

## ***Remote Access to your Desktop using VPN***

### Overview

VPN is a tool that enables you to access one computer from another. Typical uses for Pop Center members would be 1) access their pop center computer from a home computer or laptop 2) access HSPH Kresge computers from the pop center 3) access the HSPH network drives from a non-HSPH internet connection.

To set up the VPN you need to install two software programs on the computer you connect FROM. You will also need to enable remote access of the computer you are going to access TO.

To start things off, put in an HSPH IT ticket and request a “VPN account” and a “fixed IP address” of the computer you want to connect TO. If you are not a faculty member, you will have to pay \$72/year for this VPN account.

Once you have the email saying you can go ahead and set up VPN, you can follow the instructions below working with both the computer you want to connect TO, and the computer you connect FROM. For ease of notation, I’m going to call the computer you connect TO the “office” computer, and the computer you connect FROM is the “home” computer. This is just notation, however, you can actually set up the VPN any way around.

The initial set up takes a few steps, but then each time you want to connect it is just a two set process.

### Stepwise instructions

[Connecting from a home Windows PC to an office Windows PC.](#)

[Connecting from a home Mac to an office Mac.](#)

[Connecting from a home Mac to an office Windows PC.](#)

[Connecting from a home Windows PC to an office Mac.](#)

Connecting from an iPad to a Mac.

[Connecting from an iPad to a Windows PC.](#)

### Technical Details

**VPN** is a “virtual private network.” The VPN protocol is how your HOME computer connects to the HSPH network. The VPN client, Cisco Anyconnect, creates a tunnel to the HSPH network, through which you can access other computers on the HSPH

network. Before connecting with remote desktop software, a VPN tunnel must be established from the client HOME computer to the HSPH network.

**VNC** is “virtual network computing.” The VNC protocol allows you to gain access to the desktop of another computer. The VNC client, Tight VNC, connects to an HSPH computer through the VPN tunnel. Mac computers have a VNC server pre-installed but Windows computers do not.

To connect FROM a Windows computer to a Mac: Install Tight VNC on the Windows computer, and use the Tight VNC Viewer to connect to the Mac’s IP address.

To connect from a Mac to another Mac, no additional software is required. Simply use the Finder, select Go -> *Connect to server* and enter the IP address of the other Mac.

**RDP** is “remote desktop protocol.” The RDP allows you to gain access to the desktop of another computer. The RDP client, Remote Desktop Connection, connects to an HSPH computer through the VPN tunnel, just like the VNC client. Windows computers have an RDP server pre-installed but Mac computers do not.

To connect FROM a Mac to a Windows computer: Install Remote Desktop Client on the Mac, then go to Applications -> Remote Desktop Connection and enter the IP address of the Windows computer.

To connect from a Windows computer to another Windows computer, no additional software is required. Simply go to Start -> Accessories -> Remote Desktop Connection and enter the IP address of the other Windows computer.

**In summary:**

FROM Mac to Mac or Windows to Windows: Connect with VPN, then use native remote desktop software.

From HOME Mac to OFFICE Windows: Connect with VPN, then use Remote Desktop Client.

From HOME Windows to OFFICE Mac: Connect with VPN, then use VNC client.

***Connecting from a home Windows PC to an office Windows PC.***

Initial set up

Let’s start by setting up the OFFICE computer you want to connect TO.

*If the computer you want to connect to is using Windows 7 Professional, Windows 7 Ultimate, or Windows 7 Enterprise, follow these steps:*

1. Go to System in the Control Panel
2. Click on Remote Settings in the top left corner
3. Click on the Remote tab
4. Then select “Allow Remote Assistance connections to this computer” and select “Allow connections from computers running any version of Remote Desktop”.

*In Windows XP:*

1. Right-click the **My Computer** icon on the desktop, and then click **Properties**.
2. Click the **Remote** tab.
3. Make sure that the **Allow users to connect remotely to this computer** check box is selected, and then click **OK**

You will need to request the “fixed IP address” for this “office” computer. To determine your computer’s IP address, *Run* cmd, then type *ipconfig*. Record the IP address.

Your OFFICE computer is now set up so you can connect to it.

Next, we’ll set up your HOME PC.

1. Request VPN from HSPH IT – provide ID #, email address, billing code
2. HSPH will send you an email with instructions for setting up your VPN account (similar to what follows:)
3. Use a web browser to log-in to <http://vpn5.harvard.edu>
4. Download Cisco Anyconnect VPN client
5. Create tunnel:
  - a. Go to Start -> All Programs > Cisco > Cisco Anyconnect VPN Client
  - b. Select vpn5.harvard.edu
  - c. Log in with your credentials
    - i. User: XXXXXXX@HSPH
    - ii. Pasword: Harvard PIN
6. In addition to the Cisco program, you will also need a remote desktop program to connect to the computer you want to connect to.
  - a. *In Windows XP* go to: Start>All Programs>Accessories and choose remote desktop connection (create a shortcut on your desktop, as you will go to this program each time you connect to your “office” computer). Enter the IP of your “office” computer in the provided box and click connect.
  - b. *In Windows 7:* Go to the Start menu, then search “Remote Desktop”. Choose the FILE named remote desktop. Enter the IP address of the computer you want to connect to. You will also need to enter your username and password of the computer you connect to.

## Connecting from your HOME PC

Each time you connect from your “home” PC

1. Go to the Cisco Anyconnect VPN program, enter your HSPH PIN password, and click accept.
2. Go to “Remote Desktop”, your IP address should already be there from the initial setup, click connect. You should be taken to your “office” desktop, maybe to your login page.

## **Connecting from a home Mac to an office Mac.**

### Initial set up

Let’s start by setting up your OFFICE Mac that you’ll connect TO:

1. Configure local firewall:
  - a. Go to System Preferences -> Security & Privacy -> Firewall
  - b. Uncheck “Block all incoming connections”
  - c. Allow SSH, Management, Screensharing
2. Go to System preferences > Sharing
  - a. Check Remote login
  - b. Check Remote management

You will need to request the “fixed IP address” for this “office” computer. To determine your computer’s IP address, open the Terminal and type *ifconfig*. Under your Ethernet port, *en0* there should be listed *inet* and an IP address. Record this IP address.

Your OFFICE computer is now set up so you can connect to it.

Next, we’ll set up your HOME Mac.

1. Request VPN from HSPH IT – provide ID #, email address, billing code
2. HSPH will send you an email with instructions for setting up your VPN account (similar to what follows:)
3. Use a web browser to log-in to <http://vpn5.harvard.edu>
4. Download Cisco Anyconnect VPN client
5. Create tunnel:
  - a. Go to Applications > Cisco > Cisco Anyconnect VPN Client
  - b. Select vpn5.harvard.edu
  - c. Log in with your credentials
    - i. User: XXXXXXX@HSPH
    - ii. Password: Harvard PIN
6. Finder > Go > Connect to server
  - a. Enter: vnc://ip-address

- b. Click the + button to add the IP address to your favorites
7. Screen Sharing VNC application will open

### Connecting from your HOME Mac

Each time you connect from your “home” Mac:

1. Go to the Cisco Anyconnect VPN program, enter your HSPH PIN password, and click accept.
2. Go to Finder > Go > Connect to server. Your IP address should already be there from the initial setup, click connect. You should be taken to your “office” desktop, maybe to your login page.

### **Connecting from a home Mac to an office Windows PC**

#### Initial set-up

Let’s start by setting up the OFFICE PC computer you want to connect TO.

*If the computer you want to connect to is using Windows 7 Professional, Windows 7 Ultimate, or Windows 7 Enterprise, follow these steps:*

1. Go to System in the Control Panel
2. Click on Remote Settings in the top left corner
3. Click on the Remote tab
4. Then select “Allow Remote Assistance connections to this computer” and select “Allow connections from computers running any version of Remote Desktop”.

*In Windows XP:*

1. Right-click the **My Computer** icon on the desktop, and then click **Properties**.
2. Click the **Remote** tab.
3. Make sure that the **Allow users to connect remotely to this computer** check box is selected, and then click **OK**.

You will need to request the “fixed IP address” for this “office” computer. To determine your computer’s IP address, *Run* cmd, then type *ipconfig*, Record the IP address.

Your OFFICE computer is now set up so you can connect to it.

Next, we’ll set up your HOME Mac.

1. Request VPN from HSPH IT – provide ID #, email address, billing code
2. HSPH will send you an email with instructions for setting up your VPN account (similar to what follows:)
3. Use a web browser to log-in to <http://vpn5.harvard.edu>

4. Download Cisco Anyconnect VPN client
5. Create tunnel:
  - a. Go to Applications > Cisco > Cisco Anyconnect VPN Client
  - b. Select vpn5.harvard.edu
  - c. Log in with your credentials
    - i. User: XXXXXXX@HSPH
    - ii. Password: Harvard PIN
6. In addition to the Cisco program, you will also need a remote desktop program. Download Microsoft RDC software from:  
<http://www.microsoft.com/mac/remote-desktop-client>
7. Open the RDC software by Applications > Remote Desktop Connection
  - a. Enter the IP address of the computer you're connecting to and click *Connect*
  - b. A warning dialogue will pop up, click *Connect*
  - c. Screen Sharing RDC application will open to the log-in of the OFFICE computer

### Connecting from your HOME Mac

Each time you connect from your "home" Mac:

1. Go to the Cisco Anyconnect VPN program, enter your HSPH PIN password, and click accept.
2. Open the RDC software by Applications > Remote Desktop Connection, enter the IP address and connect

### ***Connecting from a home Windows PC to an office Mac***

#### Initial set up

Let's start by setting up your OFFICE Mac that you'll connect TO:

1. Configure local firewall:
  - a. Go to System Preferences -> Security & Privacy -> Firewall
  - b. Uncheck "Block all incoming connections"
  - c. Allow SSH, Management, Screensharing
2. Go to System preferences > Sharing
  - a. Check Remote login
  - b. Check Remote management

You will need to request the "fixed IP address" for this "office" computer. To determine your computer's IP address, open the Terminal and type *ifconfig*. Under your Ethernet port, *en0* there should be the word *inet* and an IP address. Record this IP address.

Your OFFICE computer is now set up so you can connect to it.

Next, we'll set up your HOME PC.

1. Request VPN from HSPH IT – provide ID #, email address, billing code
2. HSPH will send you an email with instructions for setting up your VPN account (similar to what follows:)
3. Use a web browser to log-in to <http://vpn5.harvard.edu>
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  - b. Select vpn5.harvard.edu
  - c. Log in with your credentials
    - i. User: XXXXXXX@HSPH
    - ii. Password: Harvard PIN
6. In addition to the Cisco program, you will also need a remote desktop program. Download Tight VNC for Windows from: <http://www.tightvnc.com/download.php>
  - a. Install Tight VNC Viewer
  - b. Enter the IP address of the OFFICE computer and click *Connect*
  - c. Remote desktop screen will open on log-in screen for OFFICE computer

### Connecting from your HOME PC

Each time you connect from your “home” PC

1. Go to the Cisco Anyconnect VPN program, enter your HSPH PIN password, and click accept.
2. Open Tight VNC Viewer, your IP address should already be there from the initial setup, click connect. You should be taken to your “office” desktop, maybe to your login page.

### ***Connecting from an iPad to a PC***

#### Initial set-up

Let's start by setting up the OFFICE PC computer you want to connect TO.

*If the computer you want to connect to is using Windows 7 Professional, Windows 7 Ultimate, or Windows 7 Enterprise, follow these steps:*

5. Go to System in the Control Panel
6. Click on Remote Settings in the top left corner
7. Click on the Remote tab
8. Then select “Allow Remote Assistance connections to this computer” and select “Allow connections from computers running any version of Remote Desktop”.

*In Windows XP:*

4. Right-click the **My Computer** icon on the desktop, and then click **Properties**.
5. Click the **Remote** tab.
6. Make sure that the **Allow users to connect remotely to this computer** check box is selected, and then click **OK**.

You will need to request the “fixed IP address” for this “office” computer. To determine your computer’s IP address, *Run* cmd, then type *ipconfig*, Record the IP address.

Your OFFICE computer is now set up so you can connect to it.

Next, we’ll set up your iPad.

1. Download the app “Any Connect” developed by Cisco
  - a. To set up the connection to your HCPDS PC
    - i. Add VPN connection
    - ii. Description is any name you want to give the computer you are connecting to.
    - iii. Server address: vpn5.harvard.edu
  - b. Each time you want to use your iPad to connect to your HCPDS PC
    - i. Turn “on” the AnyConnect VPN (status should switch to “Connected” and the letters “VPN” will appear in the top left of the iPad screen)
2. Download the app RDP Remote Desktop Protocol from Microsoft
  - a. Go to “Menu” (top left) -> “Add another server”
  - b. Click on “New” to configure the new connection
    - i. “PC Address”: enter the IP address of your OFFICE computer
    - ii. “Name”: enter a memorable name for this connection, such as “Bow St Office”
    - iii. Click the “Configure” back arrow to return to the Menu
  - c. Click “Menu” -> “Connect” & select the connection that you just configured. This will shortly take you to the Novell login screen on your OFFICE computer.

### Connecting from your iPad

1. Go to Cisco Any Connect and turn ON the VPN. VPN will appear in the top left corner of the iPad. Enter your HSPH password, and click accept.
2. Go to RDP and click connect. You should be taken directly to your “office” desktop, to your login page.
3. Disconnect from both the RDP and VPN once your session is over. Leaving the VPN connection open will drain your iPad’s battery unnecessarily.