

---

# **OpenStack-Ansible Documentation:**

## **os\_mistral role**

*Release 0.1.0.dev113*

**OpenStack-Ansible Contributors**

**Mar 28, 2024**



## CONTENTS

<b>1</b>	<b>Default variables</b>	<b>3</b>
<b>2</b>	<b>Example playbook</b>	<b>9</b>
<b>3</b>	<b>External Restart Hooks</b>	<b>11</b>
<b>4</b>	<b>Tags</b>	<b>13</b>



This role installs the following Systemd services:

- mistral-api
- mistral-engine
- mistral-executor
- mistral-notifier

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



## DEFAULT VARIABLES

```
# Installation method
mistral_install_method: "{{ service_install_method | default('source') }}"
mistral_venv_python_executable: "{{ openstack_venv_python_executable |
↳default('python3') }}"

# Operating system user & groups
mistral_system_user_name: mistral
mistral_system_group_name: mistral
mistral_system_shell: /sbin/nologin
mistral_system_comment: Mistral Daemons
mistral_system_user_home: /var/lib/mistral

# Distribution deployment
mistral_package_state: "{{ package_state | default('latest') }}"

# Source package builds
mistral_git_repo: https://opendev.org/openstack/mistral
mistral_git_install_branch: master
mistral_extra_git_repo: https://opendev.org/openstack/mistral-extra
mistral_extra_git_install_branch: master
mistral_upper_constraints_url: "{{ requirements_git_url | default('https://
↳releases.openstack.org/constraints/upper/' ~ requirements_git_install_
↳branch | default('master')) }}"
mistral_git_constraints:
  - "--constraint {{ mistral_upper_constraints_url }}"
mistral_pip_packages:
  - "git+{{ mistral_git_repo }}@{{ mistral_git_install_branch }}#egg=mistral"
  - "git+{{ mistral_extra_git_repo }}@{{ mistral_extra_git_install_branch }}
↳#egg=mistral-extra"
  - PyMySQL
  - pymemcache
  - python-memcached
  - systemd-python

mistral_optional_oslomsg_amqp1_pip_packages:
  - oslo.messaging[amqp1]
mistral_venv_tag: "{{ venv_tag | default('untagged') }}"
mistral_bin: "{{ _mistral_bin }}"
```

(continues on next page)

(continued from previous page)

```

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

mistral_memcached_servers: "{{ memcached_servers }}"

# Services
mistral_services:
  mistral-notifier:
    group: mistral_notifier
    service_name: mistral-notifier
    init_config_overrides: "{{ mistral_notifier_init_overrides }}"
    start_order: 1
    execstarts: "{{ _mistral_bin }}/mistral-server --server notifier"
  mistral-executor:
    group: mistral_executor
    service_name: mistral-executor
    init_config_overrides: "{{ mistral_executor_init_overrides }}"
    start_order: 1
    execstarts: "{{ _mistral_bin }}/mistral-server --server executor"
  mistral-engine:
    group: mistral_engine
    service_name: mistral-engine
    init_config_overrides: "{{ mistral_engine_init_overrides }}"
    start_order: 1
    execstarts: "{{ _mistral_bin }}/mistral-server --server engine"
  mistral-api:
    group: mistral_api
    service_name: mistral-api
    init_config_overrides: "{{ mistral_api_init_overrides }}"
    start_order: 2
    wsgi_app: true
    wsgi_name: mistral-wsgi-api
    uwsgi_overrides: "{{ mistral_api_uwsgi_ini_overrides }}"
    uwsgi_bind_address: "{{ mistral_bind_address }}"
    uwsgi_port: "{{ mistral_service_port }}"

# UWSGI settings
mistral_wsgi_processes_max: 16
mistral_wsgi_processes: "{{ [(ansible_facts['processor_vcpus']//ansible_
↪facts['processor_threads_per_core'])|default(1), 1] | max * 2, mistral_wsgi_
↪processes_max] | min }}"
mistral_wsgi_threads: 1

# RPC
mistral_oslmsg_rpc_host_group: "{{ oslmsg_rpc_host_group | default(
↪'rabbitmq_all') }}"
mistral_oslmsg_rpc_setup_host: "{{ (mistral_oslmsg_rpc_host_group in_
↪groups) | ternary(groups[mistral_oslmsg_rpc_host_group][0], 'localhost') }}"
↪"

```

(continues on next page)



(continued from previous page)

```

mistral_oslomsg_rpc_transport: "{{ oslomsg_rpc_transport | default('rabbit') }}
↪}"
mistral_oslomsg_rpc_servers: "{{ oslomsg_rpc_servers | default('127.0.0.1') }}"
↪"
mistral_oslomsg_rpc_port: "{{ oslomsg_rpc_port | default('5672') }}"
mistral_oslomsg_rpc_use_ssl: "{{ oslomsg_rpc_use_ssl | default(False) }}"
mistral_oslomsg_rpc_userid: mistral
mistral_oslomsg_rpc_vhost: /mistral
mistral_oslomsg_rpc_ssl_version: "{{ oslomsg_rpc_ssl_version | default('TLSv1_
↪2') }}"
mistral_oslomsg_rpc_ssl_ca_file: "{{ oslomsg_rpc_ssl_ca_file | default('') }}"

# Notify
mistral_oslomsg_notify_host_group: "{{ oslomsg_notify_host_group | default(
↪'rabbitmq_all') }}"
mistral_oslomsg_notify_setup_host: "{{ (mistral_oslomsg_notify_host_group in_
↪groups) | ternary(groups[mistral_oslomsg_notify_host_group][0], 'localhost
↪') }}"
mistral_oslomsg_notify_transport: "{{ oslomsg_notify_transport | default(
↪'rabbit') }}"
mistral_oslomsg_notify_servers: "{{ oslomsg_notify_servers | default('127.0.0.
↪1') }}"
mistral_oslomsg_notify_port: "{{ oslomsg_notify_port | default('5672') }}"
mistral_oslomsg_notify_use_ssl: "{{ oslomsg_notify_use_ssl | default(False) }}"
↪"
mistral_oslomsg_notify_userid: "{{ mistral_oslomsg_rpc_userid }}"
mistral_oslomsg_notify_password: "{{ mistral_oslomsg_rpc_password }}"
mistral_oslomsg_notify_vhost: "{{ mistral_oslomsg_rpc_vhost }}"
mistral_oslomsg_notify_ssl_version: "{{ oslomsg_notify_ssl_version | default(
↪'TLSv1_2') }}"
mistral_oslomsg_notify_ssl_ca_file: "{{ oslomsg_notify_ssl_ca_file | default(
↪') }}"

# (Qdrouterd) integration
mistral_oslomsg_amqp1_enabled: "{{ mistral_oslomsg_rpc_transport == 'amqp' }}"

# Database
mistral_db_setup_host: "{{ openstack_db_setup_host | default('localhost') }}"
mistral_db_setup_python_interpreter: "{{ openstack_db_setup_python_
↪interpreter | default((mistral_db_setup_host == 'localhost') |_
↪ternary(ansible_playbook_python, ansible_facts['python']['executable'])) }}"
mistral_galera_address: "{{ galera_address | default('127.0.0.1') }}"
mistral_galera_database: mistral
mistral_galera_user: mistral
mistral_galera_use_ssl: "{{ galera_use_ssl | default(False) }}"
mistral_galera_ssl_ca_cert: "{{ galera_ssl_ca_cert | default('') }}"
mistral_galera_port: "{{ galera_port | default('3306') }}"
mistral_db_max_overflow: "{{ openstack_db_max_overflow | default('50') }}"
mistral_db_max_pool_size: "{{ openstack_db_max_pool_size | default('5') }}"

```

(continues on next page)

(continued from previous page)

```

mistral_db_pool_timeout: "{{ openstack_db_pool_timeout | default('30') }}"
mistral_db_connection_recycle_time: "{{ openstack_db_connection_recycle_time |
  default('600') }}"

# Configuration options
mistral_debug: "{{ debug | default(false) }}"
mistral_bind_address: "{{ openstack_service_bind_address | default('0.0.0.0') |
  default }}"
mistral_service_port: 8989

# Overrides
mistral_notifier_init_overrides: {}
mistral_executor_init_overrides: {}
mistral_engine_init_overrides: {}
mistral_api_init_overrides: {}
mistral_api_uwsgi_ini_overrides: {}
mistral_mistral_conf_overrides: {}
mistral_policy_overrides: {}

# Service setup
mistral_service_setup_host: "{{ openstack_service_setup_host | default(
  'localhost') }}"
mistral_service_setup_host_python_interpreter: "{{ openstack_service_setup_
  host_python_interpreter | default((mistral_service_setup_host == 'localhost'
  ) | ternary(ansible_playbook_python, ansible_facts['python']['executable']
  )) }}"
mistral_service_name: mistral
mistral_service_type: workflowv2
mistral_service_description: OpenStack Workflow service
mistral_service_in_ldap: "{{ service_ldap_backend_enabled | default(False) }}"
mistral_service_user_domain_id: default
mistral_service_user_name: mistral
mistral_service_project_domain_id: default
mistral_service_project_name: service
mistral_role_name: admin
mistral_service_region: "{{ service_region | default('RegionOne') }}"
mistral_service_proto: http
mistral_service_publicuri_proto: "{{ openstack_service_publicuri_proto |
  default(mistral_service_proto) }}"
mistral_service_publicurl: "{{ mistral_service_publicuri_proto }}://{{
  external_lb_vip_address }}:{{ mistral_service_port }}/v2"
mistral_service_internaluri_proto: "{{ openstack_service_internaluri_proto |
  default(mistral_service_proto) }}"
mistral_service_internalurl: "{{ mistral_service_internaluri_proto }}://{{
  internal_lb_vip_address }}:{{ mistral_service_port }}/v2"
mistral_service_adminuri_proto: "{{ openstack_service_adminuri_proto |
  default(mistral_service_proto) }}"
mistral_service_adminurl: "{{ mistral_service_adminuri_proto }}://{{ internal_
  lb_vip_address }}:{{ mistral_service_port }}/v2"

```

(continues on next page)

(continued from previous page)

```
# Specific pip packages provided by the user
mistral_user_pip_packages: []
```



## EXAMPLE PLAYBOOK

```
---  
- name: Install mistral server  
  hosts: mistral_all  
  user: root  
  roles:  
    - { role: "os_mistral", tags: [ "os-mistral" ] }
```



## EXTERNAL RESTART HOOKS

When the role performs a restart of the service, it will notify an Ansible handler named `Manage LB`, which is a noop within this role. In the playbook, other roles may be loaded before and after this role which will implement Ansible handler listeners for `Manage LB`, allowing external roles to manage the load balancer endpoints responsible for sending traffic to the servers being restarted by marking them in maintenance or active mode, draining sessions, etc. For an example implementation, please reference the [ansible-haproxy-endpoints](#) role used by the `openstack-ansible` project.





---

**CHAPTER  
FOUR**

---

**TAGS**

This role supports two tags: `mistral-install` and `mistral-config`. The `mistral-install` tag can be used to install and upgrade. The `mistral-config` tag can be used to manage configuration.