



# Project Bouncer

## Installation Guide

### Version 1

May 17, 2019

#### Distribution Statement

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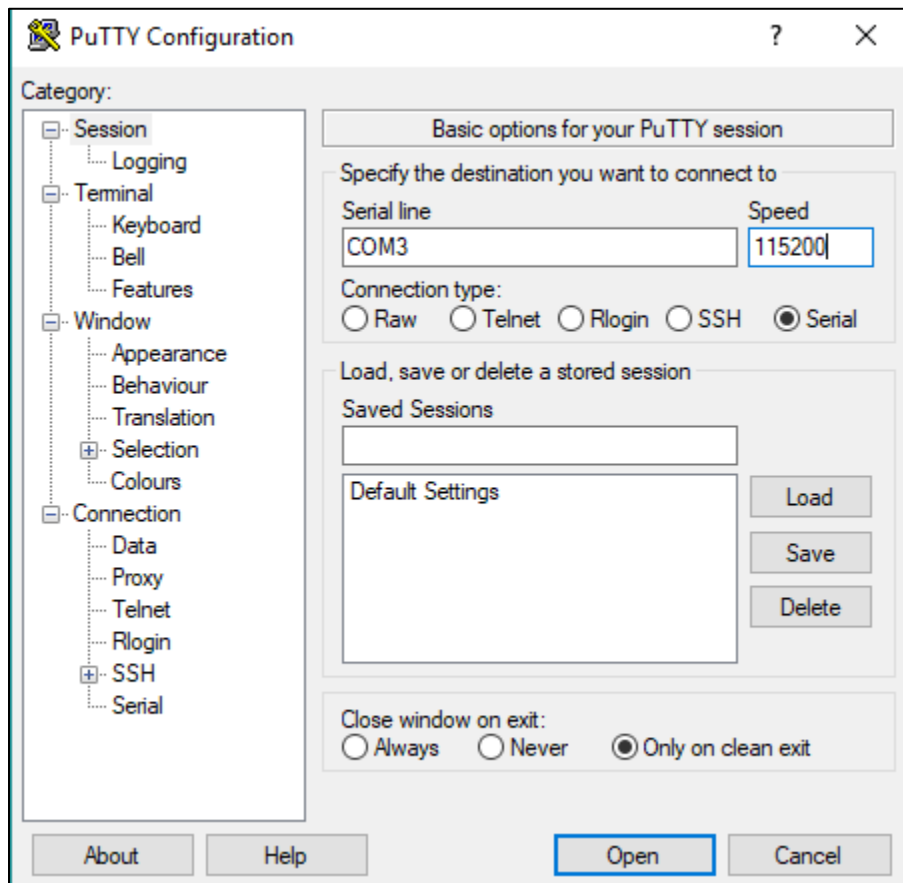
## How to install Bouncer onto a Netgate Appliance

### 1.1 Installing Debian Onto a Netgate Appliance

The operating system that is loaded from the factory onto the Netgate appliance is pFSense, which runs on FreeBSD. To get Bouncer to work, it will need to be installed onto Debian. To install Debian onto the Netgate appliance, follow the instructions below.

1. Download the newest version of Debian and create a bootable USB drive from it.
2. Plug the bootable USB drive into one of the USB slots on the front of the appliance.
3. Connect one end of the provided USB console cable to the appliance and the other end to your USB on your PC.
4. Open up Putty and input the settings below:
  - a. Connection Type: Serial
  - b. Speed: 115200
  - c. Serial Line: This will depend on which COM port your computer is using. Generally, try COM1-COM4.

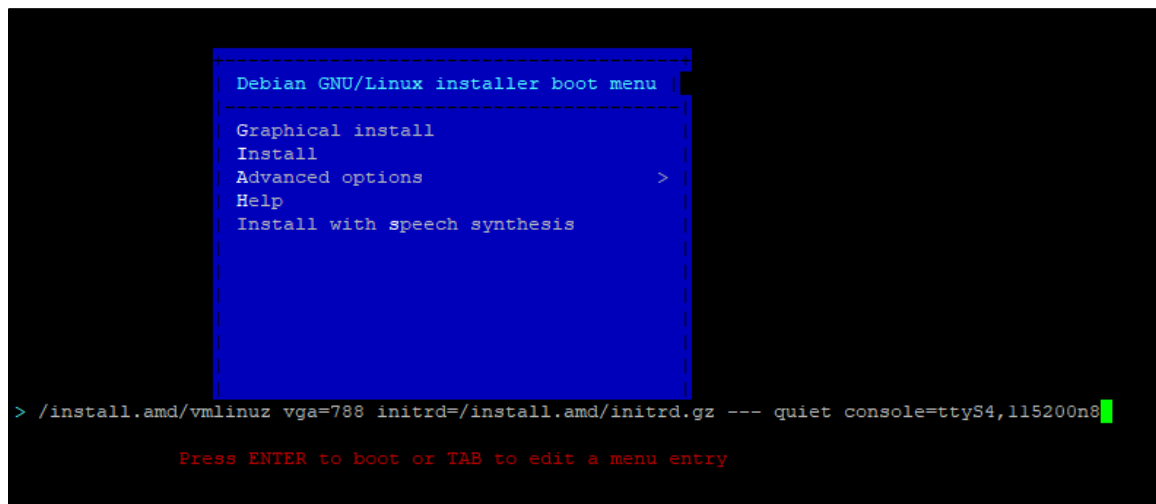
Figure 1 : PuTTY Configuration



5. Power on the appliance.
6. Once the boot menu appears, highlight the "Install" option.

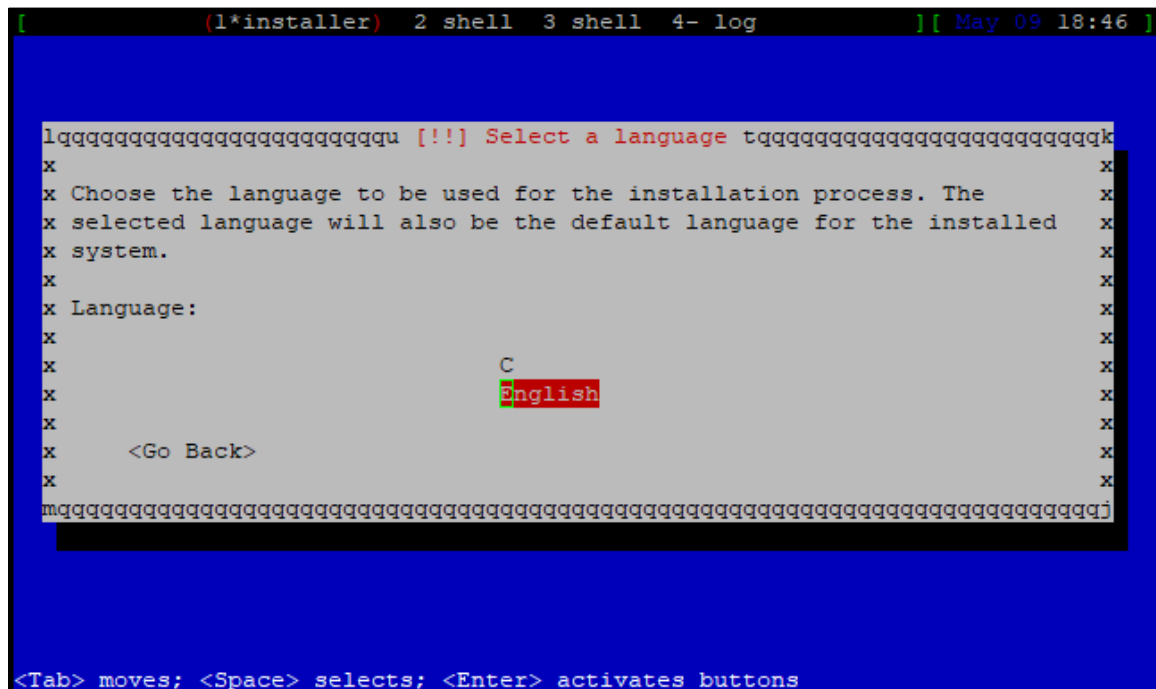
7. Hit Tab and insert the following command at the end
  - a. console=ttyS4,115200n8.
  - b. Note: change the ttyS4 to an output that works for you. Example, ttyS3, ttyS2. It is usually the serial COM port you used to connect with Putty plus 1. For me, I used COM3 so my output is ttyS4.
  - c. Hit Enter.

**Figure 2: Debian GNU/Linux installer boot menu**



8. Select language of your choice.

**Figure 3: Language selection**



9. Select your location.

### Figure 4: Location selection

```
(1*installer) 2 shell 3 shell 4- log ][ May 09 18:46 ]
```

```
lqqqqqqqqqqqqqqqqqqqqqqqq [!!] Select your location tqqqqqqqqqqqqqqqqqqqqqk
x                                                                 x
x The selected location will be used to set your time zone and also for   x
x example to help select the system locale. Normally this should be the   x
x country where you live.                                                  x
x                                                                 x
x This is a shortlist of locations based on the language you selected.     x
x Choose "other" if your location is not listed.                          x
x                                                                 x
x Country, territory or area:                                              x
x                                                                 x
x                               Philippines -                               x
x                               Singapore  a                              x
x                               South Africa 0                             x
x                               United Kingdom a                           x
x                               United States .                            x
x                                                                 x
x      <Go Back>                                                            x
x                                                                 x
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
```

<Tab> moves; <Space> selects; <Enter> activates buttons

10. Select the primary network interfaces.

### Figure 5: Primary network interface selection

```
[ (l*installer) 2 shell 3 shell 4- log ] [ May 09 18:49 ]  
  
lqqqqqqqqqqqqqqqqqqqqqqqqq [!!] Configure the network tqqqqqqqqqqqqqqqqqqqqqqqk  
x                                                                                               x  
x Your system has multiple network interfaces. Choose the one to use as                       x  
x the primary network interface during the installation. If possible,                         x  
x the first connected network interface found has been selected.                           x  
x                                                                                               x  
x Primary network interface:                                                                    x  
x                                                                                               x  
x   enp2s0f0: Intel Corporation I350 Gigabit Network Connection                             x  
x   enp2s0f1: Intel Corporation I350 Gigabit Network Connection                             x  
x   enp2s0f2: Intel Corporation I350 Gigabit Network Connection                             x  
x   enp2s0f3: Intel Corporation I350 Gigabit Network Connection                             x  
x   enp5s0f0: Intel Corporation Device 15c4                                                 x  
x   enp5s0f1: Intel Corporation Device 15c4                                                 x  
x   enp6s0f0: Intel Corporation Device 15c3                                                x  
x   enp6s0f1: Intel Corporation Device 15c3                                                x  
x                                                                                               x  
x   <Go Back>                                                                                x  
x                                                                                               x  
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqj  
  
<Tab> moves; <Space> selects; <Enter> activates buttons
```

11. Type in a hostname for the appliance.

Figure 6: Enter hostname

```
[ (l*installer) 2 shell 3 shell 4- log ][ May 09 18:53 ]

lqqqqqqqqqqqqqqqqqqqqqqqqqqqq [!] Configure the network tqqqqqqqqqqqqqqqqqqqqqqqqqqqq
x
x Please enter the hostname for this system.
x
x The hostname is a single word that identifies your system to the
x network. If you don't know what your hostname should be, consult your
x network administrator. If you are setting up your own home network,
x you can make something up here.
x
x Hostname:
x
x bouncer-appliance
x
x      <Go Back>                                <Continue>
x
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq

<Tab> moves; <Space> selects; <Enter> activates buttons
```

12. Type in a domain name if you require it.

Figure 7: Enter domain name

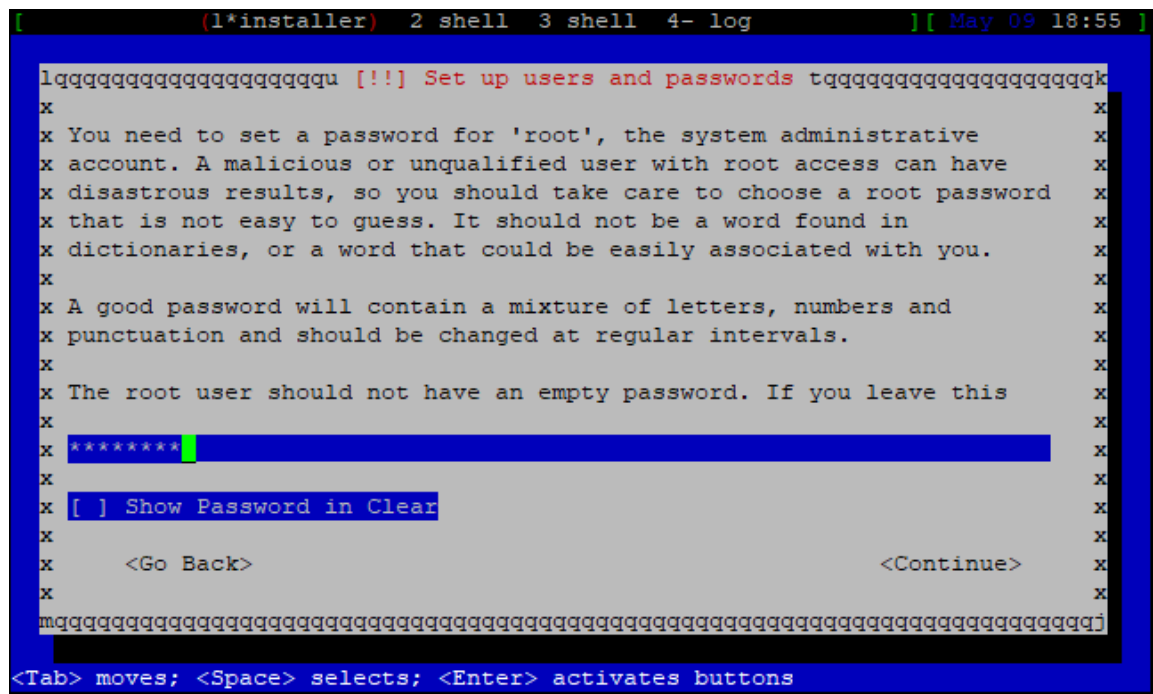
```
[ (l*installer) 2 shell 3 shell 4- log ][ May 09 18:54 ]

lqqqqqqqqqqqqqqqqqqqqqqqqqqqq [!] Configure the network tqqqqqqqqqqqqqqqqqqqqqqqqqqqq
x
x The domain name is the part of your Internet address to the right of
x your host name. It is often something that ends in .com, .net, .edu,
x or .org. If you are setting up a home network, you can make
x something up, but make sure you use the same domain name on all your
x computers.
x
x Domain name:
x
x
x
x      <Go Back>                                <Continue>
x
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq

<Tab> moves; <Space> selects; <Enter> activates buttons
```

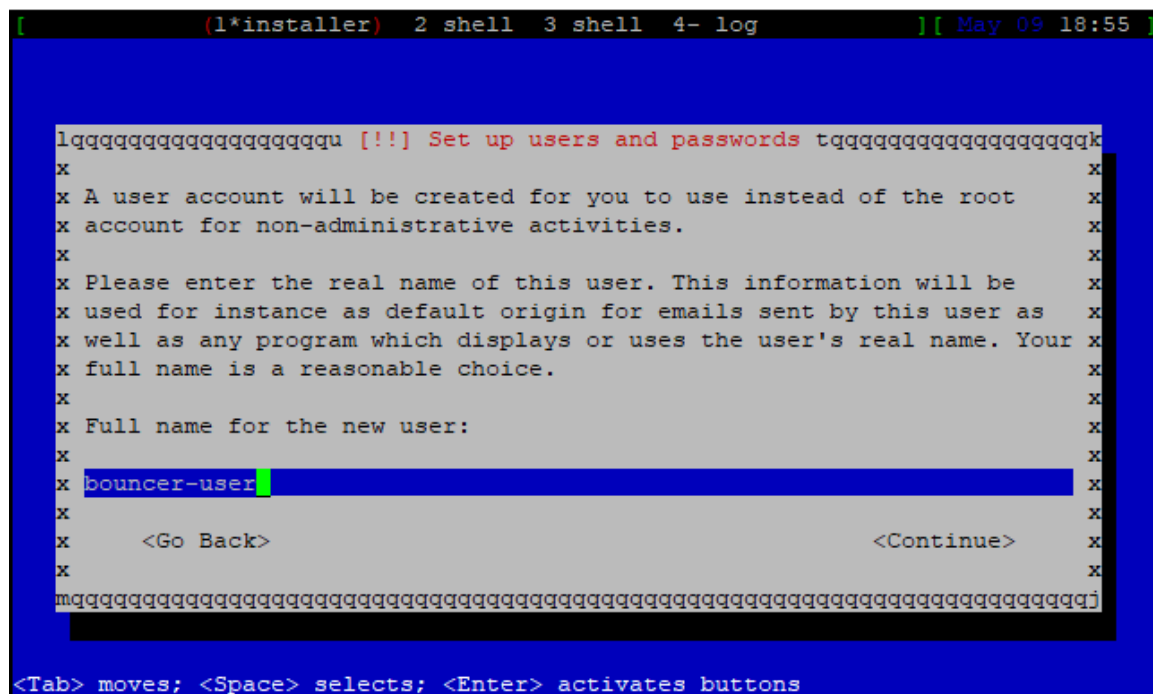
13. Create a password for the “root” account.

### Figure 8: Create password for root account



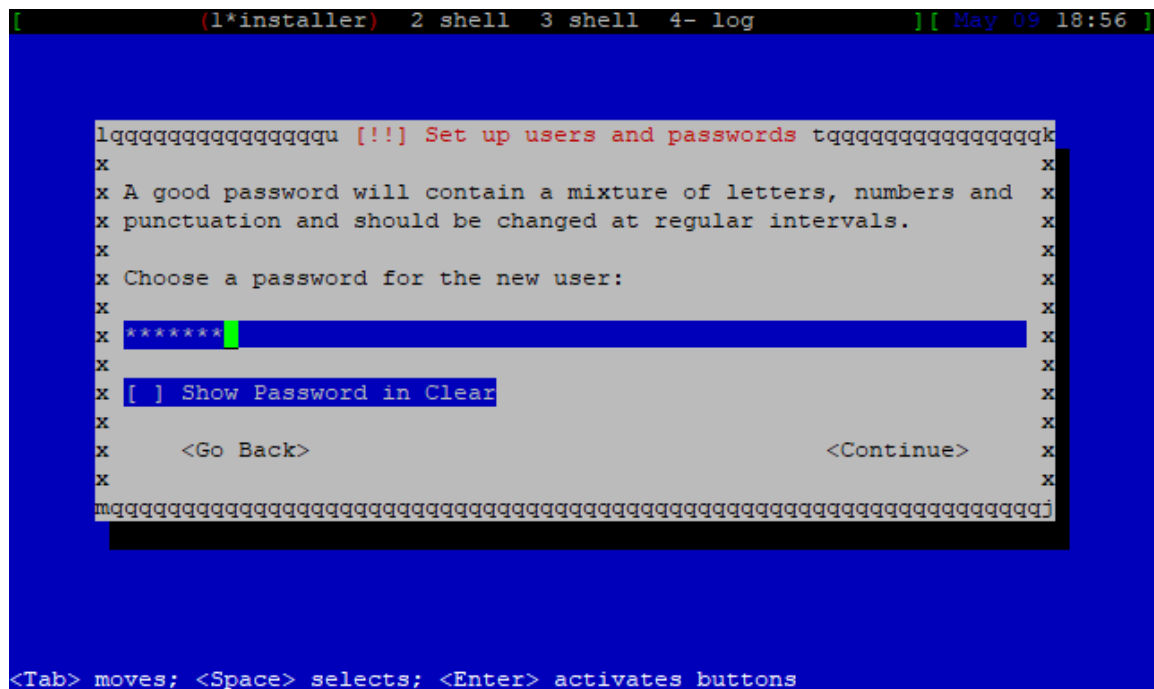
14. Create a user name for a standard account.

**Figure 9: Enter username for standard account**



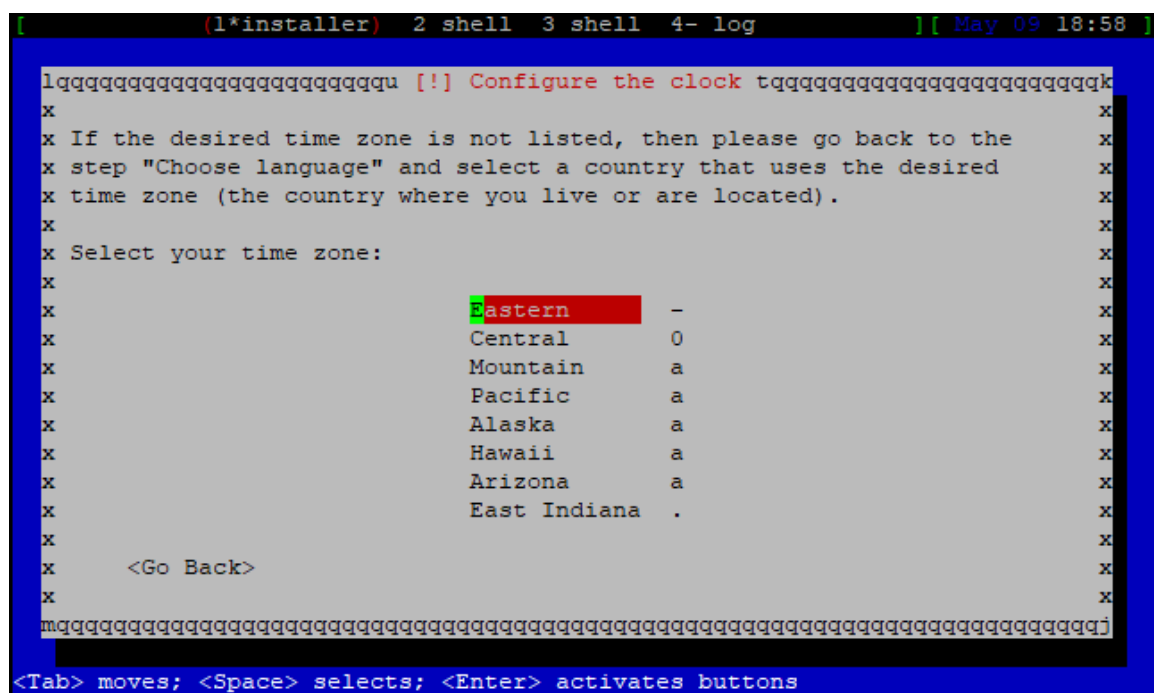
15. Create a password for the standard user.

**Figure 10: Create password for standard user**



16. Select the timezone for the clock.

### Figure 11: Select timezone





17. Select the disk configuration. If you do not need to partition it, choose “use the entire disk.”

**Figure 12: Select disk configuration**

```
[ (l*installer) 2 shell 3 shell 4- log ][ May 09 19:07 ]

lqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq [!!] Partition disks tqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq

x
x The installer can guide you through partitioning a disk (using
x different standard schemes) or, if you prefer, you can do it
x manually. With guided partitioning you will still have a chance later
x to review and customise the results.
x
x If you choose guided partitioning for an entire disk, you will next
x be asked which disk should be used.
x
x Partitioning method:
x
x     Guided - use the largest continuous free space      -
x     Guided - use entire disk                          0
x     Guided - use entire disk and set up LVM             a
x     Guided - use entire disk and set up encrypted LVM .
x
x     <Go Back>
x
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq

<Tab> moves; <Space> selects; <Enter> activates buttons
```

18. Select the hard drive you wish to install Debian on. Make sure to select the correct drive and not the built in flash. The correct drive should be the larger one.

**Figure 13: Select hard drive for installation**

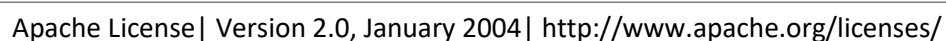
```
[ (l*installer) 2 shell 3 shell 4- log ][ May 09 19:08 ]

lqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq [!!] Partition disks tqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq

x
x Note that all data on the disk you select will be erased, but not
x before you have confirmed that you really want to make the changes.
x
x Select disk to partition:
x
x     MMC/SD card #1 (mmcblk0) - 30.6 GB MMC M52532
x     SCSI2 (0,0,0) (sda) - 256.1 GB ATA Micron 1100 MTFD
x     SCSI8 (0,0,0) (sdb) - 8.1 GB FLASH Drive SM_USB20
x
x     <Go Back>
x
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq

<Tab> moves; <Space> selects; <Enter> activates buttons
```

- Figure 14: Select partitioning scheme**



22. After installation is finished. Unplug the USB drive and reboot the appliance.

## 1.2: Installing Bouncer onto the Netgate Appliance

1. Once Debian OS is installed, Git will need to be installed so the appliance is able to download the Bouncer software directly from the Github repository.
2. Under the root account, install git by executing the command below:

`apt-get install git`

```
root@bouncer-appliance:/home/bouncer-user# apt-get install git
```

3. Clone the official Bouncer repository from Github to the appliance with the command below:

`git clone https://github.com/nmfta-repo/nmfta-bouncer`

4. Install the following requirements for Bouncer

`apt-get install ufw python3-pip`

5. Navigate to the Bouncer directory. Execute packager.sh with the following command **in the bouncer directory**:

`./packager.sh`

```
root@bouncer-appliance:/home/bouncer-user/nmfta-bouncer# ./packager.sh
```

6. Install Bouncer with the following command **in the bouncer directory**:

`dpkg -i bouncer.deb`

```
root@bouncer-appliance:/home/bouncer-user/nmfta-bouncer# dpkg -i bouncer.deb
```

7. Bouncer is now installed.