Released Operational Procedure

JPLNet-L1-RAS-PulseSecureClientLinux	
Purpose/Scope	This procedure provides instructions for IT Operations on how to install the Pulse client along Debian and RedHat based Linux systems. This must be done in a terminal session window.
Problem	Need to install the new Pulse VPN client Linux systems.
Audience	End Users, Help Desk, and Ops
Trigger	Require access to JPL resources from remote locations
PROCEDURE	
Pre-Reqs	1. Remote Access account to the corresponding VPN Portal:

Environment:	URL:
RAS Portal	https://connect.jpl.nasa.gov
Full Tunnel VPN	https://jplvpn.jpl.nasa.gov/full
Split Tunnel VPN	https://jplvpn.jpl.nasa.gov/split
Full Tunnel VPN - Linux	https://jplvpn.jpl.nasa.gov/full/linux
Split Tunnel VPN - Linux	https://jplvpn.jpl.nasa.gov/split/linux

2. A Debian or RedHat based Linux system such as: Ubuntu, Debian, RHEL, or CentOS.
3. A JPL-issued RSA SecurID Token (available at https://dir.jpl.nasa.gov/tfa/)

Background	JPL provides remote access into the JPL network through a VPN portal, utilizing the Pulse Secure client to provide connectivity. The Linux client is only available to run through the CLI, there is no GUI client available.
Diagnose	

Solve

How to install (while connected to the JPL Network):

1. Download the JPL-issue PulseSecure Linux installer tarball package “jpl-ps-8.1r8.tar.gz":
   https://ras.jpl.nasa.gov/standalone_installers.php

2. Once downloaded, extract the contents of the tarball:

```
$ tar zxvf jpl-ps-8.1r8.tar.gz
```

*Note: For non LMIT supplied workstations or systems whose username isn’t the same as your JPL username, you will need to edit the /usr/local/bin/jpl-ps script and change the “$USER” variable to your JPL username, example VPN_USER=”$USER” to VPN_USER=“jdoe”.

Run the setup script to install Pulse Secure Client for Linux and its dependencies automatically for your Linux system.

```
$ cd jpl-ps-8.1r8
$ ./setup-ps.sh
```

Verify	You should now have the Pulse Client installed on your system, and can be verified by reviewing the directory listing of: /usr/local/pulse
	
	`$ ls -l /usr/local/pulse/`
	`total 4004`
	`-rwxr-xr-x. 1 root root  2653 Mar  8 06:15 ConfigurePulse.sh`
	`-rw-r--r--. 1 root root  30 Jun 22 11:35 postinstall.log`
	`-rwxr-xr-x. 1 root root  4092 Mar  8 06:15 PulseClient.sh`
	`-rwxrwxr-x. 1 root root  98712 Mar  8 06:15 pulsediag`
	`-rwsrwsr-x. 1 root root 2744408 Mar  8 06:15 pulsesvc`
	`-rw-r--r--. 1 root root 1226516 Mar  8 06:15 pulse.tgz`
	`-rw-r--r--. 1 root root  3187 Mar  8 06:15 README`
	`-rw-r--r--. 1 root root  16 Mar  8 06:15 version.txt`
	`$`
	
	To connect, run the jpl-ps shell script, specifying “full” or “split” tunneling modes from within the jpl-ps directory in terminal, and enter your passcode (PIN + RSA Token) instead of PASSWORD, as shown in the example output below:
	
	`$ jpl-ps full`
	
	`Connecting to jplvpn.jpl.nasa.gov...`
	
	`** Type PASSCODE (PIN + RSA Token) instead of PASSWORD  **`
	`** Wait about 10 seconds then open 2nd Terminal.  **`
	`** To see VPN status,  '/usr/local/pulse/PulseClient.sh -S' **`
	`** To kill VPN session, '/usr/local/pulse/PulseClient.sh -K' **`
	
	`executing command : /usr/local/pulse/pulsesvc -h jplvpn.jpl.nasa.gov -u bguevara -U https://jplvpn.jpl.nasa.gov/full/linux -r realm-jpl-linux-vpn-full`
	`VPN Password:`
	
	To check the status, launch another terminal session and run the command “`pulsesvc -S`”, as shown in the example output below:
	
	`$ /usr/local/pulse/pulsesvc -S`
	`Connection Status :`
	
	`connection status : Connected`
	`bytes sent : 144`
	`bytes received : 366`
	`Connection Mode : ESP`
	`Encryption Type : AES256/SHA1`
	`Comp Type : LZO`
	`Assigned IP : 128.149.80.80`
	
	`$`

Exit	
Escalate	
ADMINISTRATIVE	
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Level	1
Related Docs	*ps-pcs-sslvpn-8.1r5-supportedplatforms.pdf*