



IBM Software Group

WebSphere Business Modeler V6.2

Process modeling



@business on demand.

© 2009 IBM Corporation
Updated April 20, 2009

This presentation provides an introduction to process modeling with WebSphere® Business Modeler.

Goal

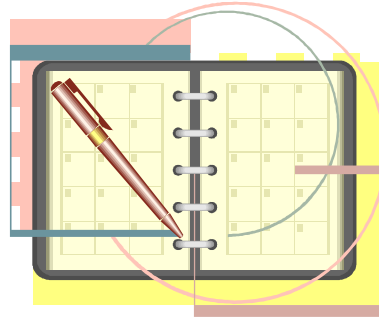
- To introduce you to process modeling with WebSphere Business Modeler



As you will see in the overview section, WebSphere Business Modeler provides a very rich set of functions for documenting, simulating, and analyzing business processes. Each of these functions is covered in detail in other educational modules. The purpose of this module is to show you what is available in the process editor so that you are comfortable creating your own business models.

Agenda

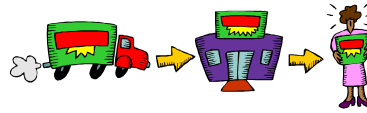
- Overview of process modeling and the editor
- Projects, catalogs and wizards
- Modeling elements and flows
- The process editor



This presentation covers the first topic on the agenda – an overview of process modeling and the editor. The other topics are covered in separate presentations.

Why model business processes?

- Documentation and understanding
- Regulatory requirements
- Process improvement
 - ▶ Document both the “current” state and “future” state business processes
 - compare to determine Return on Investment (ROI) analysis
 - ▶ Simulate
- First step in developing the applications that will implement the model.
 - ▶ Reduce the overall time required to implement or modify a business process



Objectives for modeling vary from organization to organization, and WebSphere Business Modeler is well suited to meet a wide variety of objectives.

Some organizations have a tactical need to accurately document processes for legal, regulatory, training, or other purposes. WebSphere Business Modeler's ease of use, shared element model, document attachment, and collaboration features, make it very effective at meeting these objectives.

Many businesses are undertaking specific process improvement initiatives where process redesign is either already underway or inevitable. The analysis and reporting, simulation, and process comparison capabilities in WebSphere Business Modeler make it a very powerful tool for this approach.

When the organization chooses to implement the new “To-Be” process, WebSphere Business Modeler can provide artifacts from the business model that will act as the starting point for the implementation. This will increase the accuracy of the transition from the business to the technology domain, and reduce implementation time.

Process model editor features

- Two different ways to view a model.
 - ▶ Free-Form and Swim lane
 - ▶ Interchangeable
- Palette of elements which can be used to express complex behaviors in business processes
- Use of colors and labels, and Swim lane view aid in visual identification of hand-offs and the associated attributes of the model
 - ▶ Detailed labels
 - ▶ Color coding by key attributes and classifiers
- Creation of business measures for monitoring
- Detailed specifications for tasks, resources and relationships.
- Process modeling goal



There are two different editor options available for specifying and viewing business models.

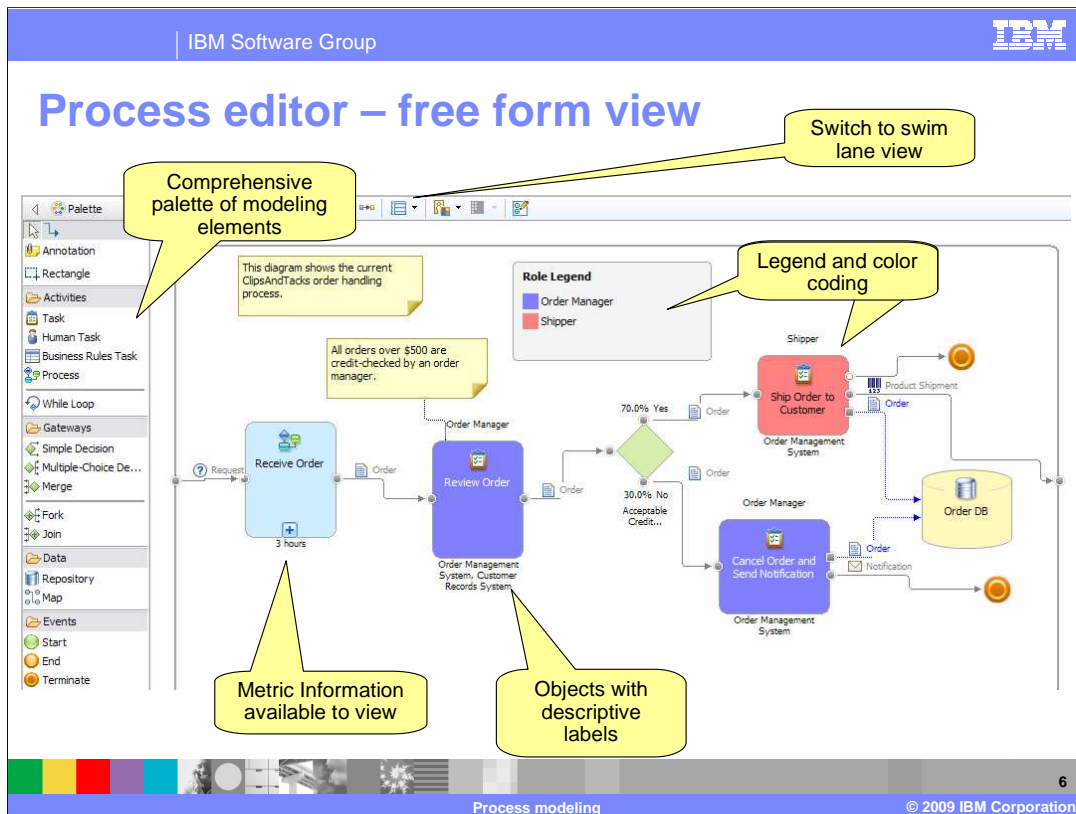
The Free-Form editor, which is a classical flow diagram, allows the business analyst to control the layout.

The swim lane editor provides a convenient way to lay out processes while taking into consideration the various resources and other types of qualifiers that are assigned to the tasks and elements of a process. With the swim lane editor, you can clearly see how different transitions occur between tasks within the business processes.

You can easily switch back and forth between the two different representations. Both views can make use of different colors and labels that can be enabled on tasks and other elements in processes. Adding color and descriptive labels provides additional information and clarity to the business process model.

As a business user modeling business processes, you have the best insight regarding what aspects of the business model need to be monitored to verify that the business goals are achieved. With the WebSphere Business Modeler process editor you can create business measures directly from the process editor with a few clicks of the mouse.

With the process editor it is very easy to get started. You are not required to fully specify everything all at once. Information can be added incrementally as it becomes known. Warning and error messages guide you in the completion of mandatory specifications depending on your modeling goal.

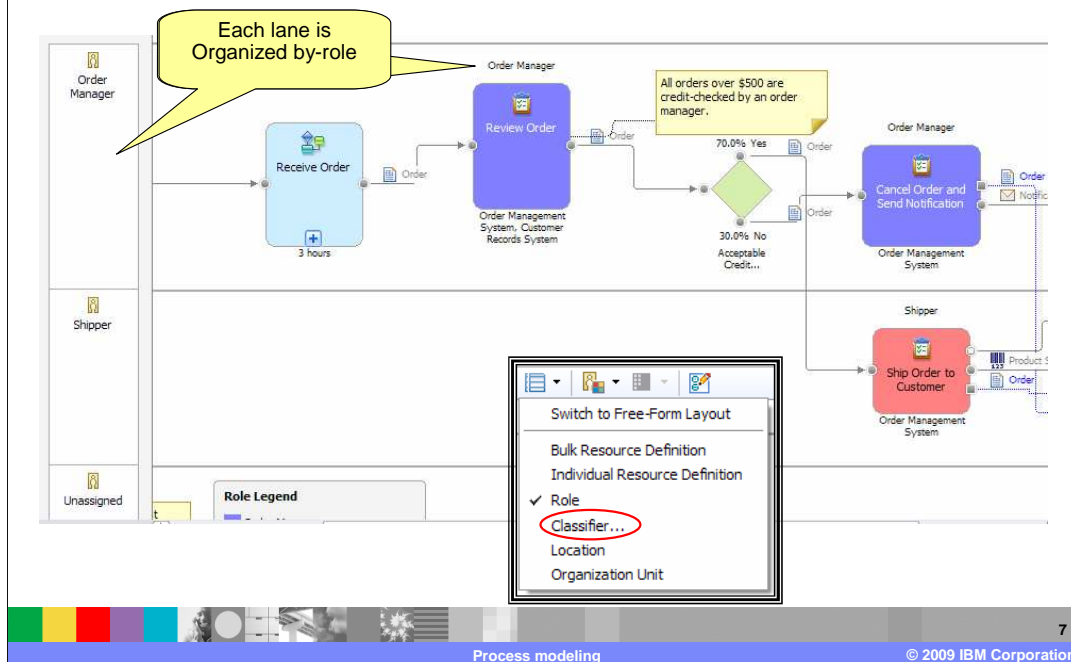


Shown here is a screen capture of the Process Editor in the Free-Form layout mode.

You can easily change it to the Swim lane Editor, using the menu item and drop down in the toolbar. The drop down menu will let you select the attribute to use for organizing the swim lanes. Swim lanes can be organized by role, individual resource, bulk resource, location, or a classifier.

Several elements are available on the palette and can be easily dragged and dropped onto the canvas of the editor. The screen capture also shows some labels, description information, and metric information, such as processing time, that can be specified for the different types of tasks. In this example the tasks are displayed in different colors based on the roles assigned to them. The coloring and legend work together to allow you to easily focus on specific aspects of the model. You can color by role, individual resource, bulk resource, location, organizational unit, or a classifier.

Process editor – swim lane, by-role, view



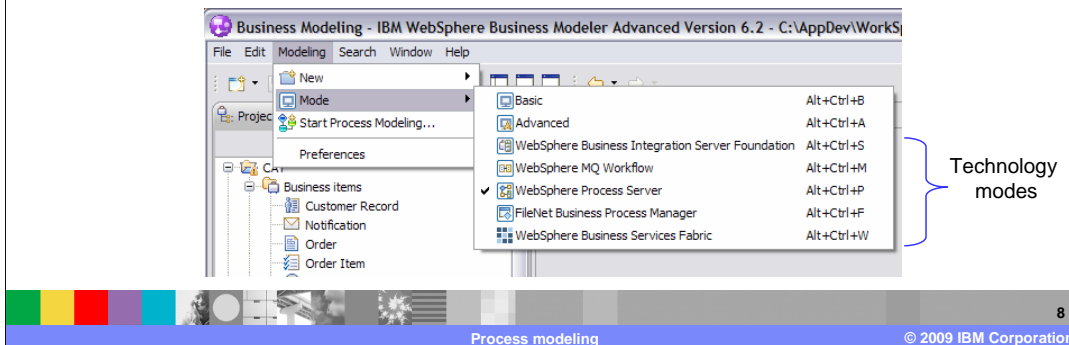
Here you see the same process model using the swim lane view with the role being used to organize the swim lanes.

All of the tasks that are done by the Order Manager are in the same lane and the shipper is in a second lane. This makes it easy to see who is doing what task and when the hand-offs are.

The inset at the bottom shows you the different categories you can use for creating the swim lanes. The category of classifiers opens up a whole new world of possibilities because the classifiers can be created by you.

Process model: modeling modes

- Modeling modes guide you in creating models
 - ▶ Show or hide levels of details based on the modeling goal
 - ▶ Provide goal specific validation
 - ▶ Set a technology mode as soon as the destination runtime is known
- All modeling elements are not available for all modes
 - ▶ Some options and notational elements are disabled
 - ▶ New validation rules are enforced when the modeling mode is changed



There are seven modeling modes available with WebSphere Business Modeler V6. The first two modeling modes, Basic and Advanced, set the level of detail exposed to the business analyst, with the advanced mode providing more options and details than the Basic mode.

The next five modes, WebSphere Business Integration Server Foundation, WebSphere MQ Workflow, WebSphere Process Server, FileNet Business Process Manager, and WebSphere Business Services Fabric are technology modes. These modes include all of the details and options of the Advanced mode plus additional validation that is applicable to the respective target runtime environment. Anything that is not appropriate to that particular runtime environment is flagged. You should change to a particular technology mode as soon as you know the runtime environment that your business process will run in. This will reduce the amount of rework that must be performed when preparing the process for deployment to one of the particular runtime environments.

The screenshot displays the IBM Business Modeler interface. At the top, the 'Views' section is visible. On the left, a palette of 'major tabs' includes Gateways, Simple Decision, Multiple-Choice De..., Merge, Fork, Join, Data, Repository, Map, and Events. The main canvas shows a process flow starting with a 'Request' event leading to a 'Receive Order' task (3 hours), followed by an 'Order' event leading to a 'Review Order' task (Order Management System, Customer Records System). This is followed by another 'Order' event leading to a decision diamond (30.0% No Acceptable Credit...). The 'Review Order' task is currently selected, and the 'Attributes - Review Order' tab is active. This tab has 'minor tabs' for General, Cost and Revenue, Duration, Inputs, Outputs, Input Logic, Output Logic, Resources, Organizations, Classifiers, and More. The 'Inputs' tab is selected, showing a table with the following data:

Name	Associated data	State	Minimum	Maximum
Input	Order		1	1

The bottom of the interface shows 'Process modeling' and '© 2009 IBM Corporation'.


Although laying out the flow of the business process is typically where you will start, there is much more information that can be captured as part of the model. Selecting an item on the canvas, such as a task, a sub-process, or a decision, will change the context of the viewing area below the diagram.

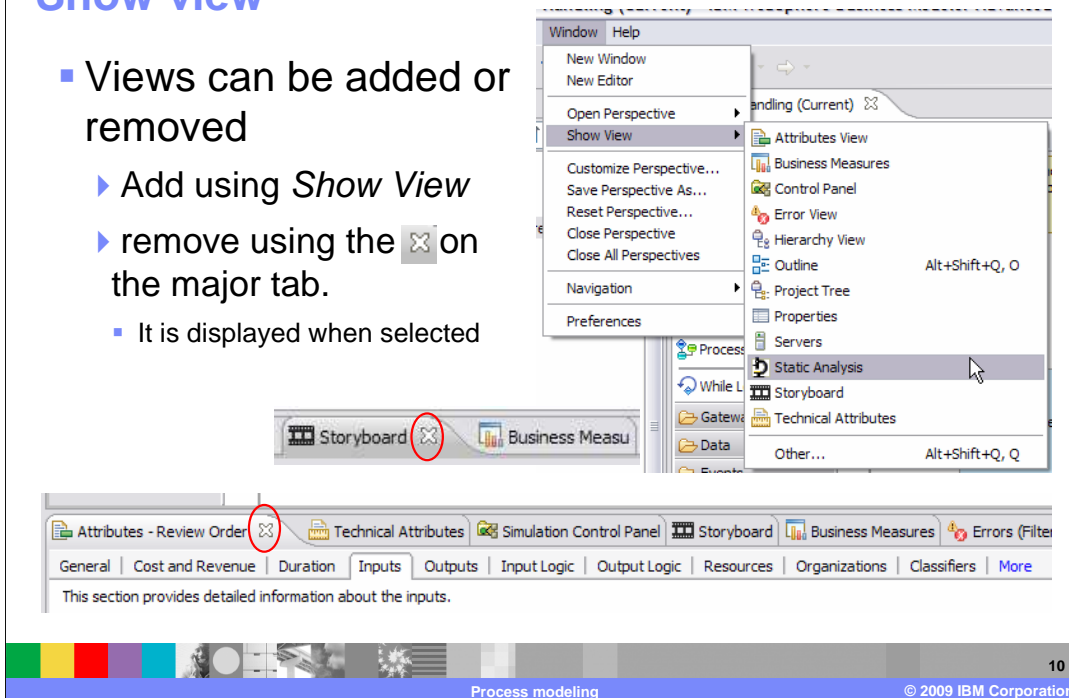
Here you see tabs for organizing data and providing access to some of the functions available in WebSphere Business Modeler. The major tabs provide a window into key features or areas of Modeler, such as Simulation, Storyboard™, or the Errors view. Here the focus is on the major tab labeled Attributes. Notice too, that the Review Order task is currently selected. With the Attributes tab selected, the minor tabs become visible showing the different areas where you can add data about the Review Order task. The views are not going to be discussed in detail at this time, but notice the different categories or areas. You can specify metrics related to cost, revenue, time, and associated resources. The various input and output tabs are for defining details about the business items used for input and output.

The information specified can be very detailed. Some is used in the simulations, some is used for generating the implementation, and some is used for specifying key business measures for the business process.

Not everything needs to be specified all at once. You only need to specify the attributes that you need to fulfill your current objectives. Additional details can be added when they become known or become necessary for the task at hand.

Show view

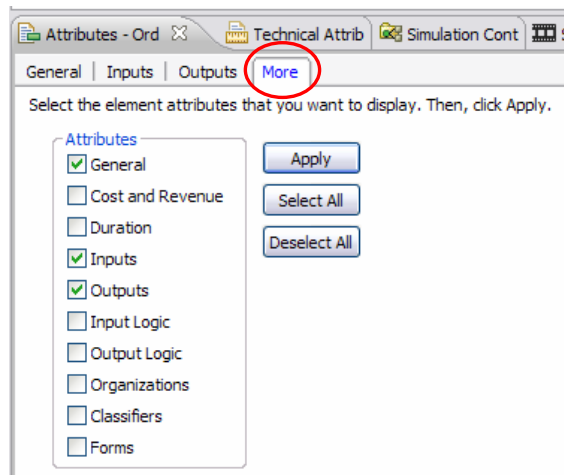
- Views can be added or removed
 - ▶ Add using *Show View*
 - ▶ remove using the  on the major tab.
 - It is displayed when selected



You might have trouble finding the major view that you are looking for. Sometimes they get deleted by accident and they are not all present by default. They can be retrieved using show view from the menu bar. Looking at the titles, technical attributes, Simulation Control Panel, Storyboard, and so on, you can see that they represent advanced features. To do basic modeling, you only need the Attributes view and the errors view.

Process attributes view

- More...
 - ▶ Provides a way manage the minor tabs that are displayed.
 - ▶ Depending on what you are doing you might not want to see all the pages



The Attributes view can be customized to display only the pages you need for the task at hand. For creating the basic flow for a business process, it is only necessary to describe the purpose of the process or element and the inputs and outputs. In this case the only pages needed are the general, inputs, and outputs pages.

The screen capture here shows the pages available for a business process. The list will vary slightly depending on the type of element, be it a Task, a Human Task or a Business Rules Tasks.

General process attributes

- Name
 - ▶ cannot be changed
- Description
- Associated service
- Attached files
 - ▶ Files are published to the *WebSphere Business Modeler Publishing Server*

Attributes - Order Handling (Cu) Technical Attributes Simulation Contr

General Inputs Outputs More

This section provides general information about this process.

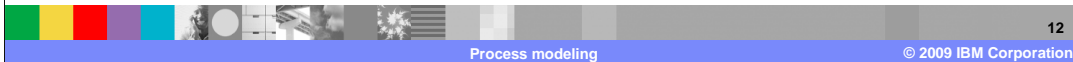
Name
Order Handling (Current)

Description

Associated service: None
Break Association

Attached files

Open
Rename...
Add...
Remove



The name and description for any object being modeled is extremely important. Here in the case of a global element, the name cannot be changed. The name of a global process must be changed from the project tree. If this were a local element then the name can be changed here and it is reflected in the diagram.

The description should explain the responsibility of the business process, such as what it is supposed to do, or known limitations and issues. If this business process is going to be implemented as an executable business process, consider what you need to communicate to the developers.

When creating a business process in WebSphere Process Server modeling mode, there is an opportunity to associate the business process with a service. If you had made an association at that time, you can use this page to undo it.

The attached files area is a place to attach other supporting documents to your business process. If you are also using the WebSphere Business Modeler Publishing Server, the files attached here will also be published to the publishing server.

Process inputs

- Specify the data elements to be passed into the business process
 - ▶ Data elements are called *business items* in WebSphere Business Modeler

This section provides detailed information about the inputs.

Name	Associated data	State	Minimum	Maximum
Input	Request		1	1

Details

Name:

Associated data:

State:

Minimum number of items needed:

Maximum number of items needed:

Unlimited Limited

The items are in a specific order

The items are unique

Process modeling © 2009 IBM Corporation 13

Shown here is the interface for specifying the data elements to be passed into the business process.

You can add and remove inputs as needed. To see the information in the bottom part of the screen, you need to select one of the inputs.

The cells in the table are directly editable. You can change the associated data by directly editing the cell or you can use the browse button in the section below.

The set of possible states is defined as part of the business item. There is more on this in a separate presentation. If the states have been defined, you can select the state that represents the business item as it is first received by the business process. For example, 'new' as in a new order.

The minimum and maximum are used to indicate how many items are needed. You can also input this information in the bottom section, where you can get a clearer picture of the options. If there is more than one item, then you have a collection. The collection can be limited or unlimited, ordered or unordered and you can also specify that each item be unique.

Process outputs

- Specify the data elements to be passed out of the business process
 - ▶ The interface is the same as for the inputs.

The screenshot shows the 'Outputs' configuration interface in IBM Business Process Manager. The top navigation bar includes tabs for 'General', 'Inputs', 'Outputs', and 'More'. Below the navigation, a table lists the output configurations:

Name	Associated data	State	Minimum	Maximum
Output	Product Shipment		1	1

Below the table, the 'Details' section allows for further configuration:

- Name: Output
- Associated data: Product Shipment (with a 'Browse...' button)
- State: (with a 'Browse...' button)
- Minimum number of items needed: 1
- Maximum number of items needed: Limited (1)
- Options: Unlimited, Limited
- Checkboxes: The items are in a specific order, The items are unique

The footer of the interface displays 'Process modeling' and '© 2009 IBM Corporation'.

The interface for specifying the output data works the same as the input specification interface. You can associate a state, use collections, and have as many outputs as you need.

Keep in mind this is only the basic specification. It can get more complicated in a hurry. That is where the input and output logic specifications come into play. Input and output logic specifications are advanced features and are not covered further in this module.

Summary

- Different goals for modeling
 - ▶ Documentation, regulatory requirements, process improvements, first step in developing an application
- Multiple views
 - ▶ Free-form and swim lane
- Modeling modes
 - ▶ Basic, advanced and technology modes
- Views
 - ▶ Provide windows into the model details



When working with WebSphere Business Modeler it is important to remember that there are many different reasons for creating business models. WebSphere Business Modeler accommodates many different goals and provides a smooth transition from one to the other as your needs and understanding evolve.

You can view and work with your models using two interchangeable views, the Free-form and the swim lane views. They are both very popular and each provides unique insight into the business process being modeled.

Although the different views were not discussed in detail, you can see how each view is a window into the model details. The attributes view is the most frequently used view and provides a way to manage which pages are displayed using the more tab.

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_WBPMv62_Modeler_ProcessModeling.ppt

This module is also available in PDF format at: ..\WBPMv62_Modeler_ProcessModeling.pdf



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

Trademarks, copyrights, and disclaimers

IBM, the IBM logo, ibm.com, and the following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

Storyboard WebSphere

If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of other IBM trademarks is available on the Web at "Copyright and trademark information" at <http://www.ibm.com/legal/copytrade.shtml>

Other company, product, or service names may be trademarks or service marks of others.

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.

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 2009. 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.

