Appendix - quantum.conf

The Quantum service, plugins and agents make use of a common configuration file called quantum.conf. After installation this file is found in the directory '/etc/quantum'.

This section lists all of the possible values that can be configured. In order to make it a bit easier to follow and understand the configuration flags are grouped together under various titles. The general configuration values are stored under the section [DEFAULT].

Common configuration entries for debugging

Entry	Default	Description
debug	False	Print debugging output
verbose	False	Print more verbose output

Common configuration entries for logging

Entry	Default	Description
log_config		If this option is specified, the logging configuration file specified is used and overrides any other logging options specified. Please see the Python logging module documentation for details on logging configuration files.
log_format	%(asctime)s %(levelname)8s [%(name)s] %(message)s	A logging.Formatter log message format string which may use any of the available logging.LogRecord attributes.
log_date_format	%Y-%m-%d %H:%M:%S	Format string for %(asctime)s in log records.
log_file		(Optional) Name of log file to output to.
log_dir		(Optional) The directory to keep log files in (will be prepended to --logfile)
use_syslog	False	Use syslog for logging.

syslog_log_facility	LOG_USER	syslog facility to receive log lines

Configuration entries for the Web Service

Entry	Default	Description
bind_host	0.0.0.0	Server listening IP.
bind_port	9696	Server listening port.
api_paste_config	api-paste.ini	The paste configuration file. This is used to configure the WSGI application.
api_extensions_path		Enables custom addition to be made to the above configuration.
policy_file	policy.json	JSON file representing policies to access and view data. The usage and format is discussed in more detail in the Authentication and Authorization section.
auth_strategy	keystone	The strategy used for authentication. The supported values are ‘keystone’ and ‘noauth’.
core_plugin	quantum.plugins.sample.SamplePlugin.FakePlugin	The plugin to be loaded by the service.

Base plugin configuration options

Entry	Default	Description
base_mac	fa:16:3e:00:00:00	MAC addresses for a port are generated.The first 3 octets will remain unchanged. If the 4h octet is not 00, it will also used. The others will be randomly generated.
mac_generation_retries	16	The number of times the

		plugin attempts to generate a unique MAC address.
allow_bulk	True	Enable or disable bulk create/update/delete operations.
max_dns_nameservers	5	The maximum amount of DNS nameservers that can be configured per subnet.
max_subnet_host_routes	20	The maximum amount of host routes that can be configured per subnet.
state_path	.	Top level directory for configuration files.
dhcp_lease_duration	120	The default expiration time for a DHCP address.

Common RPC Messaging

Entry	**Default**	**Description**
control_exchange	quantum	AMQP exchange to connect to if using RabbitMQ or QPID
rpc_back_end	quantum.openstack.common.rpc.impl_kombu	The messaging module to use, defaults to kombu. For qpid make use of quantum.openstack.common.rpc.impl_qpid
rpc_thread_pool_size	64	Size of RPC thread pool.
rpc_conn_pool_size	30	Size of RPC connection pool.
rpc_response_timeout	60	Seconds to wait for a response from call or multicall
allowed_rpc_exception_modules	quantum.openstack.common.exception, nova.exception	Modules of exceptions that are permitted to be recreated upon receiving exception data from an rpc call.
fake_rabbit	False	If passed, use a fake

		RabbitMQ provider

Rabbit RPC Configuration

Entry	Default	Description
kombu_ssl_version		SSL version to use (valid only if SSL enabled).
kombu_ssl_keyfile		SSL key file (valid only if SSL enabled)
kombu_ssl_certfile		SSL cert file (valid only if SSL enabled)
kombu_ssl_ca_certs		SSL certification authority file (valid only if SSL enabled)
rabbit_host	localhost	IP address of the RabbitMQ installation
rabbit_password	guest	Password of the RabbitMQ server
rabbit_port	5672	Port where RabbitMQ server is running/listening
rabbit_userid	guest	User ID used for RabbitMQ connections
rabbit_virtual_host	/	Location of a virtual RabbitMQ installation.
rabbit_max_retries	0	Maximum retries with trying to connect to RabbitMQ. (the default of 0 implies an infinite retry count)
rabbit_retry_interval	1	RabbitMQ connection retry interval

QPID RPC Configuration

Entry	Default	Description
qpid_hostname	localhost	Qpid broker hostname

qpid_port	5672	Qpid broker port
qpid_username		Username for qpid connection
qpid_password		Password for qpid connection
qpid_sasl_mechanisms		Space separated list of SASL mechanisms to use for auth
qpid_reconnect	True	Automatically reconnect
qpid_reconnect_timeout	0	Reconnection timeout in seconds
qpid_reconnect_limit	0	Max reconnections before giving up
qpid_reconnect_interval_min	0	Minimum seconds between reconnection attempts
qpid_reconnect_interval_max	0	Maximum seconds between reconnection attempts
qpid_reconnect_interval	0	Equivalent to setting max and min to the same value
qpid_heartbeat	5	Seconds between connection keepalive heartbeats
qpid_protocol	tcp	Transport to use, either 'tcp' or 'ssl'
qpid_tcp_nodelay	True	Disable Nagle algorithm

Notifications

Entry	**Default**	**Description**
notification_driver	quantum.openstack.common.notifier.list_notifier	Driver or drivers to handle sending notifications. The default is set as notifier as the DHCP agent makes use of the notifcations.
default_notification_level	INFO	Default notification level for outgoing notifications

default_publisher_id	$host	Default publisher_id for outgoing notifications
list_notifier_drivers	'quantum.openstack.common .notifier.no_op_notifier'	List of drivers to send notifications
notification_topics	'notifications'	AMQP topic used for openstack notifications

Quotas

Entry	**Default**	**Description**
quota_driver	quantum.quota.ConfDriver	Default driver to use for quota checks. If the default driver is used then the configuration values below are in effect. To limit quotas per tenant then use: quantum.extensions._quotav2_driver.DbQuotaDriver
quota_items	network,subnet,port	Resource names that are supported by the Quotas feature.
default_quota	-1	Default number of resources allowed per tenant, minus for unlimited
quota_network	10	Number of networks allowed per tenant, and minus means unlimited
quota_subnet	10	Number of subnets allowed per tenant, and minus means unlimited
quota_port	50	Number of ports allowed per tenant, and minus means unlimited