README

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Contents

1 *Multi-SSH Menu* (`mssh-menu`)

1.1 Description

SSH to multiple devices, splitting the screen per session, and send what is typed on the keyboard to all sessions. Instead of typing out the names of each device, select the devices via a menu which is based on information from a user created CSV file. A CSV file is required before using the program, but it is easy and straightforward to create one.

To create the CSV file, create a new file in a spreadsheet program. The first column is the list of IP addresses or hostnames. The second, third, etc. columns will be the "tags" to identify each device. A header is expected. "Host" and "Tags" will be fine for a header. Save this file with the ".csv" extension. Here is an example:

host	tags		
server1	Site 1	Primary	All
server2	Site 1	Redundant	All
server3	Site 2	Primary	All
server4	Site 2	Redundant	All

The menu is generated from the tags. The unique tags are grouped together.

Run `mssh-menu` and supply the name of the CSV file as the argument. For example, to run `mssh-menu` with the file `examples/servers.csv`, enter the following:

```
mssh-menu examples/servers.csv
```

The list of tags appears on the screen. Select the tag group(s) and provide a username. An SSH session to all selected devices is created within a split screen via tmux. They keyboard input is synchronized so any commands you type go to all sessions.

Multi-SSH Menu (`mssh-menu`) is written in *Python*.

1.2 Features

- SSH to multiple devices simultaneously.
- Synchronize the keystrokes sent to all sessions.
- Create groups of devices by adding the devices and tags in a CSV file.

1.3 Screenshots

Figure 1: Running the script and using the menu

```
$ mssh-menu ~/servers.csv
1. All
2. Primary
3. Redundant
4. Site 1
5. Site 2
Info: Use commas to separate multiple entries and dash for ranges.
Select one or more numbers from the list [1-5,q] (default=1): 1
Selected: `1. All`
server1
server2
server3
server4

Enter username (default=admin): admin
```

Figure 2: Logged into multiple devices and typing the same commands once

```
— [ #1 admin@server1: ~ ] ——————————        ——— [ #2 admin@server2: ~ ] ———————
admin@server1:~$ hostname                    admin@server2:~$ hostname
server1                                      server2
admin@server1:~$ ip -brief address show enp1s0   admin@server2:~$ ip -brief address show enp1s0
enp1s0          UP          192.168.122.247/24 metric 100 fe8  enp1s0          UP          192.168.122.130/24 fe80::5054:ff:f
0::5054:ff:fe62:67e5/64                      ed5:9e3e/64
admin@server1:~$ ip link show enp1s0         admin@server2:~$ ip link show enp1s0
2: enp1s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_co  2: enp1s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_cod
del state UP mode DEFAULT group default qlen 1000   el state UP mode DEFAULT group default qlen 1000
    link/ether 52:54:00:62:67:e5 brd ff:ff:ff:ff:ff:ff       link/ether 52:54:00:d5:9e:3e brd ff:ff:ff:ff:ff:ff
admin@server1:~$                             admin@server2:~$ []




— [ #3 admin@server3: ~ ] ——————————        ——— [ #4 admin@server4: ~ ] ———————
admin@server3:~$ hostname                    admin@server4:~$ hostname
server3                                      server4
admin@server3:~$ ip -brief address show enp1s0   admin@server4:~$ ip -brief address show enp1s0
enp1s0          UP          192.168.122.127/24 fe80::5054:ff:  enp1s0          UP          192.168.122.194/24 fe80::5054:ff:f
fe2c:a81c/64                                 e03:5cf6/64
admin@server3:~$ ip link show enp1s0         admin@server4:~$ ip link show enp1s0
2: enp1s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_co  2: enp1s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_cod
del state UP mode DEFAULT group default qlen 1000   el state UP mode DEFAULT group default qlen 1000
    link/ether 52:54:00:2c:a8:1c brd ff:ff:ff:ff:ff:ff       link/ether 52:54:00:03:5c:f6 brd ff:ff:ff:ff:ff:ff
admin@server3:~$                             admin@server4:~$



[mssh] 1:mssh-20250523T002950*                          "admin@server2: ~" 00:32 23-May-25
```

1.4 Installing

See the **INSTALL** document for instructions on how to install this program.

1.5 Usage

Use one of the following options to learn how to use this program.

1.5.1 Manual

The program's command usage and also examples are included in a document named **MANUAL** in various formats including pdf, markdown, and html.

On certain platforms, usage and examples can also be found in the program's **man** page. On systems which utilize **man** pages, you can view the manual with the command **man mssh-menu**.

1.5.2 Help Option

You can type either **mssh-menu -h** or **mssh-menu --help** at the command line interface to see the program's options and usage.

1.6 Examples

For examples see the **Examples** section in the **MANUAL** document. You can also see examples if you view the **man** page for this program.