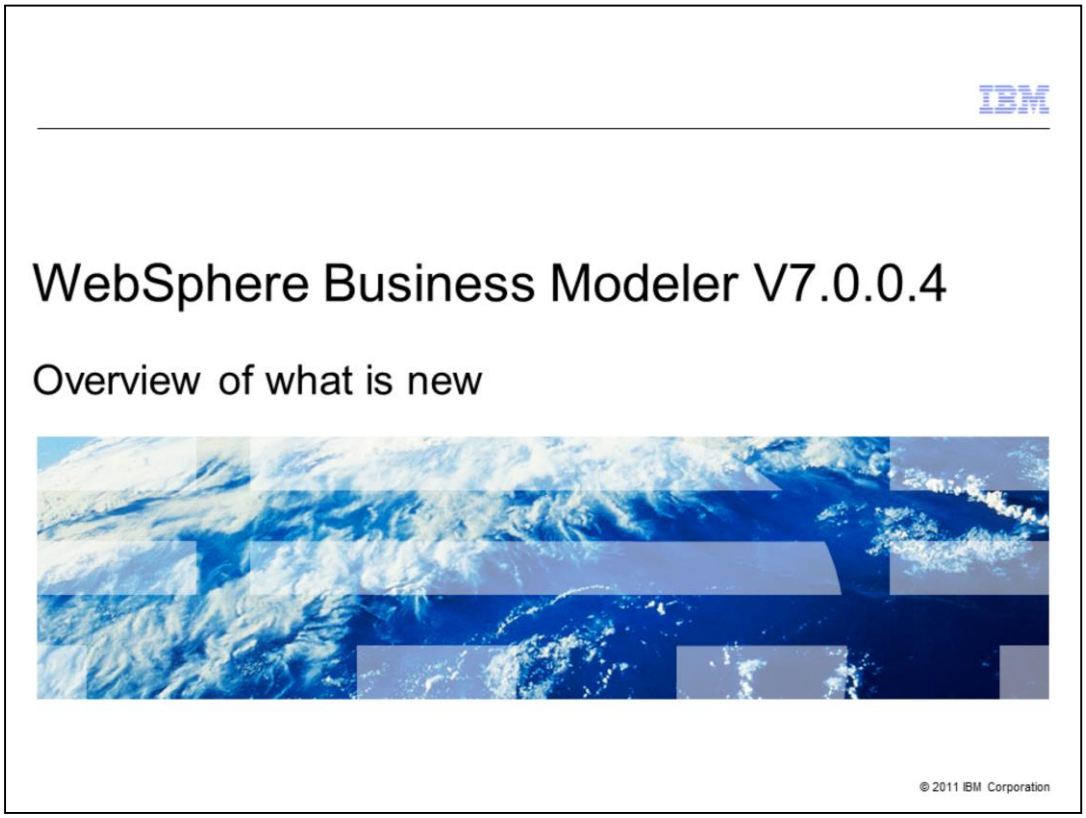


This presentation provides a high level overview of the key new features for WebSphere® Business Modeler V7.0.0.4

IBM

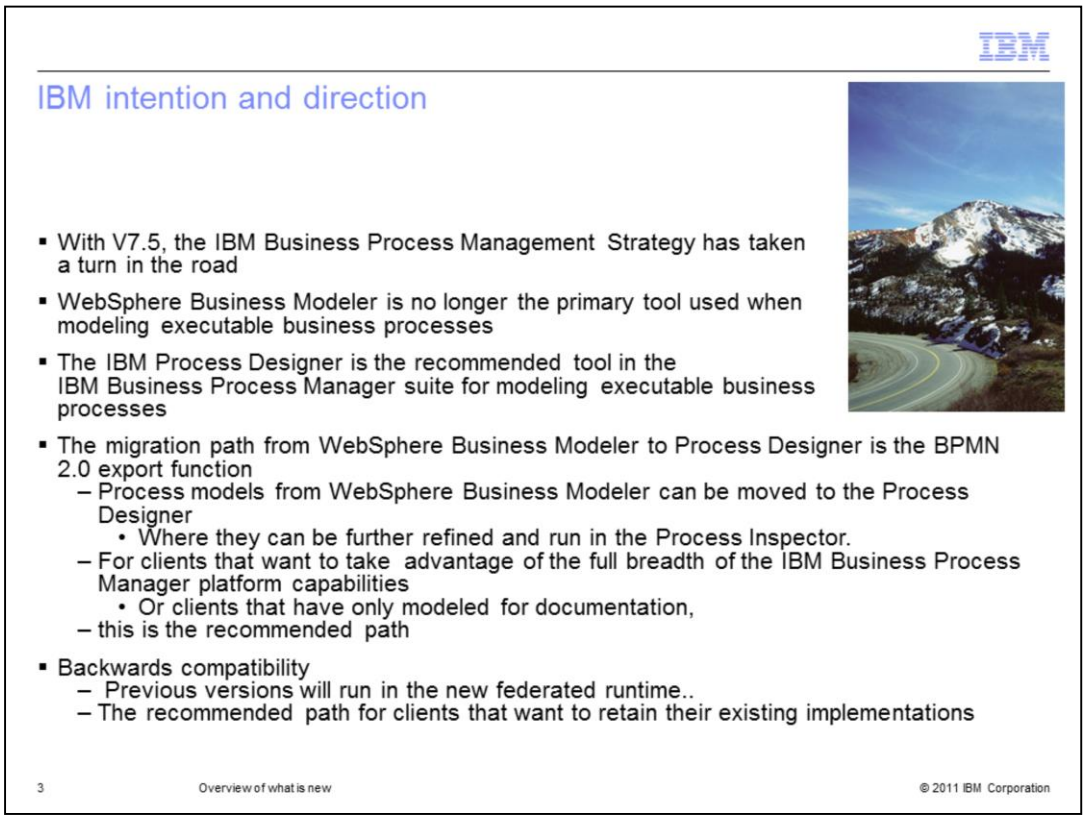
Table of contents

- Intention and direction
- Overview
- Fixes
  - For 7.0.0.4
- New feature
  - BPMN2 Export

This presentation provides an overview of the new enhancements and fixes for WebSphere Business Modeler V7.0.0.4.

The new direction for the IBM Business Process Management strategy as it pertains to WebSphere Business Modeler is discussed briefly.

This is followed by a discussion of the fixes that are part of this release and then the key new features that have been added to assist in migrating models to the new process modeling tool.



With IBM Business Process Manager V7.5, WebSphere Business Modeler is no longer the primary tool for modeling executable business processes.

WebSphere Business Modeler V7.0.0.4 will continue to be the tool of choice for documentation and analysis of business processes, while the Process Designer will used for modeling and testing executable processes. The Process Designer is a part of the IBM Business Process Management suite V7.5.

For clients that want to move their executable business processes to the Process Designer, there is a new BPMN 2.0 export feature available with WebSphere Business Modeler 7.0.0.4 that can be used to export their models. The exported models can then be imported into the Process Designer V7.5

If you are not ready to move to the Process Designer, then your existing models will continue to run with the new WebSphere Business Process Manager.

WebSphere Business Modeler V7.0.0.4 is fix pack release.

There are numerous fixes that are delivered. The complete list and the detailed description of each fix can be found on the IBM support website.

The link to the announcement and the installation instruction are provided here for your convenience.

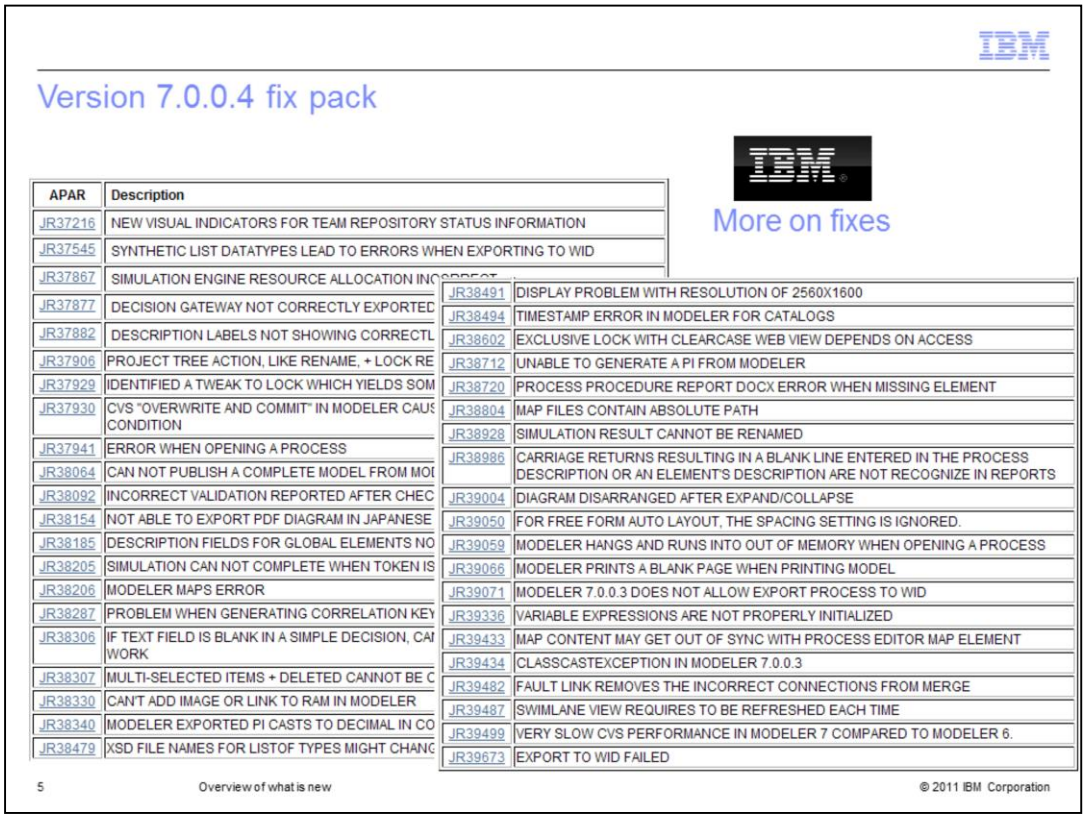
As mentioned on the previous slide, a new BPMN 2.0 export is provided to facilitate the migration to the new Business Process Management platform.

To learn more about the standard format you can visit the www.omg.org website.

When considering the use of the BPMN2 export feature, keep in mind that the BPMN2 format is an intermediate format between the WebSphere Business Modeler and Process Designer.

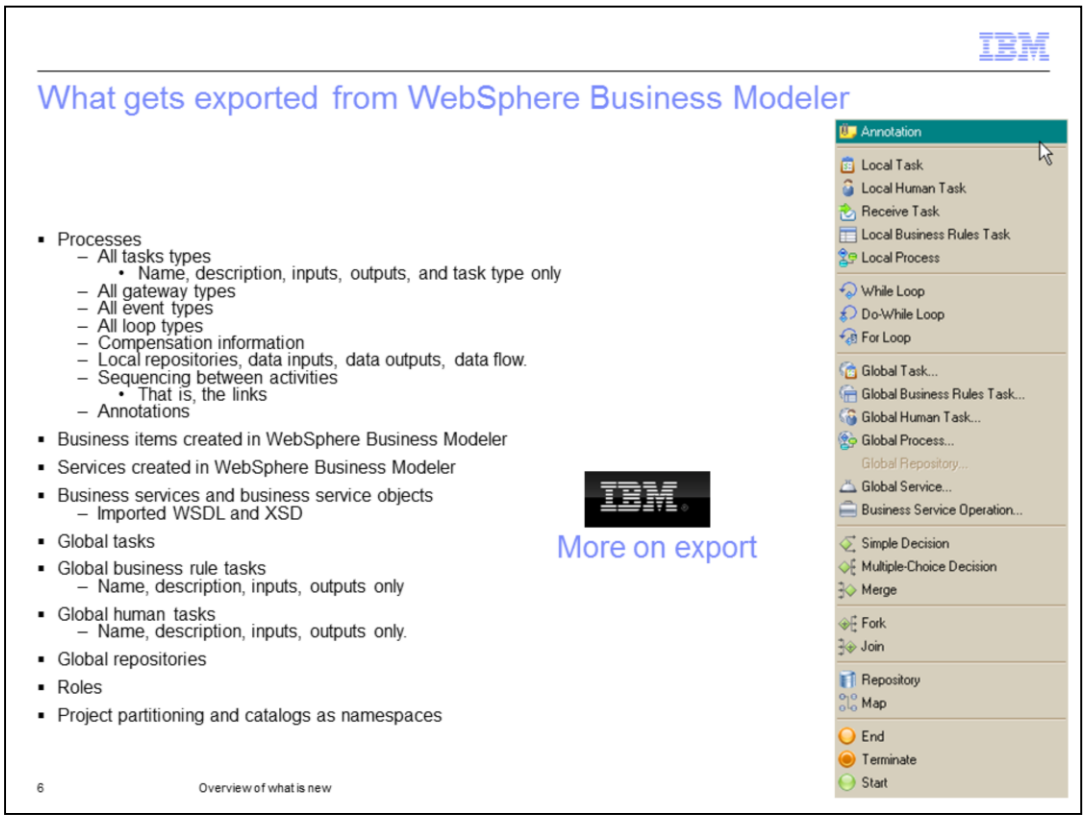
There are features in WebSphere Business Modeler that are not supported in BPMN2 or in Process Designer and there are features in BPMN2 that are not supported in Process Designer.

The result is that there is not a 100% translation from WebSphere Business Modeler to Process Designer. There will be some information that will be lost.



The fixes delivered with the V7.0.0.4 fix pack have been listed here to give you a sense of the kind of fixes that are delivered with this release.

To view and study the details of each fix, visit the IBM Support Site. The link is provided on this page. Select the black IBM logo.

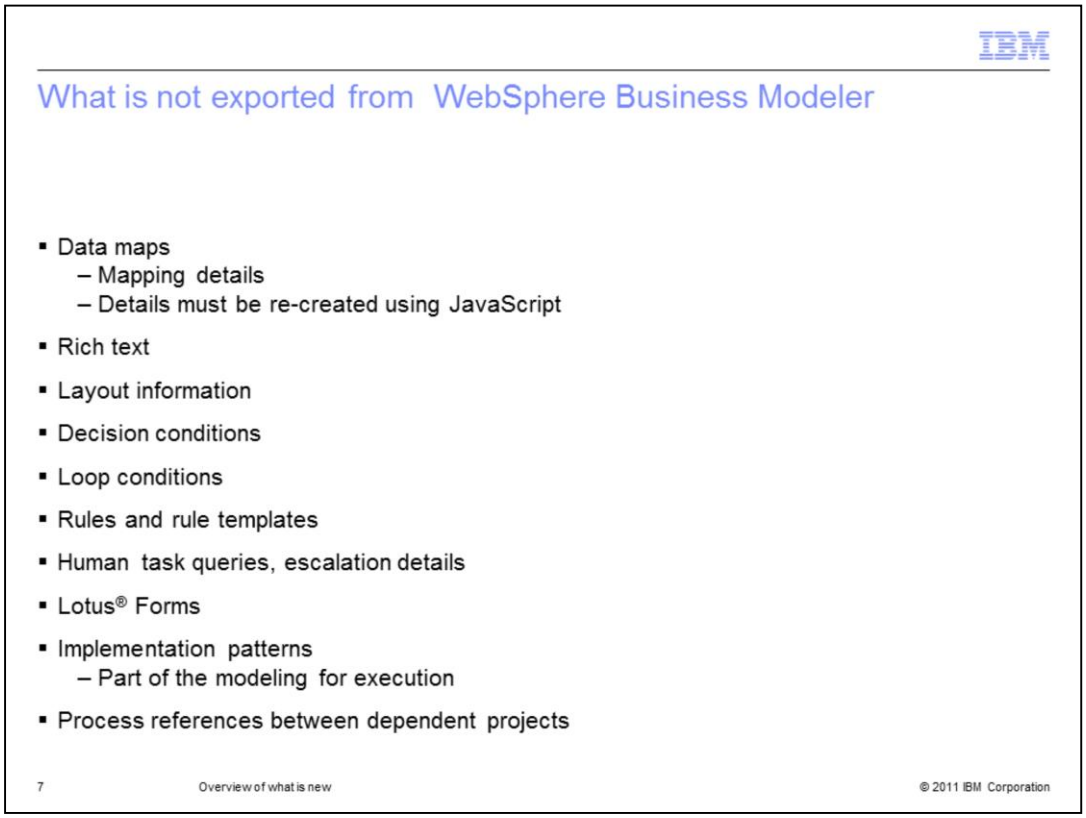


Before attempting to move your executable business process to the Process Designer using the BPMN2 export, its good to get an idea of what is exported and what is not. Its important to keep in mind that what gets exported by WebSphere Business Modeler is not necessarily what is imported into the Process Designer. This slide provides a summary of what gets exported.

The processes and process elements are all exported but some of the details, the meta-data are not carried forward. The basics, such as the names, descriptions, inputs and outputs are. Things like the logic in the data maps, the escalation information associated with the human tasks, the rich text in the descriptions and the conditions in the decisions and loops are not.

The compensation information is an example of a feature that is supported by WebSphere Business Modeler and BPMN2 but is not supported in the Process Designer. Therefore even though this gets exported, it is not imported into the Process Designer.

For details on what gets exported visit the information center by selecting the black IBM logo.



From the previous slide you can see that the key structural information is exported. There is enough of the application carried forward to use as a starting point for re-creating the process application in the new Process Designer. There are a few key pieces that are still missing as a result of the export from WebSphere Business Modeler and import into the Process Designer.

First are the data maps. If there are data maps in the business process, upon export to BPMN2, the map elements are converted to activities. The details of the mapping are lost. The place in the business process flow, where the mapping happens is preserved as a placeholder activity. In Process Designer, complex mapping is done using Java™ Scripts, therefore the mapping details need to be re-created in the Process Designer using Java Script.

The next thing that becomes apparent when the BPMN2 model is imported into the Process Designer is the absence of the rich text that you used when documenting your activities. There is no provision for this in the BPMN2 standard. Rich text is not available in the Process Designer.

The layout of the flow is another feature that will quickly become apparent. The sequence of the activities and events are exported with the BPMN2 format but the spatial relationships of the elements is not. This means that you will need to rework the business process definition so that the flow is meaningful for you. There is no automatic layout feature available in the Process Designer, no zoom in or out, and no panning feature to help navigate a large business process definition. This is only a problem for large and complex business process flows.

The conditional information in decisions and loops is lost. The decisions are converted to the appropriate gateways, but the logic details need to be re-implemented. The various loops are converted to activities which in turn reference separate business process definition that represent the flow which is to be iterated over. The logic for the loop exit conditions is lost and must be re-implemented also.

Rule and human tasks both have equivalents in the Process Designer but their implementations are significantly different such that not all the details can be transformed. The concept of rules and rule templates is lost, along with the human task query capability and the escalation details.

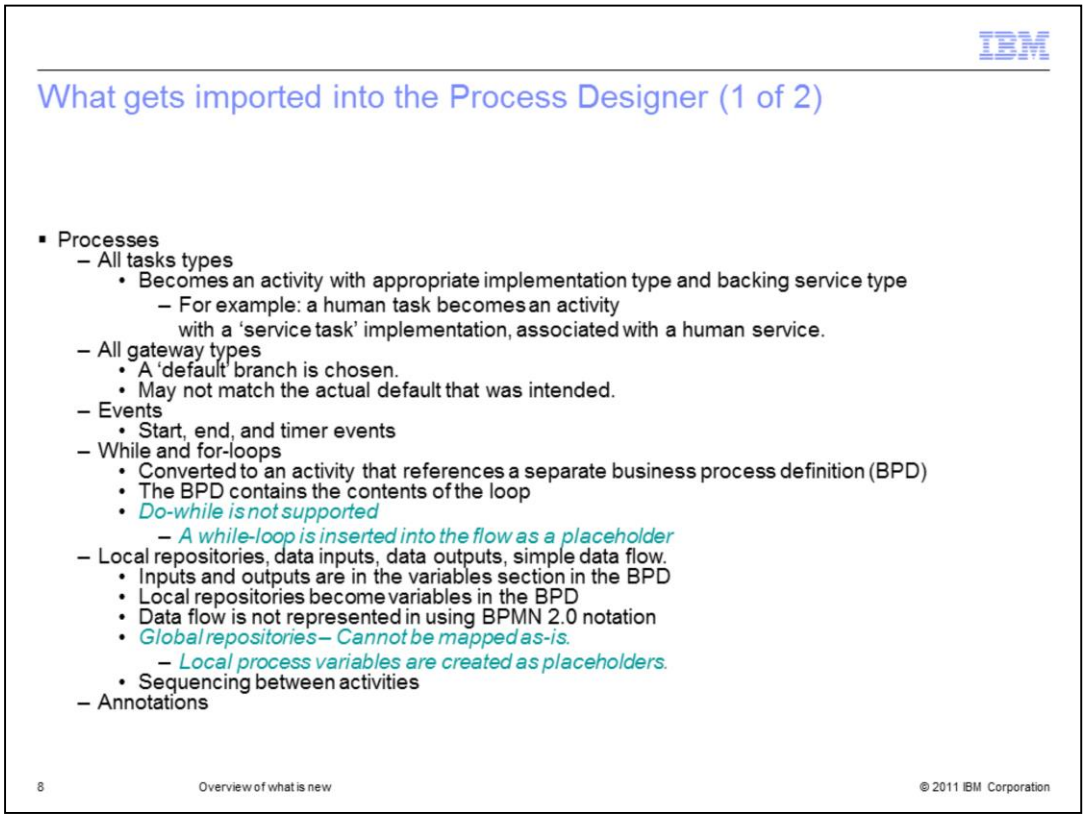
If Lotus Forms are being used, then they is not exported.

When using WebSphere Business Modeler for developing executable business models, there are certain implementation patterns that are generated in the WebSphere Integration Developer. Depending on the implementation options, there are mediation flow components and SCA exports created in the SCA assembly diagram. With Process Designer there is no longer this generation step. The Advanced Integration Services will need to be developed either top-down or bottom-up and then incorporated into the business process definition. When developing them top-down, there are no options to generate specific patterns that incorporate mediation flow components.

The last topic that needs to be mentioned effects the way you approach the migration.

It is possible in WebSphere Business Modeler to have many projects that are related through dependencies. The shared business objects, services and processes, are factored out into common projects. If this is the approach you used, then you might be tempted to export each project separately beginning with the common projects first and importing them as Toolkits. If you do this, the links between the elements within the processes are lost and they will need to be manually repaired. The recommended approach is to export all the projects as a single export and then import then into a single process application. Once everything is in the Process Designer, then move the common projects to Toolkits.

Using the Process Designer features for moving projects and model elements will allow the Process Designer to manage the refactoring of the internal links between the elements within the Process Application and Toolkit.



What gets exported from WebSphere Business Modeler and what gets imported into the Process Designer are two different aspects of the discussion. Remember that BPMN2 is an intermediate format and each tool has their own level of support for the standard.

All of the task types in WebSphere Business Modeler get converted to activities in Process Designer. There are rules used to help determine which kind of activity the task is transformed to. If the task has performers associated with it, then it is transformed to a Human Service implementation. When there are multiple performers, only the first one is used and the others are dropped. If a task has no performers then the task is transformed to an Integration Service implementation.

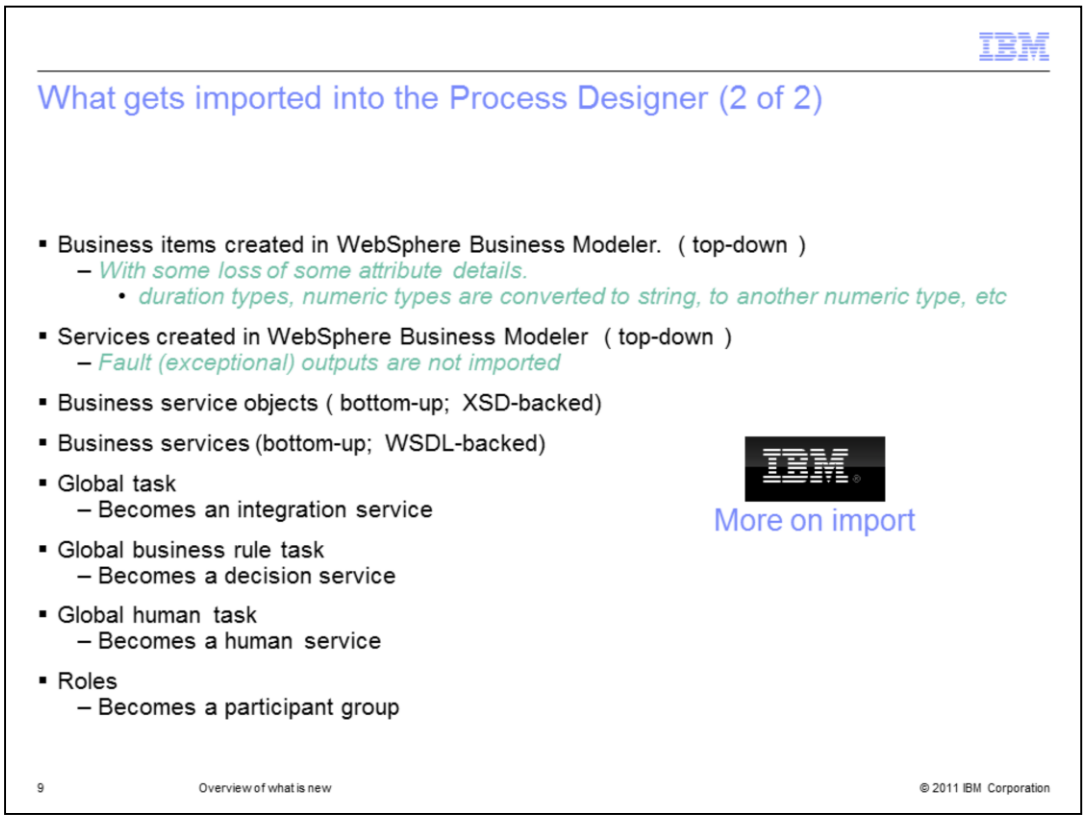
In Process Designer the decision gateways have the concept of a default pathway. This is not something that is captured in the BPMN2 standard, therefore after the export, all of the gateway logic should be carefully checked to make sure you are getting the correct behavior. Also remember that the decision conditions were never exported so the decision logic will need to be implemented also.

With loops, the conditions are exported and in Process Designer there is no Do-while loop construct. The loops are converted to an activity that references a separate business process definition. The referenced business process definition contains the part of the business process that is to be iterated over. Since the Do-while is not supported in the Process Designer, a while-loop is created as a placeholder. Allocate time in your migration plan to learn about how loops work in Process Designer and be prepared to re-work the logic for the exit conditions.

The data inputs, data outputs and simple data flow are imported into the Process Designer.

First, the business objects are created and placed in the Process Designer Data folder. Variables are created for the inputs and outputs and can be found in the variables tab of the business process definition.

Simple data flow is represented by the data mappings in the properties of the business process. The more expressive representation using the BPMN2 notation for data flow, is not available. There is no equivalent to the Global Repository in Process Designer, therefore local process variables are created and used as placeholders.



Continuing with the list of what gets imported into the Process Designer.

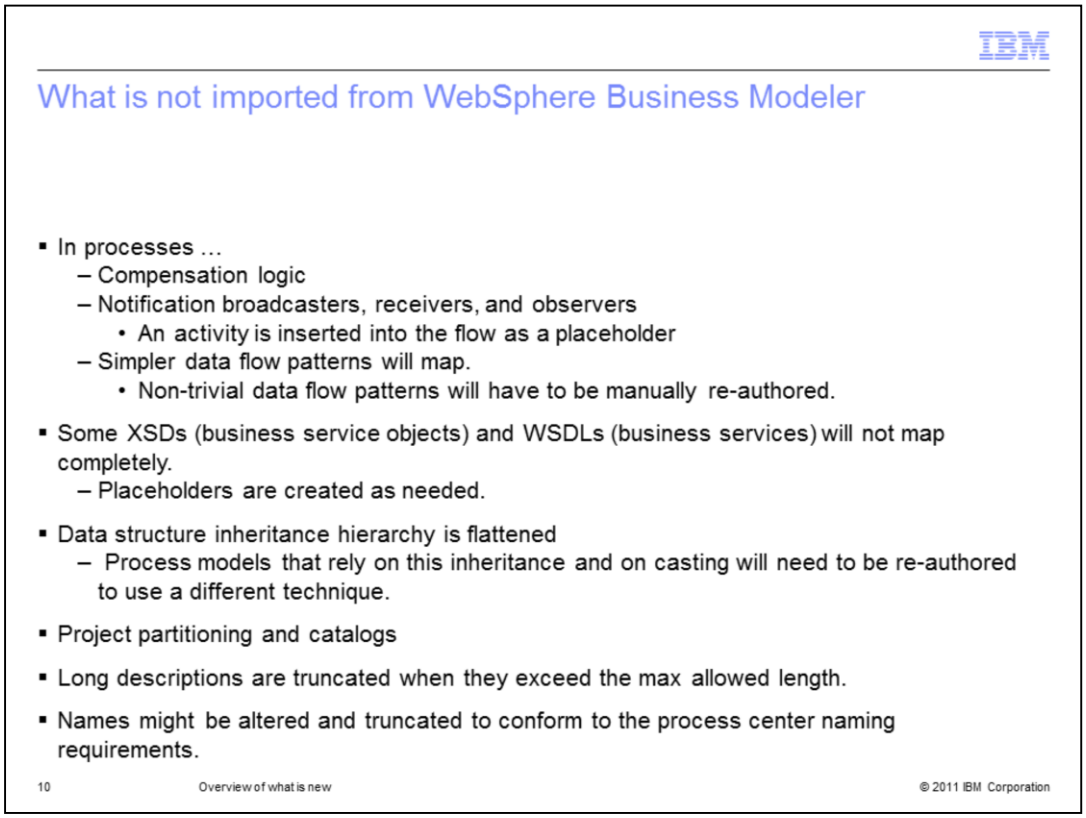
The business items and business service objects are imported as expected. There might be some minor information loss of information associated with the attributes.

For example, in the case of a business service object that has a fault output defined, the fault information is lost and the default data mapping is not completed.

The various tasks are converted as shown.

The roles defined in WebSphere Business Modeler get mapped to the participant groups in the Process Designer.

For more details about what gets imported, select the link to the information center, the black IBM icon.



You have seen from the previous slides that much of the design information can be exported from WebSphere Business Modeler into the BPMN2 format but not everything. You have also seen that much of the BPMN2 model information can be imported into the Process Designer, but again, some of the details are lost.

Where ever possible placeholders are used to maintain the flow and convey the original intent to the business process developer using the Process Designer to complete the conversion.

Here are a few more migration issues to aware of.

As mentioned earlier, the compensation information can be exported from WebSphere Business Modeler but cannot be imported into the Process Designer.

The Notification broadcasters, receivers and observers are not available in the Process Designer so placeholder activities are used.

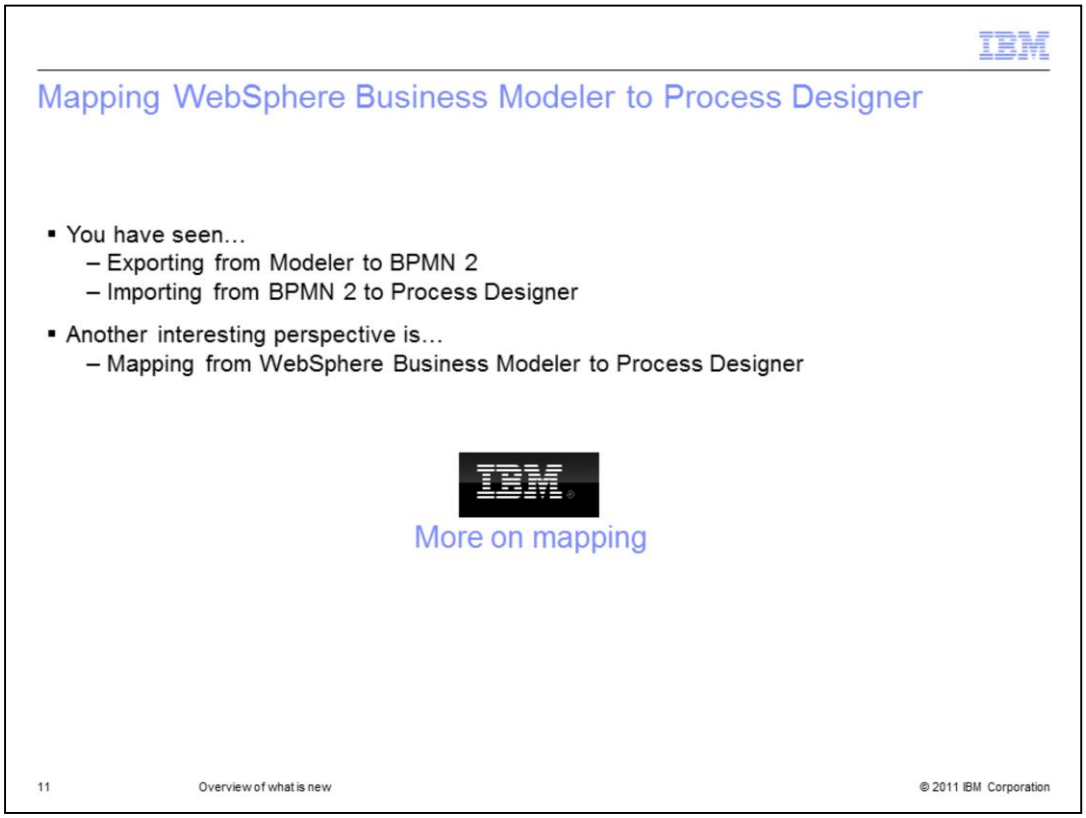
Complex data flow patterns cannot be achieved and will need to be re-worked manually after the import.

Some XSD and WSDL types will not map, so again placeholders are used to help you understand what needs to be done post import.

The data inheritance hierarchy is flattened and if your application relies on inheritance and casting, you will need to re-work the data model and how you use it.

The project partitioning and catalogs will need to be manually moved to Process Applications and Toolkits.

Long descriptions will be truncated and names adjusted to conform to the Process Center naming requirements.



There is not a straight one to one mapping from WebSphere Business Modeler to the Process Designer,

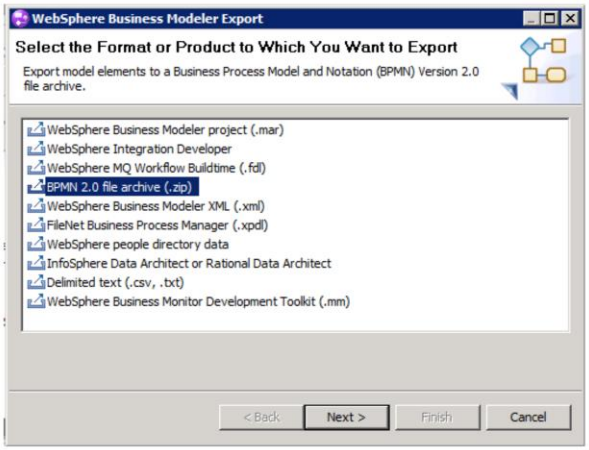
Therefore you have seen how each tool uses the BPMN2 standard

Another useful view which is provided in the information center, is the mapping between the WebSphere Business Modeler and the Process Designer.

A link to the information center is provided here for your convenience.

Exporting from WebSphere Business Modeler V7.0.0.4

- A new export type
- Some loss of information as a result of the transformations



Modeler → BPMN 2 → Process Designer

12 Overview of what is new © 2011 IBM Corporation

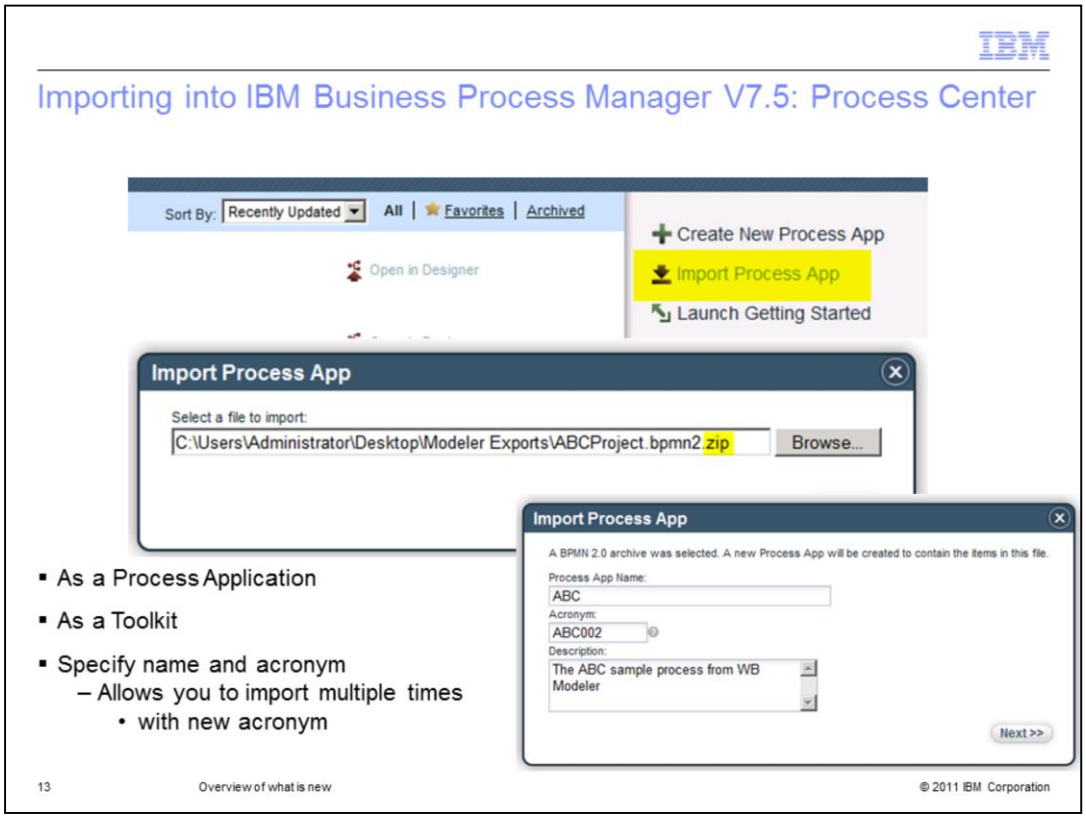
Now that you are familiar with what you will get, lets take a look at how to do it.

First, remember that you are exporting from WebSphere Business Modeler 7.0.0.4 or WebSphere Business Compass 7.0.0.4, and that you are using the BPMN 2.0 format.

Shown here is a screen capture form WebSphere Business Modeler showing the new export type.

Use this option to export all or part of your project.

Remember, the recommended way to migrate an application is to export everything to one file and them import it all into the Process Designer. You will then rearrange your process applications into Toolkits as needed.



With your BPMN 2.0 export file in hand, open the Process Center or Process Designer.

Select the Process Apps tab, then select the “Import Process App” option on the right.

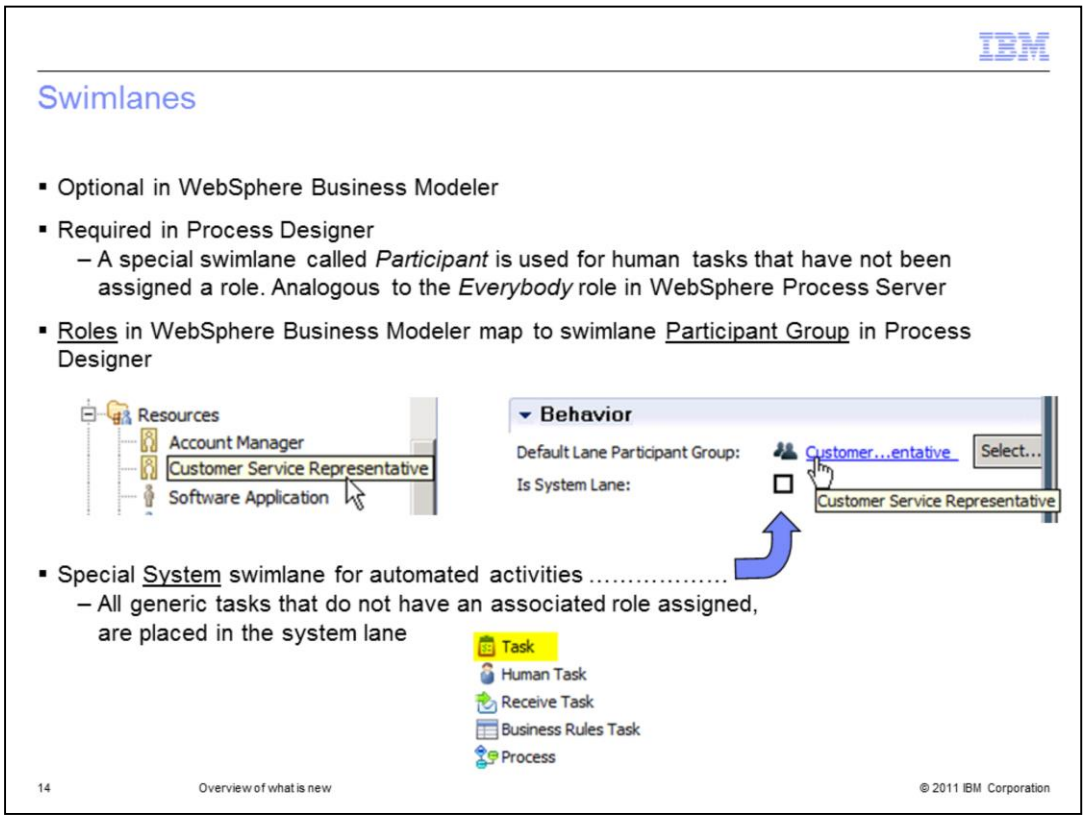
Fill out the fields in the dialogs.

Note that when importing a BPMN 2.0 file, the file extension is dot zip

You cannot import to a given Process Application name and acronym more than once.

The import creates an initial snapshot, and to re-import, you will need to specify a new and unique acronym.

If you have something that you want to import as a Toolkit, go to the Toolkit tab instead of the Process Apps tab, at the beginning

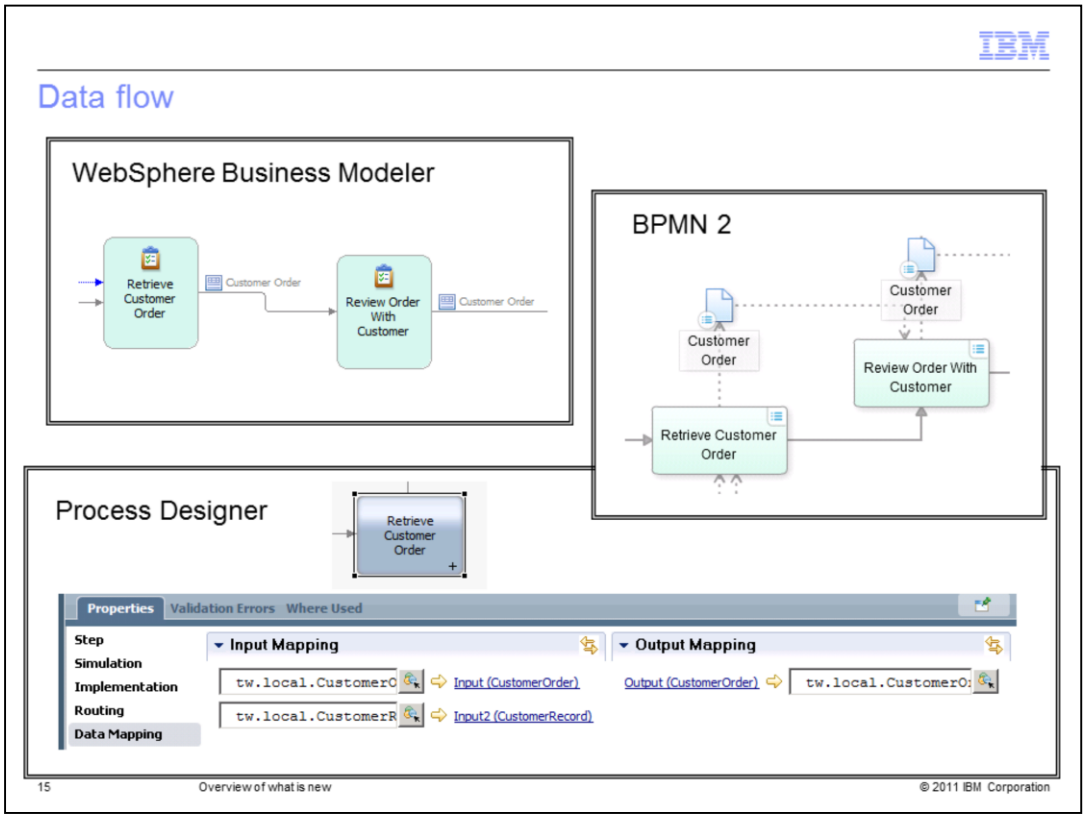


Once you get your application imported there is a period of orientation.

Both WebSphere Business Modeler and Process Designer support the use of swimlanes for process modeling. The difference is, that with the Process Designer, the swimlanes are mandatory. Swimlanes are a way to model who is responsible for an activity. With WebSphere Business Modeler the actors are defined by using roles and associating the role to the task. In the Process Designer, participant groups are used and they are associated with a swimlane. The participant group is an attribute of the swimlane. Recall that during the transformation, roles in WebSphere Business Modeler get mapped to participant groups in the Process Designer.

In the Process Designer, there are two swimlanes created by default. The Participant lane and the System lane. If your human task activity coming from WebSphere Business Modeler does not have a specific role associated to it, it is placed in the Participant lane. This is analogous to the Everybody role in WebSphere Process Server. If there is a defined role associated with the activity, then a participant group is created and used to create a new swimlane and the activity is placed therein.

If the activity is not a human task and does not have a role associated to it, it will go to the System lane. The System lane is for those activities that are not run by people but are services that can be automatically run without human intervention.

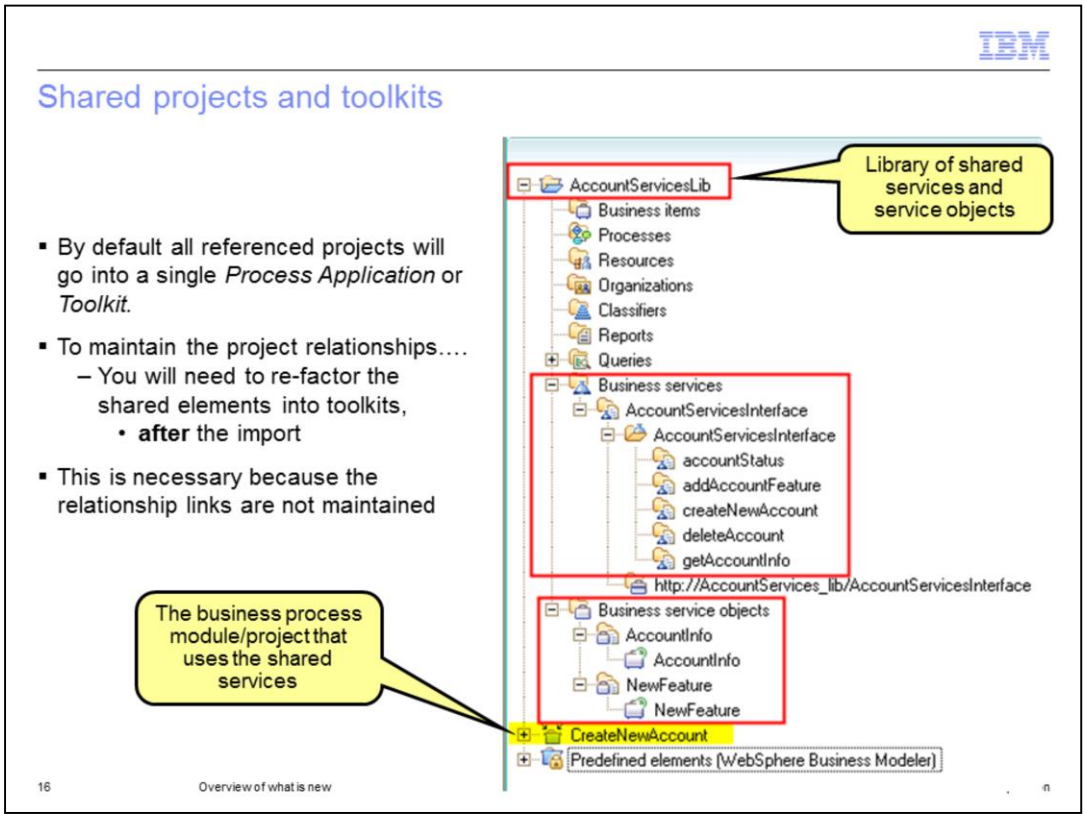


Another aspect of the Process Designer that requires some getting used to, is the way data flow is represented.

With WebSphere Business Modeler the data elements that flow between the activities can been shown on the business process flow diagram. The data object is an attribute of the link between the activities. This is illustrated with the Customer Order object in top left picture.

With the BPMN2 notation, there is a way to represent the data flow on the diagram. The data object is shown as an element on the diagram.

With the Process Designer, the data flow cannot be shown on the business process flow diagram. To see the flow of data into and out of an activity, you must select the activity in the diagram, then select the data mapping tab in the properties. This will then show you what business objects are being mapped into and out of the activity.



Here, in this simple example of a WebSphere Business Modeler application, its clear that there is a library of common services that can be shared with many different process applications.

Knowing that the AccountServiceLib is a shared project, the first reaction is to export that separately and import it into the Process Designer as a Toolkit.

The next step would be to export the CreateNewAccount project and import that as a Process Application.

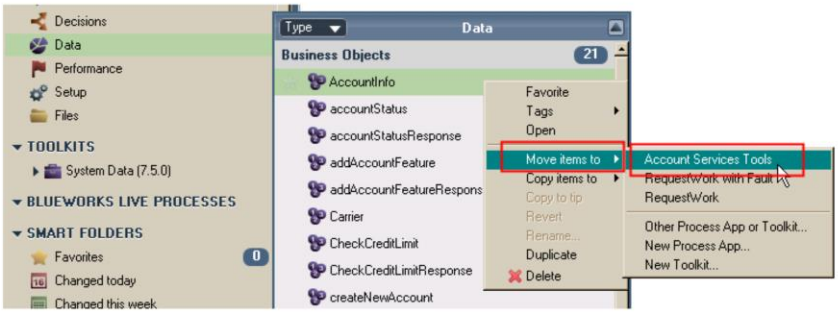
Once all the projects have been imported, set the dependency between them.

If this is the approach you take, then the internal links in the business process definition are broken.

The internal links to the data objects are lost also..

Therefore the recommended approach is to export the top level business process project and all of its references to a single file.

Refactoring in the Process Designer



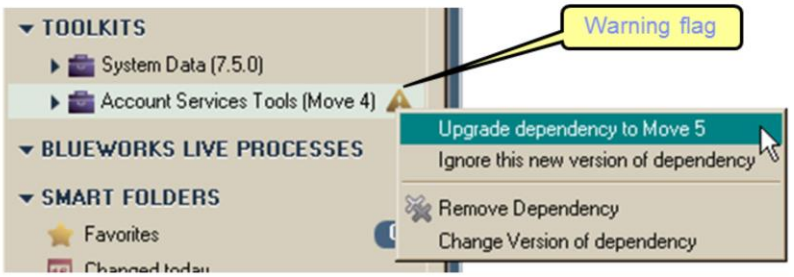
- Create the Toolkit
  - From the Toolkit tab
- Return to the Process Application that you imported
- Identify all the business service objects that you want to move to the toolkit
  - Move them
  - Each move creates a snapshot of the Toolkit
  - Upgrade the dependency to the latest version of the Toolkit
- Identify all the Service implementations and move them to the Toolkit

17 Overview of what is new

The factoring of the common services and objects into a toolkit is done manually using the move functions that are part of the Process Designer.

Move the business objects first, then the services that use them and any other objects that you deem to be part of the toolkit.

Upgrading the dependency

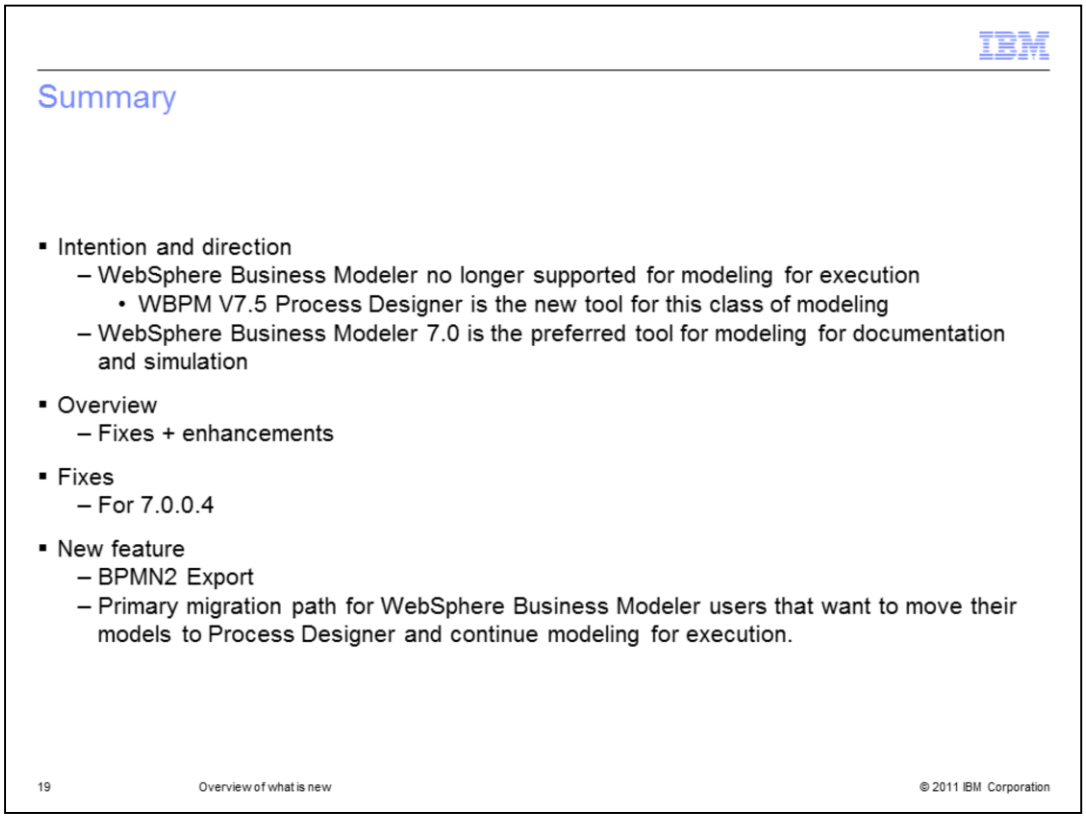


- Each move into the toolkit will create a new snapshot of the toolkit
- Notice the warning flag by the toolkit.
  - This means that there is a new version of the toolkit to upgrade to
- You can rename the toolkit snapshots later if you want too.
- When all is done,
  - you will have a toolkit with your services and related business objects and
  - a process application with the business processes that use the services and objects

Each move operation will cause a new snapshot of the toolkit to be created. Therefore after the move you will notice the warning flag that alerts you to the fact that a new version of the toolkit is available. Upgrade to the latest dependency.

You can rename the toolkit snapshots to something more meaningful after you are done with all your moves.

When all is done, you will have a Process Application with one or more toolkits that it depends on.



In this presentation you were introduced to the fixes and enhancements in WebSphere Business Modeler V7.0.0.4.

The fixes were not discussed in detail but a link to the support center was provided. They were introduced here to give you a sense of what is delivered with this release.

The new direction for WebSphere Business Modeler was discussed, explaining the motivation behind the change in direction.

The new direction is for Process Center and not WebSphere Business Modeler to be the development tool for developing executable business processes.

WebSphere Business Modeler will continue to be the preferred tool for modeling for documentation and simulation.

There was one key enhancement delivered as part of the 7.0.0.4 fix pack, which is the BPMN2 export utility.

This was discussed thoroughly with links to more detailed information in the Information Center.

The BPMN2 export is the migration path for WebSphere Business Modeler users that want to continue modeling for execution.

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