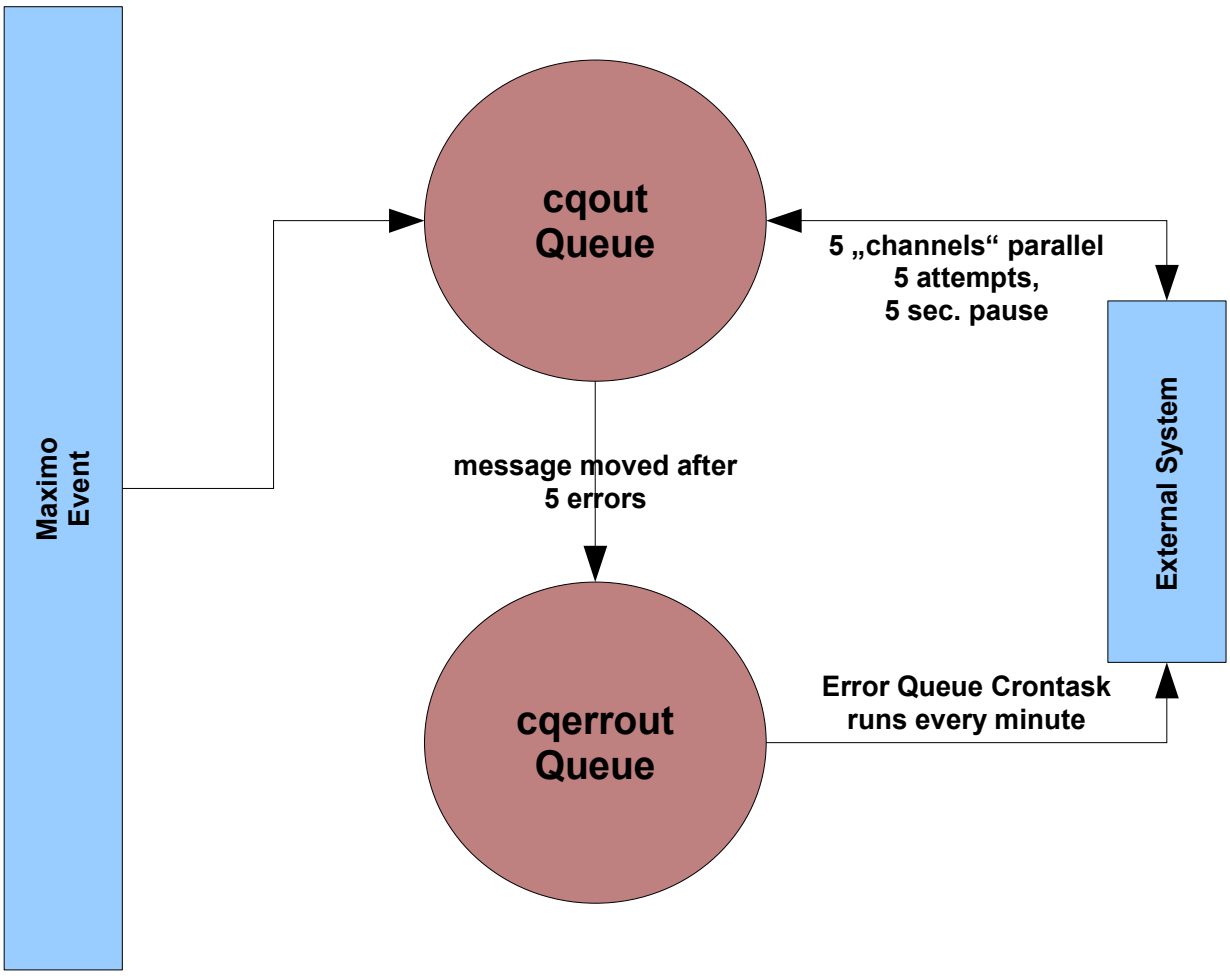
Adding a Continuous Out Queue with additional Error Queue in Maximo 6 / BEA Weblogic

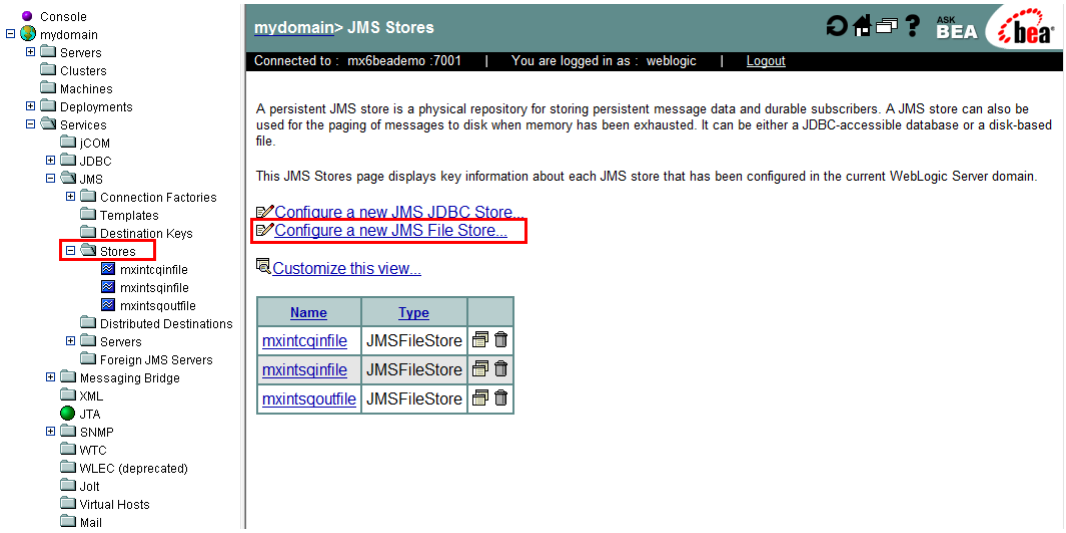
1. Abstract:

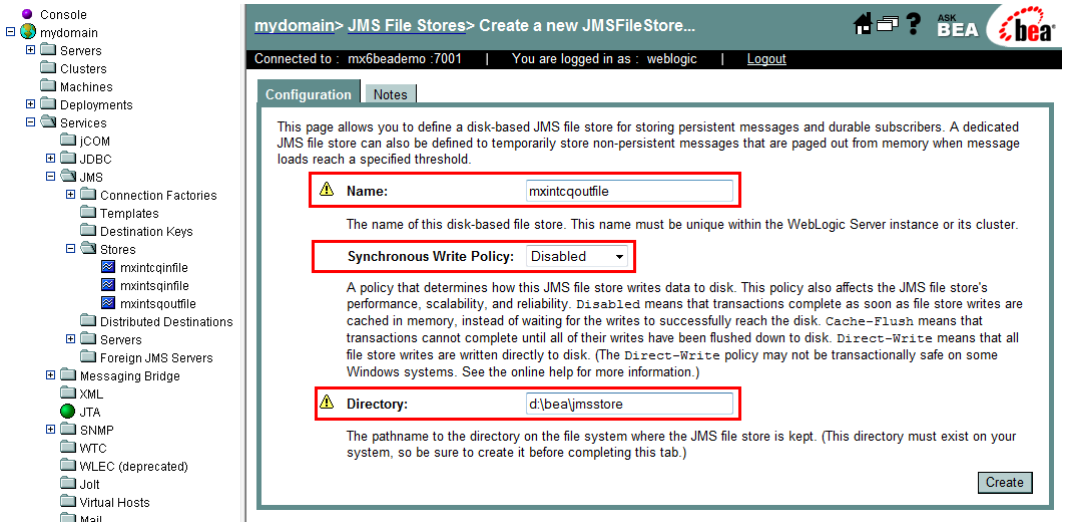
A continuous outgoing queue offers the opportunity to send messages from IBM Maximo to other systems in a parallel way. We had one customer case where this methodology was necessary to prevent performance issues.

Overview:



2. Create a new JMS File Store:

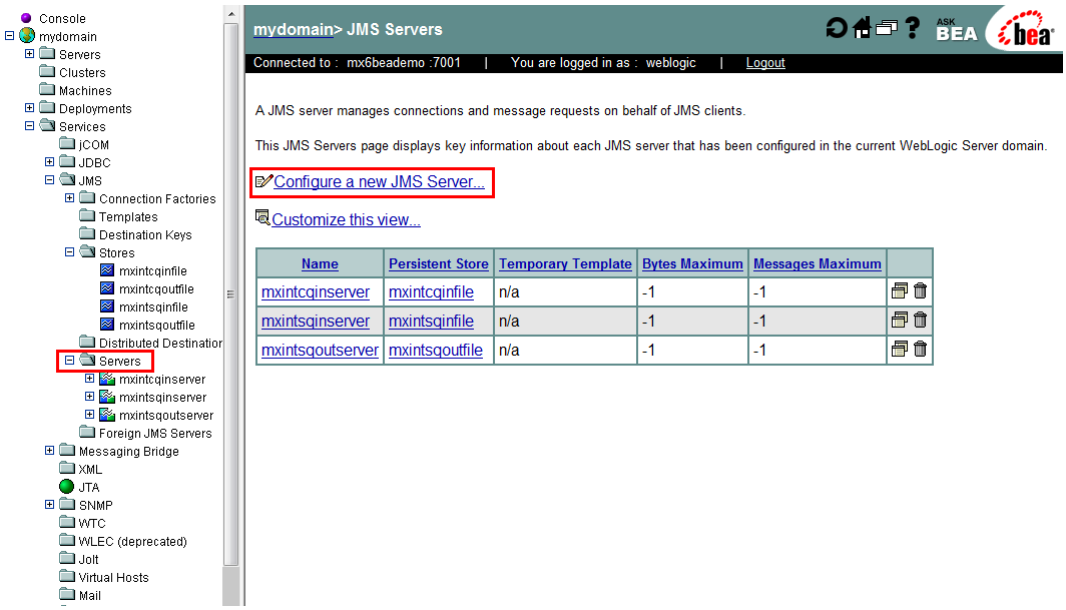


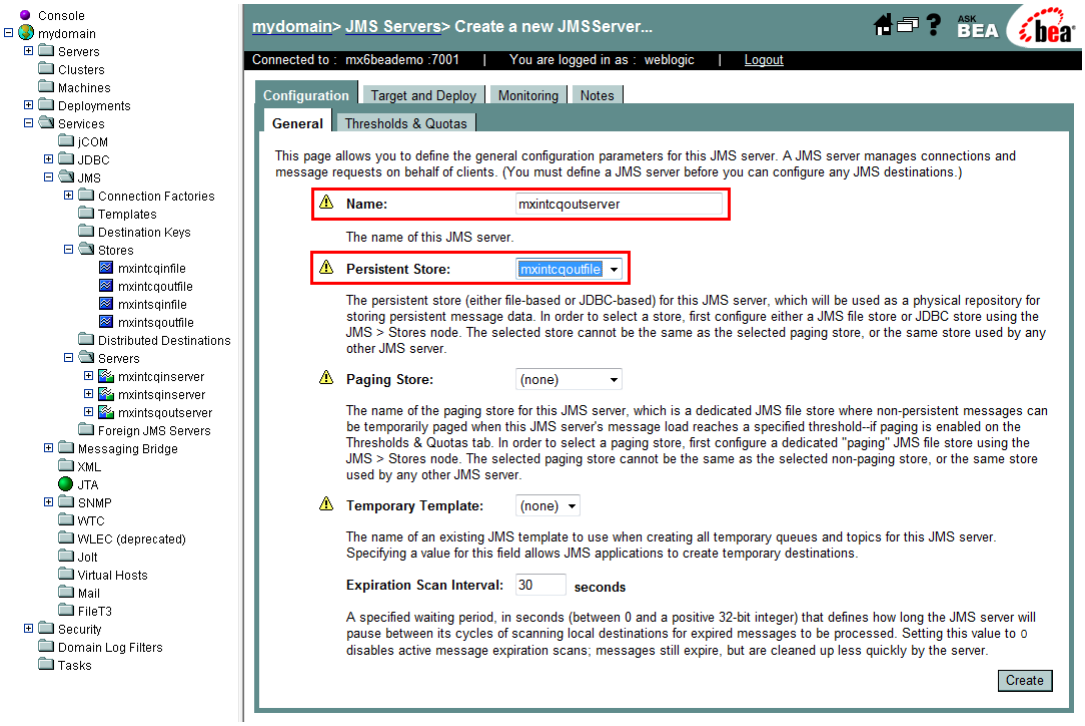


Parameter:

Name: mxintcqoutfile
Synchronous Write Policy: Disabled
Directory: d:\bea\jmsstore (If BEA is installed on a different Drive – modify this Parameter according to your Bea Directory)

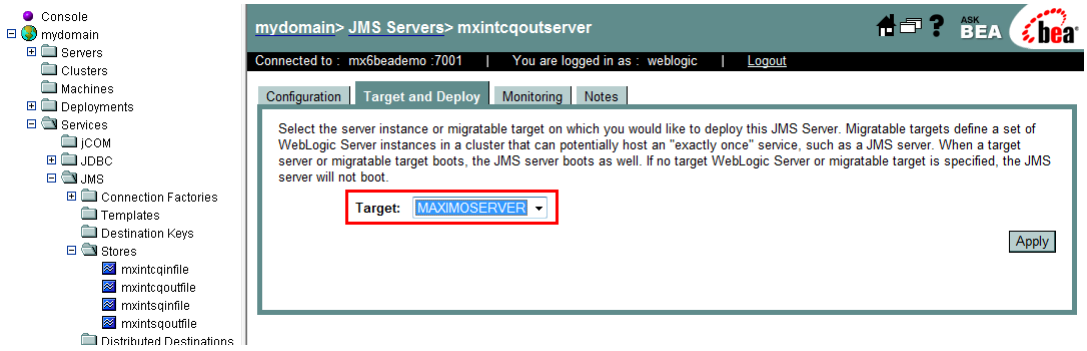
3. Create a new JMS Server:



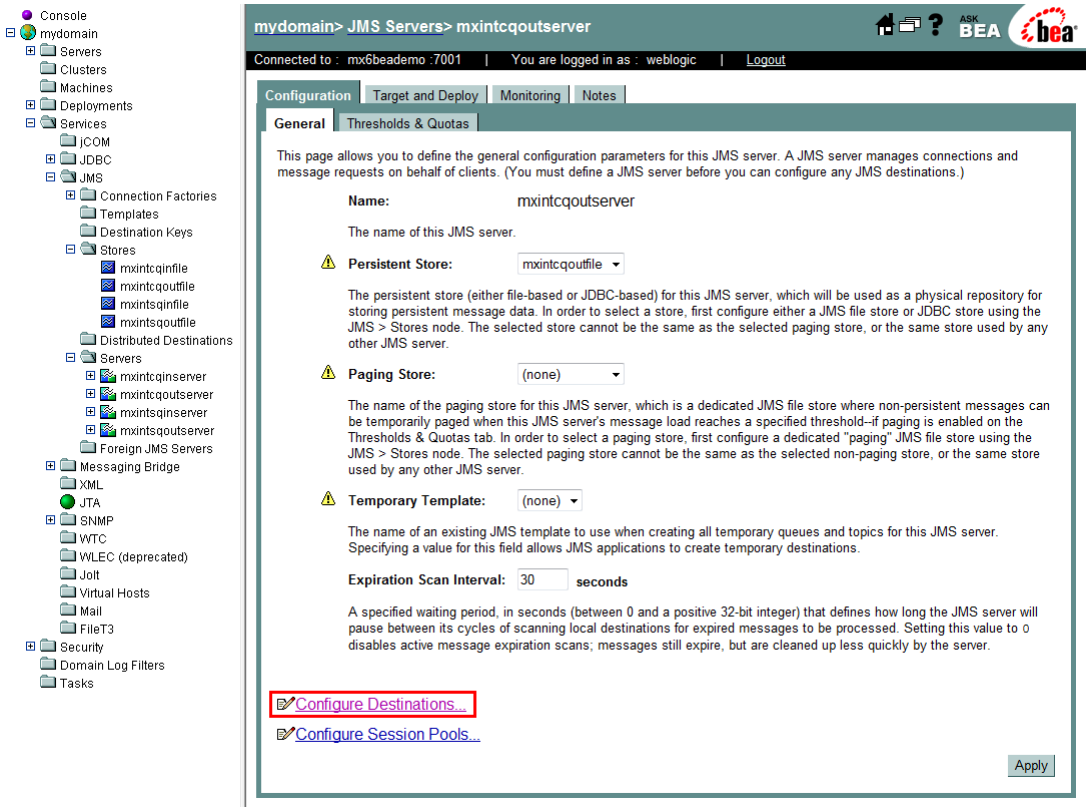


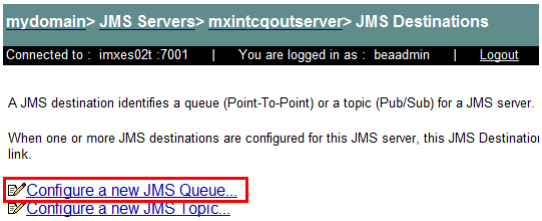
Parameter:

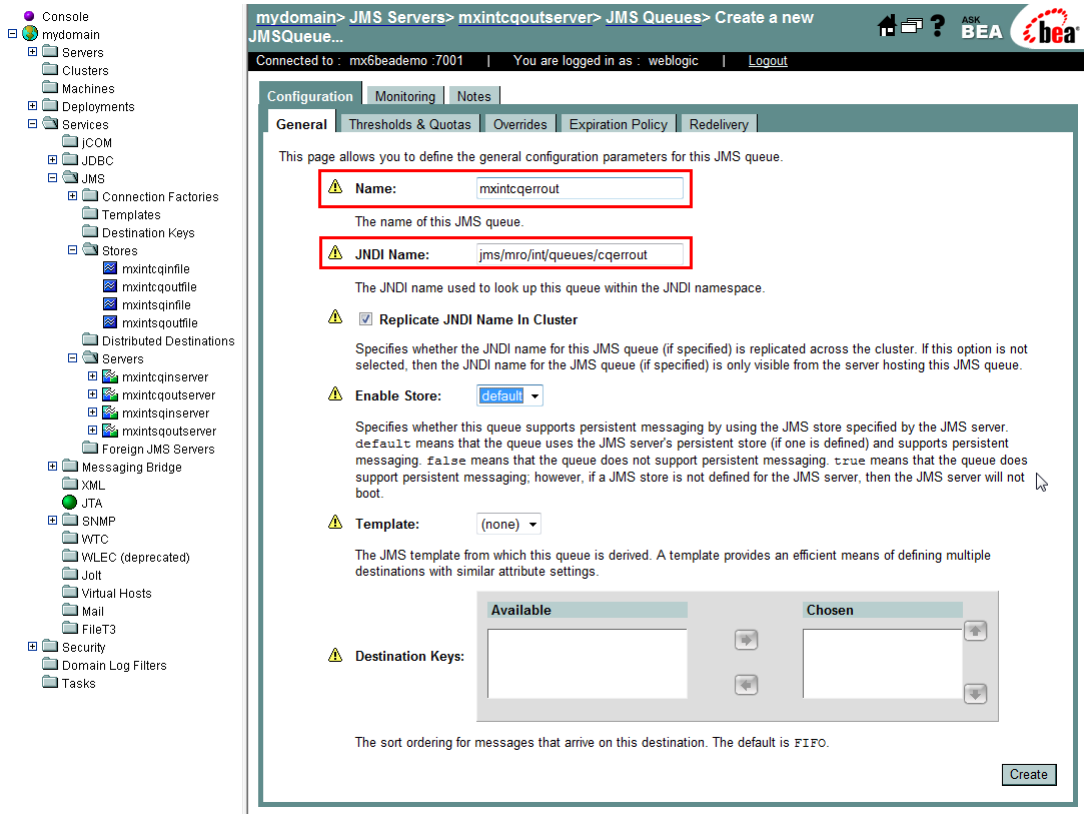
Name: mxintcqoutserver
Persistent Store: mxintcqoutfile



4. Create the new JMS Queues:

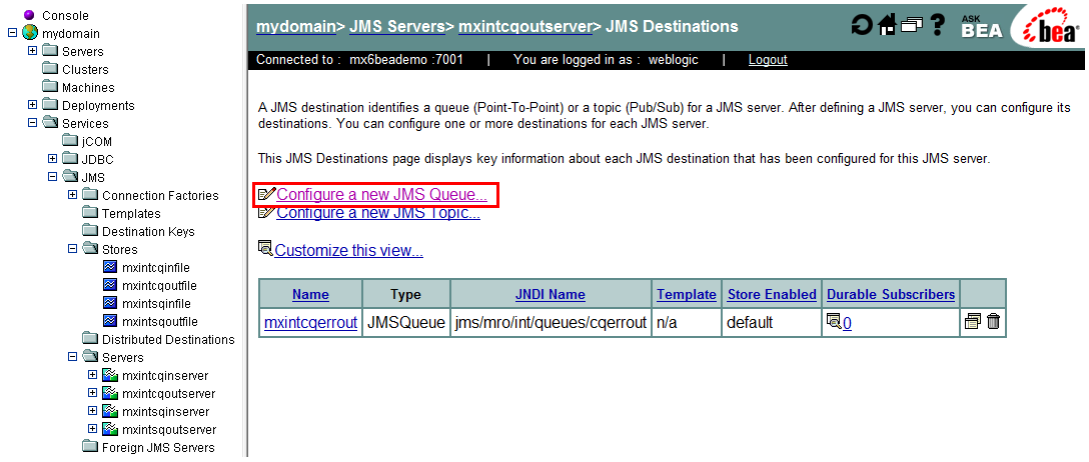


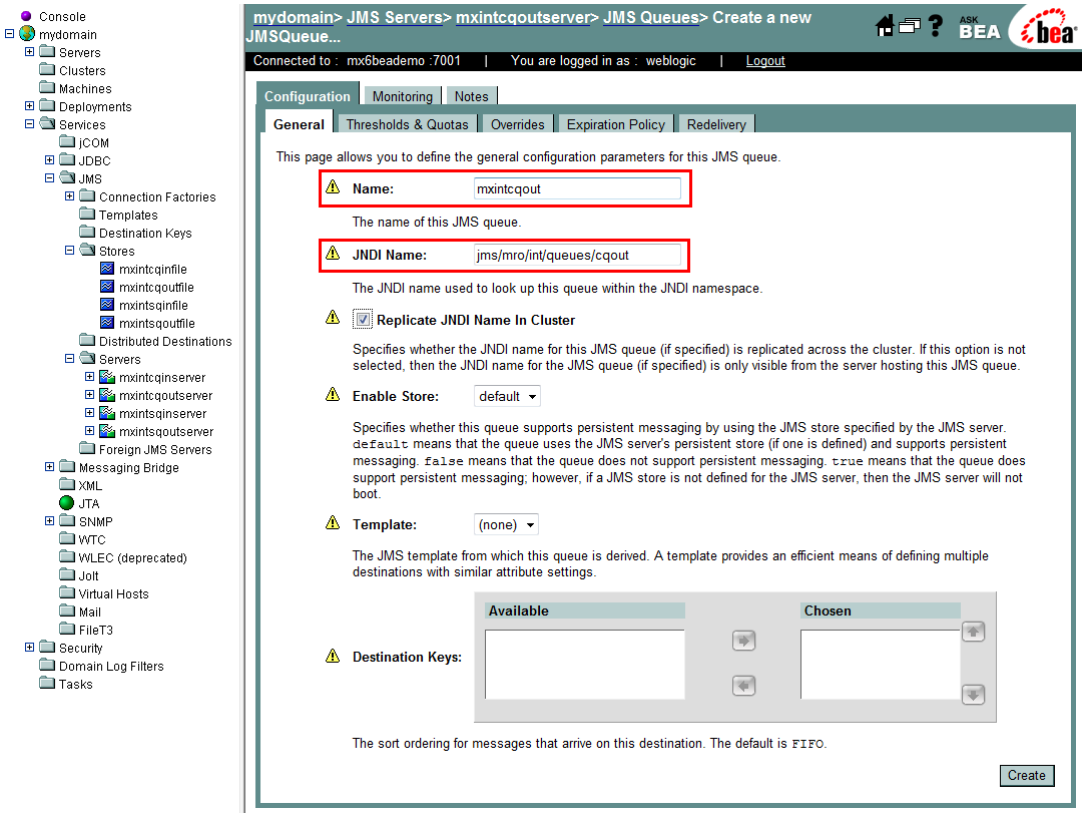




Parameter:

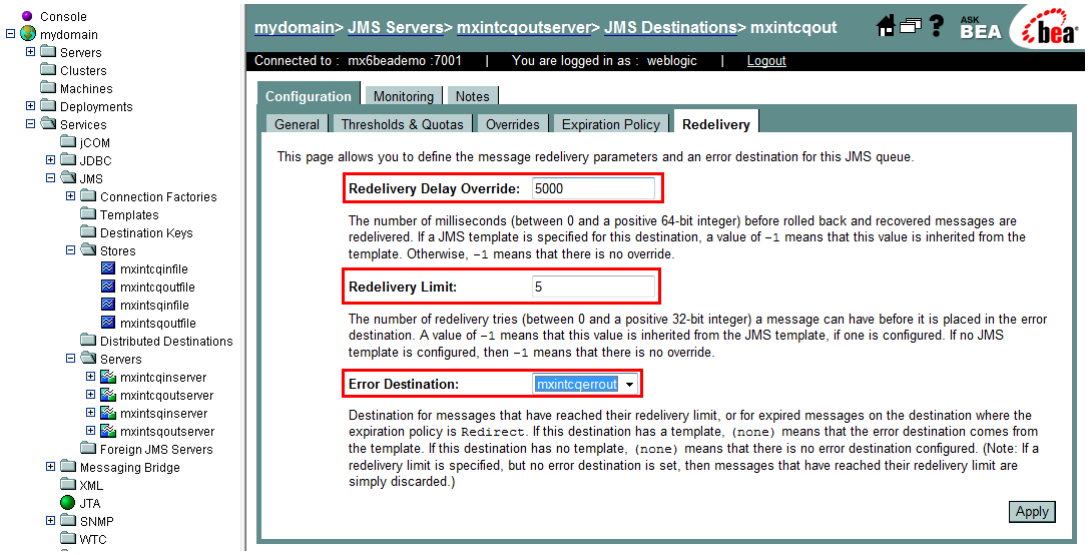
Name: mxintcqerrout
JNDI Name: jms/mro/int/queues/cqerrout





Parameter:

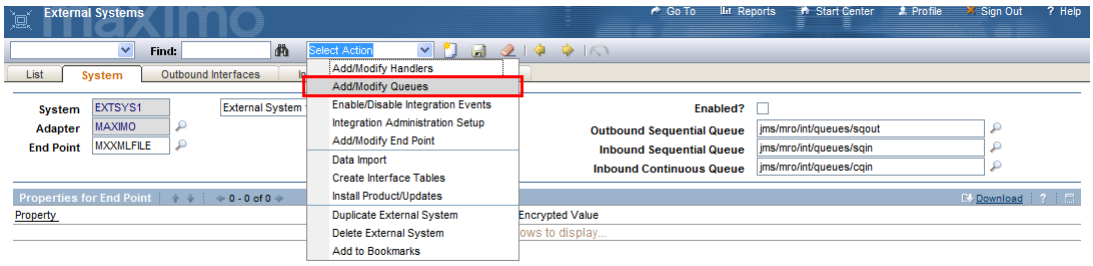
Name: mxintcqout
JNDI Name: jms/mro/int/queues/cqout

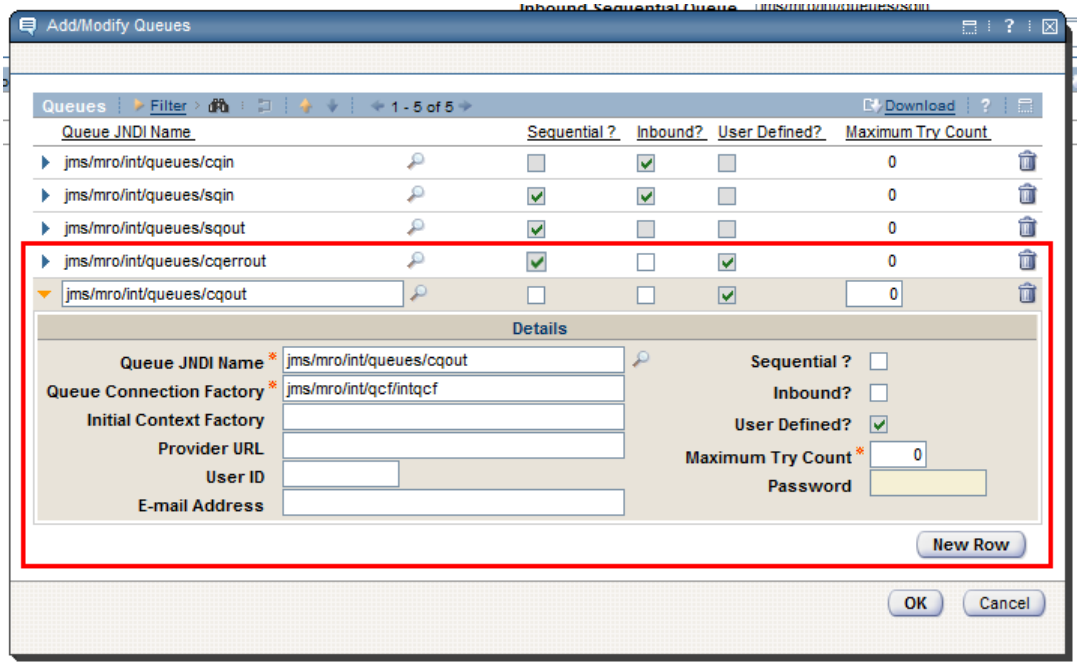


Parameter:

Redelivery Delay Override: 5000
Redelivery Limit: 5
Error Destination: mxintcqerrout

5. Add new Queues in Maximo:



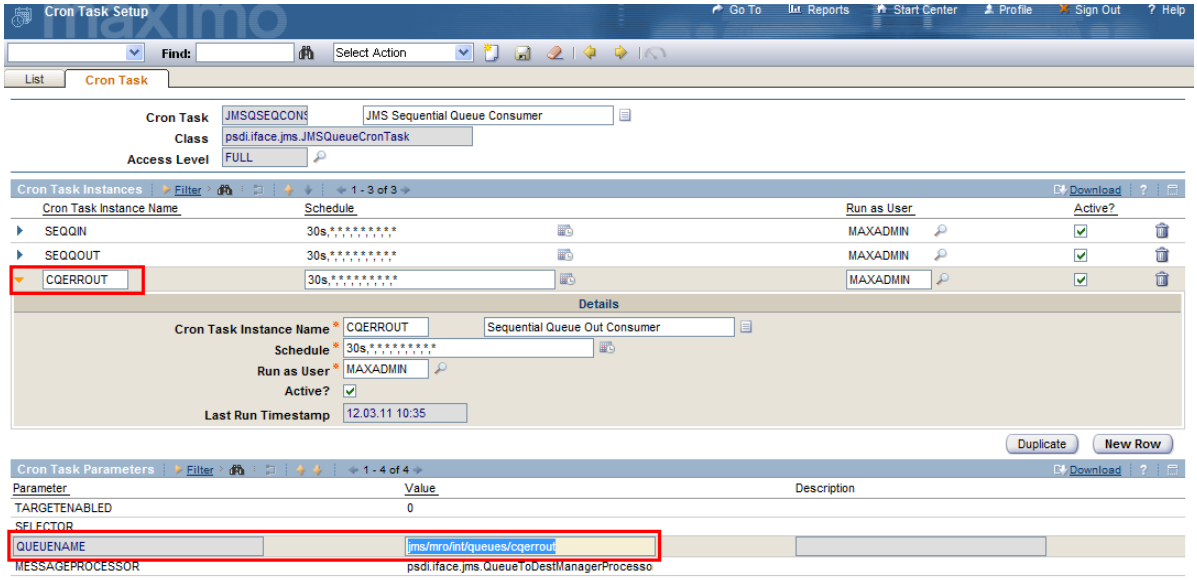


Parameter:

Queue JNDI Name: jms/mro/int/queues/cqout
Queue Connection Factory: jms/mro/int/qcf/intqcf
Sequential: false
Inbound: false
Maximum Try Count: 0

Queue JNDI Name: jms/mro/int/queues/cqerrout
Queue Connection Factory: jms/mro/int/qcf/intqcf
Sequential: true
Inbound: false
Maximum Try Count: 0

6. Create a new Cron Task Instance for the Error Destination Queue:



Parameter:

Duplicate the SQQOUT Cron Task Instance with following parameters.
Cron Task Instance Name: CQERROUT
Queue Name: jms/mro/int/queues/cqerrout

7. Initial Edits in the Application Deployment Descriptors:

File:
../maximo/applications/maximo/META-INF/application.xml

Before:

```
      <!-- List of EJB modules -->
      <module>
            <ejb>/mboejb/ejbmodule</ejb>
      </module>

<!-- JMS MDB is not deployed by default
      <module>
            <ejb>/meajmsejb/ejbmodule</ejb>
      </module>
      -->
```

After:
Enable the meajmsejb Module:

```
      <!-- List of EJB modules -->
      <module>
            <ejb>/mboejb/ejbmodule</ejb>
      </module>

<!-- JMS MDB is not deployed by default -->
      <module>
            <ejb>/meajmsejb/ejbmodule</ejb>
      </module>
```

File:

../maximo/applications/maximo/META-INF/deployment-application.xml

Before:

```
        <!-- List of EJB modules -->
        <module id="EjbModule_1077124925247">
                <ejb>mboejb.jar</ejb>
        </module>

<!-- JMS MDB is not deployed by default
        <module id="EjbModule_1077124925237">
                <ejb>meajmsejb.jar</ejb>
        </module>
        -->
```

After:

Enable the mboejb.jar Module:

```
        <!-- List of EJB modules -->
        <module id="EjbModule_1077124925247">
                <ejb>mboejb.jar</ejb>
        </module>

      <!-- JMS MDB is not deployed by default  -->
        <module id="EjbModule_1077124925237">
                <ejb>meajmsejb.jar</ejb>
        </module>
```

8. Add an additional Message Driven Bean:

File:

../maximo/applications/maximo/meajmsejb/ejbmodule/META-INF/ejb-jar.xml

```
<!DOCTYPE ejb-jar PUBLIC "-//Sun Microsystems, Inc.//DTD Enterprise JavaBeans 2.0//EN"
                         "http://java.sun.com/dtd/ejb-jar_2_0.dtd">

<ejb-jar id="ejb-jar_ID">
       <display-name>MEA JMS EJB Module</display-name>
 <enterprise-beans>

    <message-driven id="MessageDriven_JMSContQueueProcessor_1">
      <ejb-name>JMSContQueueProcessor-1</ejb-name>
      <ejb-class>psdi.iface.jms.JMSContQueueProcessor</ejb-class>
      <transaction-type>Container</transaction-type>
      <message-driven-destination>
        <destination-type>javax.jms.Queue</destination-type>
      </message-driven-destination>
      <env-entry>
        <env-entry-name>MESSAGEPROCESSOR</env-entry-name>
       <env-entry-type>java.lang.String </env-entry-type>
       <env-entry-value>psdi.iface.jms.QueueToMaximoProcessor</env-entry-value>
      </env-entry>
    </message-driven>

      <!-- START SECTION FOR ADDITONAL MDB -->
    <message-driven id="MessageDriven_JMSContQueueProcessor_2">
      <ejb-name>JMSContQueueProcessor-2</ejb-name>
      <ejb-class>psdi.iface.jms.JMSContQueueProcessor</ejb-class>
      <transaction-type>Container</transaction-type>
      <message-driven-destination>
        <destination-type>javax.jms.Queue</destination-type>
      </message-driven-destination>
      <env-entry>
        <env-entry-name>MESSAGEPROCESSOR</env-entry-name>
       <env-entry-type>java.lang.String </env-entry-type>
       <env-entry-value>psdi.iface.jms.QueueToDestManagerProcessor</env-entry-value>
      </env-entry>
    </message-driven>
      <!-- END SECTION FOR ADDITONAL MDB -->
 </enterprise-beans>


 <assembly-descriptor>
    <container-transaction>
       <method>
          <ejb-name>JMSContQueueProcessor-1</ejb-name>
          <method-name>*</method-name>
       </method>

       <trans-attribute>Required</trans-attribute>

    </container-transaction>

      <!-- START SECTION FOR ADDITONAL MDB -->
    <container-transaction>
       <method>
          <ejb-name>JMSContQueueProcessor-2</ejb-name>
          <method-name>*</method-name>
       </method>

       <trans-attribute>Required</trans-attribute>

    </container-transaction>
      <!-- END SECTION FOR ADDITONAL MDB -->
 </assembly-descriptor>
</ejb-jar>
```

File:

../maximo/applications/maximo/meajmsejb/ejbmodule/META-INF/weblogic-ejb-jar.xml
weiteres weblogic-enterprise-bean einfügen, Parameter für max-beans und inital-beans setzen (5)

```
<?xml version="1.0"?>

<!DOCTYPE weblogic-ejb-jar PUBLIC "-//BEA Systems, Inc.//DTD WebLogic 6.0.0 EJB//EN"
"http://www.bea.com/servers/wls600/dtd/weblogic-ejb-jar.dtd">

<!-- Sample MessageDriven bean Weblogic deployment descriptor -->

<weblogic-ejb-jar>

  <weblogic-enterprise-bean>
    <ejb-name>JMSContQueueProcessor-1</ejb-name>
    <message-driven-descriptor>
      <destination-jndi-name>jms/mro/int/queues/cqin</destination-jndi-name>
      <connection-factory-jndi-name>jms/mro/int/qcf/intqcf</connection-factory-jndi-name>
    </message-driven-descriptor>

    <transaction-descriptor>

          <trans-timeout-seconds>600</trans-timeout-seconds>

    </transaction-descriptor>


    <jndi-name>JMSContQueueProcessor-1</jndi-name>
  </weblogic-enterprise-bean>

      <!-- START SECTION FOR ADDITONAL MDB -->
  <weblogic-enterprise-bean>
    <ejb-name>JMSContQueueProcessor-2</ejb-name>
    <message-driven-descriptor>
      <pool>
        <max-beans-in-free-pool>5</max-beans-in-free-pool>
        <initial-beans-in-free-pool>5</initial-beans-in-free-pool>
      </pool>
      <destination-jndi-name>jms/mro/int/queues/cqout</destination-jndi-name>
      <connection-factory-jndi-name>jms/mro/int/qcf/intqcf</connection-factory-jndi-name>
    </message-driven-descriptor>

    <transaction-descriptor>

          <trans-timeout-seconds>600</trans-timeout-seconds>

    </transaction-descriptor>


    <jndi-name>JMSContQueueProcessor-2</jndi-name>
  </weblogic-enterprise-bean>
      <!-- END SECTION FOR ADDITONAL MDB -->
</weblogic-ejb-jar>
```

Change History

Version	Date	Author	Change
Rev.001	11.03.11	Johann Rumpl	Dokument created
Rev.002	14.03.11	Johann Rumpl	Wrong Parameter in the Maximo Queue Dialog corrected.