

## The Ansible Variable File

This section describes the variable file used with Ansible modules and playbooks.

The KumoScale modules and example playbooks receive their input from the variable file **vars.yml** located in the **examples** directory. This section defines the parameters as they fall under different categories. Several parameters may be used for more than one category (though not repeated).

Variable	Category where defined
admin_password	<a href="#">Software Initialization and Network Parameters</a>
agent_deb_path	<a href="#">Initiator Parameters</a>
agent_rpm_path	<a href="#">Initiator Parameters</a>
blockSize	<a href="#">Volume Management Parameters</a>
capacity	<a href="#">Volume Management Parameters</a>
client_id *	<a href="#">Provisioner and General Parameters</a>
client_scope *	<a href="#">Provisioner and General Parameters</a>
client_secret *	<a href="#">Provisioner and General Parameters</a>
desiredBWPerGB	<a href="#">Volume Management Parameters</a>
desiredIOPSPerGB	<a href="#">Volume Management Parameters</a>
expiration	<a href="#">Software Initialization and Network Parameters</a>
host_name	<a href="#">Initiator Parameters</a>
host_uuid	<a href="#">Initiator Parameters</a>
hosts_group	<a href="#">Initiator Parameters</a>
ks_url	<a href="#">Software Initialization and Network Parameters</a>
maxBWPerGB	<a href="#">Volume Management Parameters</a>
maxIOPSPerGB	<a href="#">Volume Management Parameters</a>
maxReplicaDowntime	<a href="#">Volume Management Parameters</a>
provisioner_url	<a href="#">Provisioner and General Parameters</a>
provisioningType	<a href="#">Volume Management Parameters</a>
racks	<a href="#">Volume Management Parameters</a>
regions	<a href="#">Volume Management Parameters</a>
replica_uuid	<a href="#">Volume Management Parameters</a>
replicable	<a href="#">Volume Management Parameters</a>
replicas	<a href="#">Volume Management Parameters</a>
reservedSpacePercentage	<a href="#">Volume Management Parameters</a>

sameRackAllowed	<a href="#">Volume Management Parameters</a>
snap_name	<a href="#">Volume Management Parameters</a>
snap_uuid	<a href="#">Volume Management Parameters</a>
spanAllowed	<a href="#">Volume Management Parameters</a>
storageClassName	<a href="#">Volume Management Parameters</a>
tenant_id	<a href="#">Volume Management Parameters</a>
token_url	<a href="#">Provisioner and General Parameters</a>
username	<a href="#">Software Initialization and Network Parameters</a>
vol_name	<a href="#">Volume Management Parameters</a>
vol_uuid	<a href="#">Volume Management Parameters</a>
writable	<a href="#">Volume Management Parameters</a>
zones	<a href="#">Volume Management Parameters</a>

### KumoScale Software Initialization and Network Parameters

The following parameters describe the parameters used for KumoScale software initial configuration and network configurations.

Variable Name	Description	Expected Input
ks_url	The management URL of the KumoScale storage node.	URL
username	The username for KumoScale software authentication (RBAC).	16 alphanumeric characters
admin_password	Password for RBAC authentication.	String
expiration	Duration (in minutes) until the token expires.	Integer

### Volume Management Parameters

The following parameters are used for creating and deleting volumes.

Variable Name	Description	Expected Input
vol_name	The volume's name (Alias).	16 alphanumeric characters, '_', '-'
vol_uuid	The UUID of the volume.	UUID
replica_uuid	The replica (physical volume) UUID.	UUID
replicas	Number of volume replicas	Integer (1, 2, or 3)
replicable	The volume can be replicated	Equals true if the number of replicas is > 1, otherwise false
capacity	Volume size in GB.	Integer (with no suffix)
racks	A list of racks on which the volume may be created.	List <string>
regions	A list of regions on which the volume may be created.	List <string>
zones	A list of zones on which the volume may be created.	List <string>
provisioningType	Indicates whether the volume should be fully pre-allocated (thick) or thin-provisioned (thin). (default: thick)	String ("thick", "thin")
reservedSpacePercentage	The reserved space for a thin-provisioned volume or for a snapshot's log, in percentage of volume capacity. (default: 10)	Integer

Variable Name	Description	Expected Input
blockSize	The block size for formatting the new volume, in bytes. (default: 4096)	Integer
maxIOPSPerGB	The maximum value for a new volume's IOPS for each volume's GB.	Integer
desiredIOPSPerGB	Desired value for a new volume's IOPS for each volume's GB.	Integer
maxBWPerGB	Maximum limit for a new volume's bandwidth (BW) for each volume's GB.	Integer
desiredBWPerGB	Desired limit for a new volume's BW for each volume GB.	Integer
sameRackAllowed	May two volume replicas be located on the same rack (default: false).	Boolean
maxReplicaDowntime	The number of minutes to wait when a replica was detected 'missing' until initiating the self-healing process for failure recovery. The default = 180 (3 hours). (See <a href="#">Maintenance and Monitoring with KumoScale Ansible</a> )	Integer:  <b>180 (3 hours)</b> minimum: 5 maximum: 1440 (1 day)
snap_name	The alias for the snapshot.	String
snap_uuid	The snapshot UUID.	String
writable	Indicates whether the snapshot volume is writable (True) or read only (False). (default: false).	Boolean
spanAllowed	Indicates whether the volume is allowed to span over multiple SSDs (default: true)	Boolean
storageClassName	The name of the storage class	String
tenant_id	The tenant ID in a multi-tenant environment. This parameter used if a tenant is defined that is different from the default Global Tenant (default is equal to 0).	String

### Initiator Parameters

The following table describes the parameters used to configure the initiator.

Variable Name	Description	Expected Input
hosts_group	Defines which hosts will execute the playbook tasks as defined in <b>/etc/ansible/hosts</b> .	List <string>
host_name	Name of the host initiator	String
host_uuid	UUID of the host initiator	String
agent_rpm_path	Full path of the KumoScale agent installation rpm file. For initiators running RHEL/CentOS.	String
agent_deb_path	Full path of the KumoScale agent installation deb file. For initiators running Ubuntu operating system or Debian <sup>™</sup> OS.	String

### Provisioner and General Ansible Parameters

The following table describes parameters for configuring the KumoScale Provisioner service and general Ansible module settings.

Variable Name	Description	Expected Input
provisioner_url	IP or FQDN address of the KumoScale Provisioner service.	IPv4 address format
client_id *	Client identifier in the authentication server.	String
client_secret *	Client secret string in the authentication server	String
client_scope *	Client scope string in the authentication server	String

token_url	Authentication server token URL	String

- \* For implementations using ADFS authorization mode, for:
- install\_host playbook, use storage node authorization parameters,
  - all other playbooks, use the Provisioner authorization parameters.

Next: [Maintenance and Monitoring with KumoScale Ansible](#)