

## MOVEit DMZ Compatible Secure File Transfer Clients

This document provides a three-step process for identifying which specific clients can best meet your requirements for exchanging files with a MOVEit DMZ secure file transfer and storage server. These steps consist of picking a transfer protocol (AS2, AS3, FTPS/TLS, HTTPS or SFTP/SCP2), identifying your client requirements (end-user or server-based, manual or automated), and then selecting specific clients (including Web browsers) by their transfer protocol and operating system.

Step 1. Pick the Protocol. MOVEit DMZ supports all of these secure transmission methods.

**AS2 and AS3 (Application Statement 2 and 3)** protocols enable the secure exchange of data over the Internet. AS2 uses HTTPS to move data via Web servers; AS3 uses FTP to transfer data via either FTP or FTPS/TLS servers. Both provide data protection and non-repudiation using S/MIME, digital signatures and Message Disposition Notifications (MDNs) for data encryption, authentication, and data integrity checking. AS2 requires only a single open firewall port (443), which is open by default on almost all firewalls. AS3 via FTP requires only a single open port (21). AS3 via FTPS requires port 990 plus 4 or more consecutive 'high' ports (1024 and above) be open.

**FTPS / TLS (secure FTP over SSL)** is popular on Windows, and native to many IBM mainframe and midrange systems. FTPS setup can be a bit complicated. FTPS has multiple SSL modes (IMPLICIT, TLS-P, TLS-C) and transfer modes (Active, Passive). Some mode combinations are considered less secure than others, and FTPS is not considered to be very firewall friendly.

There is no FTPS standard governing the number and range of firewall ports that must be open; it depends on the server being used. This means most firewalls are not configured for FTPS. FTPS is a multiple port/rarely open protocol. Some work may be needed to open, and keep open, all of the necessary ports on the local and remote firewalls that the transfers will pass through. MOVEit DMZ has advanced features that make FTPS easier, such as needing as few as four contiguous open ports (some FTPS servers require 64,000) and supporting transfers with clients on NAT networks (some FTPS servers do not). MOVEit DMZ supports IMPLICIT and TLS-P and Active and Passive modes, which allows use of a variety of MOVEit and third-party FTPS clients.

**SSH2 (Secure SHell 2)** is a popular standard on Linux/UNIX hosts. It is used by Secure FTP over SSH (SFTP) and Secure Copy Protocol 2 (SCP2) clients. SSH2 is firewall friendly because it needs only one open firewall port (22), though this port is not always be open on every firewall. SSH2 is a single port/sometimes open protocol. This means some effort may be needed to get and keep port 22 open on local and/or remote firewalls. MOVEit DMZ servers support SSH2-based file transfers by a variety of third-party SFTP and SCP2 clients. It should be noted that such transfers will be slower than those done using clients that use either the HTTPS or FTPS protocols.

**HTTPS (HTTP over SSL)** is an established Web standard used for commercial purposes. It is considered to be very firewall friendly. HTTPS requires only a single open firewall port (443), open by default on almost all firewalls because Web browsers use it to make secure connections. HTTPS is a single port/always open protocol, which means it provides operational advantages over SSH2 and especially FTPS. Many MOVEit and third-party HTTPS-based clients, including a number of popular Web browsers, can be used to securely exchange files with MOVEit DMZ servers.

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Compatible Clients, Cont.

Files can be securely exchanged with a MOVEit DMZ server by end-user and backend systems, and on a manual or automated basis. Transfers involving backend systems can be managed on either a decentralized basis by applications on each system, or on a centralized basis by an enterpriselevel file transfer management program like MOVEit Central, or by a mix of both approaches. There are MOVEit and third-party secure file transfer solutions for each of these specific situations.

Step 2. Identify Your Needs. Certain types of clients are best suited for certain uses.

**End-User Manual Transfers**. While MOVEit and third-party FTPS and SFTP clients can be used to manually move files between desktops and a MOVEit DMZ server, Web browsers are typically used for this purpose because they are free, come pre-installed on end-user systems, require little training or support, and are very firewall-friendly. Browsers do not need Java, ActiveX, plugins, or third-party encryption applications like PGP in order to securely exchange files with MOVEit DMZ servers. Browsers have time-out limits and some have file size transfer limits; all lack some advanced security capabilities, including Non-Repudiation and Guaranteed Delivery (which can be supplied by using the free MOVEit Wizard ActiveX and Java Web browser clients).

**End-User Automated Transfers.** When minimal user involvement is desired or required, a variety of MOVEit and third-party HTTPS, FTPS/TLS and SFTP/SCP2 secure file transfer clients are available with built-in automation or the ability to be automated using scripts or batch files. A suitable HTTPS-based Windows desktop solution is the MOVEit EZ client, which can run up to 15 scheduled, automated upload and/or download file transfers tasks with a MOVEit DMZ server.

**Backend System-Controlled Transfers**. Various MOVEit and third-party AS2, AS3, FTPS/TLS, HTTPS, SFTP and SCP2 secure file transfer clients that can be automated and scheduled using job control and schedulers are available for mainframe, midrange, Linux/UNIX, and Windows systems. HTTPS-based clients include the MOVEit DMZ API Java class and COM component (which provide secure, programmatic access to MOVEit DMZ files and services), and the free, commercially supported MOVEit Xfer Java and Windows command-line clients.

**Backend Centrally-Controlled Transfers.** MOVEit and third-party enterprise-level secure file transfer management applications are available for use with a MOVEit DMZ server. The MOVEit Central file transfer management super-client can be used to automate, schedule and monitor the exchange of files between internal and external systems, including MOVEit DMZ as well as secure and non-secure file, FTP, Web and email servers.

MOVEit Central does this using easy-to-create tasks (no scripting or other programming required). Central runs tasks on a scheduled, event-driven or on-demand basis. Tasks can also be controlled by third-party programs, scripts, and by developers via the optional MOVEit Central API Interface.

Central can transfer files using any combination of AS1, AS2, AS3, FTP, FTPS/TLS, HTTP, HTTPS, SFTP/SCP2, copying to the local file system and shared network folders, or by exchanging files via SMTP/POP3 email and/or S/MIME encrypted email. And Central can automatically process files during a transfer using built-in functions (including ZIP and OpenPGP) as well as with VBS scripts.

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Compatible Clients, Cont.

Every MOVEit client features a standard set of advanced capabilities (including cryptographically valid file integrity checking and resume and retry of interrupted transfers) that provide both Non-Repudiation and Guaranteed Delivery when exchanging files with a MOVEit DMZ server.

Step 3. Choose Your Clients. On this	page and next, by protocol, client name, and O	S.
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HTTPS (HTTP over SSL) Clients	SSH2 SFTP and SCP2 Clients
<ul> <li>cURL (downloads only)</li> <li>AIX, AmigaOS, BeOS, DOS, DragonFly BSD, FreeBSD, HPUX, Linux, NetBSD, NetWare, OpenBSD, OS/2, OS X, QNX, RISC OS, Solaris, SunOS, Tru64 UNIX, UNIXware, VMS, Windows</li> <li>Internet Explorer Web Browser Macintosh, Windows</li> <li>Firefox Web Browser any supported OS</li> <li>MOVEit Central</li> <li>Windows Vista Business Ed., 2003, XP Professional, 2000 Server</li> <li>MOVEit Central API Java Class</li> <li>Windows Vista Business Ed., 2003, XP Professional, 2000 Server</li> <li>MOVEit Central API Windows COM Component</li> <li>Windows Vista Business Ed., 2003, XP Professional, 2000 Server</li> </ul>	Cyberduck OS X v.10.3 or higher Cyclone Commerce Interchange Solaris FileZilla Windows F-Secure SSH (including SCP2) Solaris, UNIX, Windows Fugu OS X v.10.3 or higher IBM Ported Tools (OpenSSH) z/OS Ipswitch WS_FTP Pro Windows J2SSH
any OS with Java v.1.4 or higher <b>MOVEit DMZ API Windows COM Component</b> Windows Vista Business Ed., 2003, XP, 2000, NT 4.0 <b>MOVEit Wizard ActiveX Plugin</b> Internet Explorer Windows <b>MOVEit Wizard Java Plugin</b> Firefox Linux and Windows Mozilla Linux and Windows Netscape Linux and Windows Opera Linux and Windows Safari OS X	Java MacSSH OS X v.10.3 or higher Magnetk sftpdrive Windows MOVEit Central Windows Vista Business Ed., 2003, XP Professional, 2000 Server NET::SFTP (uses Net::SSH::Perl) Linux OpenSSH for sftp
MOVEit Xfer Java Any OS with Java v.1.4 or higher MOVEit Xfer Windows Windows Vista Business Ed., 2003, XP, 2000, ME, 98, NT Mozilla Web Browser any supported OS Netscape Navigator Web Browser Linux, Macintosh, Windows Opera Web Browser any supported OS Safari Web Browser OS X	MVS, OS X v.10.3 or higher, Solaris, UNIX, Windows, z/OS v.1.4 or higher PuTTY PSCAP and PSFTP Windows, Windows NT for Alpha Rbrowser OS X v.10.3 or higher SouthRiver Technologies WebDrive Windows SSH FileSystem (SSHFS) Unix (requires OpenSSH and FUSE) SSH Secure Shell FTP Windows SSH Tectia Client AIX, HP-UX, Linux, Solaris, Windows
AS2 and AS3 (SSL) Clients	SALT Tectia Connector Windows Stairways Interarchy
Clients that are AS2 or AS3 certified by Drummond will be compatible with MOVEit DMZ, including: MOVEit Central Windows Vista Business Ed., 2003, XP Professional, 2000 Server	OS X Transmit OS X v.10.3 or higher WinSCP (in SFTP mode) Windows

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In addition to AS2, AS3, HTTPS, SFTP and SCP2-based secure file transfer clients, the following MOVEit and third-party FTPS clients can be used to securely exchange files with a MOVEit DMZ.

FTPS (FTP over SSL) Clients	FTPS (FTP over SSL) Clients, Cont.
bTrade TDAccess	MOVEit Central
AIX, AS/400, HP-UX, Linux, MVS, Solaris, Windows	Windows Vista Business Ed., 2003, XP Professional, 2000 Server
C-Kermit FTP	MOVEit Freely
AIX, QNX, UNIX, VMS	Windows Vista Business Ed., 2003, XP, 2000, ME, 98, NT
Cleo LexiCom	Netkit
AS/400, Linux, UNIX, Windows	Linux, Solaris, UNIX
cURL	Rhino Voyager FTP
AIX, AmigaOS, BeOS, DOS, DragonFly BSD, FreeBSD,	Windows
HPUX, Linux, NetBSD, NetWare, OpenBSD, OS/2,	Seagull Secure FTP Pro
OS X, QNX, RISC OS, Solaris, SunOS, Tru64 UNIX,	Windows
UNIXware, VMS, Windows	SmartFTP
FileZilla	Windows
Windows	SouthRiver Technologies WebDrive
GlobalSCAPE CuteFTP Pro	Windows
Windows	Stairways Interarchy
GLUB Secure FTP	OS X
Java	Sterling Commerce Connect:Direct
IBM z/OS Secure Sockets FTP	Enterprise Command Line Client
z/OS	UNIX, Windows
IniCom FlashFXP (GUI v.3.0 or higher)	Surge SSLFTP
Windows	FreeBSD, Linux, Macintosh, Solaris, Windows
Ipswitch WS_FTP Pro (GUI v.7.0 or higher)	TrailBlazer ZMOD
Windows	OS/400
LFTP	Tumbleweed SecureTransport Clients
AIX, MVS, Solaris, UNIX	UNIX, Windows
MOVEit Buddy	/n software IP*Works SSL
Windows Vista Business Ed., 2003, XP, 2000, ME, 98, NT	Windows

Here is how MOVEit secure file transfer clients can be acquired for evaluation and production use.

The free MOVEit Wizard Web ActiveX and Java HTTPS clients can be downloaded by authorized MOVEit DMZ end-users. The free MOVEit Xfer Java and Windows command line HTTPS clients can be downloaded from the MOVEit support site by MOVEit DMZ licensees and evaluators. The free MOVEit Freely Windows FTP/FTPS client can downloaded from various shareware sites and the Standard Networks website. The MOVEit EZ Windows HTTPS automated client and the MOVEit Buddy Windows FTP/FTPS client can be downloaded for evaluation and purchased from the Standard Networks website. To evaluate or license the MOVEit Central Windows enterprise file transfer management client and/or a MOVEit DMZ server, please contact Ipswitch directly.

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