

**Central Address Systems, Inc.**  
10303 Crown Point Avenue  
Omaha, Nebraska 68134-1061  
402-964-9998 / 800-524-0908  
402-963-2100 fax  
www.cas-online.com



# FTP/SFTP

File Transfer Protocol

A Method to Send and Receive Files via the Internet

## *Contents*

Definition -FTP File Transfer Protocol	2
How to access Standard FTP via Command Line FTP	4
Programs Available	7

This document has been prepared for use by employees and clients of CAS, Inc.

## Definition - FTP File Transfer Protocol

File Transfer Protocol (hereby referred to as FTP) is a process at which one can send and receive files over a internet or intranet connection using the TCP/IP protocol stack between dissimilar computer operating systems. FTP predates the World Wide Web by several years, and has a reliable track record.

File Transfer Protocol RFC959 is the IETF specification for client-server file transfer, universally known as FTP. Prior to the introduction of the World Wide Web, FTP was the primary method of exchanging files with a remote server via the Internet. It is still used where:

- uploading and downloading of data files
- restricted access may be required

Specifications for use of FTP delivery with CAS, Inc.:

- The CAS, Inc. FTP Server address is: **ftp.cas-online.com**
- CAS, Inc. does not recommend transferring a file larger than **500,000,000 bytes (500 Meg)** for performance reasons
- Should you wish to send us files larger than **500 meg**, please consider a flash drive or CD/DVD as the media or splitting the file into multiple members.
- All incoming files should be compressed (ie. .zip, .7z, .rar, .tar, etc)
- All outgoing files will be compressed using PKZIP (.zip)
- PGP encryption of files is available upon request and must be setup and approved prior to transfer

CAS, Inc. offers Standard and Secure FTP. Both require an account username and password to be setup beforehand, which can be provided by your account rep if wish to use this method. CAS recommends using SFTP whenever possible.

Most operating systems can natively compress and decompress files to or from .zip files. You may also use third party applications for added functionality. Compressing files prior to transmission to CAS will greatly cut down on transfer time.

Contact your Company's Support Personnel on how to install and operate your FTP client software. CAS, Inc. cannot provide support for your FTP client and/or server.

CAS, Inc. cannot provide support for the use of a Web Browser (Internet Explorer, Netscape, Mozilla, Opera, Safari, Konquerer) to send and retrieve files. We recommend the use of an FTP client software package which provides all the features of FTP. A listing of packages is below.

**Please use these recommended FTP Client software packages:**

Filezilla is a full-featured, free FTP GUI Client software package for multiple Operating Systems, including Windows, Mac OS X and Linux. Windows and Mac version can be downloaded from CAS here:

Mac version

[http://www.cas-online.com/resource/FileZilla\\_3.11.0.2\\_macosx-x86.app.tar.bz2](http://www.cas-online.com/resource/FileZilla_3.11.0.2_macosx-x86.app.tar.bz2)

Windows

[http://www.cas-online.com/resource/FileZilla\\_3.10.1.1\\_win32-setup.exe](http://www.cas-online.com/resource/FileZilla_3.10.1.1_win32-setup.exe)

CoreFTP is a full-featured, FTP GUI Client software package for the Windows OS.

<http://www.coreftp.com/download.html>

## How to access Standard FTP via a Command Line FTP :

If you have Windows, Mac or Linux, a command line FTP program is be available for use. (command line ftp is virtually the same on most computer systems. Step 1 applies to Windows systems)

Command line FTP may not work if you are behind a proxy or firewall, depending on how your network is setup. Please have your Company's Support Personnel help you with any problems you may encounter. Toggling Passive Mode for your FTP client may alleviate any problems you may have. Please note that different versions (and update levels) of command line ftp clients change in command syntax. Not every version will adhere to the standards set forth in this document. Wherever possible, we strongly recommend using FileZilla with the below settings. Please see page 7 of this document.

Access to the CAS, Inc. Standard FTP server requires that you have an account and password. Your Account Rep can provide you with an account if you wish to use this service..

1. To start Command Line FTP, open a Command Prompt (sometimes called a "DOS Window").

2. Change into the directory you wish to use. For this example, we will use c:\temp. You should start FTP in the directory location you wish to receive or send your file(s).

```
cd c:\temp
```

3. Next, we need to start the ftp program. A simple command will start this function.

```
ftp ftp.cas-online.com
```

Where **ftp** is the name of the program and **ftp.cas-online.com** is the location you wish to connect to.

You will then have the following prompt:

```
Connected to ftp.cas-online.com.
220-
#####
##          ##          ##          CAS, Inc.
##          ##          ##          10303 Crown Point Avenue
##          ##          ##          Omaha, NE 68134-1061
##          ##          ##          402.964.9998
##          #####          ##          402.963-2100 fax
##          ##          ##          http://www.cas-online.com
##          ##          ##          ##
```

```
##      ##      ##      ##
#####  ##      ##  #####
```

All Transfers are logged.

220 ProFTPD 1.2.4 Server (CAS, Inc. FTP Server) [cas.cas-online.com]

Name (ftp.cas-online.com:none):

**4. At the User (cas.cas-online.com(none)): prompt type your *username*. It should appear like this:**

Name (ftp.cas-online.com:none): username

**5. Next, you need to enter your password. Your password is unique to your account.. You must enter this to gain access to our Standard FTP server!**

331 Password required for username.

Password:

Your next prompt will look similar to this. You have successfully connected to our Standard FTP site.

230-

```
#####
```

Welcome to the CAS FTP site - ftp.cas-online.com

If you have problems with this server, contact your account representative in email or by phone at 800-524-0908.

You may download files in a web browser by using the following URL:

```
ftp://username@ftp.cas-online.com/filename.zip
```

where username is replaced by your username  
and  
where filename.zip is replaced by the name of your file.

Filenames are case sensitive and provided by your Account Rep.

For more information, see <http://www.cas-online.com/resource/ftp.html>

```
#####
```

## **6. To receive a file: (to send a file, go to step 8)**

We must first change the transfer mode. This is done by typing *binary* and pressing **<ENTER>**. This will ensure your file is transferred correctly. Failure to set binary mode will result in corrupted / unusable data.

```
binary
200 Type set to I.
ftp>
```

The response 200 Type set to I. confirms that Binary mode has been selected.

7. To get a file from our ftp site, simply enter the following command:

```
get filename.zip
```

(where **filename.zip** is the name of your file)

You will then see the following occur:

```
200 PORT command successful.
```

```
150 Opening BINARY mode data connection for filename.zip (880760 bytes).
```

This message will appear when you have successfully downloaded your file.

```
226 Transfer complete.
```

```
xxxxxx bytes received in x.xx seconds (xxx.xx Kbytes/sec)
```

```
ftp>
```

## 8. To send a file:

If you are not already connected to the CAS, Inc. Standard FTP server, please repeat steps 1 - 5.

We must first change the transfer mode. This is done by typing **binary** and pressing **<ENTER>**. This will ensure your file is transferred correctly. Failure to set binary mode will result in corrupted / unusable data.

```
binary
```

```
200 Type set to I.
```

```
ftp>
```

The response 200 Type set to I. confirms that Binary mode has been selected.

9. Using the put command, you can send files to the CAS, Inc. ftp site.

```
put filename.zip
```

(where **filename.zip** is the name of your file)

The following will occur:

```
200 PORT command successful.
```

```
150 Opening BINARY mode data connection for filename.zip.
```

Your file is done uploading when you see the following message:

```
226 Transfer complete.
```

```
xxxxxx bytes sent in x.xx seconds (xxx.xx Kbytes/sec)
```

```
ftp>
```

10. To exit ftp, type bye and press enter.

bye

221 Goodbye.

Note: Please send your files in PKZIP format. This will greatly reduce your transfer time.

### **Programs Available**

There are many Graphic User Interface (aka "GUI") FTP packages available. As such, CAS, Inc. cannot provide support for these software packages as their GUI varies from package to package.

Programs such as [FileZilla](#), [WS FTP](#), [CoreFTP](#), and [WinSCP](#) are GUI based tools good for FTP.

FileZilla is a fast and reliable FTP client with many features and an intuitive interface. It is a free, open source program for the multiple OSs.

Documentation is available at <http://filezilla.sourceforge.net/documentation/>

Fig. 1 – Filezilla connected into the CAS, Inc. FTP Server

Please see below setting screens and apply to your particular client software.

The settings shown below in FileZilla are representative of correct settings which can be applied to most ftp client software. If your software does not support the above settings, we strongly suggest you download FileZilla and configure appropriately as these settings are guaranteed to work as long as your firewall settings do not prohibit. Also, on Windows XP and even Vista, I have noted that when you first connect to the ftp server with these settings, the local windows firewall will attempt to block access. Simply click allow this action and you will not see this blocking again.

To install FileZilla on a Mac, simply double click on the file you downloaded from [http://www.cas-online.com/resource/FileZilla\\_3.11.0.2\\_macosx-x86.app.tar.bz2](http://www.cas-online.com/resource/FileZilla_3.11.0.2_macosx-x86.app.tar.bz2). This will extract the .app file set. You can copy or move this to wherever you would like. The first time you launch FileZilla, you will need to right click and select open. This will prompt you that the file is not signed by an approved developer, but will allow you to open it. After the first time, you can simply double click on the app

The screen shots below will walk you through setting up a connection to SFTP. The first time you connect from a given machine or user account, you will be prompted to accept the rsa key. You can have your system store this key or accept it each time you connect.





