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# **OpenStack-Ansible Documentation:**

## **os\_designate role**

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**OpenStack-Ansible Contributors**

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This Ansible role installs and configures OpenStack Designate.

**This role will install the following services:**

- designate-api
- designate-central
- designate-worker
- designate-producer
- designate-mdns
- designate-sink

The DNS servers Designate will interface with can be defined in the `designate_pools_yaml` variable. This is eventually written to the Designate `pools.yaml` file.

To clone or view the source code for this repository, visit the role repository for [os\\_designate](#).



## DEFAULT VARIABLES

```
## Verbosity Options
debug: False

# Enable/Disable Ceilometer
designate_ceilometer_enabled: False

# Set the host which will execute the shade modules
# for the service setup. The host must already have
# clouds.yaml properly configured.
designate_service_setup_host: "{{ openstack_service_setup_host | default(
  ↳'localhost') }}"
designate_service_setup_host_python_interpreter: "{{ openstack_service_
  ↳setup_host_python_interpreter | default((designate_service_setup_host ==
  ↳'localhost') | ternary(ansible_playbook_python, ansible_python[
  ↳'executable']))) }}"

# Set the package install state for distribution packages
# Options are 'present' and 'latest'
designate_package_state: "latest"
designate_pip_package_state: "latest"

# Set installation method.
designate_install_method: "source"
designate_venv_python_executable: "{{ openstack_venv_python_executable |
  ↳default('python2') }}"

## The git source/branch
designate_git_repo: https://opendev.org/openstack/designate
designate_git_install_branch: master
designate_upper_constraints_url: "{{ requirements_git_url | default(
  ↳'https://releases.openstack.org/constraints/upper/' ~ requirements_git_
  ↳install_branch | default('master')) }}"
designate_git_constraints:
  - "git+{{ designate_git_repo }}@{{ designate_git_install_branch }}"
  ↳#egg=designate"
  - "--constraint {{ designate_upper_constraints_url }}"

designate_pip_install_args: "{{ pip_install_options | default('') }}"

# Name of the virtual env to deploy into
designate_venv_tag: "{{ venv_tag | default('untagged') }}"
designate_bin: "{{ _designate_bin }}"
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# Set the etc dir path where designate is installed.
# This is used for role access to the db migrations.
# Example:
# designate_etc_dir: "/usr/local/etc/designate"
designate_etc_dir: "{{ _designate_etc }}/designate"

## System info
designate_system_user_name: designate
designate_system_group_name: designate
designate_system_shell: /bin/false
designate_system_comment: designate system user
designate_system_user_home: "/var/lib/{{ designate_system_user_name }}"

## Database info
designate_db_setup_host: "{{ openstack_db_setup_host | default('localhost
→') }}"
designate_db_setup_python_interpreter: "{{ openstack_db_setup_python_
→interpreter | default((designate_db_setup_host == 'localhost') |
→ternary(ansible_playbook_python, ansible_python['executable'])) }}"
designate_galera_address: "{{ galera_address | default('127.0.0.1') }}"
designate_galera_user: designate
designate_galera_database: designate
designate_galera_use_ssl: "{{ galera_use_ssl | default(False) }}"
designate_galera_ssl_ca_cert: "{{ galera_ssl_ca_cert | default('/etc/ssl/
→certs/galera-ca.pem') }}"
designate_galera_port: 3306

## Oslo Messaging
# RPC
designate_oslomsg_rpc_host_group: "{{ oslomsg_rpc_host_group | default(
→'rabbitmq_all') }}"
designate_oslomsg_rpc_setup_host: "{{ (designate_oslomsg_rpc_host_group in
→groups) | ternary(groups[designate_oslomsg_rpc_host_group][0], 'localhost
→') }}"
designate_oslomsg_rpc_transport: "{{ oslomsg_rpc_transport | default(
→'rabbit') }}"
designate_oslomsg_rpc_servers: "{{ oslomsg_rpc_servers | default('127.0.0.1
→') }}"
designate_oslomsg_rpc_port: "{{ oslomsg_rpc_port | default('5672') }}"
designate_oslomsg_rpc_use_ssl: "{{ oslomsg_rpc_use_ssl | default(False) }}"
designate_oslomsg_rpc_userid: designate-rpc
designate_oslomsg_rpc_vhost: /designate

# Notify
designate_oslomsg_notify_host_group: "{{ oslomsg_notify_host_group |
→default('rabbitmq_all') }}"
designate_oslomsg_notify_setup_host: "{{ (designate_oslomsg_notify_host_
→group in groups) | ternary(groups[designate_oslomsg_notify_host_
→group][0], 'localhost') }}"
designate_oslomsg_notify_transport: "{{ oslomsg_notify_transport | default(
→'rabbit') }}"
designate_oslomsg_notify_servers: "{{ oslomsg_notify_servers | default(
→'127.0.0.1') }}"
designate_oslomsg_notify_port: "{{ oslomsg_notify_port | default('5672') }}"
→"
designate_oslomsg_notify_use_ssl: "{{ oslomsg_notify_use_ssl |
→default(False) }}"

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designate_oslmsg_notify_userid: "{{ designate_oslmsg_rpc_userid }}"
designate_oslmsg_notify_password: "{{ designate_oslmsg_rpc_password }}"
designate_oslmsg_notify_vhost: "{{ designate_oslmsg_rpc_vhost }}"

## (Qdrouterd) info
# TODO(ansmith): Change structure when more backends will be supported
designate_oslmsg_amqp1_enabled: "{{ designate_oslmsg_rpc_transport ==
  ↳ 'amqp' }}"

## Pool Configuration Defaults
designate_pool_uuid: 794ccc2c-d751-44fe-b57f-8894c9f5c842

# Designate services info
designate_role_name: admin

## DNS Backend Configuration
# Configuration for the DNS backend that Designate will talk to, Designate
# supports lots of backends, bind9, powerdns, nsd, djbdns, dyn, akamai, etc.
# DNS Backends are configured via a YAML file that Designate reads. The
  ↳ DNS
# server need not be in the actual Designate container, but for
  ↳ development,
# or for some internal addressing use cases, it may make sense.

# YAML to use for the Designate pools.yaml file. If this variable is
  ↳ defined,
# a pools.yaml file will be written to /etc/designate/pools.yaml with the
# provided YAML data.
#
# This is some example pools.yaml information that will work with a
# simple bind9 installation in the same container as Designate.
# designate_pools_yaml:
#   - name: "default"
#     description: Default BIND9 Pool
#     attributes: {}
#     ns_records:
#       - hostname: ns1.example.org.
#         priority: 1
#     nameservers:
#       - host: 127.0.0.1
#         port: 53
#     targets:
#       - type: bind9
#         description: BIND9 Server
#         masters:
#           - host: 127.0.0.1
#             port: 5354
#         options:
#           host: 127.0.0.1
#           port: 53
#           rndc_host: 127.0.0.1
#           rndc_port: 953

## rndc keys for authenticating with bind9
# define this to create as many key files as are required
# designate_rndc_keys
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# - name: "rndc-key"
#   file: /etc/designate/rndc.key
#   algorithm: "hmac-md5"
#   secret: "<key>"

# Owner of all managed resources - like auto-created records etc.
designate_managed_resource_project_name: "{{ designate_service_project_
  ↳name }}"

## Service Type and Data
designate_service_region: RegionOne
designate_service_endpoint_type: internalURL
designate_service_name: designate
designate_bind_address: "{{ openstack_service_bind_address | default('0.0.
  ↳0.0') }}"
designate_service_port: 9001
designate_service_proto: http
designate_service_type: dns
designate_service_description: "Designate DNS as a Service"
designate_service_project_domain_id: default
designate_service_user_domain_id: default
designate_service_user_name: designate
designate_keystone_auth_type: password
designate_service_project_name: service

designate_service_publicuri_proto: "{{ openstack_service_publicuri_proto |
  ↳default(designate_service_proto) }}"
designate_service_internaluri_proto: "{{ openstack_service_internaluri_
  ↳proto | default(designate_service_proto) }}"
designate_service_adminuri_proto: "{{ openstack_service_adminuri_proto |
  ↳default(designate_service_proto) }}"

designate_service_publicuri: "{{ designate_service_publicuri_proto }}://{{
  ↳external_lb_vip_address }}:{{ designate_service_port }}"
designate_service_internaluri: "{{ designate_service_internaluri_proto }}:/
  ↳/{{ internal_lb_vip_address }}:{{ designate_service_port }}"
designate_service_adminuri: "{{ designate_service_adminuri_proto }}://{{
  ↳internal_lb_vip_address }}:{{ designate_service_port }}"

designate_service_in_ldap: False

# memcache override
designate_memcached_servers: "{{ memcached_servers }}"

# Common pip packages
designate_pip_packages:
- cryptography
- designate
- osprofiler
- python-designateclient
- PyMySQL
- pymemcache
- python-memcached
- systemd-python
- warlock
designate_user_pip_packages: []

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```
designate_optional_oslmsg_amqp1_pip_packages:
  - oslo.messaging[amqp1]

designate_central_init_overrides: {}
designate_worker_init_overrides: {}
designate_producer_init_overrides: {}
designate_mdns_init_overrides: {}
designate_sink_init_overrides: {}
designate_api_init_overrides: {}

## Service Name-Group Mapping
designate_services:
  designate-central:
    group: designate_central
    service_name: designate-central
    init_config_overrides: "{{ designate_central_init_overrides }}"
    execstarts: "{{ designate_bin }}/designate-central"
    start_order: 3
  designate-worker:
    group: designate_worker
    service_name: designate-worker
    init_config_overrides: "{{ designate_worker_init_overrides }}"
    execstarts: "{{ designate_bin }}/designate-worker"
    start_order: 2
  designate-producer:
    group: designate_producer
    service_name: designate-producer
    init_config_overrides: "{{ designate_producer_init_overrides }}"
    execstarts: "{{ designate_bin }}/designate-producer"
    start_order: 5
  designate-mdns:
    group: designate_mdns
    service_name: designate-mdns
    init_config_overrides: "{{ designate_mdns_init_overrides }}"
    execstarts: "{{ designate_bin }}/designate-mdns"
    start_order: 4
  designate-sink:
    group: designate_sink
    service_name: designate-sink
    init_config_overrides: "{{ designate_sink_init_overrides }}"
    execstarts: "{{ designate_bin }}/designate-sink"
    start_order: 6
  designate-api:
    group: designate_api
    service_name: designate-api
    init_config_overrides: "{{ designate_api_init_overrides }}"
    execstarts: "{{ designate_bin }}/designate-api"
    start_order: 1

## Tunable overrides
designate_policy_overrides: {}
designate_designate_conf_overrides: {}
designate_api_paste_ini_overrides: {}
designate_rootwrap_conf_overrides: {}
```



## DEPENDENCIES

This role needs pip  $\geq 7.1$  installed on the target host.

This role needs the following variables defined:

```
designate_galera_address  
designate_galera_password  
designate_service_password  
designate_oslmsg_rpc_password  
designate_oslmsg_notify_password
```



## EXAMPLE PLAYBOOK

```
---
- name: Install Designate Server
  hosts: designate_all
  user: root
  roles:
    - { role: "os_designate", tags: [ "os-designate" ] }
  vars:
    external_lb_vip_address: 172.16.24.1
    internal_lb_vip_address: 192.168.0.1
    designate_galera_address: "{{ internal_lb_vip_address }}"
    designate_galera_password: "SuperSecretePassword1"
    designate_service_password: "SuperSecretePassword3"
    designate_oslmsg_rpc_password: "SuperSecretePassword4"
```





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**TAGS**

This role supports two tags: `designate-install` and `designate-config`. The `designate-install` tag can be used to install and upgrade. The `designate-config` tag can be used to maintain configuration of the service.