



Set Password with User Password Script

Summary

Feature: Change all admin passwords for all IP in range using supermicro mapping file

Ping is used to test the valid IP addresses in IP range.

Using ARP (Address Resolution Protocol), pinging an IP address on your local network will first look at the local ARP table on the system, to retrieve its mac address. If the IP address is not found in the ARP table, the system will send a broadcast packet to the network. All machines on the network will receive it and any machine with the requested IP address will respond back, adding to the local ARP table with its mac address.

Using the mac addresses found on the ARP table, it will match the IP addresses in the IP range to their passwords found in the mapping file. Using SUM and its function SetBmcpassword, the BMC password is changed to the password found in user password file for each pair of IP address to unique password.

Prerequisites

- Python 3
 - Libraries included: subprocesses, re, argparse, sys, os
- SUM 2.3
 - Utilizes SetBmcPassword command
 - Environment variable SUM_DIR must be set to SUM directory
- Linux environment
- Supermicro mapping file
 - txt file containing IPMI mac addresses and unique passwords
 - Must be in format Item Number, Serial Number, IPMI mac, and unique password in this order separated by commas
- User Password file:
 - Txt file containing the new password
- run on same subnet as BMC

Usage

```
python set_bmc_password [supermicro_mapping_file] [user_password_file] [start_ip] [end_ip]
```

-h, --help can be used for help with parameters

```
gwan@localhost:~/Desktop/unique password
File Edit View Search Terminal Help
Finished
[gwan@localhost unique password]$ python set_bmc_password.py input_file.txt password.txt 172.31.4.8 172.31.4.15
PING 172.31.4.8 (172.31.4.8) 56(84) bytes of data.
64 bytes from 172.31.4.8: icmp_seq=1 ttl=64 time=0.367 ms
64 bytes from 172.31.4.8: icmp_seq=2 ttl=64 time=0.644 ms
64 bytes from 172.31.4.8: icmp_seq=3 ttl=64 time=0.512 ms

--- 172.31.4.8 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2001ms
rtt min/avg/max/mdev = 0.367/0.507/0.644/0.116 ms
ping to 172.31.4.8 OK
PING 172.31.4.9 (172.31.4.9) 56(84) bytes of data.
64 bytes from 172.31.4.9: icmp_seq=1 ttl=64 time=0.396 ms
64 bytes from 172.31.4.9: icmp_seq=2 ttl=64 time=0.349 ms
64 bytes from 172.31.4.9: icmp_seq=3 ttl=64 time=0.554 ms

--- 172.31.4.9 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2000ms
rtt min/avg/max/mdev = 0.349/0.433/0.554/0.087 ms
ping to 172.31.4.9 OK
PING 172.31.4.10 (172.31.4.10) 56(84) bytes of data.
64 bytes from 172.31.4.10: icmp_seq=1 ttl=64 time=0.348 ms
64 bytes from 172.31.4.10: icmp_seq=2 ttl=64 time=0.369 ms
64 bytes from 172.31.4.10: icmp_seq=3 ttl=64 time=0.523 ms

--- 172.31.4.10 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2000ms
rtt min/avg/max/mdev = 0.348/0.413/0.523/0.079 ms
ping to 172.31.4.10 OK
PING 172.31.4.11 (172.31.4.11) 56(84) bytes of data.
From 172.31.42.12 icmp_seq=1 Destination Host Unreachable
From 172.31.42.12 icmp_seq=2 Destination Host Unreachable
From 172.31.42.12 icmp_seq=3 Destination Host Unreachable

--- 172.31.4.11 ping statistics ---
3 packets transmitted, 0 received, 100% packet loss, time 3000ms
```

Ping all ip addresses

LIST OF ALL IP ADDRESSES FOUND

```
172.31.4.8      0c:c4:7a:29:6a:d5
172.31.4.9      0c:c4:7a:29:6a:f2
172.31.4.10     0c:c4:7a:29:6a:df
172.31.4.13     0c:c4:7a:e9:8c:58
172.31.4.14     0c:c4:7a:f3:2d:8a
172.31.4.15     0c:c4:7a:99:1d:af
```

Lists all IP addresses and IPMI mac addresses found

172.31.4.8

```
Supermicro Update Manager (for UEFI BIOS) 2.3.0 (2019/08/08) (x86_64)
Copyright(C) 2013-2019 Super Micro Computer, Inc. All rights reserved.
```

```
The BMC password is set for the user ID 2
172.31.4.10
```

```
Supermicro Update Manager (for UEFI BIOS) 2.3.0 (2019/08/08) (x86_64)
Copyright(C) 2013-2019 Super Micro Computer, Inc. All rights reserved.
```

```
The BMC password is set for the user ID 2
FINISHED
[gwan@localhost unique password]$
```

Updates all passwords found in the mapping file

172.31.4.8

```
Supermicro Update Manager (for UEFI BIOS) 2.3.0 (2019/08/08) (x86_64)
Copyright(C) 2013-2019 Super Micro Computer, Inc. All rights reserved.
```

```
The BMC password is set for the user ID 2
172.31.4.10
```

```
Supermicro Update Manager (for UEFI BIOS) 2.3.0 (2019/08/08) (x86_64)
Copyright(C) 2013-2019 Super Micro Computer, Inc. All rights reserved.
```

```
The BMC password is set for the user ID 2
Finished
[gwan@localhost unique password]$
```