



Residential and Dial Up Networking at
James Madison University

System Specification Guide

CAMPUSNET AT JAMES MADISON UNIVERSITY

System Specification Guide

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Introduction and Overview

Welcome to the CampusNet Program at James Madison University. With CampusNet installed on your computer you receive:

On Campus you will keep in touch with family and friends with:

- 10 Base T Ethernet Internet access from your room
- Convenient one time charge for the whole year
- Campus-supported internet applications such as: Simeon (email), Netscape, WinVN, WsFTP, and QVTnet
- Access to available campus network resources

Off Campus you will keep in touch with family and friends with:

- Internet access via modem from your room in your house or apartment
- Convenient one time charge for the whole school year
- Campus-supported internet applications such as: Simeon (email), Netscape, WinVN, WsFTP, and QVTnet
- Access to available campus network resources

How do I get this great service?

Chances are, if you are currently reading this manual you are already signed up. However, if you are not signed up, and would like to do so you can either sign up online at: <http://www.jmu.edu/campusnet/signup> and have them bill your Telecom bill. Another option is to visit the Telecom office located in the basement of Wilson Hall on the side facing Gibbons dining hall and sign up and pay for the service there.

Before you sign up...

And sink \$100 into this service, you need to make sure that your computer meets our minimum system requirements so that CampusNet will work successfully on your machine.

Overview of System Specifications

If you already know how to find out if your system meets the minimum requirements, the following is a list of the **minimum** specifications for both Macintosh and PC.

	PC	Macintosh
Operating System	Windows 95, Windows 98, or Windows NT Workstation 4.0	System 7.5.3 or above with Open Transport 1.1 or greater
Processor	Pentium	Power PC
Speed	60 MHz	60 MHz
Hard drive Space	50 MB free	50 MB free
Physical Memory	16 MB	16 MB
Network card/modem	On campus: 10 Base T RJ45 Ethernet card Off campus: modem	On campus: 10 Base T RJ45 Ethernet card Off campus: modem

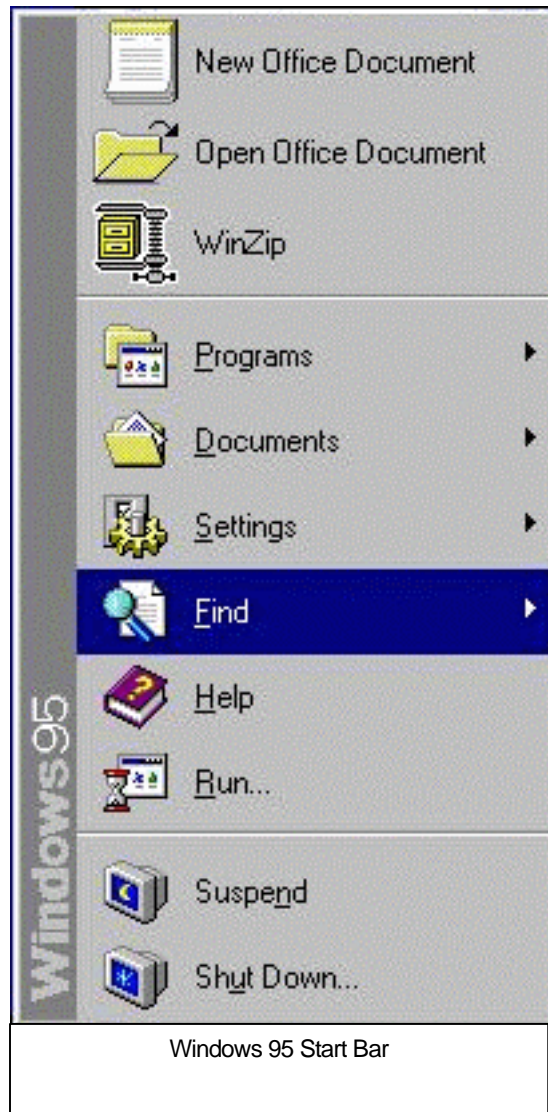
How do I check my system specifications?

That's exactly what the rest of this guide is designed to do. The remainder of the specification guide is divided up by operating system. Find whichever one you have on your computer and follow the step-by-step directions from there.

PC: Checking your Operating System Version

Determine which supported PC Operating System you have: Windows 95, Windows 98, or Windows NT Workstation 4.0.

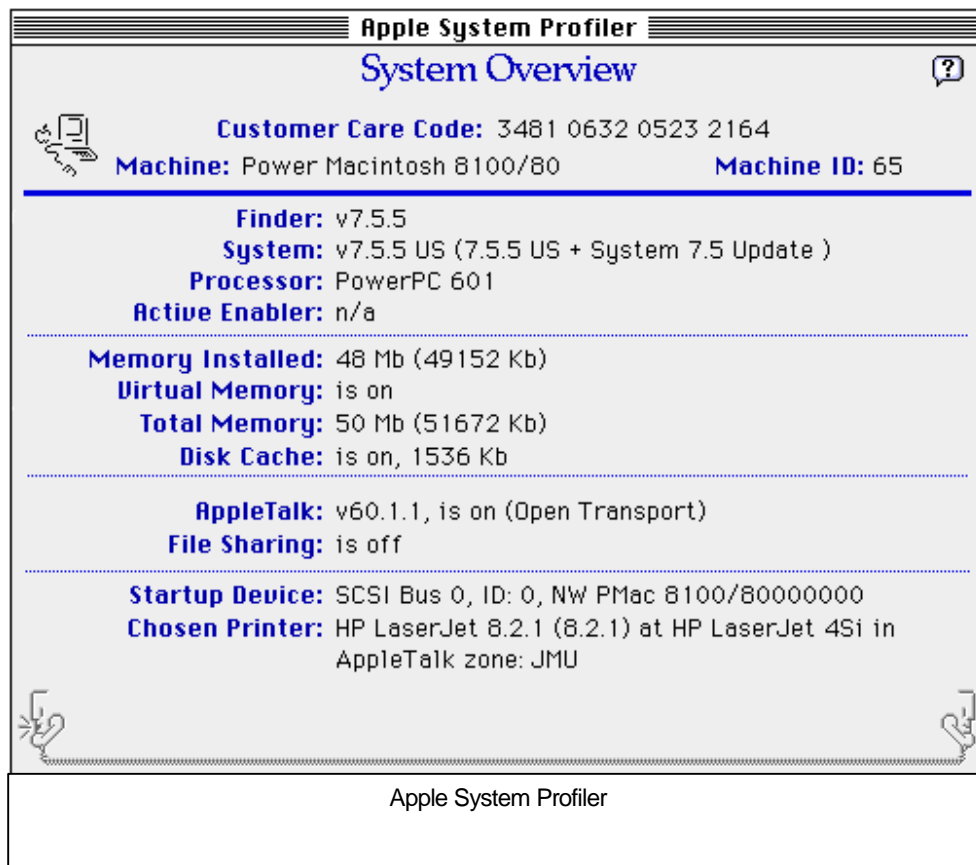
1. Turn on the computer
2. Click on the **Start** icon
3. Along the left-hand side of the **Start Menu** bar it will read **Windows 95, Windows 98, or Windows NT Workstation.**



Mac: Using Apple System Profiler to Check your Specifications

If your system has Apple System Profiler (which most Macs with System Software version 7.5.2 and above do) this is a quick and easy way to check the majority of the specifications.

1. Click on the Apple in the upper left hand corner.
2. Select **Apple System Profiler** from the list of Apple Menu Items (if for some reason it is not listed, try going to **File, Find**, and type **Apple System Profiler**. That should let you know where it is located on your system)

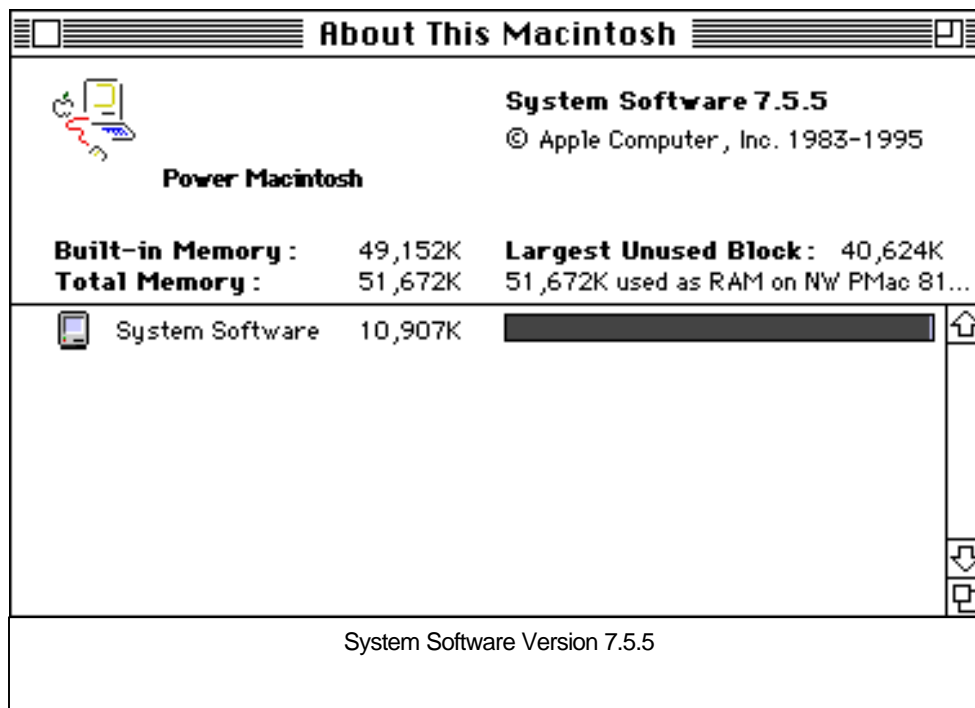


The **Apple System Profiler** will tell you all kinds of information like: system software version, whether or not the system is running Open Transport, Processor, Speed, and the amount of memory.

Mac: Checking your System Version

Determine whether or not your system is using System software 7.5.3 or above.

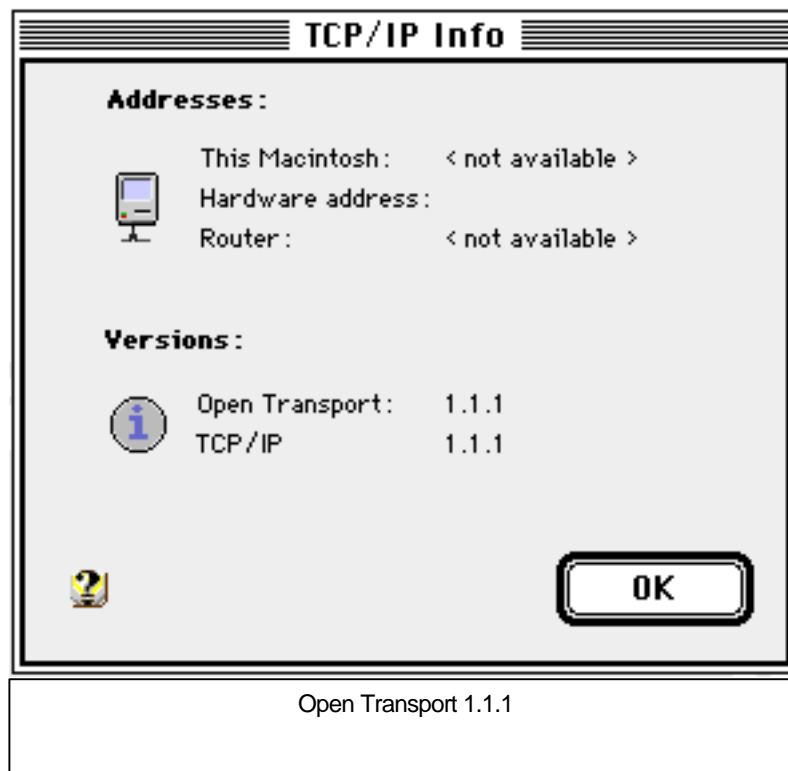
1. Click the apple in the upper left hand corner of the screen
2. Select **About this Macintosh**
3. The number beside **System Software** will let you know your system software version.



Mac: Checking for Open Transport

Determining whether or not you have Open Transport and the version is 1.1 or better

1. Go to the apple in the upper left hand corner of the screen
2. Click **Control Panels**
3. Click once on **TCP/IP** so that it is highlighted
4. Go to **File** and click on **Get Info**



Note: If you do not see TCP/IP listed in the Control Panels, you do not have Open Transport.

Windows NT Workstation 4.0

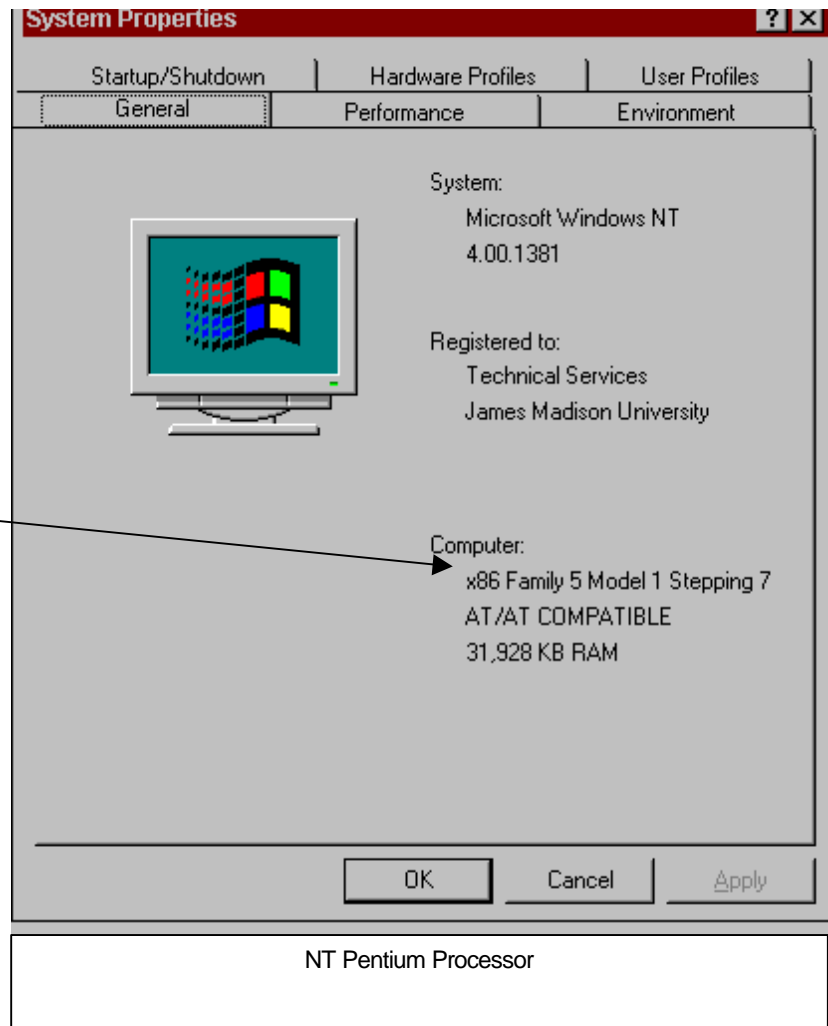
CampusNet System Requirements for
James Madison University

NT: Checking your Processor

To run CampusNet on an NT machine, you need to make sure that you have at least a Pentium processor.

1. Click on **Start**
2. Select **Settings**
3. Select **Control Panels**
4. Select **System**
5. Click on the **General** tab

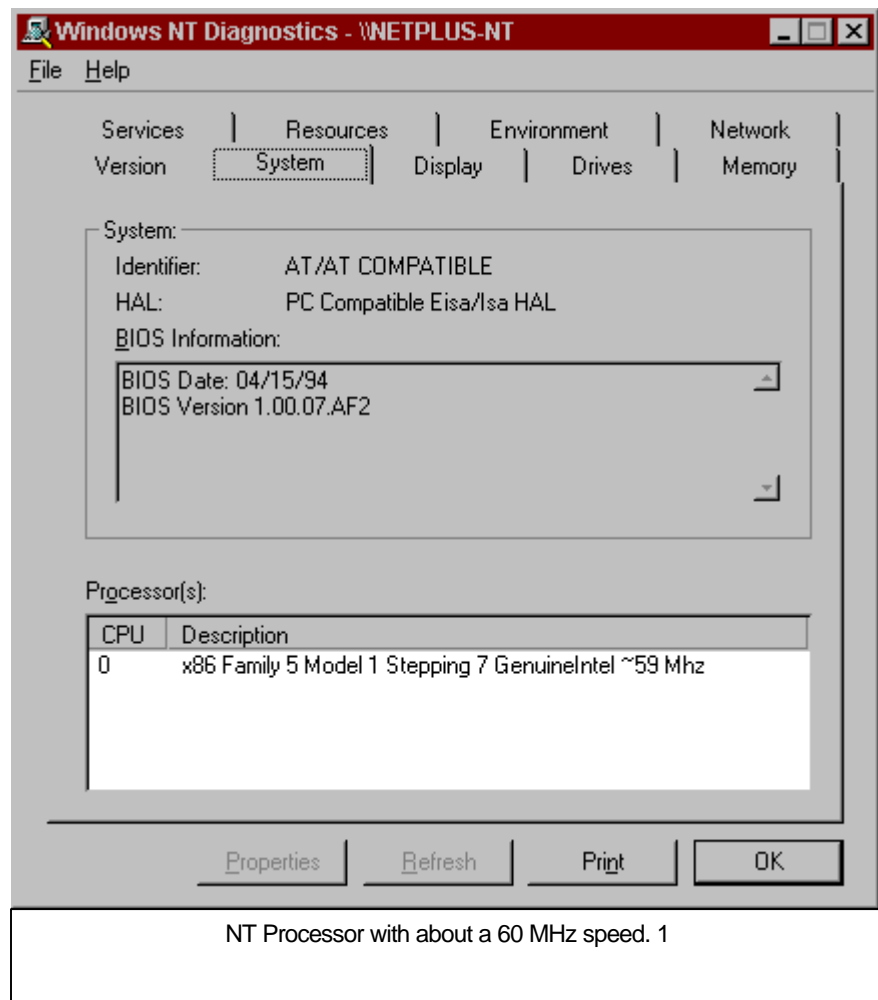
This means a Pentium Processor on an NT machine



NT: Checking your Speed

To successfully run CampusNet on your machine, you need to have a processor speed of at least 60 MHz.

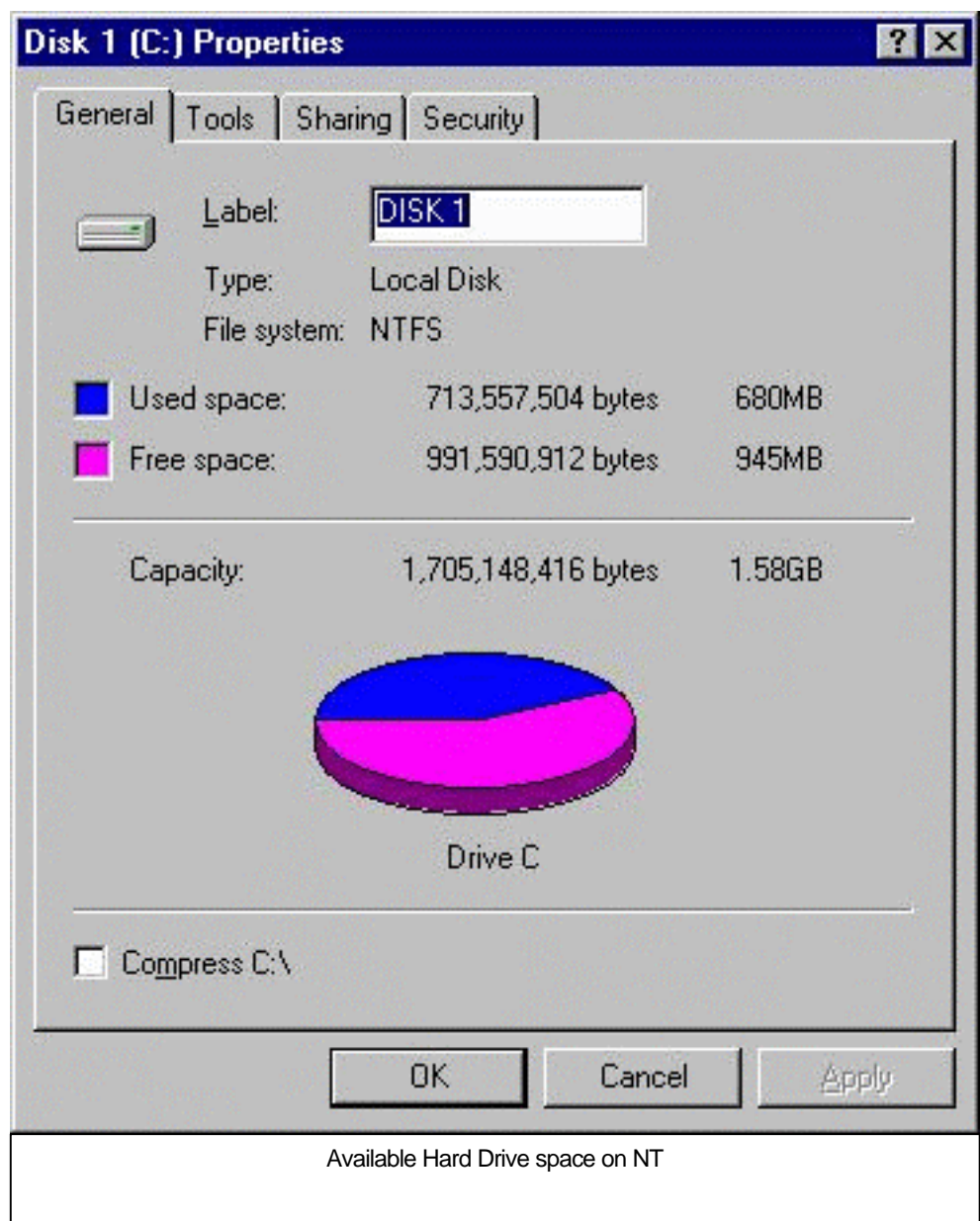
1. Go to **Start**
2. Select **Administrative Tools**
3. Select **NT Diagnostics**
4. Click on the **System** tab
5. Under **Processors**, there will be a “~” and beside that, an approximation of the speed of your processor.



NT: Checking for free Hard Drive Space

Your machine needs to have 50 Megabytes free on your hard drive to run CampusNet.

1. Click on **My Computer**
2. Right-click on the Hard drive
3. Select **Properties**
4. The number listed next to Free Space must be 50 MB or greater.



NT: Checking your Physical Memory (RAM)

You must have at least 16M of Physical Memory.

1. Click on **Start**
2. Select **Administrative Tools**
3. Select **NT Diagnostics**
4. Click on the **Memory** tab
5. In the Right hand column under **Physical Memory** next to **Total** is the Physical Memory of the machine.

Windows NT Diagnostics - WNETPLUS-NT

File Help

Services | Resources | Environment | Network
Version | System | Display | Drives | **Memory**

Totals		Physical Memory (K)	
Handles	1,938	Total	31,928
Threads	161	Available	3,100
Processes	25	File Cache	7,488

Commit Charge (K)		Kernel Memory (K)	
Total	54,280	Total	13,216
Limit	67,352	Paged	10,584
Peak	59,176	Nonpaged	2,632

Pagefile Space (K)			
Total	44,032		
Total In Use	31,764		
Peak Use	33,188		

Pagefile	Total (K)	In Use (K)	Peak Use (K)
C:\pagefile.sys	44,032	31,764	33,188

Properties Refresh Print OK

NT with 32M of Physical Memory

NT: Checking your Network Card

An ethernet card with a 10 Base T (RJ45) connector installed and configured to use Microsoft's TCP/IP protocol set to defaults is required for CampusNet.

We recommend using a 3com product that would work with your computer. To find out which 3com product would work best with your machine you can:

- Call 3com at **1-800-NET-3com**
- Visit the 3com web site at <http://www.3com.com>
- Call one of the vendors on our list advertising CampusNet (or check out the vendor page: <http://www.jmu.edu/campusnet/vendors>). They can not only supply the network card, but they can install it and the required software on your computer as well.

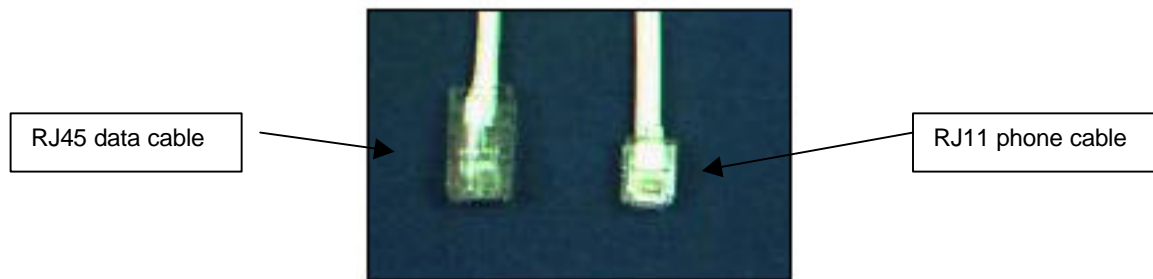


Back of a machine with a 3com card in it

If your machine already came with a network card in it, first make sure that it has an RJ45 (data jack) outlet instead of a phone jack outlet for a modem. **Many machines already have a modem installed. That is not a network card!**

Comparing a data cable with a phone cable.

The cable that goes to a network card (RJ45) is significantly larger than the one that would go to a phone or modem (RJ11). Make sure that you have a network cable and not a phone cable plugged into your network card.



If your network card does have a RJ45 data jack outlet, refer to the manuals that came with the network card for the proper installation and configuration inside your machine. If you don't want to install the card yourself, there is a list of local vendors to JMU who will do it for you at <http://www.jmu.edu/campusnet/vendors>.

Windows 95 and Windows 98

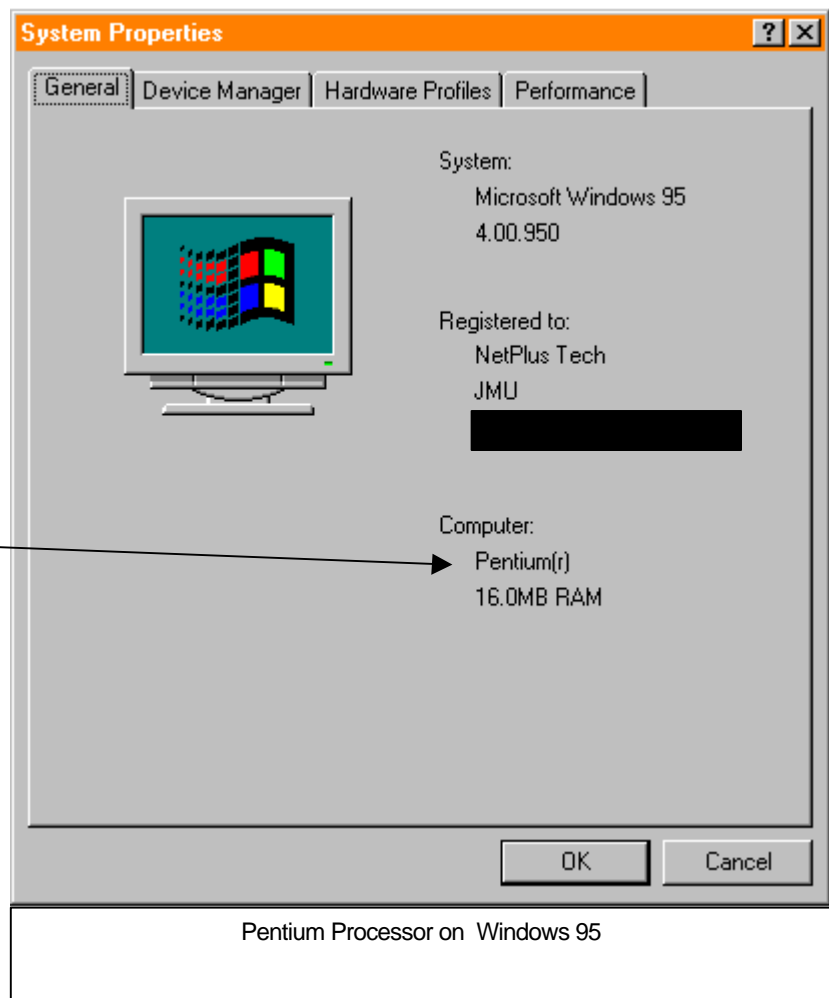
CampusNet System Requirements for
James Madison University

95/98: Checking your Processor

You need to have a Pentium processor to run CampusNet successfully on your machine.

1. Click on **Start**
2. Select **Settings**
3. Select **Control Panel**
4. Select **System**
5. Click on the **General** tab

This is an example of the notation of a Pentium processor in either a Windows 95 or 98 operating system.



95/98: Checking the Speed of your Processor

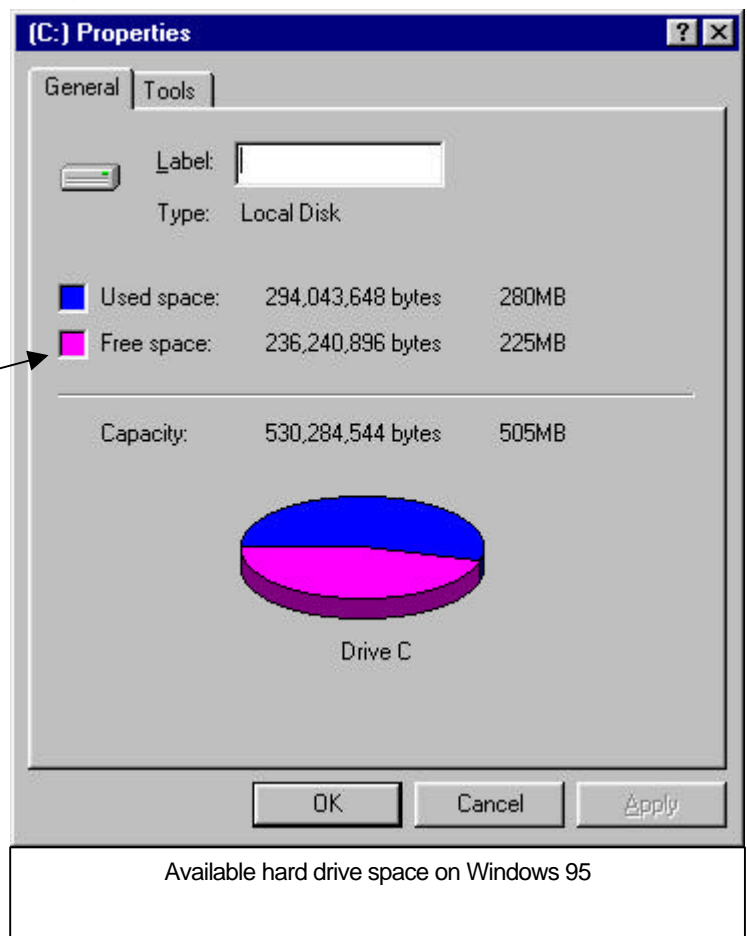
You need to make sure that you have a processor speed of at least 60 MHz to run CampusNet on your machine. There really isn't a specific way to check processor speed on either Windows 95 or Windows 98. Your best bet would be to either watch the computer as it's booting where right before it says "Starting Windows 95" (or 98) it will list the type of computer you have along with the processor speed. If you are using a Dell Optiplex Pentium 133, as the computer is booting, it will list that you are using that type of computer. The other option is to look in the manual that came with your computer. It should be listed with the computer's specifications.

95: Checking your free Hard drive space

You need to make sure that you have 50 megabytes of free space on your hard drive.

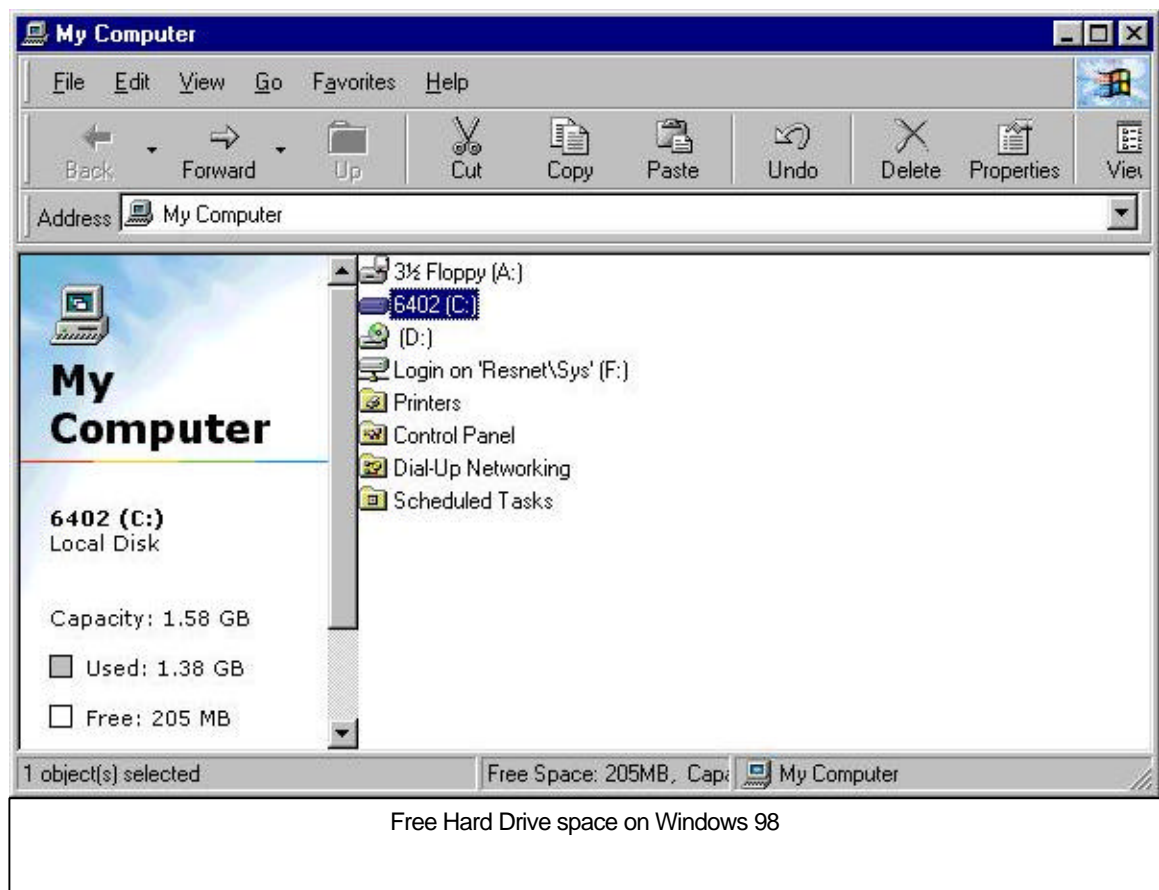
1. Click on **My Computer**
2. Right-click on the hard drive
3. Select **Properties**

In this example, there are 225 MB of free space on the hard drive.



98: Checking free space on your Hard drive

Your machine needs to have at least 50 megabytes of space available for CampusNet.



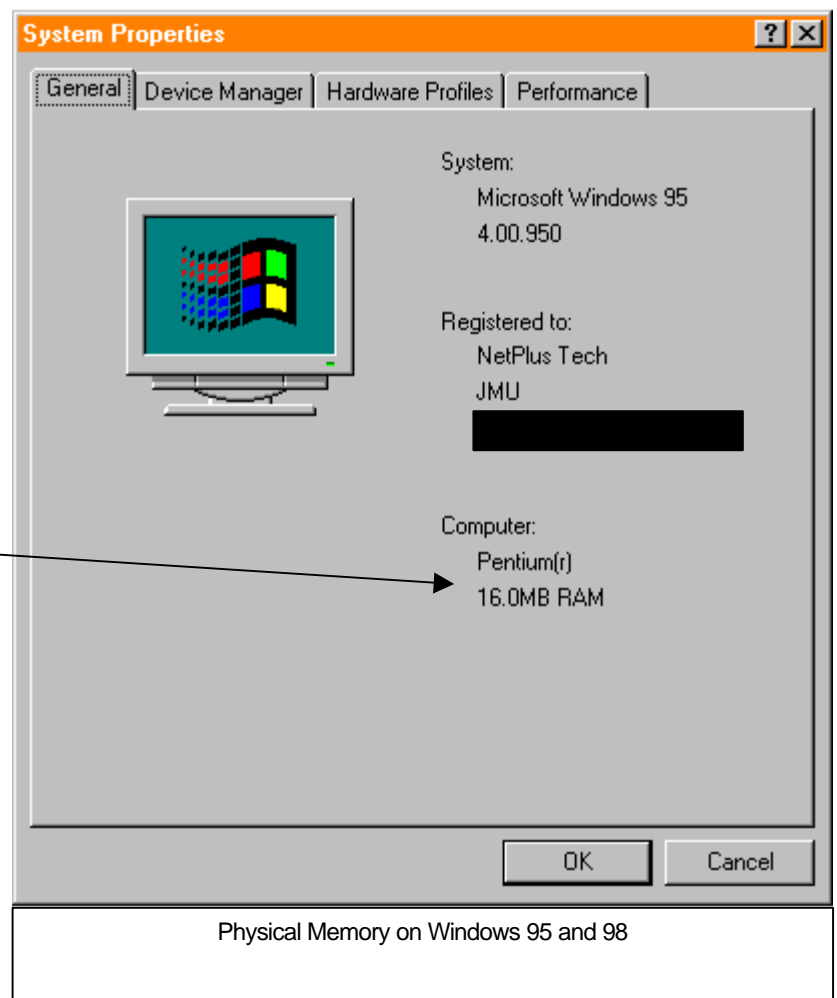
1. Double click on **My Computer**
2. Highlight your hard drive in the right hand frame
3. Free space is listed in two places: the left hand frame in the **Capacity** section and on the bottom of the window in the middle of the bar. In the above example, both locations show that there is 205 MB of free space on this hard drive.

95/98: Checking your Physical Memory (RAM)

You must have 16 megabytes of Physical Memory to successfully run CampusNet.

1. Click on **Start**
2. Select **Settings**
3. Select **Control Panels**
4. Select **System**
5. Click on the **General** tab

This example shows that there are 16 MB of physical memory on this machine.

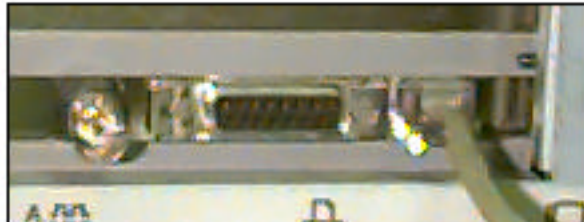


95/98: Checking your Network Card

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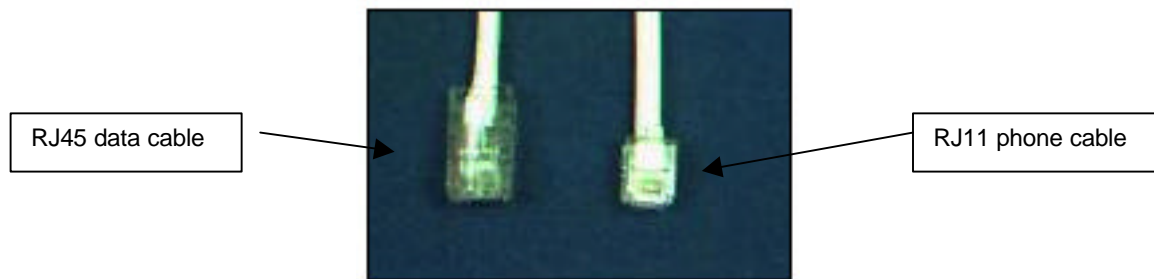


Back of a machine with a 3com card in it

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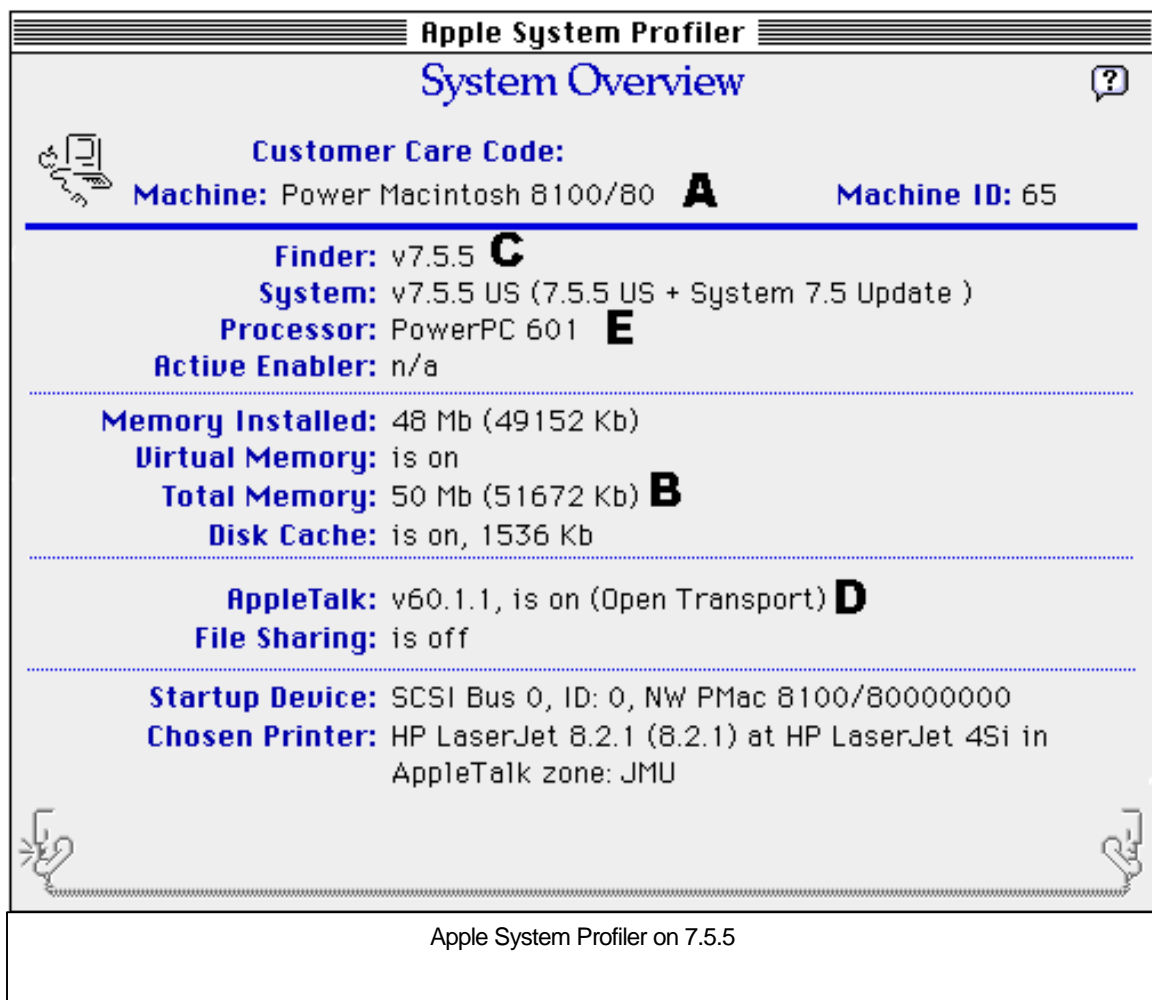
Macintosh System 7.5.3 and above

CampusNet System Requirements for
James Madison University

Mac: Checking System Specifications

Since System software version 7.5.2 and above has the utility Apple System Profiler, if you don't have utility, you probably don't meet specifications for CampusNet. To get to the Apple System Profiler:

1. Go to the **Apple** in the left hand corner of the screen
2. Select **Apple Menu Items** from the list
3. Select the **Apple System Profiler**



Reading the Results from the Apple System Profiler

A Machine type: Power Macintosh is required for CampusNet. In this example, the machine being used is a Power Macintosh 8100/80.

B Total Memory: Total Physical Memory needs to be 16 M of RAM. In this case, Total memory is 50 M of RAM. Total memory would be both the Physical and virtual memory in the machine. To get an actual break down of the Physical and virtual, go to the Control Panels and select the Memory Control Panel.

C Finder: The Finder says that it is version 7.5.5. and right below it next to **System**, it also states that this machine is using system software version 7.5.5 which meets the specification of 7.5.3 or better.

D Appletalk: Next to the version of Appletalk, it says that this computer is using Open Transport, another requirement of CampusNet.

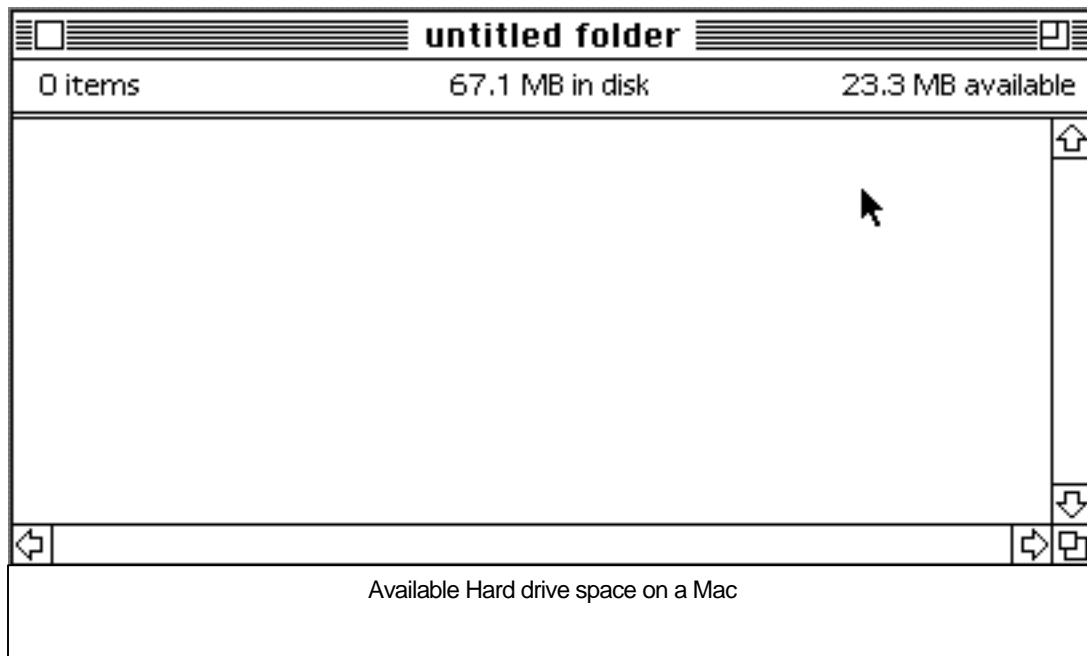
E Processor: The processor requirement for Macintosh using CampusNet is Power PC.

After running the Apple System Profiler...

If you have passed all the other system specification requirements through the Apple System Profiler, the only thing that needs to be checked is the amount of available hard drive space and the version of Open Transport.

Mac: Checking your Available Hard drive space

To meet the CampusNet system requirements, you must have 50 MB of free hard drive space available.



To find out how much available space you have, just go to:

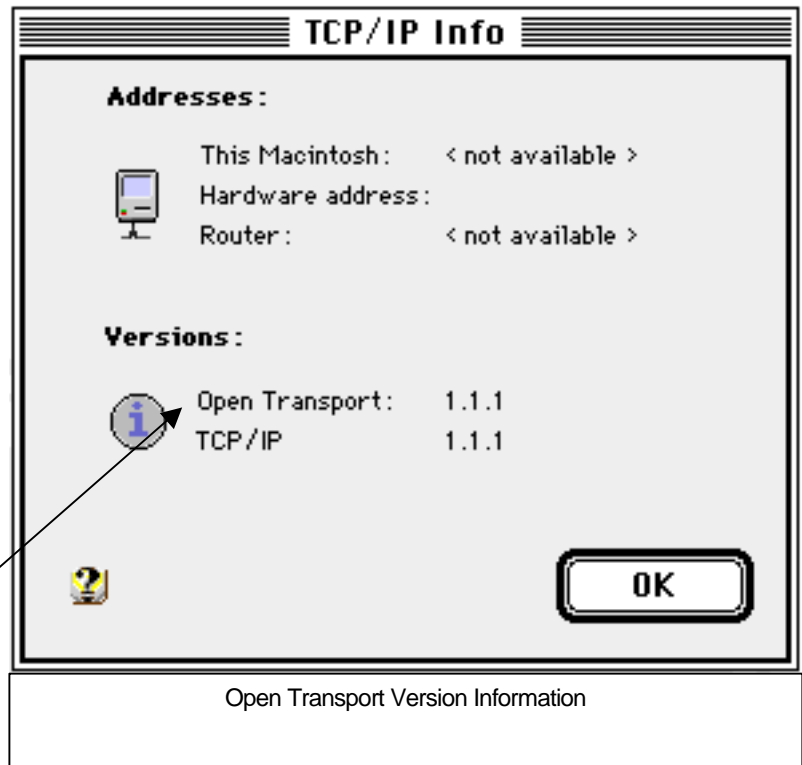
1. **File**
2. Select **New Folder**
3. Open the new folder you created and at the top, it will show you how much space you have on your disk and how much is available of that in the upper right hand corner. In the above example, there is only 23.3 MB available, not enough to install CampusNet.

Mac: Checking the version of Open Transport

CampusNet requires Open Transport version 1.1 or better.

1. Go to the **Apple** in the upper left hand corner
2. Select **Control Panels**
3. Select **TCP/IP**
4. Keeping that window open, go to **File**
5. Select **Get Info**
6. In the **Versions** section, next to **Open Transport**, the version is listed.

Open Transport version
1.1.1



Mac: Checking your Network Card

It is necessary to have an Ethernet card with a 10 Base T (RJ45) connector installed and configured to use Open Transport 1.1 (at least) set to use DHCP via the Ethernet card to use CampusNet

We recommend using an Asante product that would work best with your computer. To find out which Asante product would be the most compatible with your machine you can:

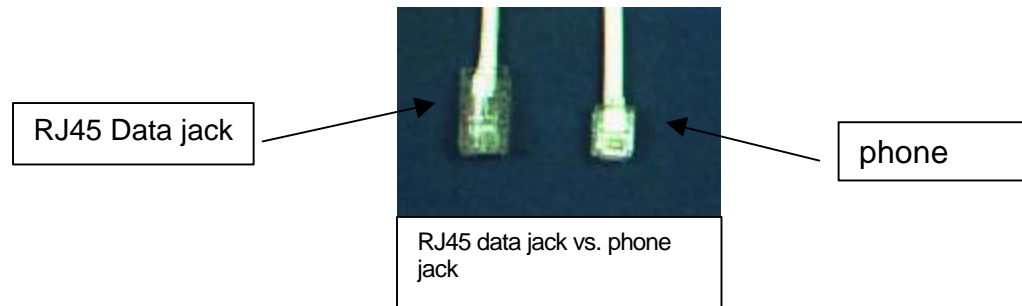
- Call Asante at **1-800-662-9686**
- Visit Asante's **Captain Network** site at:

<http://www.asante.com/captain-network>

This is an extremely user-friendly site that you do the following: Select your computer, and select 10Mbps Ethernet (as your Network Topology). It will then tell you exactly what kind of network card you will need.

Call one of the vendors on our list: <http://www.jmu.edu/campusnet/vendors> they can supply the card you need as well as install it and the required software on your computer.

If you think your computer came with a network card already in it, check the back of the machine. If there is an outlet that looks like a telephone jack could fit into it, it is either a modem or an RJ45 outlet. An RJ45 data jack is larger than a phone jack.



If your network card does have a RJ45 data jack outlet, then refer to the manuals that came with your computer for the proper installation and configuration of your network card. If you don't want to do this yourself, you can refer to our list of vendors on our advertisement flyer and they can install and configure your network card for you.