OPENTEXT

FirstClass Synchronization Services Install Guide

12.1.009

Product Released: 2015-10-30

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Contents

OPENTEXT

1 Component Information:

- FirstClass Sync Services121009.msi MSI installer)
(Windows - FirstClass Synchronization Services

- fcss-12.1.009-osx-py2.7.dmg Services installer)
(OS X - Disk image of the FirstClass Synchronization

- fcss-12.1.009-linux-py2.6.tgz Services installer)
(Linux - Tar archive of the FirstClass Synchronization

Required Python packages which are included with and will be installed if necessary by the above mentioned installers:

Package	Distribution Source	Reason for inclusion
CherryPy-3.2.4.tar.gz	http://www.cherrypy.org/	A WSGI compliant web server included as a requirement for non Apache based web server installs.
WebOb-1.4.tar.gz	http://webob.org/	Directly required by the FirstClass Synchronization Services 12 product.
setuptools-0.6c11.tar.gz	https://pypi.python.org/pypi/setuptools	An installer packaging tool, which simplifies and adds flexibility to installing python based packages.

2 Install Instructions

The following section contains information regarding the installation of FirstClass Synchronization Services 12.1.009

2.1 Windows Install Instructions:

Installation Overview

The attached 'FirstClass Sync Services121009.msi' file is for installing/updating the FirstClass Synchronization Services on Windows.

2.1.1 Installation Prerequisites (one-time requirements):

On Windows systems, FirstClass Synchronization requires Python 2.7.x but NOT version 3.x. If you have Python 3 installed, you will either have to remove it, or change the path for python execution to point to the 2.7 executable after installation.

The below instructions assume that the install is on your C:\ drive, please adjust accordingly.

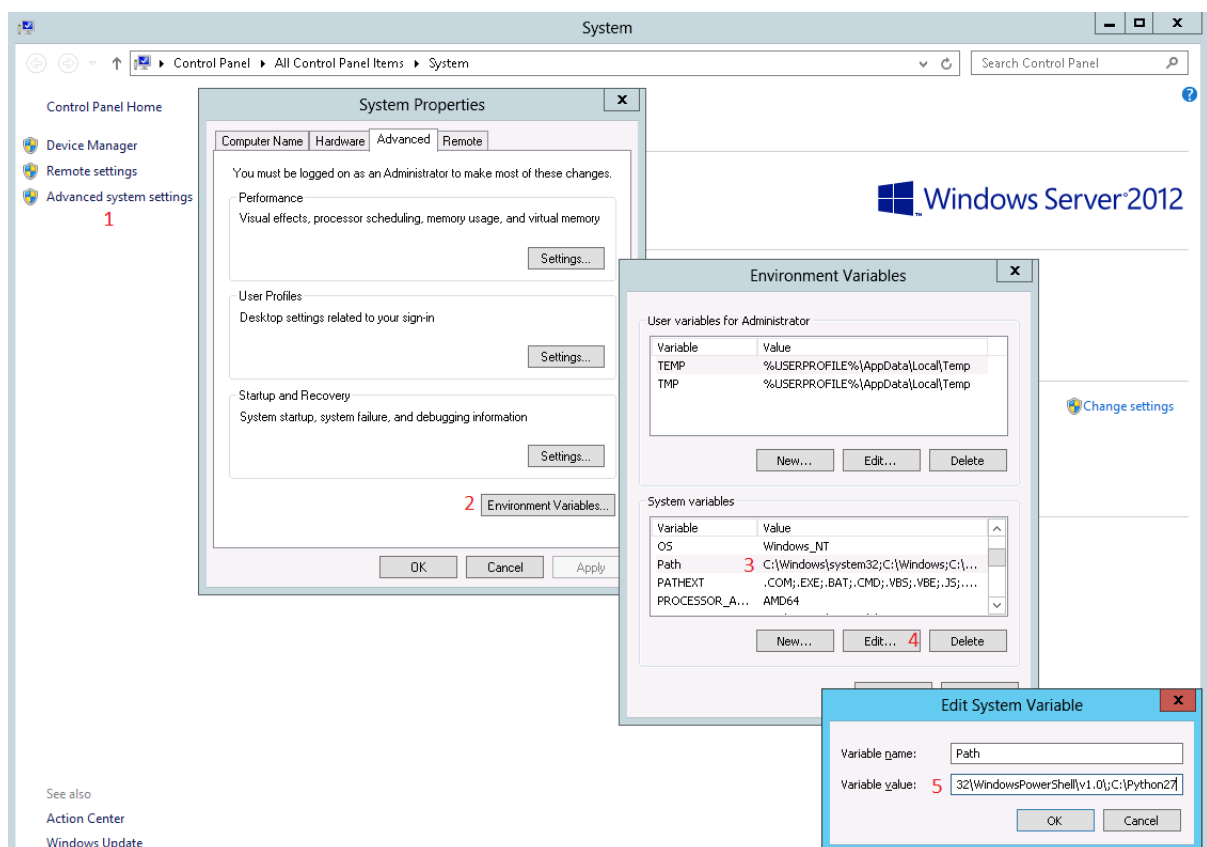Download and install the python-2.7.8.amd64.msi installer.

For simplicity sake, run the installer and accept all defaults. This will create a Python27 folder at the root level of your C:\drive.

- Add C:\Python27 to your path environment variable

For Windows 2008/2012:

Add C:\Python27 to your path environment variable

Add C:\Python27 as an additional path to your System Path environment variable.

Above is showing how on a Windows 2008/2012 server to change the system path variable.

Right click on "My Computer" and choose **Properties**

1. Click on **Advanced system setting**

2. Click on **Environment Variables**

3. Click on **Path** in the **System Variables** section

4. Click on Edit

5. Add ;C:\Python27 in the Variable Value field and click on OK

- Restart your computer and test by executing Python

You need to restart your computer to make sure that the path is recognized.

You can test this by typing the following in a cmd window:

python -V

If it is present it should return the installed version such as:

python 2.7.6

2.1.2 Installation Instructions

- Download and run the attached "FirstClass Sync Services121009.msi" installer

- Type 'Yes' to accept the FirstClass End User License Agreement

- This will install the necessary files and start the Python based installer script in a command prompt window. Please wait for the python install script to complete.

- **Note**: If upgrading, you can choose to use the default install location or change it to install into the same location you have already installed it.

- After the installer script has completed, you should have the following structure, and will be able to start the FirstClass Synchronization Services server by double clicking the startfcsync.bat

Contents:

- C:\Program Files\FirstClass Sync Services package directory.

- "startfcsync.bat" is a preconfigured startup script for starting the FirstClass Synchronization Services. This script can be customized and does not get overwrote by upgrades.

- "PkgArchives" is used to archive the previously installed package so that any customized config does not get lost. The following user configuration is copied from the archived package during the install;
- fcsync.cfg

- Any *.pem files in the root of the fcsync folder.

NOTE: If this is a new install you will need to configure the following items:

1. The 'fcsync.cfg' file located in the "C:\Program Files\FirstClass Sync Services\fcss-12.1.009-win\fcsync" folder.

This file is used to configure which FirstClass servers your instance of Synchronization Services can connect to and on which FCP port.

FCSPort - The FCP port over which FCSync will connect to your FirstClass Server

ValidFCServers - Enter the FirstClass Server address that FCSync is connecting to: default,<Server Address>

LoggingLevel - Current values are: DEBUG,INFO,WARN,ERROR,CRITICAL,FATAL

fcsync.cfg sample:
FCSPort=510
ValidFCServers=default,fc.mydomain.com

2. The 'startfcsync.bat' file located in the "C:\Program Files\FirstClass Sync Services" folder.

This file is currently in place to start the installed Synchronization Server with the proper configuration.

With the default installed file it should start a sync server on port 80. If you then add SSL certificates as mentioned below, then it will start a HTTPS server on port 443.

Currently with this initial release it is configured for starting the CherryPy server via passing parameters to the cherry.pyc file in the fcsync folder.

By default it only tries to start a HTTPS server on port 443 unless no SSL certificate files are found in which case it falls back to starting a HTTP server on port 80.

You can specify it starts a HTTP server in addition to the HTTPS server by adding the '-e' as an arg.

The startup parameters currently supported are as follows:

Usage: cherry.pyc [options]

Options:

-h, --help   show this help message and exit

-H HOST, --host=HOST

     Specify the host name for the CherryPy Server. 0.0.0.0 will serve on all interfaces. (default: 0.0.0.0)

 -f FCS_PORT, --fcserverport=FCS_PORT

     Specify the FCP port number used to connect to the FirstClass Server. (default: 510)

 -s SSL_PORT, --sslport=SSL_PORT

     Specify the SSL / HTTPS port number. (default: 443)

 -k SSL_PRIVATE_KEY, --key=SSL_PRIVATE_KEY

     Specify the SSL key file name or path. (default: key.pem)

 -c SSL_CERTIFICATE, --cert=SSL_CERTIFICATE

     Specify the SSL cert file name or path. (default: cert.pem)

 -i SSL_CERTIFICATE_CHAIN, --intermediate=SSL_CERTIFICATE_CHAIN

     Specify the SSL intermediate certificate file name or path. (default: none)

-t SSL_THREAD_POOL, --sslthreads=SSL_THREAD_POOL

     Specify the number of threads for the SSL CherryPy Server. (default: 500)

 -e, --enablehttp

     Enable the HTTP server. (default: False)

 -p PORT, --httpport=PORT

     Specify the HTTP port number. (default: 80)

--httpthreads=HTTP_THREAD_POOL

     Specify the number of threads for the HTTP CherryPy Server. (default: 100)

  (ie.) Modifying the startup line in the 'startfcsync.bat' file to either of the following would cause the web server to start up both a HTTPS server on port 8443 and a HTTP server on port 8000.

Examples:

C:\Python27\python.exe "C:\Program Files\FirstClass Sync Services\fcss-12.1.009-win\fcsync\cherry.pyc" -H 127.0.0.1 -s 8443 -ep 8000

C:\Python27\python.exe "C:\Program Files\FirstClass Sync Services\fcss-12.1.009-win\fcsync\cherry.pyc" -H 127.0.0.1 --sslport=8443 --enablehttp --httpport=8000

2.1.3 Starting & connecting to FirstClass Synchronization Services:

For starting FirstClass Synchronization Services, you can double click the 'startfcsync.bat' file located in the "C:\Program Files\FirstClass Sync Services" folder.

Pressing CTRL+C will stop the FirstClass Synchronization Service.

Connecting to your FCWS server:

Within the settings of your device open the "Accounts" or "Mail, Contacts, Calendars" and select add an account. When prompted: select the exchange account type. From there you can enter the necessary FirstClass Synchronization Server settings

2.1 OS X Installation

Installation Overview

The attached fcss-12.1.009-osx-py2.6.dmg file is for installing/updating the FirstClass Synchronization Services on OS X.

2.1.1 Installation Prerequisites (one-time requirements):

Installation Prerequisites (one-time requirements):

Python 2.7 is now required.

You can test which version is currently running as default by typing the following in a terminal window:

sudo python -V

If it is present it should return the installed version such as:

Python 2.6.7 or Python 2.7.5

If you version is reported as 2.6, you will need to change the default version of Python by running the following command:

sudo defaults write com.apple.versioner.python Version 2.7

The FirstClass Web Services installer must be run as a user with a userid of 'fcadmin' (and any full name, but "FirstClass Administrator" is recommended). This user must be a member of the 'admin' group.

2.1.2 **Installation** Instructions

Download the attached disk image (fcss-12.1.009-osx-py2.6.dmg) and extract it on your Synchronization Services machine.

Once the image is mounted (e.g. fcss-12.1.009-osx-py2.6), execute the "installer.command" by double clicking it.

You may get a prompt to enter a password

Type 'Yes' to accept the FirstClass End User License Agreement

Once the installation is complete you can eject the mounted image.

After having run the installer script, you should have the following structure:

A "FirstClass Synchronization Services" folder is created at "/Library/FirstClass Sync Services".

Contents:

"startfcsync.command" is a preconfigured startup script for starting the FirstClass Synchronization Services. This script can be customized and does not get overwrote by upgrades.

"PkgArchives" is used to archive the previously installed package so that any customized config does not get lost. The following user configuration is copied from the archived package during the install;

fcsync.cfg

Any *.pem files in the root of the FCSync folder.

NOTE: If this is a new install you will need to configure the following items.

1. The 'fcsync.cfg' file located in the "/Library/FirstClass Sync Services/fcss-12.1.009-win/fcsync" folder.

This file is used to configure which FirstClass servers your instance of Synchronization Services can connect to and on which FCP port.

FCSPort - The FCP port over which FCSync will connect to your FirstClass Server

ValidFCServers - Enter the FirstClass Server address that FCSync is connecting to: default,<Server Address>

LoggingLevel - Current values are: DEBUG,INFO,WARN,ERROR,CRITICAL,FATAL

fcsync.cfg sample:

FCSPort=510
ValidFCServers=default,fc.mydomain.com

2. The 'startfcsync.command' file located in the "/Library/FirstClass Sync Services" folder.

This file is currently in place to start the installed Synchronization server with the proper configuration.

With the default installed file it should start a sync server on port 80. If you then add SSL certificates as mentioned below, then it will start a HTTPS server on port 443.

Currently with this initial release it is configured for starting the CherryPy server via passing parameters to the cherry.pyc file in the fcsync folder.

By default it only tries to start a HTTPS server on port 443 unless no SSL certificate files are found in which case it falls back to starting a HTTP server on port 80.

You can specify it starts a HTTP server in addition to the HTTPS server by adding the '-e' as an arg.

The startup parameters currently supported are as follows:

Usage: cherry.pyc [options]

Options:

-h, --help   show this help message and exit

-H HOST, --host=HOST

      Specify the host name for the CherryPy Server. 0.0.0.0 will serve on all interfaces. (default: 0.0.0.0)

-f FCS_PORT, --fcserverport=FCS_PORT

      Specify the FCP port number used to connect to the FirstClass Server. (default: 510)

-s SSL_PORT, --sslport=SSL_PORT

      Specify the SSL / HTTPS port number. (default: 443)

-k SSL_PRIVATE_KEY, --key=SSL_PRIVATE_KEY

      Specify the SSL key file name or path. (default: key.pem)

-c SSL_CERTIFICATE, --cert=SSL_CERTIFICATE

      Specify the SSL cert file name or path. (default: cert.pem)

 -i SSL_CERTIFICATE_CHAIN, --intermediate=SSL_CERTIFICATE_CHAIN

      Specify the SSL intermediate certificate file name or path. (default: none)

-t SSL_THREAD_POOL, --sslthreads=SSL_THREAD_POOL

      Specify the number of threads for the SSL CherryPy Server. (default: 500)

-e, --enablehttp

      Enable the HTTP server. (default: False)

-p PORT, --httpport=PORT

      Specify the HTTP port number. (default: 80)

--httpthreads=HTTP_THREAD_POOL

      Specify the number of threads for the HTTP CherryPy Server. (default: 100)

(ie.) Modifying the startup line in the 'startfcsync.bat' file to either of the following would cause the Synchronization server to start up both a HTTPS server on port 8443 and a HTTP server on port 8000

sudo /usr/bin/python "/Library/FirstClass Sync Services/fcss-12.1.009-osx/fcsync/cherry.pyc" -H 127.0.0.1 -s 8443 -ep 8000

sudo /usr/bin/python "/Library/FirstClass Sync Services/fcss-12.1.009-osx/fcsync/cherry.pyc" -H 127.0.0.1 --sslport=8443 --enablehttp --httpport=8000

2.1.3 Starting & connecting to FirstClass Synchronization Services

For starting FirstClass Synchronization Services, you can double click the 'startfcsync.bat' file located in the "C:\Program Files\FirstClass Sync Services" folder.

Pressing CTRL+C will stop the FirstClass Sync Services.

Connecting to your FirstClass Synchronization Services Server:

Within the settings of your device open the "Accounts" or "Mail, Contacts, Calendars" and select add an account. When prompted select the exchange account type. From there you can enter the necessary FirstClass Synchronization Server settings.

2.3.1 Linux **Installation**

Installation Overview

The attached fcss-12.1.009-linux_installer.tgz file is for installing/updating the FirstClass Synchronization Services on Linux.

Note that the majority of our testing for this product thus far has centered on the Cent OS 6.3 Linux distribution, but it should run on other distributions as well if all the requirements are met.

2.3.2 Installation **Prerequisites (one-time requirements):**

The FirstClass Synchronization Services installer must be run as a user with a userid of 'fcadmin' (and any full name, but "FirstClass Administrator" is recommended). This user must be a member of the 'adm' group.

After creating this user and adding it to the 'adm' group, log out and back in as 'fcadmin'. Create this group first, if it does not already exist.

Python 2.6 is required. On Linux this will in most cases be already present even if it is not the default Python version.

You can test this by typing the following in a terminal window:

python2.6 -V

If it is present it should return the installed version such as:

Python 2.6.7

2.3.3 Installation Instructions

Ensure the 'fcadmin' account has been created as per the instructions above, that the account is a member of the 'adm' group, and that you have logged out and back in as 'fcadmin'. This is required to ensure that the 'adm' group change is applied.

Download the attached (fcss-12.1.009-linux-py2.6.tgz) tar file.

- Start a shell Terminal window, and "cd" to your download location.

- Extract the files in the installer tar file, using this command:

tar xzf fcss-12.1.009-linux-py2.6.tgz

- "cd" into installer package directory as in the below example.

cd fcss-12.1.009-linux-py2.6.tgz

- Start the installer, and answer the prompts as asked. **Note:** If your fcadmin account does not have sudoer privileges you will be asked to re-run the installer after first becoming "root" by executing the "su" command.

./install.sh

- Enter 'yes' to accept the End User License Agreement

- Once the installation is complete you can delete the temporary package directory and downloaded tar file.

- After having run the installer script, you should have the following structure:

- A "FirstClass Sync Services" folder is created at "/opt/FirstClass Sync Services".

Contents:

"startfcsync.sh" is a preconfigured startup script for starting the FirstClass Synchronization Services. This script can be customized and does not get overwrote by upgrades.

"PkgArchives" is used to archive the previously installed package so that any customized config does not get lost. The following user configuration is copied from the archived package during the install;

fcsync.cfg

Any *.pem files in the root of the FCSync folder.

Note: If your fcadmin account does not have sudoer privileges you will be asked to re-run the installer after first becoming "root" by executing the "su" command.

- Once the installation is complete you can delete the temporary package directory and downloaded tar file.

After having run the installer script, you should have the following structure:

- A "FirstClass Web Services" folder is created at "/opt/FirstClass Web Services".

Contents:

- "fcws" is a link to the "<PythonLib>\SitePackages\fcws_12.0.136-osx-py2.7.egg" package directory.

- "startfcws.command" is a preconfigured startup script for starting the FirstClass Web Services. This script can be customized and does not get overwrote by upgrades. This script is also called by the 'fcwsctl' control script.

- "PkgArchives" is used to archive the previously installed package so that any customized config does not get lost. The following user configuration is copied from the archived package during the install;

- User added icons in the fcws/images/icons folder.

- fcws.cfg

- Any *.pem files in the root of the fcws folder.

- Any user added html files in the fcws/localized/<lang>/user/html' folders.

NOTE: If this is a new install you will need to configure the following items.

1. The 'fcsync.cfg' file located in the "/opt/FirstClass Sync Services/fcss-12.1.009-win/fcsync" folder.

 This file is used to configure which FirstClass servers your instance of Synchronization Services can connect to and on which FCP port.

FCSPort - The FCP port over which FCSync will connect to your FirstClass Server

ValidFCServers - Enter the FirstClass Server address that FCSync is connecting to: default,<Server Address>

LoggingLevel - Current values are: DEBUG,INFO,WARN,ERROR,CRITICAL,FATAL

fcsync.cfg sample:

FCSPort=510
*ValidFCServers=*default,fc.mydomain.com

- The 'startfcsync.bat' file located in the "opt/FirstClass Sync Services" folder.

This file is currently in place to start the installed Synchronization server with the proper configuration.

With the default installed file it should start a sync server on port 80. If you then add SSL certificates as mentioned below, then it will start a HTTPS server on port 443.

Currently with this initial release it is configured for starting the CherryPy server via passing parameters to the cherry.pyc file in the fcsync folder.

By default it only tries to start a HTTPS server on port 443 unless no SSL certificate files are found in which case it falls back to starting a HTTP server on port 80.

You can specify it starts a HTTP server in addition to the HTTPS server by adding the '-e' as an arg.

The startup parameters currently supported are as follows:

Usage: cherry.pyc [options]

-h, --help

        show this help message and exit

-H HOST, --host=HOST

Specify the host name for the CherryPy Server. 0.0.0.0 will serve on all interfaces. (default: 0.0.0.0)

-f FCS_PORT, --fcserverport=FCS_PORT

Specify the FCP port number used to connect to the FirstClass Server. (default: 510)

-s SSL_PORT, --sslport=SSL_PORT

Specify the SSL / HTTPS port number. (default: 443)

-k SSL_PRIVATE_KEY, --key=SSL_PRIVATE_KEY

Specify the SSL key file name or path. (default: key.pem)

-c SSL_CERTIFICATE, --cert=SSL_CERTIFICATE

Specify the SSL cert file name or path. (default: cert.pem)

-i SSL_CERTIFICATE_CHAIN, --intermediate=SSL_CERTIFICATE_CHAIN

Specify the SSL intermediate certificate file name or path. (default: none)

-t SSL_THREAD_POOL, --sslthreads=SSL_THREAD_POOL

Specify the number of threads for the SSL CherryPy Server. (default: 500)

e, --enablehttp

Enable the HTTP server. (default: False)

p PORT, --httpport=PORT

Specify the HTTP port number. (default: 80)

--httpthreads=HTTP_THREAD_POOL

Specify the number of threads for the HTTP CherryPy Server. (default: 100)

(ie.) Modifying the startup line in the 'startfcsync.bat' file to either of the following would cause the Synchronization server to start up both a HTTPS server on port 8443 and a HTTP server on port 8000

sudo /usr/bin/python "/opt/FirstClass Sync Services/fcss-12.1.009-osx/fcsync/cherry.pyc" -H 127.0.0.1 -s 8443 -ep 8000 -e True

sudo /usr/bin/python "/opt/FirstClass Sync Services/fcss-12.1.009-osx/fcsync/cherry.pyc" -H 127.0.0.1 -e True --sslport=8443 --enablehttp --httpport=8000

2.3.4 Starting & connecting to FirstClass Synchronization Services

For starting FirstClass Synchronization Services, you can run the 'startfcsync.sh' file located in the "opt/FirstClass Sync Services" folder. (./startfcsync.sh)

Pressing CTRL+C will stop the FirstClass Sync Services.

Connecting to your FCSync Server:

Within the settings of your device open the "Accounts" or "Mail, Contacts, Calendars" and select add an account. When prompted select the exchange account type. From there you can enter the necessary FirstClass Synchronization Server settings.

3   Contact Information

OpenText Corporation
275 Frank Tompa Drive
Waterloo, Ontario
Canada, N2L 0A1

Email: support@opentext.com
Knowledge Center: https://knowledge.opentext.com

For more information, visit www.opentext.com