This manual will help you connect your Microsoft® Windows® XP, Vista, or 7, or Apple® OS X computer to the University of Maryland campus data network.

Prerequisites for Network Registration:

1. In order to register, your Directory ID is required. If you do not know your Directory ID, please use a computer connected to the Internet—such as a Div-IT open lab computer—to visit the University Directory web page at http://directory.umd.edu, where you can search for your Directory ID using your Identity Verification information.

2. Your computer must have an Ethernet card (10BaseT network interface card) installed.

3. In order to connect to the campus network, you must have an Ethernet card and cable (Category 5, 5e, or 6). Ethernet cards and cables use an RJ-45 connector that looks similar to a phone cable, only larger (please note that a Category 5, 5e, or 6 Ethernet cable and a telephone cord are not the same thing.)

4. You need a web browser such as Microsoft® Internet Explorer® or Mozilla® Firefox®.

5. Your computer must be configured to obtain its IP address automatically using DHCP. To learn how to configure your computer properly, refer to:
   - Section I (page 5) for Windows® XP
   - Section II (page 15) for Windows® Vista
   - Section III (page 29) for Windows® 7
   - Section IV (page 41) for Apple®

6. You may need your original Windows® XP, Vista, or 7 CD or DVD.
Please, do not continue with Section V: Registering Your Data Jack (page 30) until you have met all of the prerequisites listed above. Meeting these prerequisites is essential for a successful installation.

**Campus Wireless Networks**

In addition to a wired internet connection, the University of Maryland also provides two main wireless networks, “umd” and “umd-secure”. “Umd-secure” is the recommend means of establishing a wireless internet connection. The “umd” network is meant for guests and students, faculty, and staff who have not (or are unable to) set up WPA2/WPA on your device. Instructions for connecting to the “umd” network are below, and for instructions on connecting to “umd-secure” refer to:

- **Section I** (page 14) for Windows® XP
- **Section II** (page 23) for Windows® Vista
- **Section III** (page 37) for Windows® 7
- **Section IV** (page 43) for Apple®

Additional information on the wireless networks provided can be found at [http://www.oit.umd.edu/nts/noc/wireless/connect.html](http://www.oit.umd.edu/nts/noc/wireless/connect.html).
Connecting to the “umd” Network

1. Select the “umd” wireless network from the choices of available networks.

2. Launch a web browser such as Microsoft® Internet Explorer® or Mozilla® Firefox®.

3. Before being brought to your home page you will be redirected to the log in page below, where you will need to enter your Directory ID and password.

4. After successful authentication you will be brought to your default home page. **Note:** Your session will last until you have been inactive for an hour.
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Section I: Windows® XP

Part A: Installing Windows® XP Network Connections

1. Click **Start** and highlight **All Programs**, then **Accessories**, then **Communications**, and click **New Connection Wizard**.
2. The **New Connection Wizard** window will appear; click **Next >**.

3. **Connect to the Internet** is selected by default; click **Next >**.
4. Click **Set up my connection manually** and click **Next >**.

5. Click **Connect using a broadband connection that is always on** and click **Next >**.

6. Click **Finish** to create your connection.
Part B: Configuring Windows® XP Network Connections

1. To ensure that your connection’s settings are correct click Start and highlight All Programs, then Accessories, then Communications, and click Network Connections.
2. Locate the connection you created under **LAN or High-Speed Internet**. Right-click this connection and click **Properties**.

3. The **Local Area Connection Properties** window will appear; verify that your Ethernet card is listed in the **Connect using:** box.
4. Click **Internet Protocol (TCP/IP)** and click the **Properties** button.

5. Verify that **Obtain an IP address automatically** and **Obtain DNS server address automatically** are selected.

6. Click the **Advanced** button.
7. The **Advanced TCP/IP Settings** window will appear; verify that **DHCP Enabled** appears in the **IP address** box.
8. Click the **DNS** tab; verify that **Append primary and connection specific DNS suffixes** is selected and that **Append parent suffixes of the primary DNS suffix is checked**. Verify that **Register this connection’s addresses in DNS** is unchecked.
9. Click the **WINS** tab; verify that **Enable LMHOSTS lookup** is checked. In the **NetBIOS setting** box, verify that **Default** is selected.

![Advanced TCP/IP Settings window]

10. Click the **OK** button on the **Advanced TCP/IP Settings** window.

11. Click the **OK** button on the **Internet Protocol (TCP/IP) Properties** window.

12. Please proceed to **Section V**: Registering Your Data Jack.
Part C: Connecting to “umd-secure” with Windows® XP

Step-by-step instructions are provided by OIT for configuring computers using the following wireless adapters to use the “umd-secure” wireless network. These represent the most popular adapters used by current manufacturers. If you know which wireless adapter is installed in your laptop, use the links below to go to the appropriate instructions. If you do not know what wireless adapter model is in your computer, you can find out by following the steps here: http://www.oit.umd.edu/nts/noc/wireless/windows_preconfig.html.

Wireless Adapters

- Intel PROSet/Wireless 2100
- Intel PROSet/Wireless 2200BG
- Intel PROSet/Wireless 2915ABG
- Intel PROSet/Wireless 3945ABG
- Dell Wireless 1350 WLAN MiniPCI Card
- Dell Wireless 1350 WLAN PC Card
- Dell Wireless 1370 WLAN MiniPCI Card
- Dell Wireless 1390 WLAN ExpressCard
- Dell Wireless 1390 WLAN MiniCard
- Dell Wireless 1450 WLAN MiniPCI Card
- Dell Wireless 1450 Dual-Band WLAN MiniPCI Card
- Dell Wireless 1470 Dual-Band WLAN MiniPCI Card
- Dell Wireless 1490 Dual-Band WLAN MiniPCI Card
- Dell Wireless 1500 Draft 802.11n WLAN Mini Card

Instructions for Dell Wireless cards can be found here: http://www.oit.umd.edu/nts/noc/wireless/installing_dell.html

Instructions for Intel PROSet cards can be found here: http://www.oit.umd.edu/nts/noc/wireless/version_proset.html

If your wireless adapter is not on the list, you will have to locate the updated software for the network adapter installed in your computer. You can accomplish this by visiting the manufacturer’s Web site and searching for updated software and drivers for the network card installed in the computer. Once you have downloaded and installed the latest software, please visit the following site to view the settings you will need to input for a successful configuration:

http://www.oit.umd.edu/nts/noc/wireless/generic_config_chart.html
Section II: Windows® Vista

Part A: Configuring Windows® Vista Network Connections

1. To ensure that your connection’s settings are correct click Start and click Control Panel.
2. The **Control Panel** window will appear; click **Network and Internet**.

3. Click **Network and Sharing Center**.
4. Along the left of the **Networking and Sharing Center** window are several Task links; click **Manage Network Connections**.

5. In the **Network Connections** window, locate your Local Area Connection icon and right-click it.
6. Click **Properties**.

7. The **Local Area Connection Properties** window will appear; click **Internet Protocol Version 4 (TCP/IPv4)** and click the **Properties** button.
8. The **Internet Protocol Version 4 (TCP/IPv4) Properties** window will appear; verify that **Obtain an IP address automatically** and **Obtain DNS server address automatically** are both selected.

9. Click the **Advanced...** button.
13. The **Advanced TCP/IP Settings** window will appear; verify that **DHCP Enabled** appears in the **IP address** box.
10. Click the **DNS** tab; verify that **Append primary and connection specific DNS suffixes** is selected and that **Append parent suffixes of the primary DNS suffix is checked**. Verify that **Register this connection’s addresses in DNS** is unchecked.
11. Click the **WINS** tab; verify that **Enable LMHOSTS lookup** is checked. In the **NetBIOS setting** box, verify that **Default** is selected.

![Advanced TCP/IP Settings](image)

12. Click the **OK** button on the **Advanced TCP/IP Settings** window.

13. Click the **OK** button on the **Internet Protocol Version 4 (TCP/IPv4)** window.

14. Click the **OK** button on the **Local Area Connection Properties** window.

15. Please proceed to **Section V: Registering Your Data Jack**.
Part B: Connecting to “umd-secure” with Windows® Vista

1. Click the Start button and select Control Panel
2. Click Network and Sharing Center.
3. On the left window pane, select Manage wireless networks
4. Click the Add button
5. Select Manually create a network profile
6. Enter in the following information:
   a. Network name for type “a/g/n” network: **umd-secure**
   b. Security type: **WPA2-Enterprise**
   c. Encryption type: **AES**
   d. Check the box for **Start this connection automatically**.
   e. Click the **Next** button.

7. Click **Change connection settings**.

8. Click the **Security** tab.

9. Click the **Settings** button.
10. Enter in the following information:

   a. Check the box for **Connect to these servers** and enter: `wireless.umd.edu`

   b. Under the Trusted Root Certificate Authorities section, check the box for **Thawte Premium Server CA**.

   c. Under the Select Authentication Method section, check the box for **Enable Fast Reconnect** click the **Configure** button.
d. Uncheck the box for *Automatically use my Windows logon name and password*. Click the **OK** button.

11. For the EAP MSCHAPv2 Properties window, click the **OK** button.

12. For the Protected EAP Properties window, click the **OK** button.

13. For the Manually connect to a wireless network window, click the **Connect to** button.

14. Depending on the information you entered for the profile setup, select the **umd-secure** or **umd-secure-fast** Security-enabled network and click the **Connect** button.

15. Click **Enter/select additional log on information**
16. For the **Enter Credentials** window, type in your directory ID for username, and directory password for password fields. Logon domain is left blank. Click the **OK** button.
17. You have successfully connected to the umd-secure network. Click the **Close** button.
Section III: Windows® 7

Part A: Configuring Windows® 7 Network Connections

1. To ensure that your connection’s settings are correct click **Start** and click **Control Panel**.
2. The **Control Panel** window will appear; click **Network and Internet**.

![Control Panel](image1.jpg)

3. Click **Network and Sharing Center**.

![Network and Sharing Center](image2.jpg)
4. Along the left of the **Networking and Sharing Center** window are several Task links; click **Change Adapter Settings**.

![Networking and Sharing Center](image1.png)

5. In the **Network Connections** window, locate your Local Area Connection icon and right-click it.

![Network Connections](image2.png)
6. Click **Properties**.

7. The **Local Area Connection Properties** window will appear; click **Internet Protocol Version 4 (TCP/IPv4)** and click the **Properties** button.
8. The **Internet Protocol Version 4 (TCP/IPv4) Properties** window will appear; verify that **Obtain an IP address automatically** and **Obtain DNS server address automatically** are both selected.

![Internet Protocol Version 4 (TCP/IPv4) Properties window](image)

9. Click the **Advanced...** button.
10. The **Advanced TCP/IP Settings** window will appear; verify that **DHCP Enabled** appears in the **IP address** box.
11. Click the **DNS** tab; verify that **Append primary and connection specific DNS suffixes** is selected and that **Append parent suffixes of the primary DNS suffix** is checked. Verify that **Register this connection’s addresses in DNS** is unchecked.
12. Click the **WINS** tab; verify that **Enable LMHOSTS lookup** is checked. In the **NetBIOS setting** box, verify that **Default** is selected.

![Advanced TCP/IP Settings](image)

13. Click the **OK** button on the **Advanced TCP/IP Settings** window.
14. Click the **OK** button on the **Internet Protocol Version 4 (TCP/IPv4)** window.
15. Click the **OK** button on the **Local Area Connection Properties** window.
16. Please proceed to **Section V**: Registering Your Data Jack.
Part B: Connecting to “umd-secure” with Windows® 7

1. Click the Start button and select Control Panel.
2. Click Network and Sharing Center.
3. On the left window pane, select Manage wireless networks.
4. Click the Add button.
5. Select Manually create a network profile.
6. Enter in the following information:
   a. Network name for type “a/g/n” network: umd-secure
   b. Security type: WPA2-Enterprise
   c. Encryption type: AES
   d. Check the box for Start this connection automatically.
   e. Click the Next button.

7. Click Change connection settings.

8. Click the Security tab.

9. Click the Settings button.
10. Enter in the following information:
   a. Check the box for **Connect to these servers** and enter: `wireless.umd.edu`
   b. Under the **Trusted Root Certificate Authorities** section, check the box for **Thawte Premium Server CA**.
   c. Under the **Select Authentication Method** section, check the box for **Enable Fast Reconnect** and click the **Configure** button.

![Protected EAP Properties](image-url)
d. Uncheck the box for *Automatically use my Windows logon name and password*. Click the **OK** button.

![EAP MSCHAPv2 Properties](image1)

11. For the EAP MSCHAPv2 Properties window, click the **OK** button.

12. For the Protected EAP Properties window, click the **OK** button.

13. For the Manually connect to a wireless network window, click the **Close** button.

14. In the Notification area on the desktop, click the wireless connection.

15. For the Windows Security window, enter your Directory ID and password. Click the **OK** button.

![Windows Security](image2)
Section IV: Apple

Part A: Apple OS X® Administrator Access

To make the following changes you will need to have administrator access on your Apple® OS X computer.

When you first install and configure Apple® OS X you set up a user. This user is an administrator. As an administrator you can create other users, as well as other administrators, install software in the Applications and Library folders, and change your computer’s settings.

If you set up your computer for other users or turn on logging in, you need to enter the username and password of an administrator to administer your computer. If you know the username and password of an administrator, you can change settings in System Preferences… panes that are locked when you’re not logged in as an administrator.

Part B: Configuring Apple® OS X Networking

1. Click the Apple menu in the upper left corner of your screen and click System Preferences...

2. Click the Network icon.
3. Click the **Show** drop-down box and select **Built-in Ethernet**.
4. Click the **Configure** drop-down box and select **Using DHCP**.
5. In the **Search Domains** box type **umd.edu**.
6. Click the **Save** button.

![Network Configuration](image)

7. Please proceed to **Section V**: Registering Your Data Jack.

Note: Resident Life Information Technology does not fully support Apple systems. For more information, or help with network configuration, please contact the Division of Information Technology (Div-IT) Help Desk at x5-1500. Please note that the Div-IT Help Desk only provides support for Apple OS X and above.
**Part C: Connecting to “umd-secure” with Apple® OS 10.7 “Lion”**

The following are instructions on how to connect to the “umd-secure” network using Apple® OS 10.7 “Lion”. Instructions on connecting to “umd-secure” using other Apple® operating systems can be found here: [http://www.oit.umd.edu/nts/noc/wireless/connect.html](http://www.oit.umd.edu/nts/noc/wireless/connect.html)

**NOTE:** For the umd-secure.mobileconfig file to download and work properly, you need to access your email and the file with a configured mail client (ex.: Macintosh Mail, Microsoft Outlook 2011) on the computer you want to connect to umd-secure. There are instructions for configuring clients with your University of Maryland (UMD) email available in the Division of Information Technology site: [https://www.itsc.umd.edu/](https://www.itsc.umd.edu/)

1. To obtain the **umd-secure Configuration** file use your web browser and go to mobility.umd.edu/emails. Enter your @umd.edu email address. Click **Send Me Email Please**.

2. Once you get the email, click on and open the attached file called **umd-secure.mobileconfig**.

3. The **Profile** screen will prompt to **Install "umd-secure"? Click **Continue**.**
4. The Profiles window now shows: **Are you sure you want to install profile ‘umd-secure’?**, click **Continue**.

5. Enter your **Directory ID** and **Password** in the **Username** and **Password** boxes. Click **Install**.
6. You may see a window that requires you to enter your computer username and password. Enter those and click OK.

![Configuration Profile Tool](image1)

7. Once the installation finishes, the Profiles window will appear. The umd-secure network should appear under User Profiles:

![Profiles Window](image2)
8. From the **Wi-fi icon** (at the top of your screen), select **umd-secure** from the available wireless networks.
Section V: Registering Your Data Jack

Part A: Registering Your Data Jack

1. Using a web browser such as Microsoft Internet Explorer or Google Chrome, open [http://connect.umd.edu](http://connect.umd.edu)

2. Click On-Campus Students

3. Click the LINK2UM image
4. Enter your **Directory ID** and your **Directory Password**.

5. Click the **Login** button.

6. A successful login page will be displayed, and you will automatically be redirected to the start of the data jack registration process.

7. The system will display your contact information, including name, e-mail address, and local residence. Click the **Continue** button to proceed with data jack registration.

8. Follow the on-screen instructions, remembering to reboot your computer once your registration has been successfully completed.
Part B: Virus Protection

The University of Maryland provides high-quality anti-virus software for PC and Apple computers to members of the UMCP community for free. Computer viruses can spread rapidly through the campus network via e-mail, file sharing, or IRC, and are capable of deleting data files (like term papers or MP3 files), causing system crashes, and completely erasing hard drives. If your computer does not have anti-virus software installed or only has a trial version of anti-virus software (which is common on new computers), you are strongly encouraged to download and install one of the anti-virus software options provided by the university. You can download the software and read the brief installation instructions at the Division of Information Technology’s web page or as part of the Getting Started CD available from the Div-IT Helpdesk in 1400 Computer and Space Sciences.

Anti-Virus Download & Instructions

Go to: www.itsc.umd.edu and search “University of Maryland Supported Antivirus Software”

If any of the above steps do not complete correctly please call Resident Life Information Technology at x4-DATA (x4-3282) for assistance.
Section VI: Smart Devices

Part A: Connecting to “umd-secure” with an iPhone or iPod Touch

* Be sure you have downloaded and installed the latest version of iTunes on your PC or Mac.
* Your iPhone / iPod touch software has to be version 2.0 or greater to connect to umd-secure.

The files you will need to connect to “umd-secure” must be installed on the device via an e-mail attachment. Please use this documentation: http://www.oit.umd.edu/nts/noc/wireless/images/iPhone/Configuring_mailatumd.pdf to create your umd.edu e-mail account on your device before proceeding with the “umd-secure” directions.

1. Visit http://mobility.umd.edu/emails and enter your @umd.edu e-mail address to have the iPhone/iPod touch configuration file and PDF instructions for connecting to the umd-secure wireless network e-mailed to you.

2. Press the Home button and then tap the iPhone Mail application icon.
3. Tap the E-mail with paper clip indicating an attachment labeled **umd-secure**.

4. Tap the **umd-secure.mobileconfig** button.
5. Tap the **Install Now** button.

6. Enter **Directory ID** in the **Username** field, then tap **Next**.
7. Enter your **Directory password** in the **Password** field; then, tap **Next**.

8. Tap **Done** and you will be returned to your original e-mail message.
9. Press the **Home** button.

10. Reset your network settings. Tap the **Settings** application icon.
11. Tap the **General** area.

12. Scroll down to the bottom and tap the **Reset** button.
13. Tap the **Reset Network Settings** area. This will take you to a screen, which will allow you to reset the network settings or cancel your choice. You must reset your network settings in order to use umd-secure.
14. Tap the **Reset Network Settings** button. The iPhone / iPod touch will reboot and you will be able to connect to the umd-secure wireless network with your iPhone / iPod touch.

* Tapping the Reset Network Settings button will remove any network setting that are presently on the iPhone / iPod touch. It will not affect any other settings or data stored on your unit.
Part B: Connecting to “umd-secure” with an Android Device

**Important:** It is good practice to be sure your mobile device is running the most recent Operating System (OS) available. The mobile operating system of your smartphone, personal digital assistant (PDA), or tablet computer is the software platform that controls everything on that device. Check your Manufacturer's website for instructions on how to update your system.

1. Tap the menu button, then press **Settings**.
2. Tap **Wireless & Networks**.

3. Tap to enable **Wi-Fi**.
4. Tap on **WiFi settings**.

5. Long tap **umd-secure**.
6. Tap **Connect to network**.

7. Select **TTLS** on the **EAP method** menu.
8. Select **PAP** on the **Phase 2 authentication** menu.

![Image of Phase 2 authentication menu]

9. Enter your directory ID in the **Identity** box.

![Image of Wi-Fi settings with Identity field highlighted]
10. Enter your directory password in the Password box.

![Image of Wi-Fi settings with username and password fields]

11. Tap the Connect button.
Appendix A: E-Mail, Passwords, and Acceptable Use

Part A: TERPmail

Using a web browser such as Microsoft® Internet Explorer® or Google® Chrome®, visit http://terpmail.umd.edu/ and enter your Directory ID and password to access your TERPmail account via the web.

Part B: Third-Party E-Mail Applications

If you wish to use third-party software such as Microsoft® Outlook® or Mozilla® Thunderbird® to access your e-mail, you will need to enter the following mail server information into your e-mail client:

Incoming (IMAP) Server: imap.googlemail.com
Outgoing (SMTP) Server: smtp.googlemail.com

The TERPmail incoming and outgoing e-mail servers require Secure Socket Layer (SSL) connections. Most popular e-mail clients will allow you to connect to both incoming and outgoing servers in this manner, lessening the risk of malicious users stealing your account information. For more information on enabling SSL connections, please refer to you e-mail client’s help files or to the e-mail client configuration pages listed at the IT Service Center by going to itsc.umd.edu and using the search phrase “How to Configure TERPmail”.

Note: Resident Life Information Technology does not support third-party software, and is only providing this information as a service to those that prefer third-party mail readers. For more information regarding on-campus mail servers, please contact the Division of Information Technology (Div-IT) Computer Help Desk at x5-1500.
Part C: Directory Password Information

The Division of Information Technology (Div-IT) requires strong passwords in order to protect any information linked with your Directory ID. For more information on strong passwords, and how to select one, please visit the link below.

http://www.helpdesk.umd.edu/videos/passwords/

Note: Resident Life Information Technology does not administer the Directory ID system, and can not provide help with lost passwords. For more information regarding the Directory ID system, please contact the Division of Information Technology (Div-IT) Computer Help Desk at x5-1500.

Part D: Acceptable Use Policy

The University of Maryland Policy on Acceptable Use of Information Technology Resources can be found at http://www.nethics.umd.edu/aup/.

Note: by registering your residence hall data jack you agree to abide by these policies.