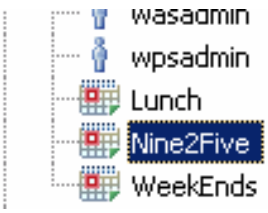
- Using a simple business process
  - With a human task
- Create a modeler timetable with exemptions
- Export to WebSphere Integration Developer and show the results of the export

Here is a demonstration. Start with a simple human centric business process, create the timetables and then export it and then import it to WebSphere Integration Developer 6.1.2.

In WebSphere Integration Developer you'll see how the timetable elements are mapped to implementation objects.

Create timetables in Modeler

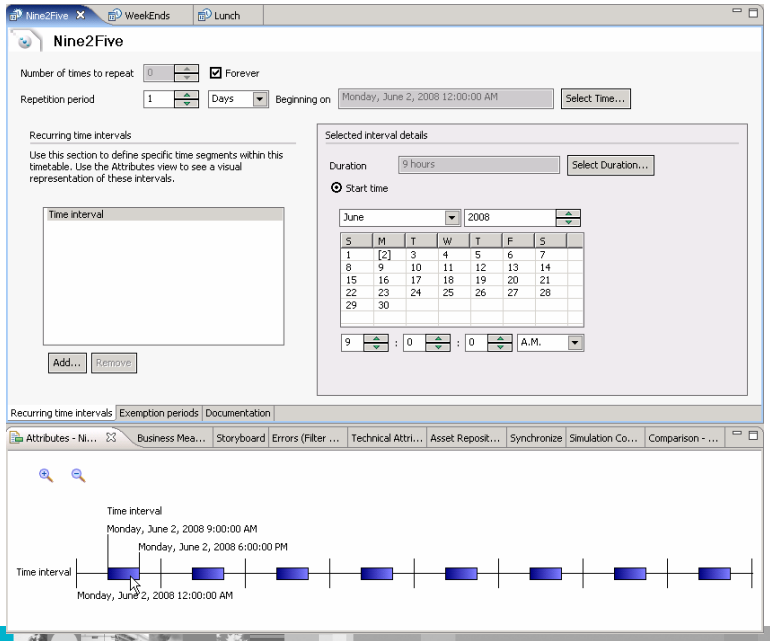
- Starting with a business process that has one or more human task
- Create the three timetables used to define a regular work week
- The Nine2Five timetable is associated with the HT and use the two exemption timetables



There are three timetables used to describe a typical nine to five work week. The nine to five timetable will define the entire week from Sunday to Saturday and then the lunch break and the weekend are modeled as exemptions to the nine to five timetable.

The three timetables are created independently and then the exemption tables are associated with the nine two five timetable.

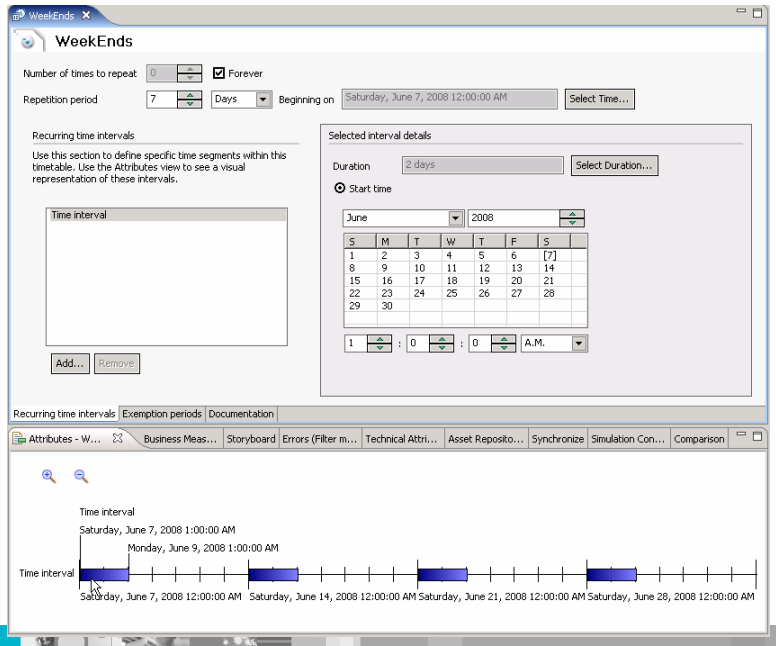
Nine2Five timetable



When defining the nine to five timetable note that it is for a single nine hour day that repeats forever. The weekends and lunch break are modeled as exemptions to the nine to five timetable.

Also note the start time and date. You can see the graphical representation below.

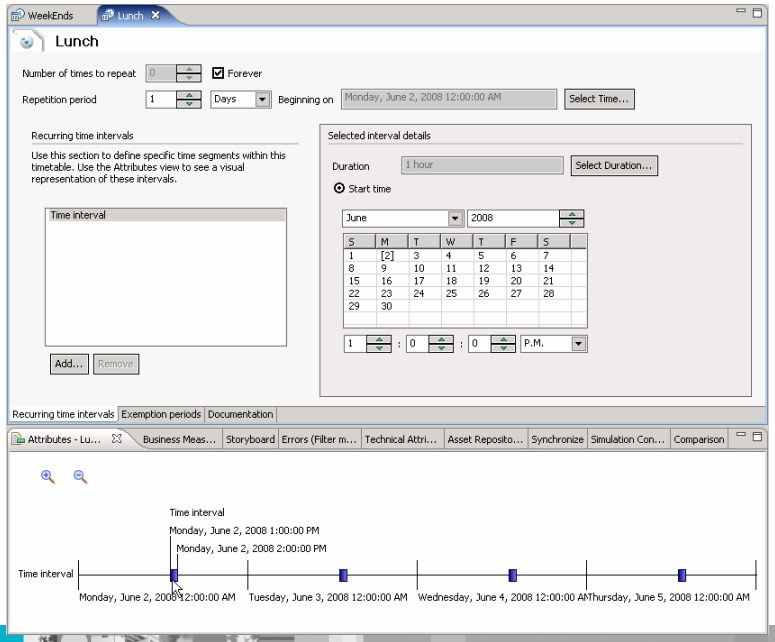
WeekEnds timetable



Notice the starting day is June 7th, the first Saturday after the start of the nine to five timetable. The repetition is every seven days, forever. The start time is one AM.

The graphical representation provides easy verification of all the settings.

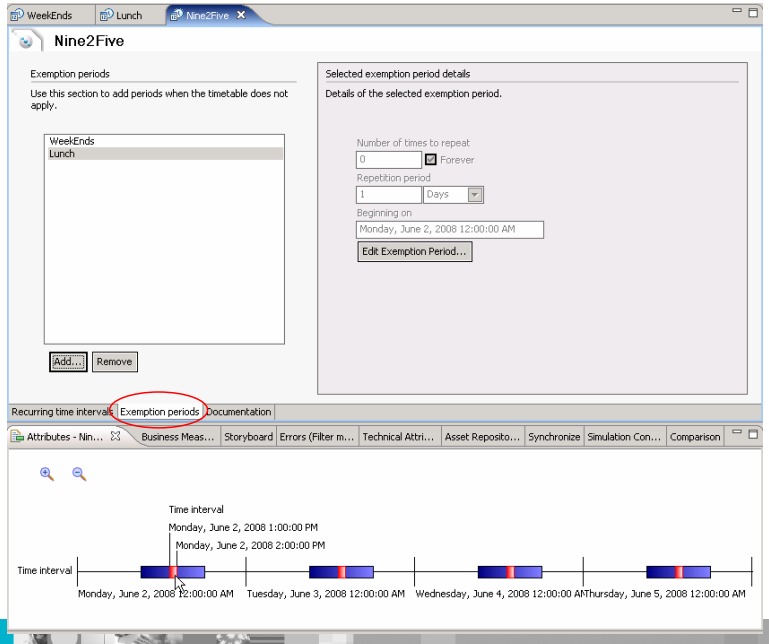
Lunch timetable



Next create the lunch timetable.

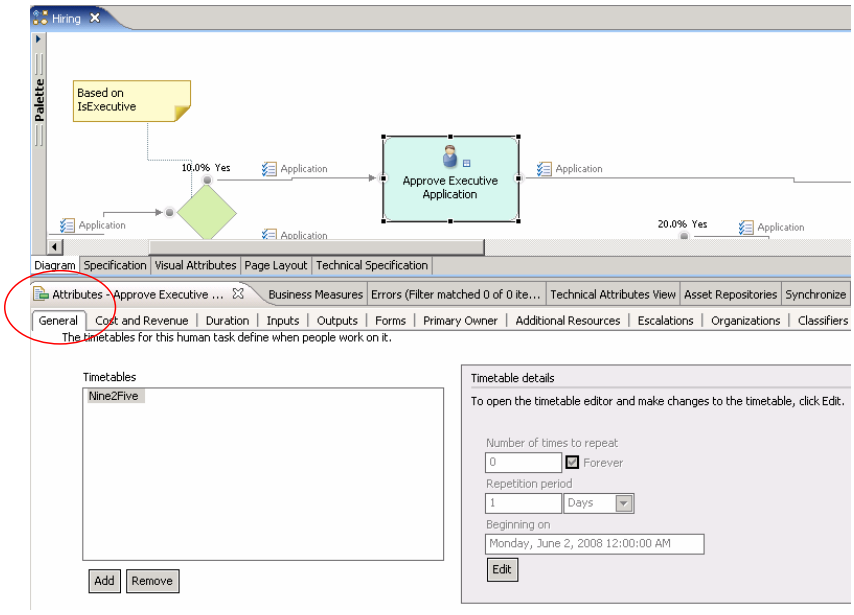
Note that it also repeats everyday forever, but the start time and duration are different.

Nine2Five with exemptions

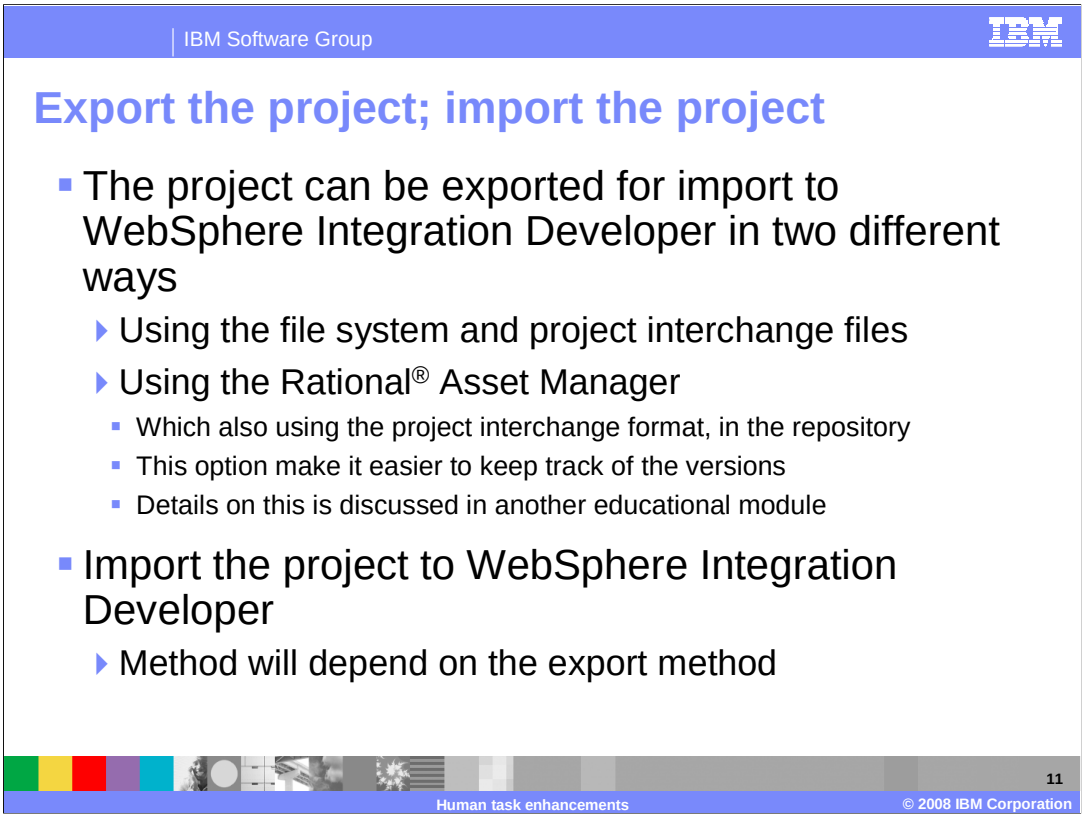


Finally the nine to five timetable is completed by adding the exemptions. The exemptions represent the time period when the nine to five timetable is not in effect. Where the exemption period coincides with the nine to five time period the color is changed to red.

Associate the timetable with the human task



Next, the timetable is associated with a human task using the attributes, general tab. Just add the timetables you need. In this case there is only one. The exemptions are contained in the nine to five timetable.



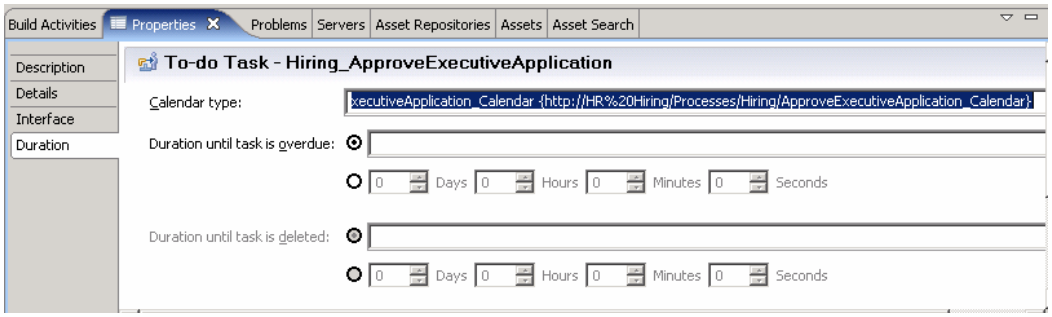
Everything up to this point should be familiar to an experienced business modeler that uses WebSphere Business Modeler. What is really new is how this information is carried over to WebSphere Integration Developer and represented there.

Export the business modeling project by exporting as a project interchange file or add it to the Rational Asset Manager.

Import the project interchange file into WebSphere Integration Developer or retrieve it using the Rational Asset Manager.

Locate the association with the timetable

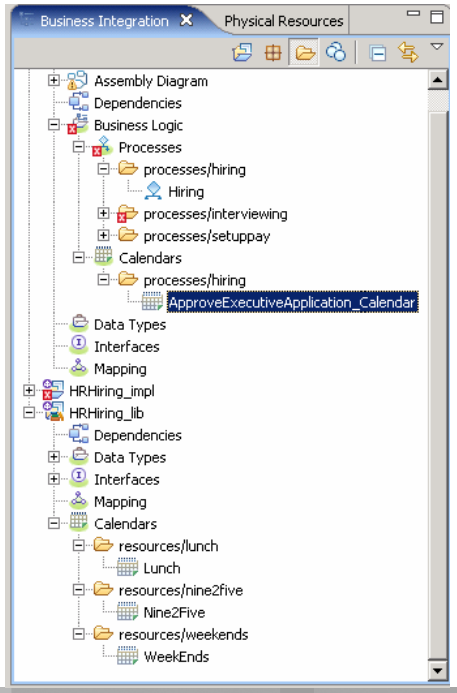
- In the properties of the “Approve Executive Application” to-do-task
  - Select the duration tab
  - A specific calendar type is created for each human task that will use it
  - This is a wrapper class



Inspecting the human task in WebSphere Integration Developer reveals that the duration for the human task is specified by a business calendar. A specific calendar type is created for each human task that will use the business calendar. It is a wrapper class that is specific to this human task.

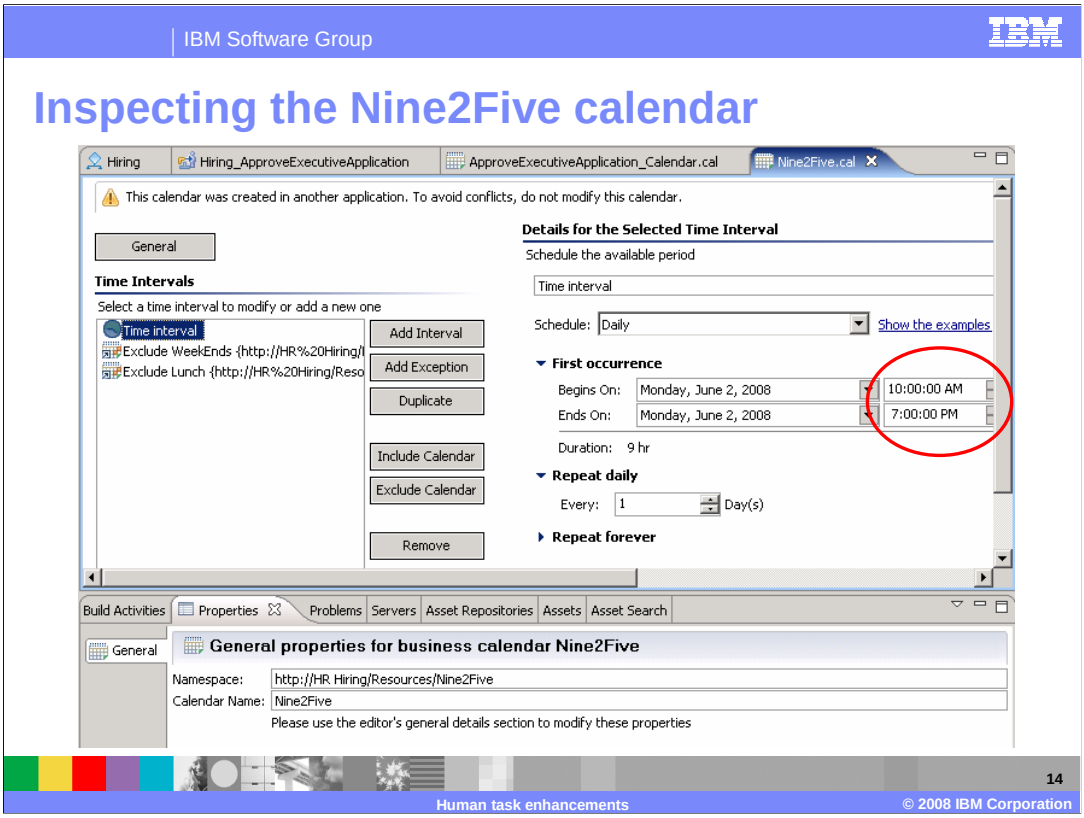
The calendar wrapper

- Here you can see the wrapper class that is associated with the human task
- And then the individual calendar classes that are in the shared library
  - Nice!



To understand the wrapper class, expand the business process module and expand the Calendars folder. This is where the wrapper class is located.

Also expand the library module that is associated with the business process module. This is where the three timetables get mapped to the business calendars. These are the business calendars wrapped by the wrapper class. To see how this is done, open the wrapper class.



There are several things to notice here.

•First, you can see that the nine to five calendar is composed of a time interval and two exemptions or excludes as they say in WebSphere Integration Developer.

•Next you can see that the interface is different but similar. You can see that all the same information is there.

•The time interval, circled in red, is off. The start time is off by one hour. This is due to differences in the way the time zone is managed in WebSphere Business Modeler and WebSphere Integration Developer. Taking into account the time zone offset and then it looks like it is really a nine to six calendar. It still specifies an eight hour work day with a one hour lunch, but perhaps a better name is in order, for example, Normal Work Day.

Although the integration developer can make changes here and use the model synchronization feature to provide the changes back to the business model, it is recommended that the timetables be managed by the business analyst, using business modeler.

The changes can then be merged into the implementation model during the next model synchronization.

Section

Direct deploy for human tasks

This next section will discuss the new direct to deploy for human tasks.

Direct deploy for human tasks

- Goal
  - Ensure that human-centric business process can be deployed and run in a test environment without further modifications from the integration developer in WebSphere Integration Developer
- Strategy
  - During the export of a business process from WebSphere Business Modeler V6.1.2 or a selection containing human tasks, a script is generated to facilitate the creation of the VMM person accounts and groups based on the modeler resources, roles and organization instances

The goal of the direct deploy feature is stated here. It is to make testing of a human centric business process easier. Before this feature became available the integration developer had to create a user registry, populate it with users and groups and make sure that the proper associations were made between the users and groups, and the human tasks. It was a lot of work.

Now that the human resources and timetables that are modeled in WebSphere Business Modeler have full counter parts in WebSphere Integration Developer, it's possible to generate and deploy all the "user registry" information for the WebSphere Integration Developer unit test client.

Direct deploy – Additional information

- Running the script populates the enterprise repository with entries required to resolve the resource assignments specified by the business analyst in WebSphere Business Modeler
- File-based Virtual Member Management (VMM) registry is the default registry installed with WebSphere Process Server
- Additional scripts are provided for cleaning up the VMM registry entries

The scripts populate and clean up the “user registry” are automatically created for you. You can choose to use them or not.

This feature does depend on having a complete human resource model that is associated with the human tasks. That is to say, the users and groups must be defined in modeler and associated with the human tasks before exporting to WebSphere Integration Developer.

Another nice aspect of this feature is that the scripts to remove all the entries from the “user registry” are also provided. This is very helpful when doing development and testing.

Overall it is a very nice first experience.

Demonstration: Direct deployment of human tasks

- Requires WebSphere Process Server runtime
- Show where the scripts are
- Show how to run the scripts
- Show how to verify that they worked

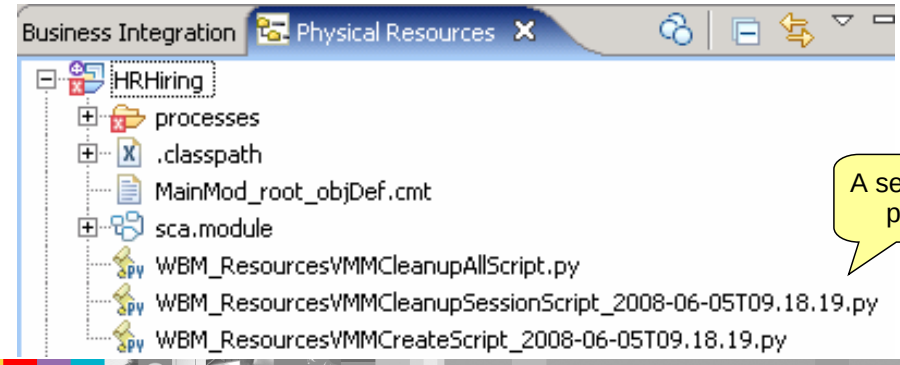
The next few slides will demonstrate how the direct deployment of human tasks works. The first you'll need is a runtime server to deploy to. This is typically the unit test client in WebSphere Integration Developer.

Next you see where the scripts are located and how to run them from WebSphere Integration Developer.

Then you'll verify that the scripts did what they were supposed to do.

Locate scripts in WebSphere Integration Developer

- After you have imported a business process that has human tasks, with the primary owner information configured
  - Look in the physical resources view to find the files

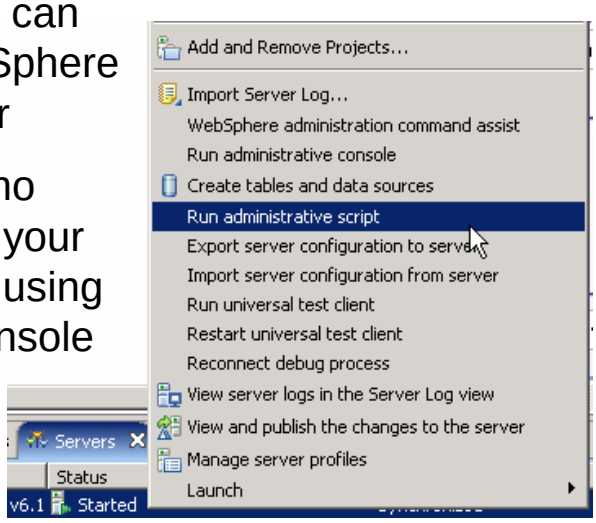


To locate the scripts in WebSphere Integration Developer 6.1.2, open a Physical Resources view and you should see them in the root of the business logic module. They are identified with the WBM_ prefix and the .py file extension.

In the case shown here there are three scripts. Notice that the create and cleanup session scripts are linked by the time-date stamp. It can be that there are multiple imports, each representing a session. If you want to clean up only the artifacts related to a single session you can. Otherwise you can clean up everything with the cleanup all script.

Administrative scripts

- Now that you know the scripts are there, you can run them using WebSphere Integration Developer
- Verify that there are no definitions already in your runtime environment using the administrative console



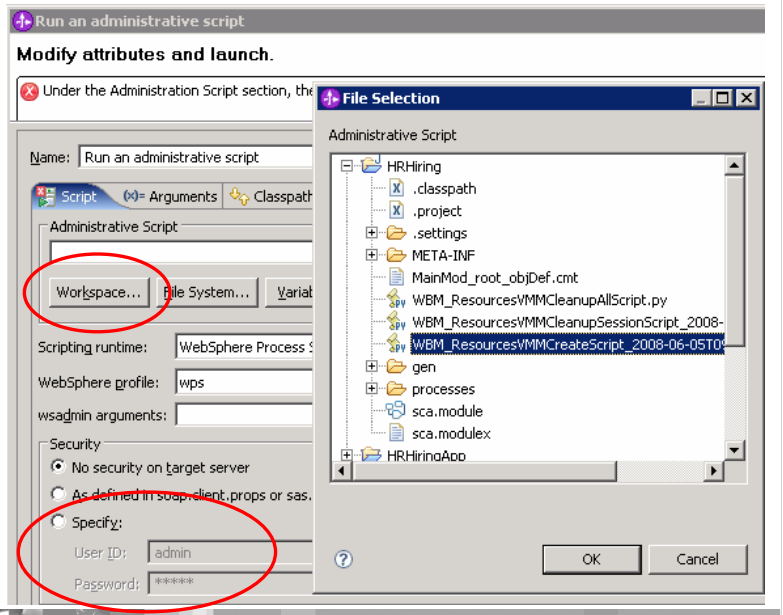
Once the scripts have been located, that can be run using the 'Run administrative script' option off the server pop-up menu. The server should be up and running and the application does not need to be deployed at this time.

Running the scripts should be done before adding the applications since they will create the resources that the applications depend on.

To verify that there are not any conflicting definitions already in the "user registry", use the adminconsole to view the users and groups.

Running the scripts

- Run in the workspace
- Specify user ID and password
  - The radio button must be selected



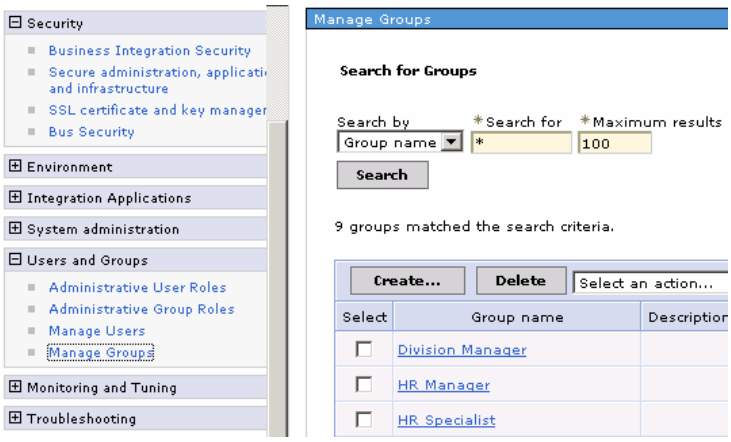
Selecting the 'Run administrative script' option will invoke a dialog where you can enter the information required to run the script. This is the location of the script, which is the workspace and the security information.

Locating the script is straightforward. The security information is a little trickier. If you have security on, then you need to select the 'specify' radio button.

Finish the dialog and the script will run, logging information to the system console.

Verify that the script ran successfully

- Use the administrative console
- Check both the users and the groups
- Note that the user ID might not be the same as the label of the resource in modeler



To verify that the scripts actually did what they were supposed to do, use the adminconsole. Inspect the groups and users to make sure that the ones you just added are there.

Something to be aware of, in modeler the object representing a human resource has a label and an identifier. The label is what you see in the modeler project navigator. The identifier is part of the human resource data. It is the identifier that is used in creating the human resource in the VMM user registry.

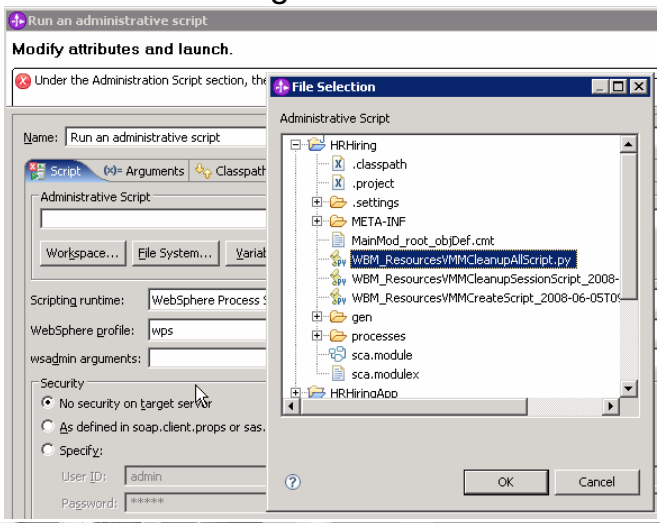
Test the application

- Use the WebSphere Integration Developer unit test client and the business process choreography explorer
- There is no magic here, business as usual
- Add the modules to the server
- Start and claim the tasks using the business process choreographer

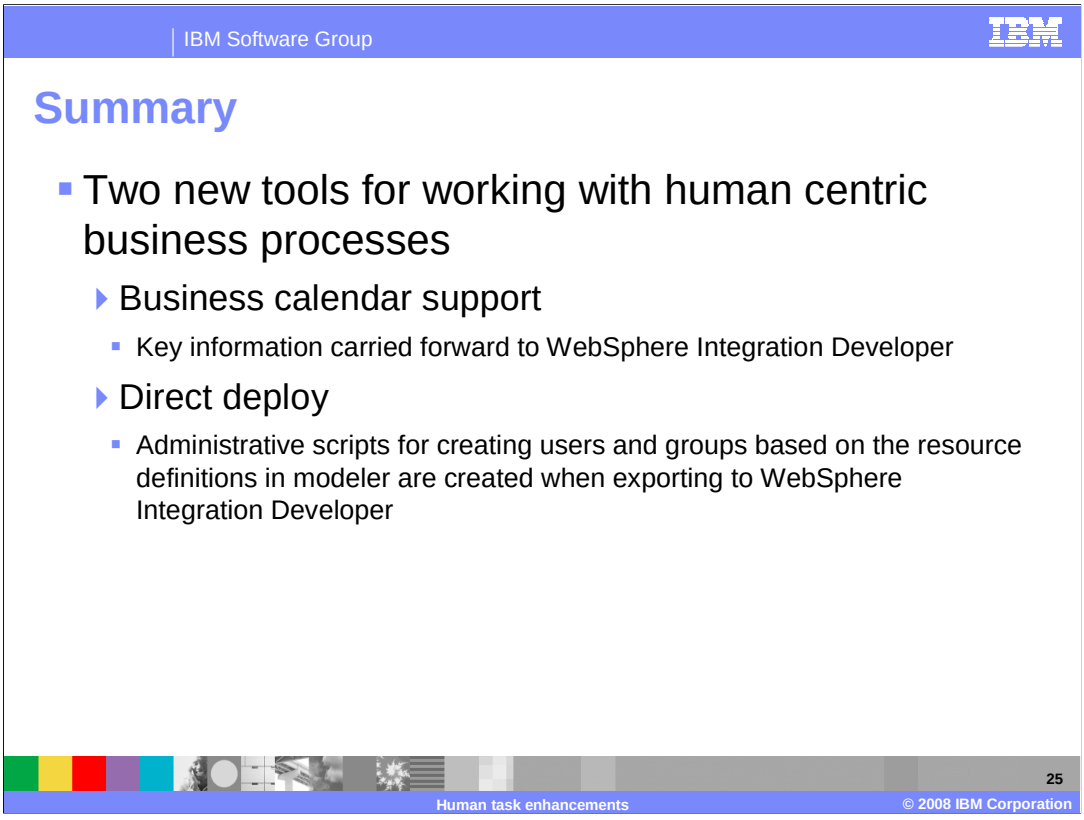
To test the application, add the modules to the server and then use the business process choreographer to start and claim the tasks.

Clean up

- Remove the users and groups using the script
  - Check the console log for verification



When testing is completed, remove the users and groups from the VMM registry by running the cleanup session or the cleanup all scripts using the “Run administrative script’ option.



Version 6.1.2 of WebSphere Business Modeler fills out the support for model driven development by providing a common business calendar for both WebSphere Business Modeler and WebSphere Integration Developer. When associated with a human task, the business calendar is used to manage the availability of the human resources involved in a business process.

With the introduction of the direct deploy feature the specification and management of the human resources can be carried out in WebSphere Business Modeler and easily transferred to the integration test environment in WebSphere Integration Developer. This provides a way to quickly test and validate complex human centric business processes while maintaining the integrity of the business model and the development roles.

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