



IBM Software Group

WebSphere Business Modeler V6.2

The process editor



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This presentation will familiarize you with the tools available with the WebSphere® Business Modeler process editor.

Goal

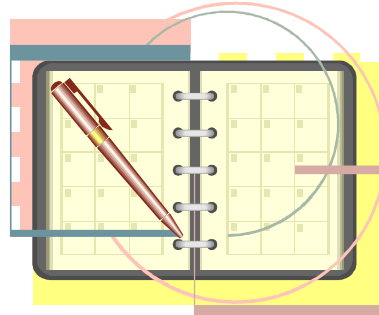
- To introduce you to the features and functions available with the WebSphere Business Modeler process editor



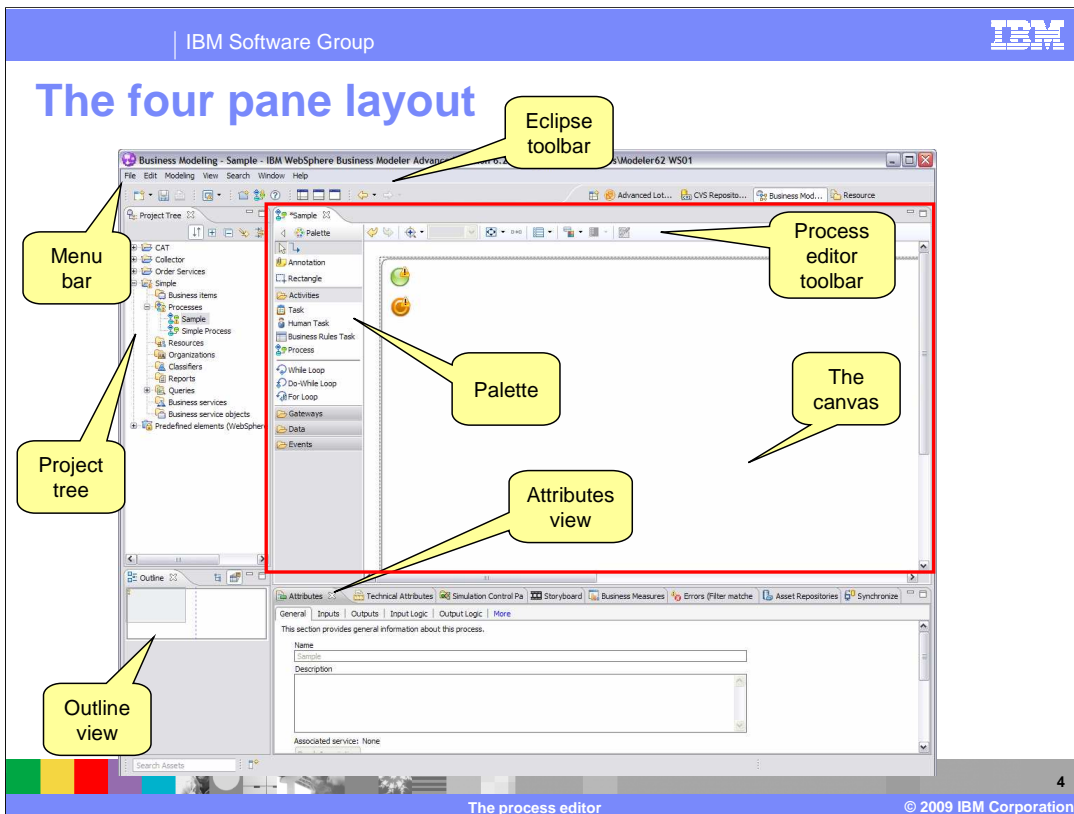
Now that you have the basics, it is time to look at what the process editor can do for you.

Agenda

- Overview of process modeling and the editor
- Projects, catalogs and wizards
- Modeling elements and flows
- The process editor



This presentation will cover the final topic on the agenda, the process editor



Shown here is the classic four pane layout that is commonly used with WebSphere Business Modeler. The panes refer to the main viewing windows. Since this is an Eclipse based tool, it is very customizable.

Starting from the upper left, the project tree view is used for creating, locating, and selecting the objects you will be working with in the process editor. The process editor view is the next one over to the right, the one outlined in red.

The pane directly below the process editor is really a collection of tabbed views. The attributes view is where the detailed information for the currently selected process element is displayed.

The next one over to the left is the outline view.

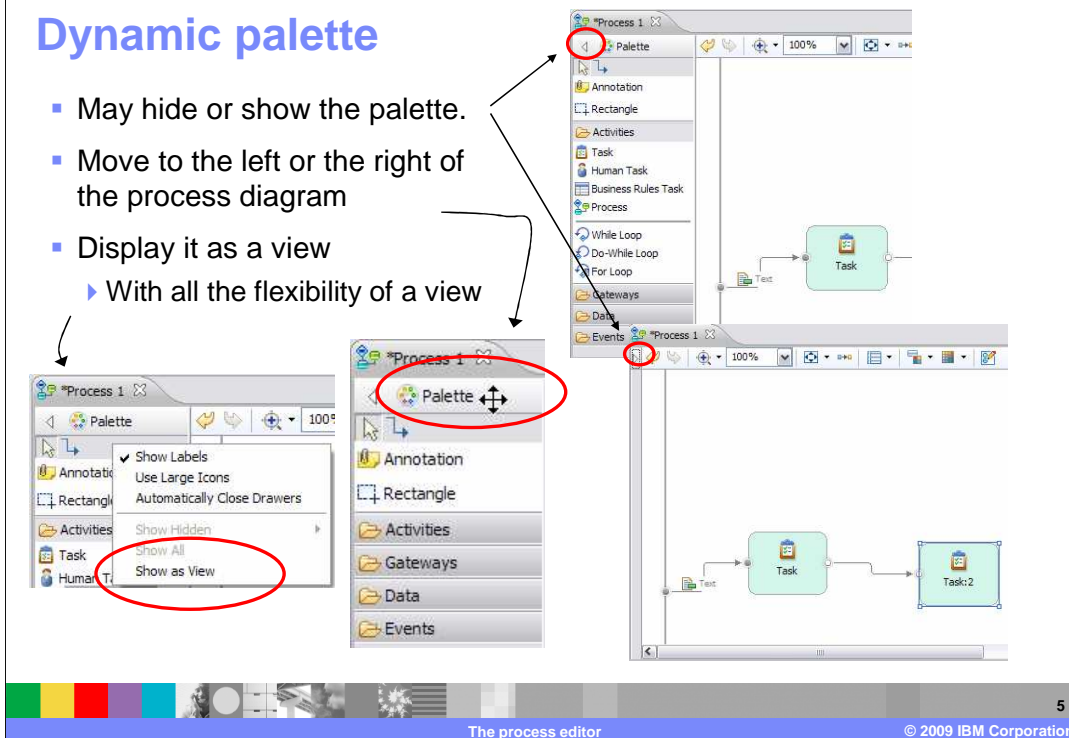
All together, these four views compose the four pane layout. You can show, hide or delete the views as you need to. If you delete one by accident, you can reset the perspective from the Windows menu in the menu bar.

Speaking of menus and tool bars; notice that there is the menu bar, which is text based and is the first one you will encounter starting from the top. Then there is the icon based Eclipse toolbar. The Eclipse toolbar has a mixture of functions related to WebSphere Business Modeler in general. Finally there is the process editor toolbar which is only available when the process editor is open. As you can surmise, it has functions that are specific to the business process editor. The process editor toolbar is covered in detail in this presentation.

The last couple of areas to point out are the palette and the canvas of the process editor. The palette is where you get the modeling element to use when constructing your business process models and the canvas is the drawing area, the background.

Dynamic palette

- May hide or show the palette.
- Move to the left or the right of the process diagram
- Display it as a view
 - ▶ With all the flexibility of a view



Ever feel like you needed more space on your canvas to layout your business process? Perhaps you would rather have the palette on the right or the bottom or maybe even in a separate view. Now you can do any of these things. Hide it, move it, or convert it to a view.

The clues are in the red circles.

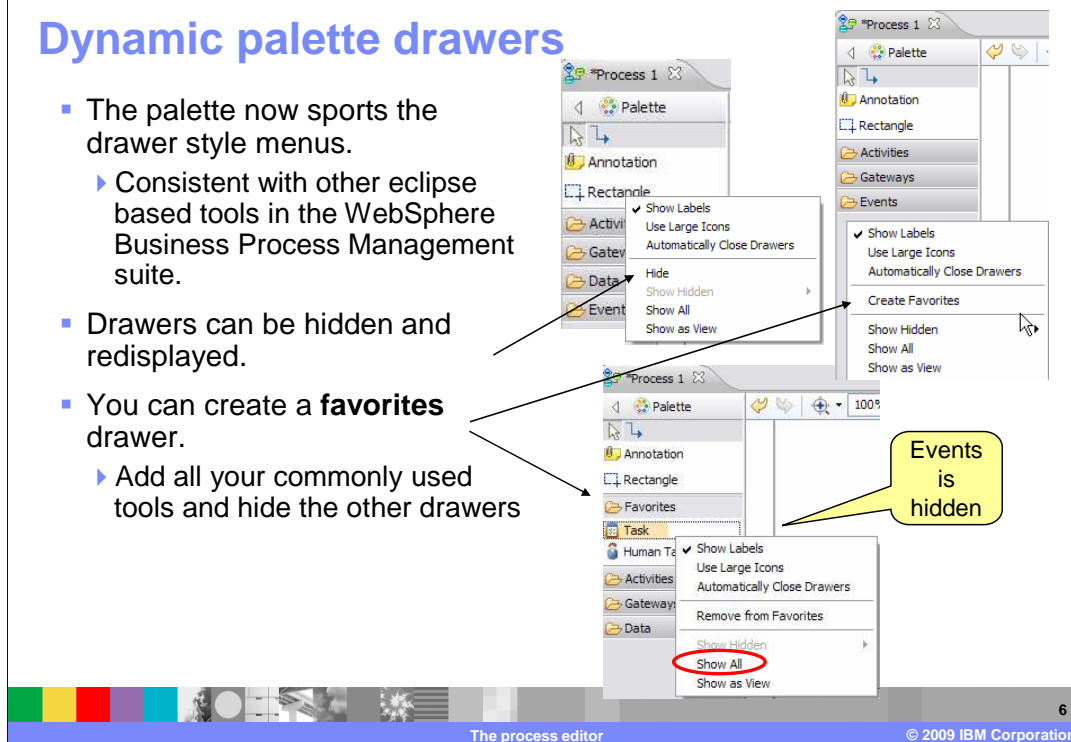
To show or hide, use the little arrow on the top left of the palette.

To move it to the right, use the title bar for the palette.

To convert it to a view, use the menu option, right-click the palette.

Dynamic palette drawers

- The palette now sports the drawer style menus.
 - ▶ Consistent with other eclipse based tools in the WebSphere Business Process Management suite.
- Drawers can be hidden and redisplayed.
- You can create a **favorites** drawer.
 - ▶ Add all your commonly used tools and hide the other drawers

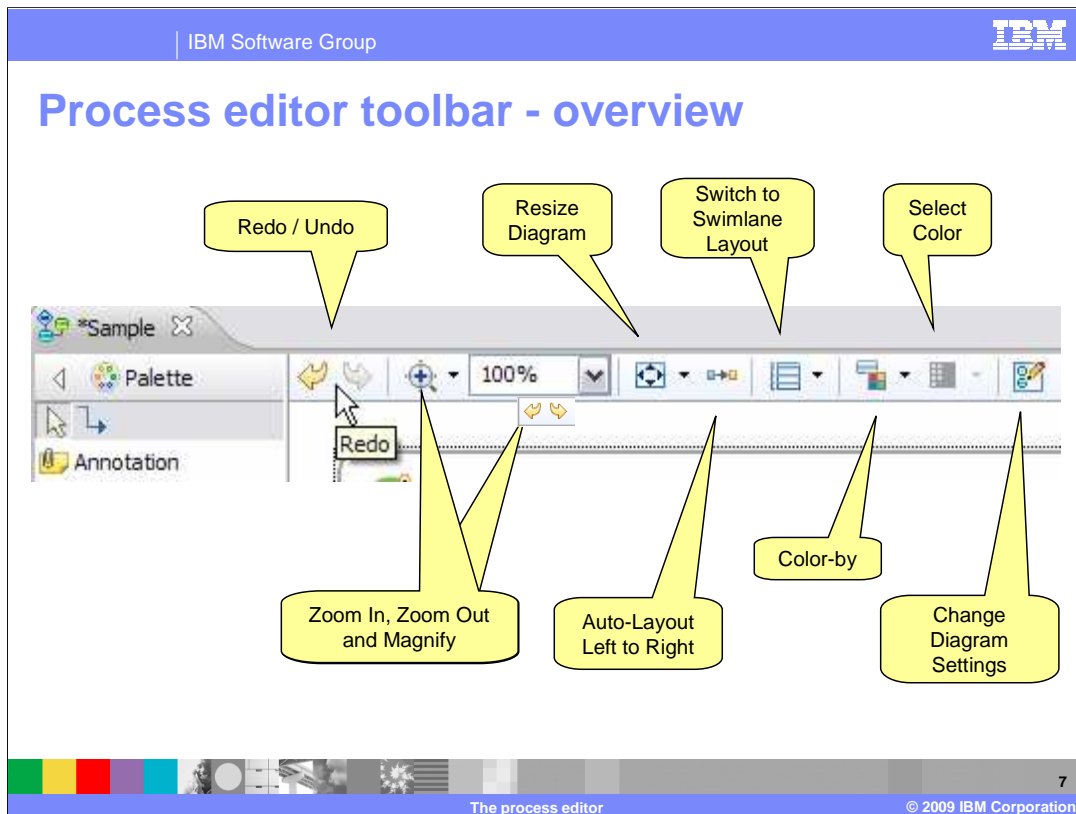


The new dynamic palette now uses drawers as used in other programs such as WebSphere Integration Developer V6. The drawers group the elements into activities, gateways, data, and events.

The drawers are very flexible, allowing you to customize them to suit your individual needs for the task at hand. You can hide and show an entire drawer or create your own favorites drawer.

As you can see from the pop-up menu, it is very easy to reestablish the default by using the show all option.

Note, the favorites drawer is only displayed if there is something in it.



The screen capture here shows the process editor toolbar. Each of these functions are covered in detail in the next set of slides.

This overview gives you the opportunity to see it all in one view. Until you learn what each of the icons represents, you can use the

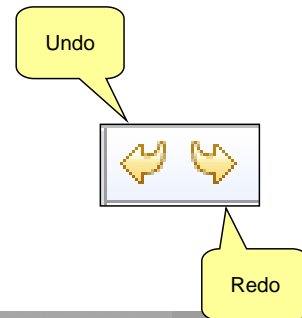
fly over help to learn what the function is. Just move the mouse across the icon and hover for a few seconds and the label will appear.

Here you see the fly over help for the redo function.

As you can see many of them have drop down menus and some like the color selector, require that the proper element is selected before it becomes available.

Redo / undo

- Convenient and efficient access to a common editing function
- Make a series of changes and the undo arrow is enabled
- Select the undo arrow in the toolbar to 'undo' the editing changes.
 - ▶ The redo arrow becomes enabled.
- Keyboard commands
 - ▶ ctrl-z = undo
 - ▶ ctrl-y = redo



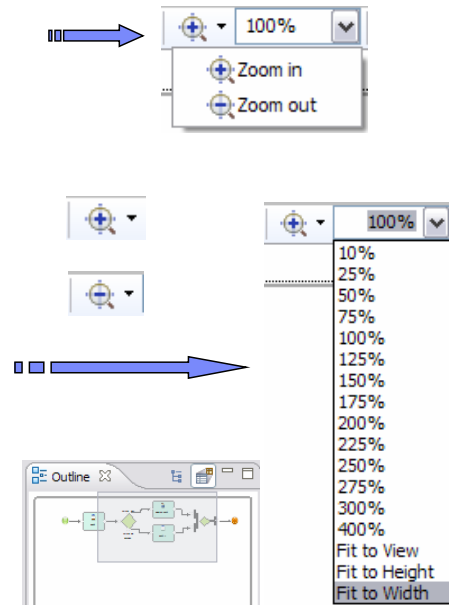
The toolbar provides convenient and efficient access to common editing functions. Now when you make a change or delete something inadvertently, you can very easily change it back.

Saving the diagram will reset the undo stack to zero.

For those of you whose fingers are quicker than the mouse, the keyboard equivalents are ctrl-z for undo and ctrl-y for redo.

Zoom

- The zoom in/out button will magnify or reduce the diagram in place.
 - ▶ Selecting the menu item will change the icon from a plus to minus or vice versa.
- Reduce or magnify the image based on the percentage
- Panning with the outline view



The process editor

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Zooming in and out is a critical part of any graphical application. Sometimes you need to get in close and focus on a specific area and then you need to back up to get the overall picture.

The zoom button with cross-hairs is sticky. This means that when you select one of the options, the icon will change and the cursor will remember the selection as well. As you move the cursor over the diagram, you will notice that the cursor has changed to indicate the current selection. Select a location on the diagram and it will bring that spot to the center of the diagram and zoom in or out accordingly. To return the cursor back to selection mode, select the white arrow at the top left of the palette.

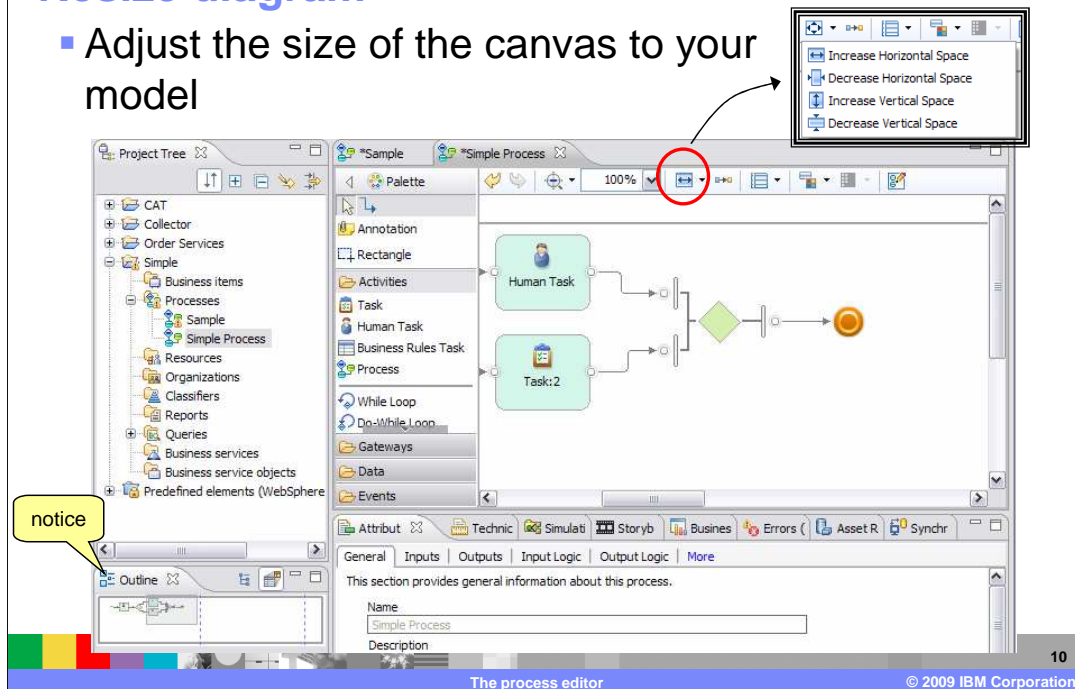
The controls for zooming in and out are intuitive and do not require a lot of explanation. Try them a few times and you will get the hang of it quickly.

Sometimes you get so zoomed in that you can no longer see the whole picture. You might not want to zoom out, only to zoom back in once you have located the next area of interest. In the 4-pane layout, the outline view in the lower left pane of the WebSphere Business Modeler will provide you the 30,000 foot view. The shaded area shows the area that is displayed on the canvas and when you use the mouse to move the shaded area in the outline view, the area displayed on the canvas is moved also. This provides a very nice way to navigate the diagram without having to zoom out.

Note: if you do not see the outline view, you can add it at anytime using show view from the Windows option of the menu bar.

Resize diagram

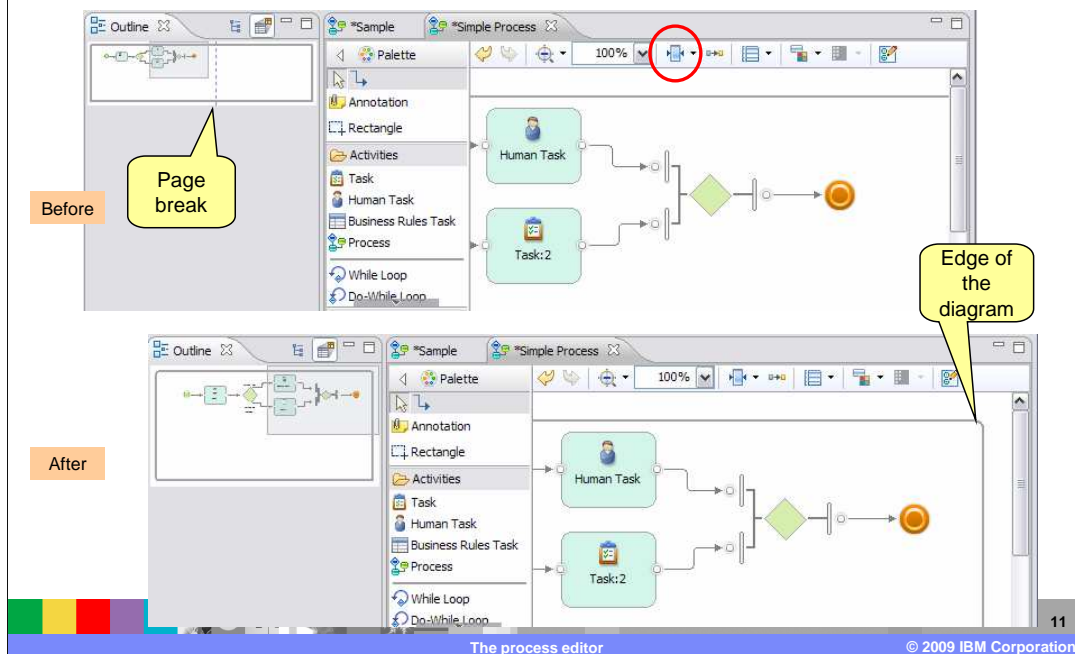
- Adjust the size of the canvas to your model



Here you can see that a terminal node is being used to end the business process. It is now time to design the business process so that it will return some data by way of the business process output. This means that you will need to wire up the merge to the output of the business process. The business process output is on the extreme right boundary of the diagram. If you look at the outline view you will see that there are a couple of page boundaries between the merge and the edge of the diagram. This means that you will have to do a lot of scrolling to link the two. There is a much easier way.

You can pull the right edge in by resizing the diagram. Select the “decrease horizontal size” option and two things happen. First the size of the diagram changes and second, the icon in the resize diagram button changes to indicate the current selection. Once the selection has been made, you can watch the outline view to see the edge move in. At this point all you need to do to repeat the operation is to select the icon again.

Resize diagram - again



Repeated selection of the resize diagram toolbar option will perform the operation that is currently displayed by the icon. To change the option, use the drop down arrow next to it.

The second screen capture shows what it looks like when the diagram has been resized as small as it can get. Notice the differences in the outline views between the before and after.

At this point there is a reasonable distance between the last element in the business process flow and the edge of the diagram, making it very easy to link the two.

Auto-layout left to right

- Bring order to chaos
 - with a single mouse click

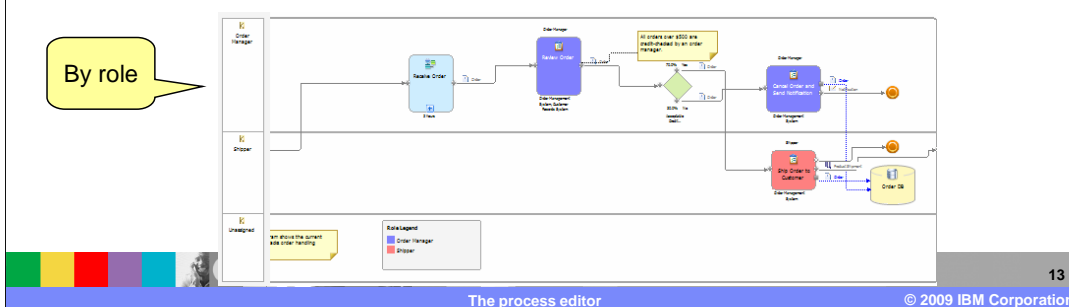
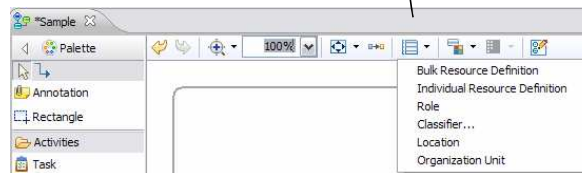
The screenshot displays the IBM BPM Process Editor interface. At the top, there is a toolbar with various icons, including a palette and an annotation tool. A pop-up menu is shown on the right side, listing several options: New, Input and Output, Auto-Layout Left to Right, Compact Diagram, Move Nodes Off Page Breaks, Insert Space, Copy, and Paste. Below the toolbar, a process diagram is shown in two states: 'Before' and 'After'. The 'Before' state shows a chaotic layout with nodes and connectors scattered across the canvas. The 'After' state shows the same process diagram with a clean, organized layout where nodes are arranged from left to right. A blue arrow points from the 'Before' state to the 'After' state, indicating the result of the 'Auto-Layout Left to Right' function.

The chaos of the before picture is slightly exaggerated, but it does illustrate the point.

This function is also available from the pop-up menu of the canvas, right-click the canvas background. You can see that there are a few other functions related to managing the layout, such as compact diagram and move nodes off the page breaks. The insert space function is handy when you need to insert new elements and you do not want to mess up the diagram too much.

Swimlane

- Organize flow by
 - ▶ Bulk resource definition
 - ▶ Individual resource definition
 - ▶ Role
 - ▶ Classifier...
 - ▶ Location
 - ▶ Organization unit



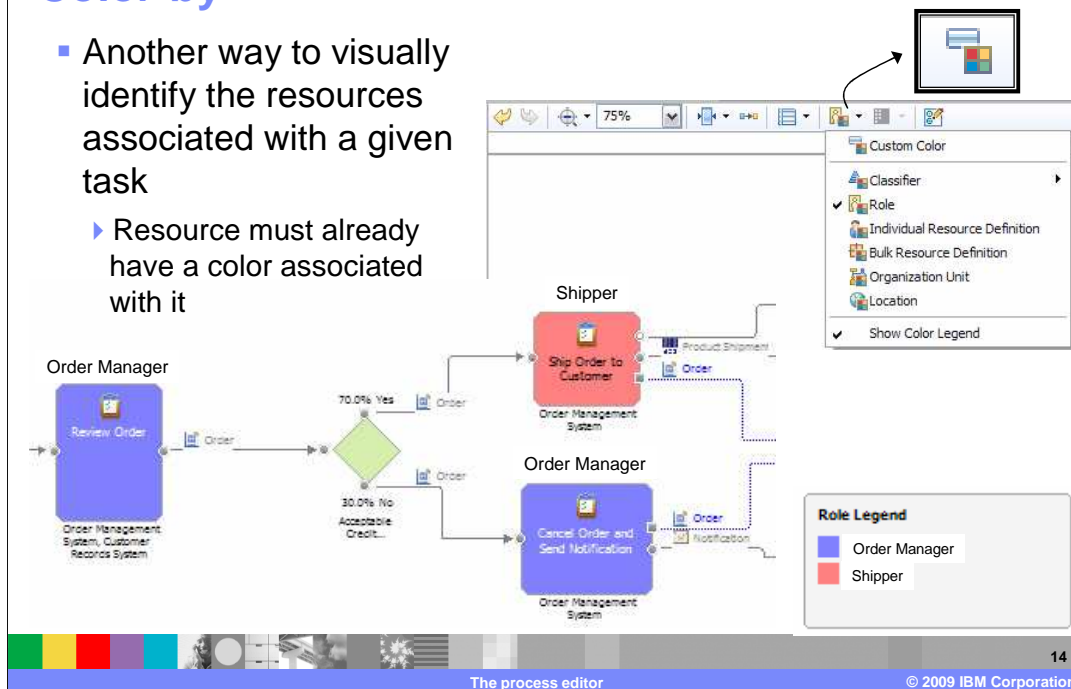
Shown here in the bottom section of the picture is a swimlane view that is organized by role. The details are not discernable with this magnification but the purpose is to show how all of the tasks for which the order manager is responsible are lined up in the top lane. The tasks that the shipper is responsible for are lined up in the middle lane. The elements that are not directly part of the flow or do not have a role assigned to them, are in the bottom, unassigned lane.

This kind of view makes it very easy to see what resources are involved in a particular part of the business process. Swimlanes can also be organized by bulk or individual resources, location, organization unit or by classifier. The classifier greatly extends the possibilities because the classifiers are extendable user defined categories.

The swimlane and the free-form view are completely interchangeable. If you are in the swimlane view, there is a menu option to return to the free-form view.

Color-by

- Another way to visually identify the resources associated with a given task
 - Resource must already have a color associated with it



The color-by option is another way to easily identify what resource is associated with a given task. Shown here is a free-form view where the color-by option has been set to color-by role. The “show color legend” option has also been selected.

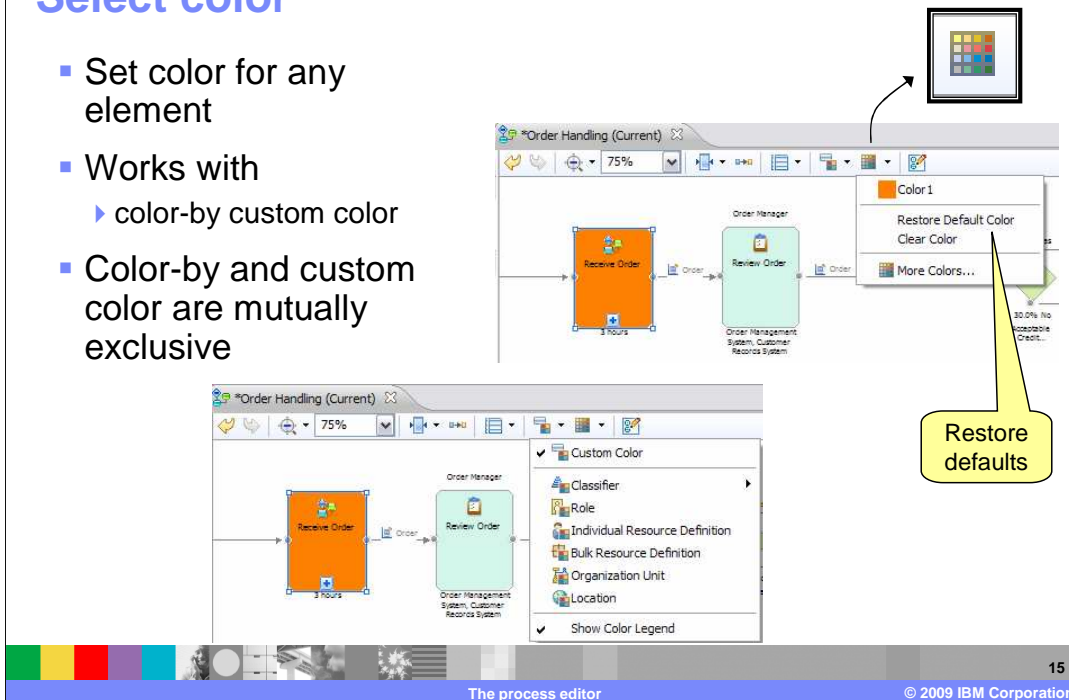
The color has to be associated with the resource independently. Associating the color to the resource is a function of the resource definition and is done when specifying the attributes for the resource.

Additionally, the top labels have been set for the local tasks to display the role name. This provides added confirmation that the purple tasks are the ones that the order manager is responsible for and the pink one is the shipper’s responsibility.

Adding this option to the toolbar makes changing the view to get different perspectives very easy.

Select color

- Set color for any element
- Works with
 - ▶ color-by custom color
- Color-by and custom color are mutually exclusive

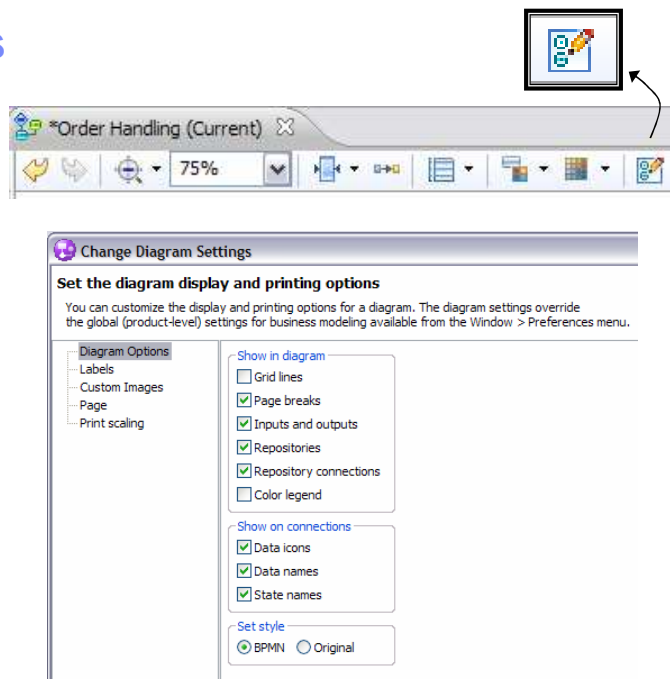


Use the select color option to set the color of any modeling element. First select the element and then select the 'select color' icon from the toolbar. From there, select the 'more colors' option. Once the color has been selected you might need to go back to the color-by toolbar option to set it to custom color. Custom color and color-by are mutually exclusive.

As you can see from the screen capture, the defaults can be easily restored and you can also set it to clear color, which is no color.

Diagram settings

- All the important settings in one place
 - ▶ Invokes a modeless dialog
- Dialog remains up until you close it
 - ▶ Can still interact with the rest of the modeling editor
- Changes take effect immediately



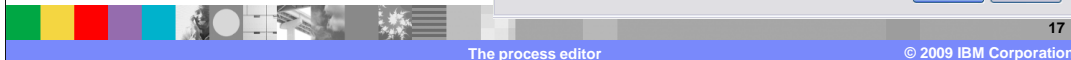
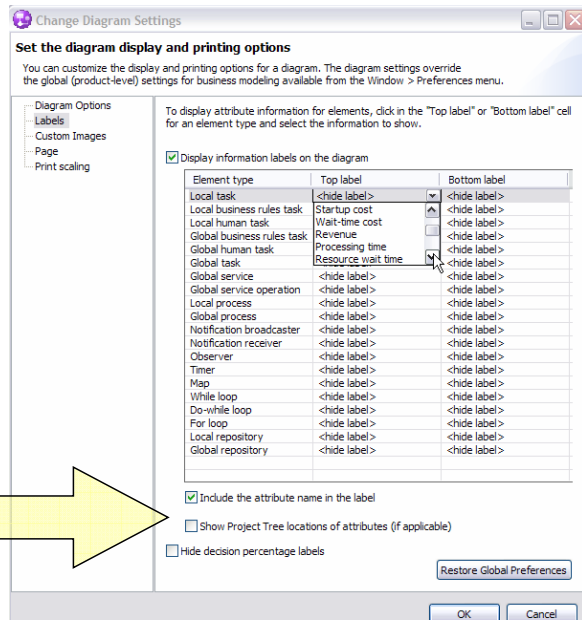
All of the various diagram settings have been gathered together in this one modeless dialog. Modeless means that you can still interact with other parts of the program while it is up. Besides being modeless, the changes you make are immediate.

There are five areas of settings. The most commonly used settings are here on the first page. Many of the options have to do with what you want to see or not see in your diagram.

The next few slides will step through the pages for labels, custom images, page, and print scaling.

Diagram settings - labels

- Used for setting what is displayed above and below a modeling element
- The label columns are editable
 - ▶ Drop down menus
- For all displayed labels...
 - ▶ Include attribute name
 - ▶ Show project tree location
 - ▶ Hide decision percentages



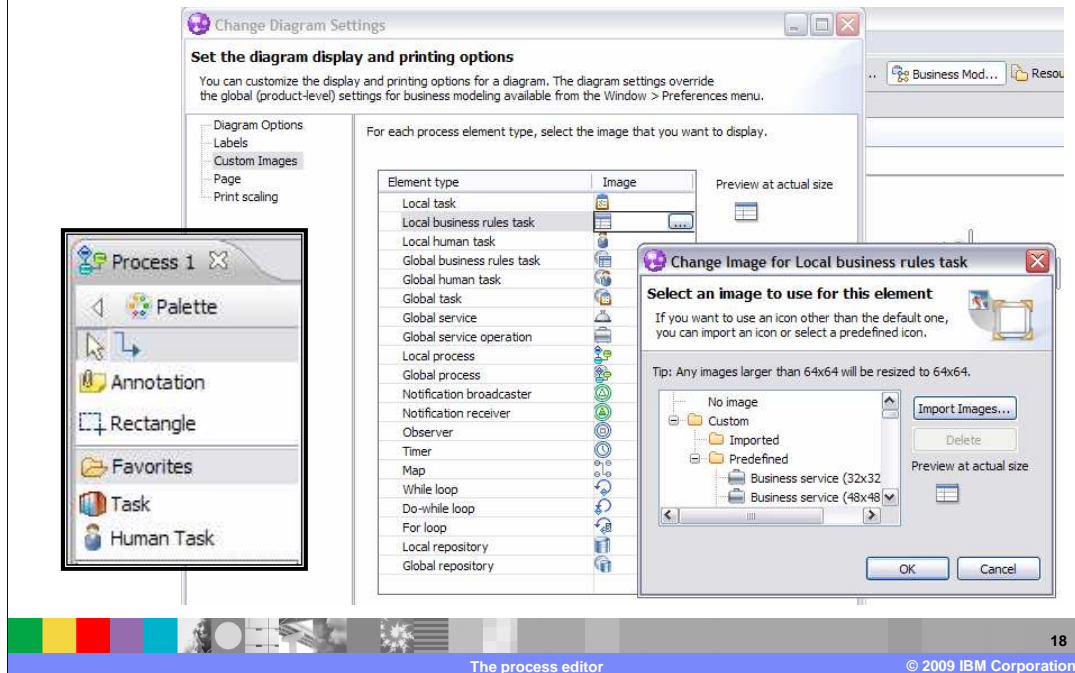
The 'labels' page lets you select what is displayed for a given element type. Each type of element is listed in the first column and the corresponding information to display, either above or below the element, is selected in the second and third columns.

The options at the bottom of the dialog are applied to all the attributes that are displayed on the diagram.

Include the name of the attribute, the location in the project tree and hide or show the decision percentages.

If needed, the labels can be resized on the diagram after they have been displayed.

Diagram settings - custom images



Custom images can be used for the elements in the business process diagram.

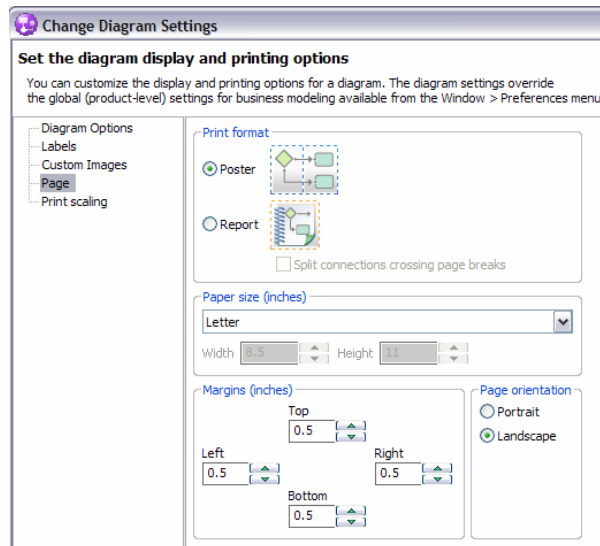
You can use any of the predefined images or import your own. To change an image, select the element in the list, then select the image on the right to enable the edit button (three dots). Selecting the edit button will invoke the change image dialog which will allow you to select a predefined image or import your own custom image.

There is a preview function that will let you see what the new image will look like before you commit it to your project. Changes made here are applied to the entire project and the palette. The example in the inset on the left shows the Task element in the palette with a new image. The default image for a Task is the clipboard.

Once the image has been changed at this level, all the local tasks in that project will change to the new icon and newly created ones will use it as well. This only affects the current project. To make the change globally you can use the global preferences. To change the image for a specific element only, right-click the element and then select the 'change image' menu item.

Diagram settings - page and print options

- Print format works with diagrams as well
 - ▶ Poster format
 - ▶ Report format
 - Split connections on page breaks
- Printing options
 - ▶ Paper size
 - ▶ Portrait or landscape
 - ▶ Margins



The print formatting options, poster, or report, effect the display of the working diagram and the printed output.

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. You can experiment with the split connections option and see the results in your diagram.

The other options, paper size, margins, and page orientation are strictly for printing and can be verified when previewing a printout, before printing.

Diagram setting - print scaling

- Standard scaling options
 - ▶ Effects both display and printouts

Change Diagram Settings

Set the diagram display and printing options

You can customize the display and printing options for a diagram. The diagram settings override the global (product-level) settings for business modeling available from the Window > Preferences menu.

Diagram Options

- Labels
- Custom Images
- Page
- Print scaling

Scaling options

Scale to 100%

Fit to page

Fit to 1 pages across

Fit to 1 pages down

Maintain diagram proportions when scaling

Restore Global Preferences

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Having the scaling options in the diagram settings makes it is easy to adjust the options, test the results, and restore them when done.

The 'restore global preferences' button allows you to reset to the values in the preferences.

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The canvas

- Popup menu
 - ▶ Right-click the background
- Create new elements
 - ▶ Local and global
- Edit the inputs and outputs
- Adjust layout
- Static analysis
- Find
- Export
- Report
- Create business measures

Pop-up menu for the background canvas

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The canvas itself is an area with readily available functions. Right-click the background to invoke the pop-up menu.

From there you will see the functions available.

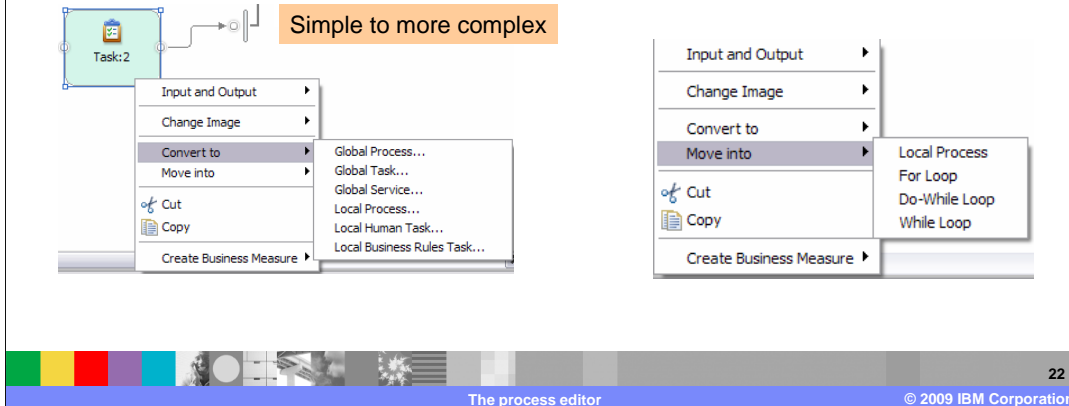
These functions are not covered in this presentation.

The point here is to note that they are readily available by right-clicking the background canvas and from the main menu bar.

The pop-up menus from the canvas or from an element provide context sensitive short cuts.

More still – convert and move

- One or more elements selected
 - ▶ Pop-up menu has more
 - Convert to
 - Move into

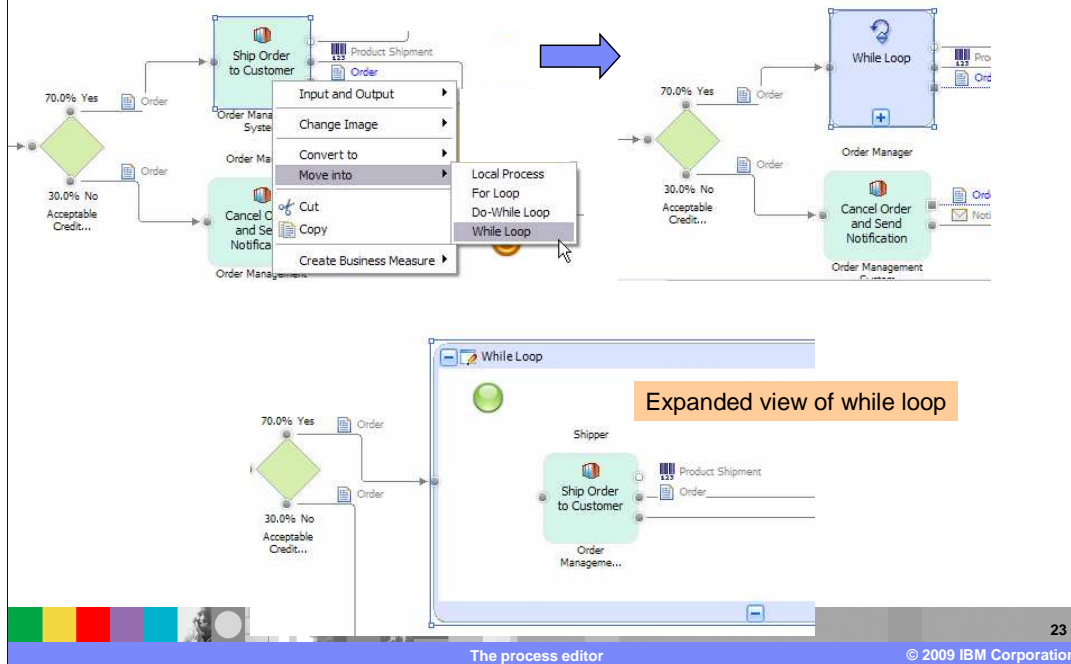


There are two very powerful functions available for refactoring your business processes. These options are only available if one or more elements are selected.

‘Convert to’ lets you convert certain kinds of elements to other types. Here you can see that a simple task can very easily be converted to a global or local process, human task, or business rule. Human tasks or business rules cannot be further converted. The conversion can only go from simple to something more complex and both human task and business rules are at the top of the complexity hierarchy.

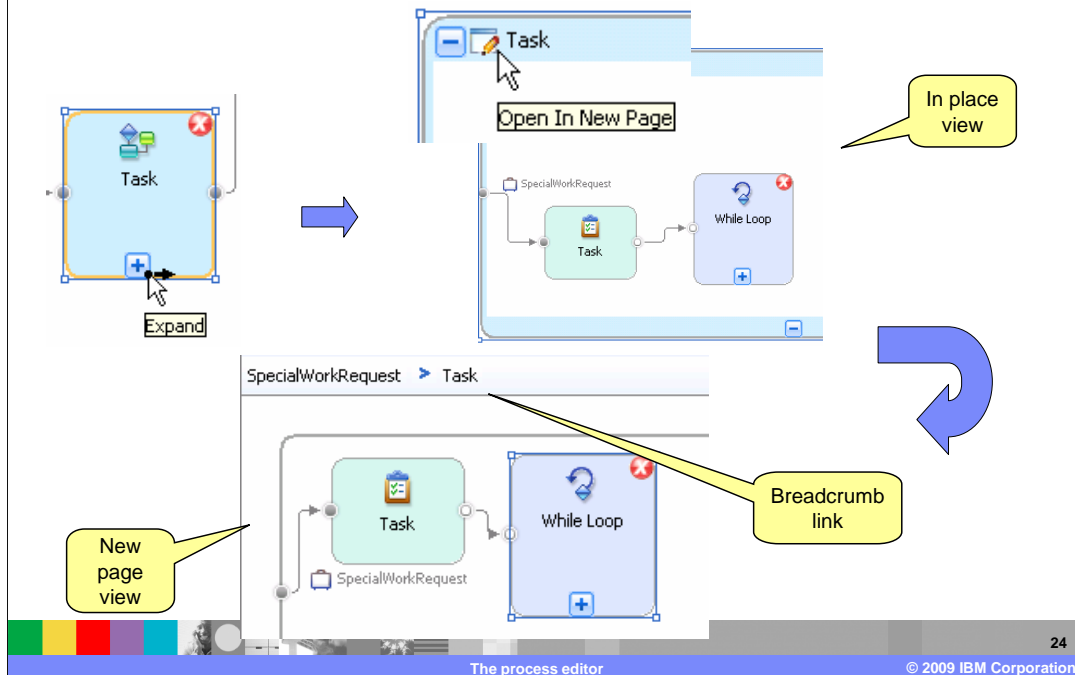
The other very useful function is the move into. As you can see from the screen capture, you can move one or more elements directly into a local process, or a loop. The local process or loop is created for you.

Example: move into while loop



This example illustrates how easy it is to select an element and put it inside a loop. There is still work to be done regarding the loop control variable and getting data into and out of the 'Ship order to Customer' task.

Subprocess and loop navigation



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 to your original process using the breadcrumb links. When viewing in place you can return to next level up by selecting the minus sign in the menu bar.

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Annotations

- Available from the palette
- Add descriptive information
- Associate to a specific element
- Published with the diagram to WebSphere Business Modeler Publishing Server

The screenshot shows the 'Order Handling' process editor. On the left is a 'Palette' with various elements: Annotation, Rectangle, Activities, Task, Human Task, Business Rules Task, Process, While Loop, Do-While Loop, For Loop, Gateways, and Data. An arrow points from the 'Annotation' element in the palette to a yellow sticky note annotation in the process diagram. The process diagram shows a flow from 'Order' to a task box labeled 'Check Order Handling Policy for Automatic Approval', which then leads to another 'Order' element. The yellow annotation is titled 'Order Handling Policy' and contains the following text: 'Default: Orders are reviewed by the system for automatic approval' and 'If the total price of an order is less than \$750, then the order can be automatically approved without review.'

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Annotations are a way to add extra descriptive information to the business process diagram.

Annotations are electronic sticky notes that are associated with the diagram or directly with a process element.

Shown here is an annotation that has been associated with the Check Order Handling Policy for Automatic Approval task.

It brings some of the internal information that is embedded in the business rule to the surface so that the reader can understand what the business rule is doing without having to open it up.

Another nice feature of the annotation element is that it is also published with the business process when published to the WebSphere Business Modeler Publishing Server.

Copy/paste support

- To external tools or programs
 - ▶ You can copy a diagram or parts of a diagram and paste into any external program that enables pastings of pictures
 - No meta data is copied
- To other parts of the process editor
 - ▶ Meta data copied
 - ▶ New instances created if pasted into the same context
 - ▶ Within the same business process diagram
 - ▶ Other process diagrams in other projects



Being able to copy and paste all or part of a business process diagram to other applications facilitates communication and creation of custom reports. Sometimes all you need is small part of the overall process diagram in a document so that you can make a few points. This is possible with the copy-and-paste support in WebSphere Business Modeler.

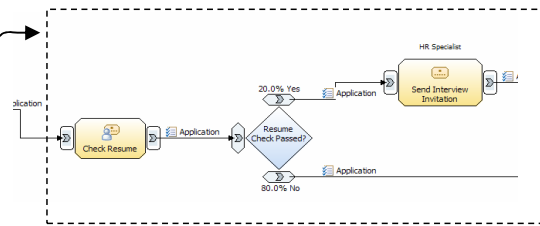
You can copy a diagram or part of a diagram and paste it into any external program that enables pasting of pictures, such as Microsoft® Word, Microsoft PowerPoint®, or Microsoft Visio®.

It is also possible to copy and paste parts of the business process to other parts of your business process or into another project. In this case, since the destination is still within the domain of the WebSphere Business Modeler process editor, the meta data is be copied as well. Meta data is data that describes the attributes of the elements and their relationships to each other.

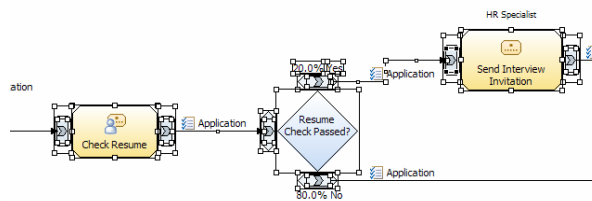
Copy/paste multiple elements in a process editor

- Multiple elements can be selected using the marquee tool

- copied and pasted into the same process or another process



- In non-basic modes, the *inputs*, *outputs* and *criteria* will also be copied



Using the marquee tool you can now select a group of process elements all at the same time and then copy and paste them into either the same process or another process.

The marquee tool is invoked by holding down the right mouse button on the background and then moving the mouse diagonally across the elements you want to select. A rectangular box (the rubber band) is drawn around the elements. Releasing the mouse button will cause all of the elements contained in the rectangle to be selected.

It should be noted that connections can not be copied and pasted if they are selected without the source and target. A connection has no meaning without its endpoints.

Copy/paste multiple elements in a process editor

- Paste using ctrl+v and right-click pop-up menu will have the same behavior
 - ▶ Elements are pasted relative to the original element's location
 - Same context
 - Offset from the original element's location
 - Different context
 - The same location as the original element's location
 - ▶ Elements at different levels can not be copied/pasted at the same time



This behavior matches user expectations based on their experience with other Windows® based graphical applications.

Be aware that elements from different levels of your business process diagram cannot be selected at the same time.

Summary

- The dynamic palette
- The toolbar
 - ▶ Basic drawing tools
 - Resize, auto layout, view management
 - ▶ Diagrams settings
 - Grid, visibility, page breaks, notation, ...
- The canvas
 - ▶ Menu items, outline view
 - ▶ Annotations
 - ▶ Copy and paste
 - External tools, multiple select



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The WebSphere Business Modeler business process editor is very a powerful tool for creating rich and detailed business process models. This presentation has shown you some of the basic process editing tools that are available to the business user.

You have seen how the dynamic palette can be customized to work in a way that is most efficient for you, creating a favorites drawer or hiding the palette all together to maximize the drawing space.

Each of the functions on the process editor toolbar have been covered in detail and you are now aware of functions available in the process editor canvas.

This presentation concludes the series on process modeling. With the information presented in this series you can now get started building you own business processes. If you need more detailed information along the way, the on-line help is always available.

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