# Oracle® Cloud Terraform Scripts in Oracle WebLogic Server for OKE



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# Preface

*Terraform Scripts in Oracle WebLogic Server for OKE* explains how to access the Terraform Scripts of Oracle WebLogic Server for OKE to perform Oracle Cloud Infrastructure tasks using the Oracle Cloud Infrastructure (OCI) Command Line Interface.(CLI).

#### **Topics:**

- Documentation Accessibility
- Diversity and Inclusion

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# 1 Terraform Scripts in Oracle WebLogic Server for OKE

Learn to access the Terraform Scripts of an Oracle WebLogic Server for Oracle Cloud Infrastructure Container Engine for Kubernetes (Oracle WebLogic Server for OKE), and modify it as required.

#### Note:

If you are using a Oracle WebLogic Server for OKE (**Release 21.3.2 or earlier**), see Terraform Scripts in Oracle WebLogic Server for OKE (Release 21.3.2 or earlier).

The Oracle Cloud Infrastructure (OCI) Command Line Interface (CLI) is a small-footprint tool that you can use as a standalone or with the Console to complete Oracle Cloud Infrastructure tasks. The CLI provides the same core functionality as the Console, plus additional commands. Some of these, such as the ability to run scripts, extend Console functionality.

Topics:

- About Configuring Terraform Scripts
- Prerequisites
- Download a Terraform Configuration File
- Invoke Terraform Scripts
- Variables in Terraform Scripts
- Sample Scripts

## About Configuring Terraform Scripts

You can create a single or multi-node Oracle WebLogic Server cluster with Oracle Cloud Infrastructure database or Oracle Autonomous database (ATP) as an infra database, optionally, fronted-by a load balancer. Here you would create a stack and a domain, and modify them as required.

When you create an instance by using the scripts, you will create a public or private subnet in Oracle WebLogic Server for OKE.

By default subnets span an entire region in Oracle Cloud Infrastructure. Oracle WebLogic Server for OKE supports both regional and AD-scoped subnets. AD subnets are now supported for only existing subnets. In case of regional subnets, single regional subnet is created.



### Prerequisites

Prerequisites you need to complete before you update the terraform scripts in Oracle WebLogic Server for OKE.

- An Oracle Cloud Infrastructure tenancy.
- The OCID for the compartment where you wish to create your stack.
- A user account that includes the following:
  - An API signing key. See Required Keys and OCIDs.
  - Required IAM permissions. See How Policies Work.
  - If you want to use the Oracle Cloud Infrastructure CLI, install and configure the CLI first. See Installing the CLI.
- Install and configure terraform. See OCI Terraform Provider Configuration on Linux and Windows machine.

### Download a Terraform Configuration File

Create a Oracle WebLogic Server for OKE stack, download the terraform configuration file, and update the provider.tf file.

Complete the following steps:

- 1. Create a Stack. See Get Started with Oracle WebLogic Server for OKE.
- 2. Click the navigation menu **E**, and select **Developer Services**. Under the **Resource Manager** group, click **Stacks**.
- 3. Select the **Compartment** that contains your stack.
- 4. Click the name of your stack.
- 5. In the Stack Information tab, click Download against Terraform Configuration File (.zip).
- 6. Unzip the terraform configuration files to a folder.
- 7. The terraform configuration files includes the provider.tf file that you cannot use for the CLI option.

```
Update the contents of the terraform file provider.tf, with the following content:
```

```
# Copyright 2019, 2021 Oracle Corporation and/or affiliates. All
rights reserved.
# Licensed under the Universal Permissive License v 1.0 as shown at
http://oss.oracle.com/licenses/upl
# Identity and access parameters
variable "api_private_key_path" {
    description = "path to oci api private key"
}
variable "api_fingerprint" {
    description = "fingerprint of oci api private key"
}
variable "user_id" {
    type = string
```



```
description = "user id"
}
# general oci parameters
variable "disable auto retries" {
   default = true
}
provider "oci" {
  version = ">=4.7.0"
tenancy_ocid = var.tenancy_ocid
user_ocid = var.user_id
fingerprint = var.api_fingerprint
private_key_path = var.api_private_key_path
region = var.region
   disable auto retries = var.disable auto retries
}
provider "oci" {
   version
                                  = ">=4.7.0"
                                   = "home"
   alias
  alias = "home"
region = local.home_region
tenancy_ocid = var.tenancy_ocid
user_ocid = var.user_id
fingerprint = var.api_fingerprint
private_key_path = var.api_private_key_path
   disable auto retries = var.disable auto retries
}
```

### **Invoke Terraform Scripts**

Use specific commands to invoke the terraform scripts in Oracle WebLogic Server for OKE.

Topics:

- Invoke terraform scripts in an infrastructure
- Update an infrastructure
- Destroy an infrastructure

The following section reference files in the input directory that you need create. Depending on the type of stack (JRF or non-JRF), create the appropriate files in the inputs directory. For information about the input files, see Sample Scripts.

#### To invoke terraform scripts in an infrastructure:

Complete the following steps:

- 1. Go to the directory, where you unzipped the terraform configuration files.
- 2. Initialize the terraform provider plugin:

\$ terraform init

3. Initialize the environment with terraform environment var files:

```
$ source inputs/env vars
```

4. Invoke apply passing all \*.tfvars files as input:



🖓 Tip:

If you do not specify the -var-file, then the defaults in vars.tf will apply.

WebLogic Non-JRF:

\$ terraform apply -var-file=inputs/instance.tfvars

WebLogic JRF with OCI database:

```
$ terraform apply -var-file=inputs/instance.tfvars -var-
file=inputs/oci_db.tfvars
```

WebLogic JRF with ATP database:

```
$ terraform apply -var-file=inputs/instance.tfvars -var-
file=inputs/atp db.tfvars
```

5. Create multiple instances from same solutions:

```
$ terraform apply -var-file=inputs/instance.tfvars -
state=<file name>
```

Where, <file\_name> is the unique directory name or state file name for each stack.

#### To update an infrastructure:

Complete the following steps:

- 1. Update the variables. For the list of variables you can update, see Table 1-1.
- 2. Complete step 1 through step 4 in Invoke terraform scripts.

#### To destroy an infrastructure:

```
$ terraform destroy -var-file=inputs/instance.tfvars
```

#### **Delete the Resources and Stack**



### Variables in Terraform Scripts

The variables you need input to the terraform scripts in Oracle WebLogic Server for OKE.



Note: If you are using a Oracle WebLogic Server for OKE (Release 21.3.2 or earlier), see Terraform Scripts in Oracle WebLogic Server for OKE (Release 21.3.2 or earlier).

The following table lists all the variables in terraform scripts:

| Table 1-1 Va | riables ir | n terraform | scripts |
|--------------|------------|-------------|---------|
|--------------|------------|-------------|---------|

| Variables                                                                                                                                                                    | Туре   | Default Value | Optional | Can be<br>updated? | Description                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------|----------|--------------------|-----------------------------------------------------------------------|
| Authentication<br>Information<br>Note: Use<br>env_vars_tem<br>plate to create<br>env_vars and<br>source it as:<br>source ./<br>env_vars<br>before running<br>terraform init. |        |               |          |                    |                                                                       |
| FingerPrint                                                                                                                                                                  | String | -             | -        | Yes                | Fingerprint of<br>the OCI API<br>private key.                         |
| Path to<br>private key                                                                                                                                                       | String | -             | -        | -                  | Path to the<br>private key that<br>matches the<br>fingerprint.        |
| Tenancy OCID                                                                                                                                                                 | String | -             | -        | -                  | OCID of the<br>tenancy in<br>which you want<br>to perform<br>changes. |
| User OCID                                                                                                                                                                    | String | -             | -        | -                  | OCID of the<br>signed in user.<br>That is, your<br>OCID.              |
| WebLogic<br>Server<br>Variables                                                                                                                                              |        |               |          |                    |                                                                       |
| compartment_<br>ocid                                                                                                                                                         | String | -             | -        | -                  | OCID of the<br>compartment<br>for WebLogic<br>instances.              |
| region                                                                                                                                                                       | String | -             | -        | -                  | Region for provisioning.                                              |



| Variables                                   | Туре    | Default Value                                                  | Optional | Can be<br>updated? | Description                                                                                                                                               |
|---------------------------------------------|---------|----------------------------------------------------------------|----------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| service_name                                | String  | -                                                              | -        | -                  | Prefix for stack<br>resources. The<br>names of all the<br>related<br>compute and<br>network<br>resources<br>begins with the<br>prefix you<br>assign here. |
| ssh_public_k<br>ey                          | String  | -                                                              | -        | -                  | Content of<br>public key for<br>access.                                                                                                                   |
| resource_pre<br>fix                         | String  | -                                                              | -        | -                  | Prefix for stack<br>resources. The<br>names of all the<br>related<br>compute and<br>network<br>resources<br>begins with the<br>prefix you<br>assign here. |
| General                                     |         |                                                                |          |                    |                                                                                                                                                           |
| create_polic<br>ies                         | Boolean | true                                                           | Yes      | -                  | Create policies<br>to read Secrets<br>from Vault and<br>manage ATP<br>database (if<br>applicable).                                                        |
| Container<br>Cluster (OKE)<br>Configuration |         |                                                                |          |                    |                                                                                                                                                           |
| existing_clu<br>ster_id                     | String  | -                                                              | -        | -                  | Existing cluster ID value.                                                                                                                                |
| kubernetes_v<br>ersion                      | String  | Latest<br>Kubernetes<br>version is<br>displayed by<br>default. | Yes      | -                  | Kubernetes<br>version.                                                                                                                                    |



| Variables                   | Туре   | Default Value      | Optional | Can be<br>updated? | Description                                                                                                                                                                                                                                                                                     |
|-----------------------------|--------|--------------------|----------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| non_wls_node<br>_pool_count | String | 1                  |          | Yes                | Count of the<br>non-WebLogic<br>node pool.                                                                                                                                                                                                                                                      |
|                             |        |                    |          |                    | Note: If you<br>update the<br>node pool<br>count, then the<br>node pool is<br>recreated. If<br>you scale the<br>compute<br>instance and<br>the WebLogic<br>server Operator<br>does not<br>connect to the<br>WebLogic<br>server<br>Persistence<br>store, see<br>Scaling<br>Compute<br>Instances. |
| non_wls_node<br>_pool_shape | String | VM.Standard2<br>.1 | -        | Yes                | Shape of the<br>non-WLS node<br>pool.                                                                                                                                                                                                                                                           |
| pods_cidr                   | String | -                  | Yes      | -                  | CIDR value of the OKE pod.                                                                                                                                                                                                                                                                      |
| services_cid<br>r           | String | -                  | Yes      | -                  | CIDR value of the services.                                                                                                                                                                                                                                                                     |
| cluster_name                | String | -                  | -        | -                  | Name of the OKE cluster.                                                                                                                                                                                                                                                                        |
| wls_node_poo<br>l_shape     | String | VM.Standard2<br>.1 | -        | Yes                | Shape of the worker nodes.                                                                                                                                                                                                                                                                      |

| Variables                | Туре    | Default Value | Optional | Can be<br>updated? | Description                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------|---------|---------------|----------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| wls_node_poo<br>l_count  | Number  | 1             | -        | Yes                | Number of<br>nodes in the<br>WebLogic node<br>pool.<br><b>Note:</b> If you<br>update the<br>node pool<br>count, then the<br>node pool is<br>recreated. If<br>you scale the<br>compute<br>instance and<br>the WebLogic<br>server Operator<br>does not<br>connect to the<br>WebLogic<br>server<br>Persistence<br>store, see<br>Scaling<br>Compute<br>Instances. |
| use_encrypti<br>on       | Boolean | false         | -        | -                  | Indicates if you<br>have enabled<br>encryption by<br>using the<br>master<br>encryption key<br>in Vault. If you<br>do not enable<br>this option, the<br>standard block<br>storage<br>encryption is<br>used for etcd<br>read and write<br>and Kubernetes<br>secrets at rest<br>in etcd are not<br>encrypted.                                                    |
| vault_key_oc<br>id       | String  | -             | -        | -                  | Key OCID for<br>Kubernetes<br>secret<br>encryption.                                                                                                                                                                                                                                                                                                           |
| use_existing<br>_cluster | Boolean | false         | -        | -                  | Indicates if you<br>are using an<br>existing cluster.                                                                                                                                                                                                                                                                                                         |

| Table 1-1 (Cont. | Variables in | terraform scripts |
|------------------|--------------|-------------------|
|------------------|--------------|-------------------|



| Variables                                                 | Туре    | Default Value        | Optional | Can be<br>updated? | Description                                                                                                                            |
|-----------------------------------------------------------|---------|----------------------|----------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| enable_publi<br>c_cluster_en<br>dpoint_confi<br>g         | Boolean | false                | -        | -                  | Indicates if you<br>are using a<br>public or private<br>endpoint for the<br>cluster.                                                   |
| Container<br>Cluster (OKE)<br>Administration<br>Instances |         |                      |          |                    |                                                                                                                                        |
| admin_availa<br>bility_domai<br>n                         | String  | -                    | -        | -                  | Name of the<br>availability<br>domain for the<br>administrator<br>instance.                                                            |
| admin_shape                                               | String  | VM.Standard.<br>E2.1 | -        | -                  | Shape for administrator instance.                                                                                                      |
| bastion_shap<br>e                                         | String  | VM.Standard.<br>E2.1 | -        | -                  | Shape for bastion instance.                                                                                                            |
| assign_admin<br>_public_ip                                | Boolean | false                | -        | -                  | Indicates the<br>admin host<br>have a public<br>IP.                                                                                    |
| Network<br>Variables                                      |         |                      |          |                    |                                                                                                                                        |
| <pre>network_comp artment_id</pre>                        | String  | -                    | -        | -                  | The network<br>compartment<br>ID.                                                                                                      |
| existing_vcn<br>_id                                       | String  | _                    | -        | -                  | OCID of an<br>existing VCN<br>where you want<br>to create the<br>compute<br>instances,<br>network<br>resources, and<br>load balancers. |
| existing_lb_<br>subnet_id                                 | String  | -                    | -        | -                  | OCID of an<br>existing load<br>balancer<br>subnets.                                                                                    |
| existing_bas<br>tion_subnet_<br>id                        | String  | -                    | -        | -                  | OCID for an existing bastion subnet.                                                                                                   |
| existing_oke<br>_workers_sub<br>net_id                    | String  | -                    | -        | -                  | OCID for an<br>OKE worker<br>node subnet.                                                                                              |



| Variables                               | Туре   | Default Value | Optional | Can be<br>updated? | Description                                                                                                                                     |
|-----------------------------------------|--------|---------------|----------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| existing_oke<br>_endpoint_su<br>bnet_id | String | -             | -        | -                  | OCID for an<br>existing cluster<br>private API<br>endpoint<br>subnet.                                                                           |
| existing_adm in_subnet_id               | String | -             | -        | -                  | OCID for an<br>existing<br>administrator<br>subnet.                                                                                             |
| existing_fss<br>_subnet_id              | String | -             | -        | -                  | OCID for an existing FSS subnet.                                                                                                                |
| existing_nat<br>_gw_id                  | String | -             | Yes      | -                  | OCID for an<br>existing NAT<br>gateway.                                                                                                         |
|                                         |        |               |          |                    | Note: You need<br>to specify either<br>the NAT<br>gateway<br>(existing_na<br>t_gw_id) or<br>service<br>gateway<br>(existing_se<br>rvice_gw_id). |
| existing_ser<br>vice_gw_id              | String | -             | Yes      | -                  | OCID for an existing service gateway.                                                                                                           |
|                                         |        |               |          |                    | Note: You need<br>to specify either<br>the NAT<br>gateway<br>(existing_na<br>t_gw_id) or<br>service<br>gateway<br>(existing_se<br>rvice_gw_id). |

 Table 1-1
 (Cont.) Variables in terraform scripts

| Variables                            | Туре    | Default Value | Optional | Can be<br>updated? | Description                                                                                                                                                                                                                |
|--------------------------------------|---------|---------------|----------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| is_bastion_i<br>nstance_requ<br>ired | Boolean | true          | Yes      | -                  | Creates bastion<br>for the stack.<br>If true, it<br>provisions a<br>bastion<br>compute<br>instance on a<br>public subnet to<br>provide access<br>to the<br>WebLogic<br>server compute<br>instances on a<br>private subnet. |
| vcn_cidr                             | String  | 10.0.0/16     | -        | -                  | CIDR block of the VCN.                                                                                                                                                                                                     |
| lb_subnet_ci<br>dr                   |         |               |          |                    | CIDR of the<br>load balancer<br>subnet.                                                                                                                                                                                    |
| oke_workers_<br>subnet_cidr          |         |               |          |                    | CIDR for an<br>OKE worker<br>node subnet.                                                                                                                                                                                  |
| oke_endpoint<br>_subnet_cidr         |         |               |          |                    | CIDR for an<br>existing cluster<br>private API<br>endpoint<br>subnet.                                                                                                                                                      |
| bastion_subn<br>et_cidr              |         |               |          |                    | CIDR for an<br>existing bastion<br>subnet.                                                                                                                                                                                 |
| admin_subnet<br>_cidr                |         |               |          |                    | CIDR for an<br>existing<br>administrator<br>subnet.                                                                                                                                                                        |
| fss_subnet_c<br>idr                  |         |               |          |                    | CIDR for an<br>existing FSS<br>subnet.                                                                                                                                                                                     |
| Load Balancer<br>Variables           |         |               |          |                    |                                                                                                                                                                                                                            |
| ingress_lb_s<br>hape                 | String  | flexible      | -        | -                  | Shape of the<br>ingress load<br>balancer.                                                                                                                                                                                  |
| ingress_lb_s<br>hape_min             | String  | 10 Mbps       | -        | Yes                | Minimum size<br>of the flexible<br>load balancer<br>shape.                                                                                                                                                                 |
| ingress_lb_s<br>hape_max             | String  | 100 Mbps      | -        | Yes                | MAximum size<br>of the flexible<br>load balancer<br>shape.                                                                                                                                                                 |



| Variables                               | Туре    | Default Value | Optional | Can be<br>updated? | Description                                                                                                                 |
|-----------------------------------------|---------|---------------|----------|--------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Shared File<br>System<br>Variables      |         |               |          |                    |                                                                                                                             |
| fss_availabi<br>lity_domain             | String  | -             | -        | -                  | OCID of the<br>availability<br>domain for<br>Shared File<br>System.                                                         |
| <pre>mountTarget_ id</pre>              | String  | -             | Yes      | -                  | OCID for the mount target.                                                                                                  |
| <pre>mountTarget_ compartment_ id</pre> | String  | -             | Yes      | -                  | OCID of the<br>compartment<br>for the mount<br>target.<br>This variable is<br>required if<br>mountTarget_<br>id is updated. |
| OCIR<br>Variables                       |         |               |          |                    |                                                                                                                             |
| ocir_user                               | String  | -             | -        | -                  | OCIR user name.                                                                                                             |
| ocir_auth_to<br>ken_ocid                | String  | -             | -        | -                  | OCID token for the OCIR user name.                                                                                          |
| ocir_region                             | String  | -             | -        | -                  | The URL to the<br>OCIR.                                                                                                     |
| ocir_custom_<br>image_repo_n<br>ame     | String  | -             | -        | -                  | The OCIR<br>repository to<br>download the<br>existing custom<br>WLS image to<br>create a<br>domain.                         |
| Gateway<br>Variables                    |         |               |          |                    |                                                                                                                             |
| create_nat_g<br>ateway                  | Boolean | true          | -        | -                  | Indicates if you<br>want to create a<br>NAT gateway.                                                                        |
| create_servi<br>ce_gateway              | Boolean | true          |          |                    | Indicates if you<br>want to create a<br>service<br>gateway.                                                                 |
| Security<br>Variables                   |         |               |          |                    |                                                                                                                             |

| Variables                   | Туре    | Default Value | Optional | Can be<br>updated? | Description                                                                                                                                                                |
|-----------------------------|---------|---------------|----------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| allow_node_p<br>ort_access  | Boolean | false         | -        | -                  | Indicates if you<br>want to allow<br>access to<br>NodePorts,<br>when worker<br>nodes are<br>outside the<br>access zone<br>(only applicable<br>for public<br>worker nodes). |
| allow_worker<br>_ssh_access | Boolean | true          | -        | -                  | Indicates if you<br>want to allow<br>SSH access to<br>worker nodes,<br>for worker<br>nodes in<br>instances in the<br>same VCN.                                             |
| Verrazzano<br>Variables     |         |               |          |                    |                                                                                                                                                                            |
| vz_enabled                  | Boolean | false         | Yes      | -                  | Indicates if you<br>have enabled<br>Verrazzano<br>integration.                                                                                                             |
| vz_profile                  | String  | prod          | -        | -                  | The<br>deployment<br>profile for<br>Verrazzano.                                                                                                                            |
| vz_env_name                 | String  |               | -        | -                  | Name of the<br>Verrazzano<br>installation.<br>This name is<br>part of the<br>generated<br>endpoint<br>access URLs.                                                         |
| vz_customize<br>_dns        | Boolean | false         | -        | -                  | Indicates if you<br>have enabled to<br>customize DNS<br>configurations<br>for Verrazzano<br>system and<br>application<br>endpoints.                                        |



| Variables                                    | Туре    | Default Value                   | Optional | Can be<br>updated? | Description                                                                                                                 |
|----------------------------------------------|---------|---------------------------------|----------|--------------------|-----------------------------------------------------------------------------------------------------------------------------|
| vz_customize<br>_certificate<br>s            | Boolean | false                           | -        | -                  | Indicates if you<br>have enabled to<br>customize SSL<br>certificate<br>generation for<br>Verrazzano<br>system<br>endpoints. |
| vz_customize<br>_elastic_sea<br>rch          | Boolean | false                           | -        | -                  | Indicates if you<br>have enabled to<br>customize<br>Elastic Search.                                                         |
| vz_customize<br>_persistent_<br>storage      | Boolean | false                           | -        | -                  | Indicates if you<br>have enabled to<br>customize<br>Persistent<br>Volumes.                                                  |
| vz_dns_type                                  | String  | Wildcard                        | -        | -                  | The DNS type.                                                                                                               |
| vz_wild_card<br>_dns_type                    | String  | nip.io                          | -        | -                  | The DNS<br>Wildcard type.                                                                                                   |
| vz_dns_zone_<br>compartment_<br>ocid         | String  | -                               | -        | -                  | The OCI DNS<br>Zone<br>compartment<br>ID.                                                                                   |
| vz_dns_zone_<br>ocid                         | String  | -                               | -        | -                  | The OCI DNS<br>Zone OCID.                                                                                                   |
| vz_certifica<br>te_type                      | String  | Verrazzano<br>self-signed<br>CA | -        | -                  | The certificate type.                                                                                                       |
| vz_custom_ca<br>_signing_key<br>_secret_ocid | String  | -                               | -        | -                  | The custom CA<br>signing key<br>secret OCID.                                                                                |
| vz_custom_ca<br>_cert_secret<br>_ocid        | String  | -                               | -        | -                  | The custom CA<br>Cert secret<br>OCID                                                                                        |
| vz_letsencry<br>pt_email                     | String  | -                               | -        | -                  | The email ID for<br>LetsEncrypt.                                                                                            |
| vz_letsencry<br>pt_env                       | String  | production                      | -        | -                  | The<br>LetsEncrypt<br>environment<br>type.                                                                                  |
| vz_is_system<br>_lb_private                  | Boolean | true                            | -        | -                  | The system<br>load balancer<br>visibility type.                                                                             |
| vz_system_lb<br>_shape                       | String  | flexible                        | -        | -                  | The shape of<br>the system load<br>balancer.                                                                                |



| Variables                               | Туре    | Default Value | Optional | Can be<br>updated? | Description                                                                  |
|-----------------------------------------|---------|---------------|----------|--------------------|------------------------------------------------------------------------------|
| vz_system_lb<br>_min_bandwid<br>th      | Number  | 10            |          |                    | The minimum<br>bandwidth of<br>the system load<br>balancer.                  |
| vz_system_lb<br>_max_bandwid<br>th      | Number  | 10            | -        | -                  | The maximum<br>bandwidth of<br>the system load<br>balancer.                  |
| vz_is_app_lb<br>_private                | Boolean | false         | -        | -                  | The application<br>load balancer<br>visibility type                          |
| vz_app_lb_sh<br>ape                     | String  | flexible      | -        | -                  | The shape of the application load balancer.                                  |
| vz_app_lb_mi<br>n_bandwidth             | Number  | 10            | -        | -                  | The minimum<br>bandwidth of<br>the application<br>load balancer.             |
| vz_app_lb_ma<br>x_bandwidth             | Number  | 100           | -        | -                  | The maximum<br>bandwidth of<br>the application<br>load balancer.             |
| vz_es_master<br>_node_replic<br>a_count | Number  | 3             | -        | -                  | The number of master node replicas.                                          |
| vz_es_master<br>_node_memory            | Number  | 1.4           | -        | -                  | The master<br>node memory<br>in GB.                                          |
| vz_es_ingest<br>_node_replic<br>a_count | Number  | 1             | -        | -                  | The number of<br>ingest node<br>replicas.                                    |
| vz_es_ingest<br>_node_memory            | Number  | 2.5           | -        | -                  | The Ingest<br>node memory<br>in GB.                                          |
| vz_es_data_r<br>eplica_count            | Number  | 2             | -        | -                  | The number of data replicas.                                                 |
| vz_es_data_r<br>eplica_memor<br>Y       | Number  | 4.8           | -        | -                  | The data<br>replicate<br>memory in GB.                                       |
| vz_es_storag<br>e_size                  | Number  | 50            | -        | -                  | The storage capacity in GB.                                                  |
| vz_ephemeral<br>_storage                | Boolean | false         | -        | -                  | Use Ephemeral<br>Storage for Dev<br>profiles only.                           |
| vz_ps_capaci<br>ty_global               | Number  | 50            | -        | -                  | The persistent<br>volume storage<br>capacity for all<br>components in<br>GB. |

| Table 1-1 | (Cont.) | Variables | in terraform | scripts |
|-----------|---------|-----------|--------------|---------|
|-----------|---------|-----------|--------------|---------|



| Variables                   | Туре   | Default Value      | Optional | Can be<br>updated? | Description                                                         |
|-----------------------------|--------|--------------------|----------|--------------------|---------------------------------------------------------------------|
| vz_ps_capaci<br>ty_keycloak | Number | 50                 | -        | -                  | The persistent<br>volume storage<br>capacity for<br>Keycloak in GB. |
| vz_node_pool<br>_shape      | String | VM.Standard2<br>.4 | -        | -                  | The shape of worker nodes.                                          |
| vz_node_pool<br>_count      | Number | 3                  | -        | -                  | The number of<br>nodes in the<br>Verrazzano<br>node pool.           |

#### Note:

Support for existing bastion host to be used in provisioning WebLogic server with private subnet is enabled in terraform CLI only. This can be achieved by using the variables: <code>is\_bastion\_instance\_required</code>,

existing bastion\_instance\_id, and bastion\_ssh\_private\_key. For existing WebLogic server subnet, you will need to open port 22 for bastion IP/subnet CIDR. For a new WebLogic server subnet we create security list with bastion private IP.

### Sample Scripts

Following are a few sample scripts in Oracle WebLogic Server for OKE.

Following is a sample script for file: **env\_vars**:

```
# Use this template to create a file env_vars and source it before
running terraform.
### Authentication details
export TF_VAR_tenancy_ocid="<tenancy_ocid>"
export TF_VAR_user_ocid="<user_ocid>"
export TF_VAR_api_fingerprint="<fingerprint>"
export TF_VAR_api_fingerprint="<fingerprint>"
export TF_VAR_api_private key path="/home/<path>/.oci/oci api key.pem"
```

Following is a sample script for file: oci\_db.tfvars. Use this file to provision WLSC with OCI database, along with instance.tfvars.

```
#DB VCN ID
ocidb_existing_vcn_id = "<VCN OCID>"
```

```
#DB Compartment
ocidb_compartment_id = "<Compartment OCID>"
```

#DB System



```
ocidb_dbsystem_id ="<OCID>"
#Database
ocidb_database_id = "<OCID>"
#PDB Name
ocidb_pdb_service_name = "PDB1"
#Provide DB user creds.
```

```
oci_db_user = "sys"
oci_db_password_ocid = "<OCID>"
```

Following is a sample script for file: atp\_db.tfvars. Use this file to provision WLSC with ATP database, along with instance.tfvars.

```
atp_db_level = "low"
atp_db_id = "<OCID>"
atp_db_compartment_id="<OCID>"
atp_db_password_ocid="<password>"
```

#### Following is a sample script with all variables: instance.tfvars:

```
# Copyright 2019, 2020, Oracle Corporation and/or affiliates. All rights
reserved.
# Identity and access parameters
#Compartment for resources- MyCompartmentWLSC
compartment ocid = "<Compartment OCID>"
#Network compartment -OCID HERE is for Networks compartment
network compartment id = "<Network Compartment OCID>"
region = "<region>"
# ssh keys
ssh public key = "<ssh public key>"
# general oci parameters
resource prefix = "<prefix>"
/*
is idcs selected = "false"
idcs host = "<IDCS host>"
idcs port = "443"
idcs tenant = "<IDCS Tenant>"
idcs client id = "<IDCS Client ID>"
# Secret Plain value: <Value>
idcs client secret ocid = "<IDCS Client Secret OCID>"
idcs cloudgate port = "9999"
*/
```

```
# networking
```



```
vcn cidr = "<CIDR>"
# admin
admin shape = "VM.Standard2.1"
#MDS Image below
admin image id="<Admin Image OCID>"
# which AD where to place non-OKE resources
admin availability domain=""
#depends on the subnet type
assign admin public ip = false
# oke
cluster name = "oke-cluster"
#public/private subnet flag
worker mode = "private"
allow node port access = false
allow worker ssh access = false
dashboard_enabled = true
kubernetes version = "v1.17.9"
pods cidr = "<CIDR>"
services cidr = "<CIDR>"
# ocir
ocir region="phx"
ocir user="<firstname.lastname@email.com>"
ocir auth token ocid="<OCID>"
#fss parameters- for existing-mount-ad-2
fss availability domain="<FSS Domain>"
#ingress
ingress lb shape="flexible"
ingress lb shape min="10Mbps"
ingress lb shape max="100Mbps"
#workaround to provision all nodes in single AD
node pool single ad="<AD>"
#If use encryption flag is true, then the vault key is used for OKE
encryption
vault key ocid="<OCID>"
#Optional
#use existing network -oke-vcn
existing vcn id ="<OCID>"
existing lb subnet id ="<OCID>"
existing bastion subnet id ="<OCID>"
```

existing oke workers subnet id ="<OCID>"



```
existing_admin_subnet_id="<OCID>"
existing_fss_subnet_id="<OCID>"
existing_service_gw_id="<OCID>"
existing_oke_endpoint_subnet_id="<OCID>"
```

#existing-mount-ad-2- for WLSOnOke compartment
mountTarget\_id="<OCID>"
mountTarget\_compartment\_id="<OCID>"
existing\_cluster\_id=""

