VPN Resources

VPN service will be provided to all IIIT students. To use service it is necessary to install openVPN client on personal machines and laptops. Using VPN all students would be able to connect to any student machine in campus from their home machines. Also ssh, mail and web access to all servers using VPN is allowed. Hence now you can easily access courses.iiit.ac.in, intranet.iiit.ac.in, mirage.iiit.ac.in, etc. even when you are not in campus.

Note that: VPN service will only work when you are trying to use it from outside campus. VPN will not work when you try to use it from inside the network.

To setup VPN following files are required:

- 1. CA certificate file
- 2. all.iiit.ac.in certificate file
- 3. <u>all.iiit.ac.in key file</u>
- 4. Windows configuration file for openVPN
- 5. Linux configuration file for openVPN
- 6. MAC OS X configuration file for openVPN
- 7. openVPN setup for Windows XP
- 8. openVPN setup for Windows Vista and Windows 7 (32-bit and 64-bit)
- 9. openVPN setup for MAC OS X

All these file are available in <u>zip</u> or <u>tar.bz2</u> archive formats.

Windows XP setup:

To setup openVPN in Windows you can use following method:

- 1. Install openVPN on Windows using setup file provided on this site. The default options in setup are fine and do not need any change. During installation you will get warning since Win32-TAP driver would get installed. You have to click "Continue Anyway" at that warning prompt for successful installation.
- 2. After installation you have to open openVPN configuration file directory from openVPN submenu (inside Start Menu -> All Programs) which is created during openVPN installation.
- 3. Copy files `ca.crt', `all.iiit.ac.in.crt', `all.iiit.ac.in.key' and `windows_client.ovpn' files in this configuration file directory. Now you can right click `windows_client.ovpn' file and choose "Start openVPN with this configuration file" option to start openVPN tunnel.
- 4. You will be prompted for username and password. Username is complete IIIT email user id, for example `saurabh.barjatiya@research.iiit.ac.in' and password is corresponding email password. If username and password are correct you will get connected to VPN server and after few status messages you would see message "Process Initialization Complete". When you see this message it means that you are successfully connected to IIIT VPN.
- 5. When you connect using VPN you will get IP in range 10.6.0.0/16. You can start putty and connect to mirage.iiit.ac.in, web.iiit.ac.in, etc. You can open browser and

- open courses.iiit.ac.in or intranet.iiit.ac.in or even ss1.iiit.ac.in from outside campus.
- 6. To disconnect you have to select openVPN connection window and use 'F4' shortcut key. You can also disconnect VPN by disabling and then re-enabling virtual tap interface used for VPN connections.

A virtual "Local Area Connection" interface gets created due to installation. This interface is necessary for VPN connection. This would remain disconnected unless you connect to VPN server.

A video showing the complete procedure in Windows XP is available in <u>avi</u>, <u>downloadable flash</u> and <u>flash displayed using HTML</u> formats.

In case VPN is not working for Windows OS then please see <u>Windows Troubleshooting</u> page.

Windows Vista and Windows 7 (32-bit and 64-bit) setup:

To setup openVPN in Windows Vista and Windows 7 you can use following steps:

- 1. Download files `openvpn-2.1_rc21-install.exe', `ca.crt', `windows_client.ovpn', `all.iiit.ac.in.key' and `all.iiit.ac.in.crt' when you are inside campus.
- 2. Right click `openvpn-2.1_rc21-install.exe' and choose `Run as administrator' for installing openVPN.
- 3. Go to folder `C:\Program Files(x86)\openVPN' and change permission for `config' directory such that all users can create and delete files inside that folder. Copy files `ca.crt', `windows_client.ovpn', `all.iiit.ac.in.key' and `all.iiit.ac.in.crt' to config folder.
- 4. Go to folder `C:\Program Files(x86)\openVPN\bin' and change properties of file `openvpn-gui-1.0.3'. Go to compatibility tab and choose to run as administrator.
- 5. Go to Start Menu -> All Programs -> OpenVPN -> OpenVPN GUI. Right click on shortcut for openVPN GUI and again go to properties. Verify that in compatibility tab, run as administrator option is ticked.
- 6. Start openVPN GUI from Start Menu -> All Programs -> OpenVPN -> OpenVPN GUI. In case icon in notification area is not visible you can change settings so that all notification icons are always shown.
- 7. Right click the icon in notification area and choose "Connect". Enter complete email address like 'saurabh.barjatiya@research.iiit.ac.in' and corresponding email password for connecting.

Ignore the error displayed in recorded video. The error is displayed as video was recorded within campus. OpenVPN will work properly if you use this procedure and try to connect from outside campus.

A video showing the complete procedure in Windows Vista is available in <u>avi</u>, <u>downloadable flash</u> and <u>flash displayed using HTML</u> formats.

Another video showing the complete procedure in Windows 7 is available in <u>avi</u>, <u>downloadable flash</u> and <u>flash displayed using HTML</u> formats.

In case VPN is not working for Windows OS then please see <u>Windows Troubleshooting</u> page.

Linux setup:

To setup openVPN in Linux you can use following steps:

- 1. Install openvpn package using yum, apt-get, synaptic, yast etc. based on which Linux distribution you are using. All standard Linux distribution support openVPN installation using standard repositories.
- 2. After installation go to `/etc/openvpn' folder and copy files `ca.crt', `all.iiit.ac.in.crt', `all.iiit.ac.in.key' and `linux_client.conf' in this directory. (You need to be root to be able to write in this directory).
- 3. Now to start openVPN connection you have to follow these steps:
 - a. Start terminal as root user
 - b. Go to directory `/etc/openvpn'
 - c. Use command `openvpn --config linux_client.conf' to start openVPN tunnel
 - d. When asked for username and password, please enter your proper IIIT email address as username and email password as password. For example username can be 'saurabh.barjatiya@research.iiit.ac.in' and password corresponding email password.
 - e. After you see 'Process Initialization Complete' message, you have to open another terminal as root user
 - f. In this terminal open file `/etc/resolv.conf' and add line `nameserver 10.4.20.204' at top of this file
- 4. When you connect using VPN you will get IP in range 10.6.0.0/16. You can now ssh to mirage.iiit.ac.in, web.iiit.ac.in, etc. You can open browser and open courses.iiit.ac.in or intranet.iiit.ac.in or even ss1.iiit.ac.in from outside campus.
- 5. To disconnect just press 'Ctrl+C' in terminal in which you have started openVPN client. Also remove entry for `nameserver 10.4.20.204' from `/etc/resolv.conf' file.

In case VPN is not working for Linux then please see <u>Linux Troubleshooting</u> page.

MAC OS X setup:

To setup openVPN in MAC OS X you can use following steps:

- 1. Install Tunnelblick using setup shared on this website or obtained through other sources.
- 2. Run Tunnelblick in case it is not already running. You should see small black circular icon in status bar (usually on top right corner) in case Tunnelblick is running.
- 3. After setup is complete copy files 'ca.crt', 'all.iiit.ac.in.crt', 'all.iiit.ac.in.key' and 'openvpn.ovpn' to openvpn folder. This folder can be created anywhere as per convinience.
- 4. Double click on .ovpn file to add it to tunnelblick
- 5. To connect you can click on tunnelblick icon on status bar and choose connect option.
- 6. When prompted for username and password, please enter complete IIIT email address as username and corresponding email password as password. For example, 'saurabh.barjatiya@research.iiit.ac.in' can be used as username and corresponding email password as password.

For more information on using VPN, for example for opening IEEE, Springer, etc. websites you can visit the page on <u>VPN tips and tricks</u>

You can send email to 'help@iiit.ac.in' for queries regarding VPN service.

