

NCSA Mosaic™

for Microsoft Windows

Installation and Configuration Guide

Version 2.0.0 Final Beta

Table of Contents:

Introduction

System Requirements

Hardware

Software (operating systems, Win32s, winsock)

Supported Operating Systems

Win32s and OLE

Winsock Information

Connecting to the Internet

Obtaining Mosaic from NCSA

Ways to obtain the software

Command line FTP instructions

Installing or Upgrading Win32s with OLE

First Time Installation of Win32s with OLE

Upgrading Win32s with OLE

Installing NCSA Mosaic

Introduction

The Mosaic initialization file (mosaic.ini)

Windows 3.1 or Windows for Workgroups

Windows NT for the Intel ix86 compatible processors:

Windows NT for the DEC aXP, Mips , Power PC processors

Win95 Beta testers

Executing and Testing NCSA Mosaic

Frequently Asked Questions (FAQs)

Support and Feedback to NCSA

Introduction_

NCSA Mosaic is an Internet navigation and data retrieval tool. It will allow you to access network information with the click of a mouse button. Mosaic is capable of accessing data from World Wide Web servers (HTTP), Gopher servers, FTP servers and Usenet News servers (NNTP). Mosaic can also access other data services through gateway servers. These services provide search capabilities in database environments such as PH, Archie, WAIS, and Veronica. NCSA Mosaic provides transparent access to these information sources and services. NCSA Mosaic software is copyright The Board of Trustees of the University of Illinois (UI), and ownership remains with the UI. The UI grants you a license without a fee to use the Mosaic software for personal, academic, research, government and internal business purposes. For information about licensing or distributing Mosaic see the FAQs at the end of this document.

Below are the naming schemes we are using for this release.

With a Setup Program:

mos20fb.exeWin3.1x, WfW 3.1x, Win95 & WinNT for the Intel processor

Without a Setup Program:

axp.mosaic.2.0.0fb.exe.....WinNT for the DEC aXP

mips.mosaic.2.0.0fb.exe.....WinNT for the MipsPC

ppc.mosaic.2.0.0fb.exe.....WinNT for the Power PC

System Requirements

Hardware

Mosaic operates under Microsoft Windows on one of the following processor architectures.

Intel iX86	- Intel's 386, 486, and Pentium processors
DEC aXP	- Digital Equipment Corporation (DEC) aXP 64-bit processor
MIPS PC	- Mips Technology processor
Power PC	- Motorola, IBM, Apple Power PC processor

The minimum requirement for the Intel processor is a 80386SX-based machine with 4MB RAM operating in enhanced mode. Consult your Windows manual for more information about running your system in enhanced memory mode.

Software

Operating System - Mosaic requires one of the following Windows operating systems:

Intel (iX86)	Microsoft Windows 3.1x, Windows for Workgroups 3.1x, Windows 95 or Microsoft Windows NT version 3.5
DEC aXP	Microsoft Windows NT version 3.5
Mips PC	Microsoft Windows NT version 3.5
Power PC	Microsoft Windows NT version 3.5

Win32s and OLE- Win32s is a subsystem created by Microsoft for the Windows 3.1x and Windows for Workgroups 3.1x 16-bit operating systems. The Win32s libraries allow Win3.1x and WfW 3.1x users to run Win32 (32-bit) applications on their 16-bit operating systems. Object Linking and Embedding (OLE) allows Mosaic to use its Common Client Interface (CCI) and communicate with other applications.

Windows NT and Windows 95 Users:

Windows NT v3.5 and Windows 95 are 32-bit operating systems with built-in support for OLE. WinNT and Win95 users should NOT install Win32s with OLE on their computers.

Windows 3.1x and Windows for Workgroups 3.1x Users:

Win3.1x and WfW 3.1x are 16-bit operating system and you will need to install Microsoft's Win32s with OLE software. The latest version of Win32s is available from NCSA's FTP site, ftp.ncsa.uiuc.edu, in the /Mosaic/Windows directory. The file w32sOLE.exe is a self-extracting executable. Download the file, put it in a temporary directory (c:\install) and type w32sOLE. This program will expand and decompress all associated files. Now follow the appropriate instructions for installing or upgrading Win32s found in the Win32s installation section of this document.

The latest version of Win32s, version 1.25, addresses the National Language Support problem and the compobj.dll problem some Windows users were experiencing with Win32s v1.20. We recommend you upgrade to this latest version if you use a language other than English(American) in your Windows environment. We also recommend you upgrade if you have experienced problems with the compobj.dll library while using Microsoft Office, Excel or Word. In general, if you are NOT experiencing problems with Win32s v1.20, upgrading to Win32s v1.25 is not necessary.

NOTE: Install Win32s BEFORE you attempt to install Mosaic. Mosaic's installation program, setup.exe, is also a 32-bit application.

Winsock Information

The Windows Sockets specification provides a standard method of accessing data from a TCP/IP network. TCP/IP, Transfer Control Protocol/Internet Protocol, is the data transfer method used by the Internet and the World Wide Web. The Windows Sockets Dynamic Link Library, winsock.dll, contains the necessary functions and network calls to successfully negotiate data transfers over a TCP/IP network. The winsock software must be compliant with version 1.1 of the Windows Sockets Standard.

Windows 95 and Windows NT - These operating systems have built-in support for the winsock.dll therefore you do not need to install a third party winsock software on these systems. See our FAQs for information about configuring the Win95 winsock.dll.

Windows 3.1x and Windows for Workgroups 3.1x - These operating systems do NOT have built-in support for the Windows Sockets Standard and you will have to install a winsock.dll if you plan to use Mosaic as a World Wide Web browser. Mosaic will operate in stand alone mode if you do not have a winsock.dll on your system or you invoke Mosaic with the "-s" command line option. In stand-alone mode you can use Mosaic to view locally stored HTML files.

Factors to consider when deciding which winsock.dll is best for you:

- Does your Internet service provider recommend or provide specific winsock software?

- Is your computer connected to a local area network (LAN)? (Microsoft, Novell, Pathworks, etc.) If you have commercial networking software you need to obtain that company's winsock.dll to ensure its compatibility with your LAN.
- Personal choice is also a consideration. Not all winsocks are equal. Even though all winsock.dlls follow the same Windows Socket Standard, there are different companies developing the software and the feature set of each winsock product is different. The choice is yours.

Winsock software is available from one of the following sources:

- Commercial winsock products can be purchased from: FTP Inc., Microsoft's TCP/IP-32 for Windows for Workgroups, NetManage's Chameleon, Novell, PC/NFS Pathworks 5.0, and Spry Inc.
- Download, evaluate and purchase a shareware winsock software from Trumpet International Software or download and use the free with copyright winsock package from NetManage Inc. The winsock Trumpet International Software is available from the anonymous FTP server "ftp.trumpet.au" in the /winsock directory. If you experience network delays from this Australian FTP site, you can find a copy of the Trumpet software on NCSA's anonymous FTP server, ftp.ncsa.uiuc.edu. The file winsock.zip is in the /Mosaic/Windows/sockets/Trumpet directory. The Chameleon Sampler software is licensed freely courtesy of NetManage Incorporated for personal and educational use only. This product only supports modem connectivity to the network. The Chameleon Sampler software is available from Netmanage's anonymous FTP site, ftp.netmanage.com, in /pub/demos/sampler directory. With permission from NetManage Inc., we maintain a copy of this product on our FTP server in the /Mosaic/Windows/sockets/Chameleon directory.

For information about obtaining software from an anonymous FTP server, please refer to the section "Obtaining Mosaic from NCSA". For more information about winsock.dll's, please refer to the FAQs (Frequently Asked Questions) at the end of this file.

Connecting to the Internet

Many organizations that are already on-line offer their members or employees Internet access. Some typical organizations include Colleges, Universities, Government Agencies, and Corporate organizations. Check with the organization's computer services organization for more information about gaining access to the Internet. Another way to gain Internet access is to purchase on-line services from a commercial company. There are companies that provide Internet access for a monthly fee. See the FAQs for a list of Nationwide and International Internet Service Providers.

Obtaining Mosaic from NCSA

NCSA Mosaic is available for free from our anonymous FTP (File Transfer Protocol) or for a small fee on diskette. Hardcopy manuals and software disks are available through the NCSA Technical Resource Catalog. The NCSA Technical Resource Catalog is available from the NCSA Orders desk. You can request a copy of the catalog by email, phone or US mail.

NCSA Orders
152 Computing Applications Bldg.
605 E. Springfield Ave.
Champaign, IL 61820-5518

orders@ncsa.uiuc.edu
(217) 244-4130

Obtaining the software via FTP is the fastest and most cost effective way of obtaining Mosaic. There are various FTP software interfaces. Some FTP clients have command line and some use a graphical user interface (GUI). Mosaic has a built-in FTP GUI client and if you are using an older copy of Mosaic you can download the latest version from the NCSA Mosaic for Microsoft Windows home page. (<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/HomePage.html>) On the home page you will find a link to the latest release. If you do not have Mosaic but have access to a command line FTP client, you can use the following instructions to FTP Mosaic to your system.

Command line FTP instructions

1. Invoke your local FTP client and open a session to **ftp.ncsa.uiuc.edu**. For example:

open ftp.ncsa.uiuc.edu (The command line for the Microsoft command line FTP client)

or

ftp ftp.ncsa.uiuc.edu (The command line from a UNIX based command line FTP client)

2. At the login prompt enter the name anonymous.

anonymous

3. At the password prompt enter your email address as the password. For example:

yourname@your.company.com

4. Change directories to /Mosaic/Windows directory.

cd /Mosaic/Windows

5. List the contents of the directory, using the command:

ls

6. Tell the FTP server you want to transfer a binary file by giving the command:

bin

7. Get the Mosaic and the Win32s software using the command:

get mos20fb.exe

If you need the **Win32s** software, v1.25 w/OLE, download it now using the command:

get w32sOLE.exe

If you need the **Trumpet winsock**, continue with the following commands:

cd sockets/Trumpet

get winsock.zip

8. When you are finished downloading files from our FTP server, give the bye command and the

server will log you out.

bye

Installing or Upgrading Win32s with OLE

Win32s with OLE is a subsystem created by Microsoft for the Windows 3.1x and Windows for Workgroups 3.1x operating systems. Win32s with OLE gives these 16-bit operating systems the ability to run Win32 applications. Win32s with OLE is freely available to all licensed Windows 3.1 or WfW 3.1x users and it is available from the NCSA anonymous FTP server. The file w32sOLE.exe is available from the /Mosaic/Windows directory on our anonymous FTP server, ftp.ncsa.uiuc.edu. You can also hyperlink to the latest version of Win32s from the NCSA Mosaic for Microsoft Windows home page.

<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/HomePage.htm>

If you use Windows NT v3.5 or Windows 95 do not install Win32s. WinNT and Win95 are 32-bit operating systems with built-in OLE support.

First Time Installation of Win32s with OLE

1. Download the latest version of Win32s and place w32sOLE.exe into a temporary directory. For example: c:\install
2. From DOS, change directories to c:\install. (cd c:\install)
3. Enter the command "w32ole". The w32sole.exe file will decompress and create two files: install.bat and w32spack.exe
4. Enter the command "install". Install will start Windows and the setup program.
5. Follow the instructions from the Win32s setup program.
6. Install the game Freecell. Freecell is a 32-bit application that will test your Windows environment to ensure it's Win32s compatible.
7. After the setup program is complete, Windows will reboot.
8. (optional) Delete the temporary files and directories in c:\install. (w32sOLE.exe, install.bat, w32spack.exe, DISK1 & DISK2) The installation program put the necessary files in their proper places and these files are just taking up space.
9. The installation of Win32s is complete.

Upgrading Win32s with OLE

Most people upgrading Win32s can follow the step-by-step instructions outlined below. However, if you have had a problem upgrading Win32s in the past, if you have an S3 video card, or a printer driver by LaserMaster you should read the "Troubleshooting Win32s Installation Problems" guide, <http://www.microsoft.com/pages/kb/DEVELOPR/win32dk/Q106715.htm>, provided by

Microsoft before you attempt to upgrade Win32s.

1. Download the latest version of Win32s with Mosaic and place w32sOLE.exe into a temporary directory. For example, c:\install
2. Close Mosaic and all other Win32s applications.
3. If you have Mosaic or any other Win32s application in your "Startup" program group, temporarily move them to a another program group.
4. Open File Manager
5. Delete the c:\windows\system\win32s directory.
6. Close Windows
7. From DOS, change directories to c:\install. (cd c:\install)
8. Enter the command "w32ole". The w32sole.exe file will decompress and create two files: install.bat and w32spack.exe
9. Enter the command "install". Install will start Windows and the setup program..

NOTE: When upgrading Win32s, Windows will give you the following error.

Cannot find a device file that may be needed to run windows in 386 enhanced mode.
You need to run the setup program again
C:\windows\system\win32s\w32s.386

10. Acknowledge the error.
11. Follow the instructions from the Win32s setup program.
12. Install the game Freecell. Freecell is a 32-bit application that will test your Windows environment to ensure it's Win32s compatible.
13. After the setup program is complete, Windows will reboot.
14. (Optional) Delete the temporary files and directories in c:\install. (w32sOLE.exe, install.bat, w32spack.exe, DISK1 & DISK2) The installation program put the necessary files in their proper places and these files are just taking up space.
15. The installation of Win32s is complete.

Installing NCSA Mosaic

We have simplified the installation of Mosaic as much as we can. However, to establish the proper network environment you will need winsock software and a Internet access provider. NCSA does not promote any particular winsock software or network access provider. For more information about the available winsocks and Internet access providers see the FAQs (Frequently Asked Questions) at the end of this file. With this in mind, we must assume you already have a

winsock and an Internet access provider.

Ensure you have the appropriate Operating System and environment set up before you attempt to install Mosaic. If you use Windows 3.1x or Windows for Workgroups 3.1x, you MUST run your computer in Enhanced mode and install Win32s v1.25 with OLE. If you plan to access information from the Internet, you will also need to install a winsock.dll. Windows NT and Windows 95 users have a native 32-bit operating system with built-in OLE support and winsock software.

Note: You MUST install Win32s with OLE before you run the installation program for Mosaic. The Mosaic installation program is also a 32-bit application.

The setup program installs Mosaic into the "c:\mosaic" directory by default however you may specify any directory. The only directory Mosaic will not install is in the same directory as the setup.exe program. The result of this action will cause the Mosaic setup process to fail.

The Mosaic initialization file (mosaic.ini)

The Mosaic initialization file, mosaic.ini, contains information that helps Mosaic remember information about its last known state and your preferences. All initialization information is configured through Mosaic and you should not edit the mosaic.ini file with an ASCII editor.

By default, Mosaic looks for the initialization in the Windows directory and the installation program puts a copy of the mosaic.ini file into that directory unless one already exists. If you want to put the mosaic.ini in any other directory, you will need to define an environment variable for mosaic.ini. Windows 3.1x, Windows for Workgroups 3.1x and Windows 95 users define environment variable in the autoexec.bat file. The environment variable is defined as:

```
SET MOSAIC.INI=c:\complete\directory\path\mosaic.ini
```

After you have edited your autoexec.bat file, you will need to reboot your system so this change takes effect.

Windows NT users define environment variables from the Control Panel's System program. This application opens a window that allows you to enter variable names and values. For example:

```
Variable: MOSAIC.INI
Value:    c:\complete\directory\path\mosaic.ini
```

Another way to force Mosaic to read an initialization file from another directory is to use the -i switch on the command line. To change the command line of the Mosaic program icon, single click on the Mosaic icon and select Properties from the Program Manager's File menu. Windows opens a dialog box that defines the properties of the program. Place your cursor at the end of the command line and enter the -i information similar to the example below.

```
Command Line:      c:\mosaic\mosaic.exe -i c:\mosaic\mosaic.ini
```

The name of the initialization file is arbitrary and if your computer has multiple users, each user could have a unique Mosaic initialization file and a unique name for each Mosaic icon. This can be achieved by opening both the File Manager and the Program Manager. Size both windows so you can drag and drop new copies of mosaic.exe into the Mosaic program group. Each time you drag and drop mosaic.exe from the File Manager to the Program Manager, Windows creates a new icon and link to the Mosaic executable. After you have enough Mosaic links for your users, edit the preference of each to personalize them for each user. For example:

Description: Joe's Mosaic
Command Line: c:\mosaic\mosaic.exe -i c:\mosaic\joe.ini

Warning: Do not edit the Mosaic initialization file with an ASCII editor. All user configurable options are available from the Options, Preferences... menus.

Windows 3.1 or Windows for Workgroups

1. Install Win32s and your winsock software.
2. From the File Manager, move mos20fb.exe into a temporary directory. For example, C:\install.
3. Double click on mos20fb.exe.
4. Double click on setup.exe.
5. Follow the instructions from the setup program.
6. Double click on the Mosaic icon.
7. Read the "relnotes.htm" file.
8. Delete the temporary files in c:\install.
9. Open Mosaic's Options, Preferences menu and configure Mosaic.
10. (Optional) Download and setup the associated viewer applications. See the following
URL for more information:
<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/viewers.htm>
11. Have fun, Enjoy!

Windows NT for the Intel ix86 compatible processors:

1. With the File Manager, move mos20fb.exe into a temporary directory. For example, C:\install.
2. Double click on mos20fb.exe.
3. Double click on setup.exe.
4. Follow the instructions from the setup program.
5. Double click on the Mosaic icon.
6. Read the "relnotes.htm" file.
7. Delete the temporary files in c:\install.
8. Open Mosaic's Options, Preferences menu and configure Mosaic.
9. (Optional) Download and setup the associated viewer applications. See the following
URL for more information:
<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/viewers.htm>
10. Have fun, Enjoy!

Windows NT for the DEC aXP, Mips , Power PC processors:

Note: The DEC and Mips versions of Mosaic do not have a setup program. If Mosaic will not load, check to make sure you have one copy of the most recent versions of MFCANS32.DLL, MFCUIA32.DLL and MSVCRT20.DLL in your WINNT35\System directory.

1. Decompress the respective binary file into a temporary directory.
2. Place the following files into the designated directory:

MFCANS32.DLL: WindowsNT\System32 Directory

MFCUIA32.DLL : WindowsNT\System32 Directory
MSVCRT20.DLL: WindowsNT\System32 Directory
MOSAIC.EXE : a directory for Mosaic
MOSAIC.INI : the same directory as mosaic.exe
README.WRI : Place in the same directory as mosaic.exe
RELNOTES.HTM: Place in the same directory as mosaic.exe

3. Drag and drop the mosaic.exe file from the File Manager to a Program Group
4. Double click on the Mosaic icon
5. Read the "relnotes.htm" file.
6. Open Mosaic's Options, Preferences menu and configure Mosaic.
7. (Optional) Download and setup the associated viewer applications. See the following URL for more information:
<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/viewers.htm>
8. Have fun, Enjoy!

Win95 Beta testers

Windows 95 is a beta product and many of the problems you may be experiencing are due to the particular build of Win95. The setup program for Mosaic does not correctly create a shortcut to Mosaic or allow you to use file names that deviate from the 8.3 DOS naming scheme. You will need to delete the shortcut and create a new one manually and install Mosaic in a folder that has a name with a maximum of eight characters. If you use a 16-bit winsock.dll with Windows 95, you will experience network problems. The easiest solution to this problem is to install the TCP/IP support that is native with Windows 95. For more information about installing the Windows 95 winsock refer to the FAQs.

Executing and Testing NCSA Mosaic

Ensure you have installed your winsock.dll, Win32s, and Mosaic Software. Log into your Internet service provider and establish a SLIP or PPP connection. If everything is configured properly, Mosaic will load the Mosaic Home Page from NCSA's WWW server. If the page does not load automatically, click on the red house icon in the toolbar. The icon is a quick link to the home page. By default, we have set it to point to the NCSA Mosaic Home Page. Once at the Mosaic home page, we suggest you take time and learn more about the Windows version of Mosaic. From the Mosaic home page, find and select the link "Mosaic for Microsoft Windows". This URL links you to the Mosaic for Microsoft Windows Home Page.

If you are not able to connect to the Mosaic Home Page, check your winsock and network configuration to ensure all IP numbers are correct. After verifying that you do not have a typo, call your network service provider and verify that the IP numbers are correct.

NOTE: If you have more than one winsock.dll available to windows at any given time, you will experience system conflict problems! Make sure there is only one winsock on your system and don't mix proprietary network software with winsock software. For example, if your computer is connected to a Novell network do not install the Trumpet winsock. IT WON'T WORK! If you are using Windows 95, you should use the built-in winsock. See the FAQs for more information about winsock.dlls.

Frequently Asked Questions (FAQs)

Table of Contents:

Do I need to register NCSA Mosaic?
Can I license Mosaic?
Can I get the Source Code?
Do I need PKunzip to unzip Mosaic?
Do I need to edit or change the settings in the mosaic.ini file?
Is OS/2 supported?
Can I run Mosaic without an Internet connection?
Where do I get a winsock.dll?
What does the error message "Cannot find winsock.dll" mean?
What does the error message "Unable to load TCP" mean?
I have a winsock.dll and Mosaic is not working. Why?
What does the error code "Failed DNS Lookup" mean?
How do I configure the Windows 95 winsock?
What are external viewers?
How do I install an external viewer?
Can I use Mosaic from home?
How do I gain access to the Internet?
How do I set up Proxy Gateway Support in Mosaic?
Is NCSA Mosaic available on other platforms?

Do I need to register NCSA Mosaic?

No, you do not need to register NCSA Mosaic. However, NCSA Mosaic software is copyrighted by The Board of Trustees of the University of Illinois (UI), and ownership remains with the UI. The UI grants you a license to use the Software for personal, academic, research, government and internal business purposes only, without a fee. If you plan to use the software in any other capacity, you will need to contact NCSA or Spyglass Inc. for licensing information.

Can I license Mosaic?

Yes, you can license Mosaic. NCSA grants licenses to academic, government and non-profit organizations. To apply for a license, download and print a copy of the licensing agreement. Follow the instruction contained in the agreement and mail it to NCSA. NCSA will not accept electronic versions of the agreement. Copies of the licensing agreement are available from the NCSA FTP site, <ftp.ncsa.uiuc.edu>, in the /Mosaic/Windows/source directory. There are various formats of this agreement available for your convenience. The file license.txt contains more information about the licensing agreements. Using Mosaic you can access the FTP server with the following URL:

<ftp://ftp.ncsa.uiuc.edu/Mosaic/Windows/source>

If you plan to use Mosaic in a commercial capacity you will need to contact Spyglass, Inc. for information about a commercial license. All commercial licensing requests must be made through Spyglass Inc.

Spyglass, Inc.
1230 East Diehl Road
Suite 304

Naperville, IL 60563

email: mosaic@spyglass.com

phone: (708)505-1010

Can I get the Source Code?

The source code is only available through a licensing agreement. Refer to the licensing FAQ above for more information about these agreements.

Do I need PKunzip to unzip Mosaic?

No, Mosaic is a self extracting executable. This means you do not need the PKunzip software to decompress the files. However, you will find the PK software useful for decompressing other software. Files extended with ".zip" indicate that the file is in a compressed archive format. The extension ".exe" can also indicate a self extracting compressed archive file. To decompress ".zip" files you need must have the latest version of pkunzip.exe from the PKWare software. Within the PKWare file you will find an executable called "pkunzip.exe", this program will decompress ".zip" files. To decompress a zipped file use a command similar

pkunzip filename.zip

In the case of the ".exe" (self-extracting) files you should create a directory and simply type the name of the file to decompress its contents. For example, to decompress the file "mosaic20.exe" just type **mosaic20** at a DOS prompt.

If you need a copy of the SHAREWARE utility **PKWare** (zip and unzip) you can find the utility program at the anonymous FTP site oak.oakland.edu. The file pkz204g.exe is in the pub/msdos/zip directory. You can also find a copy of this software on our anonymous FTP site, ftp.ncsa.uiuc.edu, in the /PC/Windows/Contrib directory.

The file, "pkz204g.exe", is a self extracting executable file. We recommend you put it in its own directory and type pkz204g. The software will unzip itself. After you decompress the software you will need to add the directory to the "PATH= ..." statement of your "autoexec.bat" file. After you edit your autoexec.bat you must reboot your machine for the changes to take effect.

Do I need to edit or change the settings in the mosaic.ini file?

No, all user configurable settings are changed from Mosaic's preferences menus. You can open the preferences menus from the Options menu or by selecting Alt + Enter from the keyboard.

Warning: Do not edit the Mosaic initialization file with an ASCII editor.

Is OS/2 supported?

OS/2

Unfortunately not; we do not have the resources to port Mosaic to the OS/2 environment.

Can I run Mosaic without an Internet connection?

Yes. Mosaic will operate in stand alone mode if it cannot find a winsock.dll on your system or you invoke Mosaic using the "-s" switch on the command line. In stand-alone mode you can view local HTML documents and associated files.

Where do I get a winsock.dll?

Windows 95 and Windows NT have built-in support for the winsock.dll and do you not need to install a third party winsock software on these systems.

Windows 3.1x and Windows for Workgroups 3.1x do NOT have built-in support for the Windows Sockets Standard. If you plan to use Mosaic as a World Wide Web browser, you will need a winsock.dll and an Internet access provider.

See the Winsock.dll section under "System Requirements" for information about obtaining winsock software.

What does the error message "Cannot find winsock.dll" mean?

This is the most common error message users see during the installation. However, when NCSA Mosaic receives this error message from Windows, it opens in stand alone mode. If you do not want to run in stand alone mode and you intended to connect to the Internet then you have a winsock configuration problem. The error occurs when Windows can not find the winsock.dll. To correct this problem, make sure the directory that contains the winsock.dll is defined in the PATH= statement of the autoexec.bat. One of the common misconceptions is that this is a Mosaic error, when it is a Windows system error telling you it cannot find a file.

What does the error message "Unable to load TCP" mean?

This is another Winsock.dll error message. It is caused when Windows can't find related .dll files on your system. The solution to this problem is to re-install the winsock software.

I have a winsock.dll and Mosaic is not working. Why?

Ensure you have installed the winsock software according to its instructions and you have network connectivity. We suggest you try another TCP/IP application such as Telnet, news, ping or FTP to verify you have network connectivity. If you receive the error message "Winsock is not 1.1 compliant" you will need to upgrade to the latest 1.1 compliant version of your winsock software. If you are using Windows 95 and a 16-bit winsock like Trumpet, Spry, Chameleon, etc., there is a known problem between the 32-bit system and the 16-bit subsystem. It appears Win32 applications cannot communicate with 16-bit subsystem for winsock services. We recommend you use the native Windows 95 TCP/IP protocol support. See the FAQ "How do I configure the Windows 95 winsock?" for information about setting up the software.

What does the error code "Failed DNS Lookup" mean?

This error stems from network connectivity and the configuration of your winsock software. When you select a hyperlink, Mosaic passes the file's address to the winsock.dll and then the winsock calls the Domain Name Server (DNS) to resolve the name of the machine into a IP number. If the winsock cannot find the DNS, or if there is a typo in the requested address, or if the DNS machine is down, you will receive this message. To correct this problem, ensure you have network connectivity. Open another TCP/IP application (ping, telnet, FTP, news, gopher, etc...) and log

into a remote server to verify you have network connectivity. If you have connectivity and the IP number of your DNS is correct, Mosaic will work. If you get DNS errors from your other TCP/IP applications, check to ensure the IP number for the DNS is correct. Typically an Internet access provider will supply you with IP numbers for both a primary and alternate DNS. You should list both DNS servers in case one of the servers go down for maintenance. Another cause of failed DNS lookup is when the name of the machine you request information from is not listed by the DNS or there is a typo in the address.

NOTE: Many people are trying to use other 16-bit winsock software with Windows 95. All 16-bit applications operate in a 16-bit subsystem under Windows 95. It appears Win32 applications like Mosaic are unable to communicate with these winsocks. We recommend you use the native Windows 95 TCP/IP protocol support.

How do I configure the Windows 95 winsock?

Direct Network Connection

Plug and Play should identify your network adapter and allow you to configure it for various network communication protocols during the Windows 95 installation. To configure the network card for Internet access, add the TCP/IP protocol from the Microsoft protocol group during the protocol definition phase of the configuration. If your network card is installed and you need to define the TCP/IP protocol, you can install it by clicking on the Network icon in the Control Panel. Select "Add", open the Microsoft protocol group and select TCP/IP Protocol. If you are adding a new network card to your computer, select Add/Delete Hardware from the control panel. The Plug and Play program will identify your card and allow you to configure it for TCP/IP.

Dial-Up Connection (Modem)

Plug and Play should identify your Dial-up Networking adapter (modem) and allow you to configure it for various network communication protocols during the installation of Windows 95. To configure your modem for Internet access, add the TCP/IP protocol from the Microsoft protocol group during the protocol definition phase of installation. If your modem is installed and you need to define the TCP/IP protocol, you can install it by clicking on the Network icon in the Control Panel. Select "Add", open the Microsoft protocol group and select TCP/IP Protocol. If you are adding a new modem to your computer, select Add/Delete Hardware from the control panel. The Plug and Play program will identify your card and allow you to configure it for TCP/IP.

Once you have installed the TCP/IP Protocol (winsock.dll) you need to configure a dialer link to your Internet access provider. You can do so by selecting Start, Programs, Accessories, Dial-Up Networking. Next double click on the telephone icon titled "Make New Connection" and configure it for your Internet access provider. Once it's configured, click OK and Windows will create another telephone icon for that configuration. Double click on the new icon and Windows 95 will log into your Internet access provider, establish a PPP connection and allow you to run TCP/IP network applications.

What are external viewers?

NCSA Mosaic for Microsoft Windows can use other applications to display file types such as, Microsoft Word files, Postscript files, MPEG movies files, quicktime movie files, Image files, etc. These applications can be commercial software, shareware, freeware or copyright software and we refer to them as external viewers. In general, if an application can accept command line inputs, Mosaic can use it as an external viewer. When Mosaic downloads a file that it cannot display, Mosaic can pass the file to an external viewer and this application will display the file to

you. For example, if you have Microsoft Word, you can configure Mosaic to pass all files that have the MIME type of "application/msword" or files extended with ".doc" to your Word application.

For more information about MIME types, available viewers and configuring Mosaic to use viewers, see the following URL:

<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/viewers.htm>

How do I install an external viewer?

The only limitation Mosaic has using other external applications is their ability to accept command line arguments. Most applications do accept command line arguments. However, the only way to find out is to ask the author of the application or assume it does and configure Mosaic to use the application.

This is a general example of configuring Mosaic to use the application MPEGPLAY to display MPEG movie files.

- 1) Install the MPEGPLAY.
- 2) In Mosaic, select Preferences from the Options Menu.
- 3) Click on the Viewers Preference Sheet
- 4) Select Add

NOTE: Do not include the parenthesis when you define the following information in the Viewers section.

- 5) Enter the MIME type "video/mpeg" in the "Associate Mime Type of:" field.
- 6) Enter "Movie File Format - MPEG (Motion Picture Experts Group) Window" in the "Description of MIME type" field.
- 7) Enter ".mpeg, .mpe, .mpg" in the "With this/these extensions" field.
- 8) Enter "c:\win32app\mpegplay\mpegplay" in the "To this Application:" field.

NOTE: If you install MPEGPLAY in another directory, you will need to change the above field accordingly. You can use the "Browse" button to find and make the association.

- 9) Select Add when you are done and OK to save the information and close the preferences window.

IMPORTANT: Since we did not develop the viewers we do not support them. If you have specific questions regarding one of your viewers, please direct them to the developers of the software

Can I use Mosaic from home?

You can use Mosaic via a modem as long as you have an Internet Service Provider that can provide a Serial Line Internet Protocol (SLIP) or Point to Point Protocol (PPP) connection. NCSA does not provide these services. Your Internet access provider will recommend and/or supply

you with the proper winsock software. For information about National and International Internet access providers see the next FAQ.

If you already have access to a networked environment such as America on Line, CompuServe, Delphi or Prodigy you will need to contact the respective company to determine if they can provide you SLIP or PPP access in your area.

How do I gain access to the Internet?

Here is a list of some of the companies that can provide nationwide SLIP and PPP access to the Internet. These companies are listed in alphabetical order. NCSA does NOT endorse any particular provider.

Channel One Internet Services (getwired@sonetis.com) ** International Provider **
280-55 Metcalfe Street
Ottawa, Ontario, Canada K1P 6L5
Telephone: +1 (613) 236-8601
Fax: +1 (613) 236-8764

Colorado Supernet (info@csn.org) ** National (USA) Provider **
Colorado School of Mines
1500 Illinois Street
Golden, CO 80401
Telephone: (303) 296-8202

DATABANK, Inc. (info@atabank.com) ** National (USA) Provider **
1473 Hwy. 40
Lawrence, KS 66044
Telephone: (913) 842-6699
Fax: (913) 842-8518

Demon Internet Limited (internet@demon.net) ** International Provider **
Gateway House
322 Regents Park Road
London N3 2QQ
Telephone: +44 181 371 1000
Fax: +44 181 371 1150

EUnet Communications Services BV (info@EU.net) ** International Provider **
Singel 540
1017 AZ Amsterdam
The Netherlands
Telephone: +31 20 623 3803
Fax: +31 20 622 4657

Institute for Global Communications (support@igc.apc.org) ** International Provider **
PeaceNet/EcoNet/ConflictNet/LaborNet
18 deBoom St.
San Francisco, CA 94107
Telephone: (415) 442-0220
Fax: (415) 546-1794

JVNCnet (market@jvnc.net) ** International Provider **
Global Enterprise Services
3 Independence Way

Princeton, NJ 08540
Telephone: (609) 897-7300

NetCom On-Line Communication Services (info@netcom.com) ** National(USA) Provider **
4000 Moorpark Avenue
Suite 209
San Jose, CA 95117
Telephone: (408) 983-5950

Performance Systems International (info@psi.com) ** International Provider **
11800 Sunrise Valley Drive
Suite 1100
Reston, VA 22019
Telephone: (800) 827-7482

The Portal Information Network (info@portal.com) ** National(USA) Provider **
20863 Stevens Creek Boulevard
Suite 200
Cupertino, CA 95014
Telephone: (408) 973-9111
Fax: (408) 725-1580

UUNET (info@uunet.uu.net) ** International Provider **
3110 Fairview Park DR
Suite 570
Falls Church, VA 22042
Telephone: (703) 204-8000

(If you know of another National or International SLIP or PPP service provider, send me email and I will add them to this list. tmclaren@ncsa.uiuc.edu)

How do I set up Proxy Gateway Support in Mosaic?

The proxy gateway services allow Mosaic to pass on a network request (as a URL) to an outside agent that will perform the request for Mosaic, and return the results to Mosaic. The intended effect of this is to allow Mosaic clients that are behind firewalls to pass their network requests off to a machine that can access the Internet for Mosaic. A Mosaic client using a proxy gateway should feel directly connected to the Internet.

Mosaic will only work with Proxy gateways that support HTTP/1.0 protocol. Mosaic passes a URL to the proxy as an HTTP/1.0 GET request. The proxy then accesses the URL, and returns its results back to Mosaic.

Proxy gateway requests are provided on a per access basis. This means each URL access method can send its requests to a different proxy server. The current access methods are FTP, Gopher, WAIS, News, and HTTP.

To configure Mosaic to use the proxy gateway support, select the Options... Preferences or ALT + Enter to open the preferences menus. Select the Proxy tab, and enter the name and port number of the machine that is providing proxy services. For example:

BOX	COMMAND
http_proxy	your.firewall.machine:portnumber
ftp_proxy	your.ftp.firewall.machine:portnumber

wais_proxy your.firewall.machine:portnumber
gopher_proxy your.firewall.machine:portnumber

Where "your.firewall.machine.portnumber" is the machine that is providing proxy services.
Contact your system administrator for the name and port number.

For information about obtaining a web server that supports proxy services, see:

<http://www.w3.org/hypertext/WWW/Daemon/Overview.html>

Is NCSA Mosaic available on other platforms?

Yes, besides the Microsoft Windows version, NCSA Mosaic is available for the Macintosh and X-
Windows platforms. If you interested in obtaining either of these versions you can find more
information about them on our FTP server. Mosaic for the X platform is available from the
/Mosaic/Unix directory and Mosaic for the Mac platform is available in /Mosaic/Mac directory.
Please download the respective files and read them before you contact us for technical support.
If you need help, please check our on-line information and if you still need help send email to the
appropriate address:

mosaic-x@ncsa.uiuc.edu Unix X Windows Systems help
mosaic-mac@ncsa.uiuc.edu Macintosh help

Support and Feedback to NCSA

Your comments on NCSA Mosaic are important; user feedback is an integral part of the Software
Development Group's (SDG's) planning activities. Bug reports are particularly valuable because
SDG's tests cannot duplicate all user environments and equipment configurations. Bug reports
should include enough information to enable SDG developers to reproduce the problem. Please
specify any information given by Mosaic, and give us a URL so we can successfully reproduce
the problem. However, before you send any bug reports, comments, or suggestions, please
check our on line information to ensure your information hasn't already been reported. This will be
very helpful to us because we are swamped with email! You can find on-line information about
known bugs, enhancement requests, FAQs, viewers, etc. from our home page.

<http://www.ncsa.uiuc.edu/SDG/Software/WinMosaic/HomePage.htm>

If the answer to your question is not included in the above source of information, we will attempt
to reply as quickly as possible. Please remember we are supporting NCSA Mosaic and we can
not provide information about the location of specific resources on the net. The easiest way to
email technical support is to click on Help, Mail Technical Support... and write your message.
When finished, select Send and Mosaic will send the email message to the mail server defined in
the services preference menu.

Thank you,

Mosaic for Windows Technical Support
mosaic-w@ncsa.uiuc.edu
The NCSA Software Development Group
The University of Illinois at Urbana-Champaign (USA)

