



## Migrating to WebSphere Process Server

**Note**

Before using this information, be sure to read the general information in "Notices" on page 9.

**23 June 2006**

This edition applies to version 6, release 0, modification 1 of WebSphere Process Server for z/OS (product number 5655-N53) and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Migrating to WebSphere Process Server

This section describes how to migrate your system to IBM WebSphere Process Server, Version 6.0.

WebSphere Process Server documentation (in PDF format)

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## Migration overview

Migration refers to the steps used to preserve product configuration information and user applications from one product to another, or from one version of a product to another version of the same product. You must migrate your existing applications and configuration information from the previous product to WebSphere Process Server, or from the previous version of WebSphere Process Server to the newer version of WebSphere Process Server in order to use them in the new environment.

Migration steps can vary depending on the source or target of the migration. Typically, for minor version upgrades of a product such as from WebSphere Process Server 6.0.0 to WebSphere Process Server 6.0.1, there are no migration steps required besides installing the maintenance pack. This is because the upgrade is done "in place" to an existing installation, and the configuration and applications are preserved within the existing installation. Refer to **Installing > Applying product maintenance** in the WebSphere Process Server information center for information about installing such a maintenance pack. For migration from a previous product to WebSphere Process Server (for example, WebSphere InterChange Server to WebSphere Process Server), or across major versions of the same product (for example, WebSphere Business Integration Server Foundation to WebSphere Process Server), the migration steps include using migration tools to convert source artifacts to the new WebSphere Process Server version of the artifacts. The remainder of this topic describes migration from a previous product to WebSphere Process Server or across major versions of the same product. Again, for minor version upgrades refer to **Installing > Applying product maintenance** in the WebSphere Process Server information center.

WebSphere Process Server contains migration tools that assist in migrating existing application source artifacts into WebSphere Process Server artifacts. These tools can be accessed through the File->Import... wizards of WebSphere Integration Developer.

Migration from another product to WebSphere Process Server is supported from the following predecessor products:

- WebSphere Business Integration Server Foundation versions 5.1 and 5.1.1. For details on how to migrate your application source code, see the WebSphere Integration Developer Information Center.
- WebSphere MQ Workflow version 3.5. (See the WebSphere Integration Developer Information Center for details).

For more information on migration techniques, refer to the migration tutorials available at the IBM Education Assistant web site.

**Note:** Migration from WebSphere Business Integration Server Foundation to WebSphere Process Server can be accomplished only through migration of the source artifacts (by hand and/or with assistance from the migration tools provided.) Existing WebSphere Business Integration Server Foundation configurations can be applied to WebSphere Process Server, but these configurations must be set up by hand. There is no automatic tool to migrate the configuration data.

*Table 1. Overview of migration pathways*

Migration pathway	Description
WebSphere Business Integration Server Foundation versions 5.1 and 5.1.1.	Use the Migration wizard from WebSphere Integration Developer to migrate WebSphere Application Server Developer Integration Edition service projects into projects in the active WebSphere Integration Developer workspace. See the WebSphere Integration Developer Information Center for details.
WebSphere MQ Workflow version 3.5.	Use either the Migration wizard or the FDL2BPEL utility to migrate all WebSphere MQ Workflow artifacts into WebSphere Integration Developer deployable artifacts. See the WebSphere Integration Developer Information Center for details.
WebSphere MQ Workflow version 3.4 or earlier	You must first migrate to WebSphere MQ Workflow version 3.5.

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## Deprecated features

This section summarizes deprecated features in the product offerings comprising WebSphere Process Server version 6.0, which include the WebSphere Business Integration Server Foundation version 5.1 and WebSphere Application Server Enterprise Edition version 5.0. Deprecated features from other WebSphere Application Server version 5.x and 6.x product offerings are described in the documentation for those products. As they become available, links to additional information will be provided to help you migrate from deprecated features.

### Deprecation list

This article describes the deprecated features in the following versions and releases:

- “Deprecated features in version 6.0.1” on page 3
- Deprecated features in version 6.0
- Deprecated features in version 5.1.1
- Deprecated features in version 5.1
- Deprecated features in version 5.0.2
- Deprecated features in version 5.0.1
- Deprecated features in version 5.0

The following tables summarize what is deprecated, by version and release. Each table reflects the version and release where the deprecation took effect and lists what is being deprecated, such as features, APIs, scripting interfaces, tools, wizards, publicly exposed configuration data, naming identifiers, and constants. Where possible, a recommended migration action is provided.

## Deprecated features in version 6.0.1

WebSphere Process Server version 6.0.1 has no deprecated features.
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## Deprecated features in version 6.0

Application programming model and container support features
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The BRBeans component is deprecated, and is being replaced with the new business rules.

**Recommended migration action:**

You must manually remove all usages of BRBeans and move to the new business rules.

Some BPEL business process modeling constructs have been syntactically changed in version 6. Only the new syntax is supported by WebSphere Integration Developer version 6.0. Migration is available for these constructs.

**Recommended migration action:**

Use the migration wizard provided by WebSphere Integration Developer to migrate WebSphere Business Integration Server Foundation version 5.1 service projects (including process definitions) to WebSphere Process Server version 6.0. After the migration wizard has finished, you must carry out some manual steps to complete the migration. For more information about migrating service projects, refer to the information center for WebSphere Integration Developer version 6.0.

In WebSphere Business Integration Server Foundation version 5.1, there is an option for the input of an undo service to implicitly provide a message that results from the merge of the input data of the compensable service overlaid by its output data . Given the enhanced compensation support provided by BPEL this functionality is deprecated.

**Recommended migration action:**

Use BPEL compensation for new business processes.

Because of changes in the Business Flow Manager functionality In WebSphere Process Server version 6.0, the following methods are deprecated in the generic process API:

- The WorkList object has been renamed to StoredQuery; consequently, the following methods are deprecated on the BusinessFlowManager bean, and, if applicable, the methods you should now use WebSphere Process Server version 6.0 are given:
  - newWorkList( String workListName, String selectClause, String whereClause, String orderByClause, Integer threshold, TimeZone timezone )  
    Replace with: createStoredQuery( String storedQueryName, String selectClause, String whereClause, String orderByClause, Integer threshold, TimeZone timezone )
  - getWorkListNames()  
    Replace with: getStoredQueryNames()
  - deleteWorkList( String workListName )  
    Replace with: deleteStoredQuery( String storedQueryName )
  - getWorkList( String workListName )  
    Replace with: getStoredQuery( String storedQueryName )
  - executeWorkList( String workListName )  
    Replace with: query( String storedQueryName, Integer skipTuples )
  - getWorkListActions()  
    not supported.
- The WorkListData object is deprecated.  
    Use StoredQueryData instead.
- The following methods of the ProcessTemplateData object are no longer supported:
  - getInputMessageTypeSystemName()
  - getOutputMessageTypeSystemName()
- The following methods of the ProcessInstanceData object are no longer supported:
  - getInputMessageTypeSystemName()
  - getOutputMessageTypeSystemName()
- The following methods of the ActivityInstanceData object are no longer supported:
  - getInputMessageTypeSystemName()
  - getOutputMessageTypeSystemName()
- The following methods of the ActivityServiceTemplateData object are no longer supported:
  - getInputMessageTypeSystemName()

**Recommended migration action:**

Use the replacement methods, if any, that are given.



Because of changes in the Human Task Manager functionality In WebSphere Process Server version 6.0, the following methods are deprecated in the generic process API

- The following methods are deprecated on the HumanTaskManager bean, and their replacements for use in WebSphere Process Server version 6.0 are given:
  - createMessage( TKIID tkiid, String messageTypeName )  
Use the specific methods createInputMessage( TKIID tkiid ), createOutputMessage( TKIID tkiid ), createFaultMessage( TKIID tkiid ) instead.
  - createMessage( String tkiid, String messageTypeName )  
Use the specific methods createInputMessage( String tkiid ), createOutputMessage( String tkiid ), createFaultMessage( String tkiid ) instead.
- For the Task object, the following methods are no longer supported:
  - getInputMessageTypeNames()
  - getOutputMessageTypeNames()

**Recommended migration action:**

Use the replacement methods, if any, that are given.

The following database views are deprecated:

- DESCRIPTION
- CUSTOM\_PROPERTY

**Recommended migration action:**

For new applications use the TASK\_DESC view for the DESCRIPTION view and the TASK\_CPROP view for the CUSTOM\_PROPERTY view.

Programming Model of Java Code Snippets

- In WebSphere Business Integration Server Foundation version 5.1, access to BPEL variables within inline Java code snippets (activities and conditions) is provided through getter and setter methods. These methods are not supported. The WSIFMessage method that is used to represent BPEL variables in Java code snippets is also not supported.
- Methods <typeOfP> getCorrelationSet<cs> Property<p>() are not supported, as they do not consider correlation sets declared at the scope level; they can only be used to access correlation sets declared at the process level.
- The WebSphere Business Integration Server Foundation version 5.1 methods to access custom properties within Java snippet activities are not supported.
- The following getPartnerLink methods are not supported. Because they do not consider partner links declared on the scope level, they can only be used to access partner links declared at the process level.
  - EndpointReference getPartnerLink();
  - EndpointReference getPartnerLink (int role);
  - void setPartnerLink (EndpointReference epr);

**Recommended migration action:**

Use the migration wizard provided by WebSphere Integration Developer 6.0 to migrate WebSphere Business Integration Server Foundation version 5.1 service projects (including process definitions) to WebSphere Process Server version 6.0. After the migration wizard has finished, you must carry out some manual steps to complete the migration. For more information about migrating service projects, refer to the information center for WebSphere Integration Developer version 6.0.

**Application services features**

The Extended Messaging Service feature and all of the EMS/CMM APIs and SPIs listed below are deprecated:

com/ibm/websphere/ems/CMMCorrelator  
com/ibm/websphere/ems/CMMException  
com/ibm/websphere/ems/CMMReplyCorrelator  
com/ibm/websphere/ems/CMMRequest  
com/ibm/websphere/ems/CMMResponseCorrelator  
com/ibm/websphere/ems/ConfigurationException  
com/ibm/websphere/ems/FormatException  
com/ibm/websphere/ems/IllegalStateException  
com/ibm/websphere/ems/InputPort  
com/ibm/websphere/ems/OutputPort  
com/ibm/websphere/ems/transport/jms/JMSRequest  
com/ibm/websphere/ems/TimeoutException  
com/ibm/websphere/ems/TransportException  
com/ibm/ws/spi/ems/CMMFactory  
com/ibm/ws/spi/ems/format/cmm/CMMFormatter  
com/ibm/ws/spi/ems/format/cmm/CMMParser  
com/ibm/ws/spi/ems/format/Formatter  
com/ibm/ws/spi/ems/format/Parser  
com/ibm/ws/spi/ems/transport/CMMReceiver  
com/ibm/ws/spi/ems/transport/CMMReplySender  
com/ibm/ws/spi/ems/transport/CMMSender  
com/ibm/ws/spi/ems/transport/MessageFactory

**Recommended migration action:**

Instead of using the Extended Messaging Service and its associated tooling, you will need to use standard JMS APIs, or equivalent messaging technologies.

## Deprecated features in WebSphere Business Integration Server Foundation version 5.1.1

WebSphere Business Integration Server Foundation version 5.1.1 has no deprecated features.

## Deprecated features in WebSphere Business Integration Server Foundation version 5.1

### Installation and migration tools

Business processes modeled with WebSphere Studio Application Developer Integration Edition version 5.0 or earlier are deprecated.

**Recommended migration action:**

Use the **Migrate** option provided with WebSphere Studio Application Developer Integration Edition version 5.1 to migrate business process to a BPEL-related process.

Several Business Process Choreographer API interfaces and methods used for business processes created with WebSphere Studio Application Developer Integration Edition version 5.0 or earlier.

**Recommended migration action:**

Refer to the Javadoc provided with Business Process Choreographer for a detailed list of these API interfaces and methods.

### Application programming model and container support features

Business Rule Bean programming interfaces that include the following public classes, methods, and attributes are deprecated:

- Public classes:
  - com.ibm.websphere.brb.RuleImporter
  - com.ibm.websphere.brb.RuleExporter
- Public method:
  - getLocalRuleManager() on class com.ibm.websphere.brb.TriggerPoint
- Protected attribute:
  - ruleMgr on class com.ibm.websphere.brb.TriggerPoint

#### **Recommended migration action:**

No action is required.

The com.ibm.websphere.scheduler class programming interface scheduler.Scheduler methods are deprecated:

```
public BeanTaskInfo createBeanTaskInfo();  
public MessageTaskInfo createMessageTaskInfo();
```

#### **Recommended migration action:**

Use the following methods:

```
public Object createTaskInfo(Class taskInfoInterface) throws TaskInfoInvalid;  
BeanTaskInfo ti = (BeanTaskInfo) Scheduler.createTaskInfo(BeanTaskInfo.class);
```

The Web Services gateway customization API is deprecated.

#### **Recommended migration action:**

No action is required. However, where possible, use the Java API for XML-based Remote Procedure Call (JAX-RPC) handlers rather than Web Services gateway-specific interfaces, such as filters. The Web Services gateway API will be replaced in a future release. For more information, see the article 'JAX-RPC handlers - An alternative to gateway filters' in the WebSphere Business Integration Server Foundation information center.

## Deprecated features in WebSphere Application Server Enterprise Edition version 5.0.2

### Application programming model and container support features

The com.ibm.websphere.scheduler class interface scheduler.MessageTaskInfo is deprecated

```
public int setJMSPriority();
```

#### **Recommended migration action:**

Use the following method instead of the deprecated method:

```
public int getJMSPriority();
```

## Deprecated features in WebSphere Application Server Enterprise Edition version 5.0.1

WebSphere Application Server Enterprise Edition version 5.0.1 has no deprecated features.

## Deprecated features in WebSphere Application Server Enterprise Edition version 5.0

WebSphere Application Server Enterprise Edition version 5.0 has no deprecated features.

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## Programming interface information

Programming interface information, if provided, is intended to help you create application software using this program.

General-use programming interfaces allow you to write application software that obtain the services of this program's tools.

However, this information may also contain diagnosis, modification, and tuning information. Diagnosis, modification and tuning information is provided to help you debug your application software.

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