# **Categorization of Configuration Parameters in CloudStack**

In this document, CloudStack configuration parameters are listed under the categories they belong to:

## **Agent Performance/Scale**

* agent.lb.enabled
* agent.load.threshold
* direct.agent.load.size
* direct.agent.pool.size
* direct.agent.scan.interval
* direct.agent.thread.cap
* wait
* workers

## **Platform Performance/Scale**

* account.cleanup.interval
* backup.snapshot.wait
* capacity.check.period
* capacity.skipcounting.hours
* check.pod.cidrs
* cluster.heartbeat.interval
* cluster.heartbeat.threshold
* cluster.message.timeout.seconds
* concurrent.snapshots.threshold.perhost
* control.cidr
* control.gateway
* copy.volume.wait
* cpu.overprovisioning.factor
* create.private.template.from.snapshot.wait
* create-private-template-from-volume-wait
* create.volume.from.snapshot.wait
* custom.diskoffering.size.max
* custom.diskoffering.size.min
* data.motion.strategies.exclude
* default.page.size
* detail.batch.query.size
* dhcp.providers.exclude
* event.purge.delay
* event.purge.interval
* execute.in.sequence.hypervisor.commands
* execute.in.sequence.network.element.commands
* expunge.delay
* expunge.interval
* expunge.workers
* healthcheck.update.interval
* host
* host.capacityType.to.order.clusters
* host.reservation.release.period
* host.retry
* host.stats.interval
* investigate.retry.interval
* job.cancel.threshold.minutes
* job.expire.minutes
* ping.interval
* ping.timeout
* resource.discoverers.exclude
* resourcecount.check.interval
* task.cleanup.retry.interval

## **High Availability**

* ha.fence.builders.exclude
* ha.investigators.exclude
* ha.investigators.order
* ha.planners.exclude
* ha.tag
* ha.workers

## **Planner/Placement Configuration**

* affinity.processors.exclude
* affinity.processors.order
* apply.allocation.algorithm.to.pods
* deployment.planners.exclude
* deployment.planners.order
* host.allocators.exclude
* restart.retry.interval
* start.retry
* stop.retry.interval
* total.retries
* vm.allocation.algorithm
* vm.deployment.planner
* vm.destroy.forcestop
* vm.disk.stats.interval
* vm.disk.throttling.bytes.read.rate
* vm.disk.throttling.bytes.write.rate
* vm.disk.throttling.iops.read.rate
* vm.disk.throttling.iops.write.rate
* vm.instancename.flag
* vm.job.check.interval
* vm.job.report.interval
* vm.job.timeout
* vm.network.throttling.rate
* vm.op.cancel.interval
* vm.op.cleanup.interval
* vm.op.cleanup.wait
* vm.op.lock.state.retry
* vm.op.wait.interval
* vm.stats.interval
* vm.tranisition.wait.interval
* vm.user.dispersion.weight

## **Resource Limitation/Access**

* allow.public.user.templates
* allow.subdomain.network.access
* allow.user.create.projects
* cluster.cpu.allocated.capacity.disablethreshold
* cluster.cpu.allocated.capacity.notificationthreshold
* cluster.localStorage.capacity.notificationthreshold
* cluster.memory.allocated.capacity.disablethreshold
* cluster.memory.allocated.capacity.notificationthreshold
* cluster.storage.allocated.capacity.notificationthreshold
* cluster.storage.capacity.notificationthreshold
* zone.directnetwork.publicip.capacity.notificationthreshold
* zone.secstorage.capacity.notificationthreshold
* zone.virtualnetwork.publicip.capacity.notificationthreshold
* zone.vlan.capacity.notificationthreshold
* max.account.cpus
* max.account.memory
* max.account.networks
* max-account-primary-storage
* max.account.public.ips
* max.account.secondary.storage
* max-account-snapshots
* max.account.templates
* max.account.user.vms
* max-account-volumes
* max-account-vpcs
* max.project.cpus
* max.project.memory
* max.project.networks
* max.project.primary.storage
* max.project.public.ips
* max.project.secondary.storage
* max.project.snapshots
* max.project.templates
* max.project.user.vms
* max.project.volumes
* max.project.vpcs
* max.template.iso.size
* mem.overprovisioning.factor
* pod.privateip.capacity.notificationthreshold
* pool.storage.allocated.capacity.disablethreshold
* pool.storage.capacity.disablethreshold

## **Alerting Messaging**

* alert.email.addresses
* alert.email.sender
* alert.purge.delay
* alert.purge.interval
* alert.smtp.connectiontimeout
* alert.smtp.host
* alert.smtp.password
* alert.smtp.port
* alert.smtp.timeout
* alert.smtp.useAuth
* alert.smtp.username
* alert.wait

## **API Controls**

* api.checkers.exclude
* api.throttling.cachesize
* api.throttling.enabled
* api.throttling.interval
* api.throttling.max

## **Network Controls**

* blacklisted.routes
* cloud.dns.name
* direct.attach.network.externalIpAllocator.enabled
* direct.attach.network.externalIpAllocator.url
* direct.network.no.default.route
* direct.network.stats.interval
* eip.use.multiple.netscalers
* external.firewall.default.capacity
* external.lb.default.capacity
* external.network.stats.interval
* firewall.service.provider.exclude
* guest.domain.suffix
* guest.vlan.bits
* linkLocalIp.nums
* load.balancing.service.provider.exclude
* management.network.cidr
* remote.access.vpn.client.iprange
* remote.access.vpn.psk.length
* remote.access.vpn.service.provider.exclude
* remote.access.vpn.user.limit
* router.check.interval
* router.check.poolsize
* router.cpu.mhz
* router.extra.public.nics
* router.stats.interval
* router.template.hyperv
* router-template-kvm
* router.template.lxc 46
* router.template.vmware
* router.template.xen
* router.version.check
* site2site.vpn.customergateway.subnets.limit
* site2site.vpn.service.provider.exclude
* site2site.vpn.vpngateway.connection.limit
* sdn.ovs.controller
* sdn.ovs.controller.default.label
* network.acl.service.provider.exclude
* network.dhcp.nondefaultnetwork.setgateway.guestos
* network.disable.rpfilter
* network.dns.basiczone.updates
* network.elements.registry.exclude
* network.gc.interval
* network.gc.wait
* network.guest.cidr.limit
* network.gurus.exclude
* network.ipv6.search.retry.max
* network.loadbalancer.basiczone.elb.enabled
* network.loadbalancer.basiczone.elb.gc.interval.minutes
* network.loadbalancer.basiczone.elb.network
* network.loadbalancer.basiczone.elb.vm.cpu.mhz
* network.loadbalancer.basiczone.elb.vm.vcpu.num
* network.loadbalancer.basiczone.elb.vm.ram.size
* network.loadbalancer.haproxy.max.conn
* network.loadbalancer.haproxy.stats.auth
* network.loadbalancer.haproxy.stats.port
* network.loadbalancer.haproxy.stats.uri
* network.loadbalancer.haproxy.stats.visibility
* network.lock.timeout
* network.securitygroups.work.cleanup.interval
* network.securitygroups.defaultadding
* network.router.EnableServiceMonitoring
* network.securitygroups.work.lock.timeout
* network.securitygroups.work.per.agent.queue.size
* network.securitygroups.workers.pool.size
* network.throttling.rate
* vpc.cleanup.interval
* vpc.max.networks
* vpc.providers.exclude
* use.external.dns
* use.system.guest.vlans
* use.system.public.ips
* 10. Storage Controls 57
* extract.url.cleanup.interval
* extract.url.expiration.interval
* s3.rrs.enabled
* s3.singleupload.max.size
* secondary.storage.vm
* secondary.storage.vm.allocators.exclude
* secstorage.allowed.internal.sites
* secstorage.capacity.standby
* secstorage.cmd.execution.time.max
* secstorage.copy.password
* secstorage.encrypt.copy
* secstorage.proxy
* secstorage.service.offering
* secstorage.session.max
* secstorage.ssl.cert.domain
* secstorage.vm.mtu.size
* snapshot.delta.max
* snapshot.max.daily
* snapshot.max.hourly
* snapshot.max.monthly
* snapshot.max.weekly
* snapshot.poll.interval
* snapshot.strategies.exclude
* storage.cache.replacement.enabled
* storage.cache.replacement.interval
* storage.cache.replacement.lru.interval
* storage.cleanup.enabled
* storage.cleanup.interval
* storage.max.volume.size
* storage.max.volume.upload.size
* storage.overprovisioning.factor
* storage.pool.allocators.exclude
* storage.pool.allocators.order
* storage.pool.max.waitseconds
* storage.stats.interval
* storage.template.cleanup.enabled
* vmsnapshot.create.wait
* vmsnapshot.max
* vmSnapshot.strategies.exclude

## **Security**

* integration.api.port
* incorrect.login.attempts.allowed
* security.checkers.exclude
* security.checkers.order
* security.encryption.iv
* security.encryption.key
* security.hash.key
* security.singlesignon.key
* security.singlesignon.tolerance.millis

## **Authentication Management**

* ldap.basedn
* ldap.bind.password
* ldap.bind.principal
* ldap.email.attribute
* ldap.firstname.attribute
* ldap.group.object
* ldap.group.user.uniquemember
* ldap.lastname.attribute
* ldap.search.group.principle
* ldap.truststore
* ldap.truststore.password
* ldap.user.object
* ldap.username.attribute
* user.authenticators.exclude
* user.authenticators.order
* user.password.encoders.exclude
* user.password.encoders.order

## **Usage**

* usage.aggregation.timezone
* usage.execution.timezone
* usage.sanity.check.interval
* usage.stats.job.aggregation.range
* usage.stats.job.exec.time

## **System VMs**

* console.proxy.allocator.exclude
* consoleproxy.capacity.standby
* consoleproxy.capacityscan.interval
* consoleproxy.cmd.port
* consoleproxy.disable.rpfilter
* consoleproxy.launch.max
* consoleproxy.management.state
* consoleproxy.management.state.last
* consoleproxy.restart
* consoleproxy.service.offering
* consoleproxy.session.max
* consoleproxy.session.timeout
* consoleproxy.url.domain
* mount.parent
* recreate.systemvm.enabled
* system.vm.auto.reserve.capacity
* system.vm.default.hypervisor
* system.vm.random.password
* system.vm.use.local.storage

## **Parameters specific to VMware Hypervisor**

* vmware.additional.vnc.portrange.size
* vmware.additional.vnc.portrange.start
* vmware.create.full.clone
* vmware.hung.wokervm.timeout
* vmware.management.portgroup
* vmware.nested.virtualization
* vmware.ports.per.dvportgroup
* vmware.recycle.hung.wokervm
* vmware.reserve.cpu
* vmware.root.disk.controller
* vmware.reserve.mem
* vmware.service.console
* vmware.systemvm.nic.device.type
* vmware.use.dvswitch
* vmware.use.nexus.vswitch
* vmware.vcenter.session.timeout

## **Parameters Specific to XenServer Hypervisor**

* xapiwait
* xen.bond.storage.nics
* xen.create.pools.in.pod
* xen.guest.network.device
* xen.heartbeat.interval
* xen.nics.max
* xen.private.network.device
* xen.public.network.device
* xen.pvdriver.version
* xen.setup.multipath
* xen.storage.network.device1
* xen.storage.network.device2
* xen.vm.vcpu.max

## **Parameters Specific to Baremetal Hypervisor**

* baremetal.ipmi.fail.retry
* baremetal.ipmi.lan.interface

## **Parameters Specific to KVM Hypervisor**

* kvm.guest.network.device
* kvm.private.network.device
* kvm.public.network.device
* kvm.snapshot.enabled
* kvm.ssh.to.agent

## **Parameters Specific to Hyper-V Hypevisor**

* hyperv.guest.network.device
* hyperv.private.network.device
* hyperv.public.network.device

## **Others (To be categorized)**

* cloud.identifier
* disable.extraction
* enable.baremetal.securitygroup.agent.echo
* enable.dynamic.scale.vm
* enable.ec2.api
* enable.ha.storage.migration
* enable.s3.api
* enable.usage.server
* encode.api.response
* endpointe.url
* external.baremetal.resource.classname
* external.baremetal.system.url
* hypervisor.gurus.exclude
* hypervisor.list
* init
* instance.name
* internallbvm.service.offering
* interval.baremetal.securitygroup.agent.echo
* ip.deployers.exclude
* json.content.type
* mgt.server.vendor
* midonet-apiserver-address
* midonet.providerrouter.id
* migrate-retry-interval
* migratewait
* pod.alocators.exclude
* port
* port.forwarding.service.provider.exclude
* primary.storage.download.wait
* project.email.sender
* project.invite.required
* project.invite.timeout
* project.smtp.host
* project.smtp.password
* project.smtp.port
* project.smtp.useAuth
* project.smtp.username
* scale.retry
* snapshot.backup.rightafter
* sortkey.algorithm
* ssh.privatekey
* ssh-publickey
* static.nat.service.provider.exclude
* sync.interval
* template.adapter.exclude
* timeout.baremetal.securitygroup.agent.echo
* traffic.sentinel.exclude.zones
* traffic.sentinel.include.zones
* ucs.sync.blade.interval
* update.wait