**Linux Wireless Configuration**

**Confirm that Network Manager is installed**

Using the appropriate package manager for the distribution to verify that Network Manager is installed

1. Open a terminal window
2. On the table below, find the Linux distribution you are using and type the corresponding command in to the terminal and strike the enter key

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ubuntu</td>
<td>`dpkg -get-selections</td>
</tr>
<tr>
<td>Fedora</td>
<td>`yum list installed</td>
</tr>
<tr>
<td>Debian</td>
<td>`dpkg -get-selections</td>
</tr>
<tr>
<td>Mint</td>
<td>`dpkg -get-selections</td>
</tr>
</tbody>
</table>

3. If the package is installed the terminal will print the name of the package to the screen, if not then nothing will be displayed.
4. If the package is installed skip the next section and go to USE NETWORK MANAGER.

**Install Network Manager**

1. Establish internet connection via Ethernet
2. Use the correct command from the table below to install network manager

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ubuntu</td>
<td><code>sudo apt-get install network-manager network-manager-gnome network-manager-glib</code></td>
</tr>
<tr>
<td>Fedora</td>
<td><code>sudo yum install network-manager network-manager-gnome network-manager-glib</code></td>
</tr>
<tr>
<td>Debian</td>
<td><code>sudo apt-get install network-manager network-manager-gnome network-manager-glib</code></td>
</tr>
<tr>
<td>Mint</td>
<td><code>sudo apt-get install network-manager network-manager-gnome network-manager-glib</code></td>
</tr>
</tbody>
</table>

3. You will be prompted for a password, have the customer enter the root password.
4. Wait for the install to complete.
5. Run the following commands to make Network Manager start on boot
   a. `/sbin/chkconfig --add network-manager`
   b. `/sbin/chkconfig --add network-manager-glib`
   c. `/sbin/chkconfig --add network-manager-gnome`
   d. `/sbin/chkconfig network-manager on`
   e. `/sbin/chkconfig network-manager-glib on`
   f. `/sbin/chkconfig network-manager-gnome on`
6. Reboot the machine
   a. `shutdown -r now`
Use Network Manager

1. click on the Network Manager icon in the tray
2. select PerunaNet from the list of networks
3. Ensure the settings are correct and enter the user's credentials
   a. **Wireless security** is WPA & WPA2 Enterprise
   b. **Key type** is Automatic
   c. Authentication: Protected EAP (PEAP)
   d. **Identity** is the user’s 8 digit SMU ID number
   e. **Password** is the user’s SMU password
   f. **Anonymous identity** is left blank
   g. All **certificate or key** files are none
   h. Inner Authentication: MSCHAPv2
   i. **Private key** is left blank

4. Click Login to network

**A Note on Linux**

Linux comes in many versions, each slightly different from others. Linux can also be further customized by the user with many other features. The instructions in this section pertain to the 4 most common Linux distributions and assumes that a minimum of customization has occurred. The above instructions may need to be modified to fit the system.