Requirements for setting up Juniper Secure Access under Linux

Versions 6.3 and above
Document version 0.1

This document describes some of the basic requirements for using the Juniper Network Connect SSL VPN client under Linux. Whilst Juniper have a fairly broad operating system support, one of the key challenges is that every Linux build is different; there are rarely any standardisations in the corporate environment in terms of version, builds or patching. This is not the “fault” of the operating system or Juniper at all; all the tools exist for standardisation but they are rarely implemented in my experience. Most Linux users will be technical in nature and not likely to have requirements that can easily be standardised upon.

To that end, this document is designed to be a cheat sheet of the requirements to successfully build a tunnel from a (relatively) standard Linux distribution to the Juniper Secure Access. This information is gleaned from various community postings which will be credited as well as some information directly gleaned from the Juniper TAC.

The information here is obviously supplied with no guarantees of any kind and is strictly “at your own risk”. Please let me know if there are any issues or typos kendalbeefcake {a} gmail.com.

Binary requirements:

1. Supported browser & Java Runtime. This list changes regularly so check the Juniper site as your first call however, it should work with:
   a. Sun JRE 5 (JRE 6 Recommended/supported)
   b. Firefox 1.5 and above (Firefox 2.0 recommend/supported)

2. Required version of openssl is 0.9.8d. OpenSSL is part of most standard Linux installs but it obtainable from here: http://www.openssl.org/

3. Additionally, the package also requires the following binaries to be present:
   • /lib/libcwait.so (0xb7ffd000)
   • linux-gate.so.1 => (0xfbffd000)
   • libdl.so.2 => /lib/libdl.so.2 (0x00294000)
   • libz.so.1 => /usr/lib/libz.so.1 (0x0038b000)
   • libpthread.so.0 => /lib/i686/libpthread.so.0 (0xb7f9b000)
   • libm.so.6 => /lib/i686/libm.so.6 (0xb7f78000)
   • libc.so.6 => /lib/i686/libc.so.6 (0xb7e4f000)
   • /lib/ld-linux.so.2 (0x0012a000)

For the non-Linux users (me included) the “.1” and “.2” numbers are the major release versions; so basically linux-gate.so version 1 and above is required. The Hex numbers at the end are hashes (MD5 I’m told, but they look to short to me) of the versions know to work.
Environmental requirements:

1. The "Tun" Module needs to be running in the Kernel as root. This binary is a device driver to generically support VPNs under Linux. Again this module is included in most distributions but is often not loaded by default. To do this use the command (as root) “modprobe tun” to load the module into the Kernel. More information on the tun module can be found here: http://vtun.sourceforge.net/tun/faq.html

Other resources:

Google is your friend, however we found these:


A Fairly technical WIKI article on how to set it all up including references to some specific libraries; however this article is OLD and doesn’t actually state which version of the JSA the admin was using; the sun Java it mentions is 1.4 which has not been supported by Juniper for a long time. May be helpful but use at your own risk!


Very Long thread about ubuntu support; contains a lot of useful information but also several inaccuracies and false assumptions apparent to even my un-trained eye. Definitely useful but definitely use at your own risk!