

The Oracle User Messaging Service

Objectives

After completing this lesson, you should be able to:

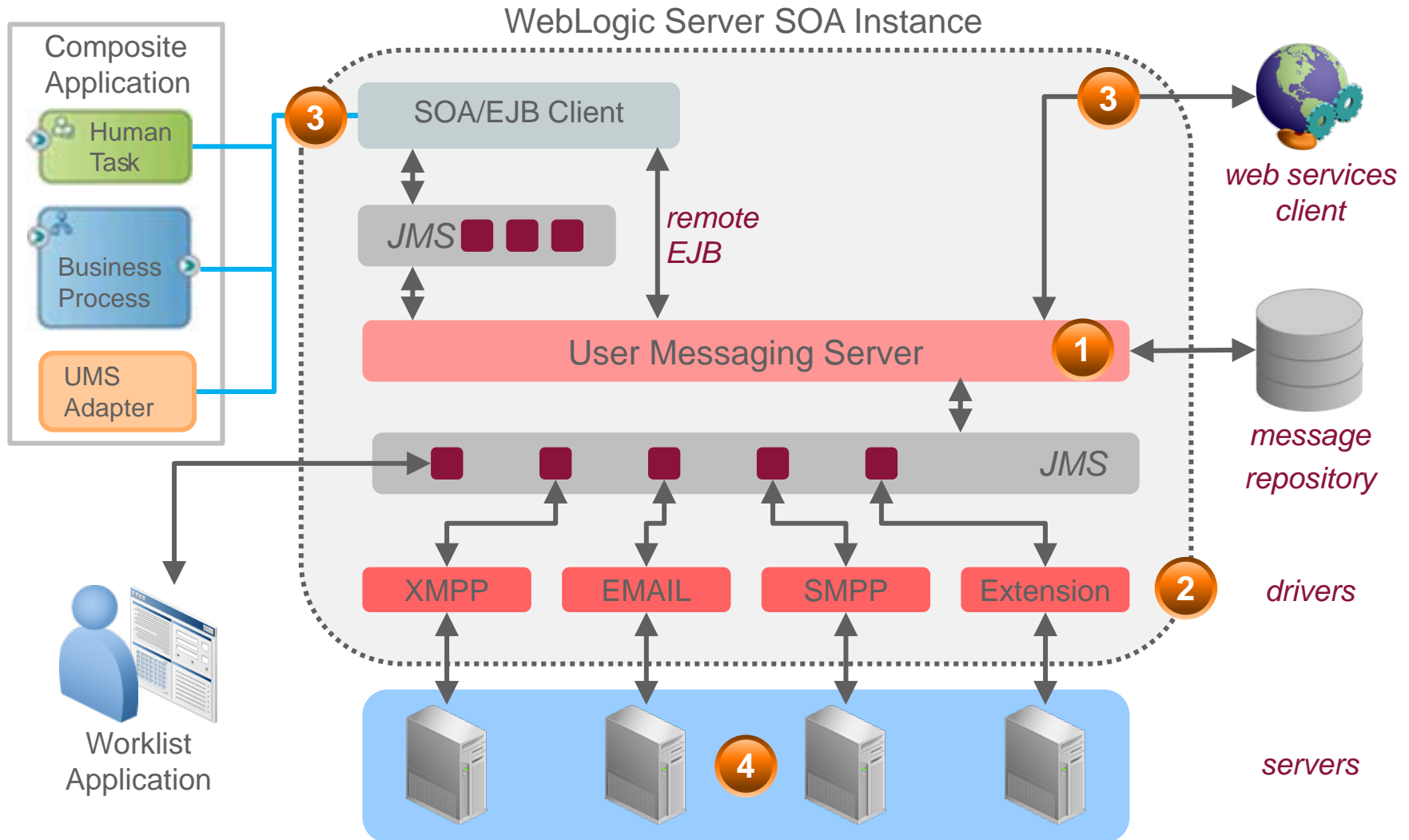
- Explain how UMS is used by Oracle SOA Suite 12c
- Configure UMS message channels and drivers



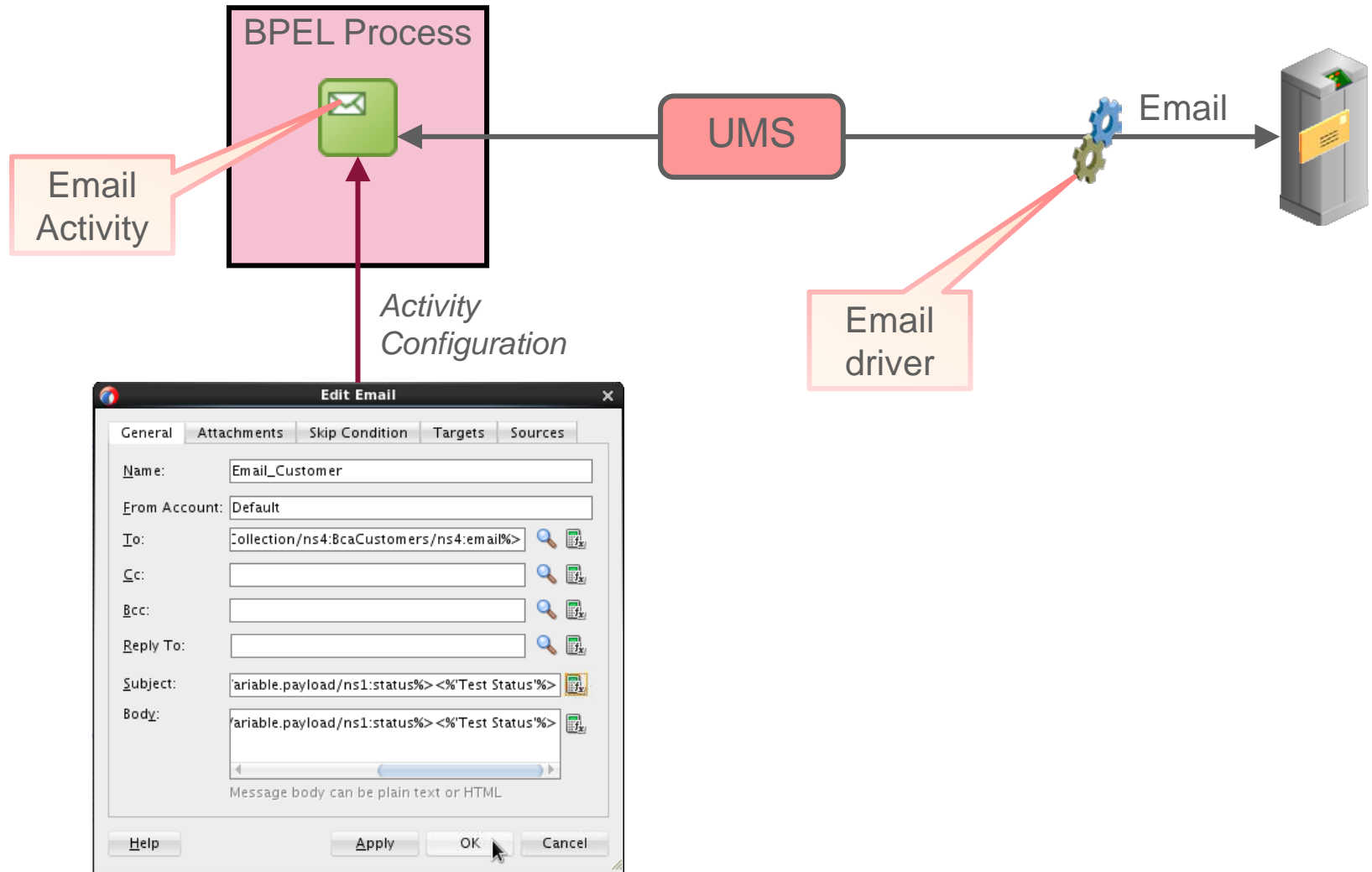
Agenda

- Introduction to UMS
- Configuring UMS

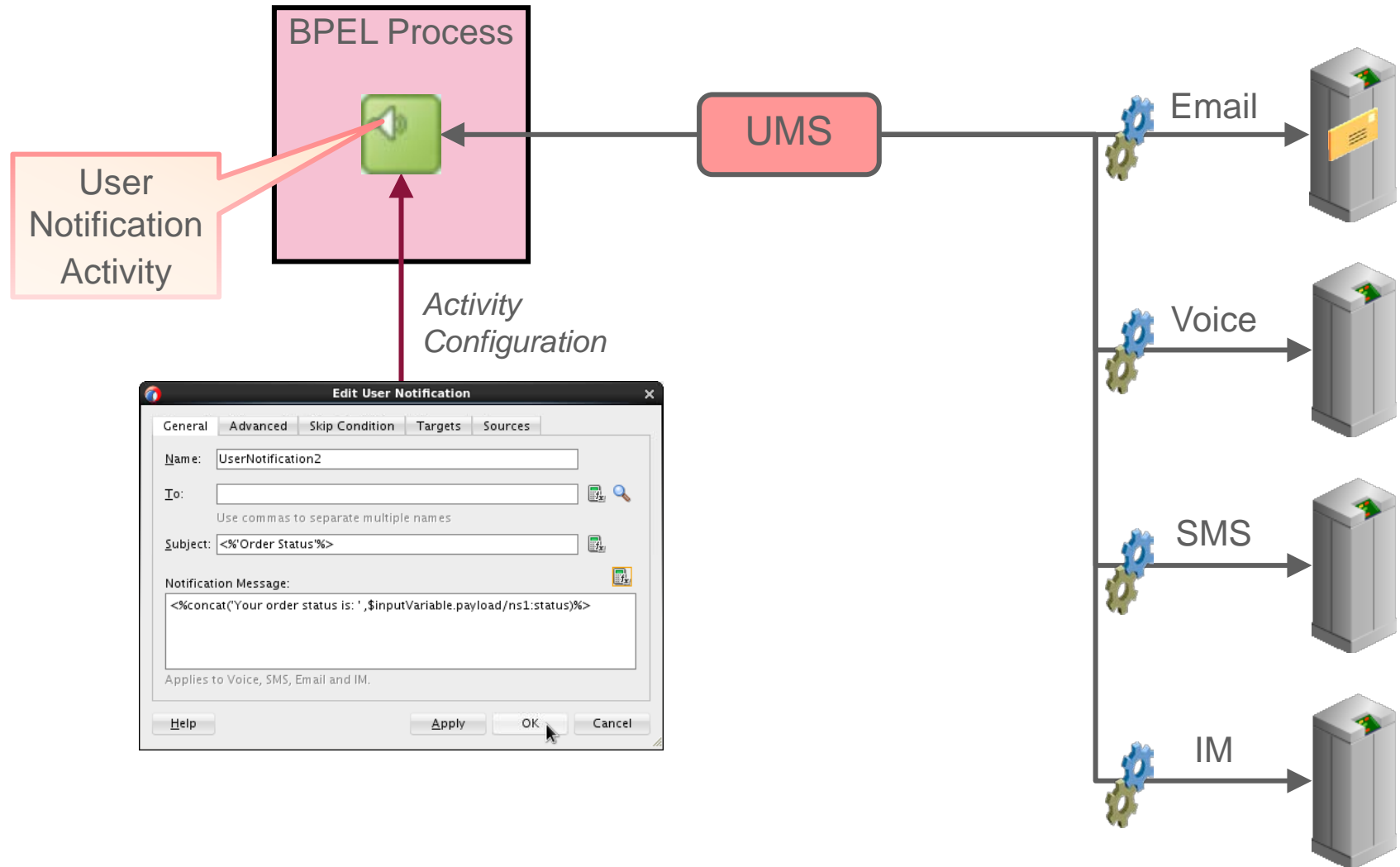
Introducing Oracle User Messaging Service



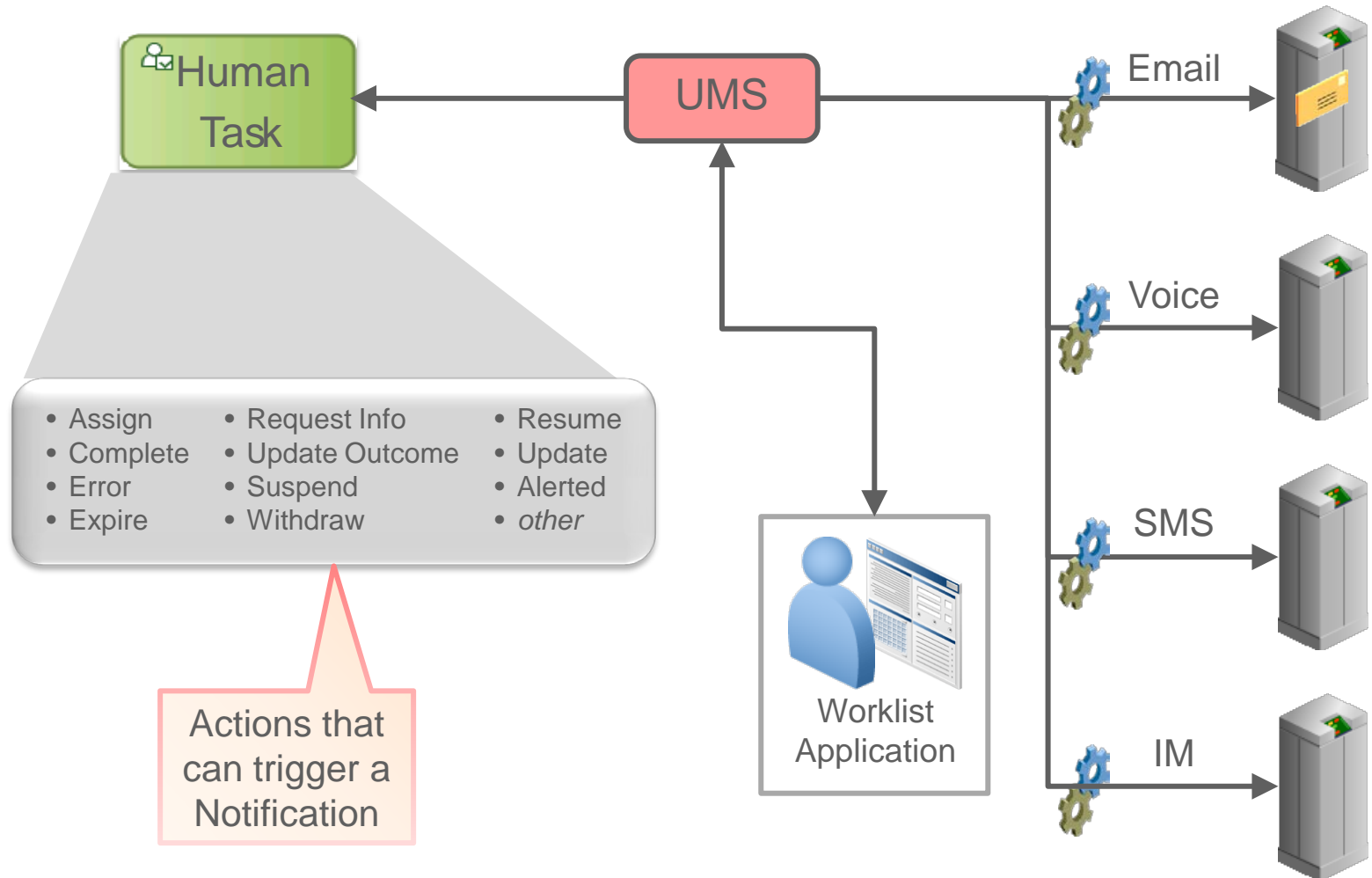
BPEL: Email Activity



BPEL: User Notification Activity



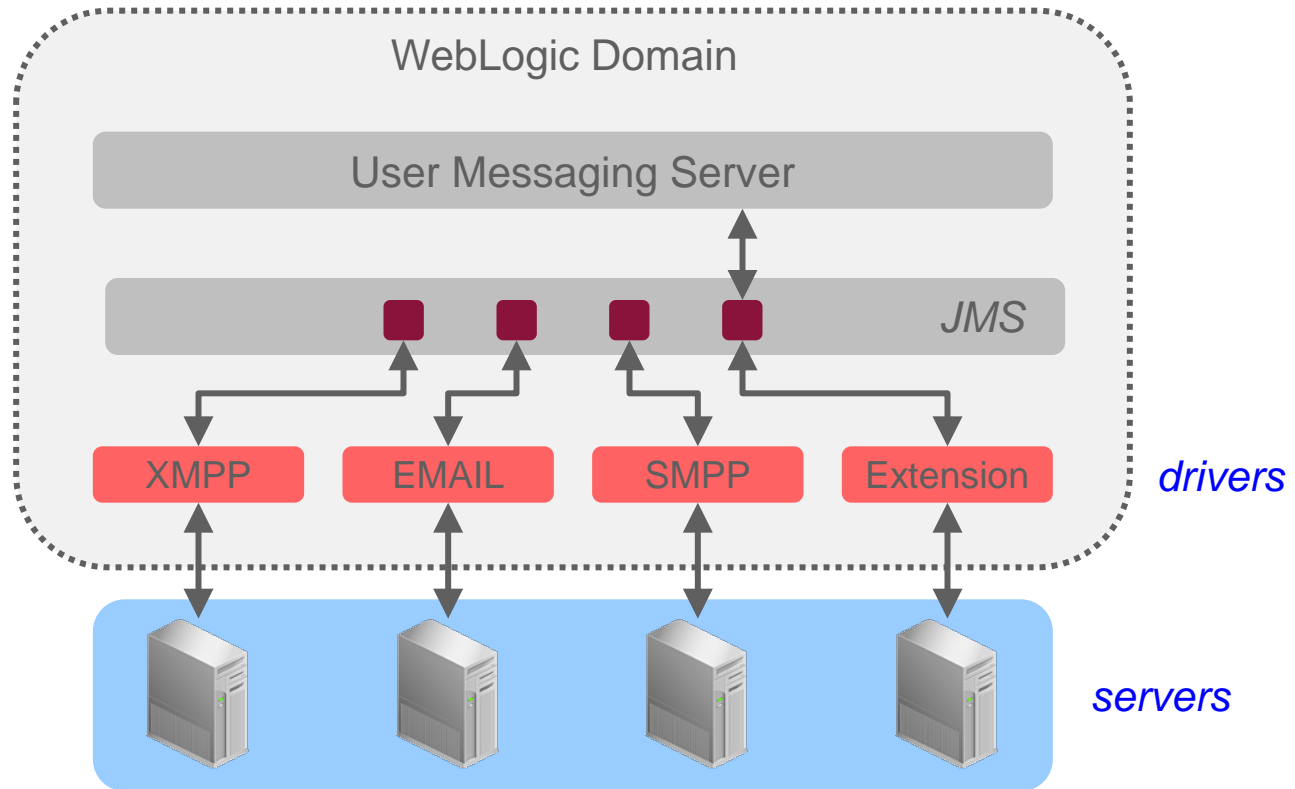
User Notifications and Human Tasks



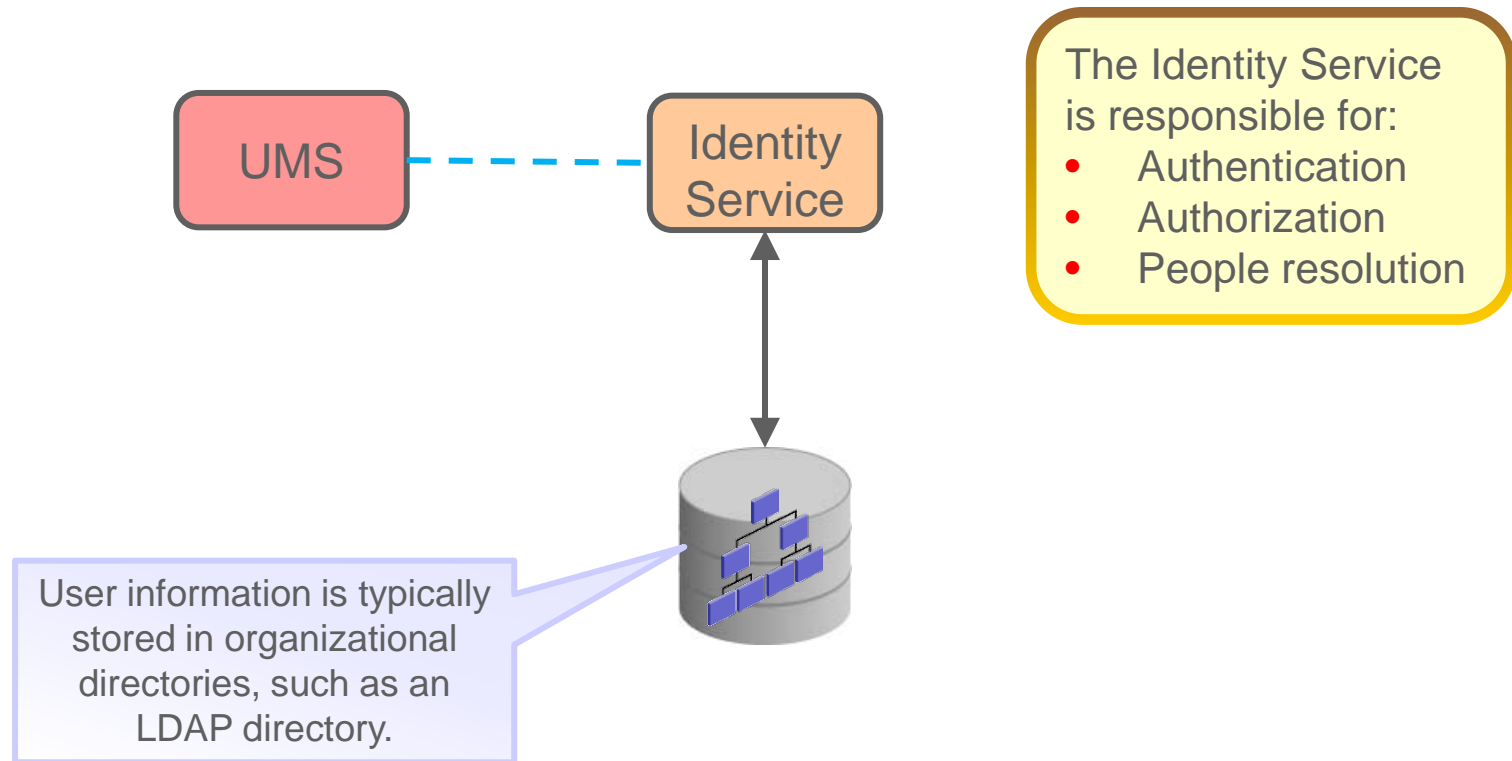
Agenda

- Introduction to UMS
- Configuring UMS

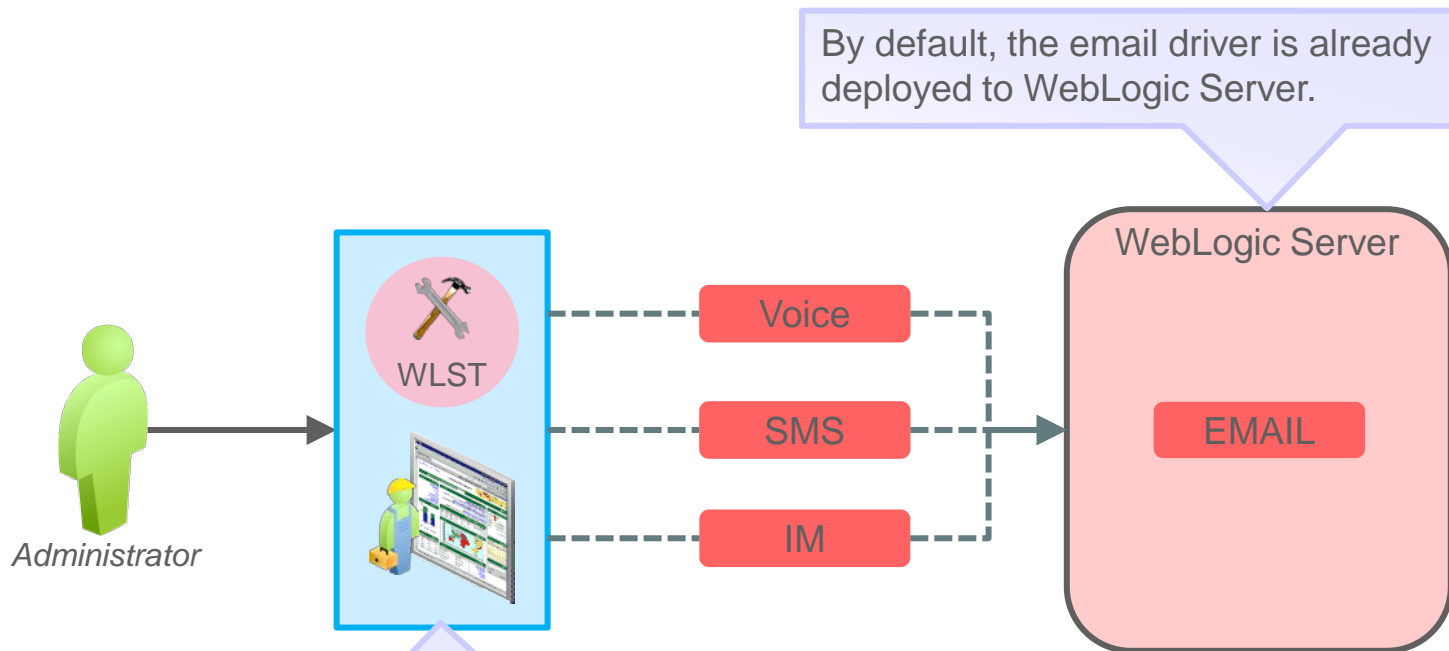
UMS Message Channels and Drivers



Relationship Between UMS and an Identity Service



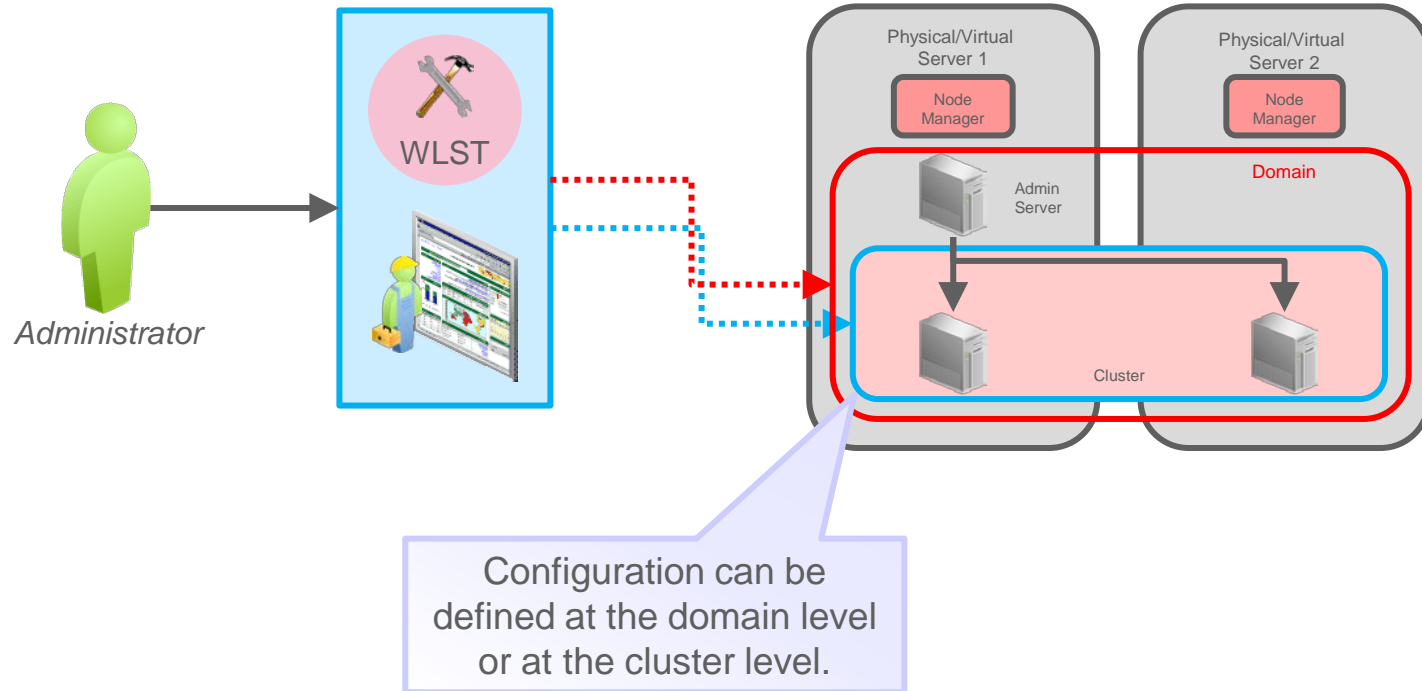
Deploying Drivers



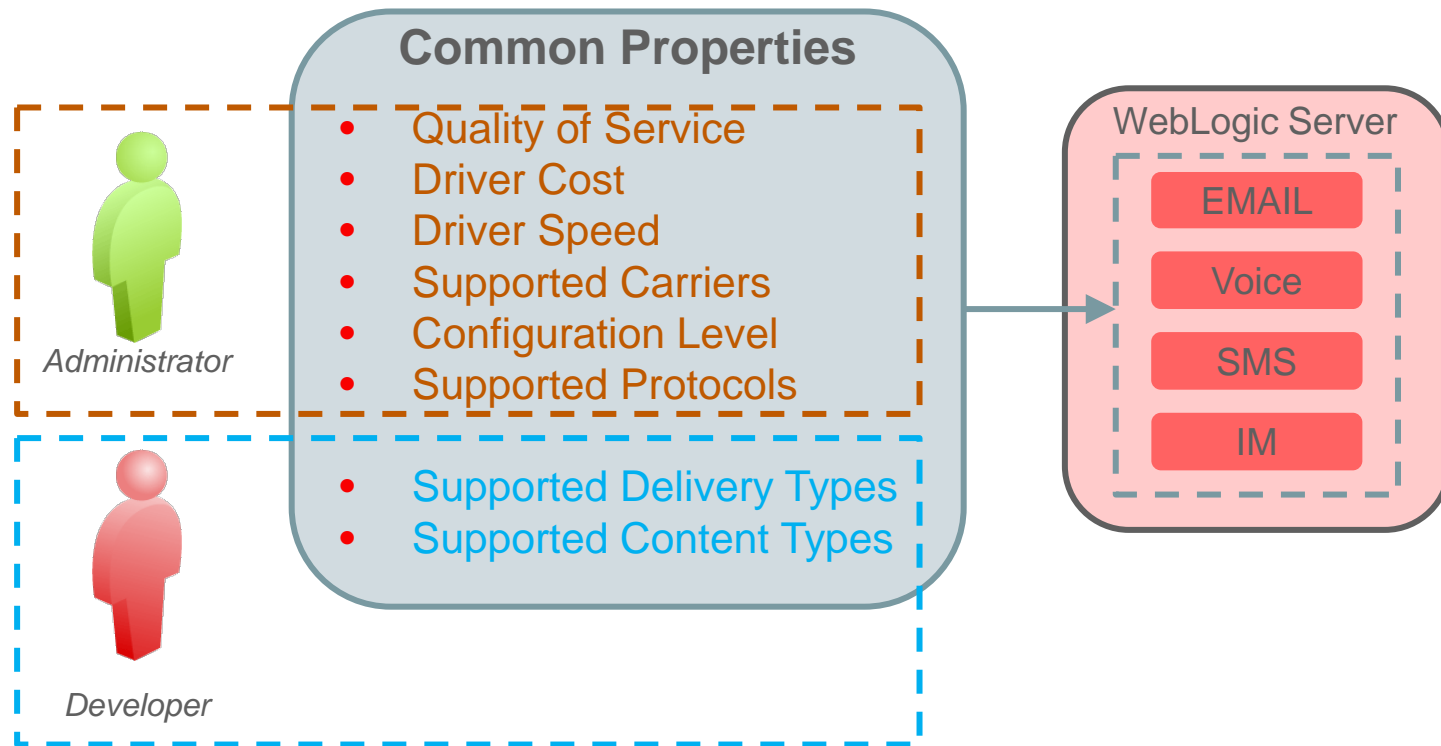
To deploy the others, you can deploy the drivers when creating or extending the domain by using the Oracle Fusion Middleware Configuration Wizard. You can also deploy additional drivers by using WLST commands (recommended), Admin Console, or Oracle Enterprise Manager.

Configuring UMS and UMS Drivers

The server and drivers can be configured by using WLST or Enterprise Manager.



Common Driver Properties



Monitoring Oracle User Messaging Service

The screenshot displays the Oracle Enterprise Manager Fusion Middleware Control 12c interface. The top navigation bar shows 'WebLogic Domain' and 'Target Navigation'. The left pane shows a tree view of the domain structure, with 'usermessagingserver (soa_server2)' selected. The right pane shows the 'usermessagingserver' target page, which includes a 'Statistics' section with four rows of metrics (all 'Unavailable') and a 'Resource Center' section with links for 'Before You Begin' and 'Typical Administration Tasks'.

ORACLE® Enterprise Manager Fusion Middleware Control 12c

WebLogic Domain ▼

Target Navigation

View ▼

- Application Deployments
- SOA
 - soa-infra (soa_server1)
 - soa-infra (soa_server2)
- WebLogic Domain
 - edg_domain
 - AdminServer
 - lbr_server
 - soa_cluster1
- Metadata Repositories
- User Messaging Service
 - usermessagingdriver-email (soa_server1)
 - usermessagingdriver-email (soa_server2)
 - usermessagingserver (soa_server1)
 - usermessagingserver (soa_server2)**

usermessagingserver ⓘ

User Messaging Service ▼

Statistics ⚙️

Messages Sent Successfully	Unavailable
Messages Sent Failed	Unavailable
Messages Received Successfully	Unavailable
Messages Received Failed	Unavailable

Resource Center ⚙️

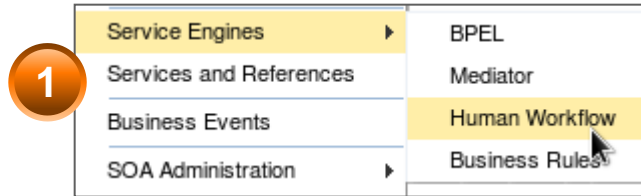
Before You Begin

- Introduction to Oracle User Messaging Service
- Getting Started with Managing Oracle User Messaging Service with Oracle Enterprise Manager
- Introduction to Oracle SOA Suite

Typical Administration Tasks

- Configuring Oracle User Messaging Service

Viewing and Testing Email Notifications



2

Outgoing Notifications

Search

Select View Resend Resend All Similar Notifications View Bad Addresses Delete

Source ID	Source Type	Channel	Recipient	Status
	BPEL	Email	sking@emailexample.com	Sent
14654b9c-d7b5-4...	WORKFLOW	Email	jcooper@emailexample.com	Sent
	BPEL	Email	sking@emailexample.com	Sent
707ba6dd-139b-4...	WORKFLOW	Email	jcooper@emailexample.com	Sent
	BPEL	Email	sking@emailexample.com	Sent
e9994a81-303c-4...	WORKFLOW	Email	jcooper@emailexample.com	Sent
	RDFI	Email	sking@emailexample.com	Sent

3

Send Test Notification

Subject Test from SOA Server

Content Test message to check if email channel is working.

* Send To jcooper@emailexample.com

* Channel Email

Response

Send Cancel













Configuring User Preferences

Browser address bar: <https://soa.example.com:4443/sdpmessaging/userprefs-ui/faces/jspx>

ORACLE® User Communication Preferences

Available Channels

View ▾

Name	Type	Address	Default
 Business Email	EMAIL	jcooper@example.com	
 Business Mobile (SMS) 	SMS	300000001	
 Business Mobile (Voice) 	VOICE	300000001	
 Business Phone (SMS) 	SMS	100000001	
 Business Phone (Voice) 	VOICE	100000001	
 Home Phone (SMS) 	SMS	400000001	

Workflow Notification Properties

Workflow Notification Properties

1

Before configuring the Workflow Notification, configure the Messaging Service Driver. [Go to the Messaging Driver page](#)

2

User Messaging Email Driver		↑	Unconfigured	
User Messaging XMPP Driver		↑	Unconfigured	

Configure Driver

3

usermessagingserver ⓘ

User Messaging Service ▼

Edit Driver Properties

Common Configuration

Name	bcaEmail	Supported Protocols	SMTP
Driver Type	User Messaging Email Driver	Supported Carriers	
Configuration Level	<input checked="" type="radio"/> Domain <input type="radio"/> Cluster Cluster Name	<input checked="" type="radio"/> Use Sender Addresses <input type="radio"/> Use Default Sender Address	
Supported Delivery Types	EMAIL	Sender Address	
Capability	SEND, RECEIVE	Cost	
Supported Content Types	*	Speed	
Supported Status Types	DELIVERY_TO_GATEWAY_SUCCESS, DELIVERY_TO_GATEWAY_FAILURE, USER_REPLY_ACKNOWLEDGEMENT_SUCCESS, USER_REPLY_ACKNOWLEDGEMENT_FAILURE	<input type="checkbox"/> Supports Cancel <input type="checkbox"/> Supports Replace <input type="checkbox"/> Supports Status Polling <input type="checkbox"/> Supports Tracking	

Driver-Specific Configuration

Name	Description	Mandatory	Encoded Credential	Value
E-mail Receiving Protocol	E-mail receiving protocol. The possible values are IMAP and POP3.			POP3

Configuring UMS Notification Properties

ORACLE® Enterprise Manager Fusion Middleware Control 12c

WebLogic Domain ▾

Target Navigation

View ▾

- Application Deployments
 - SOA
 - service-bus (DefaultServer)
 - soa-infra (DefaultServer)**
 - default
 - Home
 - Monitoring
 - Logs
 - SOA Deployment
 - Manage Partitions
 - Work Manager Groups
 - Resequencing Groups
 - Service Engines
 - Services and References
 - Business Events
 - SOA Administration**
 - Common Properties
 - BPEL Properties
 - Mediator Properties
 - Workflow Properties**
 - Cross References
 - Token Configurations
 - Security
 - Administration
 - Target Information
- WebLogic Domain
 - DefaultDomain
 - DefaultServer
- Metadata Repository
- User Messaging Service

soa-infra SOA Infrastructure

soa-infra SOA Infrastructure ▾

Mailer Task

Information

All changes made in this page require a server restart to take effect.

Workflow Notification Properties

Before configuring the Workflow Notification, configure the Messaging Service Driver. [Go to the Messaging Driver page](#)

* Notification Mode All ▾

Notification Service

* Email : From Address demoadmin@emailexample.com

* Email : Actionable Address demoadmin@emailexample.com

* Email : Reply To Address no.reply@yourdomain.com

[More Workflow Notification Configuration Properties...](#)

Changes require a server restart.

Email address to handle incoming actionable emails.

Set notification mode and email properties as appropriate.

Quiz



UMS configuration can be defined at the domain level, cluster level, or at the Managed Server level.

- a. True
- b. False

Summary

In this lesson, you should have learned how to:

- Explain how UMS is used by Oracle SOA Suite 12c
- Configure UMS message channels and drivers



Practice 12: Overview

This practice covers the following topics:

- Practice 12-1: Configuring the Email Driver
 - Seeding the LDAP Server
 - Configuring the Email Driver
- Practice 12-2: Deploying the Composite Application
- Practice 12-3: Instantiating the Composite that Generates Email
 - Observing how Oracle SOA Suite uses UMS with a BPEL Email activity and User Notification Services