Configure Mail Settings

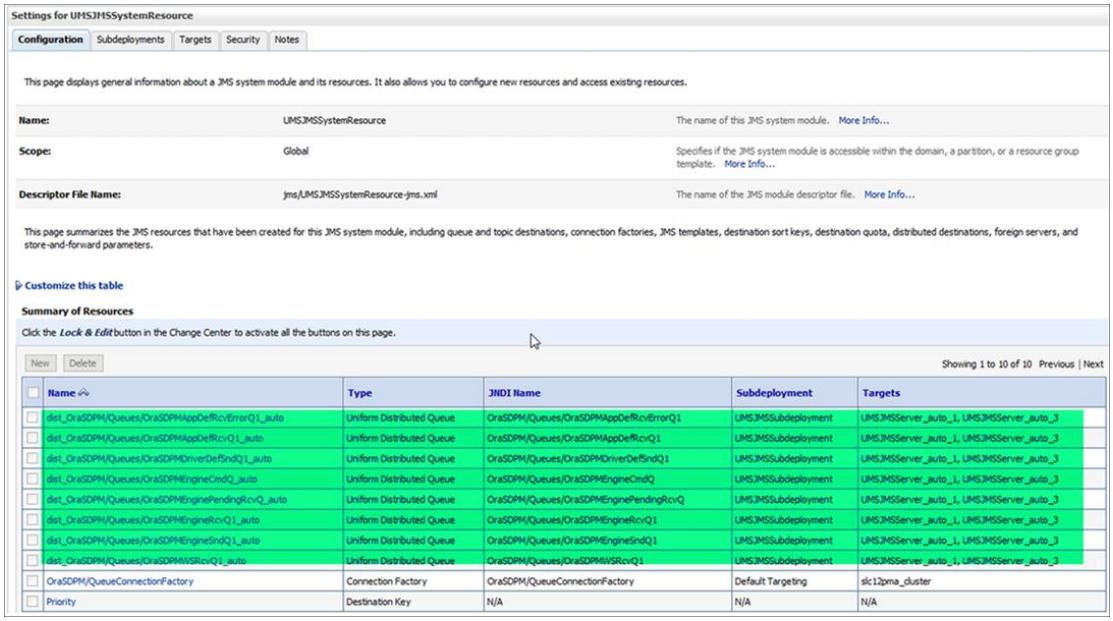
To configure email settings using User Messaging Service (UMS), UMS must be set up on your SOA servers and the UMS adapter configured for your Oracle SOA Suite on Marketplace instance. You can then configure the User Messaging Service to send emails to SSL-configured external mail servers using Oracle SOA Suite on Marketplace with Oracle Service Bus and Oracle B2B.

Configure User Messaging Service on a Cluster

To configure email settings using User Messaging Service (UMS), UMS must be set up on your SOA servers and the UMS adapter configured for your Oracle SOA Suite on Marketplace instance.
If not already done, configure User Messaging Service (UMS) on a cluster:

1. Log in to the Oracle WebLogic Server Administration Console.
2. Navigate to **Home**, then **Summary of Deployments**.
3. If the UMS adapter is not created, follow the steps to **create a UMS JMS server.**
4. Navigate to **Home**, then **Summary of Deployments**, and click **UMSJMSSystemResource**.
5. Click **Lock and Edit** if not already in edit mode and then click **New**.
6. Select **Distributed Queue** and click **Next**.
7. Provide the distributed queue name and the JNDI name.

Queue Name	JNDI Name
dist_OraSDPM/Queues/OraSDPMAppDefRcvErrorQ1_auto	OraSDPM/Queues/OraSDPMAppDefRcvErrorQ1
dist_OraSDPM/Queues/OraSDPMAppDefRcvQ1_auto	OraSDPM/Queues/OraSDPMAppDefRcvQ1
dist_OraSDPM/Queues/OraSDPMDriverDefSndQ1_auto	OraSDPM/Queues/OraSDPMDriverDefSndQ1
dist_OraSDPM/Queues/OraSDPMEngineCmdQ_auto	OraSDPM/Queues/OraSDPMEngineCmdQ
dist_OraSDPM/Queues/OraSDPMEnginePendingRcvQ_auto	OraSDPM/Queues/OraSDPMEnginePendingRcvQ
dist_OraSDPM/Queues/OraSDPMEngineRcvQ1_auto	OraSDPM/Queues/OraSDPMEngineRcvQ1
dist_OraSDPM/Queues/OraSDPMEngineSndQ1_auto	OraSDPM/Queues/OraSDPMEngineSndQ1
dist_OraSDPM/Queues/OraSDPMWSRcvQ1_auto	OraSDPM/Queues/OraSDPMWSRcvQ1

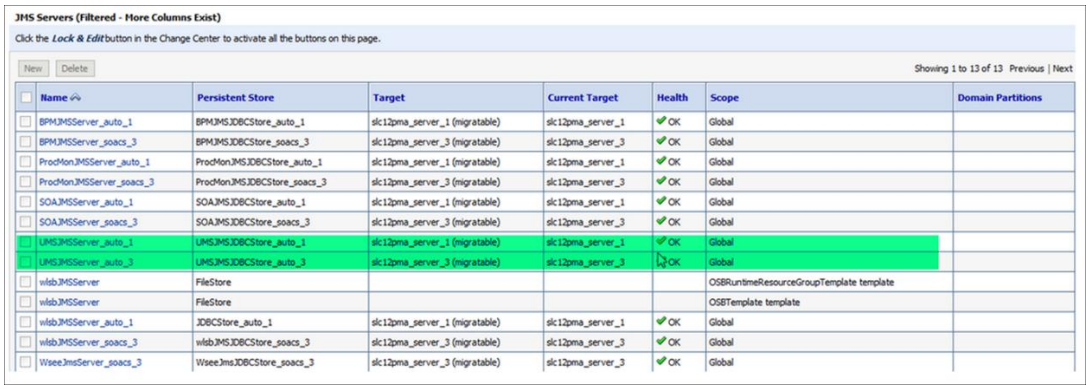


8. Select the **UMSJMSSubdeployment** from the dropdown list. If the subdeployment is not created, follow the steps in **Create a Subdeployment** to create the subdeployment.
9. Select the **UMSJMSServer** and click **Finish**.
10. Create all the queues given in the table and click **Apply**.
11. Navigate to **Home**, then **Summary of Deployments** and verify if the UMSAdapter deployment is displayed. If the UMSAdapter is not in active state, follow the steps in **Deploy a User Messaging Service Adapter** to deploy the UMS adapter.

Create the User Messaging Service JMS Server

On a cluster, you need to create two or more UMS JMS servers, one for each of the servers in the cluster.

1. Log in to the WebLogic Server Administration Console.
2. Go to the **Summary of JMS servers** section and click **New**.
3. Enter the name of the User Messaging Service JMS server and its scope, and click **Next**.
4. Select a persistent store from the drop down list and click **Next**. If the persistent store is not available, follow the steps in Create a Persistent Store to create a persistent store.
5. Select a target for the UMS JMS server and save the changes.

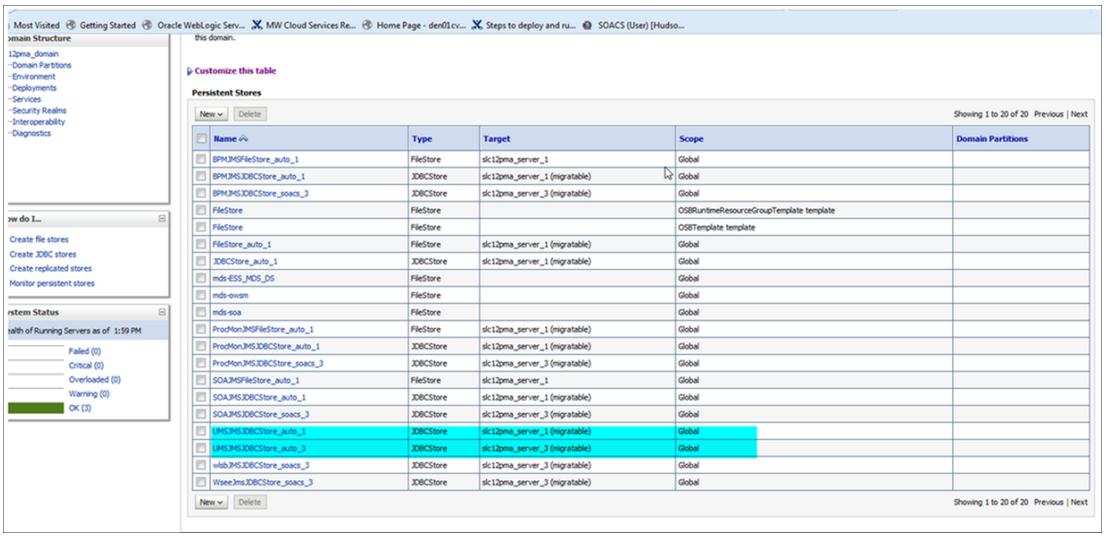


Repeat the steps for the other UMS servers in the cluster.

Create a Persistent Store

Create two or more User Messaging Service persistent stores, one for each of the nodes in the cluster.

1. Log in to Oracle Weblogic Server Administration console.
2. In the left pane of the console, expand **Services** and select **Persistent Stores**.
3. On the Summary of Persistent Stores page, click **New** and then **Create JDBC Store**.
4. On the Create a new JDBC Store page, update the following:
    - **Name** -- Enter a name for the JDBC Store.
    - **Scope** -- Specify the scope of the JDBC Store.
    - **Prefix Name** -- Specify a prefix name to prepend to the table name in this JDBC store for use with multiple instances.
5. Click **Finish**.



Repeat the steps for other persistent stores based on the servers available in the cluster.

Create a Subdeployment

Configure the mail driver for outgoing mails using the Universal Messaging Server.

1. Log in to Oracle Weblogic Server Administation console.
2. In the left pane of the console, expand **Services** then **Messaging**, and select **JMS Modules**.
3. Expand JMS modules and select **UMSJMSSystemResource**.
4. Click **Test** to test the driver configuration.
5. Click the **Subdeployments** tab and click the **New** button in the Subdeployments table.
6. On the Subdeployment Properties page, enter a name for the subdeployment. and click **Next**.
7. On the **Targets** page, select both the UMS JMS servers and click **Save**.

Deploy a User Messaging Service Adapter

If the User Messaging Service adapter is not in active state, delete and redeploy the adapter.

1. Log in to the Oracle Weblogic Server Administration console.
2. Navigate to **Home**, then **Summary of Deployments**.

3. If the User Messaging Service adapter is not in active state, select the check box against the UMSAdapter and click **Delete**.
4. Click **Install**, select the UMS Adapter RAR file in the following location: $DOMAIN_HOME/soa/soa/connectors/UMSAdapter.rar.
5. Select the cluster from the available targets, click **Next** and **Finish**.
6. Activate all changes.
7. Restart the Administration and Managed Servers.

Configure Mail Sessions

You can configure the User Messaging Service to send mails to SSL configure external mail servers using Oracle SOA Suite on Marketplace with Oracle Service Bus and Oracle B2B.

In this example, we'll configure to send mails using the yahoo mail server. Before you configure your Oracle SOA Suite on Marketplace instance and User Messaging Service to send mails, make a note of the yahoo mail server SSL settings.

Field	Value
Server	smtp.mail.yahoo.com
Port	465 or 587
Requires SSL	Yes
Requires TLS	Yes (if available)
Requires authentication	Yes

Note:

For Oracle SOA Suite on Marketplace instances using IP networks, verify if a ping to the smtp mail server is working.. For example, ping smtp.office365.com. If the ping does not work, manually add the smtp mail server host name in your DNS entry.

Import a CA-Issued SSL Certificate into the Oracle SOA Suite on Marketplace Instance

The first step is to import the CA-issued SSL certificate into the trust store being used in your server.

1. Log in to the Adminstration Server node as an oracle user.
2. Run an openssl command for the yahoo mail server:

Mail Server	Command Used
Yahoo	`openssl s_client -connect smtp.mail.yahoo.com:465 > yahoocert.pem`
Office 365	`openssl s client -showcerts -starttls smtp -crlf -connect smtp.office365.com:587`
Microsoft Outlook	`openssl s_client -showcerts -starttls smtp -connect smtp-mail.outlook.com:587`
Gmail	`openssl s_client -connect smtp.gmail.com:465 > gmail-smtp-cert.pem`

3. Make a copy of yahoocert.pem file. For example, cp yahoocert.pem yahoo.cer.
    a. Run the following command:
    Vi yahoo.cer
    The certificate is displayed.
    b. Keep only the certificate from **BEGIN CERTIFICATE** entry till **END CERTIFICATE** entry and remove all the unwanted lines to create the yahoo certificate.

    Note:

    In the case of **Office 365**, two certificates are presented. Run the following command to display the certificates:

```
openssl s_client -showcerts -connect smtp.office365.com:587 -starttls smtp  </dev/null
```

Save both the certificates as individual .cer files and import them to the keystore.

4. Add the certificate to the trust store being used in your Administration Server. By default the trust store used is **Demotrust.jks**. Use the following command to add the certificate created in the previous step to **Demotrust.jks**:

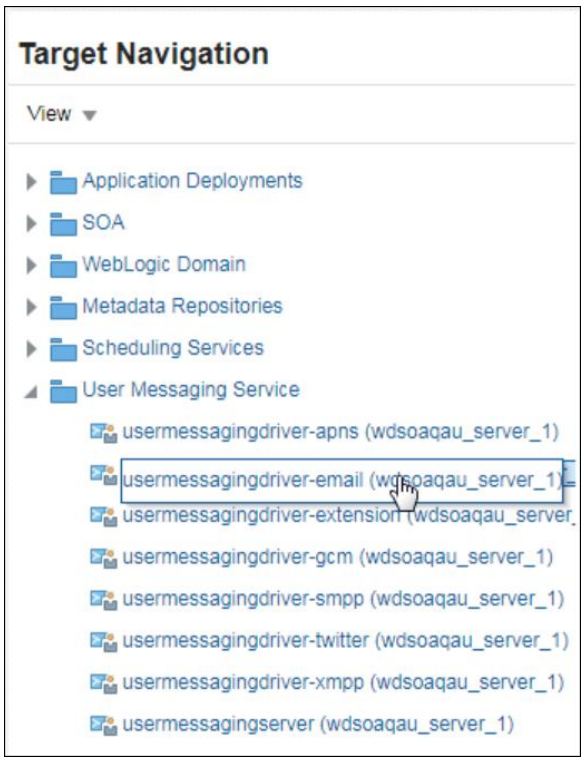
```
keytool -import -alias smtp.yahoo.com -keystore
/u01/app/oracle/middleware/wlserver/server/lib/DemoTrust.jks -file yahoo.cer -storepass
DemoTrustKeyStorePassPhrase
```

5. Stop and then restart the Administration Server and Managed Servers.

Configure the Mail Driver for Outgoing Mails

Configure the mail driver for outgoing mails using the User Messaging Service.

1. In Oracle Enterprise Manager Fusion Middleware Control, navigate to **User Messaging Server**.
2. Expand the **User Messaging Service** node and select **usermessagingdriver-email**.



3. Enter the following details:

Field	Value
Name	Email driver name. For example, yahoossl
Sender address	EMAIL:*YourMail*@yahoo.com
Capability	Send
EMAIL Receiving protocol	IMAP
Message Retrieval Frequency	30
Message Folder	INBOX
Outgoing mail Server port	smtp.mail.yahoo.com
Outgoing Mail Server port	465
Outgoing Mail Server Security	SSL
Outgoing Username	Your email user name which you give for authentication. For Office 365, test the driver settings to verify that your email use rname is a fully qualified name as Office 365 requires the user name in your SMTP configuration to be your full email address including the domain. For example, myuser@mydomain.com.
Outgoing Password	Your email password in cleartext password type. Note that Office 365 requires users to change their passwords regularly. The SMTP service may not notify you about expired passwords. Double-check the password provided in the driver configuration.
Enable SSL	Select this option

4. Click **Test** to test the driver configuration.

   Note:

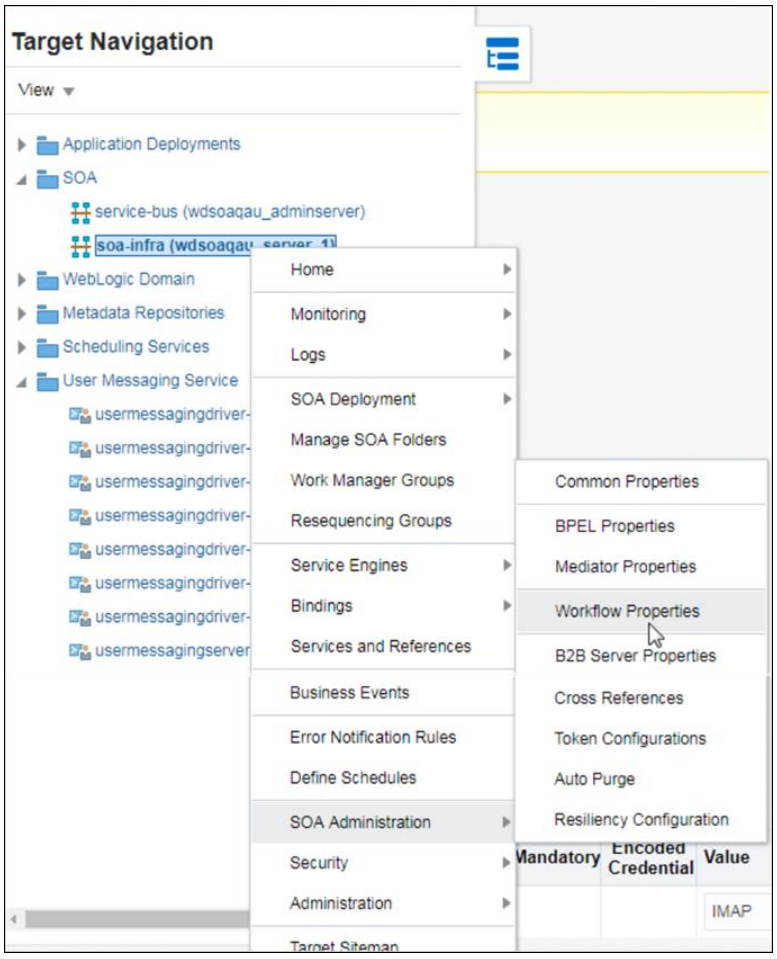
   If test fails with authentication failure, log into your mail ID and check for a mail from Yahoo or your mail server with a subject similar to " Sign in attempt

prevented". Perform the steps mentioned in the email to enable less secure sign in.

Update the Workflow Notification Properties

Update the workflow notification properties with details of the external mail server.

1. Log in to Oracle Enterprise Manager Fusion Middleware Control.
2. Expand the **SOA** node and select **soa-infra**.
3. Right-click **soa-infra**, select **SOA Administration** and then **Workflow Properties**.



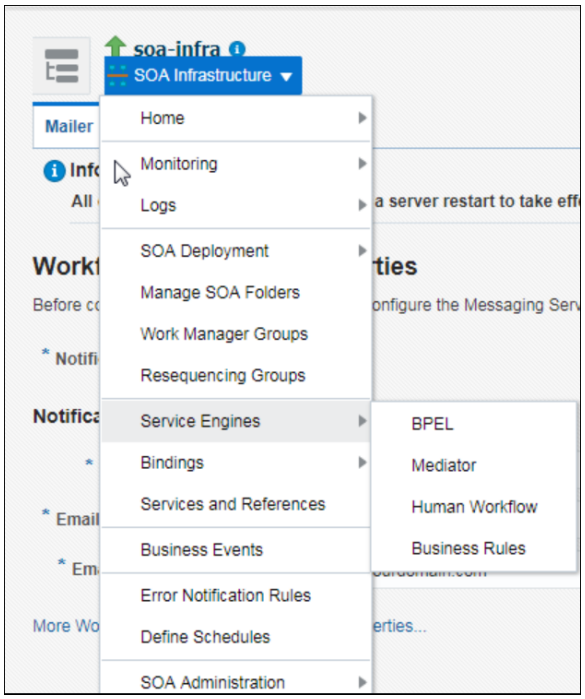
4. In the **Mailer** tab, under Notification Service, enter **From Address**, **Actionable Address**, and **Reply To Address** for your outgoing mail address. For example, YourMail@yahoo.com.

5. Click **Apply**.

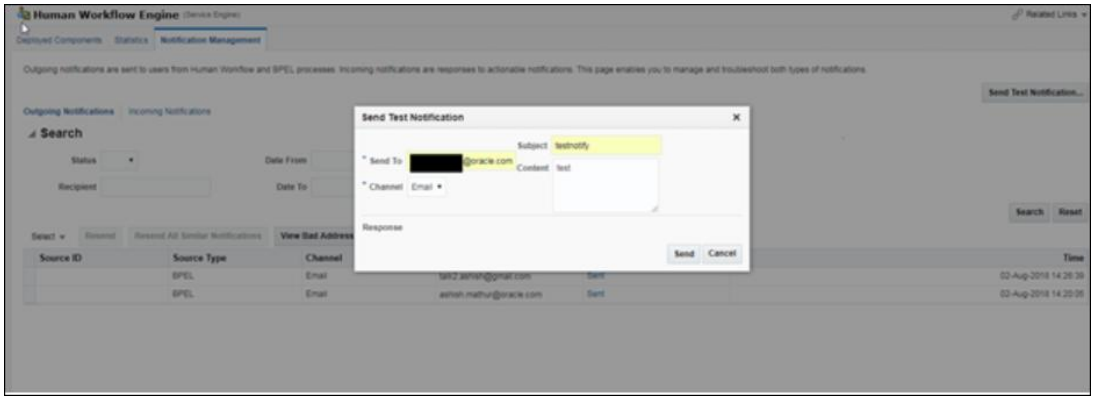
Verify Mail Configuration Settings

You can test your mail server configuration by sending a test mail.

1. Log in to Oracle Enterprise Manager Fusion Middleware Control.
2. Expand the **SOA** node and select **soa-infra**.
3. Right-click **soa-infra**, select **SOA Administration** and then **Workflow Properties**.
4. Click the arrow next to **SOA Infrastructure**, select **Service Engine** and then **Human Workflow**.



5. Click the **Notification Management** tab and click **Send Test Notification**.
6. Enter the details of the mail ID to which you want to send the test mail and click **Send**.



A successful mail delivery is sent to the intended recipient