

Atlas Software Management Guide

Cloud Execution Environment

USER GUIDE

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1 Introduction

This document describes how to manage the Atlas software.

1.1 Prerequisites

Before starting this procedure, ensure that the following conditions are met:

1.1.1 Conditions

The following is required:

- The system is ready to accept logon attempts from users.
- Root access is available for running the `atlas` command.
- Root access is available for running the `swift` command.



2 Atlas Command Overview

This section describes the `atlas` command syntax and the use of its command parameters.

2.1 Atlas Command and Parameters

The Atlas command suite is implemented by scripting technology. Its purpose is to support software management.

After a successful logon, the `atlas` command and its parameters are available, as shown in Table 1.



Table 1 Atlas Command and Parameters

Command	Parameter	Description
sudo atlas	backup-create --p <password>	Creates a backup of the key configuration files and folders contained in the Atlas image, see Section 2.2 on page 3.
	backup-list	Lists the available backup files, see Section 2.3 on page 4.
	backup-restore --d <ID> --p <password>	Restores the key configuration files and folder from a backup, see Section 2.4 on page 4.
	cert-create	Generates self signed default certificates which are not sufficient for a secure TLS communication. ⁽¹⁾
	endpoint-init --host <public host-ip> <internal host-ip>	Creates endpoints for OVFT, MISTRAL and HEAT in Keystone, see Section 2.5 on page 4.
	user-init	Creates OVFT, MISTRAL and HEAT users in Keystone, see Section 2.6 on page 7.
	--help	Prints the atlas command syntax, see Section 2.7 on page 9.
	--version	Prints the current version of Atlas, see Section 2.8 on page 9.
	update-network <args>	Updates the interfaces of Atlas, see Section 2.9 on page 9.

(1) For more information on the necessary TLS certificates, refer to the “Conditions” section of the documents *SW Installation in Multi-Server Deployment* and *SW Installation in Single Server Deployment*.

2.2 Create Backups

The command syntax is as follows:

```
sudo atlas backup-create [--name <backup name>] --p
<password>
```



The optional parameter `--name` is used to set the name of the backup. The default name is `AtlasBackup`. The backup name can only contain letters, numbers, and underscores. No special characters are allowed.

The positional parameter `--p` is used to encrypt backup during backup creation.

To back up the most important files and folders to the current directory, enter the following:

```
atlasadm@atlas:~ $ sudo atlas backup-create --name atlas  
--p atlas_password
```

The resulting output is shown in Example 1.

```
Running Atlas backup ...  
Done.
```

Example 1 Atlas Backup

2.3 List Backups

To view the available backup files, enter the following:

```
atlasadm@atlas:~ $ sudo atlas backup-list
```

The resulting output is shown in Example 2.

ID	Name	Date
1465911268	atlas_backup	Tue Jun 14 15:34:28 CEST 2016

Example 2 Atlas Backup List

2.4 Restore Backups

To restore the most important files and folders from a backup file in the current path, enter the following:

```
atlasadm@atlas:~ $ sudo atlas backup-restore --d  
1465911268 --p atlas_password
```

The resulting output is shown in Example 3.

```
Atlas has been set for restore.  
Please reboot.
```

Example 3 Atlas Restore



2.5 Create OVFT, MISTRAL and HEAT Endpoints in Keystone

To create endpoints in Keystone for OVFT, MISTRAL and HEAT, enter the following:

```
atlasadm@atlas:~ $ sudo atlas endpoint-init --host
public.atlas.local public.atlas.local
```

The resulting output is shown in Example 4.

Field	Value
description	OpenStack Workflow service
enabled	True
id	c78b349385f442ecbb77bf1292bab18d
name	mistral
type	workflowv2

Deleting existing Mistral endpoint

Creating Mistral endpoints

Field	Value
adminurl	https://public.atlas.local:8989/v2
id	a9ef5b440957472985ab895847e3a57d
internalurl	https://public.atlas.local:8989/v2
publicurl	https://public.atlas.local:8989/v2
region	RegionOne
service_id	c78b349385f442ecbb77bf1292bab18d
service_name	mistral
service_type	workflowv2

Field	Value
description	OVF Translator
enabled	True
id	b45768bf8cd8425fa0f9fa5f277aeff2
name	ovft
type	translator

Deleting existing Ovft endpoint

Creating Ovft endpoints

Field	Value
adminurl	https://public.atlas.local:8888/v1/\${tenant_id}s
id	4021bc663b2c493f86d611f428d01fd0
internalurl	https://public.atlas.local:8888/v1/\${tenant_id}s
publicurl	https://public.atlas.local:8888/v1/\${tenant_id}s



region	RegionOne
service_id	b45768bf8cd8425fa0f9fa5f277aeff2
service_name	ovft
service_type	translator

Field	Value
description	Heat Orchestration
enabled	True
id	6efc3f6a09bc404c84970c2bb093acd9
name	heat
type	orchestration

Deleting existing Heat endpoint

Creating Heat endpoints

Field	Value
adminurl	https://public.atlas.local:8004/v1/\${tenant_id}s
id	dd828421405e417b9e39bf73964573f1
internalurl	https://public.atlas.local:8004/v1/\${tenant_id}s
publicurl	https://public.atlas.local:8004/v1/\${tenant_id}s
region	RegionOne
service_id	6efc3f6a09bc404c84970c2bb093acd9
service_name	heat
service_type	orchestration

Field	Value
description	Heat CloudFormation
enabled	True
id	7cf2431134b84c329913b74e568dc772
name	heat-cfn
type	cloudformation

Deleting existing Heat-cfn endpoint

Creating Heat-cfn endpoints

Field	Value
adminurl	https://public.atlas.local:8000/v1
id	fc90c2447e9649aa85472fb40b2d55c0
internalurl	https://public.atlas.local:8000/v1
publicurl	https://public.atlas.local:8000/v1
region	RegionOne
service_id	7cf2431134b84c329913b74e568dc772
service_name	heat-cfn
service_type	cloudformation



Example 4 Atlas Endpoint Init

2.6 Create OVFT, MISTRAL and HEAT Users in Keystone

To create users in Keystone for OVFT, MISTRAL and HEAT, enter the following:
 atlasadm@atlas:~ \$ **sudo atlas user-init**

The resulting output is shown in Example 5.

Note: Each time the command is executed, a new user is created after deleting the existing users.

Field	Value
email	mistral@example.com
enabled	True
id	0d3a48e1cf814e8895ffabc4bd2b3ba1
name	mistral
project_id	22fd28267ac44929ab70967d5963e1fb
username	mistral
Field	Value
email	mistral@example.com
enabled	True
id	233283bf2c014604972e4056f32b5bfd
name	mistral
project_id	22fd28267ac44929ab70967d5963e1fb
username	mistral
Field	Value
id	5e2b5e5e9a95493080cc86affd190ad1
name	admin
Field	Value
email	ovft@example.com
enabled	True
id	aff611fe263447649950ef007dfb90e1
name	ovft
project_id	22fd28267ac44929ab70967d5963e1fb
username	ovft



Field	Value
email	ovft@example.com
enabled	True
id	57223f27ac364c429028af3f2f21f351
name	ovft
project_id	22fd28267ac44929ab70967d5963e1fb
username	ovft

Field	Value
id	5e2b5e5e9a95493080cc86affd190ad1
name	admin

Field	Value
email	heat@example.com
enabled	True
id	919bca6fe9c044388c7850738084d245
name	heat
project_id	22fd28267ac44929ab70967d5963e1fb
username	heat

Field	Value
email	heat@example.com
enabled	True
id	5451d5cc2b5f4658a42260fe6bd1c946
name	heat
project_id	22fd28267ac44929ab70967d5963e1fb
username	heat

Field	Value
id	5e2b5e5e9a95493080cc86affd190ad1
name	admin

Field	Value
id	7ba93109c5b74cc3b08ac7b980a03d82
name	heat_stack_user

Field	Value
id	6c74920126324dab862849eedd170898



name	heat_stack_user
------	-----------------

Example 5 Atlas User Init

2.7 Help

To view the syntax of the `atlas` command, enter the following:

```
atlasadm@atlas:~ $ sudo atlas --help
```

The resulting output is shown in Example 6.

```
Atlas Utility Functions ATLAS-CXC1737937_3-R2A03-83 efb9960-7030
usage: atlas [options] <argv>...
Options:
--help, -h          show this help message and exit.
--version           show program's version number and exit

user-init           Create ovft and heat users in keystone
endpoint-init       Create endpoints for ovft and heat in keystone
cert-create         Create initial set of self-signed certs
backup-create       Create new Atlas backup
backup-restore      Restore from existing backup
backup-list         List existing backups by date
update-network      Update network interfaces of Atlas
```

Example 6 Atlas Help

2.8 Version

To view the exact version of the Atlas Virtual Machines (VMs), enter the following:

```
atlasadm@atlas:~ $ sudo atlas --version
```

The resulting output is shown in Example 7.

Atlas Utility Functions ATLAS-CXC1737937 3-R2A03-83 efb9960-7030

Example 7 Atlas VM Version

2.9 Update Network

To update the interfaces of the Atlas VMs, enter the following:

```
atlasadm@atlas:~ $ sudo atlas update-network NBI_IP SBI_IP  
GATEWAY NBI GATEWAY SBI CIDR SBI CIDR PUBLIC NBI MASK SBI MASK
```

Note: For CIDR_PUBLIC, use cee_om_sp, the network used for vCIC northbound communication.



The resulting output is shown in Example 8.

```
atlasadm@atlas:~ $ sudo atlas update-network
10.33.168.4 10.33.168.36 10.33.168.1 10.33.168.33
10.33.168.32/27 10.33.168.96/27 255.255.255.224 255.255.255.224

ssh stop/waiting
ssh start/running, process 5831
```

Example 8 Atlas Update Network



3 Swift Command Overview

This section describes the `swift` command, which is used to upload and download the Atlas backup files.

Note: Before the `swift` command can be entered, use `source openrc` for OpenStack credentials and change the user from `atlasadm` to `root`:

```
atlasadm@atlas:~ $ source openrc
atlasadm@atlas:~ $ sudo -i
```

Additionally, the `AtlasBackups` container must exist in Swift.

3.1 Swift Command and Parameters

The syntax of the `swift` command and its parameters are shown in Table 2.

Table 2 Swift Command and Parameters

Command	Parameter	Description
swift	download	Downloads backup files from Swift, see Section 3.2 on page 11
	list	Lists the available backup files in Swift, see Section 3.3 on page 12
	upload	Upload backup files to Swift, see Section 3.4 on page 12

3.2 Download Backup Files

To download the backup directory from Swift, enter the following:

```
root@atlas:~# cd /var/archives
```

```
root@atlas:/var/archives/# swift download AtlasBackups -p
<atlas_backupname><ID>
```

where `atlas_backupname` is the name of the backup and `ID` is the ID of the backup.



The command input is shown in Example 9.

```
root@atlas:/var/archives# swift download AtlasBackups -p atlas_backup1465911268
```

Example 9 Swift Download Backup

3.3 List Backup Files

To list the backup files in Swift, enter the following:

```
root@atlas:~ # swift list AtlasBackups
```

To achieve an output for a specific ID only, add the following to the command:
| **grep <ID>**

The command and the resulting output, using a specific ID, is shown in Example 10.

```
root@atlas:~ # swift list AtlasBackups | grep 1465911268
atlas_backup1465911268/atlas_backup.1465911268-all-mysql-databases.sql.bz2.enc
atlas_backup1465911268/atlas_backup.1465911268-etc-puppet-hieradata-passwords.⇒
yaml.master.tar.gz.enc
atlas_backup1465911268/atlas_backup.1465911268-home-atlasadm.master.tar.gz.enc
atlas_backup1465911268/atlas_backup.1465911268-root.master.tar.gz.enc
atlas_backup1465911268/atlas_backup.1465911268.sha256.enc
```

Example 10 Swift List Backup

3.4 Upload Backup Files

To upload backup files to Swift, enter the following:

```
root@atlas:~# cd /var/archives
```

```
root@atlas:/var/archives/ # swift upload AtlasBackups
*<ID>*
```

The input, using the ID, is shown in Example 11.

```
root@atlas:/var/archives/ # swift upload Atlas
Backups *1465911268*
```

Example 11 Swift Upload Backup - Date

The input, using the file names, is shown in Example 12.



```
root@atlas:/var/archives/# swift upload AtlasBackups atlas_backup1465911268/atlas_backup.⇒  
1465911268-all-mysql-databases.sql.bz2.enc  
root@atlas:/var/archives/# swift upload AtlasBackups atlas_backup1465911268/atlas_backup.⇒  
1465911268-etc-puppet-hieradata-passwords.yaml.master.tar.gz.enc  
root@atlas:/var/archives/# swift upload AtlasBackups atlas_backup1465911268/atlas_backup.⇒  
1465911268-home-atlasadm.master.tar.gz.enc  
root@atlas:/var/archives/# swift upload AtlasBackups atlas_backup1465911268/atlas_backup.⇒  
1465911268-root.master.tar.gz.enc  
root@atlas:/var/archives/# swift upload AtlasBackups atlas_backup1465911268/atlas_backup.⇒  
1465911268.sha256.enc
```

Example 12 Swift Upload Backup - Date



4 Configure Legal Warning

Procedure to configure legal warning (Atlas GUI/CLI):

- Configure legal warning for CLI:

- Log in as atlasadm user:

```
root@cic-0-1:~# ssh atlasadm@<atlas.sbi.ip>
```

- Switch user to root:

```
atlasadm@atlas:~$ sudo su
```

```
[sudo] password for atlasadm:
```

```
root@atlas:/home/atlasadm#
```

- Update following text in file `/etc/issue` Login to Atlas:

This system is restricted solely to Ericsson authorized users for legitimate business purposes only. The actual or attempted unauthorized access, use, or modification of this system is strictly prohibited by Ericsson. Unauthorized users are subject to Company disciplinary proceedings and/or criminal and civil penalties under state, federal, or other applicable domestic and foreign laws. The use of this system may be monitored and recorded for administrative and security reasons. Anyone accessing this system expressly consents to such monitoring and is advised that if monitoring reveals possible evidence of criminal activity, Ericsson may provide the evidence of such activity to law enforcement officials. All users must comply with Ericsson Security Policy & Requirements regarding the protection of Ericsson information assets.

- Configure legal warning for GUI:

- Log in as atlasadm user:

```
root@cic-0-1:~# ssh atlasadm@<atlas.sbi.ip>
```

- Switch user to root:

```
atlasadm@atlas:~$ sudo su
```

```
[sudo] password for atlasadm:
```

```
root@atlas:/home/atlasadm#
```

- Update following text in file `/usr/lib/python2.7/dist-packages/horizon/templates/auth/_login.ericsson.html`



Only authorized users may access the system. Unauthorized users are subject to disciplinary proceedings and/or criminal and civil penalties.



5 Manage Atlas Users

An administrator user can create or delete Atlas users.

5.1 Create User

As an administrator user, perform following steps to create a user:

Note: The password must be of 12 or more characters with at least three special, numeric, lowercase and uppercase characters.

1. Log on to Atlas VM:

```
ssh atlasadm@<Atlas_IP>
atlasadm@atlas:~$
```

2. Create a user by issuing the following commands:

```
atlasadm@atlas:~$ sudo adduser new_user
[sudo] password for atlasadm:
Adding user `new_user' ...
Adding new group `new_user' (1003) ...
Adding new user `new_user' (1003) with group `new_user'
...
Creating home directory `/home/new_user' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for new_user
Enter the new value, or press ENTER for the default
Full Name []:
Room Number []:
Work Phone []:
Home Phone []:
Other []:
Is the information correct? [Y/n]
```

3. Verify the new user by logging on to Atlas with the new user credentials:

```
ssh new_user@<Atlas_IP>
```

5.2 Delete User

As an administrator user, perform following steps to delete a user:

1. Log on to Atlas VM:



```
ssh atlasadm@<Atlas_IP>  
atlasadm@atlas:~$
```

2. Delete the user:

```
atlasadm@atlas:~$ sudo deluser new_user
```

Note: The details of all the user logon activities are logged in /var/log/auth.log.