# AWS Command line interface (CLI)

The AWS Command Line Interface (CLI) is a unified tool to manage your AWS services. With just one tool to download and configure, you can control multiple AWS services from the command line and automate them through scripts.

## Documentation and links

AWS provides a getting started guide and this guide is really just a shortened version of that document.

## Install

```
~$ pip install awscli --upgrade
```

For more info check out the aws install docs

## Setting up IAM

AWS Identity and Access Management (IAM) allows you to configure what permissions users have in your account. But why does IAM matter if you are the only one using your account?

This matters because anyone that has access to your root account (e.g. through AWS Access Keys) also has access to your billing information which includes CC info. Thus we should set up a Admin user account that sandboxed from accessing billing information.

1. go too *My Account* –> AWS management console
2. click on IAM
3. customize your signin link e.g.

   https://frodob.signin.aws.amazon.com/console

4. create a new user:
    - click on *Users*
    - Create a user name and select Programmatic access and AWS Management Console access

   * create a password for this user

5. create a group with role "AdministrationAccess" – call it say 'vanilla'
6. setup security
    - [optional] For extra security you can enable multi-factor auth
    - click on 'create access key'
    - download the csv
7. configure you aws envrionment .. code-block:: bash

       ~$ aws configure

   It will look something like this...

   ```
   AWS Access Key ID [None]: SOOOOOOOMMEEEIIIIDDD
   AWS Secret Access Key [None]: somekeyyyyyyyyyThatIIsLong
   Default region name [None]: us-west-2
   Default output format [None]: json
   ```

**That just created did two things:**
1. Creates default profile in ~/.aws/config
2. Stores credentials in ~/.aws/credentials

More info and the updated docs can be found here http://docs.aws.amazon.com/cli/latest/userguide/cli-chap-getting-started.html

As an aside you can create multiple profiles via

```
~$ aws configure --profile fancy_profile
```

### Test it

```
~$ aws s3 ls
```

It should return some s3 buckets or return nothing. If some error occurs you can try running the following command to debug

```
~$ aws configure list
```

## Setup ssh keys

Generate a public and private key pair

- ~$ ssh-keygen -t rsa -C “kelsus-aws” -f ~/.ssh/id_aws
- ~$ mv ~/.ssh/id_aws ~/.ssh/id_aws.pem
- ~$ sudo chmod 600 ~/.ssh/id_aws
- ~$ ssh-add ~/.ssh/id_aws.pem
- ~$ xclip -sel clip < ~/.ssh/id_aws.pub
- ~$ got to [[https://github.com/settings/ssh]] and click on ‘add key’ and paste it in

From the IAM manager click on “upload SSH public access key”

## Test it

1. go to https://console.aws.amazon.com/ec2/
2. From the navigation bar, select the region in which you created the key pair.
3. In the navigation pane, under NETWORK & SECURITY, choose Key Pairs
4. Go to the *import key pairs tab*