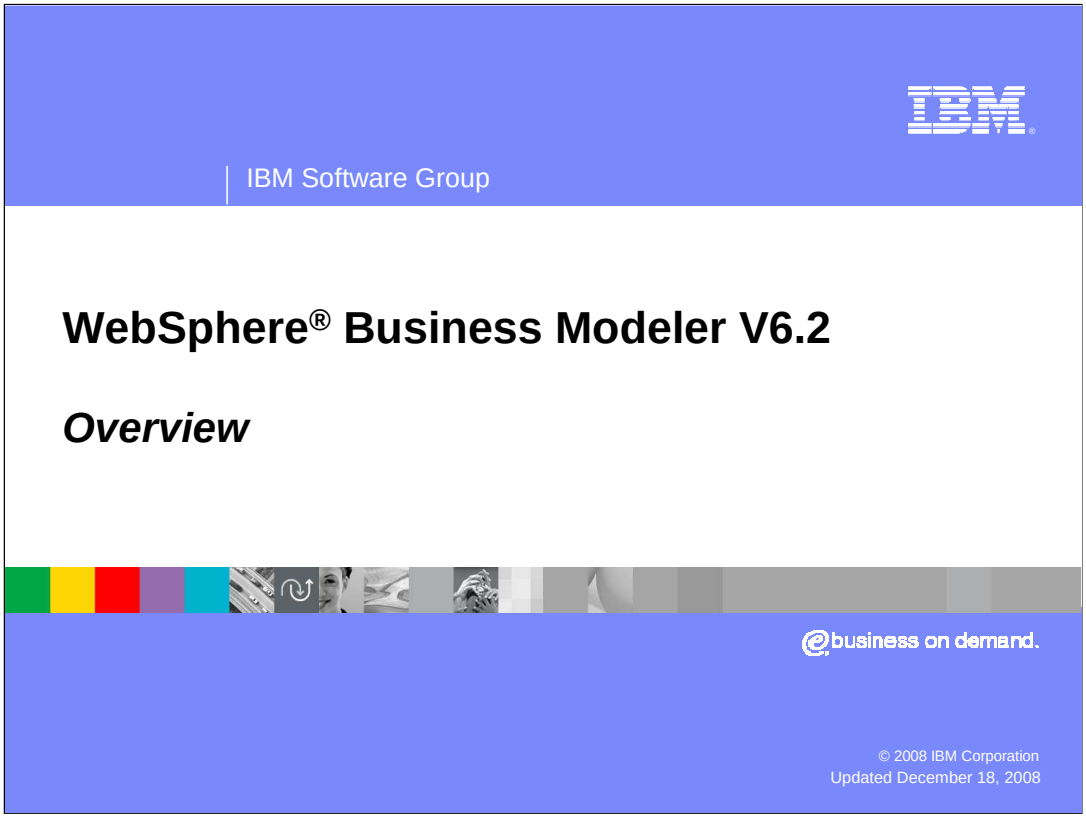

This presentation provides an introduction to the new features for WebSphere Business Modeler V6.2

New features and improvements

- Enhancements
  - Process editor
  - Monitoring
  - Model synchronization with compare merge
  - Reporting and printing
  - Fabric integration
  - Data map
- New code generation patterns to support model driven development
- Simulation of human centric business processes
- Direct deploy of human centric business process

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Improvements touch all areas of WebSphere Business Modeler.

There are usability enhancements throughout the process editor such as a more efficient toolbar, a single place to edit the diagram settings, and the navigation of nested processes and structures. You will also be pleased with the new simplified layout in general. There are fewer tabbed views to work with and you can now show or hide the ones that you do not work with frequently.

Aside from the basic incremental improvements there are also new features such as the ability to create and run simulations with human tasks or to deploy your human centric business process directly to a “Managed Sandbox”. The managed sandbox being a running WebSphere Process Server where you can quickly and easily test and verify your business process using the new “Business Space” framework.

Modeling for deployment to the WebSphere Process Server runtime has been a feature of WebSphere Business Modeler for several releases now. With version 6.2 of WebSphere Business Modeler and WebSphere Integration Developer key modeling elements are available on both sides and that they are presented consistently.

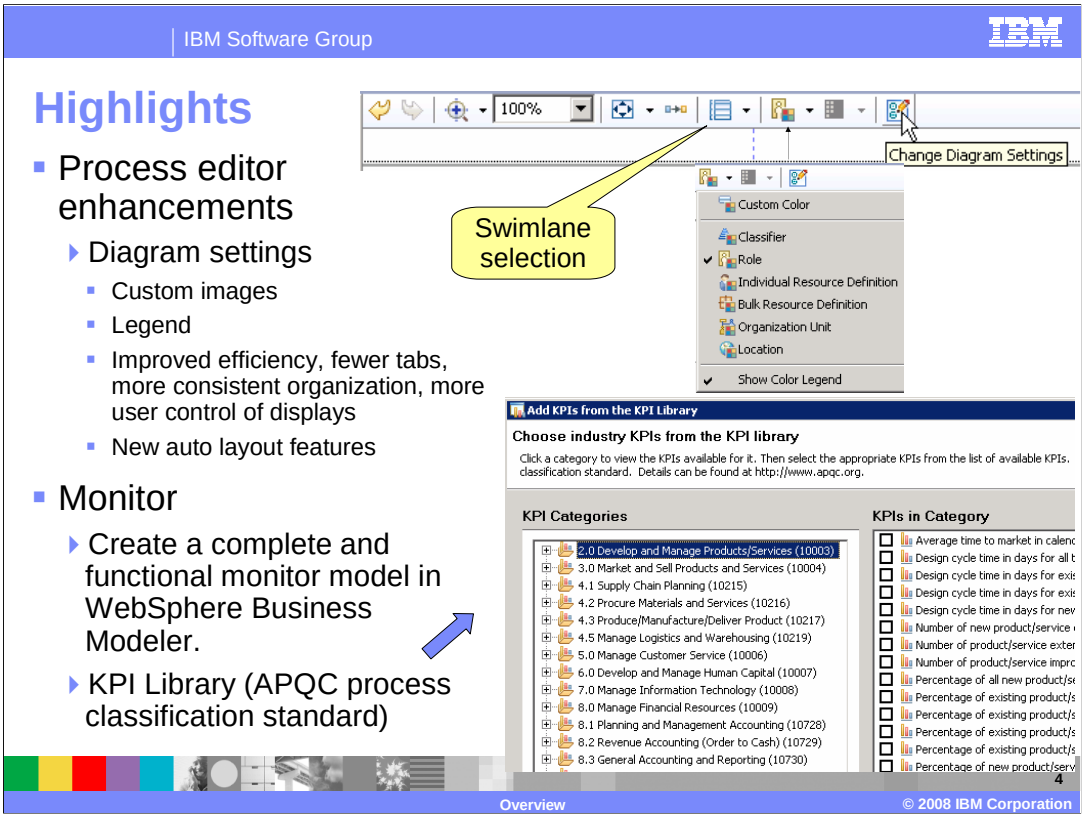
If you are modeling for deployment to WebSphere Process Server, you will see that the human tasks, business rules, business calendars and data maps are consistent in both tools. This will facilitate communication with those doing the implementations and reduce the development time.

With the support for fault handling and cyclic flows, when you make use of the exceptional outputs to go back to a previous task, your business model is carried forward to WebSphere Integration Developer. The appropriate fault handling and control flow is generated for you in BPEL.

You will now also be able to walk through your human centric business process using the simulation feature. During the course of a simulation, if you come to a human task, the simulation will pause and provide you the opportunity to input the necessary data. The data inputs can be saved allowing you to rerun the scenarios quickly at a future time. Storyboarding is part of the human task simulation feature that allows you to walk through the input and output forms without actually running the simulation. This is useful when gathering requirements from stakeholders and trying to work out the order of the inputs and verify the forms.

Exporting to the Rational Asset Manger now supports all the same export options as the file based export to WebSphere Process Server.

The most exciting new feature is the direct deployment of human centric business processes to the managed deployment environment. With this feature you can now deploy a business process directly to a stand-alone WebSphere Process Server and step through the tasks using a special “test environment” Business Space. You can use business rules, exceptional outputs, cyclic flows, and human tasks. You will even be able to invoke existing services that have already been deployed.



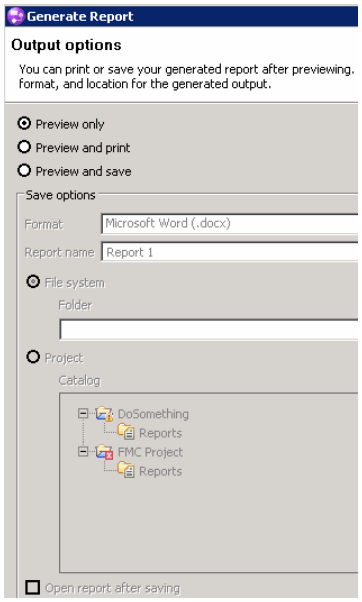
The process editor is chock full of improvements to make the modeling experience more efficient. All of the options for managing the way the process editor behaves, looks and feels, have been consolidated into the “Diagram Settings” option, which is readily accessible from the toolbar. You will also notice that many controls that were previously available on the process editor palette have been moved. You will find them either in the diagram settings or the toolbar.

Check out the diagram settings and familiarize yourself with the options that are available there. There you will find the custom images, the switch to display the legend or not, the grid line controls and much more.

Keeping in line with the direct deployment theme, support has been added to the business measures to guide you toward creating a complete and runnable business model without additional support. There is now an extensive library of standard KPIs as defined by APQC process classification standard, available for your use.

Highlights

- Reporting and printing
  - A single, consistent report wizard through out WebSphere Business Modeler
  - Smarter and more aware of the context,
  - Page break and layout support
    - Report and poster modes
- Support for WebSphere Dynamic Process Edition (Fabric)
  - Indicate which business item attributes should be used within the policies that control the service selection



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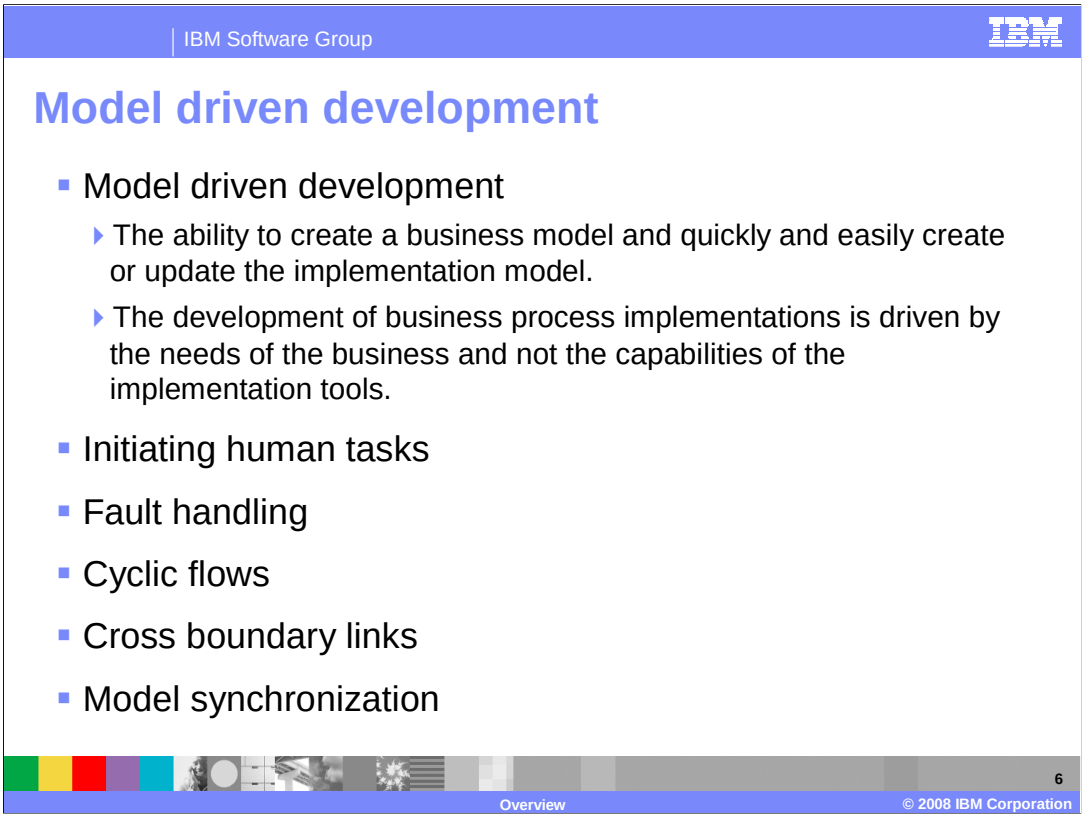
The reporting and printing has been streamlined. The various report functions and options have been consolidated into a single “context aware” wizard.

Improved support for the WebSphere Dynamic Process Edition, commonly known as Fabric, means you can specify which business item attributes should be used for the dynamic service selection.



The goal of model driven development is to create business applications that meet the needs of the business. Quite often, because of technical considerations what gets modeled cannot be created in the implementation of the business process. This then requires reworking the business model to fit in with what can be implemented. In this case the technical implementation is driving the business model.

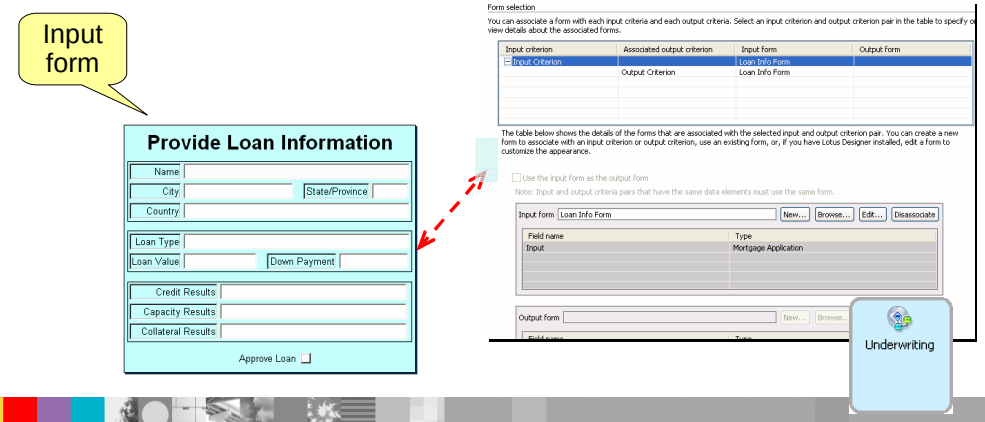
By providing the same capabilities in both the modeling and implementation tools, the technical gap is narrowed, development time is reduced and it becomes possible to create runnable business models.

The features listed here are areas that have been aligned between WebSphere Business Modeler and WebSphere Integration Developer V6.2, enabling the direct deployment feature and improving the overall model driven development support.

Initiating human tasks, fault handling, cyclic flows, cross boundary links and model synchronization are discussed in the next few slides.

Model driven development: initiating human tasks

- Process-initiating human tasks
  - Associate Form with a process
  - Generates human task to initiate process instances
  - Has been available in WebSphere Integration Developer and is now available in WebSphere Business Modeler as well



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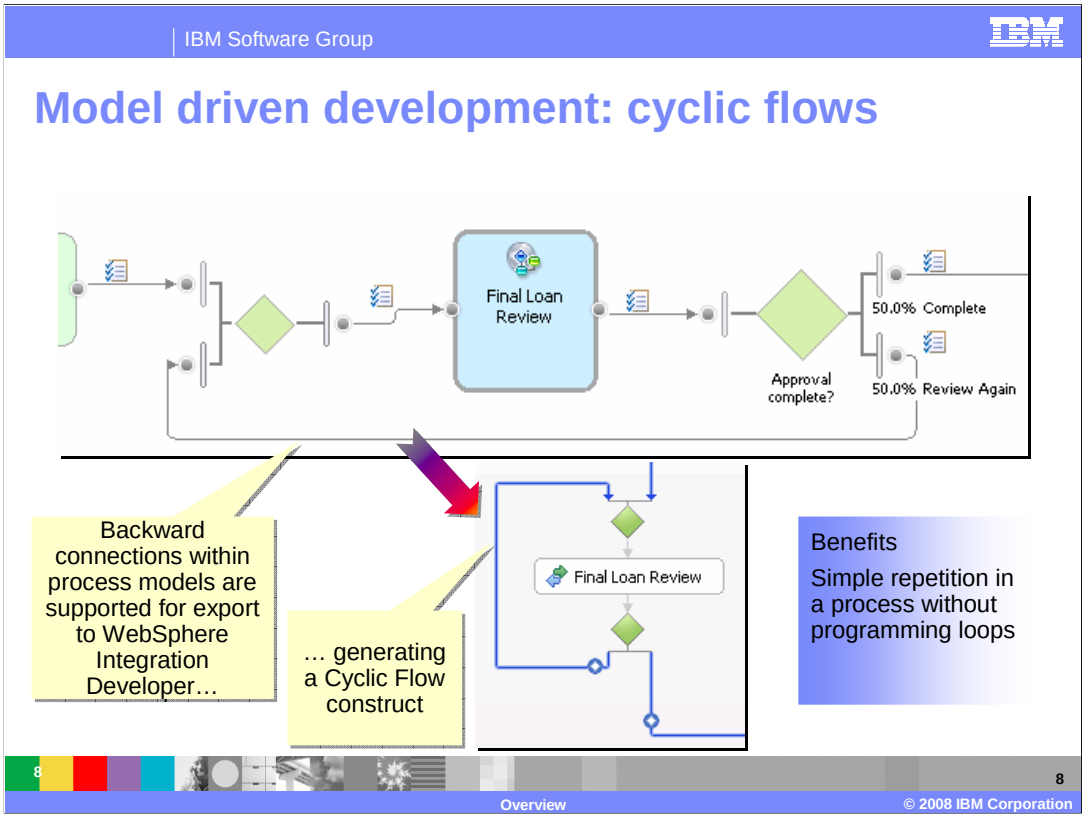
Starting a business process generally requires the input of information. A common pattern is to have a person fill out and submit a form which then starts the business process.

This is essentially a technical consideration that results in the creation of certain runtime artifacts, such as an inline human task.

The inline human tasks are created whenever exporting to WebSphere Process Server.

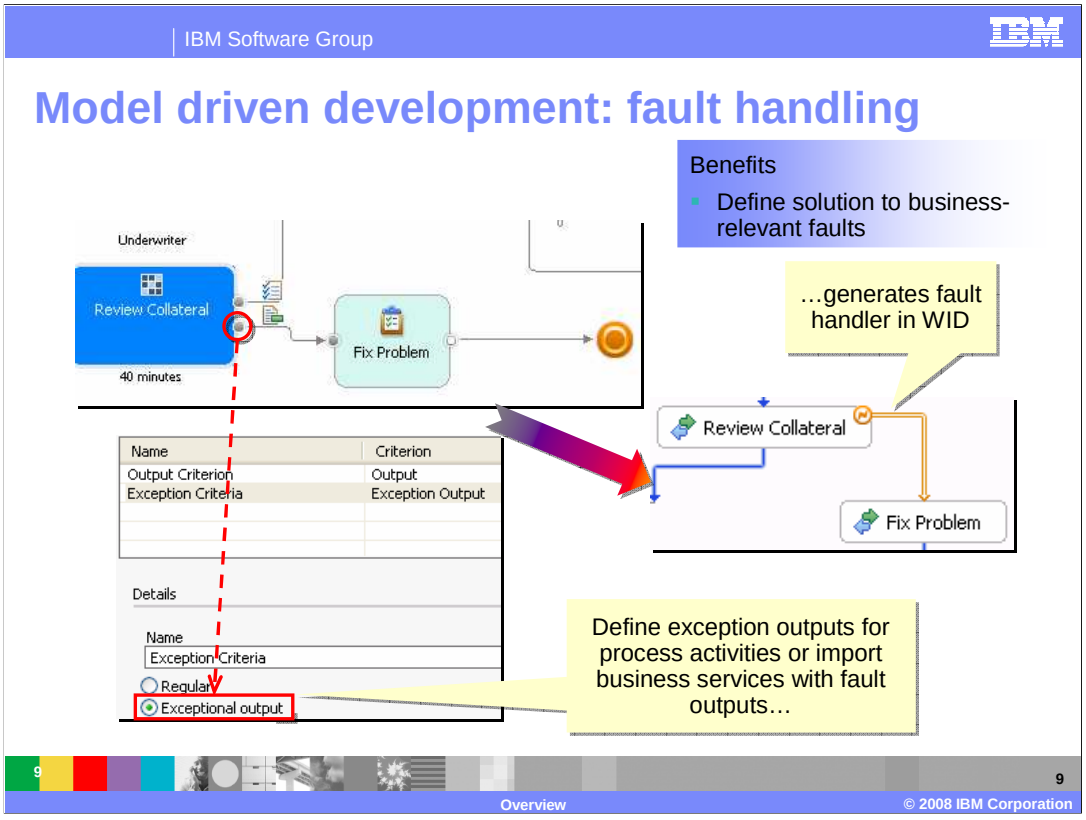
In WebSphere Business Modeler, the business user has the opportunity to create the input form and associate it with the business process.



The ability to model and simulate a business process that loops back to a previous task has been available in WebSphere Business Modeler for several versions. What has been missing is the ability to generate this pattern when exporting to WebSphere Process Server.

As you can see here, the process flow on the top comes back, permitting the loan application to be reviewed again. The flow at the bottom is the BPEL flow that is generated when exported to WebSphere Integration Developer V6.2.

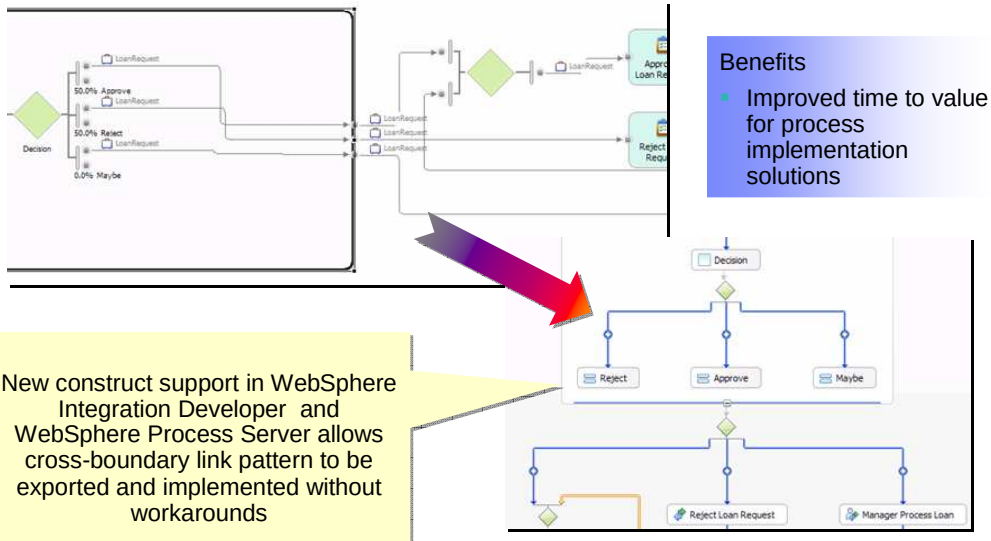
The business user now has the ability to use this common modeling technique when “modeling for deployment”.



Fault handling has been available both in WebSphere Business Modeler and WebSphere Integration Developer but they did not work together. The faults in WebSphere Integration Developer were relegated to the world of technical faults and the business exceptions, as defined by the exceptional outputs in WebSphere Business Modeler, were not carried forward to the implementation model.

With V6.2 the exceptional outputs are now mapped to BPEL fault links in the implementation model, providing a smooth transition from the business model to the implementation.

Model driven development: cross-boundary links



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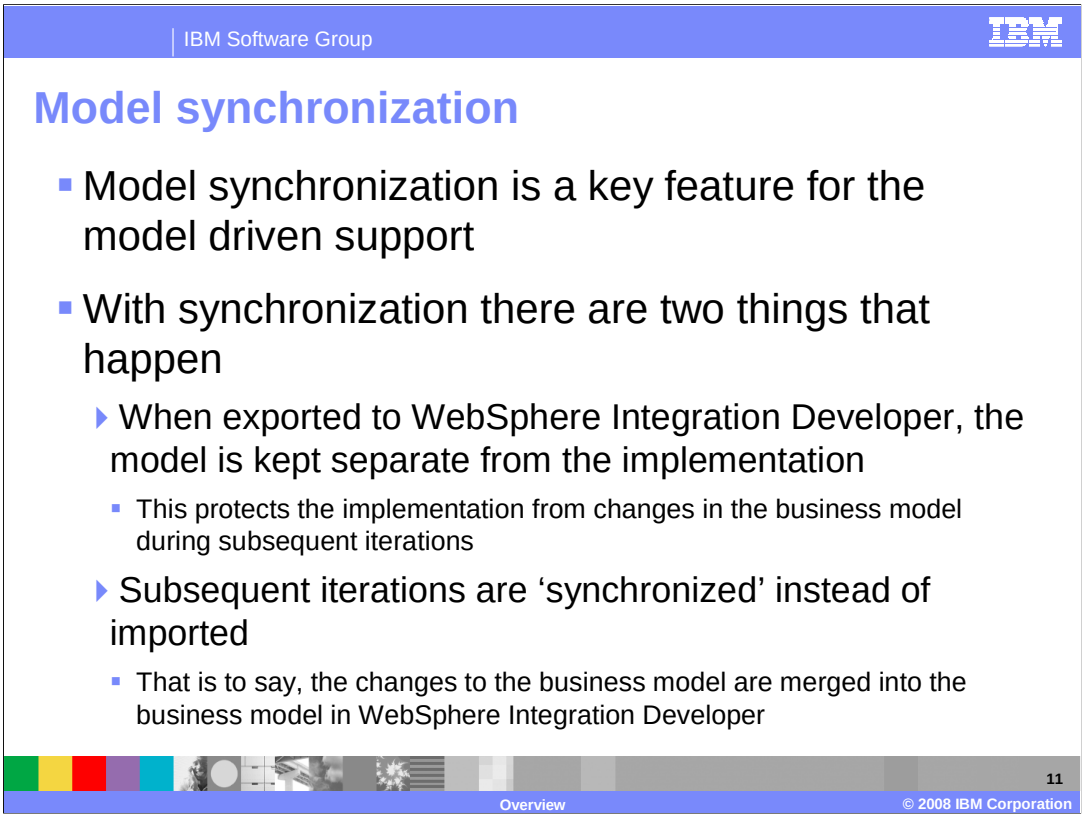
When modeling business processes the distinction of a scope in a local subprocess or loop is not important. A scope is a technical artifact used to maintain isolation of the data values in the subprocess of loop. In order to correctly map a local subprocess to BPEL there must be a way to move the data values from the business process to the outer scope.

With V6.2, this is achieved with a special BPEL generation pattern using a combination of BPEL assigns and links with embedded logic.

The result is a seamless transition from the business model to the implementation model, without additional workarounds in WebSphere Integration Developer V6.2.



With model synchronization there are two things that happen.

First; when exported to WebSphere Integration Developer, the model is kept separate from the implementation. This protects the implementation from changes in the business model during subsequent iterations.

Second, subsequent iterations are ‘synchronized’ instead of imported. That is to say, the changes to the business model are merged into the business model in WebSphere Integration Developer.

Model synchronization enhancements

- Fabric
- WebSphere Process Server components
  - Cyclic flows and Fault handling
- Data maps
  - Forward compare/merge will fully support Map nodes and their corresponding counterparts in WebSphere Integration Developer.
- Human tasks
  - Regular human tasks
  - Initiating human tasks
- Business rules
- Business calendars

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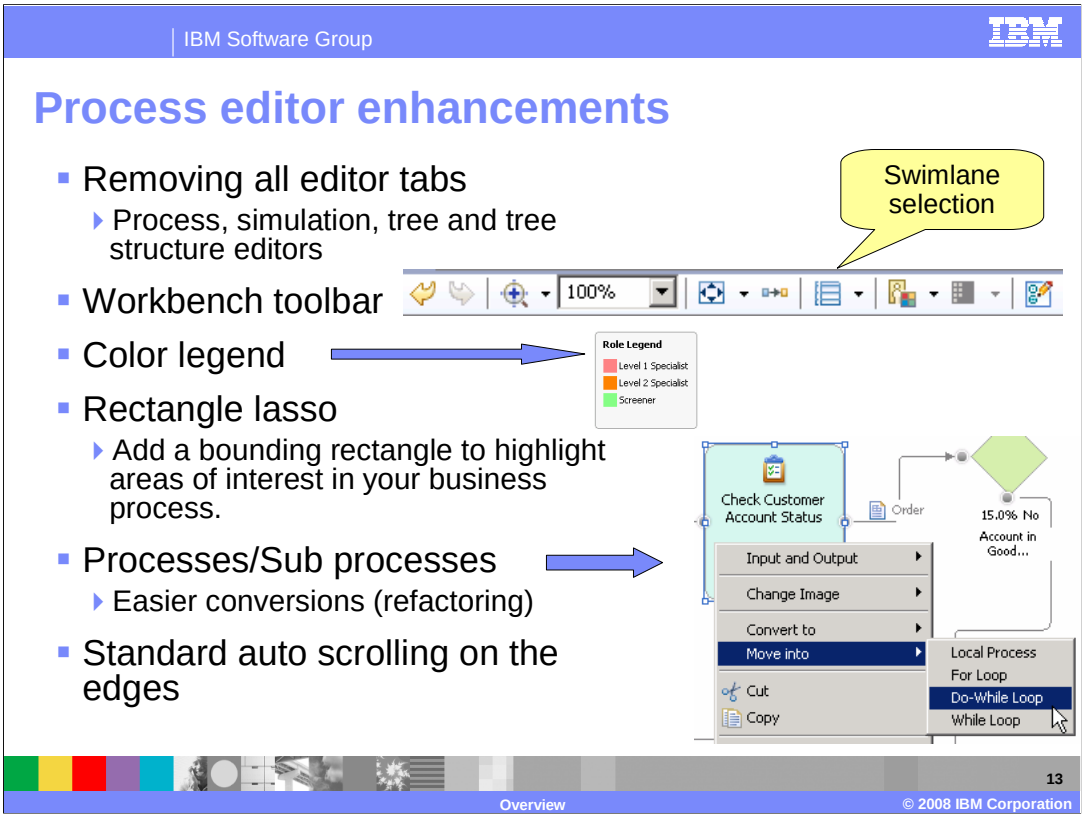
The model synchronization feature will fully support the new constructs being introduced into WebSphere Business Modeler V6.2.

You can use the new modeling elements with the expectation that changes made in WebSphere Business Modeler will be merged into the implementation model in WebSphere Integration Developer.



This slide takes a closer look at some of the new process editor enhancements introduced with V6.2. If you have not already seen the presentation for WebSphere Business Modeler V6.1.2, you may want to view it also. There were several process editor enhancements introduced there as well.

Overall clutter in the editor environment has been reduced by consolidating options into the diagram settings on the toolbar, moving function off the palette to the toolbar and reducing the number of tabbed views.

When exploring the new toolbar, be sure to check out the undo redo arrows on the left and the swimlane selection. The swimlane selection works in conjunction with the “color by” setting just to the right of it.

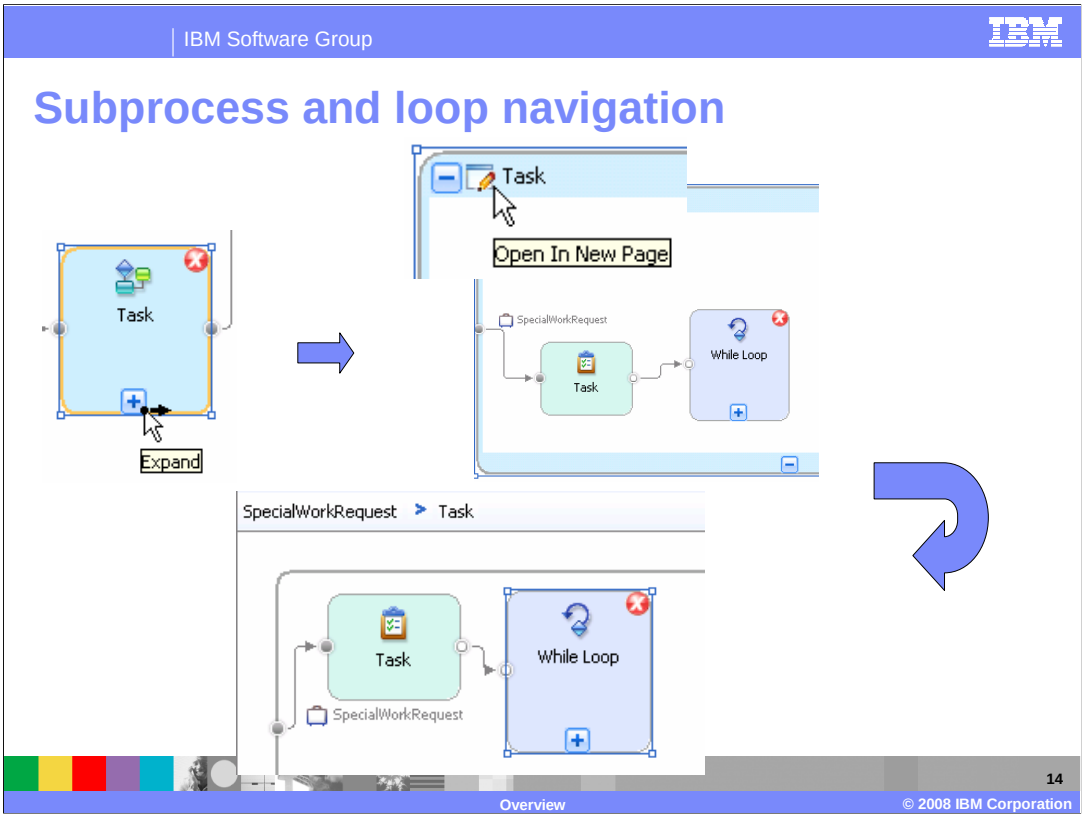
The color legend is new. It can be used to easily indicate what roles are assigned to the human tasks or other resource assignments.

The color legend is also published to the WebSphere Business Modeler Publishing Server if it is visible on the diagram when published.

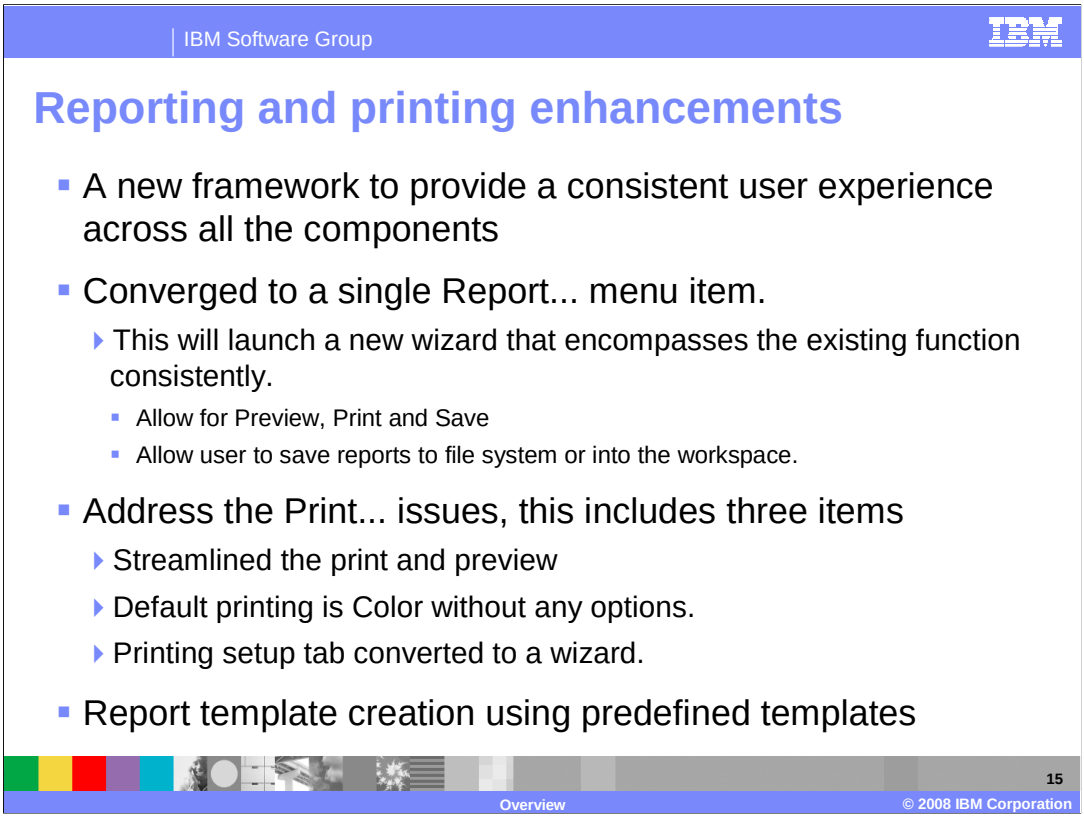
The lasso rectangle is used to highlight areas of interest in your business process. It is a bounding rectangle. There is no semantic meaning associated with it.

The new “move into” option is really slick. This is a refactoring tool that allows you select a group of elements and move them into a local subprocess or loop.

And then of course the scrolling now lets you move beyond the currently visible boundaries without having to release whatever you have selected in your mouse, such as a connection endpoint. This is a nice usability improvement.



Ever want to see what was in that subprocess or loop? Now you can easily expand them in place and if you want to switch to viewing it in a new page you can do that also. When in a new page you can return your original process using the breadcrumb links. When viewing inline you can return to next level up by selecting the minus sign in the menu bar.



Generating reports with WebSphere Business Modeler has become easier with the new wizard driven reporting framework.

Improvements to the printing functionality are focused on streamlining the print and preview task and configuring the printing setup.

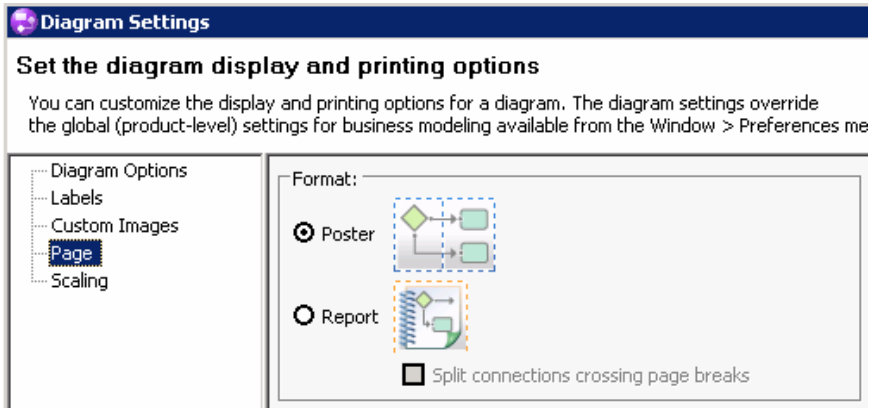
Additionally the relevant report templates are easier to find and use, with the appropriate templates being presented to you based on the context of what they are doing.

You now have the ability to save a report to the file system or to a project in your workspace.

The color printing option has been removed. All printouts are in color. Black and white or grayscale printing can be achieved using the printer drivers associated with the printing device.

Printing formats

- Auto layout
  - Manages the page boundaries when printing reports
  - Compact, poster, report



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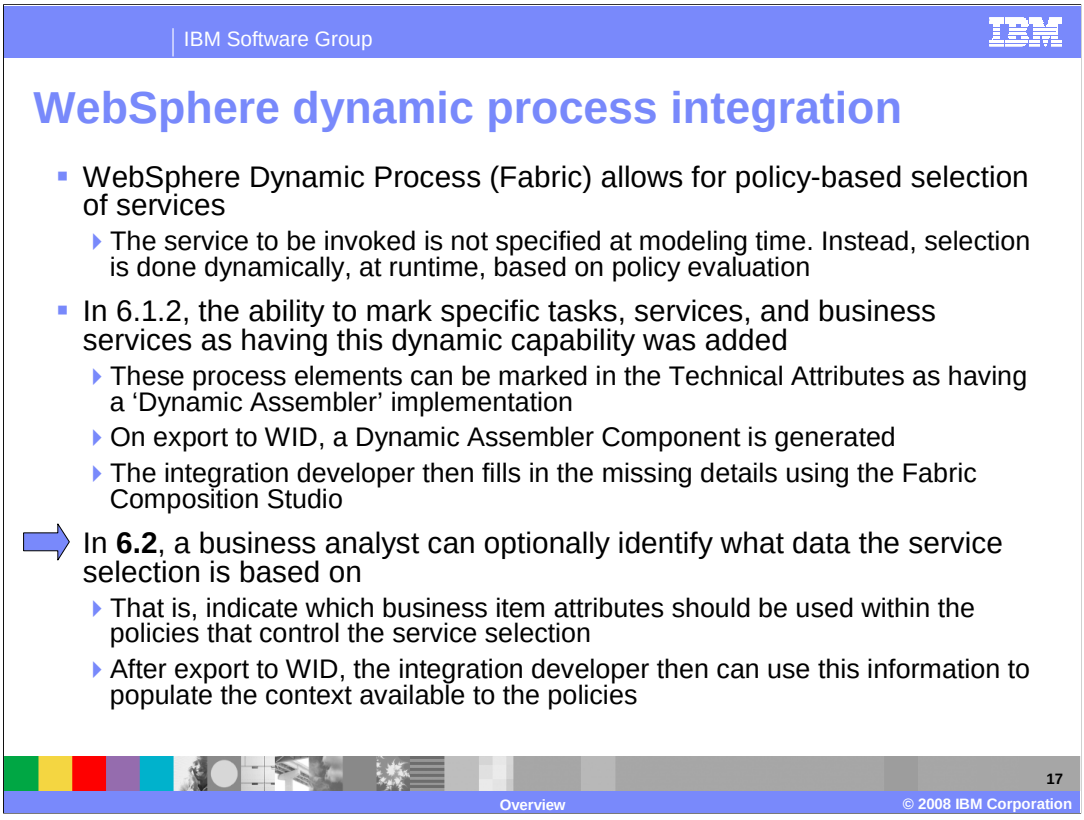
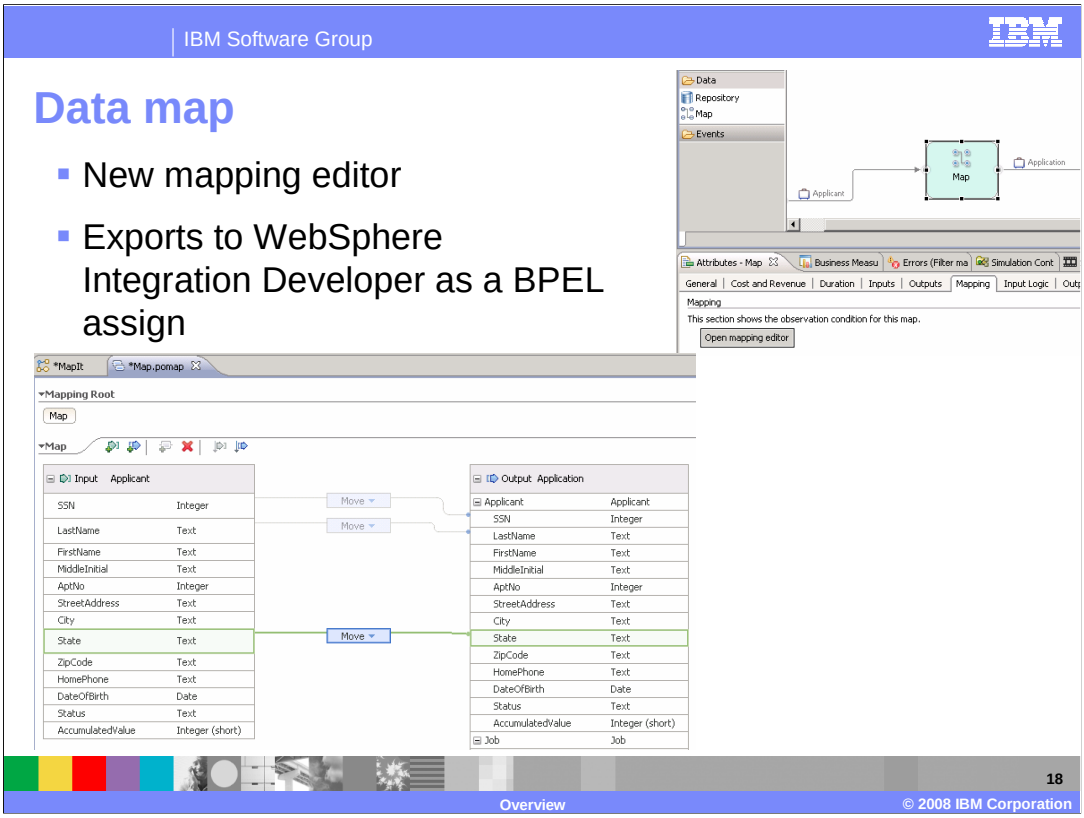
Here you can see that there are a couple of other new printing options available in the ‘diagram settings’.

The poster format will print the diagrams so that they can be pasted back together to create a wall poster and the report format can be used for creating reports for a three ring binder. Notice that there is an additional option to split the connections when crossing a page boundary. When this option is selected, connector tabs are created on both ends of the connectors to help you locate the other end of the connection in the report. The page numbers are indicated on the ends of the links.



Support for Fabric was first introduced with WebSphere Business Modeler V6.1.2. From the modeling perspective that was a matter of setting the target modeling mode and the implementation type in the technical attributes.

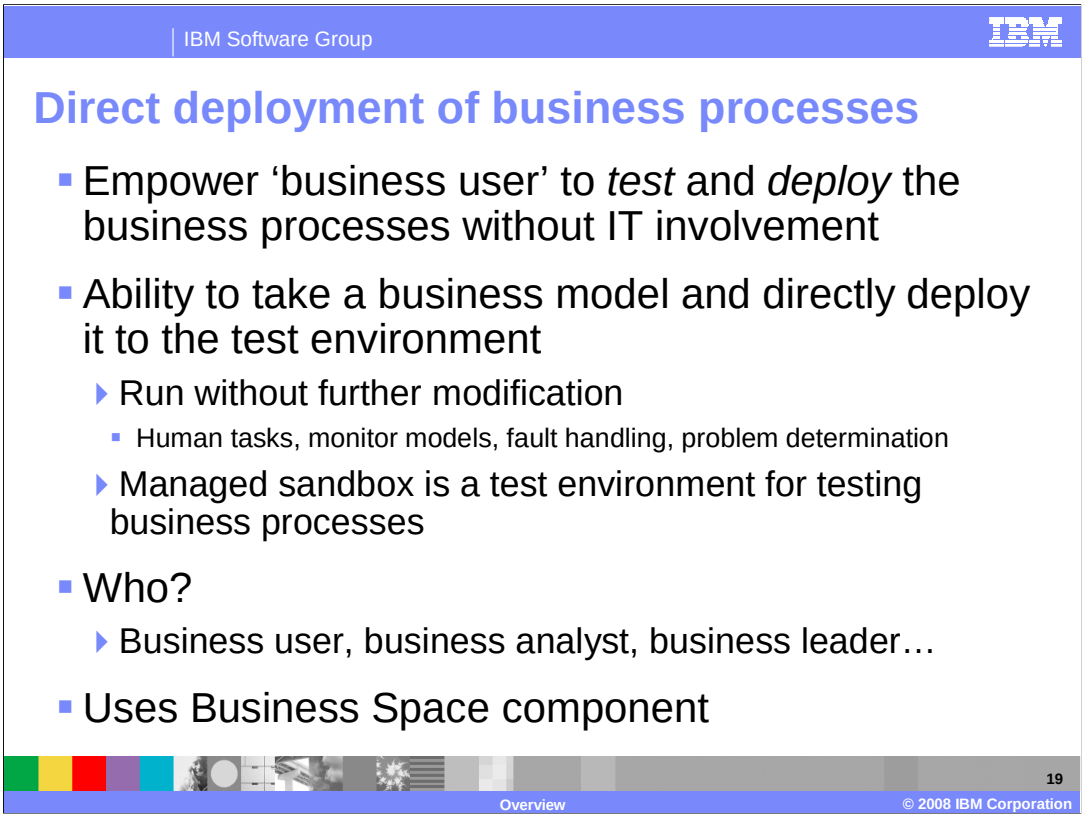
With V6.2 the business user can now specify which attributes can be used for dynamically selecting a service at runtime.



Data maps provide the ability to map data values from one kind of business item to another.

With version 6.2 a new data map editor is available. The new data map looks very much like the data maps available in WebSphere Integration Developer and operate in the same way. Just select the element on the left and wire to the appropriate element on the right. Here again you see the convergence between the modeling and implementation tools.

When the data map is used in your business models and imported into the WebSphere Integration Developer V6.2, it is converted to a BPEL assign element automatically.



Direct deployment of a business process to a testing environment is an exciting new feature of WebSphere Business Modeler V6.2.

The goal is to empower the business user to create and run their business processes without the need for intervention from the IT organization.

Deployable business processes can have human tasks, business rules, monitor models, and business exception handling. They can also invoke existing business services if they are available. When problems arise, the must gather information is easily gathered, to be shared with the IT team.

The business user uses the new Business Space framework to interact with the business process as they step through the running business process.

Direct deploy scenario -

- Business user wants to create a new business process
  - Human tasks and error paths (faults) are used
- The business user creates the process in WebSphere Business Modeler
- They connect to the managed sandbox
  - Using a predefined configuration
- Deploy the business process to the managed sandbox
- Claim the business process and step through the tasks using the *Business Space* test environment
  - If problems are encountered, the problem determination information can be gather and sent to the IT group for assistance
- Verify that the model is correct and does what its supposed to do.
- Hand off the business process to the implementation team for formal deployment

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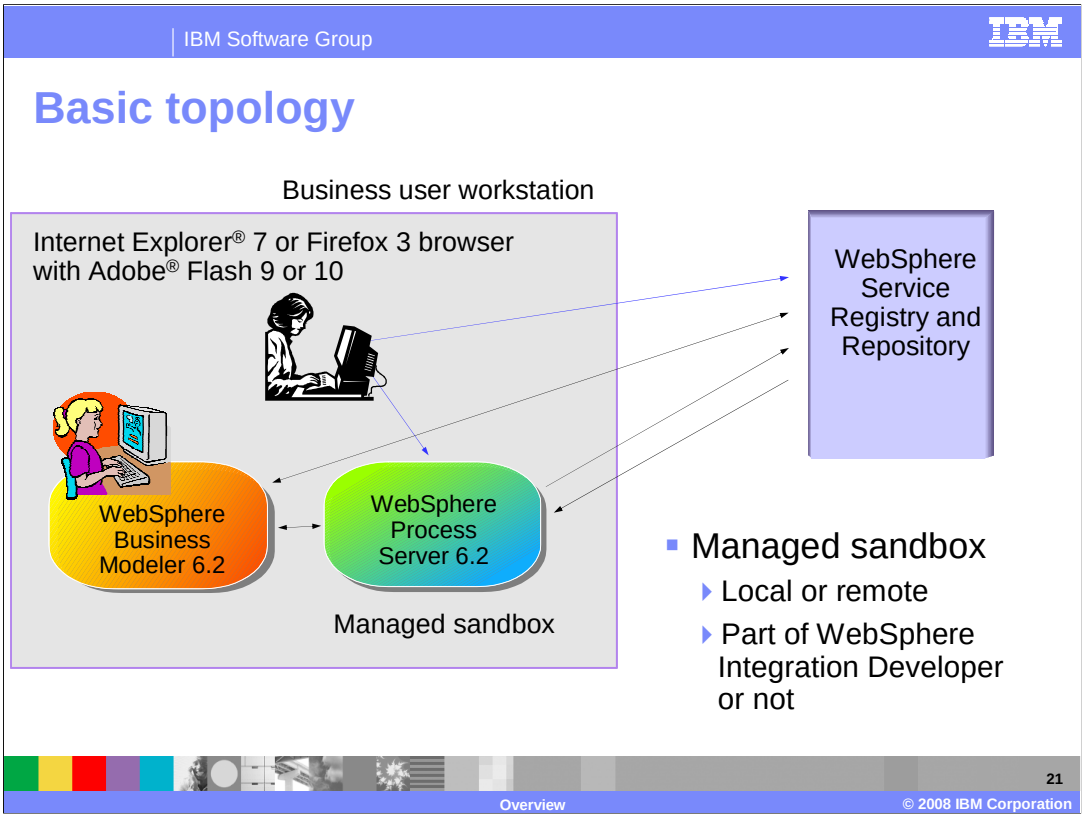
Shown here is an outline of the steps a business user goes through to deploy and test a business process using the new direct deployment feature.



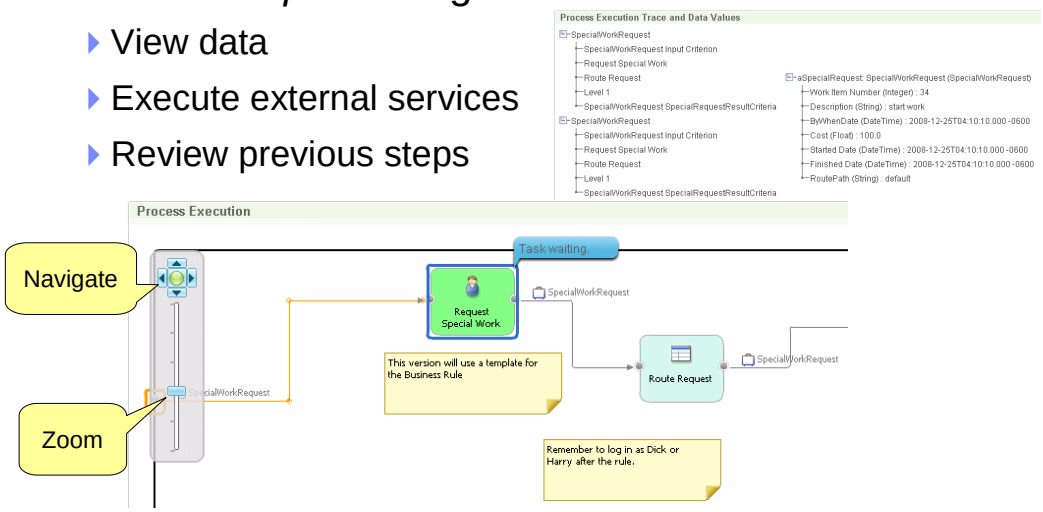
With the direct deployment feature there is some setup required by the IT team. Shown here is the basic topology, including the use of the WebSphere Service Registry Repository for managing and locating service implementations and interfaces.

The managed sandbox is a stand-alone WebSphere Process Server V6.2 server. It can be the process server that is part of the WebSphere Integration Developer test environment or not. It can be local or remote. The most efficient configuration for the business user is to have a remote stand-alone process server that is not part of WebSphere Integration Developer.

The business modeler uses WebSphere Business Modeler V6.2 to deploy the business process the managed sandbox and then use the browser based Business Space to interact with it. The business process running in the sandbox will access the WebSphere Services Registry and Repository to resolve any endpoints if necessary.

Visual stepping

- Trace a business process in real time using *Business Space* widgets
  - View data
  - Execute external services
  - Review previous steps



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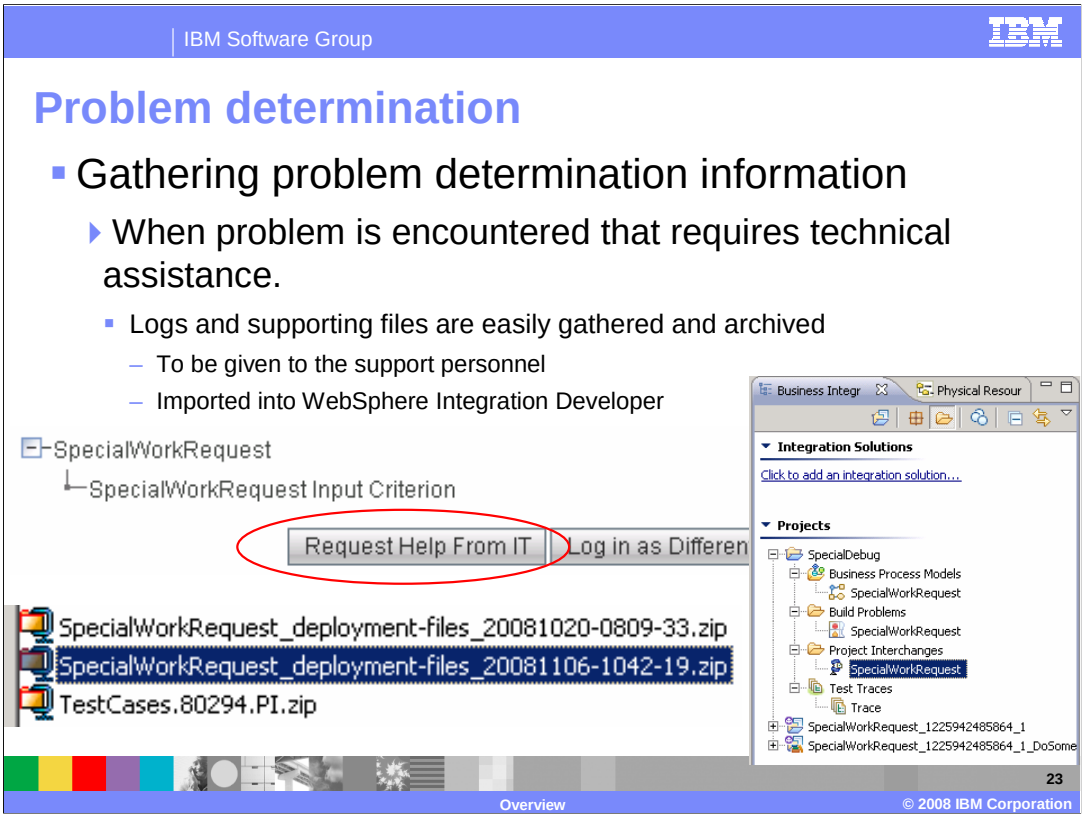
Here you see the execution trace for business process as it is displayed in the process execution widget in the Business Space test environment. The Adobe Flash Viewer 10 is being used to display the business process diagram and display the current state of the business process. The data can be inspected for the current or previous steps in the process using the “process execution trace and data values widget.”

The current step is highlighted in blue and the previously processed steps and links are highlighted in orange.

There is a full range of zooming and navigating tools for exploring large business processes.

Claiming a task and inputting data using forms is done with other Business Space widgets that are not shown here.



At the bottom of the process execution widget, there are some buttons. The button of interest here is the Request Help From IT. This button will collect and zip up the must gather information for the business user. The business user then sends the problem determination archive to the IT support team. This will give them everything they need to debug the problem using WebSphere Integration Developer V6.2

Summary

- Process editor enhancements
  - Much more efficient
- Reporting and printing
  - A new unifying, wizard driven, framework
- Modeling for deployment
  - Incremental support for new and existing modeling elements
  - Complete monitor models
  - KPI library
- Direct deployment of business processes
  - Quick turnaround for testing and verifying business processes

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WebSphere Business Modeler V6.2 comes with many new and exciting features and well as welcome enhancements that improve the efficiency and the overall user experience.

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