AWS CLI default profile Manager

Overview

Changing the default profile makes it easier to use the aws cli, especially in scripts.

This program allows profile management that will control what the default runs, in an easy and expandable way ## Setup

Python Libraries   On Linux and MacOS, make sure python3 is installed

On Windows, the curses library for python3 needs to be installed - The simple way to do this is use WSL (Windows Subsystem for Linux)

Installing   Run `setup.sh` to add the `awss` command and update the aws script for local install

Or, modify the file `aws` to have correct path and add the line `alias awss='/path/to/aws'` to your `~/.bashrc`

CSV file   The menu is made from the csv file called `aws.csv`. The first field is the text to be shown on the menu. The second field is anything that can be run in bash.

General Format   There are two steps for switching AWS CLI environments, selecting the environment

Selecting the environment copies or add into the exFsititng `~/.aws` directory

The format that environments are saved are as copies of the whole `~/.aws` directory. For example, the `/home/user/` directory would contain the folders `.aws`,`.aws_sfl`,`.aws_cbs`,`.aws_sdc`

Some of the environments are simple copy-and-replace to select, and some could be activated by running a bash script or docker image

Activating the environment is the step where any 2FA comes in

Some environments activate by using the aws session token, and others just need to be set to the default profile for activation

Adding an environment

1. Copy your `~/.aws` folder as a backup if it is not already
2. Add the new environment to `~/.aws` and set it as the default (so you can test it works)
3. Copy the `~/.aws` folder to somewhere with a unique name (like `~/.aws_name`)
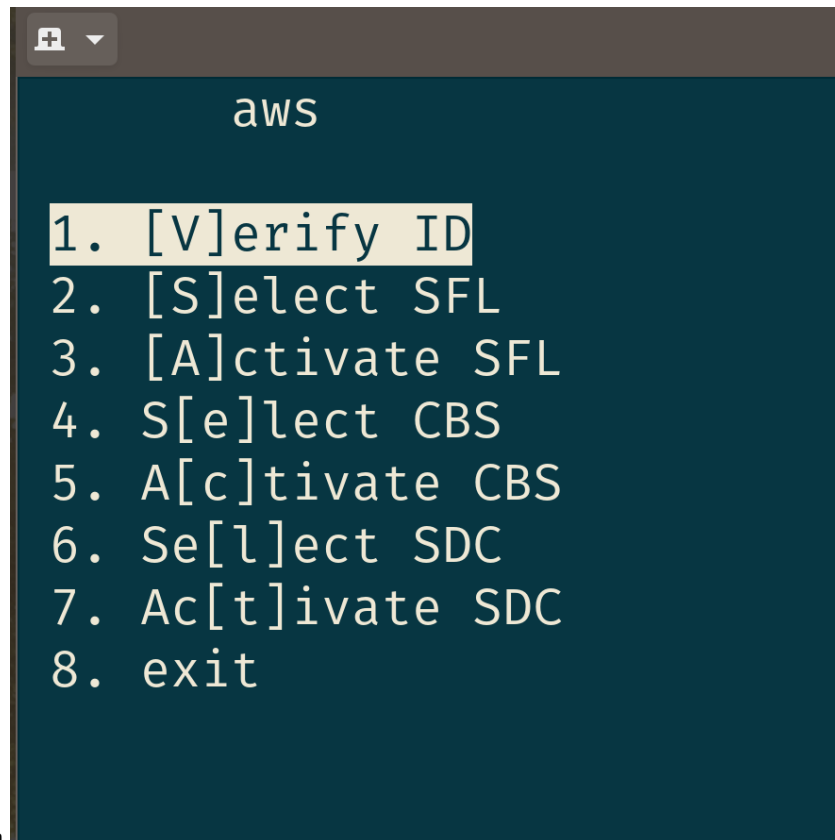4. Add a line to the `aws.csv` file to do the selection of the environment

- First section is the title ("Select env_name")
- Second section is the bash command(s) used to copy that folder over the existing`~/.aws`
  - The premade `aws.csv` has this as an example

5. Done!

See example section for more details

Example CSV Here is an example `aws.csv` file to show the different parts

```
Verify ID, aws sts get-caller-identity; aws s3 ls
Select SFL,/home/nick/Git/DevSetup/copy_dir_to_dot_aws /home/nick/.aws_sfl
Activate SFL,echo "run the command '. /home/nick/Git/DevSetup/aws_set'"
Select CBS,/home/nick/Git/DevSetup/copy_dir_to_dot_aws /home/nick/.aws_cbs
Activate CBS,echo "Should not need activation"
Select SDC,docker run -it --rm --net=host -e TZ=America/Chicago -v ~/.aws:/root/.aws ac0a9c4
Activate SDC,sed -i 's/default/olddefault/g' /home/nick/.aws/credentials; sed -i 's/sdc-mfg-
```

```
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        aws


1. [V]erify ID
2. [S]elect SFL
3. [A]ctivate SFL
4. S[e]lect CBS
5. A[c]tivate CBS
6. Se[l]ect SDC
7. Ac[t]ivate SDC
8. exit
```

And this is how it is displayed when ran

The first line

```
Verify ID, aws sts get-caller-identity; aws s3 ls
```

- "Verify ID" is the text displayed in the menu
- The commands `aws sts get-caller-identity` and `aws s3 ls` are ran
  - These show the user who aws sees them as and the contents of their S3 list, just to be sure

The lines

```
Select SFL,/home/nick/Git/DevSetup/copy_dir_to_dot_aws /home/nick/.aws_sfl
Activate SFL,echo "run the command '. /home/nick/Git/DevSetup/aws_set'"
```

- Shows the title "Select SFL"
  - The runs a script to copy the input directory `~/.aws_sfl` to overwrite the `~/.aws` directory
- Shows the title "Activate SFL"
  - Outputs to the user the script to activate for that environment
  - This is done because the menu cannot pass the functionality of `.` `./cmd` through, which executes the `./cmd` as if it was in the current working directory

The lines

```
Select CBS,/home/nick/Git/DevSetup/copy_dir_to_dot_aws /home/nick/.aws_cbs
Activate CBS,echo "Should not need activation"
```

- Shows the title "Select CBS"
  - The runs a script to copy the input directory `~/.aws_sfl` to overwrite the `~/.aws` directory
- Shows the title "Activate CBS"
  - Outputs to the user tha it doesnt need activation and is good to go

The lines

```
Select SDC,docker run -it --rm --net=host -e TZ=America/Chicago -v ~/.aws:/root/.aws ac0a9c4
Activate SDC,sed -i 's/default/olddefault/g' /home/nick/.aws/credentials; sed -i 's/sdc-mfg-
```

- Shows the title "Select SDC"
  - The runs a docker container that modifies in place the `~.aws/credentials` file to add new profiles
- Shows the title "Activate CSDC"
  - Runs 2 `sed` commands on the `~/.aws/credentials` file
  - The first changes the default profile to be "olddefault"
  - The second changes the profile from the newly added profiles to be the default

The included `aws.csv` has the same "Verify ID" line as well as a template line for selecting and activating

Usage

First Time Usage

There will already be a SFL environment in the menu, this is only there as an example and its two lines can be deleted from the `aws.csv` file, or modified to fit your environment

The simplest way is to remove the lines and add a new environment with the "Add new env" option in the menu

Adding Environments

Either run the "Add new env" option in the `awss` menu and follow the prompts

This will begin a series of prompts for the user to answer - The name of the environment - Whether the environment is created from a command or is a folder - If created every time by command, then it will ask for the command - The command can be pasted directly into the terminal - If it is a pre-existing folder it will ask if it is the current active and default environment - If it is not, it will instruct the user to make that the case - Whether it needs a command to activate it - The command can be pasted directly into the terminal

Or manually add a new entry to the `aws.csv` file to add it to the options - Make sure to leave a blank line at the bottom of the file

See the setup/csv section for more details on how the csv file is used

Removing Environments

Open the `aws.csv` file and delete the line(s) for the environments you want to remove - Be sure not to leave any blank lines between entries

Running

Run with the command `awss` to open the menu

First select the environment you want, then run the command again and activate the same environment

- Uses up and down arrows to move selection
- Enter key to select
- Number on side to select
- Key in brackets to select
  - Ex: The `a` key would select the item `[A]ctivate SFL` and the `c` key would select `A[c]tivate SFL`

Menu system is adapted from here for more info

Brackets and numbers are added automatically