WebSphere® Business Modeler V6.1

Analyze implementation changes

Business models created by WebSphere Business Modeler can be converted to BPEL models and exported as project interchange files. The project interchange files can then be imported into WebSphere Integration Developer where the runtime services supporting the BPEL model can be created and deployed to a WebSphere Process Server runtime.

This presentation discusses the feature called 'analyze model synchronization' in WebSphere Business Modeler V6.1 that allows the business analyst to track changes that are made in WebSphere Integration Developer that impact the business model.

Analyze changes

- Analyze changes in WebSphere Business Modeler V6.1
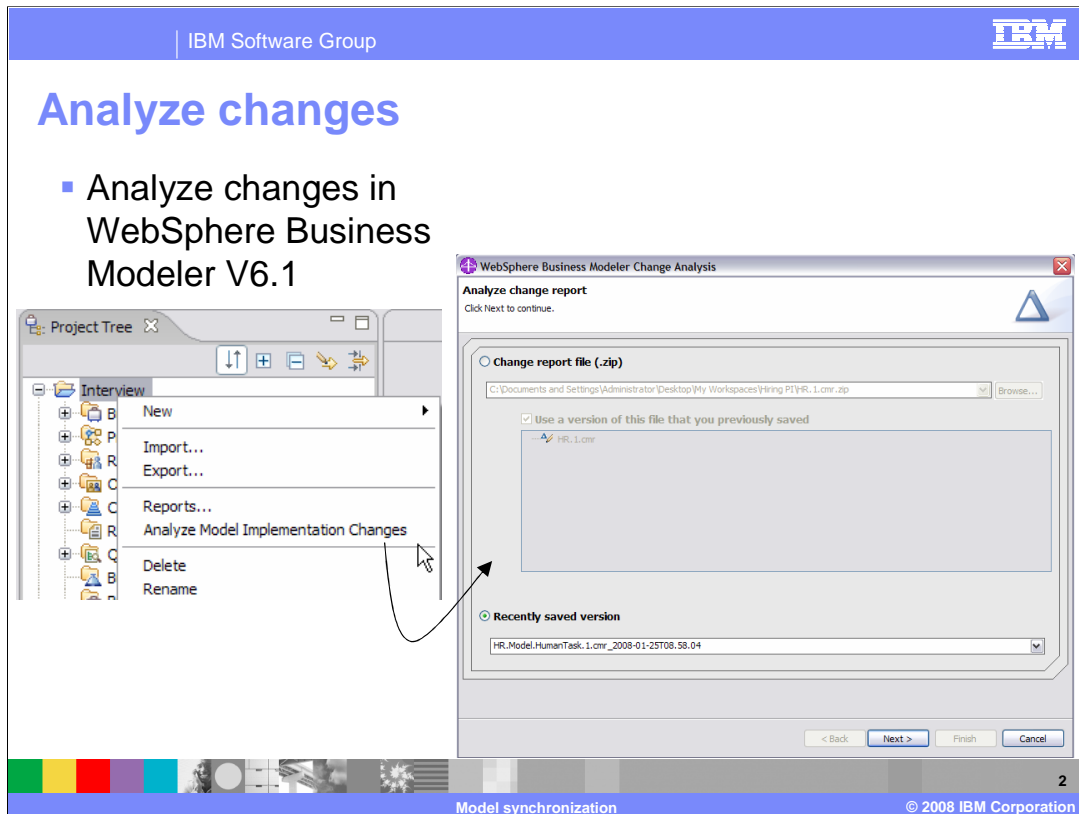
Switching to the business analyst's perspective, in WebSphere Business Modeler, you can now analyze the changes that were made by the integration developer.

Make sure you are in WebSphere Process Server mode. This option will not show up if you are not.

Selecting the 'analyze model implementation changes' option invokes the dialog shown on the right. Here you specify the change report file that you want to analyze. The change report file is provided to you by the integration developer as a result of the model synchronization.
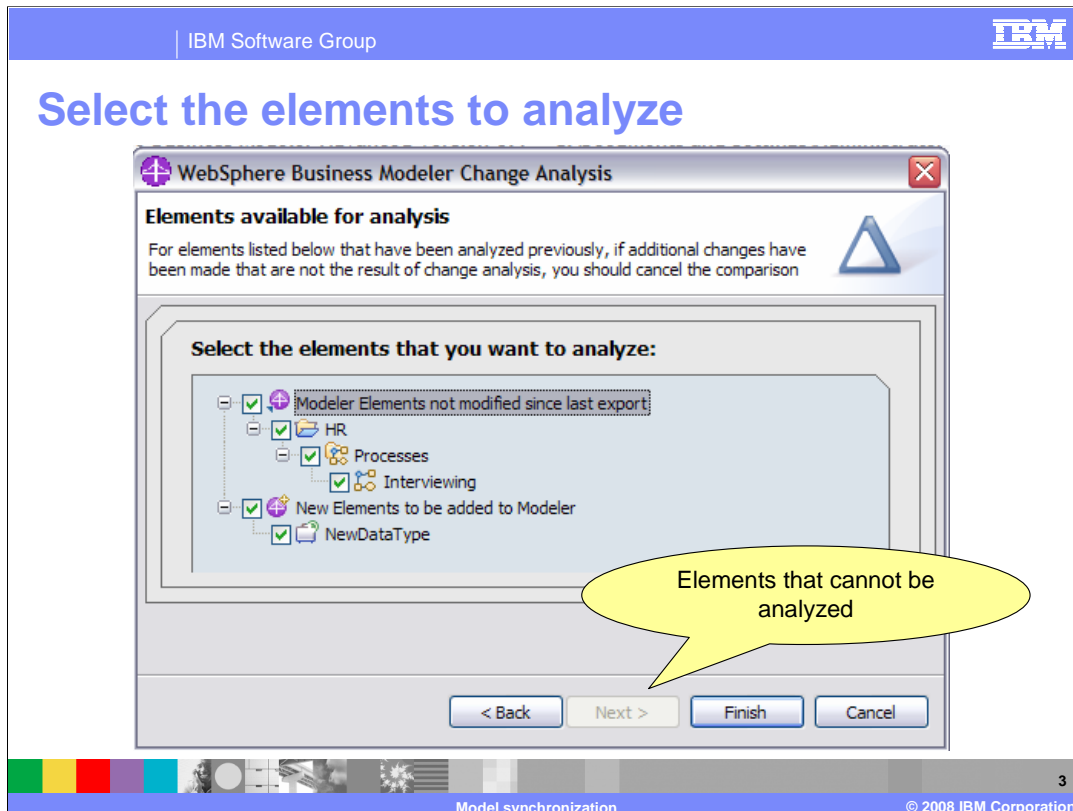
Click **Browse** and locate the archive file that contains the change report.

If you have already made changes to the business model based on this change report and saved them, you are given a list of versions to choose from.

A new version is created each time you save your work in the Change Analysis view.

Select **Recently saved version** to continue with any version of any change report that you saved in the Change Analysis view.

The previous five saved versions of any change report are shown.

Select the elements to analyze

WebSphere Business Modeler Change Analysis

Elements available for analysis

For elements listed below that have been analyzed previously, if additional changes have been made that are not the result of change analysis, you should cancel the comparison

Select the elements that you want to analyze:

- Modeler Elements not modified since last export
  - HR
    - Processes
      - Interviewing
- New Elements to be added to Modeler
  - NewDataType

Elements that cannot be analyzed

< Back   Next >   Finish   Cancel

Model synchronization

© 2008 IBM Corporation

On the "Elements available for analysis" page, select the elements that you want to analyze. There are three categories of elements.

First there are elements that have not changed in WebSphere Business Modeler since the project was exported, although they might have changed in WebSphere Integration Developer.

Second, there are new elements that have been added in WebSphere Integration Developer.

Third, there are elements that have been analyzed previously, which are identified by a specific icon. Note that because these elements have been analyzed previously, change analysis cannot tell whether they have also been modified in other ways since the project was exported. If changes have been made that do not relate to the change analysis results, you should cancel the analysis, export the updated project to WebSphere Integration Developer, and get an updated change report.

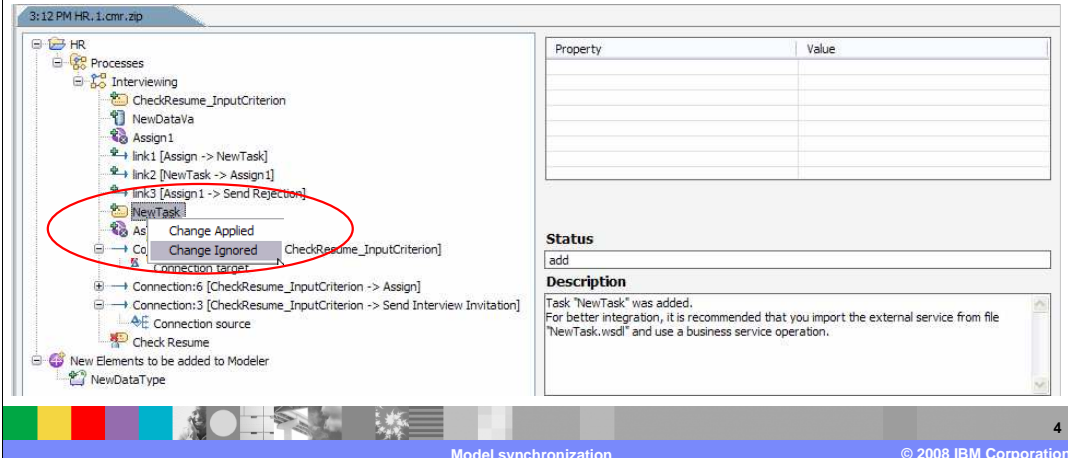When you have selected the elements to analyze, click Next or Finish.

If the next page is the "Elements that cannot be analyzed" page, it shows any elements that have changed in WebSphere Business Modeler since the project was exported.

If you want to analyze any of these elements, you must cancel the analysis, export the updated project to WebSphere Integration Developer, and get an updated change report from WebSphere Integration Developer before continuing. This is what happened in the simultaneous change scenario that was presented in the model synchronization module.

Click Finish.

Shown here are the results of the change analysis done in WebSphere Business Modeler V6.1.

You can see that the new task, along with the related elements have been added to the business implementation model by the integration developer. It is up to the business analyst to make the changes to the business model and then mark the items as applied when the work is completed.

The description in the right will aid the business analyst.

Note: It is very difficult for the business analyst to get the names and namespaces to align with what is in WebSphere Integration Developer such that the integration developer will not have to make changes to these same elements. For this reason, make the structural changes to the business model in WebSphere Business Modeler and not in WebSphere Integration Developer.

Saving the change analysis

- There are two save options available from the change analysis view.
  - ▶ Save version to another location
  - ▶ Save version

Save version to another location

Save version

Model synchronization

© 2008 IBM Corporation
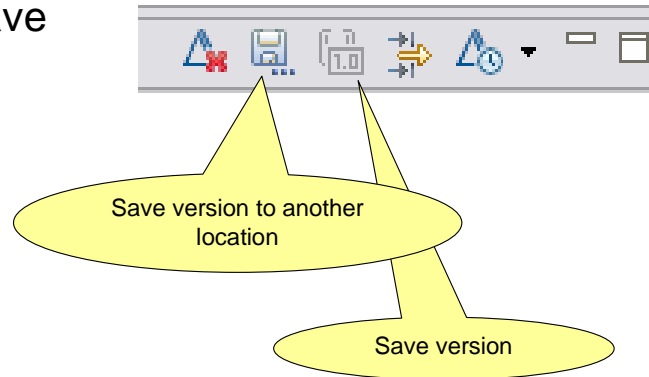
There two options for saving the work done in the change analysis view.

The "Save version to another location" is for sharing the results of the change analysis with another business analyst in another workspace.

The "Save version" is to capture the changes you make while working with the results, such as applying or rejecting a change. This option does not become available until something has been applied or rejected in the view.

Analyzing BPEL changes

- If BPEL structured activities must be added for implementation in WebSphere Integration Developer, things like….
  - ▸ Adding or removing activities to the BPEL
  - ▸ Changes to decisions and branches in the BPEL
  - ▸ Adding new business objects
  - ▸ Adding a new scope
  - ▸ Create them in WebSphere Business Modeler wherever possible.
    - **For example;** To add a FaultHandler, which requires a scope, you can create a local subprocess in WebSphere Business Modeler. This will trigger the generation of the scope activity in BPEL.

6

The integration developer, working in WebSphere Integration Developer, should avoid making structural changes to the business model in the business logic module.

Structural changes are adding or removing elements from the BPEL flow or adding new business objects.

Adding a fault handler to the BPEL flow is an example of where the integration developer might need to add a structural element to the BPEL flow. Fault handlers require a scope. The integration developer can very easily create a scope and move the activities into it.

When the business analyst analyzes the model implementation changes, the new scope is detected and the business analyst will then need to create a sub-process in the business model and move the appropriate tasks into it. Because of the naming and namespace issues, its much easier if structural changes come from the business model, top down, rather than from the business logic module of WebSphere Integration Developer.

Effecting changes in WebSphere Integration Developer

Supported BPEL construct	Recommended implementation in Modeler
Scope	See Subprocess modeling for application development
Switch	See Decision modeling for application development
While loop	See Loop modeling for application development
Flow, Sequence	Create a local subprocess to capture nested process flow logic. A local subprocess will be transformed to a BPEL scope with a flow activity. See Subprocess modeling for application development
Pick	Multiple inputs. See modeling alternative entry points

The BPEL constructs listed here have no direct corresponding element in WebSphere Business Modeler V6.1.

The table shown here is from the on-line help available with WebSphere Business Modeler V6.1. The underlined words on the right link to sections in the documentation that discuss what you need to do in modeler to cause the element on the left to be generated in WebSphere Integration Developer.

If you need to have a scope in your business implementation model, then you need to create a sub-process in the business model. The sub-process in the business model will cause the scope element to be created in the BPEL model in WebSphere Integration Developer.

If you need to have a Pick in your BPEL model then select the link to "multiple input" and it will describe how to construct your business model so that the pick is created.

Change analysis reporting

- If added in WebSphere Integration Developer and not WebSphere Business Modeler …

BPEL construct	Change analysis results
Scope	Change analysis reports the scope activity and its contents.
Switch	Change analysis reports a new decision and merge node. The condition expression, however, is not brought back to WebSphere Business Modeler.
While loop	Change analysis reports a new while loop and its contents. The condition expression, however, is not brought back to WebSphere Business Modeler.
Flow, Sequence	If a flow or sequence is added in WebSphere Integration Developer without a proper structured activity (such as scope, switch, or while loop) as its parent container, change analysis reports the contents of the flow or sequence.
Pick	If the pick activity has the createInstance flag set to yes, change analysis reports a new input criterion (or criteria) as an entry point to the process. Otherwise, change analysis reports an unsupported activity added to the process. Adding a pick activity in the BPEL process might not be reported correctly since it is not directly supported in WebSphere Business Modeler.

The table shown here is also from the on-line help that is available with WebSphere Business Modeler V6.1.

This table shows what the messages will be in the model implementation analysis if you add one of these structural elements to the BPEL model.

Adding any of these elements to the model in WebSphere Integration Developer will require considerable work on the behalf of the business analyst.

On line help is helpful
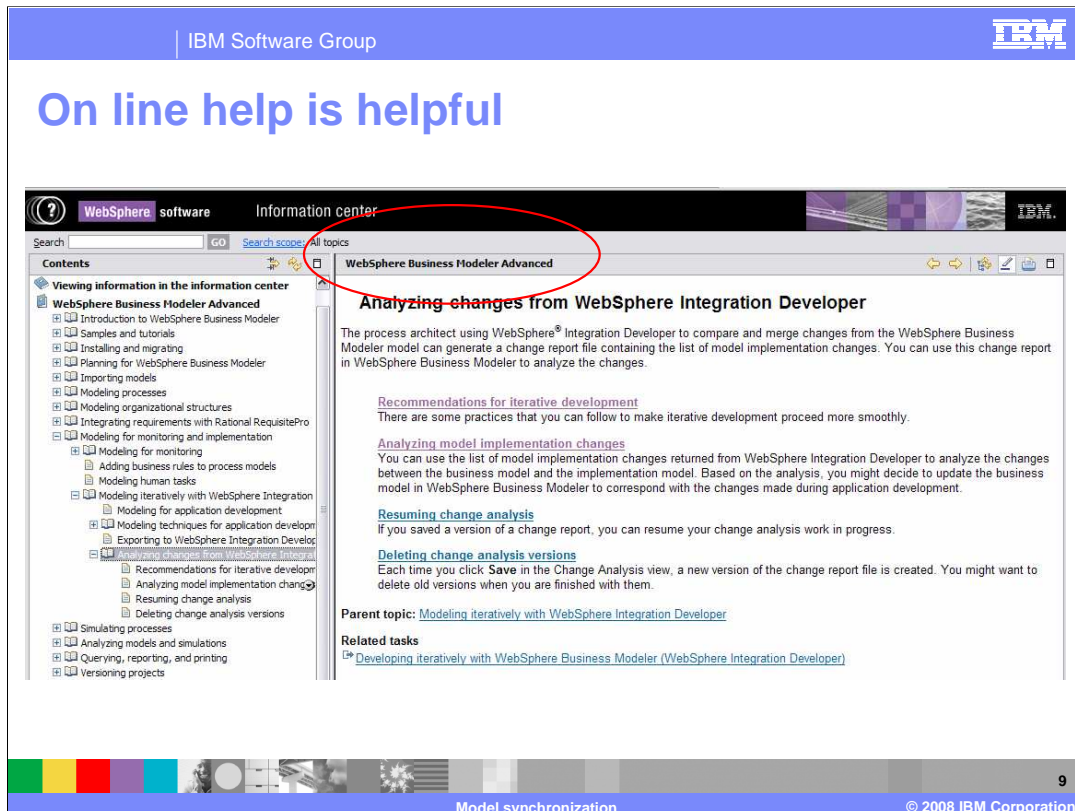
Shown here is the section of the on-line help where you can quickly find detailed information about analyzing the changes coming from WebSphere Integration Developer V6.1.

You should locate these topics and bookmark them.

Summary

- The business analyst can track and manage changes made during implementation that impact the business model.

- A change report is generated during the model synchronization in WebSphere Integration Developer V6.1

- Change report is used by WebSphere Business Modeler V6.1 in the 'analyze implementation changes' function.

10

Model synchronization

© 2008 IBM Corporation

Analyzing the implementation changes is the final step in the model synchronization scenario. The model is initially created in WebSphere Business Modeler and then exported to WebSphere Integration Developer. The implementation is realized in WebSphere Integration Developer and the change report is generated as an output of the model synchronization step in WebSphere Integration Developer.

The change report is then used to keep the original model in WebSphere Business Modeler up to date.

Feedback

Your feedback is valuable

You can help improve the quality of IBM Education Assistant content to better meet your needs by providing feedback.

- Did you find this module useful?
- Did it help you solve a problem or answer a question?
- Do you have suggestions for improvements?

Click to send e-mail feedback:

mailto:iea@us.ibm.com?subject=Feedback_about_WBIV61_WBModelerUpdate_WID.ppt

This module is also available in PDF format at: ../WBIV61_WBModelerUpdate_WID.pdf

Model synchronization

© 2008 IBM Corporation

11

You can help improve the quality of IBM Education Assistant content by providing feedback.

Trademarks, copyrights, and disclaimers

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM   Lotus   WebSphere

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. This document could include technical inaccuracies or typographical errors. IBM may make improvements or changes in the products or programs described herein at any time without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectual property rights, may be used instead.

Information is provided "AS IS" without warranty of any kind. THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IBM shall have no responsibility to update this information.   IBM products are warranted, if at all, according to the terms and conditions of the agreements (for example, IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products.

IBM makes no representations or warranties, express or implied, regarding non-IBM products and services.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

© Copyright International Business Machines Corporation 2008. All rights reserved.

Note to U.S. Government Users - Documentation related to restricted rights-Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract and IBM Corp.