**Configure PAM module for REST based SSH authentication**

1. Start docker container and login to the container

*$ sudo docker run --name test -itd ubuntu:latest bash*

*$ sudo docker exec -it test bash*

1. Install necessary packages

*# cd*

*# apt-get update*

*# apt-get install -y libpam-modules libpam0g-dev libcurl4-nss-dev git build-essential vim*

*# apt-get install -y telnet net-tools rsyslog python-dev // If required then only install. This will help for debugging*

1. Git pull the pam-http repo

*# git clone* [*https://github.com/beatgammit/pam-http.git*](https://github.com/beatgammit/pam-http.git)

1. Take care of the licensing as the developer has added MIT Licensing to the code.
2. Build the pam http module

*# cd pam-http*

*# make*

*# cp mypam.so /lib/x86\_64-linux-gnu/security/.*

1. Modify sshd\_config

*# vi /etc/ssh/sshd\_config*

|  |
| --- |
| UsePAM yes  PasswordAuthentication yes  ChallengeResponseAuthentication yes  PermitRootLogin yes  PubkeyAuthentication no |

1. Modify pam sshd configuration

*# vi /etc/pam.d/sshd*

|  |
| --- |
| // comment following line  # session required pam\_loginuid.so |

1. Modify pam common-auth configuration file and add the boxed lines to the top of the entry

*# vi /etc/pam.d/common-auth*

|  |
| --- |
| auth sufficient mypam.so url=http://localhost:2000  account sufficient mypam.so |

1. Create a user entry in “/etc/passwd” file either by adding the file directly or with “useradd” command.
   * Useradd command:

*# useradd -p -s /bin/bash -d /home/user1 -m -c user1*

* + Directly creating an entry in /etc/passwd:

*# vi /etc/passwd*

|  |
| --- |
| sshd:x:104:65534::/run/sshd:/usr/sbin/nologin  user1:x:1000:1000:user1:/root:/bin/sh |

1. Restart ssh

*# service ssh restart*

1. Start a SimpleHTTPServer in 2000 port number in a different terminal in same docker

*# python -m SimpleHTTPServer 2000*

1. Ssh from the host machine using docker ip

|  |
| --- |
| $ ssh user1@172.17.0.2  Cool buddy: <Enter password here> // This prompt can be changed “Password” by modifying “/root/pam-http/src/mypam.c” file, build and copy to respective directory. |

