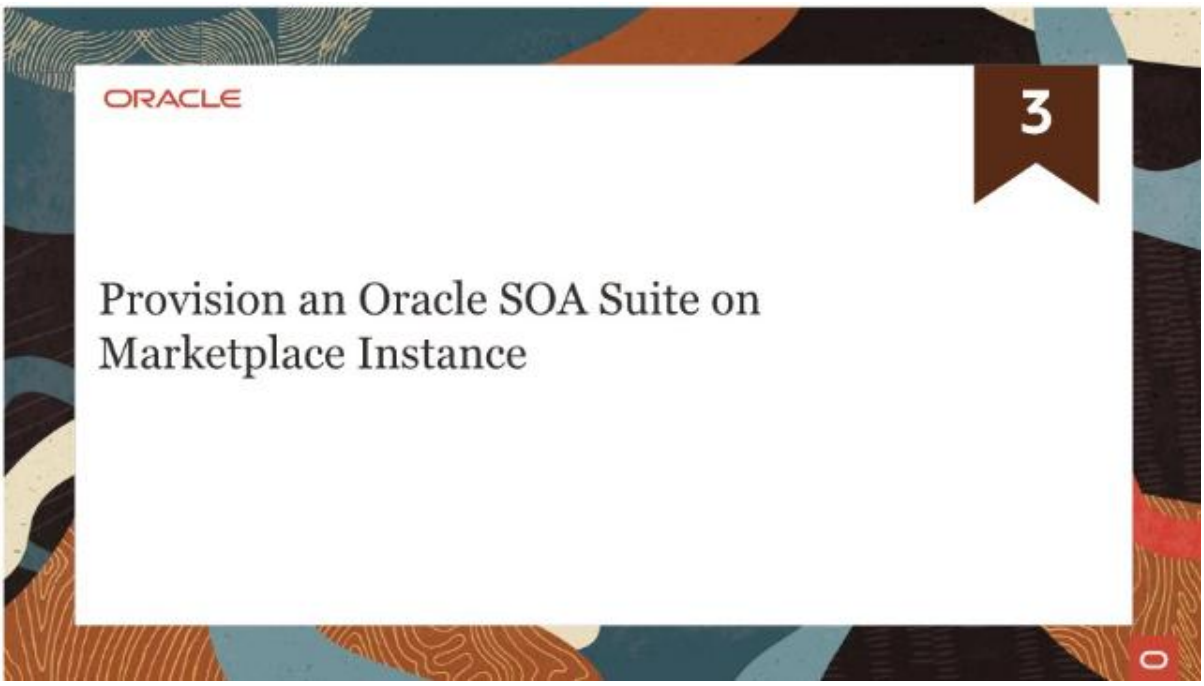

ORACLE
3
Provision an Oracle SOA Suite on Marketplace Instance

Objectives

After completing this lesson, you should be able to:

- Describe the various methods to provision an Oracle SOA Suite on Marketplace Instance
- Complete post-provisioning tasks
- Access an Oracle SOA Suite on Marketplace instance

Provision an Oracle SOA Suite on Marketplace Instance

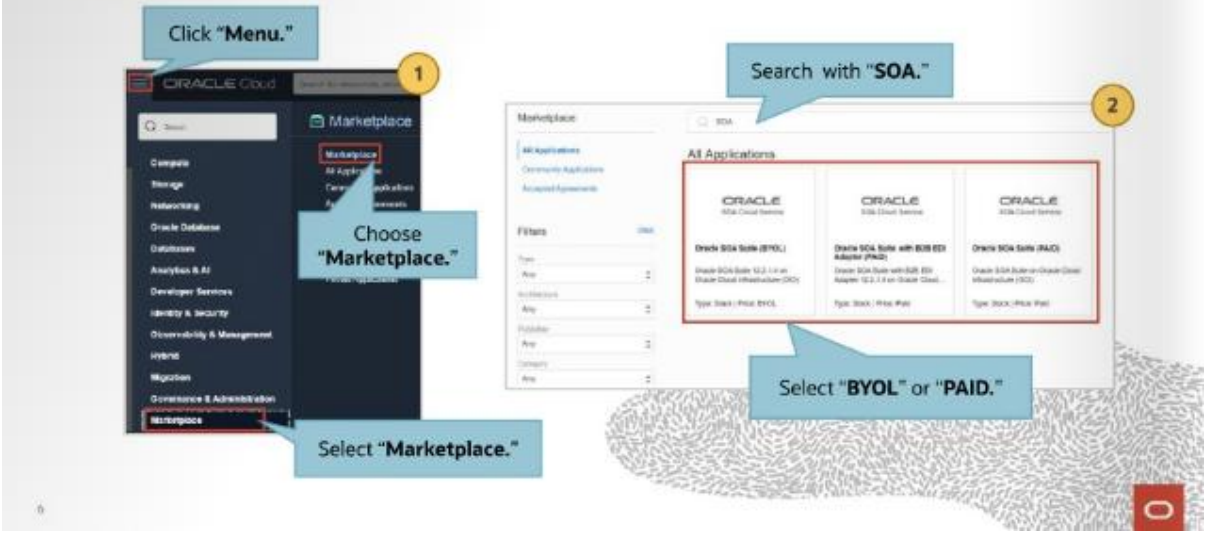
Provision an Oracle SOA Suite on Marketplace Instance

The following Oracle Cloud Infrastructure interfaces are used to create an Oracle SOA Suite on Marketplace Instance:

- **The Oracle Cloud Infrastructure console**
- **The Oracle SOA Suite on Marketplace Quick Start**
- **The Oracle Cloud Infrastructure CLI**

Provision an Oracle SOA Suite on Marketplace Instance Using OCI Console

Creating an SOA Suite Instance: Oracle Cloud Infrastructure



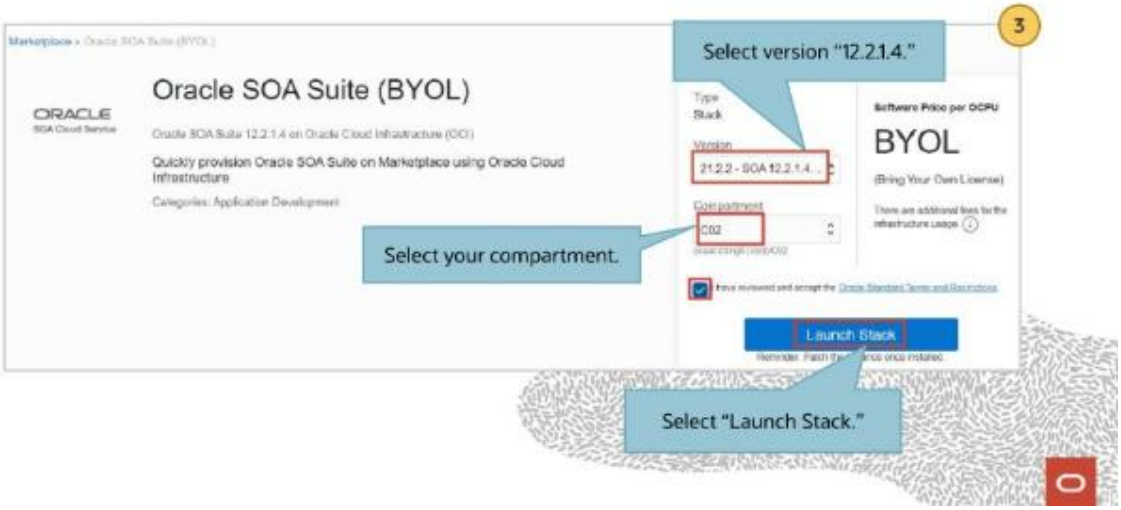
Provision an Oracle SOA Suite on Marketplace Instance:

- You can provision an Oracle SOA Suite on Marketplace instance in a selected compartment in Oracle Cloud Infrastructure. The database and Oracle SOA Suite on Marketplace instance can be in the same or different compartment.

Steps:

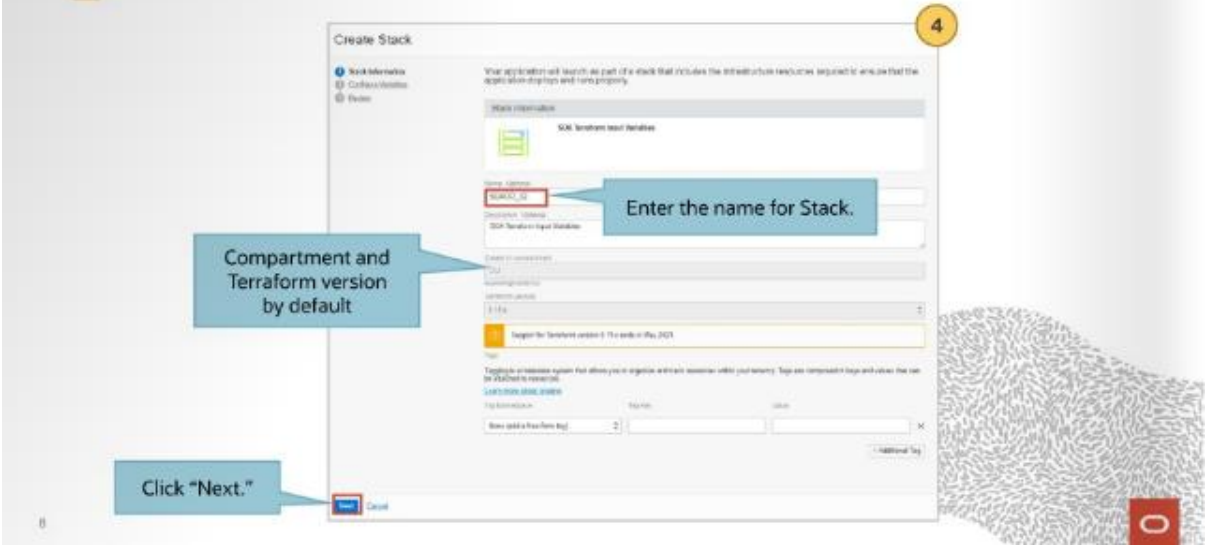
1. Sign in to the Oracle Cloud Infrastructure Console.
2. Open the navigation menu and click Marketplace. Under Marketplace, click All Applications.
3. In the Marketplace search field, enter **SOA**.
   The Marketplace listings for SOA Suite 12.2.1.4 are displayed.

Creating an SOA Suite Instance: Launch Stack



4. Click the title for the listing you want to use to open the landing page, and review the information on the Overview page.
5. Accept the terms and restrictions, and then click Launch Stack.
6. The Create Stack Wizard is displayed.

Creating an SOA Suite Instance: Stack Information



Stack Information

- **Name:** Optionally, modify the default name for the stack after it's deployed. The name must be unique within the identity domain and must meet the following conditions: start with a letter, not longer than 30 characters, not contain non-alphanumeric character (including spaces).
- **Description:** Optionally, enter a description of the stack. For example, you can specify the name of the application that will run on the stack after it is deployed.
- **Create in compartment:** Automatically populated with the compartment you selected on the landing page. This is the compartment where the stack will be created in the tenancy. (Stacks are attached to a specific region. However, where necessary, the resources on a given stack can be deployed across multiple regions.)

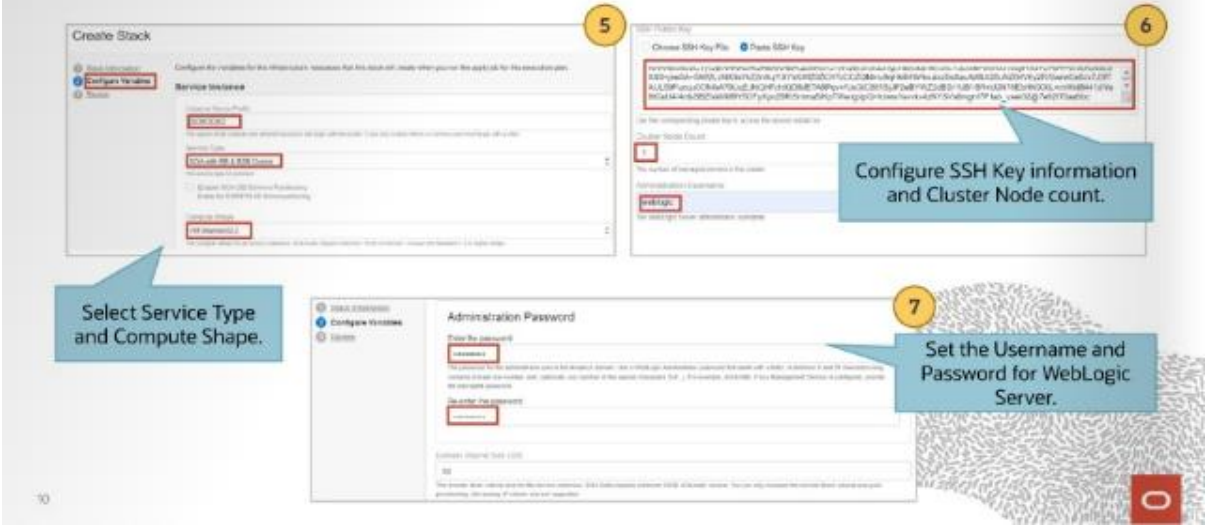
Note: If not already granted, you will need to ask your administrator to grant the following manage and use permissions in the compartment:

- allow group *groupName* to manage instance-family in compartment *compartmentName*
- allow group *groupName* to manage virtual-network-family in compartment *compartmentName*
- allow group *groupName* to manage volume-family in compartment *compartmentName*
- allow group *groupName* to use database-family in compartment *compartmentName*
- allow group *groupName* to use autonomous-database-family in compartment *compartmentName*

  where *groupName* is the name of the group to which you belong and *compartmentName* is the name of the compartment where Oracle SOA Suite on Marketplace instances will be created.

Terraform version: Automatically populated with the Terraform version used for the Marketplace offering.

Creating an SOA Suite Instance: Configure Variables



Creating SOA Suite Instance-Configure Variables:

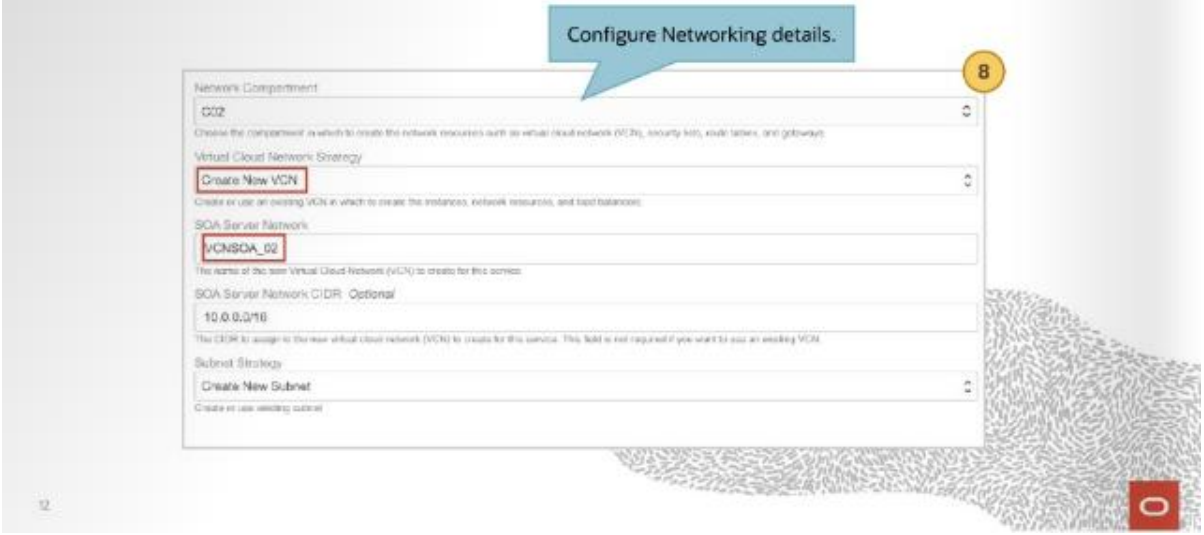
- **Instance Name Prefix:** Enter the prefix you want to use for the instance name, up to 15 characters.
- **Service Type:** Select the service type you are provisioning:
  - SOA with SB & B2B Cluster
  - MFT Cluster
  - BAM Cluster
- **Enable SOA DB Schema Partitioning**: If you selected a Service Type of SOA with SB & B2B Cluster, select this check box to enable SOAINFRA schema partitioning. Default is not selected.
- **Compute Shape**: Select a compute shape with at least 15GB of memory. For information about compute shapes.
- **SSH Public Key:** Enter the public key for the secure shell (SSH), either by providing an SSH key file or pasting the SSH key. This key is used for authentication when connecting to the Oracle SOA Suite on Marketplace instance using an SSH client.
- **Cluster Node Count**: Enter the initial number of SOA Server compute instances. This is also the number of Managed Servers in the cluster.

During provisioning, the maximum allowable cluster size is 8 nodes. If you want to create a cluster of a larger size, you can create an 8-node cluster during provisioning, and then post-provisioning you can scale out the cluster to a maximum size of 16 nodes.

- **Administration Username:** Enter the name of the SOA Server domain administrator.
- **Administration Password:** Enter a password that meets the specifications shown below the field. If you select the Use KMS Decryption option, enter the encrypted password. Enter the password again for confirmation.
- **Domain Volume Size (GB):** Enter a custom domain block volume size for the instance. Default (minimum): 50 GB

  You can increase the domain volume size post-provisioning by editing the stack. You cannot decrease the domain volume size.

Creating an SOA Suite Instance: Networking



Instance Network:

- **Network Compartment:** It is automatically populated with the compartment you selected on the landing page. This is the compartment where the instance will be created in the tenancy.
- **Virtual Cloud Network Strategy**: Select to create or use an existing VCN in which to create the instance, network resources, and load balancer.
- **SOA Server Network:** If you selected a Virtual Cloud Network Strategy of Create New VCN, enter the name of the new VCN.
- **SOA Server Network CIDR**: If you selected a Virtual Cloud Network Strategy of Create New VCN, enter the unique CIDR to assign to the new VCN.

If you select Existing Network, and selected a **Virtual Cloud Network Strategy** of **Use Existing VCN**, select the name of the VCN and Subnet.

Creating an SOA Suite Instance: Configure Database

Database Strategy: Select the database strategy for WebLogic Server.

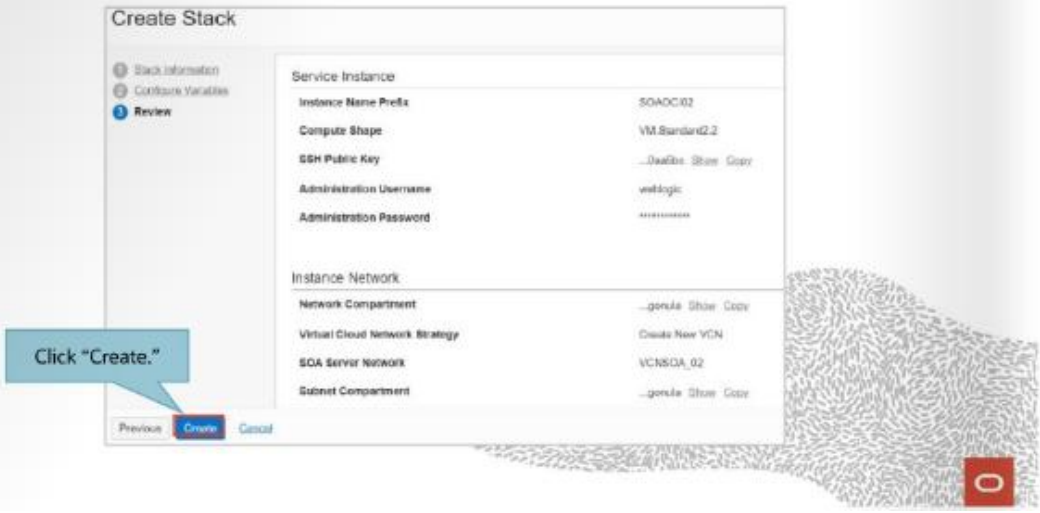
- **Database System (the Oracle Cloud Infrastructure database)**, supported for any service type
- **Autonomous Transaction Processing Database**, supported only for the SOA with **SB & B2B Cluster** service type. If you select the Autonomous Transaction Processing database for the **MFT Cluster** service type, provisioning will fail.

DB System Compartment, Autonomous DB System Compartment: Select the compartment for the database. This can be the same compartment as the Oracle SOA Suite on Marketplace instance, or a different compartment.

DB System, Autonomous Database: Select the DB system to use for this WebLogic Server domain. This should be in the same VCN as WebLogic instances.

Enter the ADMIN password for ATP and enter the SYS password in case of DB system.

Creating an SOA Suite Instance: Review Configuration

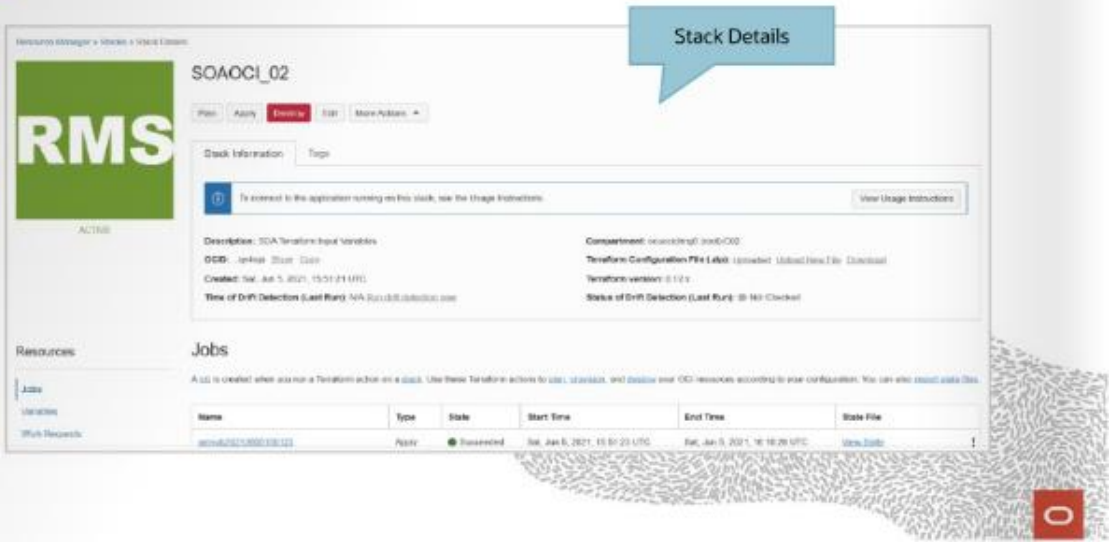


Review the configuration and click **create**.

Oracle SOA Suite Stack: Provision Status

Here you can see that the SOA Suite stack instance is created and is in Active state.

View Oracle SOA Suite Stack Details



Click on your Stack to view the details about the SOA instance and perform required actions.

The Stack Information tab specifies the:

- Usage instructions
- Description of the stack
- Compartment to which the stack is assigned
- OCID value that uniquely identifies the stack
- Created date and time
- Terraform version

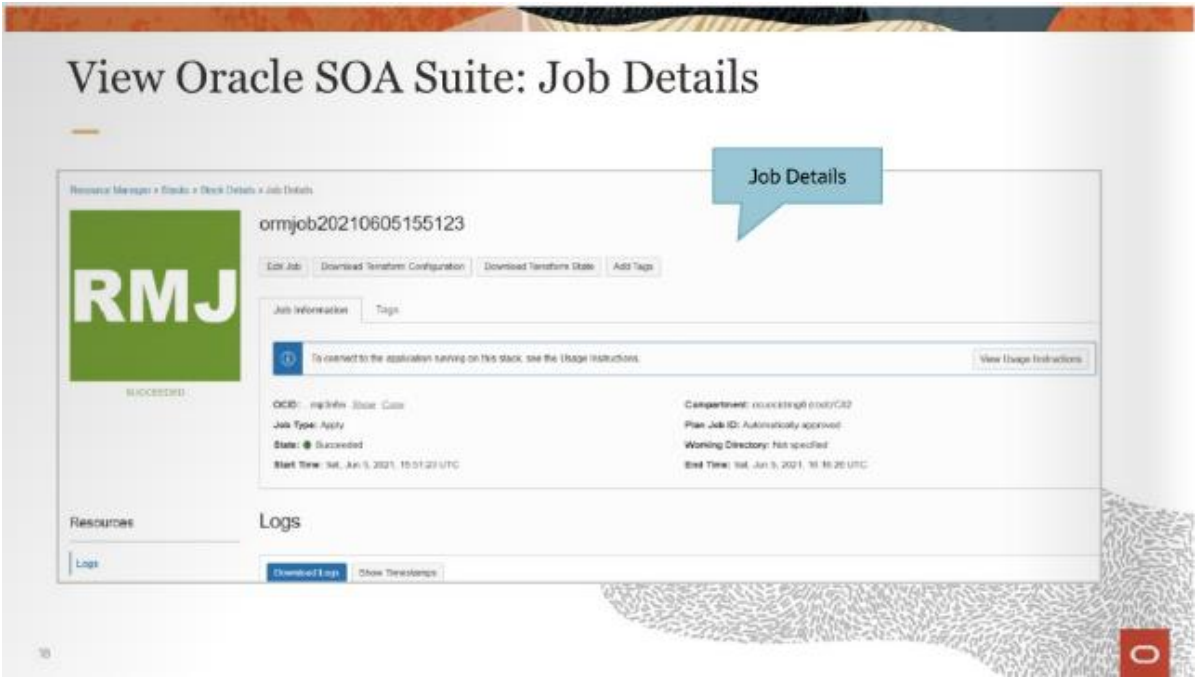
You have options to:

- Edit Stack
- Move the stack to a different compartment.
- Delete stack
- Perform terraform actions like plan, apply, and destroy.
    - Create the build plan for the environment required to create an instance
    - Execute the Plan operation to create the instance

You also have a job section at the bottom, Click the job name to view all the details of the job.

Import State

- **Destroy:** Deletes the RCU schemas, compute instances, VCNs, subnets, load balancer, and back-end servers created during provisioning. If you select this action, and want to re-create an instance using the same stack, then select the Plan and Apply operations.
- **Delete Stack:** Click to delete the selected stack after selecting Terraform Actions>Destroy. See Deprovision an Oracle SOA Suite on Marketplace Instance.



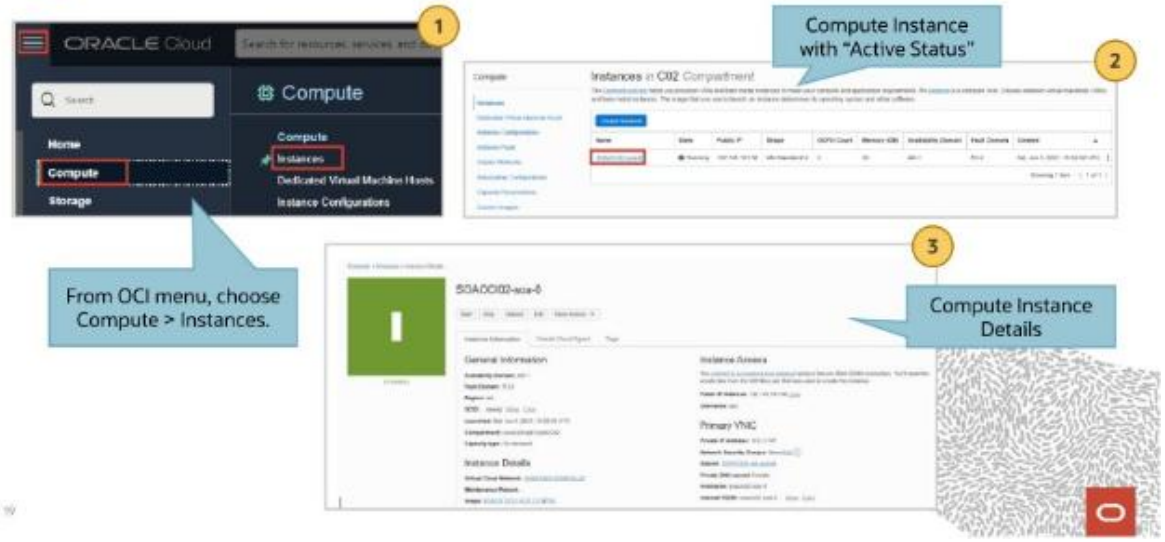
Click job name to view the job details.

Jobs section: Click a job to display its details, including logs, variables, associated resources, outputs and state. The logs and outputs include URLs for working with the Oracle SOA Suite on Marketplace instance.

On the Job Details page, you can download:

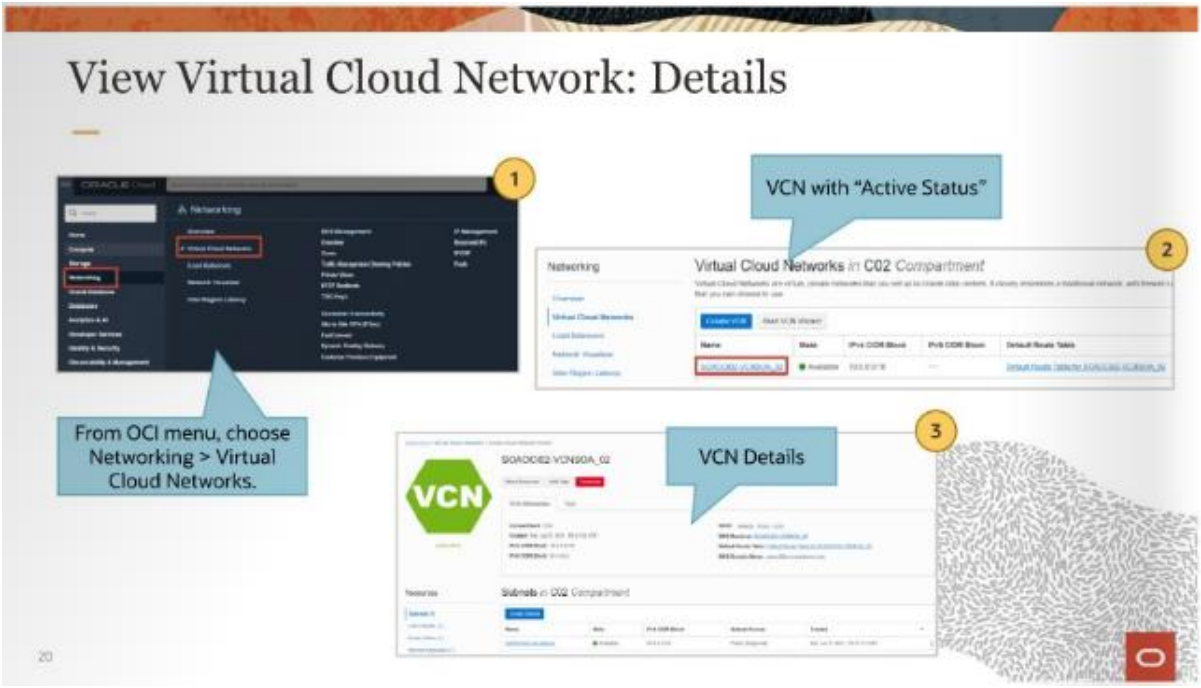
- Logs .log file
- Terraform configuration .zip file
- Terraform state .json file

View Compute Instance Details



To view the compute instance details:

1. Open the navigation menu and click **Compute**. Under **Compute**, click **Instances**.
2. Click the instance name to display its details on the **Instance Information** and **Tags** tabs.



View the compute instance details:

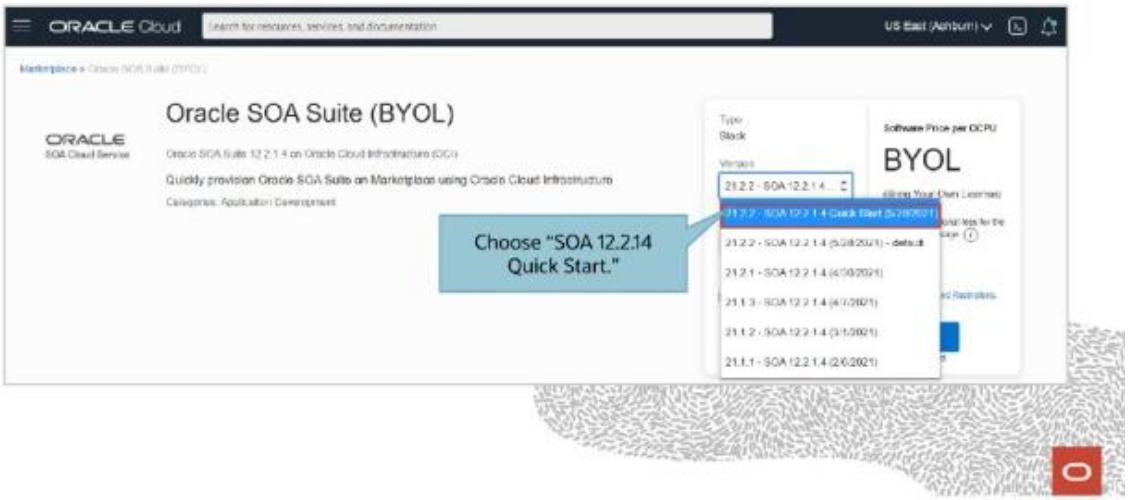
1. Open the navigation menu and click **Networking→ Virtual Cloud Networks**.
2. Click the instance name to display its details on the **Instance Information** and **Tags** tabs.

Provisioning an Oracle SOA Suite Instance: Quick Start

Oracle SOA Suite on Marketplace Quick Start Instance

- Use the Quick Start option to quickly provision an instance along with underlying OCI network resources.
- A quick start instance is automatically provisioned with ATP, Oracle SOA Suite, Oracle Service Bus, and Oracle B2B topology.
- All resources are tagged with freeform tag QSTag:InstanceNamePrefix.
- A quick start instance supports all OCI operations on compute instances.
- The following functionality is not supported in a quick start instance
  - Multinode clusters.
  - Scale out and in.
  - Adding or editing a load balancer during provisioning.
  - MFT or BAM topologies.

Oracle a SOA Suite Quick Start Instance: Launch Stack



Provision an Oracle SOA Suite on Marketplace Quick Start Instance:

- You can use the Oracle SOA Suite on Marketplace Quick Start option to quickly provision an Oracle SOA Suite on Marketplace instance along with underlying Oracle Cloud Infrastructure network resources.
- This option is available in both BYOL and PAID offerings.

Steps to provision an Oracle SOA Suite on Marketplace quick start instance:

1. Sign in to the Oracle Cloud Infrastructure Console.
2. Click Version and select the Quick Start option.
3. Oracle Cloud Infrastructure Console Sign In: Select the Quick Start option.
4. Select the Compartment in which you want to create the database and quick start instance.

   Note: If not already granted, you will need to ask your administrator to grant the following manage and use permissions in the compartment:

   - allow group groupName to manage instance-family in compartment compartmentName
   - allow group groupName to manage virtual-network-family in compartment compartmentName
   - allow group groupName to manage volume-family in compartment compartmentName
   - allow group groupName to use database-family in compartment compartmentName
   - allow group groupName to use autonomous-database-family in compartment compartmentName

     where groupName is the name of the group to which you belong and compartmentName is the name of the compartment where Oracle SOA Suite on Marketplace instances will be created
5. Accept the terms and restrictions, then click Launch Stack.

Create a Quick Start Instance: Stack Information

Stack Information

Name: Optionally, modify the default name for the stack after it's deployed.

The name must be unique within the identity domain and must meet the following conditions: start with a letter, not longer than 30 characters, not contain non-alphanumeric character (including spaces).

Description: Optionally, enter a description of the stack. For example, you can specify the name of the application that will run on the stack after it is deployed.

Create in compartment: Automatically populated with the compartment you selected on the landing page. This is the compartment where the stack will be created in the tenancy. (Stacks are attached to a specific region. However, where necessary, the resources on a given stack can be deployed across multiple regions.)

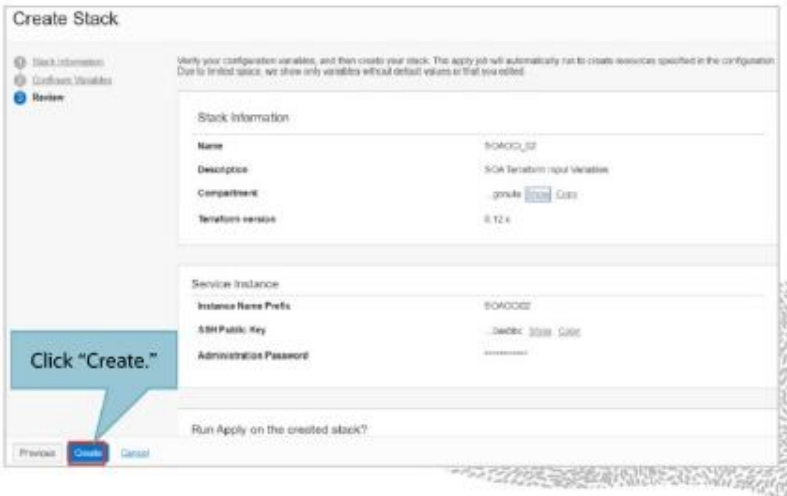
- **Note:** Terraform version is automatically populated with the Terraform version used for the Marketplace offering.

Create a Quick Start Instance: Configure Variables

Creating SOA Suite Instance-Configure Variables:

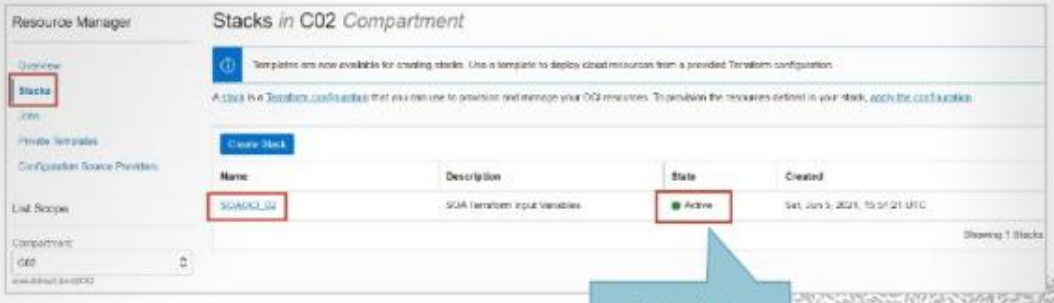
- **Instance Name Prefix:** Enter the prefix you wish to use for the instance name, up to 15 characters.
- **SSH Public Key:** Enter the public key for the secure shell (SSH). This key is used for authentication when connecting to the instance using an SSH client.
- **Administration Password**: Enter a password that meets the specifications shown below the field. This password is used for signing in to SOA Consoles as the `weblogic` user. It is the administration password to connect to the ATP database.

Creating a SOA Suite Instance: Review Configuration



Review the configuration and click **create**.

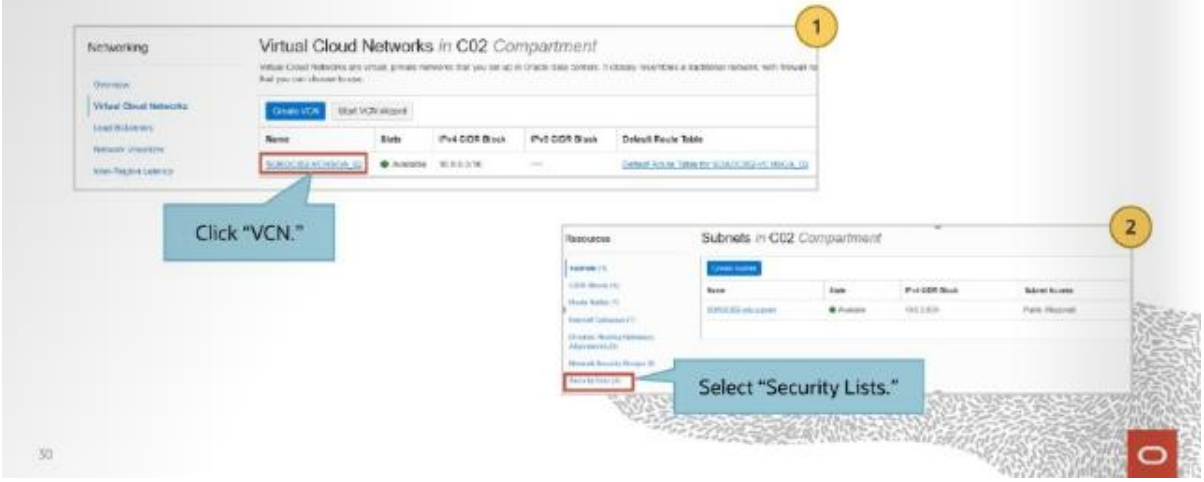
Oracle SOA Suite Quick Start Instance: Provision Status



After you click "Create," initially, the status of the job will be in progress. Allow sufficient time for this to complete and for the state to change to "Active."

Complete Post-Provisioning Tasks

Add Ingress Rules to Access WebLogic Server and Other Consoles



If you provision an instance after 1 August 2020 and you are not able to access the WebLogic Server Administration Console or other console URLs from your browser after provisioning, then you must create rules to allow traffic into your Administration Server VM.

To add ingress rules to allow access to the WebLogic Server Administration Console or other console URLs:

1. Sign in to the Oracle Cloud Infrastructure Console.
2. Open the navigation menu, click **Networking**, and then click **Virtual Cloud Networks**.
3. Select the compartment where you created the new instance.
4. In the list of VCNs, select your VCN.
5. On the Virtual Cloud Network Details page, click **Security Lists** in the left pane.

Add Ingress Rules to Access WebLogic Server and Enterprise Manager

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6. Click the security list that the Administration Server VM is using. When the SOA suite instance was created, it also created a few security lists and added a few ingress rules by default.
7. Click **Add Ingress Rules** to open the Add Ingress Rules dialog box.
8. In the Add Ingress Rules dialog box, create an ingress rule to access the WebLogic Server Administration Console.

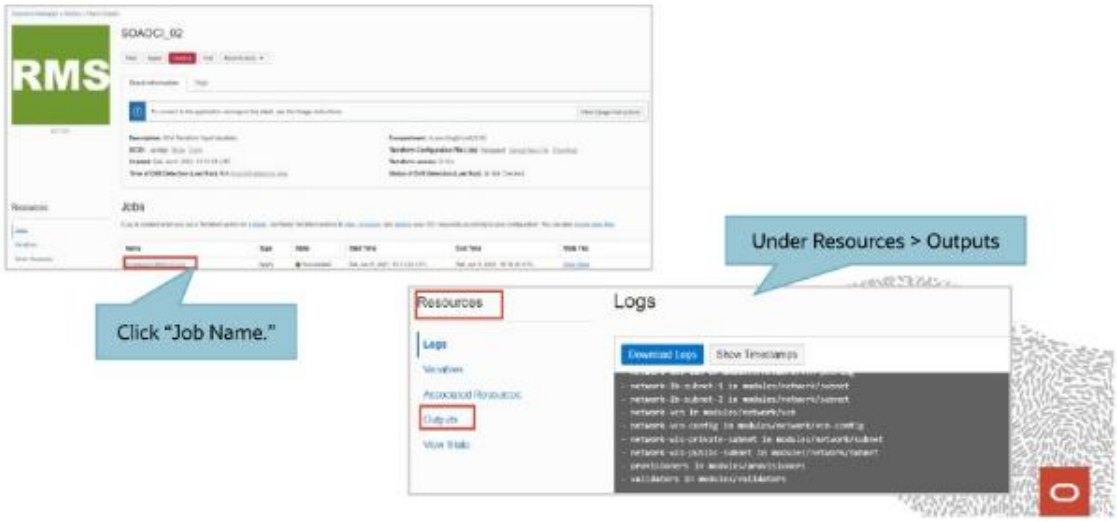
Leave the STATELESS check box deselected.

- For SOURCE TYPE, select **CIDR**.
- In the SOURCE CIDR field, enter the public IP address of the machine where the Administration Server URL is opened from a browser. (For example, if the public IP address is 123.123.456.456, then enter `123.123.456.456/32`.) Alternatively, you can enter a `CIDR 0.0.0.0/0`.
- In the IP PROTOCOL field, select TCP.
- In the DESTINATION PORT RANGE field, enter `7002`.
- Click **Add Ingress Rules**.

9. Repeat the steps above to add ingress rules to access other consoles, specifying the associated DESTINATION PORT RANGE value.

Access an Oracle SOA Suite on Marketplace Instance

Access an Oracle SOA Suite-Job Details



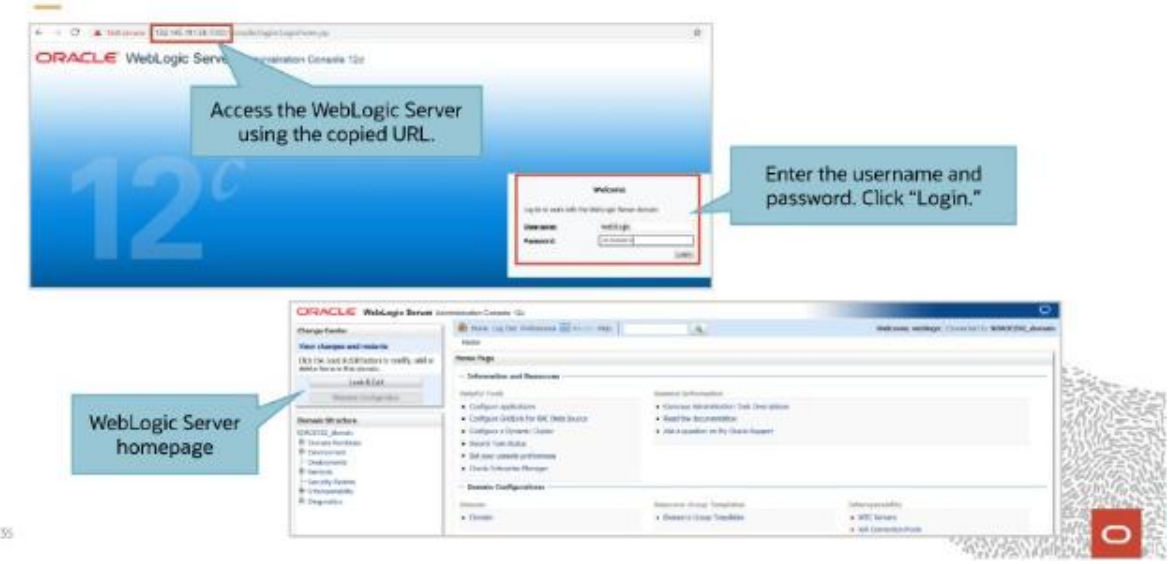
You can access an Oracle SOA Suite on Marketplace instance through the URLs in the log file.

To access a deployed Oracle SOA Suite on Marketplace instance:

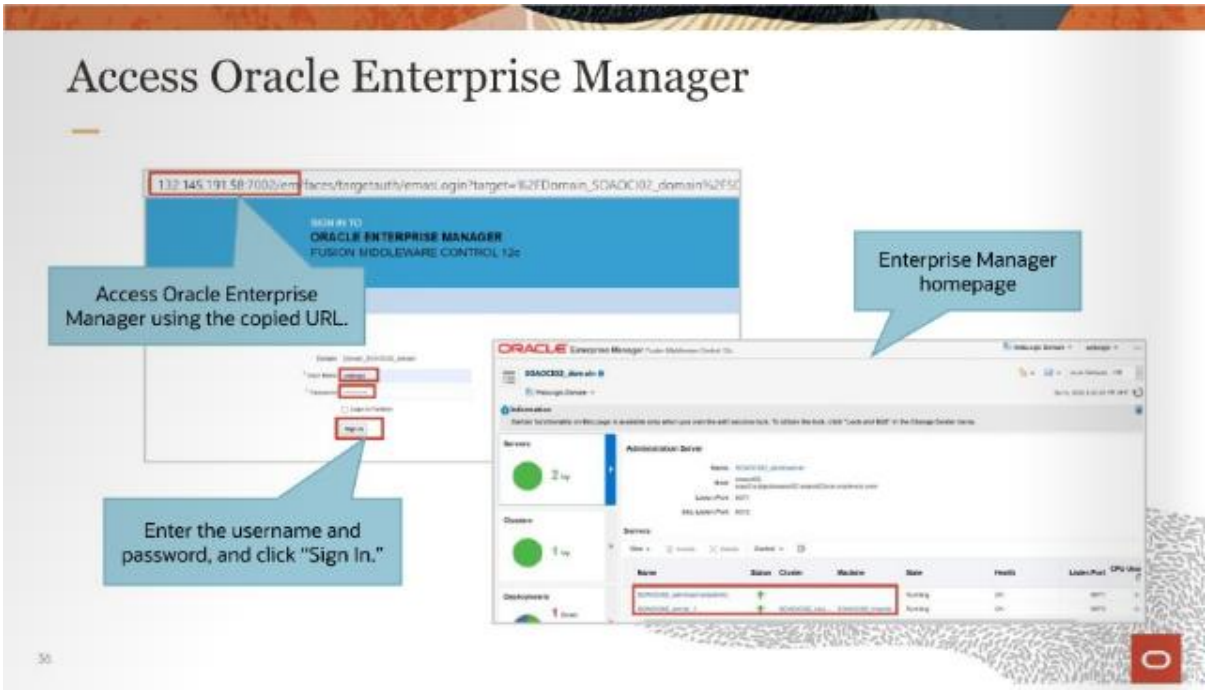
1. Go to the Stack Details page of the instance you have provisioned.
2. In the **Jobs** section, click the job name to display the Job Details page.
3. Under **Resources** in the left pane, click **Outputs** to view the IP addresses and URLs that you can use to access the instance.

4. From outputs, you can view the IP addresses and URLs that you can use to access the instance or alternatively, click **Logs** and scroll through the log file to identify the IP addresses and URLs that you can use to access the instance.

Access WebLogic Server Administration Console



Copy the URL from outputs or logs. You can access WebLogic Server Administrator Console using the valid credentials (username and password).



Copy the URL from outputs or logs. You can access the Oracle Enterprise Manager home page using valid credentials (username, password) and also access other consoles.

Summary

In this lesson, you should have learned:

- About the different methods to provision an Oracle SOA Suite on Marketplace instance
- About post-provisioning tasks
- How to access an Oracle SOA Suite on Marketplace instance

Practice 3: Provision Oracle SOA Suite on Marketplace Instances

- Practice 3-1: Provision an Oracle SOA Suite on Marketplace Instance
- Practice 3-2: View Oracle SOA Suite on Marketplace Instance Details
- Practice 3-3: Complete Post-Provisioning Tasks
- Practice 3-4: Accessing an Oracle SOA Suite on Marketplace Instance