



## Java Cloud Service Demo Guide: Side-by-side deployment

### Description

<b>For Use By</b>	Oracle Sales / Pre-Sales, Consulting, Product Managers, Solution Managers, etc
<b>Internal/External Consumption</b>	Internal
<b>Target Audience</b>	<ul style="list-style-type: none"><li>• Customer / Partner<ul style="list-style-type: none"><li>○ Architects,</li><li>○ Development Leads</li></ul></li></ul>
<b>Demo Duration (Approximate)</b>	Approximately 10 minutes, plus the time needed for Oracle Cloud to provision your service instance. (Provisioning is the process of allocating cloud resources for your service instance.)
<b>Background Knowledge Required/Suggested</b>	<ul style="list-style-type: none"><li>• Maven</li><li>• WLS architecture</li><li>• WLST</li><li>• Git</li></ul>
<b>Related Materials</b>	<ul style="list-style-type: none"><li>• Oracle Public Cloud Services<ul style="list-style-type: none"><li>○ Java Cloud Services</li><li>○ Database Cloud Services</li></ul></li><li>• Git or Downloaded Sources</li><li>• Java Development Kit 1.8+</li><li>• Apache Maven 3.2.5+</li></ul>

### Feature Overview

Weblogic Server supports a feature called side-by-side deployment (or versioned deployment). This function is extremely useful when you need to deploy a new version of an application and still keep the old one up and running. So the running instances will still use the current version and all new instances will be able to invoke the new deployed version of the application.

As soon as all the sessions that are using the old version of the application are expired, Weblogic will recognize it and will deactivate the old version. So at this moment only the new deployed version is active and all new sessions will make use of it.

This is often referred to as Production Redeployment too.

### Demo Overview

So how does this work?

You could either use shell scripting (WLST or weblogic.deployer) to deploy the application and specify the version number on deployment as one of the parameters or you can use the manifest.mf file. We'll be using the first one.

A viewlet of the same is available [here](#) as well.

We would be deploying V1 of an application, using it for some time. Then deploy V2 in Administration mode for the Admin / Developer to verify proper the functionality. Then V2 would be promoted. The sessions which are already logged in will be using the previous version (V1) of the application and the new sessions created will use the new version of application (V2). And once all the sessions that were using V1 are expired, it would finally be deactivated.

## Requirements / Prerequisites

- Windows or Linux operating system
- Computer with 2 GB RAM
- Java Development Kit 1.8+
- Apache Maven 3.2.5
- Git
- A web browser is required for working with Oracle Cloud services. These are the minimum requirements:
  - Microsoft Internet Explorer 9 or 10 with Browser Mode and Document Mode set to IE9 or IE10
  - Mozilla Firefox 24 and later
  - Google Chrome 29 and later
  - Apple Safari 6 and later
- Roles and Credentials - You must have the following roles and credentials:
  - Roles and privileges described in Oracle Cloud User Roles and Privileges in Getting Started with Oracle Cloud
  - Log-in credentials for creating Oracle Java Cloud Service instances and for working with the associated database and storage services.
  - Java Administrator role (This role lets you create Oracle Java Cloud Service instances.)
  - For more information, see About Oracle Java Cloud Service Roles and User Accounts in Using Oracle Java Cloud Service.
- Existing Database and Java Cloud Services.

## Tips

- Use FireFox for the demos.

## Demo Steps

### Setup & Dependencies

1. Install Java Development Kit and Apache Maven
2. Install Java Development Kit and Apache Maven  
The SSH connection requires advanced Unlimited Strength Java Cryptography Extension which is not enabled by default due to import control restrictions of some countries. Please [download the necessary extension policy](#) files (local\_policy.jar, US\_export\_policy.jar) and copy it to your <java-home>/lib/security  
For detailed information see the instructions attached to policy files.
3. Follow the steps outlined in [WInS - Demo Guides - Setup – Clone Git repository](#) to get the necessary sources ready.
4. To create necessary (JCS and DBCS) environment follow the [WInS - Demo Guides - JCS Setup.pdf](#)
5. Environment variables and directories
  - a. This document will refer to the local clone of WInS remote repository as **WINS\_SOURCE\_REPOSITORY**.  
Every steps where it is used replace to your location.

- b. Set JAVA\_HOME to point your jdk location. Example:  
Windows: set JAVA\_HOME=c:\jdk1.8.0\_31  
Linux: export JAVA\_HOME=/usr/java/jdk1.8.0\_31
- c. Add Apache Maven to your PATH variable. In this case it is easier to execute maven. Example:  
Windows: set PATH=%PATH%;c:\apache-maven-3.2.5\bin  
Linux: export PATH=\$PATH:/usr/apache-maven-3.2.5/bin

## Executing the Side by Side Deployment demo

- 1) Get the public IP address of your Java Cloud Service Instance Administration Server Java. To obtain this information there are two options.
  - a. Open terminal/command prompt and change directory to WINS\_SOURCE\_REPOSITORY\cloud.demos  
Execute the maven build with the following options:  
`mvn install -Dgoal=jcs-get-instance-details`  
The result output will show the IP address:

```
C:\Windows\System32\cmd.exe
c:\java\git_repos\ueblogic-innovation-seminars.cloud\cloud.demos>mvn install -DexecuteCloudUtil -Dgoal=jcs-get-instance-details
[INFO] Scanning for projects...
[INFO] Reactor Build Order:
[INFO] wins-cloud
[INFO] cloud-api
[INFO] Building wins-cloud 1.0.0-SNAPSHOT
[INFO] --- maven-install-plugin:2.4:install (default-install) @ wins-cloud ---
[INFO] Installing c:\java\git_repos\ueblogic-innovation-seminars.cloud\cloud.demos\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\wins-cloud\1.0.0-SNAPSHOT\wins-cloud-1.0.0-SNAPSHOT.pom
[INFO] Building cloud-api 1.0.0-SNAPSHOT
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ cloud-common ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ cloud-common ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ cloud-common ---
[INFO] Tests are skipped.
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ cloud-common ---
[INFO] --- maven-install-plugin:2.4:install (default-install) @ cloud-common ---
[INFO] Installing C:\java\git_repos\ueblogic-innovation-seminars.cloud\cloud.demos\cloud-common\target\cloud-common.jar to C:\Users\pnagy\.m2\repository\com\oracle\wins\wins-cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.jar
[INFO] Installing C:\java\git_repos\ueblogic-innovation-seminars.cloud\cloud.demos\cloud-common\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\wins-cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.pom
[INFO] --- maven-antrun-plugin:1.8:run (first) @ cloud-common ---
[INFO] Executing tasks
main:
[java] Read all properties from file: environment.properties
[java] Selected goal: jcs-get-instance-details
[java] JCS get specific instance details
[java] Auth: <any realm>@jaas.oraclecloud.com:443-[principal: peter.nagy@oracle.com]
[java] URI: http://jaas.oraclecloud.com/paas/service/jcs/api/v1.1/instances/jcsdemo027/winsTEST2wls
[java] Executing request GET http://jaas.oraclecloud.com/paas/service/jcs/api/v1.1/instances/jcsdemo027/winsTEST2wls HTTP/1.1
[java] Response: HTTP/1.1 200 OK
[java] Output from Server ....
[java] {
[java]   "service_name": "winsTEST2wls",
[java]   "version": "12cR3",
[java]   "wlsVersion": "12.1.3.0.4",
[java]   "status": "Running",
[java]   "error_status_desc": "",
[java]   "compliance_status": "",
[java]   "compliance_status_desc": "",
[java]   "auto_update": "true",
[java]   "description": "winstest instance through REST",
[java]   "identity_domain": "jcsdemo027",
[java]   "creation_time": "Mon Nov 2 5:55:53 UTC 2015",
[java]   "last_modified_time": "Mon Nov 2 5:55:52 UTC 2015",
[java]   "created_by": "peter.nagy@oracle.com",
[java]   "service_uri": "https://jaas.oraclecloud.com/paas/service/jcs/api/v1.1/instances/jcsdemo027/winsTEST2wls",
[java]   "domain_name": "winsTEST2wls_domain",
[java]   "domain_mode": "PRODUCTION",
[java]   "cluster_name": "winsTEST2wls_cluster",
[java]   "num_nodes": 2,
[java]   "level": "PAAS",
[java]   "subscription_type": "HOURLY",
[java]   "edition": "EE",
[java]   "shape": "oc3",
[java]   "otd_provisioned": "yes",
[java]   "otd_shape": "oc3",
[java]   "otd_storage_size": 40960,
[java]   "service_components": [
[java]     {
[java]       "type": "OTD_JDK",
[java]       "version": "1.7.0_85"
[java]     },
[java]     {
[java]       "type": "JDK",
[java]       "version": "1.7.0_85"
[java]     },
[java]     {
[java]       "type": "OTD",
[java]       "version": "11.1.1.9.0"
[java]     },
[java]     {
[java]       "type": "WLS",
[java]       "version": "12.1.3.0.4"
[java]     }
[java]   ],
[java]   "creation_job_id": "527525",
[java]   "deletion_job_id": 0,
[java]   "db_info": "winstestDB2:1521/PDB1.jcsdemo027.oraclecloud.internal",
[java]   "db_service_name": "winstestDB2",
[java]   "num_ip_reservations": 2,
[java]   "wls_admin_url": "https://129.191.0.44:7002/console",
[java]   "fwc_control_url": "https://129.191.0.44:7002/en",
[java]   "otd_admin_url": "https://129.191.1.120:8789",
[java]   "sample_app_url": "https://129.191.1.120/sample-app",
[java]   "content_url": "http://129.191.1.120",
[java]   "secure_content_url": "https://129.191.1.120",
[java]   "wls_deployment_channel_port": 9001,
[java]   "psm_plugin_version": "15.4.1-0-1510120238"
[java] }
[INFO] Executed tasks
[INFO] Reactor Summary:
[INFO] wins-cloud ..... SUCCESS [ 0.265 s]
[INFO] cloud-api ..... SUCCESS [ 5.658 s]
[INFO] BUILD SUCCESS
[INFO] Total time: 6.020 s
[INFO] Finished at: 2015-11-04T14:29:58+01:00
[INFO] Final Memory: 11M/227M
[INFO] c:\java\git_repos\ueblogic-innovation-seminars.cloud\cloud.demos>
```

- b. Or open the Java Cloud Service Console. Click on the desired JCS instance and you can see the public IP address.

**ORACLE® CLOUD My Services** Dashboard Users Notifications

Oracle Java Cloud Service / winsTEST2wls

As of Nov 4, 2015 1:38:59 PM UTC

	OCPUs	Memory	Storage	Public IPs
<b>Overview</b>	2	15 GB	142 GB	2

**Administration**

0 Patches available

Nov 3, 2015 6:25:01 PM UTC  
Last successful backup

**Topology**

2 Nodes

**Enabled**  
Load balancer status

**Virtual Machines**

Click the icon to retrieve monitoring information.

- Administration Server Domain:** winsTEST2wls\_domain  
**Managed Server:** winsTEST\_server\_1  
**Public IP:** 129.191.0.44  
**OCPUs:** 1  
**Memory:** 7.5 GB  
**Storage:** 102 GB
- Load Balancer**  
**Public IP:** 129.191.1.120  
**Host:** winstest2wls-lb-1  
**Content endpoint:** https://129.191.1.120/sample-app/  
**OCPUs:** 1  
**Memory:** 7.5 GB  
**Storage:** 40 GB

**Associated Services**

- Database Service Name:** winstestDB2  
**Connect Descriptor:** winstestDB2:1521/PDB1.jcsdemo027.oraclecloud.internal  
**Version:** 12.1.0.2  
**PDB Name:** PDB1

To check the current port availability –which will change below- open the Weblogic Admin Console. Click on the JCS console to open.

**ORACLE® CLOUD My Services** Dashboard Users Notifications

Oracle Java Cloud Service / winsTEST2wls

As of Nov 6, 2015 11:09:46 AM UTC

	OCPUs	Public IPs
<b>Overview</b>	2	2

**Administration**

**Virtual Machines**

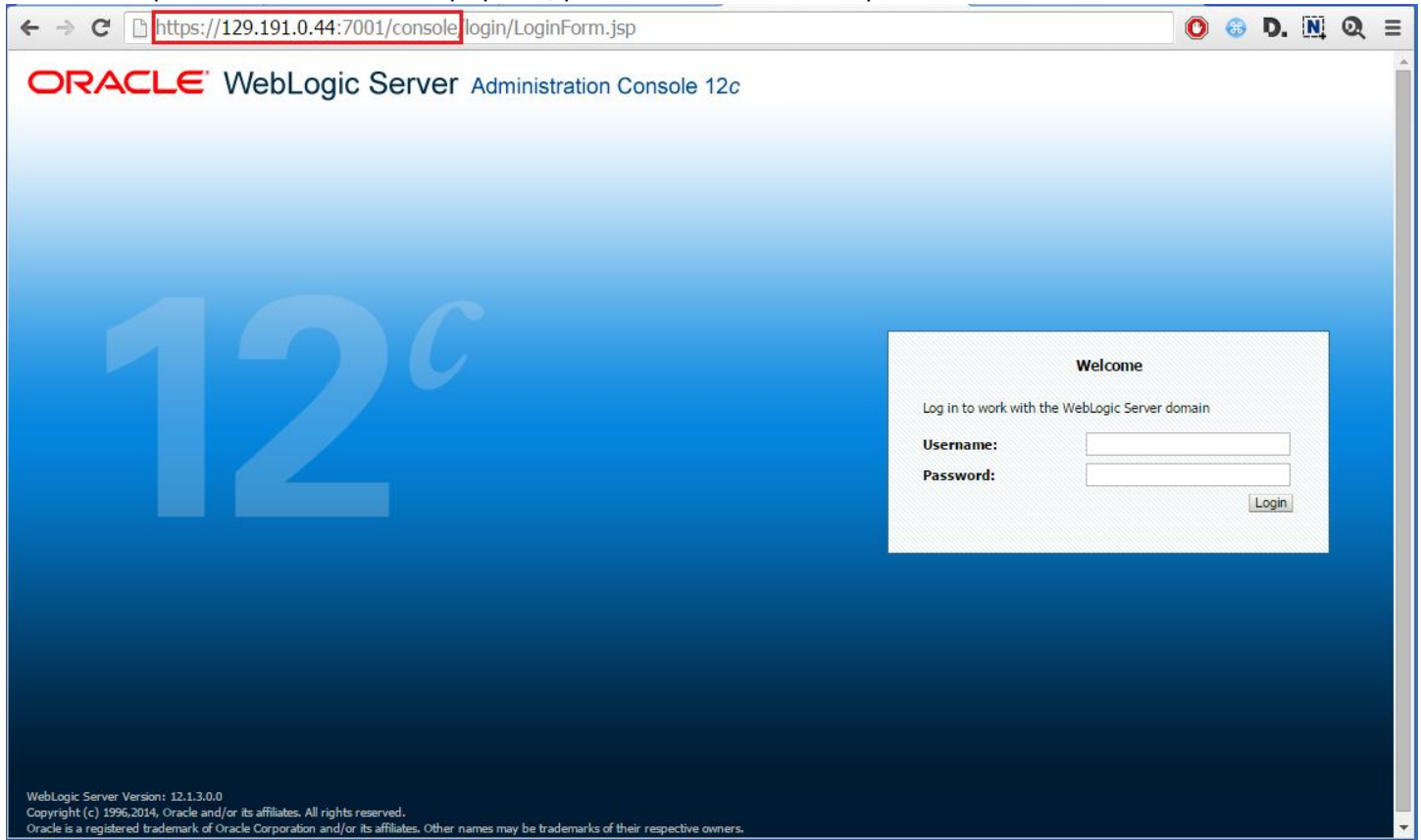
Click the icon to retrieve monitoring information.

- Administration Server Domain:** winsTEST2wls\_domain  
**Managed Server:** winsTEST\_server\_1  
**Public IP:** 129.191.0.44  
**OCPUs:** 1  
**Memory:** 7.5 GB  
**Storage:** 102 GB

**Open WebLogic Server Console**

- Open Fusion Middleware Control Console
- Open Load Balancer Console
- View Service Metrics
- Start
- Stop

Or enter the public IP address with https prefix, port number and console path into a browser.



- 2) Setup and configure Java Cloud Service instance. Run the following maven build in the WINS\_SOURCE\_REPOSITORY\cloud.demos\side-by-side-deployment directory:

```
mvn install -DprepareSideBySide -Djcs.ip=129.191.1.19
```

The preparation includes:

- Stopping Managed Servers to apply administration port settings
- Enable administration port on 7200
- Enable Tunneling for Admin server.



```
C:\Windows\System32\cmd.exe
c:\Java\git_repos\weblogic-innovation-seminars.cloud\cloud.demos\side-by-side-deployment>mvn install -DprepareSideBySide -Djcs.ip=129.191.0.44
[INFO] Scanning for projects...
[INFO]
[INFO] -----
[INFO] Building side-by-side-example 1.0.0-SNAPSHOT
[INFO]
[INFO] -----
[INFO] --- properties-maven-plugin:1.0-alpha-2:read-project-properties (default) @ side-by-side-example ---
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ side-by-side-example ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory c:\Java\git_repos\weblogic-innovation-seminars.cloud\cloud.demos\side-by-side-deployment\src\main\resources
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ side-by-side-example ---
[INFO] No sources to compile
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ side-by-side-example ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory c:\Java\git_repos\weblogic-innovation-seminars.cloud\cloud.demos\side-by-side-deployment\src\test\resources
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ side-by-side-example ---
[INFO] No sources to compile
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ side-by-side-example ---
[INFO] Tests are skipped.
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ side-by-side-example ---
[WARNING] JAR will be empty - no content was marked for inclusion!
[INFO] --- maven-install-plugin:2.4:install (default-install) @ side-by-side-example ---
[INFO] Installing c:\Java\git_repos\weblogic-innovation-seminars.cloud\cloud.demos\side-by-side-deployment\target\side-by-side-example.jar to C:\Users\pnagy\.m2\repository\com\oracle\wlns\cloud\side-by-side-example\1.0.0-SNAPSHOT\side-by-side-example-1.0.0-SNAPSHOT.jar
[INFO] Installing c:\Java\git_repos\weblogic-innovation-seminars.cloud\cloud.demos\side-by-side-deployment\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wlns\cloud\side-by-side-example\1.0.0-SNAPSHOT\side-by-side-example-1.0.0-SNAPSHOT.pom
[INFO] --- maven-antrun-plugin:1.8:run (replace) @ side-by-side-example ---
[INFO] Executing tasks

main:
[copy] Copying 5 files to c:\Java\git_repos\weblogic-innovation-seminars.cloud\cloud.demos\side-by-side-deployment\scripts
[INFO] Executed tasks
[INFO] --- maven-antrun-plugin:1.8:run (copy) @ side-by-side-example ---
[INFO] Executing tasks

main:
[echo] Copy artifacts to JCS.
[scp] Connecting to 129.191.0.44:22
[scp] done.
[sshexec] Connecting to 129.191.0.44:22
[sshexec] cmd : chmod 755 /tmp/DeployAdminMode-Aussie_tripper.sh;chmod 755 /tmp/DeployinAdminMode-Aussie_tripper_v2.sh;chmod 755 /tmp/Promote-Aussie_tripper_v2.sh;chmod 755 /tmp/prepareWLS.py;chmod 755 /tmp/restoreWLS.py;chmod 755 /tmp/prepareJCS.sh;chmod 755 /tmp/restoreJCS.sh;chmod 755 /tmp/aussie-tripper-v1.ear;chmod 755 /tmp/aussie-tripper-v2.ear
[INFO] Executed tasks
[INFO] --- maven-antrun-plugin:1.8:run (wlstdploy) @ side-by-side-example ---
[INFO] Executing tasks

prepare-WLS:
[echo] Execute WLST to initialize WLS environment.
[sshexec] Connecting to 129.191.0.44:22
[sshexec] cmd : sudo su - oracle -c /tmp/prepareJCS.sh oracle

Initializing WebLogic Scripting Tool (WLST) ...

Welcome to WebLogic Server Administration Scripting Shell

Type help() for help on available commands
```



```

Connecting to t3://winsTEST2wls-wls-1.compute-jcsdemo027.oraclecloud.internal:7001 with userid weblogic ...
Successfully connected to Admin Server "winsTEST_adminserver" that belongs to domain "winsTEST2wls_domain".

Warning: An insecure protocol was used to connect to the
server. To ensure on-the-wire security, the SSL port or
Admin port should be used instead.

Get managed server list
Location changed to serverRuntime tree. This is a read-only tree with DomainMBean as the root.
For more help, use help('domainConfig')

Connecting to Node Manager ...
<Nov 6, 2015 10:13:58 AM UTC> <Info> <Security> <BEA-090905> <Disabling the CryptoJ JCE Provider self-integrity check for better startup performance. To enable
this check, specify -Dweblogic.security.allowCryptoJDefaultJCEVerification=true.>
<Nov 6, 2015 10:13:58 AM UTC> <Info> <Security> <BEA-090906> <Changing the default Random Number Generator in RSA CryptoJ from ECDRBG128 to FIPS186PRNG. To disa
ble this change, specify -Dweblogic.security.allowCryptoJDefaultPRNG=true.>
<Nov 6, 2015 10:13:58 AM UTC> <Info> <Security> <BEA-090909> <Using the configured custom SSL Hostname Verifier implementation: weblogic.security.utils.SSLWLSHo
stnameVerifier$NullHostnameVerifier.>
Successfully Connected to Node Manager.

RUNNING

winsTEST_adminserver status...RUNNING

RUNNING

winsTEST_server_1 status...RUNNING

RUNNING

winsTEST_server_1 is RUNNING
Stopping winsTEST_server_1
Killing server winsTEST_server_1 ...
Successfully killed server winsTEST_server_1

SHUTDOWN

Now winsTEST_server_1 status is SHUTDOWN
Successfully disconnected from Node Manager.
Location changed to edit tree. This is a writable tree with
DomainMBean as the root. To make changes you will need to start
an edit session via startEdit().

For more help, use help('edit')

Starting an edit session ...
Started edit session, please be sure to save and activate your
changes once you are done.
Saving all your changes
Saved all your changes successfully.
Activating all your changes, this may take a while ...
The edit lock associated with this edit session is released
once the activation is completed.
"
You will have to re-connect to the server due to some changes "
you have made."
Disconnected from weblogic server: winsTEST_adminserver
[INFO] Executed tasks
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 21.287 s
[INFO] Finished at: 2015-11-06T11:14:02+01:00
[INFO] Final Memory: 17M/322M
[INFO]
c:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\side-by-side-deployment>_

```

Important: after the modification you cannot access to the Weblogic Admin Console through the known and preconfigured port 7002. When the administration port is enabled you can access through only that port using ssl connection. So move forward to enable external access to the newly defined administration port which is by default disabled.

- Now we need to enable a port on the JCS VM – so that external traffic can be channeled to the VM. Login to the Oracle Public Cloud and visit the Oracle Compute Cloud Service home page. From here click on 'Open Service Console'



**Oracle Compute Cloud Service**  
 Category: Oracle IaaS Public Cloud Services  
 Subscription: Trial  
 Expires: 1-Mar-2016 3:59 AM GST

**OCPU Hours** ?  
 (General Purpose)

0 S S M T W T F

**Block Storage Capacity** ?  
 (GB-Months)

0 S S M T W T F

[Open Service Console](#)

**OCPU Hours** ?  
 (High-Mem)

0 S S M T W T F

**Static IP Hours** ?

0 S S M T W T F

Or click on the console shortcut and select 'Compute Cloud Service'



ORACLE® CLOUD My Services

**CLOUD SERVICES**

- Dashboard
- Java Cloud Service
- Database Cloud Service
- Compute Cloud Service**
- Users
- Notifications

Us	Memory	Storage
	30 GB	284 GB

Nodes: 2  
Load Balancer: Enabled  
Created On: Nov 2, 2015 5:55:53 AM UTC

Click on 'Network -> Security Applications -> Create Security Application'

ORACLE® CLOUD My Services

Oracle Compute Cloud Service

Overview **Network** Metrics

Security Rules: 34 Security Rules, 22 Enabled

Security Lists: 9 Security Lists

**Security Applications**: 54 Security Applications

Security Applications

A security application is a protocol-type and port mapping, which you can define and then use in security rules to control traffic to/from instances.

Enter text  Category: All Show: All **Create Security Application**

winestDB/db/ora_dbconsole	Port: 1158
winestDB/db/ora_dbexpress	Port: 5500
winestDB/db/ora_dblistener	Port: 1521

Now create a generic 'Security Application' which can enable tcp access through port 7200. Define the values as per mentioned in the image below:

**Create Security Application** [X]

Enter the required details to create your security application. If the security application uses a single port, enter the same port number as the start and end port number. [Learn More](#)

\* Name

\* Port Type

\* Port Range Start  Port Range End

Description

Once the protocol is created – a success message is shown.

### Security Applications

A security application is a protocol-type and port mapping, which you can define and then use in security rules to control traffic to/from instances.

Enter text   Category: All

**Successfully added security application "weblogic\_custom\_admin\_port".**



**wintestDB/db/ora\_dbconsole**

Port: 1158

Description:  
Port Type: tcp



Now create the a new rule what will assign the 'Security Application' to the desired instance. Click on 'Security Rules -> Create Security Rule'

**Oracle Compute Cloud Service** Overview Network Metrics

**Security Rules**  
34 Security Rules 22 Enabled

**Security Rules**  
You can use security rules to control network access between your instances and the Internet. On this page, you can create, view, update, and delete security rules.

Enter text   Category: Personal

**Security Lists**  
9 Security Lists

**wintestDB/db/ora\_p2\_dbconsole**  
Description:  
Status: Disabled

Security Application: wintestDB/db/ora\_dbconsole  
Source: public-internet  
Destination: wintestDB/db/ora\_db

Define the values for the new rule:

- Name: choose what you want
- Status: **Enabled** (default)
- Security Application: select the previously created Security Application.
- Source: select **Security IP Lists** and the predefined **public-internet**  
Note: Here you can also create specific source address to restrict external access for more security.
- Destination: select the predefined **<JCS\_INSTANCE>/wls/ora\_admin**
- Description: choose what you want.

**Create Security Rule**

Enter the name of your security rule. The rule is enabled by default, but you can disable it until you are ready to use it. You must specify the security application and the source and destination security lists or security IP lists to which the security rule will apply. [Learn More](#)

\* Name: winsTEST2wls\_custom\_admin\_port

Status: Enabled

\* Security Application: weblogic\_custom\_admin\_port

\* Source: ☐ Security Lists  
☒ Security IP Lists  
public-internet

\* Destination: winsTEST2wls/wls/ora\_admin

Description: access to custom admin port through external IP

Create Cancel


Once the Access Rule is created, a success message is shown.

### Security Rules

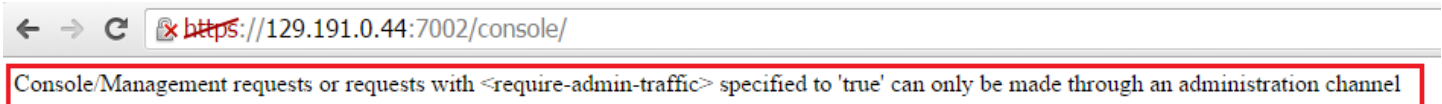
You can use security rules to control network access between your instances and the Internet. On this page, you can create, view, update, and delete security rules.

Enter text

**Successfully added security rule "winsTEST2wls\_custom\_admin\_port".**

	<b>winstestDB/db/ora_p2_dbconsole</b> Description: Status: Disabled	Security Application: winstestDB/db/ora_dbconsole Source: public-internet Destination: winstestDB/db/ora_db
---	---	---

Now check the Weblogic Admin Console access through the new administration port. Don't try to open through JCS console because that will try through the 7002 port. You can check just for sure.



So change the port to 7200 in console url, accept the risks, add the exception and proceed to be able to access the WebLogic Server Admin Console. Optionally you can check the managed server's status. It should be shutdown.

https://129.191.0.44:7200/console/console.portal?\_nfpb=true&\_pageLabel=CoreServerServerTablePage

**WebLogic Server Administration Console 12c**

Home Log Out Preferences Record Help

Home > Summary of Servers

### Summary of Servers

**Configuration** Control

A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration.

This page summarizes each server that has been configured in the current WebLogic Server domain.

[Customize this table](#)

**Servers (Filtered - More Columns Exist)**

Click the *Lock & Edit* button in the Change Center to activate all the buttons on this page.

New Clone Delete

<input type="checkbox"/>	Name	Type	Cluster	Machine	State
<input type="checkbox"/>	winsTEST_adminserver(admin)	Configured		winsTEST_machine_1	RUNNING
<input type="checkbox"/>	winsTEST_server_1	Configured	winsTEST2wls_cluster	winsTEST_machine_1	SHUTDOWN

New Clone Delete

ged Servers  
s  
ged Servers

- 4) Now is the time to deploy the application. Execute the following maven build in the WINS\_SOURCE\_REPOSITORY\cloud.demos directory:
- ```
mvn -DexecuteSh -Djcs.ip=129.191.0.44 -Dsh=Deploy-Aussie_tripper.sh
```
- Note: use your instance's public IP address and don't forget to change the directory one level up. The result should be the following:

```

C:\Windows\System32\cmd.exe
c:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos>win -DexecuteSh -Djcs.ip=129.191.0.44 -Dsh=Deploy-Aussie-tripper.sh
[INFO] Scanning for projects...
[INFO] Reactor Build Order:
[INFO] wins-cloud
[INFO] cloud-api
[INFO] Building wins-cloud 1.0.0-SNAPSHOT
[INFO] --- maven-install-plugin:2.4:install (default-install) @ wins-cloud ---
[INFO] Installing c:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\wins-cloud\1.0.0-SNAPSHOT\wins-cloud-1.0.0-SNAPSHOT.pom
[INFO] Building cloud-api 1.0.0-SNAPSHOT
[INFO] --- properties-maven-plugin:1.0-alpha-2:read-project-properties (default) @ cloud-common ---
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ cloud-common ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 7 source files to C:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\common\target\classes
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ cloud-common ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to C:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\common\target\test-classes
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ cloud-common ---
[INFO] Tests are skipped.
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ cloud-common ---
[INFO] Building jar: C:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\common\target\cloud-common.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ cloud-common ---
[INFO] Installing C:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\common\target\cloud-common.jar to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.jar
[INFO] Installing C:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\common\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.pom
[INFO] --- maven-antrun-plugin:1.8:run (wlstdploy) @ cloud-common ---
[INFO] Executing tasks
main:
[sshexec] Connecting to 129.191.0.44:22
[sshexec] cmd : sudo su - oracle -c /tmp/Deploy-Aussie-tripper.sh oracle
weblogic.Deployer invoked with options: -adminurl t3s://winsTESTwls-wls-1.compute-jcsdemo027.oraclecloud.internal:7200 -user weblogic -name aussie-tripper-v1
-deploy /tmp/aussie-tripper-v1.ear
<Nov 6, 2015 11:23:23 AM UTC> <Info> <Security> <BEA-090905> <Disabling the CryptoJ JCE Provider self-integrity check for better startup performance. To enable
this check, specify -Dweblogic.security.allowCryptoJDefaultJCEVerification=true.>
<Nov 6, 2015 11:23:23 AM UTC> <Info> <Security> <BEA-090906> <Changing the default Random Number Generator in RSA CryptoJ from ECDBRG128 to FIPS186PRNG. To disa
ble this change, specify -Dweblogic.security.allowCryptoJDefaultPRNG=true.>
<Nov 6, 2015 11:23:23 AM UTC> <Info> <Security> <BEA-090909> <Using the configured custom SSL Hostname Verifier implementation: weblogic.security.utils.SSLWLSHo
stnameVerifier$NullHostnameVerifier.>
<Nov 6, 2015 11:23:25 AM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, aussie-tripper-v1 [archive: /tmp/aussie-tr
ipper-v1.ear], to configured targets.>
Task 3 initiated: [Deployer:149026]deploy application aussie-tripper-v1 [Version=v1] on winsTEST_adminserver.
Task 3 completed: [Deployer:149026]deploy application aussie-tripper-v1 [Version=v1] on winsTEST_adminserver.
Target state: deploy completed on Server winsTEST_adminserver
[INFO] Executed tasks
[INFO] Reactor Summary:
[INFO] wins-cloud ..... SUCCESS [ 0.266 s]
[INFO] cloud-api ..... SUCCESS [ 11.285 s]
[INFO] BUILD SUCCESS
[INFO] Total time: 11.668 s
[INFO] Finished at: 2015-11-06T12:23:29+01:00
[INFO] Final Memory: 21M/227M
[INFO]
c:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos>

```

Access the application using the following url : <https://<ip address of JCS VM>:7002/aussie-tripper/>

<https://129.191.0.44:7002/aussie-tripper/>

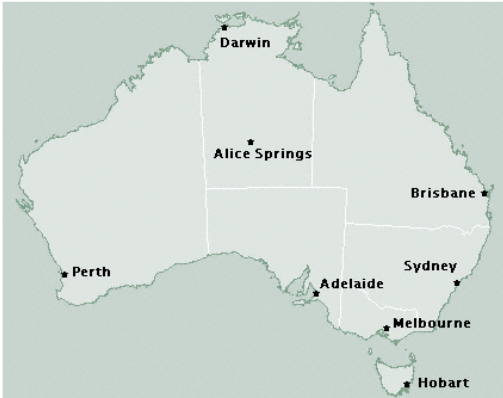
## The Little Aussie Tripper - Version 1.0

This is a simple application which is used to demonstrate the persistence of client state across multiple HTTP requests.

### Instructions

- Click on the a city name in the map below to visit it -- the cities you visit will be displayed in a list
- Click [Show Last Request] to see the hostname of the server which serviced the last request and the URL used
- Click [Clear Trips] to clear the list
- Click [Invalidate] to invalidate the session

**Select a Destination ....**



**Places Visited ...**

[\[Invalidate Session\]](#) [\[Clear Trips\]](#) [\[Show Last Request\]](#)

Click on a couple of places and the same would be reflected on the screen.

<https://129.191.0.44:7002/aussie-tripper/trip?city=Melbourne>

## The Little Aussie Tripper - Version 1.0

This is a simple application which is used to demonstrate the persistence of client state across multiple HTTP requests.

### Instructions

- Click on the a city name in the map below to visit it -- the cities you visit will be displayed in a list
- Click [Show Last Request] to see the hostname of the server which serviced the last request and the URL used
- Click [Clear Trips] to clear the list
- Click [Invalidate] to invalidate the session

**Select a Destination ....**



**Places Visited ...**

[\[Invalidate Session\]](#) [\[Clear Trips\]](#) [\[Show Last Request\]](#)

*Host: winstest2wls-wls-1.compute-jcsdemo027.oraclecloud.internal*  
*WebLogic Server: winsTEST\_adminserver*

You have visited **5** cities

|   |               |                                   |
|---|---------------|-----------------------------------|
| 1 | Perth         | Nov 6, 2015 11:33:15 AM (Ver 1.0) |
| 2 | Alice Springs | Nov 6, 2015 11:33:15 AM (Ver 1.0) |
| 3 | Adelaide      | Nov 6, 2015 11:33:17 AM (Ver 1.0) |
| 4 | Sydney        | Nov 6, 2015 11:33:18 AM (Ver 1.0) |
| 5 | Melbourne     | Nov 6, 2015 11:33:18 AM (Ver 1.0) |

- 5) Now, we will deploy a more newer version of the application. Execute the following maven build in the WINS\_SOURCE\_REPOSITORY\cloud.demos directory:

mvn install -DexecuteSh -Djcs.ip=129.191.0.44 -Dsh=DeployinAdminMode-Aussie\_tripper\_v2.sh

Note: use your instance's public IP address. The result should be the following:

```
C:\Windows\System32\cmd.exe
c:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos>mvn install -DexecuteSh -Djcs.ip=129.191.0.44 -Dsh=DeployinAdminMode-Aussie_tripper_v2.sh
[INFO] Scanning for projects...
[INFO] Reactor Build Order:
[INFO] wins-cloud
[INFO] cloud-api
[INFO]
[INFO] Building wins-cloud 1.0.0-SNAPSHOT
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ wins-cloud ---
[INFO] Installing c:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\wins-cloud\1.0.0-SNAPSHOT\wins-cloud-1.0.0-SNAPSHOT.pom
[INFO]
[INFO] Building cloud-api 1.0.0-SNAPSHOT
[INFO]
[INFO] --- properties-maven-plugin:1.0-alpha-2:read-project-properties (default) @ cloud-common ---
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ cloud-common ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ cloud-common ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ cloud-common ---
[INFO] Tests are skipped.
[INFO]
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ cloud-common ---
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ cloud-common ---
[INFO] Installing C:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\cloud-common\target\cloud-common.jar to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.jar
[INFO] Installing C:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos\cloud-common\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.pom
[INFO]
[INFO] --- maven-antrun-plugin:1.8:run (wlstdeploy) @ cloud-common ---
[INFO] Executing tasks
main:
  [sshexec] Connecting to 129.191.0.44:22
  [sshexec] cmd : sudo su - oracle -c /tmp/DeployinAdminMode-Aussie_tripper_v2.sh oracle
weblogic.Deployer invoked with options: -adminurl t3s://winsTEST2vls-wls-1.compute-jcsdemo027.oraclecloud.internal:7200 -user weblogic -adminmode -name aussie-tripper-v1 -deploy /tmp/aussie-tripper-v2.ear -appversion v2
<Nov 6, 2015 11:35:53 AM UTC> <Info> <Security> <BEA-090905> <Disabling the CryptoJ JCE Provider self-integrity check for better startup performance. To enable this check, specify -Dweblogic.security.allowCryptoJDefaultJCEVerification=true.>
<Nov 6, 2015 11:35:53 AM UTC> <Info> <Security> <BEA-090906> <Changing the default Random Number Generator in RSA CryptoJ from ECDRBG128 to FIPS186PRNG. To disable this change, specify -Dweblogic.security.allowCryptoJDefaultPRNG=true.>
<Nov 6, 2015 11:35:53 AM UTC> <Info> <Security> <BEA-090909> <Using the configured custom SSL Hostname Verifier implementation: weblogic.security.utils.SSLWLSHostnameVerifier$NullHostnameVerifier.>
<Nov 6, 2015 11:35:54 AM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, aussie-tripper-v1 [archive: /tmp/aussie-tripper-v2.ear], to configured targets.>
Task 4 initiated: [Deployer:149026]deploy application aussie-tripper-v1 [Version=v2] on winsTEST_adminserver
Task 4 completed: [Deployer:149026]deploy application aussie-tripper-v1 [Version=v2] on winsTEST_adminserver
Target state: deploy completed on Server winsTEST_adminserver
[INFO] Executed tasks
[INFO] Reactor Summary:
[INFO] wins-cloud ..... SUCCESS [ 0.259 s]
[INFO] cloud-api ..... SUCCESS [ 9.889 s]
[INFO] BUILD SUCCESS
[INFO] Total time: 10.247 s
[INFO] Finished at: 2015-11-06T12:35:59+01:00
[INFO] Final Memory: 16M/322M
[INFO]
c:\Java\git.repos\weblogic-innovation-seminars.cloud\cloud.demos>
```

Go back to the WebLogic Server admin console and notice that there are 2 versions of the application deployed. And both are in Active state.



← → ↻ [https://129.191.0.44:7200/console/console.portal?\\_nfpb=true&\\_pageLabel=AppDeploymentsControlPage](https://129.191.0.44:7200/console/console.portal?_nfpb=true&_pageLabel=AppDeploymentsControlPage)

**ORACLE® WebLogic Server Administration Console 12c**

Home Log Out Preferences Record Help

Home > Summary of Servers > Summary of Deployments

### Summary of Deployments

**Control** Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped application name and using the controls on this page.

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

**Customize this table**

**Deployments**

Install Update Delete Start Stop

| Name                         | State  | Health | Type                   | Target |
|------------------------------|--------|--------|------------------------|--------|
| aussie-tripper-v1 (v1)       | Active | OK     | Enterprise Application | wls    |
| aussie-tripper-v1 (v2)       | Admin  | OK     | Enterprise Application | wls    |
| coherence-transaction-rar    | Active | OK     | Resource Adapter       | wls    |
| DMS Application (12.1.3.0.0) | Active | OK     | Web Application        | wls    |
| em                           | Active | OK     | Enterprise Application | wls    |

**Change Center**

**View changes and restarts**

Click the Lock & Edit button to modify, add or delete items in this domain.

Lock & Edit

Release Configuration

**Domain Structure**

wlsTEST2wls\_domain

- Environment
- Deployments**
- Services
- Security Realms
- Interoperability
- Diagnostics

**How do I...**

- Install an enterprise application
- Configure an enterprise application
- Update (redeploy) an enterprise application

Launch a different browser and access the Version 2 of the application using the url : <https://<ip>:7200/aussie-tripper>. Login using the user name password which are used to login to the admin console  
It can be useful to use a different browser to avoid any caching issues.



**Authentication Required**

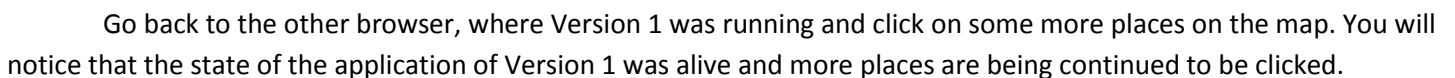
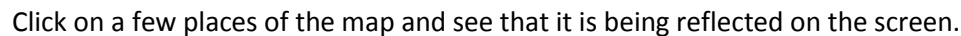
A user name and password are being requested by https://129.191.0.44:7200. The site says: "weblogic"

User Name:

Password:

OK Cancel

This should bring up the version 2 of the application.



← → ↻ <https://129.191.0.44:7002/austrie-tripper?city=Brisbane> ☆ 🔍

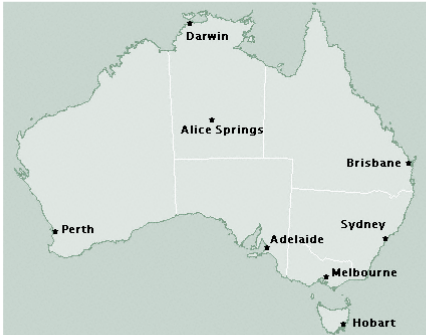
### The Little Aussie Tripper - Version 1.0

This is a simple application which is used to demonstrate the persistence of client state across multiple HTTP requests.

#### Instructions

- Click on the a city name in the map below to visit it -- the cities you visit will be displayed in a list
- Click [Show Last Request] to see the hostname of the server which serviced the last request and the URL used
- Click [Clear Trips] to clear the list
- Click [Invalidate] to invalidate the session

#### Select a Destination ....



#### Places Visited ...

[\[Invalidate Session\]](#) [\[Clear Trips\]](#) [\[Show Last Request\]](#)

Host: winstest2wis-wis-1.compute-icsdemo027.oraclecloud.internal  
WebLogic Server: winstest\_adminserver

You have visited 7 cities

|   |               |                                  |
|---|---------------|----------------------------------|
| 1 | Perth         | Nov 6, 2015 12:09:35 PM(Ver 1.0) |
| 2 | Alice Springs | Nov 6, 2015 12:09:36 PM(Ver 1.0) |
| 3 | Adelaide      | Nov 6, 2015 12:09:37 PM(Ver 1.0) |
| 4 | Sydney        | Nov 6, 2015 12:09:41 PM(Ver 1.0) |
| 5 | Melbourne     | Nov 6, 2015 12:09:42 PM(Ver 1.0) |
| 6 | Darwin        | Nov 6, 2015 12:09:47 PM(Ver 1.0) |
| 7 | Brisbane      | Nov 6, 2015 12:09:51 PM(Ver 1.0) |

- 6) Now, you have to promote Version 2 of the application to go into production (change it from admin mode). Execute the following maven build in the WINS\_SOURCE\_REPOSITORY\cloud.demos directory:
- ```
mvn install -DexecuteSh -Djcs.ip=129.191.0.44 -Dsh=Promote-Aussie_tripper_v2.sh
```
- Note: use your instance's public IP address. The result should be the following:

```

C:\Windows\System32\cmd.exe
c:\Java\git.repo\weblogic-innovation-seminars.cloud\cloud.demos>mvn install -DexecuteSh -Djcs.ip=129.191.0.44 -Dsh=Promote-Aussie_tripper_v2.sh
[INFO] Scanning for projects...
[INFO] Reactor Build Order:
[INFO] wins-cloud
[INFO] cloud-api
[INFO] Building wins-cloud 1.0.0-SNAPSHOT
[INFO] --- maven-install-plugin:2.4:install (default-install) @ wins-cloud ---
[INFO] Installing c:\Java\git.repo\weblogic-innovation-seminars.cloud\cloud.demos\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\wins-cloud\1.0.0-SNAPSHOT\wins-cloud-1.0.0-SNAPSHOT.pom
[INFO] Building cloud-api 1.0.0-SNAPSHOT
[INFO] --- properties-maven-plugin:1.0-alpha-2:read-project-properties (default) @ cloud-common ---
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ cloud-common ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ cloud-common ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ cloud-common ---
[INFO] Tests are skipped.
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ cloud-common ---
[INFO] --- maven-install-plugin:2.4:install (default-install) @ cloud-common ---
[INFO] Installing C:\Java\git.repo\weblogic-innovation-seminars.cloud\cloud.demos\common\target\cloud-common.jar to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.jar
[INFO] Installing C:\Java\git.repo\weblogic-innovation-seminars.cloud\cloud.demos\common\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.pom
[INFO] --- maven-antrun-plugin:1.8:run (ulstdeploy) @ cloud-common ---
[INFO] Executing tasks
main:
  Isshexecel Connecting to 129.191.0.44:22
  Isshexecel end : sudo su - oracle -c /tmp/Promote-Aussie_tripper_v2.sh oracle
  weblogic.Deployer invoked with options: -adminurl t3s://winsTEST2wls-wls-1.compute-jcsdemo027.oraclecloud.internal:7200 -user weblogic -start -name aussie-tripper-v1 -appversion v2
  <Nov 6, 2015 12:13:05 PM UTC> <Info> <Security> <BEA-090905> <Disabling the CryptoJ JCE Provider self-integrity check for better startup performance. To enable this check, specify -Dweblogic.security.allowCryptoJDefaultJCEVerification=true.>
  <Nov 6, 2015 12:13:05 PM UTC> <Info> <Security> <BEA-090906> <Changing the default Random Number Generator in RSA CryptoJ from ECDRBG128 to FIPS186PRNG. To disable this change, specify -Dweblogic.security.allowCryptoJDefaultPRNG=true.>
  <Nov 6, 2015 12:13:05 PM UTC> <Info> <Security> <BEA-090909> <Using the configured custom SSL Hostname Verifier implementation: weblogic.security.utils.SSLMSSLHostnameVerifier$NullHostnameVerifier.>
  <Nov 6, 2015 12:13:07 PM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating start operation for application, aussie-tripper-v1 [archive: null], to configured targets.>
  Task 5 initiated: [Deployment:149026]start application aussie-tripper-v1 [Version=v2] on winsTEST_adminserver
  Task 5 completed: [Deployer:149026]start application aussie-tripper-v1 [Version=v2] on winsTEST_adminserver.
  Target state: start completed on Server winsTEST_adminserver
[INFO] Executed tasks
[INFO] Reactor Summary:
[INFO] wins-cloud ..... SUCCESS [ 0.263 s]
[INFO] cloud-api ..... SUCCESS [ 9.086 s]
[INFO] BUILD SUCCESS
[INFO] Total time: 9.462 s
[INFO] Finished at: 2015-11-06T13:13:10+01:00
[INFO] Final Memory: 16M/322M
c:\Java\git.repo\weblogic-innovation-seminars.cloud\cloud.demos>

```

The application is deployed. Go to the WebLogic Server admin console and refresh the deployments screen. Version 1 is not in Stop Running state while Version 2 is in Active state.

Oracle WebLogic Server Administration Console 12c

Home > Summary of Servers > Summary of Deployments > aussie-tripper-v1(v2) > winsTEST2wls\_domain > Summary of Servers > winsTEST\_adminserver > Summary of Deployments

Summary of Deployments

Control Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.

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

Customize this table

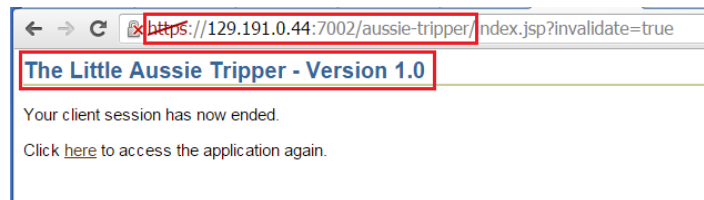
Deployments

Install Update Delete Start Stop

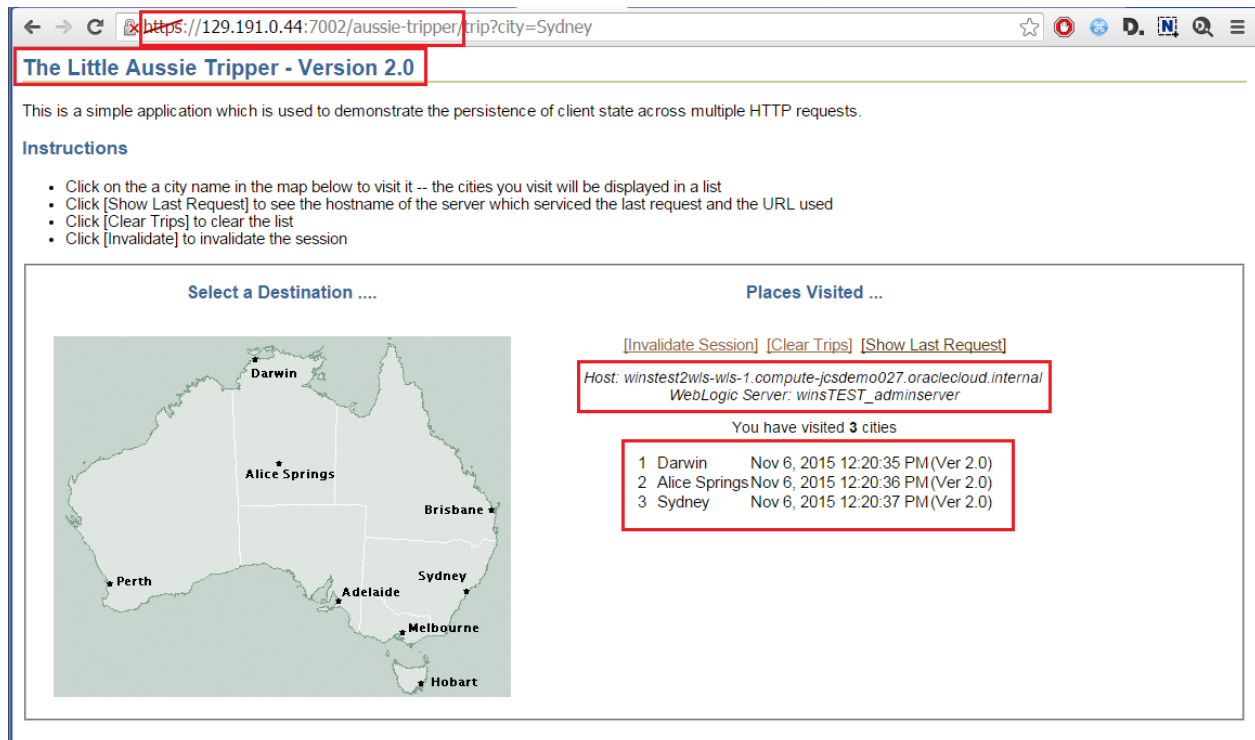
Showing 1 to 10 of 10 Pages

Name	State	Health	Type	Targets	Deploy
aussie-tripper-v1 (v1)	stop Running	OK	Enterprise Application	winsTEST_adminserver	100
aussie-tripper-v1 (v2)	Active	OK	Enterprise Application	winsTEST_adminserver	100

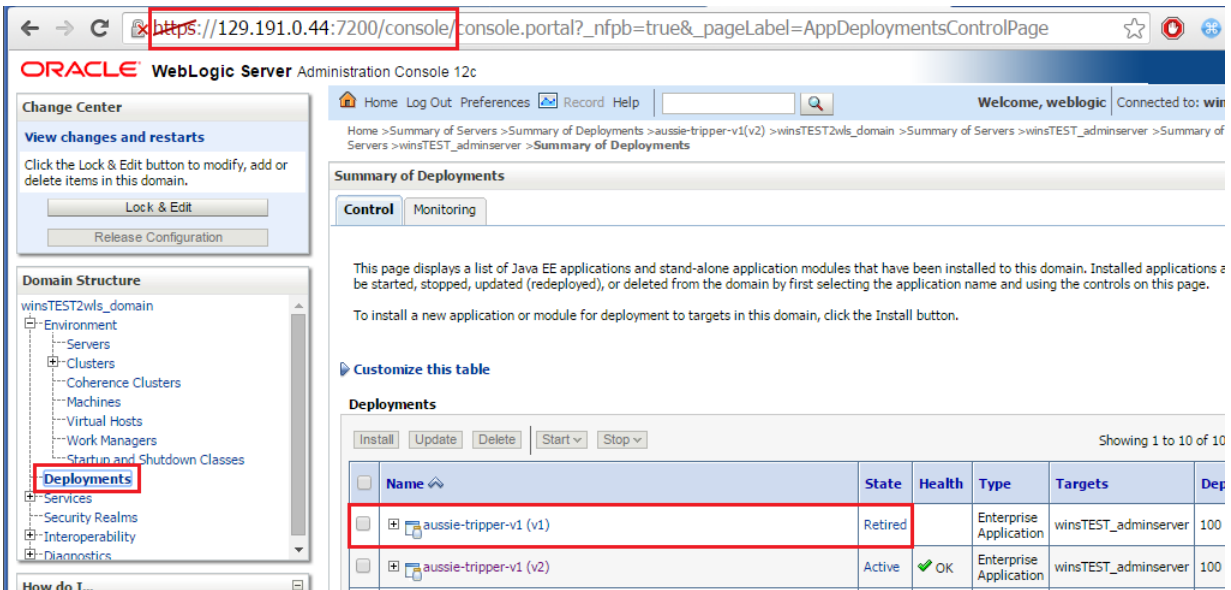
Go to the browser where V1 was running and click on 'Invalidate Session'. A message will be shown that the session has ended. Click on the link to access the application again.



This time when the page loads it is version 2 of the application. You can click on various places on the map and the same will be reflected on the screen.



Close both application's browsers page/tab and login again to WebLogic Server Admin Console. Check out the Deployments page. This time you will notice that the Version 1 of the application is now in 'retired' state while Version 2 is in Active state.



**ORACLE® WebLogic Server Administration Console 12c**

Change Center  
View changes and restarts  
Click the Lock & Edit button to modify, add or delete items in this domain.  
Lock & Edit  
Release Configuration

Domain Structure  
winsTEST2wls\_domain  
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Welcome, weblogic Connected to: win  
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**Summary of Deployments**  
Control Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications can be started, stopped, updated (redeployed), or deleted from the domain by first selecting the application name and using the controls on this page.  
To install a new application or module for deployment to targets in this domain, click the Install button.

Customize this table

**Deployments**  
Install Update Delete Start Stop  
Showing 1 to 10 of 10

Name	State	Health	Type	Targets	Deployment
<input type="checkbox"/> aussie-tripper-v1 (v1)	Retired		Enterprise Application	winsTEST_adminserver	100
<input type="checkbox"/> aussie-tripper-v1 (v2)	Active	OK	Enterprise Application	winsTEST_adminserver	100

## Restore Java Cloud Service Instance

- In order to roll back the changes on JCS execute the following maven build in the WINS\_SOURCE\_REPOSITORY\cloud.demos directory:  

```
mvn install -DexecuteSh -Djcs.ip=129.191.0.44 -Dsh=-Dsh=restoreJCS.sh
```

 Note: use your instance's public IP address. The result should be the following:



```
C:\Windows\System32\cmd.exe - mvn install -DexecuteSh -Djcsip=129.191.0.44 -Dsh=restoreJCS.sh
c:\java\git\repos\weblogic-innovation-seminars\cloud\cloud.demos>mvn install -DexecuteSh -Djcsip=129.191.0.44 -Dsh=restoreJCS.sh
[INFO] Scanning for projects...
[INFO] Reactor Build Order:
[INFO] wins-cloud
[INFO] cloud-api
[INFO] Building wins-cloud 1.0.0-SNAPSHOT
[INFO] --- maven-install-plugin:2.4:install (default-install) @ wins-cloud ---
[INFO] Installing c:\java\git\repos\weblogic-innovation-seminars\cloud\cloud.demos\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\wins-cloud\1.0.0-SNAPSHOT\wins-cloud-1.0.0-SNAPSHOT.pom
[INFO] Building cloud-api 1.0.0-SNAPSHOT
[INFO] --- properties-maven-plugin:1.0-alpha-2:read-project-properties (default) @ cloud-common ---
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ cloud-common ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ cloud-common ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Copying 0 resource
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ cloud-common ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ cloud-common ---
[INFO] Tests are skipped.
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ cloud-common ---
[INFO] --- maven-install-plugin:2.4:install (default-install) @ cloud-common ---
[INFO] Installing C:\java\git\repos\weblogic-innovation-seminars\cloud\cloud.demos\common\target\cloud-common.jar to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.jar
[INFO] Installing C:\java\git\repos\weblogic-innovation-seminars\cloud\cloud.demos\common\pom.xml to C:\Users\pnagy\.m2\repository\com\oracle\wins\cloud\cloud-common\1.0.0-SNAPSHOT\cloud-common-1.0.0-SNAPSHOT.pom
[INFO] --- maven-antrun-plugin:1.8:run (wlstdeploy) @ cloud-common ---
[INFO] Executing tasks
main:
  [sshexec] Connecting to 129.191.0.44:22
  [sshexec] cmd : sudo su - oracle -c /tmp/restoreJCS.sh oracle
Initializing WebLogic Scripting Tool (WLST) ...
Welcome to WebLogic Server Administration Scripting Shell

Type help() for help on available commands

Connecting to t3s://winsTEST2vls-vls-1.compute-jcsdemo027.oraclecloud.internal:7200 with userid weblogic ...
<Nov 6, 2015 2:07:58 PM UTC> <Info> <Security> <BEA-090905> <Disabling the CryptoJ JCE Provider self-integrity check for better startup performance. To enable t
his check, specify -Dweblogic.security.allowCryptoJDefaultJCEVerification=true.>
<Nov 6, 2015 2:07:58 PM UTC> <Info> <Security> <BEA-090906> <Changing the default Random Number Generator in RSA CryptoJ from ECDRBG128 to FIPS186PRNG. To disab
le this change, specify -Dweblogic.security.allowCryptoJDefaultPRNG=true.>
<Nov 6, 2015 2:07:58 PM UTC> <Info> <Security> <BEA-090909> <Using the configured custom SSL Hostname Verifier implementation: weblogic.security.utils.SSLWLSHos
tnameVerifier$NullHostnameVerifier.>
Successfully connected to Admin Server "winsTEST_adminserver" that belongs to domain "winsTEST2vls_domain".

Get managed server list
```





```

Location changed to serverRuntime tree. This is a read-only tree with DomainMBean as the root.
For more help, use help('domainConfig')

Stopping application aussie-tripper-v1.
<Nov 6, 2015 2:08:11 PM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating stop operation for application, aussie-tripper-v1#v1 [archive: null], to wins
TEST_adminserver .>
[Deployer:149192]Operation "stop" on application "aussie-tripper-v1 [Version=v1]" is in progress on "winsTEST_adminserver".

Completed the stop of Application with status completed
Current Status of your Deployment:
Deployment command type: stop
Deployment State : completed
Deployment Message : no message
Stopping application aussie-tripper-v1.
<Nov 6, 2015 2:08:05 PM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating stop operation for application, aussie-tripper-v1#v1 [archive: null], to wins
TEST_adminserver .>
Completed the stop of Application with status completed
Current Status of your Deployment:
Deployment command type: stop
Deployment State : completed
Deployment Message : no message
Undeploying application aussie-tripper-v1 ...
<Nov 6, 2015 2:08:09 PM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating undeploy operation for application, aussie-tripper-v1#v1 [archive: null], to
winsTEST_adminserver .>
Completed the undeployment of Application with status completed
Current Status of your Deployment:
Deployment command type: undeploy
Deployment State : completed
Deployment Message : no message
Undeploying application aussie-tripper-v1 ...
<Nov 6, 2015 2:08:13 PM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating undeploy operation for application, aussie-tripper-v1#v2 [archive: null], to
winsTEST_adminserver .>
Completed the undeployment of Application with status completed
Current Status of your Deployment:
Deployment command type: undeploy
Deployment State : completed
Deployment Message : no message
Location changed to edit tree. This is a writable tree with
DomainMBean as the root. To make changes you will need to start
an edit session via startEdit().
For more help, use help('edit')

Starting an edit session ...
Started edit session, please be sure to save and activate your
changes once you are done.
Saving all your changes ...
Saved all your changes successfully.
Activating all your changes, this may take a while ...
The edit lock associated with this edit session is released
once the activation is completed.
Activation completed
Connecting to Node Manager ...
Successfully Connected to Node Manager.

RUNNING
winsTEST_adminserver status...RUNNING

SHUTDOWN
winsTEST_server_1 status...SHUTDOWN

SHUTDOWN
winsTEST_server_1 is SHUTDOWN
Starting winsTEST_server_1
Starting server winsTEST_server_1 ...
Successfully started server winsTEST_server_1 ...

RUNNING
Now winsTEST_server_1 status is RUNNING
Successfully disconnected from Node Manager.
<Nov 6, 2015 2:09:07 PM UTC> <Warning> <JNDI> <BEA-050001> <WLContext.close() was called in a different thread than the one in which it was created.>
[INFO] Executed tasks
[INFO] Reactor Summary:
[INFO] wins-cloud ..... SUCCESS [ 0.270 s]
[INFO] cloud-api ..... SUCCESS [01:17 min]
[INFO] BUILD SUCCESS
[INFO] Total time: 01:17 min
[INFO] Finished at: 2015-11-06T15:09:10+01:00
[INFO] Final Memory: 14M/227M
[INFO]
c:\java\git\repos\weblogic-innovation-seminars\cloud\cloud.demos>

```

## Troubleshooting

If the script fails the following steps need to be complete:

- Undeploy all versions of Aussie-tripper application
- Disable Administration port (Domain -> Configuration -> General)
- Disable Tunneling (Adminserver -> Protocol -> General)

Note: once you have apply changes (Disable Administration port) the Admin console will no longer available on port 7200.

## Typical Questions

- Side by Side deployment importance and steps
  - Releasing a new version of the product is not an easy task. After finishing development cycles and QA cycles, finally it is time to deploy the new version to the application server. Servers are shut down, the new version of the product is swapped in, and then pray there is no issue once everything comes up. If

you are lucky, only a few issues will show up. However if you are not in luck then you have to roll back the old applications, and it is even more painful than deploying the new version, because sometimes you cannot roll back all of the changes.

- This is when it helps to have multiple versions on the application server and one could switch between each version without interrupting the system.
  - Side-by-side application deployment controls the process for deploying new versions of Web-based applications without the need to disrupt service. The new version of an application is deployed alongside existing version - WebLogic will gradually migrate the traffic. The older version is automatically un-deployed after all current clients complete their work. The Administrator explicitly un-deploys the older version, or a configured timeout is reached.
  - Rolling back the new version is simple: just stop the redeployment process if problems are detected in the newer application version.
  - For new applications, administrators can deploy an application in "administration mode," which makes it inaccessible to non-admin clients, in order to do sanity checks to ensure that the application is working as expected and then open it up to clients.
- List of the features of side-by-side deployment
    - Multiple application versions can coexist
    - Test versions before releasing to users
    - Roll back to previous versions
    - Automatic retirement: graceful, timeout, immediate
    - Creates version-aware application artifacts/resources
    - Reduces hardware, software, maintenance, and support costs
  - Pre-requisite
    - Prerequisite to deploy the application using "Side By Side Deployment" mechanism is that the previously deployed application has to be versioned.
    - If previously deployed application is not versioned then the new application cannot be deployed using "Side By Side Deployment" mechanism. If attempted, it will throw `weblogic.management.ManagementException: [Deployer:149081]You cannot deploy application, '[Your-App-Name]', with version '[App-Version]'. The application was previously deployed without version.`

## Wrap up / Overview

Sometimes, this is also referred to as Production Redeployment. This enables you to update and redeploy an application in a production environment without stopping the application or otherwise interrupting the application's availability to clients. Production redeployment saves you the trouble of scheduling application downtime, setting up redundant servers to host new application versions, manually managing client access to multiple application versions, and manually retiring older versions of an application.