

Installing the Bluetopia[®] Virtual Network Device Driver under Linux

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Overview

Bluetooth requires the use of Virtual Network drivers to be installed into the Linux Operating System so that certain profiles can be utilized. The profiles that require Virtual Network device support are as follows:

- Personal Area Networking Profile (PAN)

Before using the above Profile, the user must install a Virtual Network device into the Operating System. The procedure for accomplishing this task will be explained in this document. Once a Virtual Network device is installed, Linux will see another network device in the system and any action that can be performed on a normal physical network device can be performed on this Bluetooth Network device (i.e. “ifconfig” for network configuration).

Hardware/Software Requirements

- Linux Operating System (Kernel Version 2.6 or greater).

Installation Instructions

All installation/removal/configuration is done using a shell script called:

VNETMInst.sh

This script can be found on the distribution under the **VNET/driver/install** directory.

Installation is as simple as running the above-mentioned script and specifying some parameters. The parameters are as follows:

Start x

where 'x' is the number of Virtual Network devices to install. For example, to Start 1 Network device, the command line option would be:

VNETMInst.sh Start 1

The above command line will install Network device **ss1vnet0** into the system. If no parameter specifying the number of Virtual Network devices to install is supplied the default value (default=1) will be used. The user is free to install up to the maximum number (maximum=9) of devices. There is no way at present to install Virtual Network devices that are not contiguous (i.e. **ss1vnet0**, **ss1vnet2**, and **ss1vnet3** is not possible because **ss1vnet1** would not be present). Note that this script must be ran every time the system is booted unless the script is added to the boot process, for details see /etc/init.d, the man page for inittab or the man page for init in your specific Linux build.

In addition to the above mentioned installation option, the following options also exist:

stop

restart x

The **stop** option allows the user to remove ALL existing Virtual Network devices from the system.

To remove all Virtual Network devices that has been installed into the system:

VNETMInst.sh stop

The **restart** option takes the same parameters as the **start** option and allow the user to perform a **stop** immediately follow by a **start**. If no parameter specifying the number of Virtual Network devices to install is supplied the default value (default=1) will be used. This option is useful to quickly change the number of Network devices installed in the system.