JD Edwards EnterpriseOne Tools

Messaging Queue Adapter Configuration Guide

Release 9.1 for WebSphere MQ on IBM i on Power Systems

E21985-03

November 2015

Describes how to configure the Messaging Queue Adapter.

ORACLE®

JD Edwards EnterpriseOne Tools Messaging Queue Adapter Configuration Guide, Release 9.1 for WebSphere MQ on IBM i on Power Systems

E21985-03

Contents

7 Restarting Services

8 Running the R00460 Subsystem for WebSphere MQ for Z Events Only

Preface

Welcome to the JD Edwards EnterpriseOne Tools Messaging Queue Adapter Configuration Guide for WebSphere MQ on IBM i on Power Systems.

Audience

This document is intended for system administrators and consultants who are responsible for installing and managing JD Edwards EnterpriseOne.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

You can access related documents from the JD Edwards EnterpriseOne Release Documentation Overview pages on My Oracle Support. Access the main documentation overview page by searching for the document ID, which is 876932.1, or by using this link:

https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=876932.1

To navigate to this page from the My Oracle Support home page, click the Knowledge tab, and then click the Tools and Training menu, JD Edwards EnterpriseOne, Welcome Center, Release Information Overview.

This guide contains references to server configuration settings that JD Edwards EnterpriseOne stores in configuration files (such as jde.ini, jas.ini, jdbj.ini, jdelog.properties, and so on). Beginning with the JD Edwards EnterpriseOne Tools Release 8.97, it is highly recommended that you only access and manage these settings for the supported server types using the Server Manager program. See the *JD Edwards EnterpriseOne Tools Server Manager Guide*.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Introduction

Oracle's JD Edwards EnterpriseOne Adapter for IBM WebSphere MQ enables you to connect third-party applications to JD Edwards EnterpriseOne by sending and receiving messages through IBM's WebSphere MQ messaging system. The adapter monitors an inbound queue for request and reply messages, performs the requested services, and places the results on outbound queues. The adapter also monitors the system for certain activities and publishes the results in an outbound message queue. All messages transported through IBM WebSphere MQ are in the form of XML documents.

The purpose of this document is to describe the configuration and operation of the adapter. A separate document, the *JD Edwards EnterpriseOne Tools Interoperability Guide*, in the chapter "Understanding Messaging Queue Adapters" explains the design of the adapter, the formats of the documents, and the tasks necessary to create, modify, and process the XML documents in the Events chapters.

The JD Edwards EnterpriseOne Adapter for IBM WebSphere MQ is a JD Edwards EnterpriseOne product that can be licensed and installed independently. You use this adapter to connect the JD Edwards EnterpriseOne system with any system that can implement the IBM WebSphere MQ messaging protocols, including IBM WebSphere Commerce Suite (WCS), and that can produce and consume XML documents in the prescribed formats. The JD Edwards EnterpriseOne Adapter for IBM WebSphere MQ exports and imports XML documents through IBM WebSphere MQ in the prescribed formats.

The following three operations are supported:

1. Inbound transactions through calling BSFNs.

2. Outbound Z events delivery through setting up EnterpriseOne Z events mechanism.

   The remaining guide applies only to inbound and outbound using Z events.

3. Outbound Real-Time events delivery through setting up EnterpriseOne Real-Time events mechanism.

1.1 Accessing Minimum Technical Requirements

Customers must conform to the supported platforms for the release as detailed in the JD Edwards EnterpriseOne Minimum Technical Requirements. In addition, JD Edwards EnterpriseOne may integrate, interface, or work in conjunction with other Oracle products. Refer to the following link for cross-reference material in the Program Documentation for Program prerequisites and version cross-reference documents to assure compatibility of various Oracle products:
http://www.oracle.com/corporate/contracts/index.html

You can locate the JD Edwards EnterpriseOne Tools Release 9.2 Certifications from My Oracle Support.

To access JD Edwards EnterpriseOne Tools Release 9.2 Certifications:

1. Navigate to My Oracle Support (https://support.oracle.com).

2. Click the Certifications tab.

3. Search for the product.

1.2 Creating Outbound IBM WebSphere MQ Queues For Real-Time Events

If you are interested in receiving real-time events, real-time event queues must be created. The real-time event queue does not need to be created if you are not interested in receiving real-time events.

See "Creating an MSMQ Real-Time Event Queue" in the *JD Edwards EnterpriseOne Tools Interoperability Guide*.

This illustration shows the JD Edwards EnterpriseOne server with the IBM WebSphere MQ adapter:
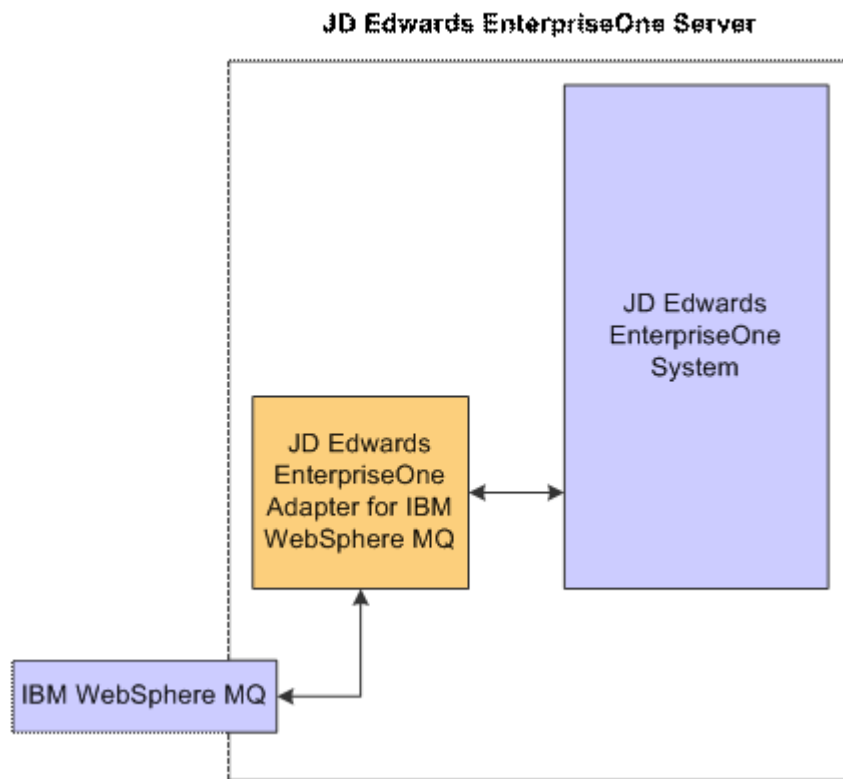
Prerequisites

See Accessing Minimum Technical Requirements.

2

Setting Up Inbound and Outbound WebSphere MQ Queues for Z Events Only

IBM WebSphere MQ is a queue messaging system that requires a sender and receiver relationship. One side of IBM WebSphere MQ is installed on Oracle's JD Edwards EnterpriseOne server while the related side is installed on another physical or logical machine. The setup on the JD Edwards EnterpriseOne server enables JD Edwards EnterpriseOne to receive inbound messages from a third-party application or system and to place outbound messages in a queue for processing by a third-party application or system. Refer to the applicable IBM documentation for instructions on installing IBM WebSphere MQ on other machines.

This chapter contains the following topics:

- Section 2.1, "Setting Up Inbound and Outbound WebSphere MQ Queues for Z Events Only: Step 1"

- Section 2.2, "Configuring the JD Edwards EnterpriseOne Server Components"

- Section 2.3, "Communicating Between Systems - Starting Up Channels And Listeners"

2.1 Setting Up Inbound and Outbound WebSphere MQ Queues for Z Events Only: Step 1

The procedures described in this section assume you have already installed the IBM product WebSphere MQ onto your JD Edwards EnterpriseOne server.

You must set up your JD Edwards EnterpriseOne server so that the system can receive inbound messages from a third-party application or system and then place responses, in the form of outbound messages, in a queue for processing by the third-party application or system.

In addition to information about setting up your JD Edwards EnterpriseOne server, this section also provides examples for communicating between the JD Edwards EnterpriseOne server and a third-party server.

Prerequisites

On your iSeries system, you must remove QMQM from the system value QSYSLIBL. After that you must issue a subsystem call with a qualified library name, which is required because the subsystem must be up and running before you can proceed with any other queue manager instructions. Type this command:

```
STRSBS QMQM/QMQM
```
Also, you must use one of these commands to change your user preferences:

```
CHGUSRPRF USRPRF(EnterpriseOne) GRPPRF(QMQMADM)
```
or

```
CHGUSRPRF USRPRF(EnterpriseOne) SUPGRPPRF(QMQMADM)
```

2.2 Configuring the JD Edwards EnterpriseOne Server Components

Inbound to JD Edwards EnterpriseOne and Outbound to a Third-Party System

You set up your JD Edwards EnterpriseOne server so that the system can receive an inbound message from a third-party system or application and respond by placing an outbound message in the outbound queue. Complete these tasks:

- Create the WebSphere MQ Queue Manager.

- Start the WebSphere MQ Queue Manager.

- Create MQ local queues.

- Create a MQ remote queue.

- Create a MQ local sender channel.

- Create a MQ local receiver channel.

- Grant authority to all queues and channels.

- Reset a channel.

> **Caution:** The names of queues and channels in IBM WebSphere MQ are case-sensitive. Be sure to use capital letters as specified in this document. You can specify any name for a queue or channel. However, it is important that the queue names you create match the queue names you specify in the jde.ini file on the JD Edwards EnterpriseOne server.

To create the IBM WebSphere MQ Queue Manager

On the JD Edwards EnterpriseOne server, create the IBM WebSphere MQ Queue Manager by issuing this command from the iSeries Command Entry command line:

```
CRTMQM MQMNAME(JDE_QMGR) TEXT('JD Edwards queue manager') DFTQMGR(*YES)
```

To start the IBM WebSphere MQ Queue Manager

1. On the JD Edwards EnterpriseOne server, start the IBM WebSphere MQ Queue Manager by issuing this command on the command line:

```
STRMQM MQMNAME(JDE_QMGR)
```

2. The display returns this:

```
Ownership of object QXCSGLOBAL in QTEMP type *USRSPC changed.
Ownership of object QXCSGLOBAL in QTEMP type *USRSPC changed.
Ownership of object QXSX455240 in QMQMDATA type *USRQ changed.
Ownership of object QXSX455240 in QMQMDATA type *USRQ changed.
Ownership of object QMQMLOCAL in QTEMP type *USRSPC changed.
Ownership of object QMQMLOCAL in QTEMP type *USRSPC changed.
Ownership of object QXSA00021 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00021 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00022 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00022 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00023 in QMQMDATA type *USRSPC changed.
```

```
Ownership of object QXSA00024 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00024 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00025 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00025 in QMQMDATA type *USRSPC changed.
Ownership of object QXSZ00006 in QMQMDATA type *USRQ changed.
Ownership of object QXSZ00006 in QMQMDATA type *USRQ changed.
Ownership of object QXSA00026 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00026 in QMQMDATA type *USRSPC changed.
Ownership of object QXSZ00007 in QMQMDATA type *USRQ changed.
Ownership of object QXSZ00007 in QMQMDATA type *USRQ changed.
Ownership of object QXSB00005 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00027 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00027 in QMQMDATA type *USRSPC changed.
Ownership of object QXSZ00008 in QMQMDATA type *USRQ changed.
Ownership of object QXSZ00008 in QMQMDATA type *USRQ changed.
Ownership of object QXSA00028 in QMQMDATA type *USRSPC changed.
Ownership of object QXSA00028 in QMQMDATA type *USRSPC changed.
11 entries received from journal AMQAJRN in QUSRSYS.
Ownership of object QXLEQ00001 in QMQMDATA type *USRQ changed.
Ownership of object QXLEQ00001 in QMQMDATA type *USRQ changed.
Object QXSX455240 in QMQMDATA type *USRQ deleted.
Message Queue Manager started
```

To create MQ local queues

You must create these local queues:

- INBOUND.Q

- SUCCESS.Q

- ERROR.Q

- DEFRES.Q

- OUTBOUND.Q.XMIT

Access the JD Edwards EnterpriseOne server.

1. To change the default local queue, enter this command on the command line:

```
CHGMQMQ QNAME(SYSTEM.DEFAULT.LOCAL.QUEUE) QTYPE(*LCL)
TEXT('Default local queue') PUTENBL(*YES) DFTPTY(9)
DFTMSGPST(*YES) PRCNAME(*NONE) TRGENBL(*NO) GETENBL(*YES)
SHARE(*YES) DFTSHARE(*YES) MSGDLYSEQ(*FIFO) HDNBKTCNT(*YES)
TRGTYPE(*NONE) TRGDEPTH(1) TRGMSGPTY(0) TRGDATA(*NONE)
RTNITV(999999999) MAXDEPTH(640000) MAXMSGLEN(4194304)
BKTTHLD(0) BKTQNAME(*NONE) INITQNAME(*NONE) USAGE(*NORMAL)
HIGHTHLD(100) LOWTHLD(0) FULLEVT(*YES) HIGHEVT(*YES)
LOWEVT(*YES) SRVITV(999999999) SRVEVT(*NONE) DISTLIST(*NO)
```

2. To create the local queues, enter these IBM WebSphere MQ commands:

```
CRTMQMQ QNAME(INBOUND.Q) QTYPE(*LCL)
TEXT('JD Edwards EnterpriseOne inbound queue')
PUTENBL(*YES) DFTPTY(9) DFTMSGPST(*YES)

CRTMQMQ QNAME(SUCCESS.Q) QTYPE(*LCL)
TEXT(' JD Edwards EnterpriseOne success queue')
PUTENBL(*YES) DFTPTY(9) DFTMSGPST(*YES)

CRTMQMQ QNAME(ERROR.Q) QTYPE(*LCL)
TEXT(' JD Edwards EnterpriseOne error queue')
PUTENBL(*YES) DFTPTY(9) DFTMSGPST(*YES)
```

```
CRTMQMQ QNAME(DEFRES.Q) QTYPE(*LCL)
TEXT(' JD Edwards EnterpriseOne default response queue')
PUTENBL(*YES) DFTPTY(9) DFTMSGPST(*YES)

CRTMQMQ QNAME(OUTBOUND.Q.XMIT) QTYPE(*LCL)
TEXT(' JD Edwards EnterpriseOne inbound queue')
PUTENBL(*YES) DFTPTY(9) DFTMSGPST(*YES)
USAGE(*TMQ)
```

To create the MQ remote queue

Access the JD Edwards EnterpriseOne server.

1. To change the default remote queue, enter this command on the command line:

```
CHGMQMQ QNAME(SYSTEM.DEFAULT.REMOTE.QUEUE)
QTYPE(*RMT)
TEXT('Default remote queue') PUTENBL(*YES)
DFTPTY(9) DFTMSGPST(*YES) TMQNAME(*NONE)
RMTQNAME(' ') RMTMQMNAME(' ')
```

2. To create the live remote queue, enter this command:

```
CRTMQMQ QNAME(OUTBOUND.Q) QTYPE(*RMT)
TEXT('JD Edwards EnterpriseOne outbound queue to NC system')
TMQNAME(OUTBOUND.Q.XMIT) RMTQNAME(ECE_IN2MQI)
RMTMQMNAME(ECE_MQI_QMGR)
```

> **Note:** ECE_IN2MQI is the third-party remote queue name and ECE_
> MQI_QMGR is the third-party queue manager name.

To create a MQ local sender channel

Access the JD Edwards EnterpriseOne server.

1. To change the default local sender channel, enter this command on the command line:

```
CHGMQMCHL CHLNAME(SYSTEM.DEF.SENDER)
CHLTYPE(*SDR ) TRPTYPE(*TCP)
TEXT('Default Sender channel') CONNAME(' ')
TMQNAME(' ') BATCHSIZE(9999) DSCITV(0)
SHORTTMR(999999999) SHORTRTY(999999999)
LONGTMR(999999999) SCYEXIT(*NONE)
SCYUSRDATA(*NONE) SNDEXIT(*NONE)
SNDUSRDATA(*NONE) RCVEXIT(*NONE)
RCVUSRDATA(*NONE) MSGEXIT(*NONE)
MSGUSRDATA(*NONE) SEQNUMWRAP(999999999)
MAXMSGLEN(4194304) CVTMSG(*NO)
HRTBTINTVL(999999) NPMSPEED(*FAST)
```

2. To create the live local sender channel, enter this command{

```
CRTMQMCHL CHLNAME(OW2MQI_CHL) CHLTYPE(*SDR )
TRPTYPE(*TCP) TEXT('Sender channel to NC system')
CONNAME('NC Server Name') TMQNAME(OUTBOUND.Q.XMIT)
```

To create an MQ local receiver channel

Access the JD Edwards EnterpriseOne server.

1. To change the default local receiver channel, enter this command on the command line:

```
CHGMQMCHL CHLNAME(SYSTEM.DEF.RECEIVER)
CHLTYPE(*RCVR) TRPTYPE(*TCP)
TEXT('Default Receiver channel') BATCHSIZE(9999)
SCYEXIT(*NONE) SCYUSRDATA(*NONE) SNDEXIT(*NONE)
SNDUSRDATA(*NONE) RCVEXIT(*NONE)
RCVUSRDATA(*NONE) MSGEXIT(*NONE)
MSGUSRDATA(*NONE) PUTAUT(*DFT)
SEQNUMWRAP(999999999) MAXMSGLEN(4194304)
HRTBTINTVL(999999) NPMSPEED(*FAST)
```

2. To create the live local receiver channel, enter this command:

```
CRTMQMCHL CHLNAME(MQI2OW_CHL ) CHLTYPE(*RCVR)
TRPTYPE(*TCP) TEXT('Receiver channel from third-party system')
```

To grant authority to all queues and channels

You need to give authority to JD Edwards EnterpriseOne and to all of the queues and channels.

Access the JD Edwards EnterpriseOne server.

Enter these commands on the command line:

```
GRTMQMAUT OBJ(JDE_QMGR) OBJTYPE(*MQM)
 USER(JD Edwards EnterpriseOne) AUT(*ALL)

GRTMQMAUT OBJ(DEFRES.Q) OBJTYPE(*Q)
 USER(JD Edwards EnterpriseOne) AUT(*ALL)

GRTMQMAUT OBJ(ERROR.Q) OBJTYPE(*Q)
 USER(JD Edwards EnterpriseOne) AUT(*ALL)

GRTMQMAUT OBJ(INBOUND.Q) OBJTYPE(*Q)
 USER(JD Edwards EnterpriseOne) AUT(*ALL)

GRTMQMAUT OBJ(OUTBOUND.Q) OBJTYPE(*Q)
 USER(JD Edwards EnterpriseOne) AUT(*ALL)

GRTMQMAUT OBJ(SUCCESS.Q) OBJTYPE(*Q)
 USER(JD Edwards EnterpriseOne) AUT(*ALL)

GRTMQMAUT OBJ(SYSTEM.DEFAULT.LOCAL.QUEUE) OBJTYPE(*Q)
 USER(JD Edwards EnterpriseOne) AUT(*ALL)

GRTMQMAUT OBJ(SYSTEM.DEFAULT.REMOTE.QUEUE) OBJTYPE(*Q)
USER(JD Edwards EnterpriseOne) AUT(*ALL)
```

To reset a channel

If a channel becomes inactive, you can use this command to reset the channel:

```
RSTMQMCHL CHLNAME(channel_name)
```

2.3 Communicating Between Systems - Starting Up Channels And Listeners

You must set up communications between the JD Edwards EnterpriseOne server and the third-party system. This section provides examples for setting up communications. The example communications setup uses these sequenced and machine-dependent steps:

- Start the Queue Manager on the third-party IBM WebSphere MQ server.

- Start the Queue Manager on the JD Edwards EnterpriseOne IBM WebSphere MQ Server.

- Start the channel on the third-party IBM WebSphere MQ Server.

- Start the channel on the JD Edwards EnterpriseOne IBM WebSphere MQ Server.

> **Note:** The first time you start your communications channels, you might need to manually start the sender channel on the local machine and then manually start the receiver channel on the remote machine. After the initial start of the channels, the receiver on the remote machine should automatically start when you start the sender on the local machine.

To start the queue manager on the third-party WebSphere MQ server

Access the third-party WebSphere MQ server.

1. At a DOS prompt, enter this command to start the Queue Manager:

   ```
   STRMQM MQMNAME(ECE_MQI_QMGR)
   ```

2. At the DOS prompt, enter this command to start the listener:

   ```
   start/min runmqlsr -m ECE_MQI_QMGR -t TCP
   ```

   This action creates a minimized DOS prompt window. Do not close this window.

   > **Note:** ECE_MQI_QMGR is the third-party queue manage name.

To start the queue manager on the JD Edwards EnterpriseOne IBM WebSphere MQ server

Access the JD Edwards EnterpriseOne IBM WebSphere MQ server.

1. Enter this command to start the Queue Manager:

   ```
   STRMQM MQMNAME(JDE_QMGR)
   ```

2. Enter this command to start the listener:

   ```
   STRMQMLSR
   ```

To start the channel on the third-party WebSphere MQ server

Access the third-party IBM WebSphere MQ server, and enter this command at the DOS prompt:

```
START CHANNEL(MQI2OW_CHL)
```

To start the channel on the JD Edwards EnterpriseOne IBM WebSphere MQ server

Access the JD Edwards EnterpriseOne IBM WebSphere MQ server, and enter this command:

```
STRMQMCHL CHLNAME(OW2MQI_CHL)
```

Alternately, you can create and run a CL script:

```
RUNMQSC ECE_MQI_QMGR
START CHANNEL(MQI2OW_CHL)
/*START CHANNEL(OW2MQI_CHL)*/
END
```

> **Note:** ECE_MQI_QMGR is the third-party queue manager name.

3

Configuring the Server jde.ini File for Z Events Only

Note: Make sure that Oracle's JD Edwards EnterpriseOne services are stopped until after you make the requisite changes to the jde.ini file on the JD Edwards EnterpriseOne server.

3.1 Configuring the Server jde.ini File for Z Events Only: Step 2

You must configure the jde.ini member on the JD Edwards EnterpriseOne server with these settings:

Parameter	Description
[SECURITY]	You must have these values set in order for JD Edwards EnterpriseOne to accept messages.
User=JDE	
Password=*JDE*	
[JDENET_KERNEL_DEF17]	You must update the DEF value to next number. For JD Edwards EnterpriseOne, the value is 17.
krnlName=MQSI Kernel	
dispatchDLLName=MQSADAPT	
dispatchDLLFunction=JDEK_ DispatchMQSeriesProcess	
maxNumberOfProcesses=1	
numberOfAutoStartProcesses=1	This value can be set for 1 through n, where n is the number of processes you have defined. When this value is 1 or more, the MQSI kernel automatically starts when JD Edwards EnterpriseOne is initialized. You must use this setting when you use the IBM WebSphere MQ adapter with JD Edwards EnterpriseOne.
	If the value of this setting is 0, the MQSI kernel does not automatically start upon initialization of JD Edwards EnterpriseOne.
[MQSI]	These settings are for the header information on the message that is required for IBM WebSphere Commerce Integrator

Parameter	Description
QMGRName=JDE_QMGR QInboundName=INBOUND.Q QErrorName=DEFRES.Q QOutboundName=OUTBOUND.Q	The name of the queues can be any name, but must match the names you specify in the IBM WebSphere MQ queue setup.
TimeoutWaitInterval=15	
MaxBufferLength=100000	This value is measured in bytes. The maximum value that you can set is 100,000,000. The default value is 100,000. You should not use the maximum value, as this can cause performance issues. You can use the IBM WebSphere MQ tools to determine the average size of a message and then set the MaxBufferLength value based on your needs.
CreateHeader=YES JDEOrderStatusCode=JDESOOUT JDECustomerCode=JDEAB JDEItemPriceCode=JDEPRICE JDEItemQtyCode=JDEIL NCOrderStatusCode=JDE.IC.F4201Z1 NCCustomerCode=JDE.IC.F0101Z2 NCProductPriceCode=JDE.IC.F4106NC NCProductQtyCode=JDE.IC.F41021Z1	If you use the adapter without the IBM WebSphere Commerce Integrator, you can specify the create header as equal to No, and you should set the IBM WebSphere Commerce Integrator -specific parameter settings in the MQSI section to blank. This includes the four parameters prefixed by JDE and four parameters prefixed by NC.
AppGroup=NNJDE	
OWHostName=*host_name*	You must specify a host name. The name you specify is the machine used to create the message to trigger the outbound adapter. This is the server on which JD Edwards EnterpriseOne resides.
CharSet=437	You must specify the 437 character set.

4

Setting Up UBE Queues for Z Events Only

You must set up at least two UBE queues. Two UBE queues are required because Oracle's JD Edwards EnterpriseOne Adapter for IBM WebSphere MQ relies on the use of a subsystem UBE (R00460). Like all subsystem UBEs, the R00460 operates in a permanent processing mode that consumes the queue in which it runs. No other UBE jobs running on the server can operate in the same queue. As a result, you must define at least two UBE queues where one queue is dedicated to normal UBE processing and the other is dedicated to the JD Edwards EnterpriseOne Adapter for WebSphere MQ subsystem.

4.1 Setting Up UBE Queues for Z Events Only: Step 3

This section describes:

- Creating multiple job queues on the iSeries JD Edwards EnterpriseOne server.

- Modifying the jde.ini on the client machine to submit the UBE subsystem request.

To create multiple job queues

Use these steps to create additional job queues on the iSeries JD Edwards EnterpriseOne server. You should have already set up at least one QBATCH queue during the initial installation of JD Edwards EnterpriseOne. If you want to create queues for running multiple job queues, then you should repeat this step using a different name for each additional queue. Queues that you set up on the iSeries can be used by JD Edwards EnterpriseOne as soon as the queue is created and running on the server. You are not required to change the jde.ini on the JD Edwards EnterpriseOne server or to restart the instance of JD Edwards EnterpriseOne on the iSeries server.

1. Log on to the iSeries as QSECOFR.

2. Enter these commands:

   ```
   ADDLIBLE JDEOW
   GO JDEOW/A98OWMNU
   ```

3. From the menu, select option 8 - Create Job Queue.

   Note: To determine the unused sequence number, enter:

   ```
   DSPSBSD SBSD (QBATCH)
   ```

   Select option 6 for the Job Queue Entries and then record an unused sequence number.

To modify the jde.ini on a client machine to submit the UBE subsystem request

If you submit or start the R00460 subsystem UBE from a JD Edwards EnterpriseOne Microsoft Windows client, you must first temporarily modify that client's jde.ini file. The temporary modification is required so that the client can direct the R00460 subsystem to the appropriate UBE queue name. After the client submits or starts the R00460 subsystem UBE, you must undo the temporary change so that the client can regain access to normal UBE submissions to the server-based UBE queue.

On the client machine from which you want to submit or start the R00460 subsystem UBE, ensure these jde.ini settings are correct:

Parameter	Description
[NETWORK QUEUE SETTINGS]	UBEQueue= Defines the name of the local or server-based UBE queue.
UBEQueue=	If you want the client to start or submit the R00460 subsystem, enter a value that corresponds with the value set by the UBEQueue1= on the JD Edwards EnterpriseOne server.
	If you want the client to use the normal server-based UBE processing queue, enter a value that corresponds with the equivalent value for that queue on the JD Edwards EnterpriseOne server.

Caution: When you modify settings in the jde.ini file on the client machine, you must exit and restart the client machine in order for those changes to become effective.

5

Configuring the Interoperability Features for Z Events Only

You can use Z, real-time, or XAPI events to receive transactions from Oracle's JD Edwards EnterpriseOne. To use real-time events, you must set up your system as indicated in the *JD Edwards EnterpriseOne Tools Interoperability Guide*, and you must set up events as indicated in the *JD Edwards EnterpriseOne Applications Real-Time Events Implementation Guide*.

Z event outbound processing uses interface table (Z-table) processes supported by JD Edwards EnterpriseOne applications. The outbound processes available to you vary depending on which JD Edwards EnterpriseOne release you use. If you use interface tables for transaction-specific outbound processing, you must perform configuration tasks such as setting up processing options and setting up data export controls.

5.1 Configuring the Interoperability Features for Z Events Only: Step 4

This section provides information about setting up the data export controls and also provides examples for setting up JD Edwards EnterpriseOne applications that support Z event processing. Application examples include the following:

- Section 5.2, "Setting Up Flat File Cross-Reference"

- Section 5.3, "Setting Up Data Export Controls"

- Section 5.4, "Setting Up the Sales Order Entry Application"

- Section 5.5, "Configuring the Address Book Revisions Application"

- Section 5.6, "Configuring the Address Book Master Business Function"

> **See Also:**
>
> - *JD Edwards EnterpriseOne Applications Real-Time Events Implementation Guide*
>
> - Events chapters in the *JD Edwards EnterpriseOne Tools Interoperability Guide*

5.2 Setting Up Flat File Cross-Reference

When you enable Z events, you also update the Flat File Cross-Reference (F47002) table. The transaction type that you entered in the processing option maps to table F47002 to determine which interface tables to use to retrieve the information. You use the Flat File Cross-Reference program (P47002) to update table F47002.

Setting up flat file cross-reference

	Trans	Trans Description	Dir Ind	Dir Ind Description	Record Type	Record Type Description	File Name	Flat File Name
⦿	JDESOOUT	Sales Order Outbound	2	Outbound	1	Header	F4201Z1	
○	JDESOOUT	Sales Order Outbound	2	Outbound	2	Detail	F4211Z1	
○	JDESOOUT	Sales Order Outbound	2	Outbound	3	Additional Header	F49211Z1	
○	JDESUGST	WMS Inbound Sugges...	1	Inbound	2	Detail	F4611Z1	
○	JDEVOUCH	Inbound/Outbound Vo...	1	Inbound	1	Header	F0411Z1	
○	JDEVOUCH	Inbound/Outbound Vo...	1	Inbound	2	Detail	F0911Z1	
○	JDEVOUCH	Inbound/Outbound Vo...	1	Inbound	4	Additional Detail	F0911Z1T	
○	JDEVOUCH	Inbound/Outbound Vo...	2	Outbound	1	Header	F0411Z3	
○	JDEVOUCH	Inbound/Outbound Vo...	2	Outbound	2	Detail	F0911Z4	
○	JDEWC	Work Center Transacti...	1	Inbound	2	Detail	F30006Z1	

Refer to the *JD Edwards EnterpriseOne Applications Data Interface for Electronic Data Interchange Implementation Guide* for instructions on setting up the flat file cross-reference application.

5.3 Setting Up Data Export Controls

You must create a Data Export Control (F0047) record for each transaction type. The record specifies the vendor-specific UBE or function to call to process the transaction. For example, for transaction type JDESOOUT you must set up a record for each order type that you want to export.

Setting Up Data Export Controls

On JD Edwards EnterpriseOne Menu, select JD Edwards EnterpriseOne Menus > Order Management > Sales Order Management > Sales Order Advanced & Technical Ops > Sales Interoperability > Data Export Controls.

An alternative way to access the Data Export Controls program is to type P0047 on the Fast Path.

Work With Data Export Controls

✓ 🔍 ➕ 🗑 ✖ ▦ Row 🔀 Tools ▣ One View

| Transaction | 309 | *Fixed Assets* |
| Order Type | * | |

No records found.

	Trans	Or Ty	Seq	UBE Name	Version	Function Name	Function Library

Values for fields shown in the diagram above include:

Form Element	Description
Trans	The values you specify in this field must match the values you have configured for JD Edwards EnterpriseOne outbound processing in the various JD Edwards EnterpriseOne applications. These are example transaction types: JDEAB JDEIL JDEPRICE JDESOOUT
Or Ty	The values you specify in this field must match the values that are required for your system. For example, for WCS these order types are required: JDESOOUT S4 JDESOOUT SO
Seq	1.00
UBE Name	Leave this field blank.
Version	Leave this field blank.
Function Name	MQOutboundNotify
Function Library:	MQSNTFY This function library is the name of the service program for the JD Edwards EnterpriseOne Adapter for IBM WebSphere MQ running on iSeries.
Execute for Add:	1
Execute for Update:	1
Execute for Delete:	1
Execute for Inquiry:	1
Flat File Export Mode:	0

Form Element	Description
External Database Export Mode	0
External API Export Mode:	0
Launch Immediately	1

5.4 Setting Up the Sales Order Entry Application

You set up the JD Edwards EnterpriseOne Sales Order Entry (P4210) program to enable it for interoperability operations.

To set up the processing options for Sales Order Entry

On EnterpriseOne Menu, select JD Edwards EnterpriseOne Menus > Order Management > Sales Order Management > Daily Processing > Sales Order Processing > click the arrow to the right of Sales Order Detail and then select Values > on Processing Options, select Interop from the Select Tab options.

1. To define the transaction type, type JDESOOUT in the Transaction Type field.

2. To define before or after image processing, enter the appropriate value in the Before/After Image Processing field.

3. Click OK.

5.5 Configuring the Address Book Revisions Application

You set up the JD Edwards EnterpriseOne Address Book Revision (P01012) program to enable it for interoperability operations.

To setup processing options for Address Book Revisions

On the JD Edwards EnterpriseOne Menu, select JD Edwards EnterpriseOne Menus > Foundation Systems > Address Book > Daily Processing > select the arrow to the right of Address Book Revisions and then select Values > on Processing Options, select the Versions tab.

1. On Processing Options, type INTOP in the Address Book MBF (P0100041) Version field.

2. Click OK.

3. On Work With Addresses, click Close.

5.6 Configuring the Address Book Master Business Function

You set up the Address Book Master Business Function (P0100041) to enable interoperability operations.

To set up the processing options for the Address Book Master Business Function

1. Type IV in the Fast Path.

2. On Interactive Versions -- Work With Versions, type P0100041 in the Application field, and then click Find.

3. Select the INTOP version, and then select Processing Options from the Row menu.

   If there is not a version called INTOP, select version ZJDE0001 and copy it. Call the new version INTOP and then click OK.
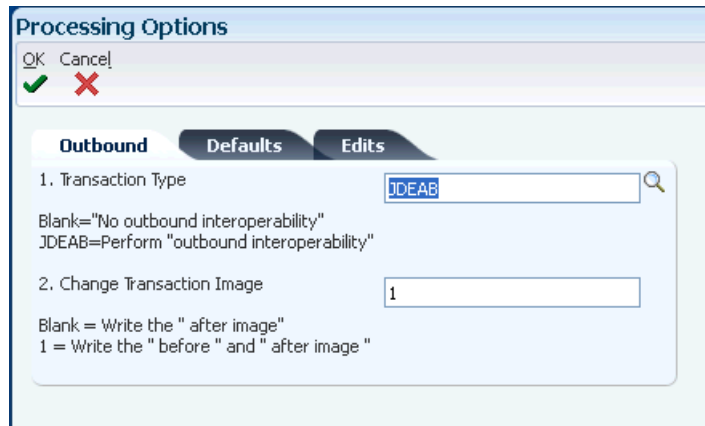
4. On Processing Options, select the Outbound tab.

5. Type JDEAB in the Transaction Type field.

6. To define before or after image processing, enter the appropriate value in the Before/After Image Processing field.

7. Click OK.

8. Click Close.

6

Configuring the Job Description

You must configure the job description for Oracle's JD Edwards EnterpriseOne Adapter for the IBM WebSphere MQ kernel that is running on the JD Edwards EnterpriseOne server.

6.1 Configuring the Job Description: Step 5

> **Note:** Make sure the system library is included in the library list of the session that you use to run this command.
>
> You must rerun this Change Job Description command any time you upgrade your JD Edwards EnterpriseOne service pack release level.

On the JD Edwards EnterpriseOne server, enter this command:

```
CHGJOBD JOBD(NETJOBD) INLLIBL(E910SYS QMQM QGPL QTEMP)
```

where E910SYS is your current JD Edwards EnterpriseOne system code library.

7

Restarting Services

After you have completed the IBM WebSphere MQ queue setup and the associated configuration tasks, you can restart Oracle's JD Edwards EnterpriseOne services on your iSeries server.

7.1 Restarting Services: Step 6

To restart the services

Access the JD Edwards EnterpriseOne server.

1. To restart your JD Edwards EnterpriseOne services, enter this command:

   `STRNET`

2. Verify your library list is set up correctly by performing your typical verification to ensure JD Edwards EnterpriseOne is working properly, for example, PORTTEST.

3. Delete the JDETEMP library.

8

Running the R00460 Subsystem for WebSphere MQ for Z Events Only

The R00460 subsystem monitors the MSMQ queues for messages and manages Oracle's JD Edwards EnterpriseOne side of the queues. After the R00460 subsystem is started, you can verify that the subsystem is running. You can also review the job record for the subsystem. After the records have been processed, you must manually terminate the subsystem job.

> **Caution:** After the records have been processed, instead of ending the job, subsystem jobs look for new data in the data queue. Subsystem jobs run until you terminate them.

> **See Also:** "Managing EnterpriseOne Subsystems" in the *JD Edwards EnterpriseOne Tools System Administration Guide*

8.1 Starting the R00460 Subsystem

The R00460 subsystem must be manually started. Usually the system administrator or manager-level user is responsible for this task.

> **Note:** Before you start the R00460 subsystem, you should have already updated the jde.ini file on the JD Edwards EnterpriseOne server to point to the new queue.

To start the R00460 subsystem

1. Type BV in the Fast Path.

2. On Work With Batch Versions, type R00460 in the Batch Application field, and then select Find.

3. Select version XJDE0001, and then click Select.

4. On Version Prompting, click Submit.

5. On Report Output Destination, select the destination option for your report, and then click OK.

8.2 Viewing Subsystems Running on a Server

You use Work With Servers to determine which subsystems are currently running or waiting on a particular server. The running subsystems are identified by report number and version.

To view subsystems running or waiting on a server

On the JD Edwards EnterpriseOne Menu, select JD Edwards EnterpriseOne Life Cycle tools > System Administration Tools > System Administration Tools > Data Source Management > Work With Servers.

1. On Work With Servers, click Find to locate all servers or use the query by example row to locate a specific server.

2. Select the server with which you want to work.

3. From the Row menu, select Subsystem Jobs.

4. On Work With Server Jobs, select one of the following options:

   ■ Processes

      A process is a subsystem that is waiting for work. This is identified by an S (subsystem job) value in the Job Type field.

   ■ Waiting Jobs

      Waiting jobs are report jobs that are queued for a subsystem. This is identified by an R (subsystem record) value in the Job Type field.

      All currently running JD Edwards EnterpriseOne subsystems are displayed. The status of each subsystem is shown by codes in the following fields:

   ■ Job Type

      This field indicates whether the status is a subsystem record or a subsystem job. Valid values are:

      – R or subsystem record

      – S or subsystem job

- Job Status
  - W - subsystem record waiting
  - P - subsystem record processing
  - E - subsystem record to end the job
  - R - subsystem job running

8.3 Terminating Subsystems

You must manually terminate subsystem jobs. Two methods of termination are available:

- Stopping a subsystem job causes it to terminate after it finishes processing the current record. Additional unprocessed records in the F986113 table will not be processed, and no new records can be written. Essentially the unprocessed records are lost; that is, the process that initiated the record is not notified that the record was not processed.

- Ending a subsystem job causes it to terminate after processing all of the existing subsystem records. No new records can be written to the F986113 table.

To stop subsystems

On the JD Edwards EnterpriseOne Menu, select JD Edwards EnterpriseOne Life Cycle Tools > System Administration Tools > System Administration Tools > Data Source Management > Work With Servers.

1. On Work With Servers, click Find.

2. Select the server in the detail area, and then select Subsystem Jobs from the Row menu.

3. On Work With Subsystems, locate a running subsystem.

4. Select the running subsystem that you want to stop, and then select Stop Subsystem from the Row menu.

5. On End Subsystem Job, click OK.

To end subsystems

On the JD Edwards EnterpriseOne Menu, select JD Edwards EnterpriseOne Life Cycle Tools > System Administration Tools > System Administration Tools > Data Source Management > Work With Servers.

1. On Work With Servers, click Find.

2. Select the server in the detail area, and then select Subsystem Jobs from the Row menu.

3. On Work With Subsystems, locate a running subsystem.

4. Select the running subsystem that you want to end, and then select Subsystem Jobs fro the Row menu.

5. On End Subsystem Job, click OK.

8.4 Verifying Event Delivery

Once finished with the installation, you should verify the event delivery. Use the IBM WebSphere MQ Explorer to select the queue that you created to received JD Edwards

EnterpriseOne events. Right-click on the queue and select Browse Messages to display the messages.

See"Verifying Event Delivery" in the *Event Delivery" JD Edwards EnterpriseOne Tools Interoperability Guide*