

**Practices for Lesson 4:
Deploy Applications for
Oracle SOA Suite on
Marketplace**

Overview

In these practices, you will learn how to deploy an application to an Oracle SOA Suite on Marketplace instance by using Fusion Middleware Control, and the WebLogic Server Administration Console.

Practice 4-1: Deploy an Application by Using Oracle Enterprise Manager Fusion Middleware Control

Overview

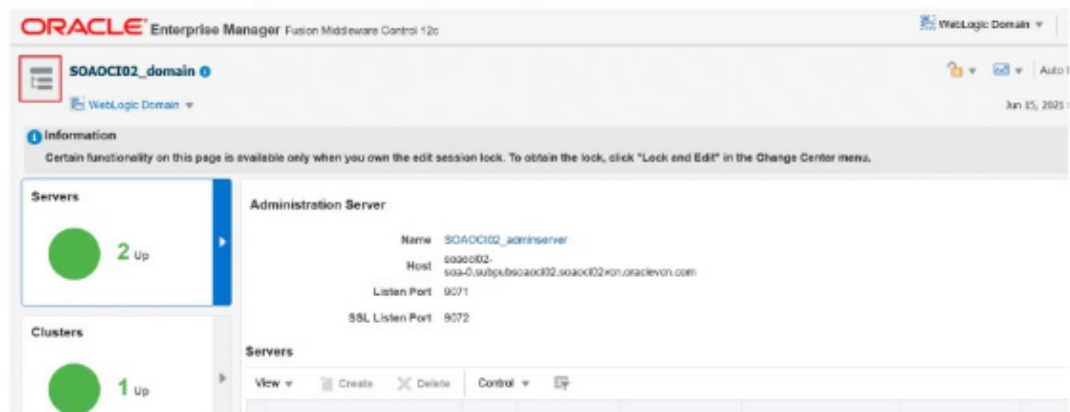
In this practice, you will use Oracle Enterprise Manager Fusion Middleware Control to deploy an application.

Assumptions

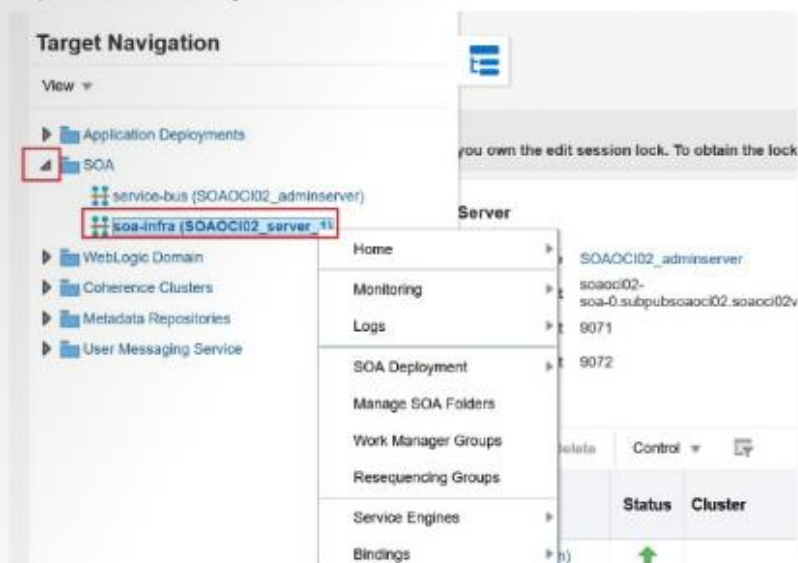
You have downloaded **sca_SayHello.jar**, **sca_SayHello_rev1.0.jar**, and **benefits.war** as part of course lab files.

Tasks

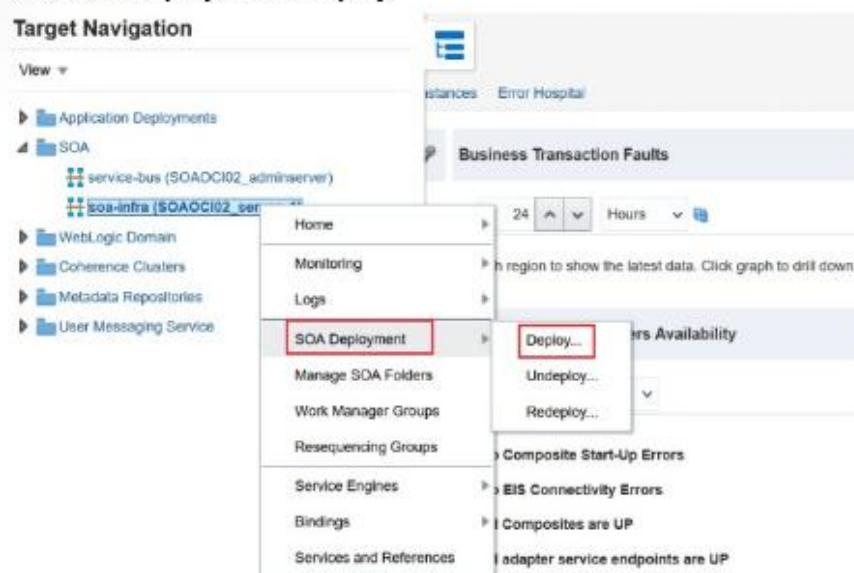
1. On the FMW home page, click the **Target Navigation** pane.



2. Expand **SOA** and right-click **soa-infra**.



3. Click **SOA Deployment > Deploy**.



4. The Deploy SOA Composite page is displayed.



5. On the **Deploy SOA Composite** page, click **Choose File** and select the **sca_SayHello_rev1.0.jar** file. This file is available as part of the course lab files. Click **Next**.



6. On the **Select Target** page, select the **default** SOA folder, and then click **Next**.



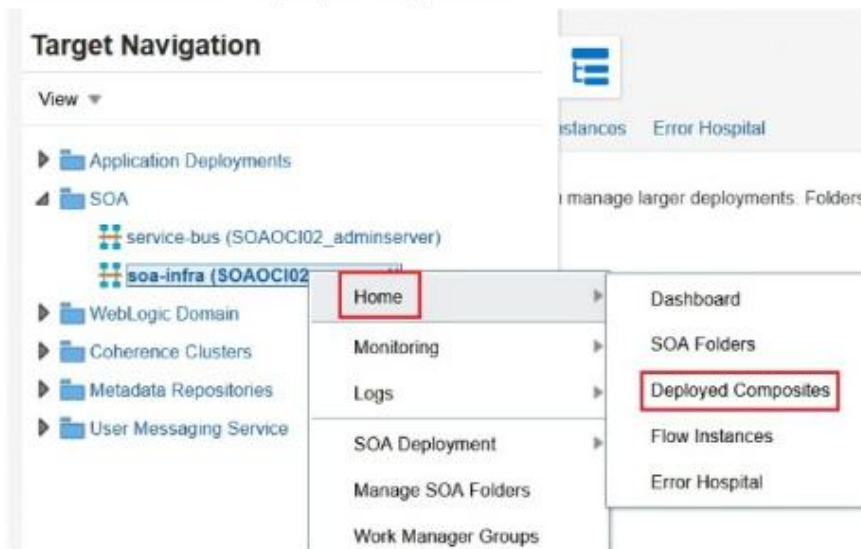
- On the **Confirmation** page, click **Deploy**.



8. The deployment is successful and click **Close**.



2. Next choose **Home**→**Deployed Composites**.



3. Click the **Deployed Composites** tab and click **SayHello [1.0]**.



4. Click **Test**.

The screenshot shows the SOA Infrastructure console. At the top, there's a header for 'soa-infra' and 'SOA Infrastructure'. Below it, a breadcrumb trail reads 'SOA Infrastructure > default (SOA Folder) > Composite'. The main area shows a composite named 'SayHello [1.0]' with status 'Active'. There are buttons for 'Retire...', 'Shut Down...', 'Test' (highlighted with a red box), and 'Settings...'. Below this, there are tabs for 'Dashboard', 'Composite Definition', 'Flow Instances', 'Unit Tests', and 'Policies'. The 'Dashboard' tab is selected, showing a 'Components' section with 'MakeGreeting' and a 'Services and References' table.

Name	Type	Usage	Total Messages
makegreeting_client_tp	Web Service	Service	0

5. On the **Test Web Service** page, click the **Request** tab, and expand **payload**.

The screenshot shows the 'Test Web Service' page. The breadcrumb trail is 'SOA Infrastructure > default (SOA Folder) > SayHello (Composite) > Test Web Service'. There are two tabs: 'Request' (highlighted with a red box) and 'Response'. Below the tabs, there are expandable sections for 'Security', 'Quality of Service', 'HTTP Header', 'Additional Test Options', and 'Input Arguments'. Under 'Input Arguments', there are options for 'Tree View', 'Enable Validation' (checked), 'Load Payload' with a 'Browse...' button, and a 'Save Payload' button. The 'SOAP Body' section is visible, with a 'View' dropdown and a 'Detach' button. Below this is a table with columns 'Name', 'Type', and 'Value'.

Name	Type	Value
* payload	payload	
* input	string	

6. Enter the **"Cloud World"** message in the text field, and then click **Test Web Service**.

SOA Infrastructure > Default SOA Project > SayHello (Composite) > Test Web Service

Security
Quality of Service
HTTP Header
Additional Test Options
Input Arguments

Tree View ▾ Enable Validation ☒ Load Payloads No file selected

SOAP Body

View ▾ Detach

Name	Type	Value
* payload	payload	
* input	string	Cloud World

Request Response

7. Click the **Response** tab and verify that the response text is **"Hello Cloud World."**

Request **Response**

Test Status Request successfully received 🟢

Response Time (ms) 2555

Tree View ▾

A new flow instance was generated.

Name	Type	Value
payload	payload	
result	string	Hello Cloud World

This completes the task of deploying and testing an application using Oracle Enterprise Manager Fusion Middleware console.

Practice 4-2: Deploy an Application by Using WebLogic Server Administration Console

Overview

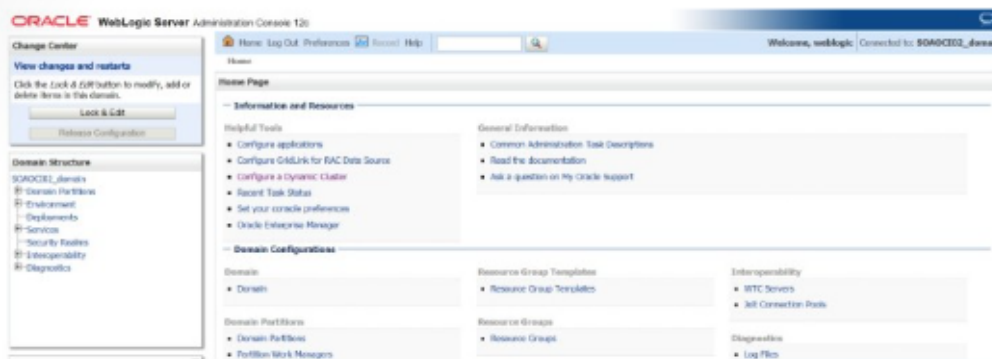
In this practice, you will use the WebLogic Server Administration Console to deploy and access the deployed application through a browser.

Assumptions

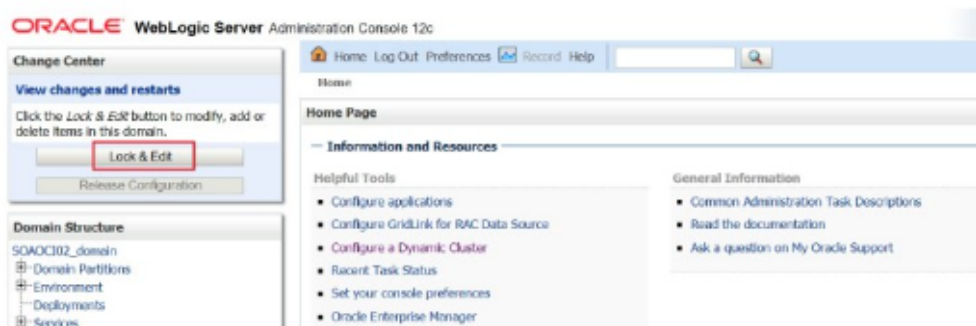
You have completed all the previous practices successfully.

Tasks

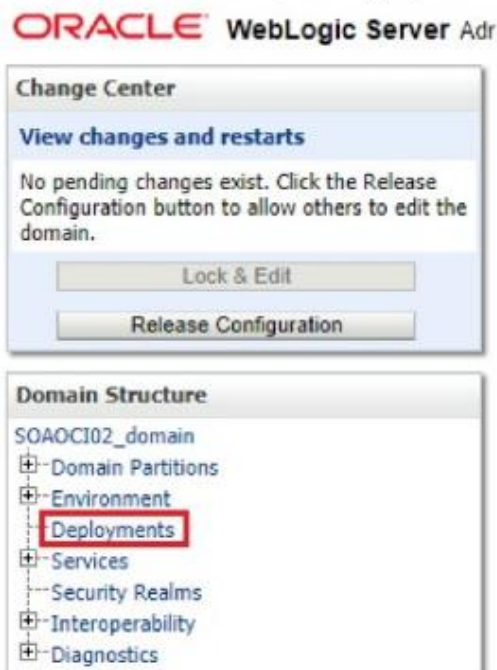
1. Access the WebLogic Administration Console using the URL <https://132.145.191.58:7002/console> (this is an example URL in our case and it will be different for you) and provide the username as "weblogic" and password as "Wwelcome#123", and then click "Login."
2. It displays the WebLogic Server Administration console home page as shown in the following:



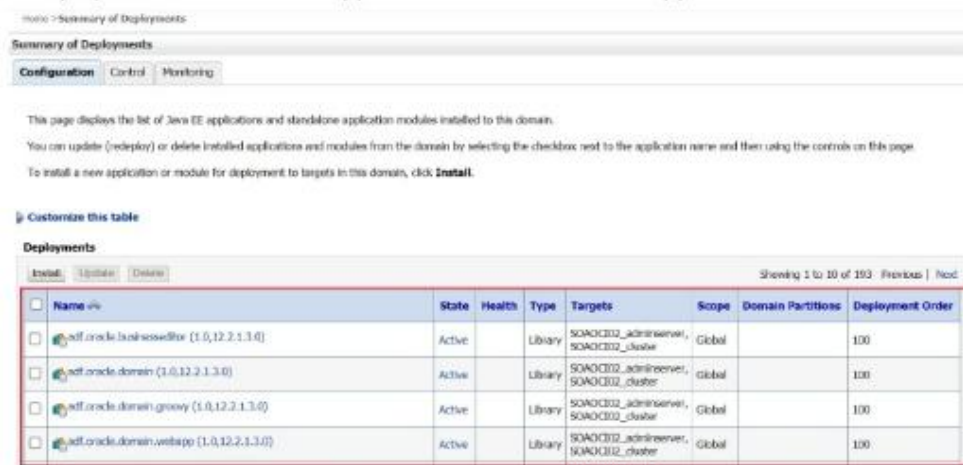
3. Click **Lock & Edit**.



4. Under Domain Structure, click **Deployments**.



5. It displays the list of Java EE applications and stand-alone application modules installed.



- Under Deployments, click the **Install** button.

Home
Log Out
Preferences
Recent
Help

Welcome, weblogic
Connected to SOAOC02_domain

Home
>
Summary of Deployments

Summary of Deployments

Configuration
Control
Monitoring

This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can update (redesploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install**.

[Customize this table](#)

Deployments

Install

Update

Delete

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<input type="checkbox"/>	Name	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
<input type="checkbox"/>	soa.oracle.businesseditor (1.0.12.2.1.3.0)	Active		Library	SOAOC02_adminserver, SOAOC02_cluster	Global		100
<input type="checkbox"/>	soa.oracle.domain (3.0.12.2.1.3.0)	Active		Library	SOAOC02_adminserver, SOAOC02_cluster	Global		100

7. In the **Install Application Assistant** page, click on **upload your file(s)**

Change Center

View changes and reverts

No pending changes exist. Click the Revert Configuration button to allow others to edit the database.

Domain Structure

- SOAACCES_Joiners
- Domain Partitions
 - Environments
 - Deployments
 - Services
 - Security Policies
 - Interoperability
 - Diagnostics

Home | Log Out | Preferences | Add Record Policy

Home > Joiners of Clusters > SOAACCES_Joiner > Summary of Deployments > Details > Summary of Deployments > Summary of Clusters > SOAACCES_Joiner > Summary of Clusters > SOAACCES_Joiner > Summary of Deployments

Install Application Assemblies

Locate deployment to install and prepare for deployment

Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path of the application directory or file in the text field.

Note: Only valid file paths are displayed below. If you cannot find your deployment file, upload your files under location that your application contains the required deployment descriptors.

Path:

Recently Used Paths:

Current Location:

☐ benefits.user

8. For Deployment archive, choose the **benefits.war** file from the **Labs** folder available in the local system and click **Next**.

Install Application Assistant

[Back](#) [Next](#) [Finish](#) [Cancel](#)

Upload a deployment to the Administration Server

Click the Browse button below to select an application or module on the machine from which you are currently browsing. When you have located the file, click the Next button to upload this deployment to the Administration Server.

Deployment Archive: Choose File benefits.war

Upload a deployment plan (this step is optional)

A deployment plan is a configuration file that can supplement the descriptors included in the deployment archive. A deployment will work without a deployment plan, but you can also upload a deployment plan archive now. This deployment plan archive will be a directory of configuration information packaged as a .jar file. See related links for additional information about deployment plans.

Deployment Plan: Choose File No file chosen

[Back](#) [Next](#) [Finish](#) [Cancel](#)

9. You will see **benefits.war** with a radio button next to it. Select the **radio button**.

Home Log Out Preferences Log Records Help Welcome, weblogic Connected to: SOAOC02_0

Home » Summary of Deployments

Messages

✔ The file benefits.war has been uploaded successfully to /u01/data/domains/SOAOC02_domain/servers/SOAOC02_adminserver/upload

Install Application Assistant

Back Next Finish Cancel

Locate deployment to install and prepare for deployment

Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path of the application directory or file in the Path field.

Notes: Only valid file paths are displayed below. If you cannot find your deployment files, Upload your file(s) and/or confirm that your application contains the required deployment descriptors.

Path: /u01/data/domains/SOAOC02_domain/servers/SOAOC02_adminserver/upload/benefits.war/app/benefits.war

Recently Used Paths: (none)

Current Location: 132.145.191.58 / u01 / data / domains / SOAOC02_domain / servers / SOAOC02_adminserver / upload / benefits.war / app

☒ **benefits.war**

Back Next Finish Cancel

10. On the next screen, ensure that **Install this deployment as an application** is selected and click **Next**.

Install Application Assistant

Back Next Finish Cancel

Choose installation type and scope

Select if the deployment should be installed as an application or library. Also decide the scope of this deployment.

The application and its components will be targeted to the same locations. This is the most common usage.

☒ **Install this deployment as an application**

Application libraries are deployments that are available for other deployments to share. Libraries should be available on all of the targets running their referencing applications.

☐ **Install this deployment as a library**

Select a scope in which you want to install the deployment.

Scope: Global

Back Next Finish Cancel

11. Select **SOAOCI02_adminserver** and **SOAOCI02_cluster**, and then click **Next**.

The screenshot shows the 'Install Application Assistant' window with the 'Select deployment targets' step. At the top, there are buttons for 'Back', 'Next', 'Finish', and 'Cancel'. Below the title bar, the text 'Select deployment targets' is followed by a note: 'Select the servers and/or clusters to which you want to deploy this application. (You can reconfigure deployment targets later).' Under the heading 'Available targets for benefits:', there are two sections: 'Servers' and 'Clusters'. In the 'Servers' section, the checkbox for 'SOAOCI02_adminserver' is checked. In the 'Clusters' section, the checkbox for 'SOAOCI02_cluster' is checked, and the radio button for 'All servers in the cluster' is selected. Below these sections, there are buttons for 'Back', 'Next', 'Finish', and 'Cancel'. The 'Next' button is highlighted with a red box.

12. You can see an application name displayed as "**benefits**" by default. Click **Next**.

The screenshot shows the 'Install Application Assistant' window with the 'Optional Settings' step. At the top, there are buttons for 'Back', 'Next', 'Finish', and 'Cancel'. Below the title bar, the text 'Optional Settings' is followed by a note: 'You can modify these settings or accept the defaults.' and a note: '* Indicates required fields'. The 'General' section is expanded, showing the question 'What do you want to name this deployment?'. Below this, the '* Name:' label is followed by a text box containing the word 'benefits'. The 'Security' section is also expanded, showing the question 'What security model do you want to use with this application?'. Below this, there are four radio button options: 'DID Only: Use only roles and policies that are defined in the deployment descriptors.' (which is selected), 'Custom Roles: Use roles that are defined in the Administration Console; use policies that are defined in the deployment descriptor.', 'Custom Roles and Policies: Use only roles and policies that are defined in the Administration Console.', and 'Advanced: Use a custom model that you have configured on the realm's configuration page.' The 'Source Accessibility' section is also expanded, showing the question 'How should the source files be made accessible?'. The 'Next' button is highlighted with a red box.

13. In the next page, select **No, I will review the configuration later**. Click **Finish**.

Install Application Assistant

Back Next **Finish** Cancel

Review your choices and click Finish

Click Finish to complete the deployment. This may take a few moments to complete.

— Additional Configuration —

In order to work successfully, this application may require additional configuration. Do you want to review this application's configuration after completing this assistant?

☐ Yes, take me to the deployment's configuration screen.

☒ **No, I will review the configuration later.**

— Summary —

Deployment: /u01/data/domains/SGAOC102_domain/servers/SGAOC102_adminserver/upload/benefits.war/app/benefits.war

Name: benefits

Staging Mode: Use the defaults defined by the chosen targets

Plan Staging Mode: Use the same accessibility as the application

Security Model: DCOOnly: Use only roles and policies that are defined in the deployment descriptors.

Scope: Global

Target Summary

Components 4%	Targets
benefits	SGAOC102_adminserver, SGAOC102_cluster

Back Next **Finish** Cancel

14. Notice the messages that the deployment has been successfully installed.

Messages

✓ The deployment has been successfully installed.

✓ You must also activate the pending changes to commit this, and other updates, to the active system.

Summary of Deployments

Configuration Control Monitoring

This page displays the list of Java EE applications and standalone application modules installed to this domain.

You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install**.

Customize this table

Deployments

Install Update Delete

Showing 1 to 10 of 100 Previous Next

<input type="checkbox"/>	Name %	State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
<input type="checkbox"/>	myself:oracle.businesseditor (1.0.12.2.1.3.0)	Active		Library	SGAOC102_adminserver, SGAOC102_cluster	Global		100
<input type="checkbox"/>	myself:oracle.domain (1.3.12.2.1.3.0)	Active		Library	SGAOC102_adminserver, SGAOC102_cluster	Global		100
<input type="checkbox"/>	myself:oracle.domain.groovy (1.0.12.2.1.3.0)	Active		Library	SGAOC102_adminserver, SGAOC102_cluster	Global		100

15. After the deployment, the changes must be activated in the Change Center. Click **Activate Changes**.



16. Notice the message that the changes have been activated and the **benefits** application listed in the deployments table is now in the "Prepared" state.

Messages

✓ All changes have been activated. No restarts are necessary.

Summary of Deployments

Configuration / Control / Monitoring

This page displays the list of Java EE applications and standalone application modules installed in this domain.

You can update (redeploy) or delete installed applications and modules from the domain by selecting the checkbox next to the application name and then using the controls on this page.

To install a new application or module for deployment to targets in this domain, click **Install**.

✚ Configure this table

Deployments

Showing 1 to 10 of 102 Previous Next

State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
Active		Library	SOA/CORE_adfservernet-SOA/CORE_cluster	Global		100
Active		Library	SOA/CORE_adfservernet-SOA/CORE_cluster	Global		100
Active		Library	SOA/CORE_adfservernet-SOA/CORE_cluster	Global		100

17. Click the link to the **benefits** application in the deployments table.

Deployments

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State	Health	Type	Targets	Scope	Domain Partitions	Deployment Order
Active		Library	SOA/CORE_adfservernet-SOA/CORE_cluster	Global		100
Active		Library	SOA/CORE_adfservernet-SOA/CORE_cluster	Global		100
Active		Library	SOA/CORE_adfservernet-SOA/CORE_cluster	Global		100
Installed		Enterprise Application		Global		11
Active	OK	Resource Adapter	SOA/CORE_adfservernet-SOA/CORE_cluster	Global		100
Active	OK	Enterprise Application	SOA/CORE_cluster	Global		100
Installed		Library		Global		1
Installed		Library		Global		1
Installed		Library		Global		1
Prepared	OK	Web Application	SOA/CORE_adfservernet-SOA/CORE_cluster	Global		100

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18. Click the **Control** tab and select the **check box** to the left of the **benefits** application in the Deployments table. From the **Start** drop-down list, select **Servicing all requests**.

Settings for benefits

Overview | Deployment Plan | Configuration | Security | Targets | **Control** | Testing | Monitoring | Notes

Use this page to stop and start a Web application.

Module

Start Stop

Servicing all requests

Servicing only administration requests

	State	Type
<input checked="" type="checkbox"/> benefits	Prepared	Web Application
<input type="checkbox"/> REST Services		
None to display		
<input type="checkbox"/> Web Services		
None to display		

Start Stop

Showing 1 to 1 of 1: Previous | Next

19. Click **Yes** to continue.

Start Application Assistant

Yes No

Start Deployments

You have selected the following deployments to be started. Click 'Yes' to continue, or 'No' to cancel.

- benefits

Yes No

20. A message is displayed indicating a start request was sent. You can see that the state of the benefits application is **Active**. It means application is available to those that have access to the server.

Messages

Start requests have been sent to the selected deployments.

Settings for SOADev_domain

Overview | Deployment Plan | Configuration | Security | Targets | **Control** | Testing | Monitoring | Notes

Use this page to stop and start a Web application.

Module

Start Stop

Name	State	Type
<input type="checkbox"/> benefits	Active	Web Application
<input type="checkbox"/> REST Services		
None to display		
<input type="checkbox"/> Web Services		
None to display		

Start Stop

Showing 1 to 1 of 1: Previous | Next

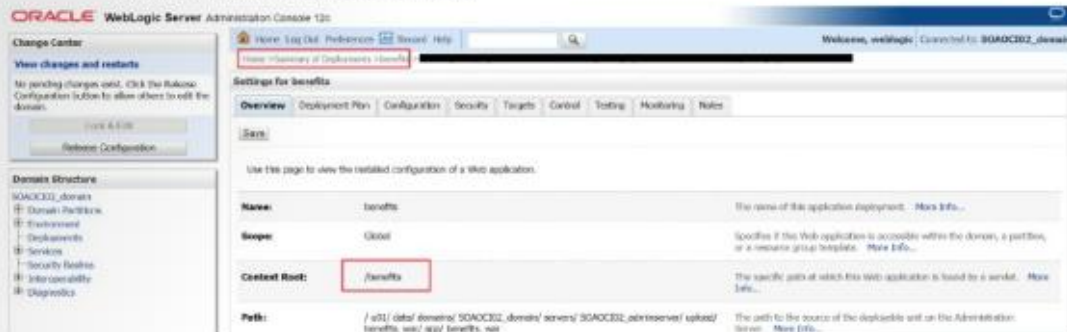
Access the Oracle SOA Suite instance deployed application:

- To access the newly deployed web application, perform the following steps:
 - In another tab of your browser, enter the WebLogic **URL** followed by context-root, that is, **/benefits**.

Example: <https://132.145.191.58:7002/benefits>

or

You can also find the context-root from the **Overview** tab of the **benefits** application in WebLogic Administration console



- b. It displays the home page of the **dizzy** managed server.

Welcome To Dizzyworld

Select What Benefits You Would Like To See

- ☐ View Vacation Schedule
- ☐ View Health Care Options
- ☐ View Vision Options
- ☐ View Dental Options
- [Get Information](#)

- c. Select "View Health Care Options" and "View Vacation Schedule," and click the **Get Information** button.

Welcome To Dizzyworld

Select What Benefits You Would Like To See

- ☒ View Vacation Schedule
- ☒ View Health Care Options
- ☐ View Vision Options
- ☐ View Dental Options
- [Get Information](#)

- d. It displays the output as shown below:

Dizzyworld Vacation Schedule

New Year's Day Holiday, January 2, 2012
Memorial Day, May 28, 2012
Independence Day, July 4, 2012
Labor Day, September 3, 2012
Thanksgiving Day, November 22, 2012
Day after Thanksgiving, November 23, 2012
Christmas Eve, December 24, 2012
Christmas Day, December 25, 2012

Dizzyworld Health Benefits

Blue Cross and Blue Shield
Matthew Thornton Health Plan

[Back To Home Page](#)

- e. Click the **Back To Home Page** link to go back to the Home page.

This completes the task of deploying and testing an application using WebLogic Server Administration Console.

