

## Using the UMD Wireless Network with OSX 10.5.x Leopard Updated 1/2008

Using the Wireless network at UMass Dartmouth is easy, but takes some initial effort to set up. The setup process described in this document is divided into five sections, and covers MacOS X version 10.5 only. If you have any older Mac operating system, check the UMD wireless web site (<http://www.umassd.edu/cits/wireless/macintosh.cfm>) for different instructions. Please read each section thoroughly before starting any of the procedures it describes. If you have questions about any of the set up procedures, or cannot complete them successfully on your own, contact the Student Help Desk at x8884, or Rich Legault at x8799 or email [Rlegault@umassd.edu](mailto:Rlegault@umassd.edu) for help.

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### Background Information about VPN

#### What Is VPN And Why Do I Need It?

The acronym VPN stands for Virtual Private Network. VPN software provides secure connections for normally non-secure methods of Internet communication. Two popular communication protocols that are not secure are HTTP (Hyper Text Transfer Protocol), used for sending and receiving information from web sites, and Telnet, used for communicating with a host computer such as the Alpha mainframe. When a connection is not secure, anyone with special 'listening' software could potentially capture personal information as it is sent across the Internet. This poses a security risk, which the VPN software addresses.

#### How Does The VPN Software Work?

The VPN client software on a computer makes a special connection with a VPN server. All network communication is encrypted, then filtered through the VPN server, making it virtually impossible for hackers to obtain sensitive information in-transit.

A connection to the UMD VPN server is *required* for full-service access to Peoplesoft systems from off-campus, including COIN. COIN self-service (for students) does not require VPN.

### I Create a VPN Account

At UMass Dartmouth each user must set up a special VPN account to access the wireless network. This account uses the same username as your email account, but has a separate password. To set up your VPN password, visit <https://email.umassd.edu/password/>, and follow the on-screen instructions, also described below.

1. Enter your UMD username, then click **Continue**.
2. Select I wish to change or set my VPN/Wireless password, then click **Continue**.
3. Enter your email password into the appropriate field.
4. Choose a VPN password, and enter it into the VPN Password and Verify Password fields provided. Note that this password must be different from your email password.
5. Click **Set my VPN Password**.

## II Update your Operating System

To use these instructions, you must know what version of the Macintosh Operating System (OS) you are using. To find out, immediately after starting your computer, go to the Apple menu in the upper left corner of the screen. Select the first command, **About This Macintosh**. A window opens displaying the OS version.

In some cases, your OS may need an update. Check the following table, and if needed, download the appropriate update from Apple's Support web site: <http://www.info.apple.com/support/downloads>

Current OS	Desired OS
10.2.x	10.2.8
10.3.x	10.3.9
10.4.x	10.4.11
10.5.x	10.5.1

If you do not have a fast internet connection available for your laptop, it will be easier to download any needed updates to a CITS public lab computer, then copy the update to your computer using a USB flash drive, CD or other removable media.

The Macintosh OS update installers are distributed as self-mounting Disk Image (dmg) or Package (.pkg) files. Double click a .dmg file to decompress it. A utility automatically opens, then decompresses the disk image, and mounts it on the Desktop. Double click the disk icon to access the installer.

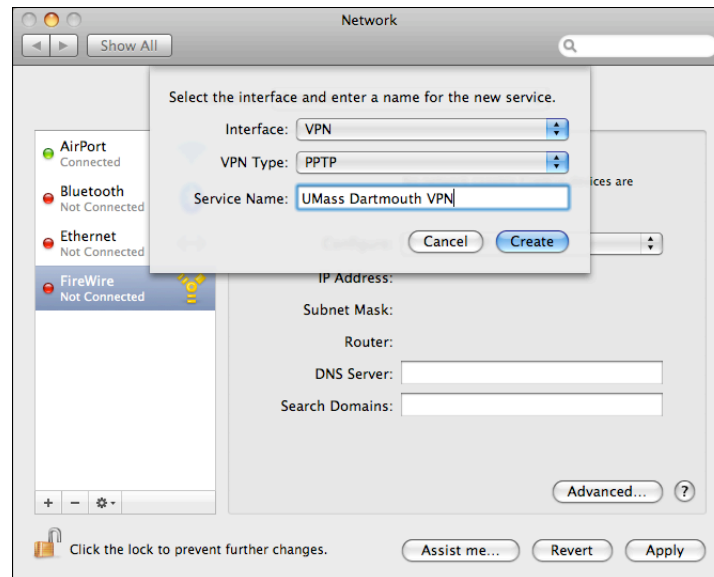
Users of OS X can also use the built-in Software Update utility, in conjunction with an existing Internet connection to update their software. Go to the Apple menu, and select System Preferences, then click the Software Update icon in the System Preferences window. Once Software Update is open, click the Update Now button to check the Apple web site for updates. A list of available updates is presented. Click the checkboxes in the left column to select or deselect the suggested updates, then click Install. The selected updates are downloaded and installed. Note that Software Update requires a fast Internet connection because it downloads very large files.

UMD does not have VPN client software that works with OS X version 10.0 - 10.1.5. If you have OS X version 10.0 - 10.1.5, you *must* upgrade to OS X version 10.2 or later, which includes built-in VPN software. This upgrade is not free. Mac OS 10.4 is available at the UMD Campus Store for about \$69. Faculty and Staff with university-owned computers should contact the I.T. Service Center at x8790 to inquire about operating systems upgrades.

### III Configure the Network System Preferences

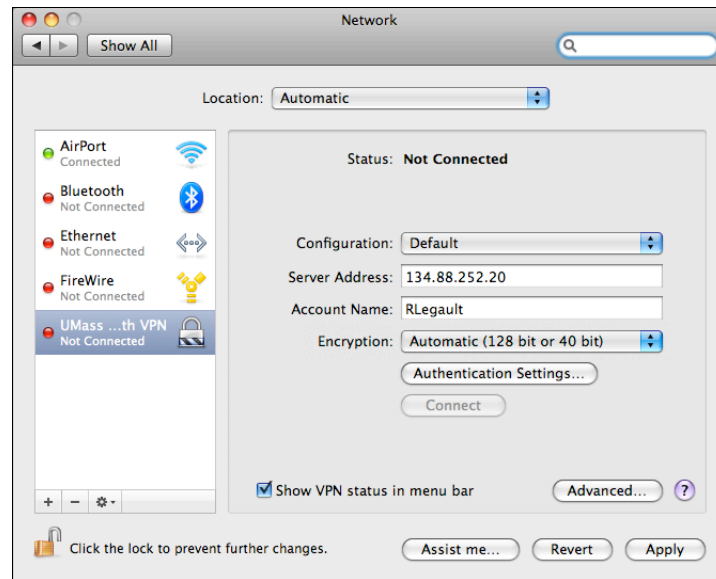
You *must* be in a wireless-accessible area to proceed. The UMD Wireless network is available in the Cafeterias, the Quadrangle, the Library, and many classrooms and lounges. Consult the Access Point Map for more locations: <http://www.umassd.edu/cits/wireless/accesspointmap.pdf>.

1. Under the Apple Menu, select **System Preferences**. The System Preferences application opens.
2. Click **Network**. The Network System Preferences panel is displayed.
3. If the lock icon in the lower left corner is locked, click it to Authenticate. This requires that you enter your Computer Administrator username and password, then click **OK**.
4. Click the '+' button at the bottom of the list of network interfaces on the left of the Network window. The Network window is shown below, with the New Network Interface sheet displayed.



5. From the **Interface** pop-up menu, select **VPN**.
6. From the **VPN Type** pop-up menu, select **PPTP**.
7. In the **Service Name** field, type UMass Dartmouth VPN.
8. Click **Create**.

9. The sheet closes and the VPN interface is added to the left column, as shown below.

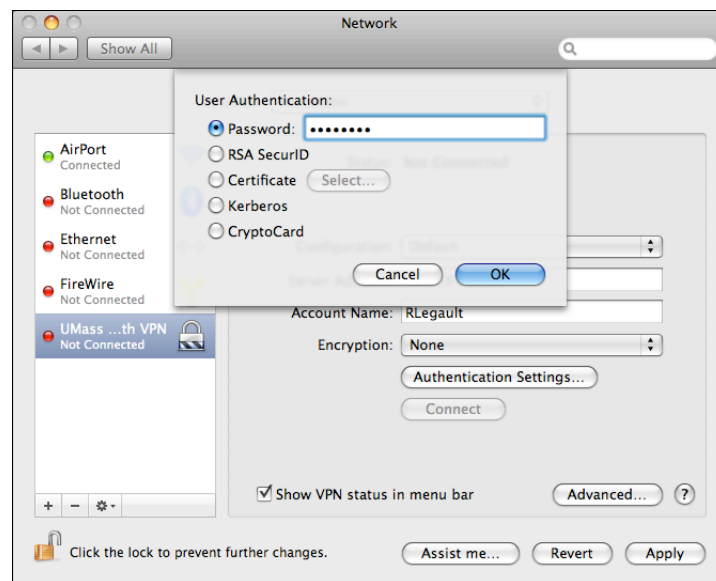


10. Enter **134.88.252.20** into the **Server Address** field.

11. Enter your VPN User **Account Name** into the field provided.

12. From the **Encryption** pop-up menu, select **Automatic**.

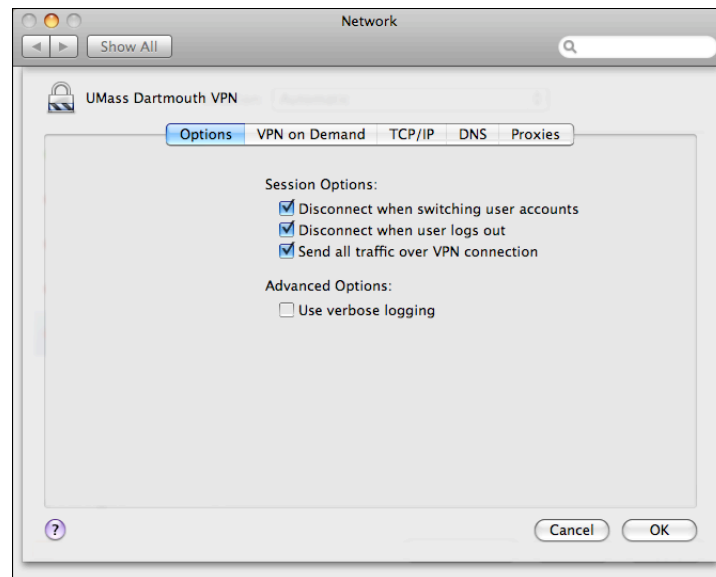
13. Click **Authentication Settings...**. The User Authentication sheet is displayed, as shown below.



14. Click to select the **Password** radio button, and enter your VPN password into the field provided.

15. Click **OK**. The User Authentication sheet closes.

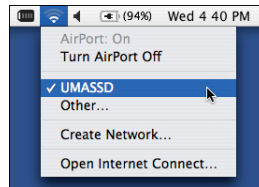
16. Click to select the **Show VPN status in menu bar** checkbox.
17. Click **Advanced**. The VPN Options sheet is displayed, with the Options tab selected as shown below.



18. Click to select the **Send All Traffic over VPN Connection** checkbox.
19. Click **OK**. The VPN Options sheet closes.
20. Click **Apply**.

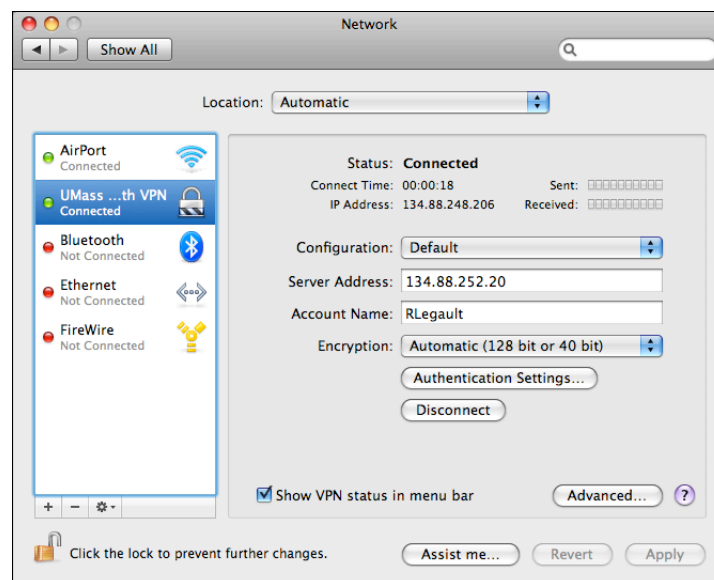
## IV Test the VPN Setup

1. Using the Airport menu, shown below, Make sure that **Airport Power** is **On**.



2. Make sure that the **UMASSD** Network is selected, and the **Signal Level** is at least 1/4 of maximum.
3. In the Network window, click **Connect**.

The Network window is shown below, after a VPN connection has been established.

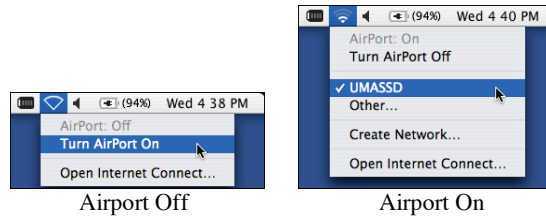


The **Status** area at the upper right of the Network window shows the connection process, and can be used to troubleshoot any connection problems. The Connect button changes to read **Disconnect** once the connection has been made.

4. Test the connection by opening a web browser and visiting a few websites. Quit the browser when you are confident the connection has been established successfully.
5. Click **Disconnect**.
6. Choose **Quit** from the **System Preferences** menu.

## V The Airport and VPN Menus

The Airport Menu is a useful tool for determining wireless signal strength, and turning Airport on and off. The Airport menu appears as a fan icon near the clock on the right side of the menu bar, and is shown below.

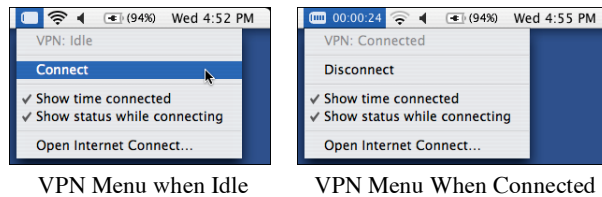


If you have used a different wireless network, you may need to reselect the UMASSD network with the Airport menu.

The fan icon for the Airport menu provides signal strength information at a glance. More black bars indicate a stronger signal. The image below shows about 50% signal strength.



After setting up the account information, it is not necessary to open the Network System Preferences to establish a Wireless connection. Instead, use the VPN menu, as shown below.



The VPN menu is shown above on the left when a connection has not been established. Choose **Connect** to start the VPN connection. The VPN menu is shown above on the right when a connection is active. The time the computer has been connected is indicated in the menu bar. Choose **Disconnect** to end the VPN connection.