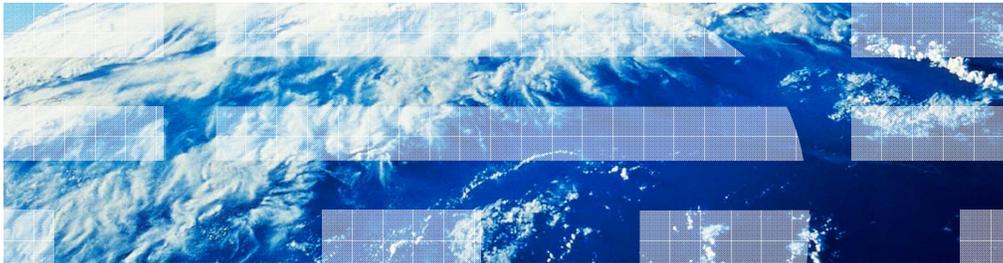

Business Process Management

IBM Integration Designer

What is new in V7.5 – Process Center Integration



This presentation provides an overview of how IBM Integration Designer is integrated with Process Center.

Goal and agenda

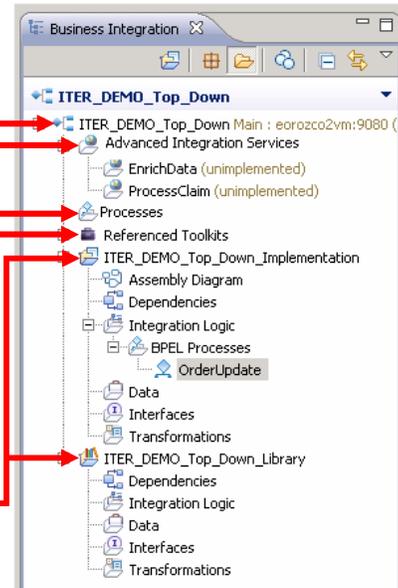
- Goal
 - Introduce Process Center Integration with IBM Integration Designer in V7.5
- Agenda
 - New Terminology
 - Integrated environment (Integration Designer, Process Designer and Process Center)
 - Integration Designer usage in different authoring scenarios
 - New actions
 - What's new when creating and renaming artifacts

The goal of this presentation is to introduce you to IBM Integration Designer integration with Process Center in Version 7.5.

First, you will learn about the new terminology and how it relates to the terminology used before version 7.5. You will then learn about the role of Integration Designer in the integrated environment, how it is used in different authoring scenarios and the new actions added to enable interaction between Integration Designer and Process Center. Finally, you will learn about what is changed when creating and renaming artifacts as a result of process center association.

New terminology

- IBM Integration Designer = new name for WebSphere Integration Developer
- Process Center
- Artifacts
 - Process Application (Process App)
 - Similar to solution in WebSphere Integration Developer one or more modules
 - Translates to BLA for deployment
 - Advanced Integration Service (AIS)
 - Equals WebSphere Integration Developer based service (BPEL, Java, open) is being used/called from a BPD process
 - Business Process Definition (BPD)
 - A business process based on BPMN
 - Toolkit
 - Similar to WebSphere Integration Developer library
 - Implementation and Library projects
 - Container for Modules and Libraries



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IBM Integration Designer - What is new in V7.5 - Process Center Integration

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IBM Integration Designer is the new name for WebSphere Integration Developer. You can use IBM Integration Designer as a tooling component with IBM Business Process Manager Advanced configuration to create an end-to-end integration of your service oriented application. The new terminology in Integration Designer when used with IBM Business Process Manager is described on this slide.

Process Center includes a unified repository for Integration Designer artifacts that can be shared with Process Designer. This enables collaborative development of business processes in a very efficient manner.

Process Application is a top level container for libraries and modules. You can think of it as a solution with multiple modules associated with it in WebSphere Integration Developer. Each process application has a business level application (BLA) when deploying.

Advanced Integration Service, henceforth referred to as AIS through out this presentation is a service in Integration Designer that is associated with a process application or a toolkit.

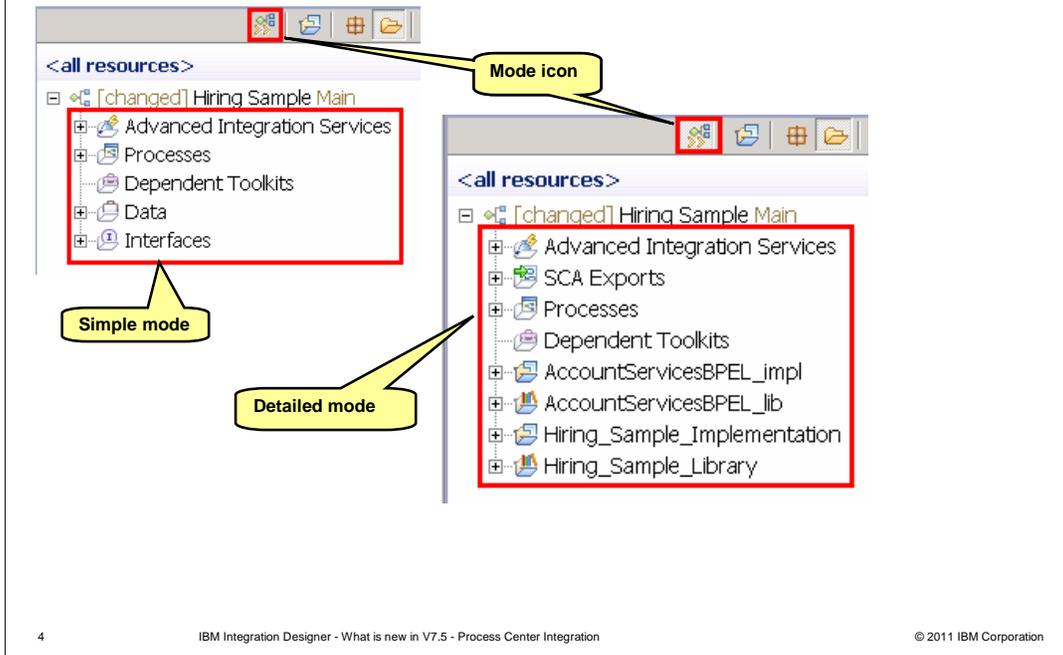
The role of Integration Designer when defining and implementing an AIS is presented on subsequent slides.

A Business Process Definition, referred to as BPD, is a process model developed in Process Designer. A BPD can be brought into Integration Designer through Process Center and is displayed under the Processes folder. BPDs are based on BPMN specification.

A Toolkit allows sharing of artifacts across multiple process applications. You can think of it as a WebSphere Integration Developer library. Toolkits referred to from a process application are shown under the Referenced Toolkits folder.

Implementation and Library folders are created when a process application is brought into Integration Designer workspace. They hold modules and libraries. You can import modules and libraries created before version 7.5 and associate them with a process application. Once these artifacts are associated with a process application, they appear under the implementation and library folders and can be referred to from a BPD in Process Designer.

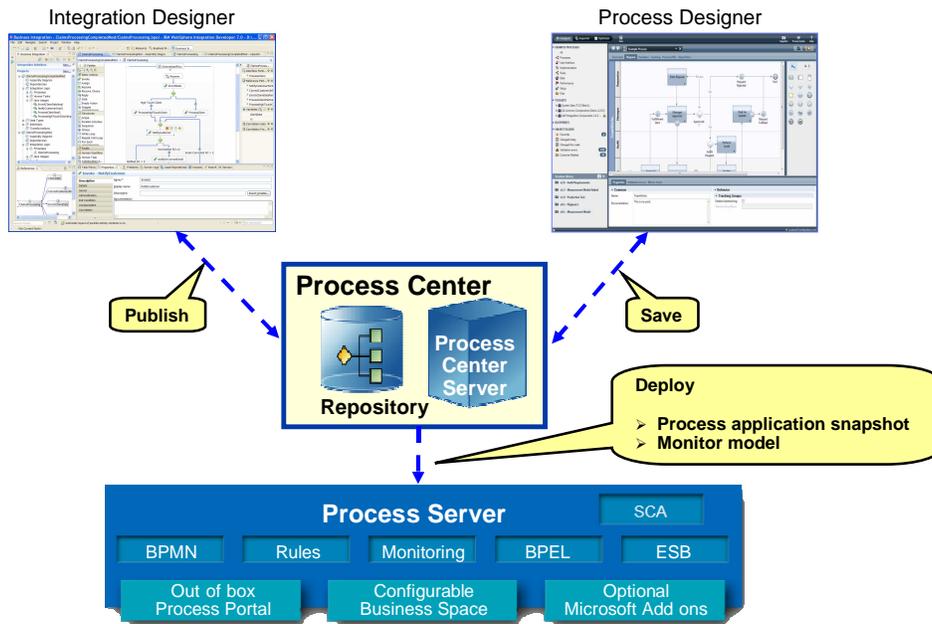
Modes of operation



Two modes of operation have been introduced in version 7.5. They are Simple mode and Detailed mode. Based on what mode you operate under, the artifacts associated with process application and toolkit are displayed in the business integration view. With the Simple mode, you can see advanced integration services, processes, data, and interfaces. Modules, libraries, and the assembly diagram are hidden in this mode. In the Detailed mode, you can see all the artifacts. The image on the slide shows business integration view in the two modes.

You can use the Mode icon in the business integration view as shown in the image on the slide to switch between the two modes.

Integrated environment



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IBM Integration Designer - What is new in V7.5 - Process Center Integration

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With IBM Business Process Manager Advanced configuration, the easiest and most efficient way to develop business processes is by using Integration Designer with IBM Process Designer and IBM Process Center.

You can use Integration Designer to create services that can be called from business process definition created in Process Designer. Similarly, you can create BPEL processes in Integration Designer that use business process definitions developed in Process Designer. You associate integration designer artifacts with process application to achieve this. The artifacts created in Integration Designer are made available in Process Designer and vice-a-versa through the Process Center repository. From the Process Center, process application snapshot or monitor model are deployed to the Process Server, which is the runtime environment for IBM Business Process Manager.

The actions introduced in Integration Designer for communicating with Process Center are described later on in this presentation.

What artifacts are created in Integration Designer and how artifacts created in Process Designer are consumed in Integration Designer depends upon the approach taken for developing a human centric business process that uses services to integrate with another system . How Integration Designer is used in three different scenarios is illustrated on slides 5, 6 and 7.

Integration Designer Usage – Top Down Scenario

Process Designer
Design an Advanced Integration Service interface

Service interface in Process Designer and implementation in Integration Designer

Top-Down

Integration Designer
Import the interface from Process Center
Develop the implementation for the service
Publish it to the Process Center to be consumed by Process Designer

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In a top down approach, Integration Designer is used for implementing a service that is created in Process Designer. The service interface is also defined in Process Designer. The implementation is done based on this interface. The implemented service is then published to Process Center to be consumed by a business process definition in Process Designer. At this point, the business process can be tested in Process Designer using process center. You can also deploy a snapshot of a process to Process Server and run it.

Integration Designer Usage – Bottom Up Scenario

Integration Designer
Design and implement an Advanced Integration Service
Publish to the Process Center to be consumed by Process Designer

Bottom-Up

Process Designer
Define a business process that uses the Advanced Integration Service published from Integration Designer

Service interface and implementation in Integration Designer

```

public DataObject invoke(DataObject input, DataObject output) {
    // type conveys that it is a
    // on the type of input, output
    //
    //
    System.out.println("*****");
    theWorkRequest.setString("Request", "Request");
    System.out.println("*****");
    return theWorkRequest;
}
    
```

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In a bottom up approach, Integration Designer is used for designing and implementing a service. The implemented service is then published to Process Center to be integrated into a business process definition in Process Designer. At this point, the business process can be tested in Process Designer using process center. You can also deploy a snapshot of a process to Process Server and run it.

Integration Designer Usage – Straight Through Processing Scenario

Integration Designer

- Import/Create BPEL process and associate with process application
- Drag and drop business process definition into BPEL process or assembly diagram
- Publish the process application to Process Center

Process Designer

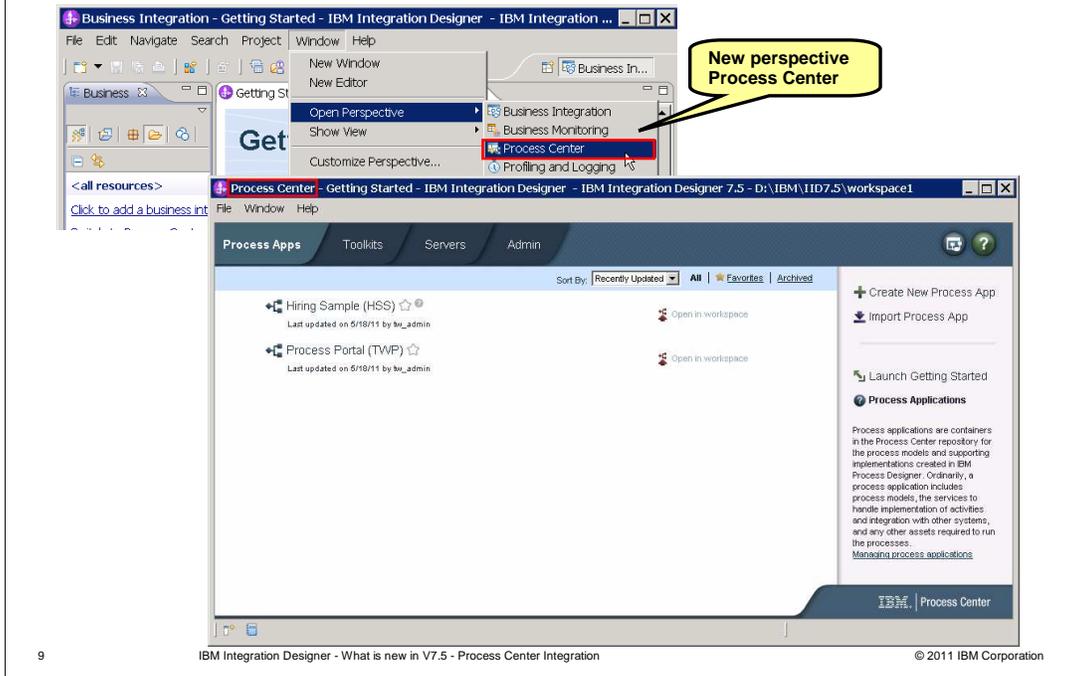
- Create a business process definition

No Advanced Integration Service

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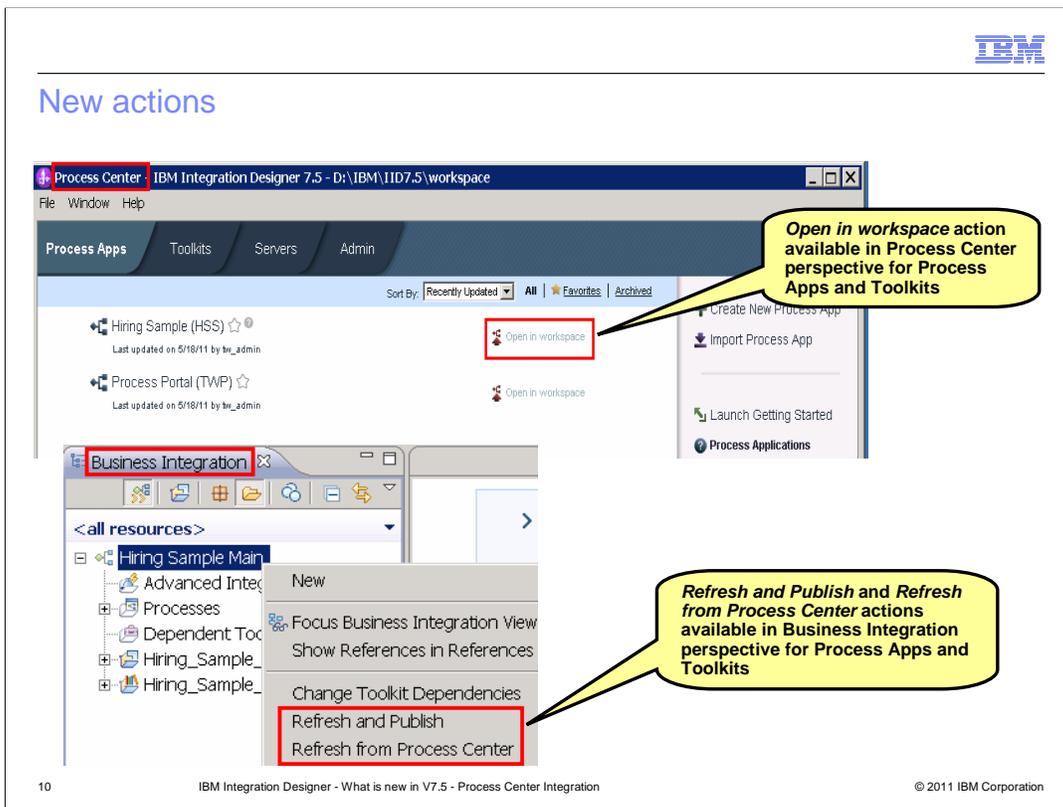
In a straight through processing scenario, a BPEL process is created or imported into Integration Designer. A business process definition is created in Process Designer which becomes available as an SCA service in Integration Designer. You can drag this service into the BPEL process as an invoke activity or into an assembly editor as an import. You can create a snapshot of a container process application, deploy it to process server and run it.

New Perspective - Process Center



A new perspective called Process Center is added in version 7.5 that displays artifacts in the process center repository. When you first start Integration Designer or when you launch this perspective the first time, you are prompted to provide process center URI and login credentials to be able to access it. When you enter a URI, it is stored in the Preferences and can be accessed by selecting Window -> Preferences -> Business Integration -> Process Center.

You can create and import process application and toolkit in this perspective.



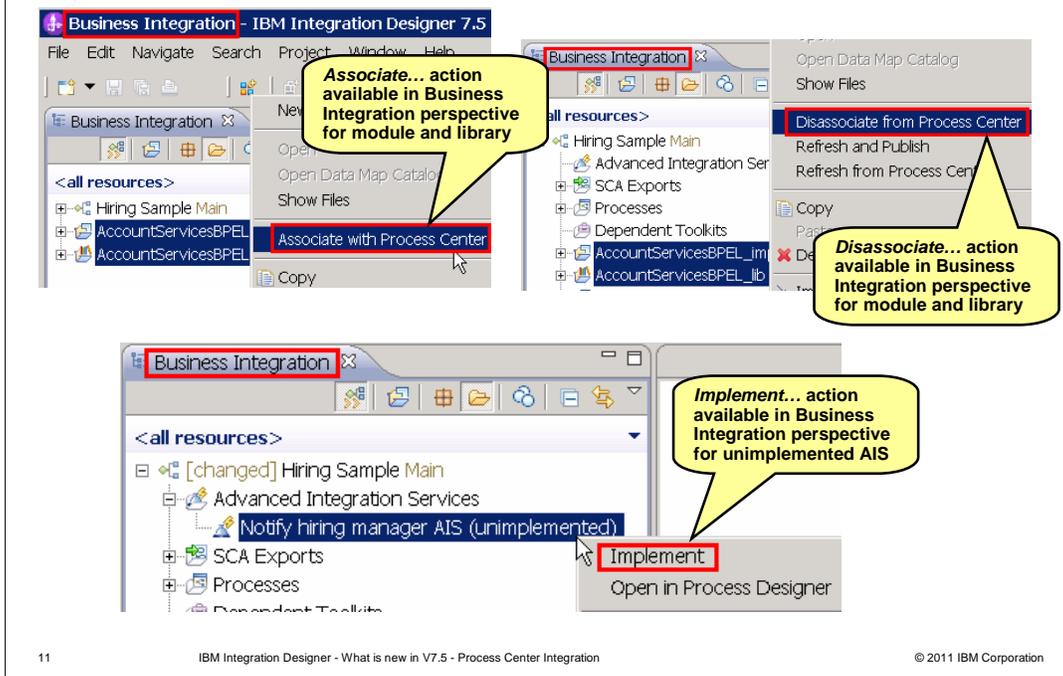
Multiple new actions are introduced in Integration Designer version 7.5 to interact with process center.

Open in workspace action in the process center perspective allows you to import process application and toolkit from process center repository into Integration Designer workspace. Once imported, you can use these artifacts with your modules and libraries.

As process applications and toolkits can be shared by different users, they can get updated by different users. As a result, your workspace artifacts can get out of sync with the process center repository. The Refresh from Process Center actions allows you to get the latest updates from the process center repository. It is possible that you have made changes to an artifact in your workspace and another user has made changes to the same artifact, say, in Process Designer. For example, two users changing type of the same parameter of a business object. When you perform the Refresh from process center, synchronization is invoked implicitly. If no conflicts are detected, changes are merged silently. If conflicts are detected, they are ignored. In version 7.5, you are not notified that the conflicts are ignored when doing Refresh from process center operation.

When you make changes to process application or toolkit in your workspace, you should reflect these changes in the process center repository. Refresh and Publish action updates the process center repository with workspace changes. When you perform Refresh and Publish, synchronization is invoked implicitly. If no conflicts are detected, changes are merged silently. If conflicts are detected, the synchronize dialog is shown with conflicting changes and non-conflicting changes, if any, are merged silently. You must resolve the conflicts in order to proceed with the publish operation. Note that the conflict handling is different when performing the two actions.

New actions (continued)



You need to associate a module or library with process application or toolkit to avail of the functionality offered by process center, such as sharing of artifacts and version control. A new action called Associate with process center is available on module and library to achieve the same. If the module being associated contains BPEL processes or human tasks, the validFrom dates for these artifacts are removed. Version handling of these artifacts when associated with process application or toolkit is done in process center using snapshots.

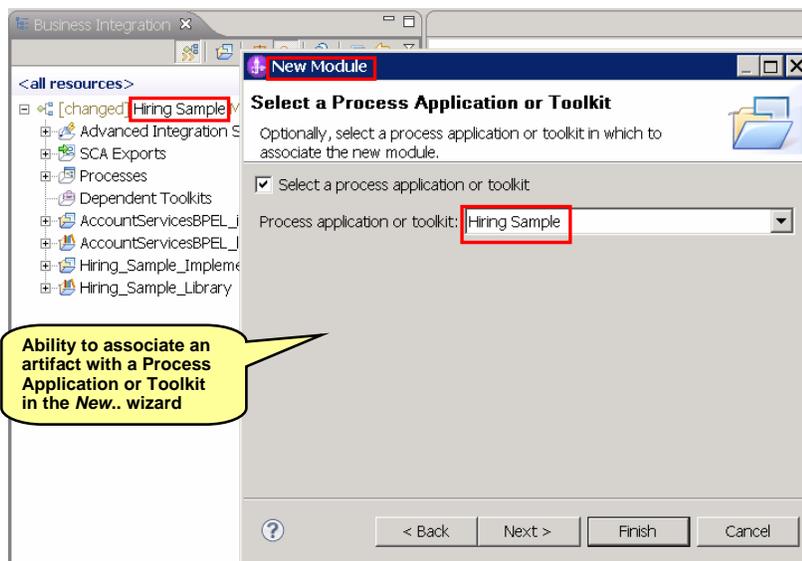
If you perform this action when in the simple mode, you are prompted to switch to the detailed mode so you can see the associated module and library under the process application or toolkit. This is optional and you can choose to stay in the simple mode.

When the artifacts are shared, they can be modified in Process Designer by another user. Sometimes you may not want all users changing the artifacts. You can set-up users and groups and give update access to certain users only.

You can choose Disassociate from Process Center action on a module or library to remove the association between the workspace artifacts and process center artifacts. You have to be in the detailed mode to perform this action. With this action, a module or library is removed from the associated process application or toolkit in both process center repository and the workspace. When disconnected from the process center, this action is called Disassociate. In this case, a module or library is removed from the associated process application or toolkit only in the workspace. The disassociated module or library remain in the workspace outside the process application or toolkit with both the actions.

The last action you will learn about is called Implement that is available on an unimplemented advanced integration service. When you invoke the Implement option, a wizard is launched for you to select an implementation type. Based on the implementation type, a corresponding editor opens in which you can complete the implementation development.

What is new when creating new artifacts



When you create new artifacts in IBM Integration Designer such as modules, libraries, and monitor models, the creation wizard now allows you to associate them with process application or toolkit.

What is new when renaming a module

The image consists of three screenshots illustrating the process of renaming a module in IBM Integration Designer:

- 1. Disassociate from Process Center:** The first screenshot shows a context menu for the module 'Hiring_Sample_Implementation'. The 'Disassociate from Process Center' option is highlighted with a red box and a yellow callout bubble.
- 2. Refactor -> Rename:** The second screenshot shows the 'Refactor or Analyze Impact' menu open for the module. The 'Rename...' option is highlighted with a red box and a yellow callout bubble.
- 3. Associate with Process Center:** The third screenshot shows the 'Associate with Process Center' option highlighted with a red box and a yellow callout bubble.

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When you want to rename a module that is associated with process application or toolkit, you need to first disassociate it from process center. Once disassociated, you can rename the module. You can then associate the renamed module with process center.

Resources

- **Authoring in Integration Designer**
 - http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r5mx/topic/com.ibm.wbpm.auth.stp.doc/topics/cbpm_stpovw.html
- **Tips and guidance when working with process center**
 - <http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r5mx/topic/com.ibm.wbpm.auth.stp.doc/processcenter/topics/rpcguidance.html>
- **Limitations when working with new artifacts (process application, toolkit, AIS, and so on.)**
 - <http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r5mx/topic/com.ibm.wbpm.auth.stp.doc/processcenter/topics/rprestrictions.html>

Refer to the product information center for details on the Integration Designer and Process Center integration. This slide provides links to useful topics for the same.

Summary

- New Terminology
- Integrated environment (Integration Designer, Process Designer and Process Center)
- Integration Designer usage in different authoring scenarios
- New actions
- What's new when creating and renaming artifacts

In this presentation you were introduced to IBM Integration Designer integration with Process Center. Topics that were covered include the new terminology and how it relates to the terminology used before version 7.5, the role of Integration Designer in the integrated environment and how it is used in different authoring scenarios.



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