Elastic Cloud Storage (ECS)
Version 3.2

CLI Installation and Configuration Guide
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Overview

Manage Elastic Cloud Storage (ECS) resources with the ECS command line interface (CLI). The ECS CLI is a Python CLI management tool available through Pip, which is a package management system that installs and manages Python software packages. The ECS CLI and supporting files are found in a container on each node.

Install Python with Pip to Windows

Before you begin
Python 2.7 and later automatically installs Pip to the system. Download and install Python 2.7 and later from https://www.python.org

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Note
The ECS CLI does not support Python 3.0 and later.

Procedure
1. On the installation wizard, click Next until you see the Customize Python dialog box.
2. Scroll down to the option Add python.exe to Path.
3. Select the option will be installed on local hard drive. This option adds C:\Python27\ to the system path variable.
4. When the installation completes, see Use Pip to install the ECS CLI on page 2.

Install Python with Pip to Linux

Before you begin
Python is preinstalled on some Linux systems but the ECS CLI only supports Python 2.7. Python 2.7.9 and later includes Pip by default.

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Note
• The ECS CLI does not support Python 3.0 and later.
• Python 2.7.8 and earlier does not include Pip by default.

Procedure
1. Download and install Python 2.7.9 and later from https://www.python.org
2. When the installation completes, see Use Pip to install the ECS CLI on page 2.

Use Pip to install the ECS CLI

Procedure
1. Open a command prompt:
On Windows, type `cmd` in the search bar.

On Linux, press `Ctrl + Alt + T`.

2. Type the following command to use Pip to install the ECS CLI:

   `pip install ecscli`

3. Check that the output is similar to the following:

   ```
   Collection ecscli
   Downloading ecscli-2.2.0a5.tar.gz (241kB)
   100%  245kB  568kB/s
   Requirement already satisfied (use -upgrade to upgrade)
   requests in ./anaconda/envs/ecscli_demoenv/lib/python2.7/site-packages (from ecscli)
   Building wheels for collected packages: ecscli
   Running setup.py bdist_wheel for ecscli...done
   Stored in directory: /Users/username/Library/Caches/pip/wheels/92/f/c3/129ffe5cd1b3b20506264398078bdd886c27fe89b062b711
   Successfully built ecscli
   Installing collected packages: ecscli
   Successfully installed ecscli-2.2.0a5
   ```

4. When the ECS CLI installation completes, see Configure the ECS CLI on page 3.

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**Configure the ECS CLI**

Create and authenticate at least one profile to configure the ECS CLI.

**Create a profile**

A profile contains the hostname/IP, a port, and a management user who then authenticates a profile to the host. Profiles are stored in `.json` files in the home directory with the name prefix `ecscliconfig_`. The ECS CLI uses the active profile to authenticate and send commands. The asterisk (*) next to a profile name indicates the active profile.

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**Note**

You can create several profiles but only one profile is active at any time.

**Procedure**

1. Type the following command to create a profile:

   `ecscli config -pf demoprofile`

2. At the prompt, type the following information for the profile:

   - hostname/IP
   - port
   - management user

   ```
   Running without an active config profile
   Please enter the default ECS hostname or IP (127.0.0.1):
   10.1.83.51
   Please enter the default command port (4443):
   Please enter the default user for the profile (root):
   ```

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Configure the ECS CLI 3
3. Type the following command to generate a list of profiles including the active profile:

```
ecscli config list
```

Running with config profile: anotherdemoprofile
User: username host:port: 10.1.60.60:4443
List of existing configuration profiles:
*anotherdemoprofile – hostname:10.1.60.60:4443 user:username
demoprofile – hostname:10.1.83.51:4443 user:root

4. Type the following command to change the active profile:

```
ecscli config set -pf demoprofile
```

Running with config profile: anotherdemoprofile
User: username host:port: 10.1.60.60:4443
List of existing configuration profiles:
*anotherdemoprofile – hostname:10.1.60.60:4443 user:username
demoprofile – hostname:10.1.83.51:4443 user:root

5. Type the following command to delete a profile:

```
ecscli config delete -pf demoprofile
```

Running with config profile: demoprofile
User: root host:port: 10.1.83.51:4443
List of existing configuration profiles:
*anotherdemoprofile – hostname: 10.1.60.60:4443 user:username

**Authenticate a profile**

The ECS CLI configuration handles the `-hostname` and `-port` arguments, and the tokens for subsequent management requests. However, you are required to authenticate a profile. Profile authentication stores a token which remains active for 24 hours. When the token becomes inactive, you must re-authenticate the profile. You can also re-authenticate a profile before a token becomes inactive.

**Procedure**

1. Type the following command to authenticate an active profile:

```
ecscli authenticate
```

Running with config profile: demoprofile
User: root host:port: 10.1.83.51:4443
Password:

Authentication result: root: Authenticated Successfully
/Users/username/demoprofile/rootcookie: Cookie saved successfully
Use the most common ECS CLI commands

Type the following command to list the storage pools:

```
ecscli objectvpool list
```

Running with config profile: demoprofile
User:root host:port:10.1.83.51:4443

```
{'data_service_vpool': [{'isAllowAllNamespaces': True, 'remote': None, 'name': 'plylab-NR', 'enable_rebalancing': True, 'global': None, 'creation_time': 1466176011859, 'isFullRep': False, 'vdc': None, 'inactive': False, 'varrayMappings': [{'name': 'urn:storageos:VirtualDataCenterData:407b66d-bda4-4ba4-895f-7220ac39d904', 'value': 'urn:storageos:VirtualArray:29e03370-5d30-45ff-8f5c-0a208e67b3d0'}, 'id': 'urn:storageos:ReplicationGroupInfo:1068238b-fdc4-4258-a044-41d0ee81d0bc:global', 'description': ''}]
```

Type the following command to list the nodes:

```
ecscli nodes list
```

```
{
    "node": [
        {
            "ip": "10.245.137.85",
            "isLocal": true,
            "nodeid": "10.245.137.85",
            "nodename": "layton-strawberry.ecs.lab.emc.com",
            "rackId": "strawberry",
            "version": "3.0.0.0.86239.1c9e5ec"
        },
        {
            "ip": "10.245.137.86",
            "isLocal": false,
            "nodeid": "10.245.137.86",
            "nodename": "logan-strawberry.ecs.lab.emc.com",
            "rackId": "strawberry",
            "version": "3.0.0.0.86239.1c9e5ec"
        },
        {
            "ip": "10.245.137.87",
            "isLocal": false,
            "nodeid": "10.245.137.87",
            "nodename": "lehi-strawberry.ecs.lab.emc.com",
            "rackId": "strawberry",
            "version": "3.0.0.0.86239.1c9e5ec"
        },
        {
            "ip": "10.245.137.88",
            "isLocal": false,
            "nodeid": "10.245.137.88",
            "nodename": "murray-strawberry.ecs.lab.emc.com",
            "rackId": "strawberry",
            "version": "3.0.0.0.86239.1c9e5ec"
        }
    ]
}
```

Type the following command to see a list of ECS CLI commands:

```
ecscli -h
```
Note

The following options are handled by the user profile, and should not be entered when running a command:

- -hostname
- -port
- -cookiefile

Positional arguments:

{config, authenticate, authentication, baseurl, billing, bucket, cas, datastore, failedzones, keystore, meter, mgmtuserinfo, monitor, nodes, objectuser, objectvpool, nfs, secretkeyuser, system, namespace, varray, vdc_data, vdc, passwordgroup, dashboard, transformation, vdc_keystore}

Use One of Commands:

config  ecscli profile configuration
authenticate  Authenticate ECS user
authentication  Operations on Authentication
baseurl  Operations on Base URL
billing  Operations to retrieve ECS billing information
bucket  Operations on Bucket
cas  Operations on CAS profile
datastore  Operations on datastore
failedzones  Get failed zone information
keystore  Operations on keystore
meter  Get metering statistics for the given time bucket
mgmtuserinfo  Operations on Mgmtuserinfo
monitor  Get monitoring events for the given time bucket
Nodes  Operations to retrieve ECS datanodes information
objectuser  Operations on Objectuser
objectvpool  Operations on Objectvpool
nfs  Operations on NFS
secretkeyuser  Operations on Secretkeyuser
system  Operations on system
namespace  Operations on Namespace
varray  Operations on varray
vdc_data  Operations on VirtualDataCenter
vdc  Operations on VirtualDataCenter
passwordgroup  Operations on Passwordgroup
dashboard  Operations on replication group links
transformation  Operations on Centera transformation
vdc_keystore  Operations on vdc_keystore certificates

Optional arguments:

-h, -help  Show this help message and exit
-hostname<hostname>,
-hn<hostname>  Hostname or IPv4 address (i.e. 192.0.2.0) or IPv6 address inside quotes and brackets (i.e. \"[2001:db8::1]\") of ECS
-port<port_number>, -po<port_number>
  Port number of ECS
-cf<cookiefile>, -cookiefile<cookiefile>
  Full name of cookiefile
-v, --version, -version  Show version number of program and exit