## Getting Started using Filezilla FTP Client 3.0 with the SCO mainframe

The SCO suggests using the latest Filezilla FTP Client for a graphical FTP client interface that provides a secure connection to the SCO mainframe. Filezilla FTP client is freeware, and supports Explicit TLS 1.0 connections and enables Extended Passive mode by default. It provides a low featured, but reliable method to transfer files securely with the SCO mainframe. The latest Filezilla version is 3.5.3.

## Setting up your "Site" in Filezilla:

Click the Site Manager icon located on the top left corner of the window.

FileZilla			
File Edit View	r Transfer Server Bookmark	s Help 🗐 🕵 😚 🖍	
Host:	Username:	Password:	

When Site Manager opens (it will default to the General Tab). Click the "New Site" button in the left bottom corner.

An icon named New Site will appear. Rename to the name you want, and then enter the following for connections to the SCO Mainframe:

Host: ftp.sco.idaho.gov

Protocol: FTP – File Transfer Protocol

Encryption: Require explicit FTP over TLS

Logon Type: Ask for password

User: Your mainframe username

Note: that the password is greyed out. You will not enter a password at this window.

Site Manager	x	Your window should look similar
Select Entry: My Sites New site	General       Advanced       Transfer Settings       Charset         Host:       ftp.sco.idaho.gov       Port:       Port:         Protocol:       FTP - File Transfer Protocol           Encryption:       Require explicit FTP over TLS           Logon Type:       Ask for password           User:       anonymous         Password:           Account:	to the one on the left, except your site name should be different and your user name should be entered next to User: Next click on the Advanced tab
New Site New Folder	*	
Delete Copy		
Connect	OK Cancel	

On the Advanced tab:

Server Type: must be set to "MVS, OS/390, z/OS".

Default local directory: This is where the files are located that need to be uploaded.

**Default remote directory:** should be a dataset qualifier surrounded by **SINGLE QUOTES**.

NOTE: Your "Default remote directory" is the directory you are taken to when you first login.

## INFO:

A mainframe dataset's name is composed of Qualifiers.

For example, XAST.TESTING.FTPTEST1 is the name of a dataset. "XAST" and "TESTING" are qualifiers in the name, separated by periods.

Qualifiers in mainframe dataset names (separated by periods) are like directories in Windows (separated by backslashes).

For example: x:\XAST\TESTING\FTPTEST1.file

If you are unsure of the correct defaults, ask your supervisor or the person directing you to upload.

Look at the image to the right this is what your Advanced tab should look similar to

elect Entry:		General Advanced Transfer Settings Charset
My Sites		Server Type: MVS, OS/390, z/OS  Bypass proxy
		Default local directory: Browse
		Default remote directory:
		'XAST.XAL0768'
		Use synchronized browsing
		Adjust server timezone offset:
New Site	New Folder	0 Hours, 0 Minutes
New Bookmark	Rename	
Delete	Сору	

Now click "OK" to Save the Site and return to the main window.

Click on site manager icon, once again.

Click on your newly created site and then click on the connect button at the bottom of the window. This will open a connection to the mainframe FTP server.

**Note:** Once you have configured Filezilla, you will always use the connection icon, then click on the site you renamed to connect to the FTP server.

My Sites	General Adv	vanced	Transfer Settings	Charset
Testing	Host:	ftp.sco	.idaho.gov	Port:
	Protocol:	FTP - F	ile Transfer Protoc	ol
	Encryption:	Require	e explicit FTP over	TLS
	Logon Type:	Ask for	password	
	User:	xal0768	3	
	Password:			
	Account:			
	Comments:			
New Site New Folder				
New Bookmark Rename				
Delete Copy				

Once you have clicked on Connect, you will see a window open like the one at the right.

This is where you will enter your **mainframe password**. Click on OK.

Note: Even if "Remember password for this session" is checked, you will still have to enter it each session.

Please enter a password f	for this server:
Name: Testing	
Host: ftp.sco.idaho.gov	
User: xal0768	
Password:	
Remember password fi	or this session

Sometimes, when you first connect to your session, you may get a certificate warning. Click on the checkbox "Always trust certificate in future session." Click on OK

make sure the ser	cate is unknown. Please carefully exami /er can be trusted.	ne the certificate	to
Certificate in chair	: 0 🔻		
Details			
Valid from:	7/6/2011		
Valid to:	10/15/2012		
Serial number:	05:44:af:c1:3e:43:c5:e2:4a:50:f2:	ea:a1:68:07:df	
Public key algori	hm: RSA with 2048 bits		
Fingerprint (MD)	); a9:62:f7:36:1d:33:c5:0f:b3:34:5a	4drad-23rac.cb	
Fingerprint (SHA	-1): 84:d6:d4:a1:9a:89:fb:49:18:ff:d2:	89.c4.c9.05.6d.4	2.50.5e.33
r ingerprinte (or in-			2100102100
Subject of certif	cate	Certificate issu	er
Common name:	*.sco.idaho.gov	Common name	: DigiCert High Assurance CA-3
Organization:	Idaho Office of the State Controller	Organization:	DigiCert Inc
Country:	US	Unit:	www.digicert.com
State or provinc	e: Idaho	Country:	US
state or provinc	Boise		
Locality:			
Locality:			
Locality: Session details Host: ftp.sco.	daho.gov:21		
Session details Host: ftp.sco. Cipher: ARCFOL	daho.gov:21 R-128		
Session details Host: ftp.sco. Cipher: ARCFOL MAC: SHA1	daho.gov:21 R-128		
Session details Host: ftp.sco. Cipher: ARCFOL MAC: SHA1	daho.gov:21 R-128		
Session details Host: ftp.sco. Cipher: ARCFOL MAC: SHA1 Trust this certifica	daho.gov:21 R-128 re and carry on connecting?		

Once your connection is made your window should look similar to the image below. Local folders and files are on the left side of the window, and the remote datasets are on the right side of the window.



Each dataset qualifier is treated like a directory in Filezilla. Once connected, you can actively change your local directory or remote directory.

To change datasets or directories either click on the directory or type it into the address bar over the top of the icons.

If your "**Remote Site:**" bar is grayed-out, this means your default remote directory must be changed to a qualifier that already exists on the mainframe.

Local site:	E:\Local dataset\			Remote site: 'XAST.XAL0768.'			
	Acrobat Tips Config manager 200 Configuration Mana Deployment Tool Kir Flash Local dataset Migrating to Excel	7 ger 2012 t 2012					
Filename	^	Filesize	Filetype	Filename	Filesize	Filetype	Last modified
 FTPTE: FTPTE: XAL07( XAST.)	ST1 ST1.bxt 58.FTPTEST1 KAL0768.FPTTEST1	0 0 0	File Text Document FTPTEST1 File FPTTEST1 File	 FTPTEST1 TEST XAL0768.FTPTEST1 XAST.XAL0768.FPTTEST1	100 100 100 100	File File FTPTEST1 FPTTEST1	5/9/2012 5/9/2012 5/9/2012 5/9/2012
				٠ [		ш	
4 files. Tot	al size: 0 bytes			Selected 1 file. Total size: 100 byt	es		

**Important File naming information:** In the above example, let's say the name of your dataset, once it is uploaded to the mainframe needs to be 'XAST.XAL0768.FTPTEST'. In the local files are four examples to illustrate proper file-naming in preparation for upload to the mainframe.

Example 1: This is a working example. This will upload to be XAST.XAL0768.FTPTEST1

**Example 2:** You do not want Windows file extensions in the name. FTPTEST1.txt would upload to be XAST.XAL0768.FTPTEST1.TXT since it treats the period as another level of qualifier.

**Example 3:** You may add some qualifiers to your filename AS LONG AS you navigate to the correct remote dataset qualifier. In the above example, XAL0768.FTPTEST1 would upload to be XAST.XAL0768.XAL0768.FTPTEST1, but if the "Remote Site:" was just set to 'XAST', this would work fine.

**Example 4:** You don't want to name your local file the ENTIRE name of the dataset. We are already navigated to 'XAST.XAL0768' on the remote site, so this will upload to be XAST.XAL0768.XAST.XAL0768.FTPTEST1

**NOTE:** Mainframe datasets are stored in terms Blocks, Tracks and Cylinders of disks. Filezilla cannot determine their size in KB, MB, or GB correctly. On remote datasets showing on the right side window, files sizes will show a number from 1-100. This means nothing

Local site: E: Local dataset Acrobat Tips Config manager 2007 Configuration Manager 2012 Deployment Tool Kit 2012 Flash Local dataset Migrating to Excel Filename Filesize	e Fi XAST.XAL0768.'			
FTPTEST1.txt				
FTPTEST1.txt XAL0768.FTPTEST1 XAST.XAL0768.FPTTEST1	D T D F D F Filename	Filesize	Filetype	Last modifie
FTPTEST1.txt XAL0768.FTPTEST1 XAST.XAL0768.FPTTEST1	0 T 0 F 0 F Filename Julia	Filesize 100	Filetype File	Last modifie
FTPTEST1.txt XAL0768.FTPTEST1 XAST.XAL0768.FPTTEST1	0 T 0 F 0 F 0 F 0 F 0 F 0 F 0 F 0 F	Filesize 100 100 100 100	File File FTPTEST1 FPTTEST1	Last modifie 5/9/2012 5/9/2012 5/9/2012 5/9/2012
FTPTEST1.txt XAL0768.FTPTEST1 XAST.XAL0768.FPTTEST1  files. Total size: 0 bytes Note: The remote site already lists XAST.XAL0768 but your local site does not I any prefix to the dataset.	0 T 0 F 0 F 0 F 1 Filename 1 1 FTPTEST1 1 TEST 1 XAL0768.FTPTEST1 1 XAST.XAL0768.FPTTEST1 1 XAST.XAL0768.FPTTEST1 1 St	Filesize 100 100 100 100	File File FTPTEST1 FPTTEST1	Last modifi 5/9/2012 5/9/2012 5/9/2012 5/9/2012

To upload a file to a dataset, in the Local Files area, right-click the local file, and select "Upload". The file will then upload to the remote directory (qualifier) you had selected on the right side of the window.

Local sites Eul	acal dataget)		<b>`</b>	<u></u>	Domoto citor	'VACT VALOZES '	
		2012	$\rightarrow$		Remote site:	AAST.AALU708.	
	Configuration Mar	nager 2012		<b>^</b>	XAS		
	Deployment Tool I	Kit 2012			<u>s</u> x	AL0768	
±	Flash						
	Migrating to Excel						
±	Migrating to Excer	Doint					
	Migrating to Public	ther		-			
	A winging to r upin	silei					
Filename		Filesize	Fletype	Last modi	Filename	Filesize Fi	letyp
<u>.</u>					<b>.</b>		
FTPTEST1		0	Fle	5/9/2012 1	TEST	100 Fi	le
	T Add files to que	eue					
	Open						
	Edit						
	Create director	У					
•	Refresh			- F	•		1
Selected 1 file. 7	c Delete				Selected 1 file	e. Total size: 100 by	tes
	Rename	-					
Server/Local fil	e	mo	tenie		Size P	riority Status	

To download a dataset, in the Remote Files area, right-click the remote file, and select "Download". The file will be named the last qualifier of the dataset name.

	Disconnected in							
ocal site:	E:\Local dataset\ Configuration Deployment To Flash Local dataset Migrating to Po Migrating to Po Migrating to Po	Manager 2012 ool Kit 2012 ccel owerPoint ublisher		•		XAST.XAL0768 PORT.JCL SI.UADS STEMS.MSTR FUSER.ISPPRO BADM.ISPPRO L0768 S0312.ISPPRO	F DF	
Filename	*	Filesize	Filetype	Last modi	Filename	Filesize	Filetype	Last modif
) FTPTES XAL076	ST1 98.FTPTEST1	0	File FTPTEST1 File	5/9/2012 1 5/9/2012 1	 FTPTEST1 TEST	100 ownload dd files to que	File	5/9/2012 5/9/2012
4				Þ		iew/Edit reate directoŋ efresh	y	
Selected 1	file. Total size: 0 bytes				Selected D	elete		
Server/Loo	cal file	Direction Remo	te file		Siz C	ename opy URL(s) to	clipboard	

When you are ready to close, there are two ways you can do this.

Click on the Server dropdown on the main toolbar and click on disconnect. This will disconnect you from your session.

File Edit \	/iew Transfer Se	erver Bookmarks Help	
		Cancel current operation	
Commar	**	Reconnect	CTRL+R
Response: Command:	230 XALU76	Disconnect	CTRL+D
Response:	227 Entering		
Command:	RETR XAL07	Search remote files	F3
Response:	250 Transfe	Enter custom command	
Status: Status:	File transfer Disconnecte	Force showing hidden files	1

Local site: E:\Local dataset\

Click on the disconnect server icon on the toolbar.

ile Edit View	Transfer Server Bookmarks	s Help
1 - 1700	1 🗞 🍬 41 14 😂 🖫	n 🕈 🕺 🗉
Host:	Username:	Password: