

# Network Bridging

This document contains the following sections:

- [Introduction](#)
- [Disable Additional Connections](#)
- [Verify Bridging is Not Configured](#)

---

For information related to this topic refer to:

- [Network Bridging Guideline](#)  
(<http://www.cmu.edu/computingguideline/network-bridge.html>)
- [Network Protocol Guideline](#) (<http://www.cmu.edu/computingguideline/network.html>)

*Last Updated: 2/14/08*

## Introduction

With many laptops now capable of connecting to both the wired and wireless Ethernet networks, users need to be aware of the problems that result when misconfigured. The common problem is a "network bridge" configured between the wired and wireless Ethernet. Some users incorrectly believe that bridging the connections will result in better connectivity to campus and the Internet. Quite the contrary, configuring a bridge results in degraded performance for all users of the affected networks.

When configuring network connections, please be careful that you do not accidentally setup a bridge or connection sharing.

*Last Updated: 2/14/08*

## Step 1: Disable Additional Network Connections

Unless needed for a specific purpose, do not use more than one network connection simultaneously. We recommend the use of wired network connections when you are near a wired outlet. Otherwise, make use of our extensive wireless network.

- To temporarily disable additional **wireless** network connections, follow these steps:
  - o **Windows XP:** Right-click the **Wireless Network Connection** icon on the menu bar (lower right corner). From the pop-up, select **Disable**.
  - o **Windows Vista:** Right-click the **connection** icon on the menu bar (lower right corner). From the pop-up, select **Disconnect from (Connection)**.
  - o **Mac OS X 10.4+:** Select the **wireless** icon on the **Menu Bar**. From the pop-up menu, select **Turn Airport Off**.
- To disable a wired connection, simply unplug the connection.



## Step 2: Verify Network Bridging is Not Configured

*Last Updated: 2/14/08*

## Step 2: Verify Network Bridging is Not Configured

If your laptop has multiple Ethernet cards, use the procedure for your operating system to verify that Network Bridging (or Internet Connection Sharing) is turned off.

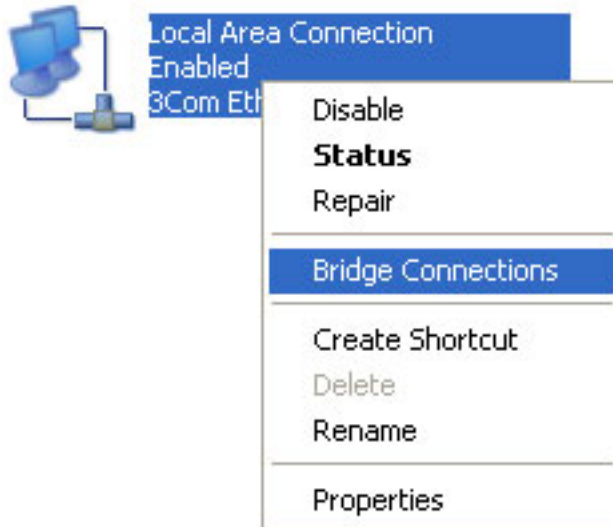
- [Windows Vista or XP](#)
- [Mac OS X 10.4+](#)

*Last Updated: 2/14/08*

## Windows Vista or XP

1. Select **Start > Control Panel** and double-click **Network Connections**.
2. Right-click on an active Ethernet connection and verify that Bridge Connections is **NOT** selected.

### LAN or High-Speed Internet

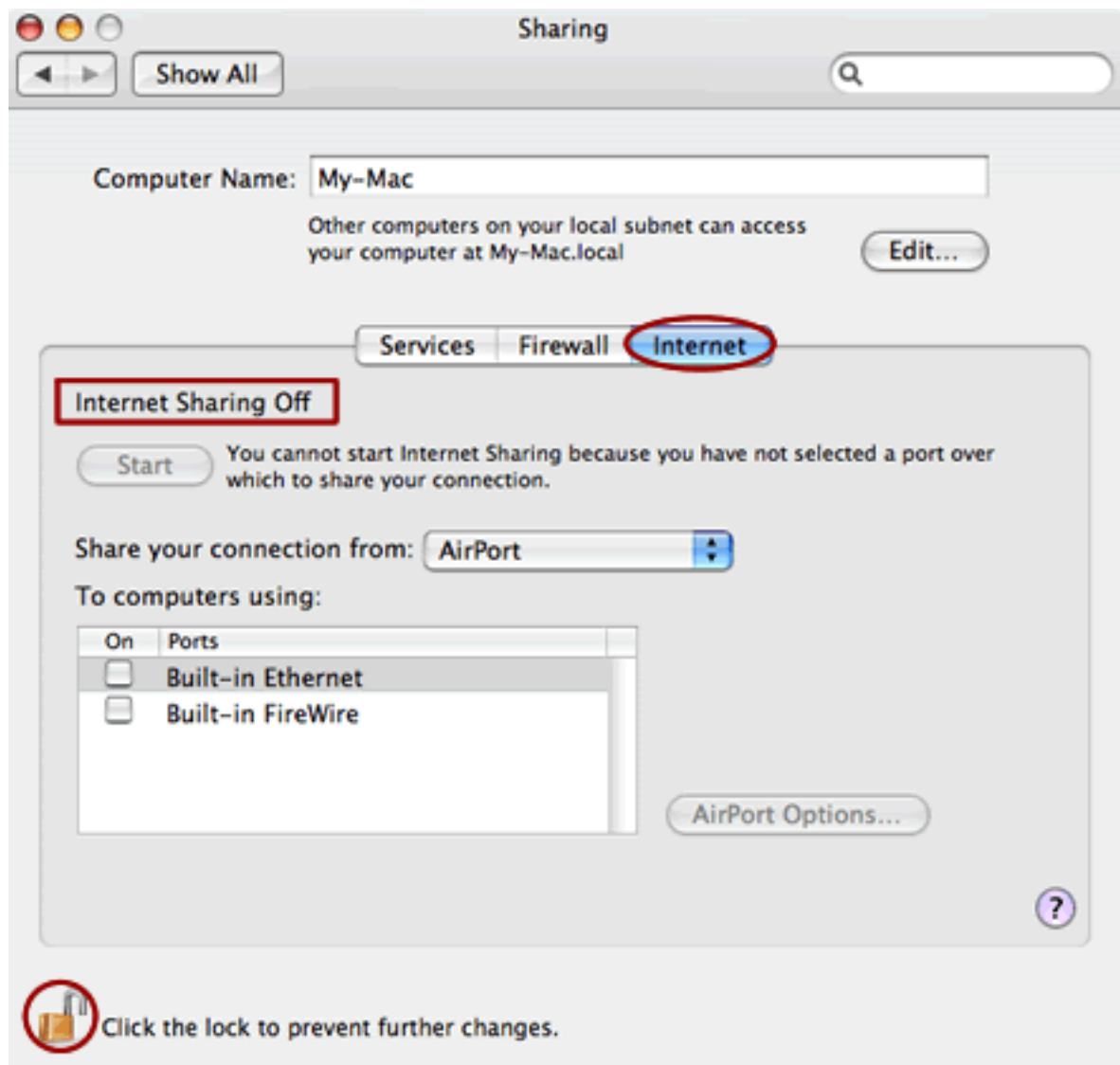


**Note:** If you run the Network Setup Wizard in the future, be careful not to bridge connections. For information specific to the Network Setup Wizard, refer to the Microsoft document: [How to Prevent the Network Setup Wizard from Creating a Bridge in Windows XP \(http://support.microsoft.com/default.aspx?scid=kb;en-us;Q283429\)](http://support.microsoft.com/default.aspx?scid=kb;en-us;Q283429).

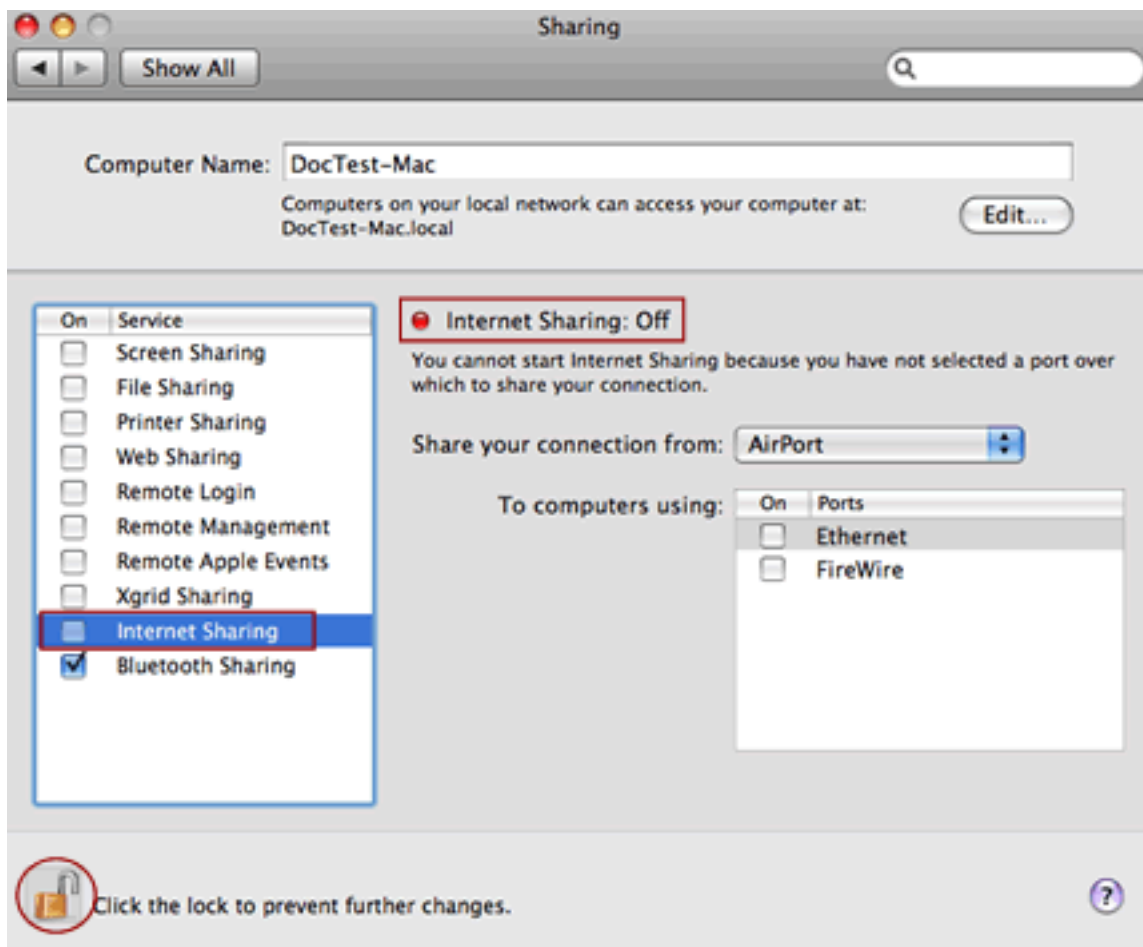
*Last Updated: 2/14/08*

## Mac OS X

1. Select **Apple menu > System Preferences...**
2. Click **Sharing** in the Internet & Network section.
3. In the Sharing window, if necessary, click the **lock icon** and authenticate using the administrator userid and password.
4. Follow the steps for your operating system:
  - **Mac OS X 10.4** - Choose the **Internet** tab and verify that **Internet Sharing Off** is displayed at the top of the tab. If Internet Sharing is ON, click **Stop** to disable this feature.



- **Mac OS X Leopard** - Make sure Internet Sharing is NOT checked. If Internet Sharing is checked, *uncheck* it.



1. Click the **lock icon** to prevent further changes and quit System Preferences.

*Last Updated: 2/14/08*