

# Minimega Virtual Playground

## Instructor Use Guide

### Page

- 1 Table of Contents
- 1 Introduction
- 1 Downloading PuTTY
- 3 Connecting to Minimega Server Using PuTTY
- 4 Running the Virtual Playground

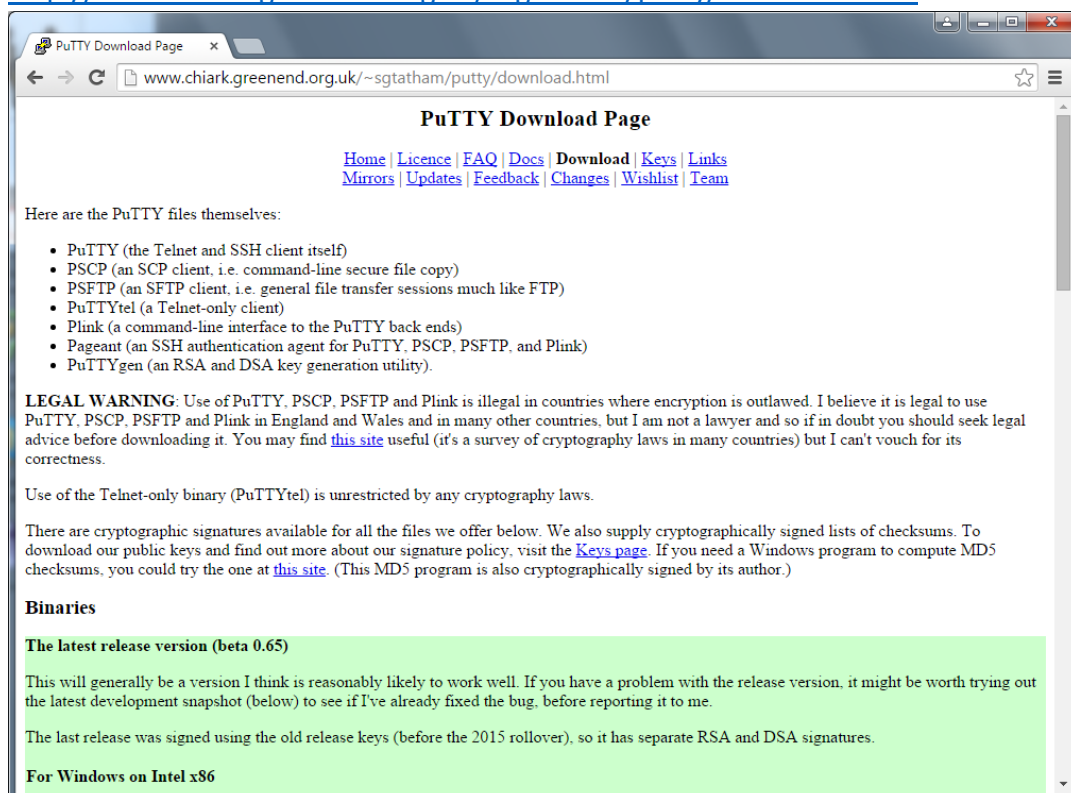
## Introduction

This guide is intended for use by CIT 406 instructors administering the Minimega Virtual Playground from within the ET007 lab network. The virtual playground creates five Kali virtual machines. If you have problems connecting to the Minimega servers following this guide, or would like to make sure you can connect to the servers, run command prompt and ping 10.5.7.22.

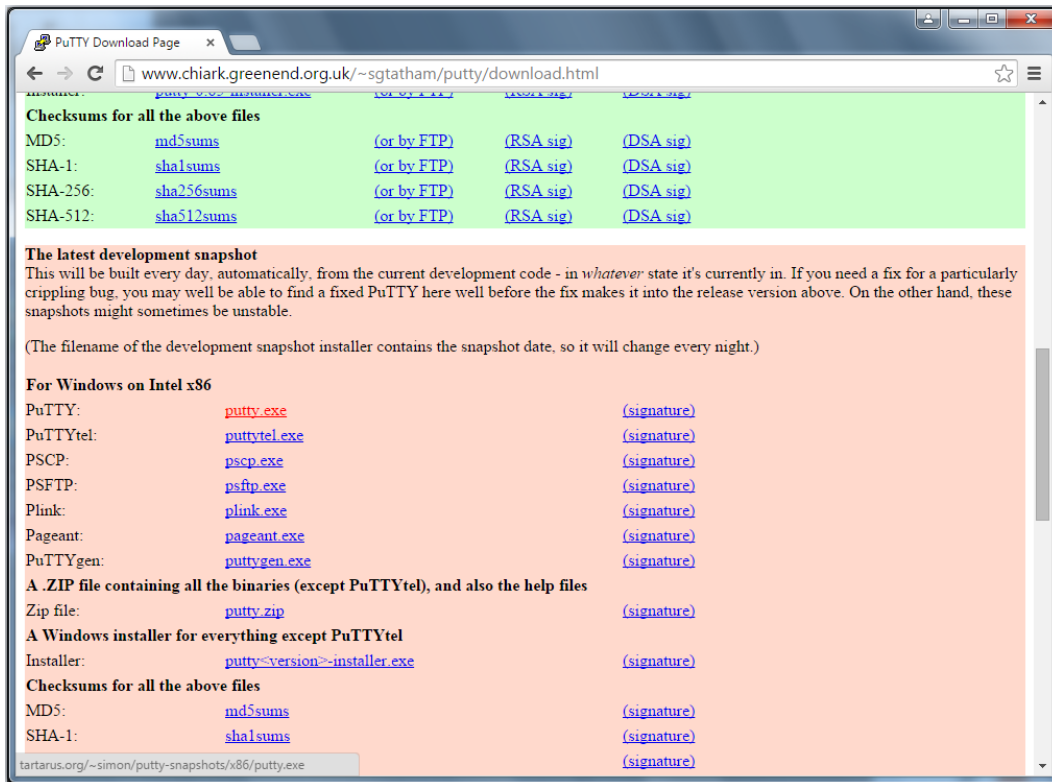
The student use guide is a separate document called mm-user-guide\_student.

## Downloading PuTTY

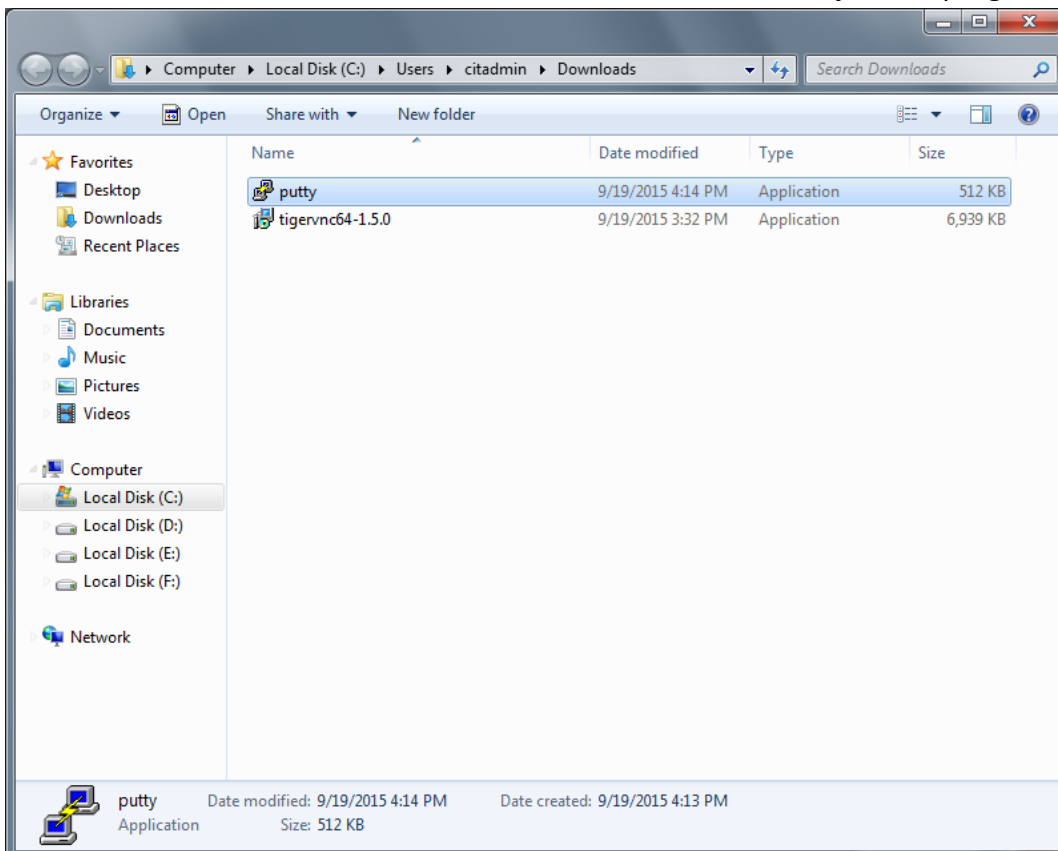
1. In your web browser's address bar, type or paste  
<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>



2. Under **Binaries** and **For Windows**, click to download the putty.exe executable file.

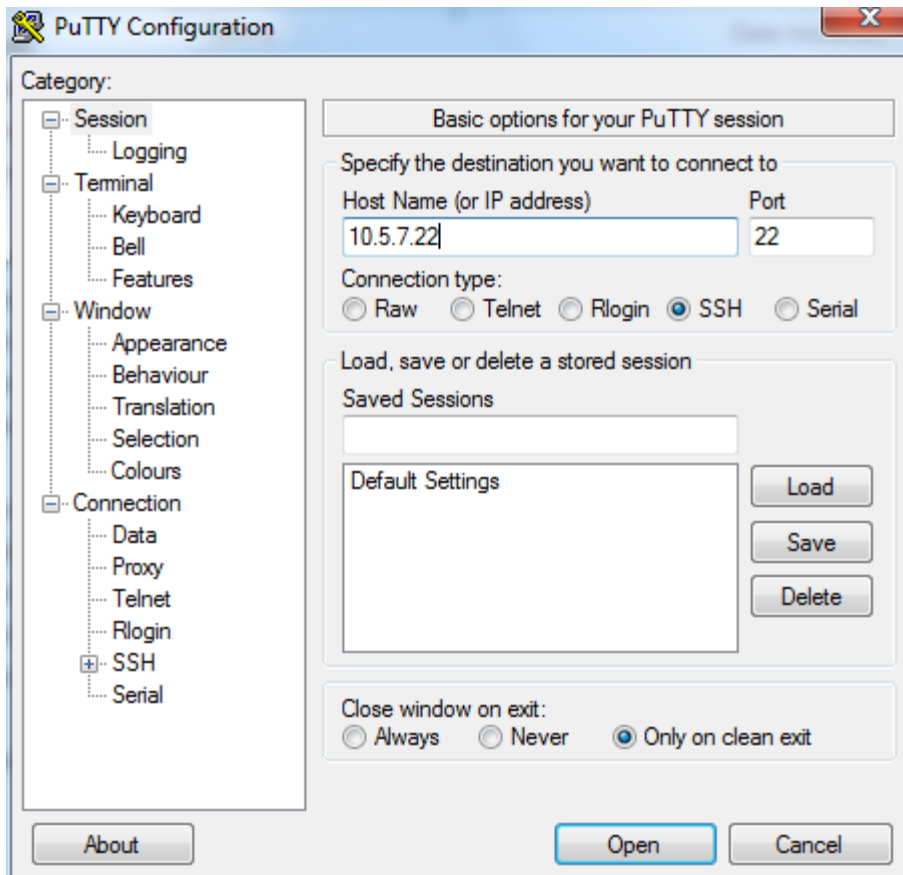


3. Note where the executable file is saved to. There is no installer, just the program.



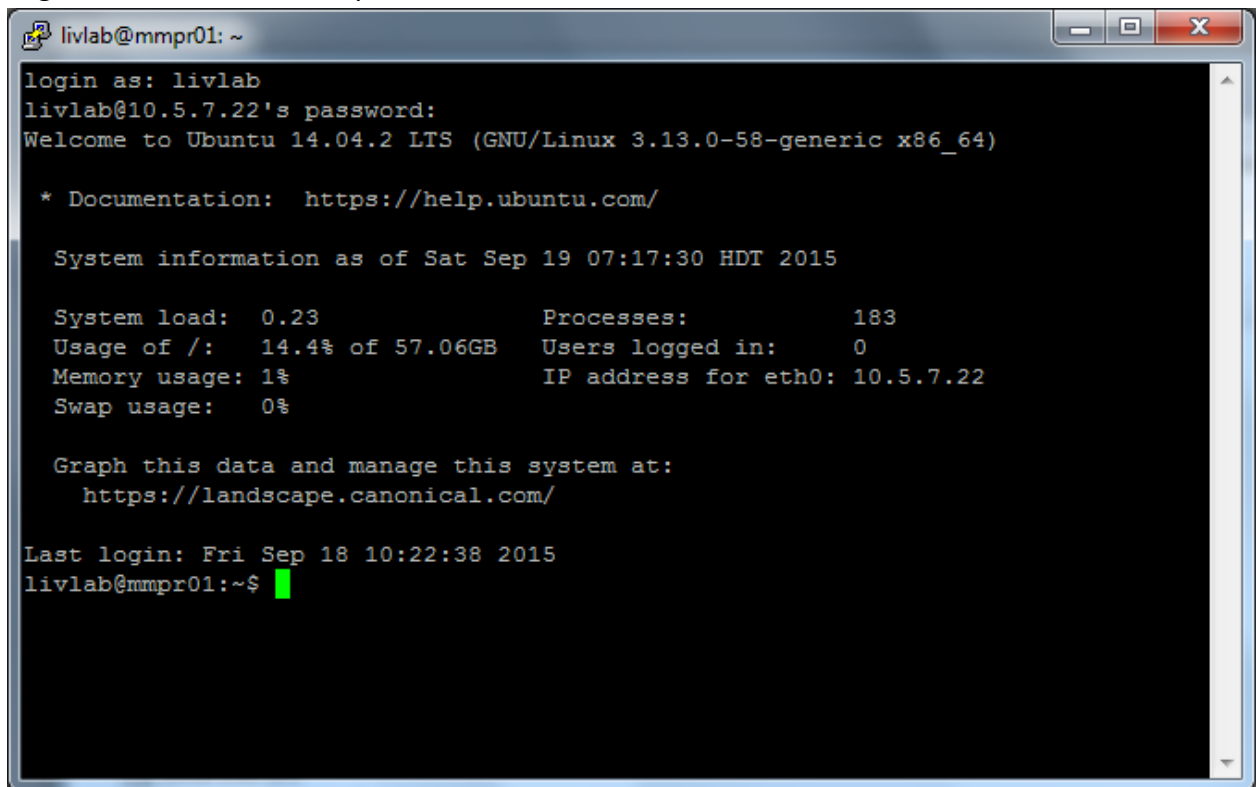
## Connecting to Minimega Server Using PuTTY

1. Double click on the file to run putty.exe.
2. Click "Run" if prompted on the security warning. You should see the PuTTY configuration window.



3. Under Host Name, type *10.5.7.22*.  
\*If you'd like to run two environments at once for a total of 10 Kali VMs, you may double click on the .exe file again to open another window and under host name, type *10.5.7.23*.
4. Make sure the port is 22 and the connection type is SSH. Click Open.

5. Login as *livlab* and use the password *livlab*.



```
livlab@mmpr01: ~  
login as: livlab  
livlab@10.5.7.22's password:  
Welcome to Ubuntu 14.04.2 LTS (GNU/Linux 3.13.0-58-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com/  
  
System information as of Sat Sep 19 07:17:30 HDT 2015  
  
System load:  0.23           Processes:            183  
Usage of /:   14.4% of 57.06GB Users logged in:       0  
Memory usage: 1%           IP address for eth0: 10.5.7.22  
Swap usage:   0%  
  
Graph this data and manage this system at:  
https://landscape.canonical.com/  
  
Last login: Fri Sep 18 10:22:38 2015  
livlab@mmpr01:~$
```

## Running the Virtual Playground

1. Type *sudo su* into the terminal and press enter to gain root access. If prompted, type the password *livlab*.
2. To start the virtual playground, type *python mm\_playground.py* and press enter.  
\*If you encounter errors after starting the script, type  
*./minimega-2.0/bin/minimega -e quit*

```

root@mmpr01: /home/livlab
login as: livlab
livlab@10.5.7.22's password:
Welcome to Ubuntu 14.04.2 LTS (GNU/Linux 3.13.0-58-generic x86_64)

 * Documentation:  https://help.ubuntu.com/

System information as of Sat Sep 19 11:29:15 HDT 2015

System load:  0.15           Processes:            183
Usage of /:   14.4% of 57.06GB Users logged in:          0
Memory usage: 1%           IP address for eth0: 10.5.7.22
Swap usage:   0%

Graph this data and manage this system at:
https://landscape.canonical.com/

Last login: Sat Sep 19 11:16:50 2015 from 10.5.7.85
livlab@mmpr01:~$ sudo su
[sudo] password for livlab:
root@mmpr01:/home/livlab# python mm_playground.py

```

- Note the VM names and their corresponding passwords and ports. Students will need these to connect to their Kali VMs.

```

root@mmpr01: /home/livlab
mmpr01: mega_tap0
Starting VMs
Generating and assigning passwords
mmpr01: {"return":{}}
mmpr01: {"return":{}}
mmpr01: {"return":{}}
mmpr01: {"return":{}}
mmpr01: {"return":{}}
Starting the recordings

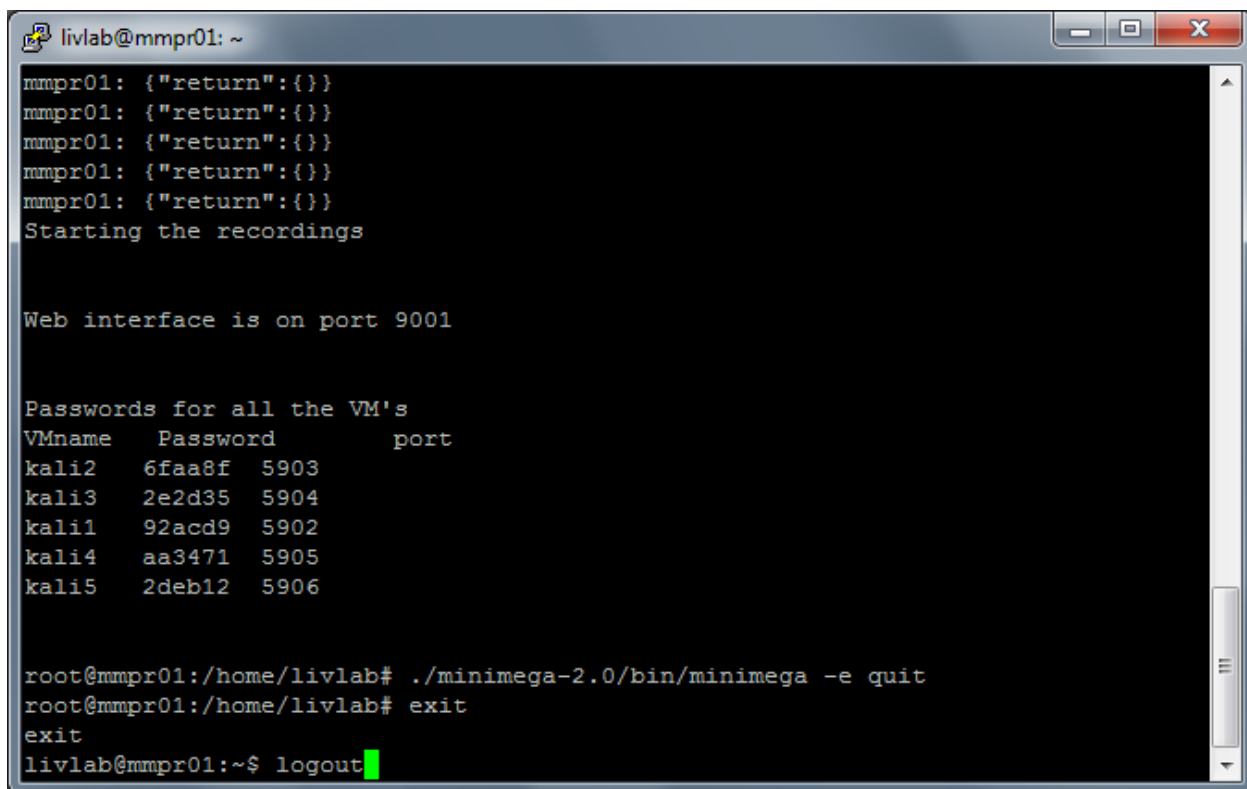
Web interface is on port 9001

Passwords for all the VM's
VMname  Password  port
kali2   2ecb4b    5903
kali3   84a30e    5904
kali1   bd6a02    5902
kali4   31ca45    5905
kali5   d0f992    5906

root@mmpr01:/home/livlab#

```

4. When finished, type `./minimega-2.0/bin/minimega -e quit` to terminate the virtual playground. Then `exit` to exit the root environment. And finally, `logout` to log out of the server.



```
livlab@mmp01: ~  
mmp01: {"return":{}}  
mmp01: {"return":{}}  
mmp01: {"return":{}}  
mmp01: {"return":{}}  
mmp01: {"return":{}}  
Starting the recordings  
  
Web interface is on port 9001  
  
Passwords for all the VM's  
VMname Password port  
kali2 6faa8f 5903  
kali3 2e2d35 5904  
kali1 92acd9 5902  
kali4 aa3471 5905  
kali5 2deb12 5906  
  
root@mmp01:/home/livlab# ./minimega-2.0/bin/minimega -e quit  
root@mmp01:/home/livlab# exit  
exit  
livlab@mmp01:~$ logout
```