

# NCSA Mosaic for Microsoft Windows Installation and Configuration Guide

## Introduction

This is a step-by-step guide to installing and configuring NCSA Mosaic for Microsoft Windows. This guide assumes that the system on which you are installing NCSA Mosaic meets the following criteria:

Microsoft Windows is properly installed and configured.

Utilities such as **ftp**, **pkunzip**, and an ASCII editor are available.

The system is connected to the Internet.

## Acquiring the Software

Since you are reading this file, you probably already have the NCSA Mosaic for Microsoft Windows software. If that is the case, you can skip this section.

If you do not have the software, start by moving to a location where applications are normally installed on your system and create a subdirectory for NCSA Mosaic. The subdirectory name is arbitrary; the name **mosaic** is used here to clarify the following discussion. Move into the new subdirectory:

```
mkdir mosaic
cd mosaic
```

Now you are ready to log on to NCSA's FTP server and download the NCSA Mosaic files:

```
ftp ftp.ncsa.uiuc.edu
```

At the login prompt, enter **anonymous**

At the password prompt, enter your email address (e.g.,  
**jdoe@business.com**)

```
get README.FIRST
```

```
cd PC/Mosaic
```

```
ls (To list the available files and directories)
```

```
bin (To change to binary mode for the file transfer)
```

```
get wmos20a1.zip
```

The filename **wmos20a1.zip** will change with each release and update. It will always be in the format **mosversion.zip** where **version** is the current version number. For example, **wmos20a1.zip** is the filename for NCSA Mosaic version 2.0, alpha release 1. The next alpha release will be **wmos20a2.zip**, and the first beta release of 2.0 will be **wmos20b1.zip**.

If you have never downloaded PC files from NCSA's server, read the file **README.FIRST** now. It provides useful information that may facilitate later steps in the installation process.

The file **wmos20a1.zip** is a compressed archive containing the NCSA Mosaic executable and several documents, including this guide and a tutorial when it is available. Execute the following command to retrieve the files from the compressed archive:

```
pkunzip wmos1_0.zip
```

## Confirming the Files

Once you have downloaded and uncompressed the NCSA Mosaic files, the installation process is straightforward. Check to make sure all of the following files exist in the **mosaic\** directory:

|                    |  |
|--------------------|--|
| <b>update.txt</b>  | Current list of this version's enhancements and bug fixes in ASCII format. |
| <b>install.txt</b> | This guide as an ASCII file  |
| <b>install.wri</b> | This guide in Microsoft Write format                                       |
| <b>mosaic.exe</b>  | The NCSA Mosaic executable   |
| <b>mosaic.ini</b>  | The initialization and configuration file for Mosaic                       |
| <b>readme.now</b>  | Last minute or emphasized information                                      |

Read the file **readme.now**. It may contain last minute information that was not available when this document was prepared.

If you want to review the list of Mosaic enhancements and bug fixes since the last version, you should read the file **update.txt**. Or you can wait until you have NCSA Mosaic running and read this list online (follow the links from the Windows Mosaic home page.)

### **Checking the WinSock DLL**

NCSA Mosaic is a WinSock 1.1-compliant program and requires that you have a WinSock 1.1-compliant sockets DLL (**winsock.dll**) installed to provide the TCP/IP networking under windows. Check your WinSock implementation's installation guide to see whether it is WinSock 1.1-compliant.

If you are using a commercial TCP/IP stack such as PC-NFS, or running a local area network such as Novell in addition to the TCP/IP, you must obtain the WinSock DLL directly from your network vendor.

If your WinSock DLL is not WinSock 1.1-compliant or you do not have a WinSock DLL installed, and if you are using a stand-alone system on the Internet, then you can use the shareware Trumpet WinSock. A compressed copy of this WinSock implementation can be found on NCSA's FTP server in the directory **PC/Mosaic/sockets/**. Download the files **disclaim.txt** and **winsock.zip**. (If you want to make sure you have the latest version of the Trumpet WinSock, it can be acquired via anonymous FTP from the server **biochemistry.bioc.cwru.edu** in the directory **/pub/trumpwsk**.)

### **Configuring NCSA Mosaic**

To configure NCSA Mosaic, first copy the file **mosaic.ini** to the directory **\windows**. This is important because NCSA Mosaic will not otherwise recognize and save configuration changes. Be sure to leave a copy of **mosaic.ini** in the **mosaic\** directory in case you need to restore any original entries.

If you are administrating a network site, and want to have one copy of Windows, and therefore can't put **mosaic.ini** in the Windows directory, use the environment variable MOSAIC.INI to specify the pathname of the INI file.

Edit the file **\windows\mosaic.ini** as follows using Notepad, edit, or any other ASCII editor. General users will not usually need to modify fields that are not mentioned in the following discussion.

**Main section:**

If you can be reached via Internet email, put your full email address in quotes in the E-mail field. This is used for annotations and for a return address when you select Mail to Developers. If your login ID is **jdoe** and you work at Business, Inc., your email entry might read as follows:

E-mail="jdoe@business.com"

If you do not want NCSA Mosaic to automatically load a document every time you run it, set Autoload Home Page to no:

Autoload Home Page=no

If you want to change the first document that is automatically loaded when NCSA Mosaic is run, change the Home Page entry to point to the document you want to load. As distributed, NCSA Mosaic points to a customized Home Page on NCSA's Web server:

Home Page =

<http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/NCSAMosaicHome.html>

If you will be using Mosaic over a slow network connection and do not want inline images to be automatically transferred, set Display Inline Images to no. Inline images will be replaced with an NCSA logo:

Display Inline Images=no

The Grey Background entry allows you to specify whether the NCSA Mosaic window has a white (no) or grey (yes) background. Many documents posted to the Web are tuned to a grey background:

Grey Background=yes

Fancy Rules toggles a different style of drawing horizontal rules in HTML documents (the <hr> tag.)

Fancy Rules=yes

List bullets slow down drawing documents. If you are a speed maven, you may wish to turn on simplified builiet drawing (line bullets instead of round bullets.)

Round List Bullets=yes

**Settings section:**

The anchor color is the color of the hyperlink anchors that appear in an NCSA Mosaic document. You may set the anchor color to any valid RGB (red, green, blue) combination. The RGB values must be separated by commas and can range from 0 to 255. As posted on the FTP server, the default color is blue (0,0,255):

Anchor Color=0,0,255

In some instances, it is desirable to have NCSA Mosaic underline hyperlink anchors (e.g, when using a gray scale or monochrome monitor). As distributed, NCSA Mosaic is set to underline hyperlink anchors. Since underlining slows performance somewhat, you may wish to set Anchor Underline to no if your system has a color monitor:

Anchor Underline=no

**Mail section:**

Edit the Default Title to contain the message you want to have appear in the subject line when you send email to the NCSA developers via the

**Mail to Developers** selection on the Help menu. As distributed, NCSA Mosaic enters the phrase "WinMosaic auto-mail feedback":  
Default Title="WinMosaic auto-mail feedback"

**Services section:**

If you want to use NCSA Mosaic's news support, set your network news (NNTP) server here. As distributed, NCSA Mosaic specifies the University of Illinois' NNTP server:  
NNTP Server="news.cso.uiuc.edu"

NCSA Mosaic uses the SMTP server specified here to send mail back to the NCSA developers when you select Mail developers from the Help menu. As distributed, NCSA Mosaic specifies NCSA's FTP server because it is known and almost always available. If you have a local SMTP server that you would rather use, edit the entry accordingly:  
SMTP Server="ftp.ncsa.uiuc.edu"

**Viewers section:**

This section contains two subsections. The first subsection contains a list of file types in MIME (Multimedia mail) form. The second subsection specifies the viewer for each of the listed file types. This information is used to determine whether an external viewer must be launched to view a file and, if so, which viewer to launch.

If necessary, edit the \*/\* entries in the second Viewers subsection to point to your viewers. If you do not have a viewer for a file type, leave the line alone. You may add arbitrary spawning of external viewers by defining a new TYPE#, specifying a viewer, and optionally providing a suffix list.

NCSA Mosaic must use telnet to connect to some information servers. To do so, NCSA Mosaic needs to know where to find the telnet application on your system. Specify the full pathname for your telnet application in the telnet entry at the end of the Viewers section:  
telnet="c:\trumpet\telw.exe"

**Suffixes section:**

This section lists the filename suffixes used to identify the file types of files retrieved via FTP or from HTTP version 0.9 servers. In such situations, NCSA Mosaic uses the information in this section and in the Viewers to determine whether an external viewer must be launched to view a file and, if so, which viewer to launch. Files that reside on HTTP version 1.0 servers are typed by the server and only the information in the Viewers section is used.

**NOTE:** If you are retrieving information from an HTTP/1.0 server (most World Wide Web servers are), the server automatically types data for you. The extensions you set up in the Suffixes section will not have any effect on what MIME type the document is assumed to be, because the data is already being typed by the server.

You may list any number of filename extensions for a given file type; simply separate them by commas.

The last suffix listed will be used when writing a file of that type to the local hard drive. If your external viewer requires a particular extension,

make sure that it is listed last.

Consider the example of the JPEG file type. The line

```
image/jpeg=.jpeg,.jpe,.jpg
```

indicates that any file with the suffix **.jpeg**, **.jpe**, or **.jpg** is a JPEG image.

Now look at the preceding section of the file. The lines

```
TYPE3="image/jpeg"
```

and

```
image/jpeg="c:\windows\apps\lview\lview30 %ls"
```

define a JPEG image as **TYPE3** and identify the required external viewer. Using the information in the Suffixes and Viewers sections of this file, NCSA Mosaic will recognize files with the extensions **.jpeg**, **.jpe**, and **.jpg** as JPEG images and know that it must launch the external viewer **lview31** when it encounters them.

Viewers specified in this section must be able to take a specified filename as a command line argument.

#### **Annotations section:**

Change the Directory entry to point to the directory on your local hard disk where you want to store personal annotations.

Change the Default Title to the title you want to use for your personal annotations.

#### **User Menu sections:**

This specifies the user-configured menus. NCSA Mosaic will accommodate up to ten user-configured menus in any combination of top level and pop-out menus. Top level menus (**Menu\_Type=TOPLEVEL**) will show up in the main menu bar; otherwise, the menu must be listed as a pop-out from one of the top level menus.

**YOU SHOULD REALLY USE THE MENU EDITOR IN MOSAIC TO EDIT THIS SECTION.** Hand-editing can result in screwing up the menus.

User-configured menus are specified as follows. The first line indicates the number of the menu while the next one or two lines name the menu and specify whether it is a top level menu. If the second user-configured menu is to be a top level menu named Demos, the first three lines of the menu specification would be

```
[User Menu2]
Menu Type=TOPLEVEL
Menu Name="Demos"
```

If the menu is to be a pop-out menu, omit the second line above.

These initial lines are followed by several lines specifying the items (Item#) in the menu. Each Item# line must begin with **Item#**= and the rest of the line must be in one of the following formats. A line specifying a hotlink must list a document and the URL with which it can be located separated by a comma:

```
Item1=Vatican Exhibit,http://www.ncsa.uiuc.edu/SDG/
Experimental/vatican.exhibit/Vatican.exhibit.html
```

A line specifying a menu separator must contain the word **SEPARATOR**:

Item2=SEPARATOR

A line specifying a pop-out menu must contain the word **MENU** and the number of the pop-out menu, taken from the first line of another user-configured menu, separated by a comma:

Item3=MENU,User Menu4

#### **HotList section:**

You can maintain a hotlist of files you wish to have conveniently available. The hotlist is maintained here and displayed when you select **Open URL** on the File menu and press the arrow button on the right side of the window.

**YOU SHOULD REALLY USE THE MENU EDITOR IN MOSAIC TO EDIT THIS SECTION.** This "Hotlist" is also now known as the "QUICKLIST".

You can edit the hotlist directly in this section. If you want to delete a file from the hotlist, delete the corresponding line from this section. If you want to reorder the files, simply rearrange and renumber the URL# lines. Note that the entries must be numbered sequentially, starting with **URL0**. The easiest way to add a file to your hotlist is to bring the file up in NCSA Mosaic then select **Add Current to Hotlist** from the Hotlist menu; if you prefer, you can add files by editing this section directly.

The Hotlist menu will be merged with the user-configurable menus in a future release.

#### **Document Caching section:**

This section tells NCSA Mosaic how many documents to cache so that you do not have to return to the network to retrieve a recently viewed document. As distributed, NCSA Mosaic caches five documents:

Number=5

If you have lots of memory on your system, you can increase the cache number. If you have little memory, you may wish to decrease the number. If you want to turn caching off, set it to 0 (zero).

Do not modify the Type entry.

#### **Font sections:**

Do not edit this section directly; all font changes must be made from the Options menu.

#### **Main Window section:**

Do not edit this section directly; adjust the NCSA Mosaic window size with the mouse and select **Save Window Size** on the File menu to save the new dimensions.

### **Finding Viewers**

NCSA Mosaic for Microsoft Windows uses external viewers and players to display certain types of files, such as JPEG images or MPEG movies. These viewers and players are separate applications and they are neither maintained nor formally distributed by NCSA.

However, NCSA is always watching for particularly suitable viewers and

players. When one is located that NCSA can legally distribute, a copy is placed on NCSA's FTP server in the directory **PC/Mosaic/viewers**. If you do not have a good viewer or player for a particular file type, check this directory. If you find a viewer or player for a common data type that is not in this directory, or is significantly more useful than the one on our server, please let us know about it. (One way to communicate that information is to select **Mail to Developers** on the Help menu.)

### **Installing into Microsoft Windows**

You are now ready to install NCSA Mosaic into the Microsoft Windows system. Select **New...** on the Program Manager's File menu. Select **Program Item** and click on **OK** to add NCSA Mosaic to a Program Group.

### **Executing and Testing NCSA Mosaic**

Execute NCSA Mosaic now. If everything is properly configured and domain name serving is set up, NCSA Mosaic should be able to load documents successfully. Test this by selecting **Windows Mosaic Home Page** from the Demos menu.

If NCSA Mosaic hangs on execution or misbehaves in any other unexplained fashion, the most likely source of the problem is the WinSock DLL. See "Checking the WinSock DLL" near the beginning of this guide.

If you are able to execute NCSA Mosaic but selecting **Windows Mosaic Home Page** did not work, try the following exercises and include the results in your query to NCSA. The results will help NCSA technical support determine the nature of your problem:

Select **Open Local File** on the File menu and try to open a file on your system.

Select **Open URL** on the File menu and try to open an HTTP file on a remote Web server. The URL

**`http://cs.indiana.edu/home-page.html`** will provide a good test.

Select **Open URL** on the File menu and try to open an FTP file on a remote Web server. The URL

**`file://cs.uwp.edu/pub/music/kurzweil`** will provide a good test.

### **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, or give us a URL if your problem is reproducible.

To send bug reports, comments, and suggestions, select **Mail to Developers** on the Help menu, fill out the form that appears, and click on **Send** when it is ready to go. If **Mail to Developers** does not work, send an email message to the following address:

**`mosaic-win@ncsa.uiuc.edu`**