FirstClass Release Notes

12

2013-06-24

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Contents

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1 Introduction

These Release Notes provide an overview of FirstClass 12, including new features, delivery information, and supported platforms. OpenText recommends that you read these Release Notes in conjunction with the documentation included with the software package. If any conflicts exist, the Release Notes supersede the other documentation.

We also recommend that you check FirstClass Online (FCOL, fc.firstclass.com) for any product or documentation updates that may have been posted after the initial release of FirstClass 12.

1.1 Release Notes Revision History

Release Notes Revision Number	Modification Date	Section Modified	Modifications
1.0	June 21, 2013	All	Initial release
1.01	June 24, 2013	3.1, 5.2.2, 5.2.3, 5.2.4	Corrections to installation instructions

2 About FirstClass

This section provides an overview of FirstClass 12.

FirstClass is a suite of personal communications and social collaboration solutions that is targeted towards both the education and business market segments. FirstClass 12 is a major product release iteration with the following key new features: Web Services Architecture and API, HTML5 Web Client, External Apps support, and Server Search/Indexing performance enhancements.

2.1 New Features

FirstClass 12 introduces the new features listed below.

2.1.1 Architecture

2.1.1.1   Web Services

FirstClass 12 introduces the high performance FirstClass Web Services server (FCWS). The FCWS design is based upon a Python framework, and facilitates access to FirstClass server data and functionality. Out of the gate, FCWS renders the new HMTL 5 FirstClass Web Client and new FirstClass Web API.

The FirstClass Web Client (or any other web-based client) uses HTML 5.0 to communicate with the FirstClass web server. Requests issued to the FirstClass web server are translated into the FirstClass-proprietary protocol FCP and sent to the FirstClass server for processing. The FirstClass server responses are also encapsulated in the FCP protocol, which is then processed by the FirstClass web server and subsequently sent back to the web client as HTML pages, JSON data, CSS style data and/or JavaScript code.

The FirstClass web server also supports WebSocket and/or AJAX connections to facilitate live web client updates with changes that occurred on the FirstClass server (new mail notifications, calendar alarm reminders, container content changes, and so on).

The FirstClass web server provides mechanisms for localization and customization. Basic language localization is done automatically by the FirstClass web server based on the language settings in the web browser **Accept_Language** HTTP header. Additionally, this API provides a JSON mechanism to override browser settings or supply an independent parameter for language localization for each session.

The FirstClass web server can additionally be customized and/or localized by providing custom and localized html templates in directories **resources**/**<lang code>**/**html** and **resources**/**<lang code>**/**user**/**html**. The template loader will search for a given template first in **resources**/**<lang code>**/**user**/**html**, then in **resources**/**<lang code>**/**html**, and finally in **fcws**/**html**. The first occurrence of a given template name will be used given the specified search order. Searching the described paths for a requested template as well as loading and rendering of the template is done automatically by the template loader.

2.1.1.2   API SDK

- Documentation
- Code Samples
- API Developer Tool. It is the main application that has been created to help web developers understand the API documentation and to provide some examples on how to retrieve and parse information returned from an API call to the FirstClass server. The API Developer Tool is comprised of 4 panes:

  - Action Entry Pane
  - Post/Get Send Pane
  - Data Received Server Response Pane
  - Example UI Display Pane

The API Developer tool provides the most visual information on how to use the API.

The API Developer tool uses the following files:
- API Developer Tool/APIDeveloperTool.html (the primary html file)
- API Developer Tool/API.js (the primary javascript file)
- API Developer Tool/APIStyles.css (the primary css file)
- Commonjs/connection.js
- Commonjs/jquery-1.8.3.min.js
- Commonjs/jsLibs.js
- Images/brand.png
- images.title-icons.png

2.1.2 HTML5 Web Client

FirstClass 12 features the new HTML5 Web Client. The user interface unifies the classic FirstClass feature set with Communities, and introduces new productivity elements. It is highly interactive and configurable, and supports the following:

Core FirstClass Features:

- Messaging
- Contacts
- Calendaring
- Conferences
- Search
- File Storage
- Documents

- Permissions
- History
- Properties / Get Info
- Preferences
- Help
- Basic printing

Social Features:

- Communities
- Profiles
- My People
- Follow
- Watches
- Instant Messaging
- Pulse
- Search for People

New Features:

- Drafts
- Mini Calendar
- Favorite Places
- Recent Places
- External Apps
- Site themable interface

Document Editing:

- Editor UI - basic style harmonization
- Online document editing
- Auto spell check during composition (using the built-in browser function)

Other Features:

- Basic Wiki functions
- Basic Documents functions
- Embedded attachments, including addition by paste, upload or drag
- Wiki links
- Inline videos

- In-feed discussions -item creation/editing/posting
- Object Creation Wizard

The HMTL5 Web Client will support the rendering of FCAS applications that have been modified for compatibility. A documentation toolkit will be provided as a guide to the process.

2.1.2.1   The Home Screen

The new interface divides your content into five basic areas:

1. Your personal preferences. From here, you can set your own personal preferences, edit your profile or change your password.

2. Your personal information management and workspace. This includes access to your preferences, personal file storage areas, drafts, mailbox, contacts and calendar. Administrators will be able to specify, by group, which users have access to these personal items.

3. Your collaborative content. This is where you will access your collaborative areas like conferences, group calendars and communities. There is also a section where you can temporarily park your favourite items for quick access.

4. Your social content. Your social content includes the Pulse - Status Updates of people that you are associated with, your followed friends (My People), your current IM sessions or Chats and your Watched items (items that you have flagged somewhere in the collaborative areas and for which you wish to stay on top of whenever there is new content related to the flagged item).

5. Custom applications. Your system administrator or third party developers will be able to develop applications that can run entirely within the new web client.

2.1.2.2   Personal Preferences and Profile

In the personal area you will be able to:

1. Update your status and post to the Pulse.
2. Access Online help.
3. Change your password.
4. Modify your preferences.
5. Update your profile.

2.1.2.3   Mailbox

If you are using FirstClass for email, you will have access to your mail from the Mailbox widget. All unread items will be flagged and shown to you within the mailbox section on the left. Clicking on the Mailbox title will open and display your mailbox in the center pane. You can go directly to one of the unread messages by clicking on it from the list. Your unread tracking is immediately updated and you have the ability to toggle this on or off. FirstClass also supports a unique set of features like Unsend and Message History.

2.1.2.4   Multiple Selections, Subfolders and Drag and Drop

You can have subfolders within the Mailbox, with the ability to drag and drop content between folders. Selecting multiple items in the list will allow you to perform actions on all of the selected items at once.

Open the folder slider to reveal all folders within your Mailbox and drag and drop your selected items on to the folder to move them there.

2.1.2.5   The Mini-Calendar

Your personal calendar is accessible directly from the left-hand pane. If you have any current events or tasks, they will be displayed in the list below the mini-calendar. Days in which you have events planned are displayed in a different colour.

2.1.2.6   Calendar/Task Views

Clicking on the mini-=calendar title will display your full calendar in the main pain where you have access to a number of different views - Day - Week- Month - Tasks. In the event that the event detail is too long to read, hovering over the event will pop up more detail.

2.1.2.7   Calendar Subscriptions (Punch-Through Calendars)

If you subscribe to another user's or a group calendar, this will be added as a "punch-through" calendar on your calendar where you will be able to toggle the display on or off as you please.

2.1.2.8   Drafts

If you prepare an email or a contribution to a discussion area such as a response to a query or a wiki update, but are not yet ready to post it, that draft (unsent item) is displayed in your Mailbox, but is also linked to the new "Drafts" item in your Personal Workspace area. If your organization does not include the email option of FirstClass, you will still have access to your draft contributions to your collaborative spaces.

2.1.2.9   Contacts and Mail Lists

Permissioned users will have the ability to maintain contacts and mail lists and FirstClass Synchronization Services will synchronize the content with your smart phone or PDA.

2.1.2.10   Drag and Drop File and Document Storage

You will be able to take advantage of file and document storage areas where you can either upload or drag and drop files from your computer into your cloud-based storage area. When clicked on, items that can display in a web browser window are displayed in the right pane.

2.1.2.11   Collaboration

FirstClass has always excelled at collaboration, and that is where our strength is. All collaborative containers support threaded discussions, sub folders, and calendars. Community containers have wikis and file storage areas.

You can access the collaborative areas by clicking on the Home Link in the Navigation bar.

2.1.2.12   Favorite Places

If you have a lot of collaborative containers, you may wish to organize them in such a way that you can focus on those that are the most important to you. You can drag those specific containers up to the top "Favorite Places" section where they will stick between sessions. Once you are done with them, you can move them back down.

2.1.2.13 Rich, Collaborative Discussions

A FirstClass collaborative container supports rich text content, attachments, embedded images, and videos. Communities feature wikis and a file storage area. All collaborative containers support subcontainers and calendars.

2.1.2.14 Drag and drop and Full Editing

The text editor allows for full rich text formatting, embedding of tables and images and supports drag and drop of attachments from the desktop to the attachments list or, when a message is received with an attachment to reverse the process and drag from the message to your local drive. You can also drag and drop images directly from your computer desktop into the body of your document or message.

2.1.2.15 Your 'My People' List

You can choose to "follow" people and they will be added to your "My People List". You can see if they are online (green ball) or have a new blog entry (red ball). In addition, you will be able to access their blog and profile, and engage in an IM session or chat.

2.1.2.16 Profiles and Blogs

Every user can have a profile and blog. Clicking on a person's name in your "My People" list will open their blog. Clicking on a person's picture anywhere else will bring up their profile.

2.1.2.17 Chats

FirstClass 12 supports asynchronous chat sessions and if a person is online, have a real time chat with them. Users will be notified as soon as they log in if they missed a chat while offline. Once connected, they can pick up and join in on the conversation.

2.1.2.18 The Pulse

Each time someone is added to the system, updates their status or adds to their blog, an entry is made in the Pulse. You can view the Pulse for everyone, only the people you follow, or just those associated with your account. As with other social media type environments, you have the ability to comment on one's status.

2.1.2.19 Updates

You can flag items within collaborative containers as ones "to watch". These are added to your Updates list and any new activity is flagged to your attention. This area is also used to notify you of any invitations to join and participate in a Community.

2.1.2.20 Search

The "Search" field will give you access to the indexed content on your server, finding information quickly as you need it. After performing a search you will be presented with content, people and folders/containers that match your search criteria.

2.1.2.21 Recent Places

The system will always remember the last 5 locations containers that you have visited or items that you have minimized and presents that information in the "recent places" section. You can get quick access to this content from here.

Dragging a file or message on to the toolbar button also opens the window and allows you to drag and drop from your current location to one of your recent places.

2.1.2.22 Retrace your steps - Breadcrumbs

If you are deep down into a nested area, you can retrace your steps and return up the path by clicking on one of the path items on the navigation bar.

2.1.2.23 Custom Applications

Your system administrator can develop custom, HTML5 based applications that will run inside the FirstClass web client. Access to these applications are determined by group membership so different groups on your server can have access to a different set of applications.

2.1.2.24 Access other Web Services

Third-party applications will allow you to access external web services through their own APIs. Web developers can build applications that can store application specific information on a per user basis and use unique FirstClass User information such as UserID and ClientID to build relational lookups to external databases.

2.1.3 Core Server

FC 12.0 Web Services Client support:
- Numerous internal enhancements were made within the server to support functionality in the new FirstClass 12.0 Web Services Client.

Resumes:

- Legacy user resume files are migrated to FCXResume on first full audit. (conference, group, etc. are unaffected)
- All resume opens will now go to the FCXResume. A new client form for the FCXResume is provided with the 12.0 client.
- Note that not only the Open Resume permission but now the permissions of the Shared Documents / Profile conference take effect

Search index:

Although functionally from an end user perspective should appear the same as in previous versions, numerous enhancements have been made in how the search index is maintained by the server such as:

- All indexing routines have been moved out of the server audit, and is thus now independent from the audit.

- The structure of the index data as stored on disk has somewhat changed as well, which allows for a much quicker index load time at server startup.
- Improvements have also been made to reduce the amount of memory required by a fully loaded index.
- Monitoring index status

Server Monitor:

New Search tab contains:

Sizes of dictionary, forward index and documents loaded.

Catchup status

Index File I/O status

Changed the Activity tab state from "Waiting for Indexer" to "Processing deletes", when audit runs post processing of queued deletes.

Server control:

Buttons added to Server tab.

Directory flush - Save the dictionary and document files

Fwd Index flush - Save the forward index files

- Added "CatchUp" functionality. Once the server has loaded the existing dictionary, document and forward index data at startup, the network store is scanned for items that have not been indexed or have been modified since the version on disk. Index catchup indexes all content for each CID in a way that if server is stopped but index catchup is only partly finished, it will resume from where it left off at next start. Catchup does conferences (not sub containers), then users mailboxes, then whatever's left.
- A complete flush to disk of index data occurs, at the end of the catch up phase which occurs on server startup and at the end of each full audit, as well as when a shutdown is requested. When flushing document data/forward index at shutdown,
  - estimated time will be printed on console (from last successful flush)
  - progress will be shown on console as "."
- HTTP code to strip off parameters to URL pages (after ?) had a bug that would not remove everything to the end of the URL if %20 and other delimiters were encountered. (this is URL stripping is enabled by setting DoHTTPIndexCheck to 1 in the FCS.INI FCSetup section)
- HTTP code enhanced to remove everything in an URL after the domain name. (this is enabled by setting DoHTTPIndexCheck to 2 in the FCS.INI FCSetup section)

Personal Information Management (PIM)

- This option is intended for use with the FirstClass Web Services interface only. PIM-less users are restricted from seeing any of the personal information based containers such as the mailbox, contacts and others.
- PIM-less accounts are required to have an external forwarding address set. As such a new audit diagnostic will report all PIM-less users who are missing a forwarding email address.

- Implemented a "Personal Information Management (PIM)" option at the group level. Turning this checkbox off on a group allows you to restrict that user group to having a logon without exposing any of the personal information based containers. The important thing to note here for this release is that if this option is set to 'off' no users with in that group will have access to their mailbox and other personal containers.
- A new licensed user class named "Community Regular User" has been introduced which is a PIM-less user regardless of user group settings.

Exposed Group Name

- Send membership of exposed groups to FirstClass Web Services clients as session data in field 7040 (fcpGroupMembership)
  The idea behind this feature is to allow external FirstClass Web Services apps to check for a user's group membership without exposing the actual user group names as used on the FirstClass Server.
  This is controlled by a field on the user group form, if this field is not filled in, the group will not be exposed to the external app.

Prevention of password changes over non secure logins.

- Implemented a login option to inform the server that the connection is NOT secure.
- Disable accounts that have attempted to change their password on a non secure connection.
    - Set random password
    - Mark account as disabled
- Identify disabled accounts in the audit.
- Admin notification that an account has been disabled due to an attempt to change password on a non secure connection.
- **NOTE:** This "automatic account disabling feature" only occurs when changing a password while being logged in non securely via a web API connection, not via a Web Services client login. If you try to change your password over an HTTP connection via FirstClass Web Services, the server will just prevent the user from changing the password, but does not disable the account. A user account should never get disabled by the server for this reason when logged in via an OpenText FirstClass produced client of any type.

  Re-enabling a disabled account can only be done via Batch Admin using the following command:
    - Modified ACTIVATE command to enable previously disabled accounts
      Syntax:
        ACTIVATE USER <UserID>
    - Export: Expand the kinds of objects that can have a From field value.

Fixes exporting calendar events

Web Services external application configuration

- Implemented FirstClass Web Services external application configuration
- An "External Applications" container will be created on the admin desktop via the 12.0 network store upgrade scripts being shipped separately.

2.1.4 Desktop Client

- New Chat form for FirstClass Web Services Chat. Can be initiated when right clicking on names in messages and directory windows. To access old Instant Messaging select the 'Collaborate -> Instant Message' option or Instant Message from Launch Bar.
- New system administration forms for FirstClass 12.
- Links in HTML Messages will now open in the users default browser.

2.2 Documentation

- New Online Help provided for the HTML5 Web Client and FirstClass Web Services API Guide.
- Online Help updated to reflect the features changes introduced in FirstClass 12.

2.3 Discontinued and Deprecated Features

The following features have been discontinued in this release:

- The FirstClass ED (Educational Development) Option is declared to be EOL, and is no longer supported.

The following features have been deprecated in this release:

- N/A

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3 Packaging and Documentation

Downloads and documentation for FirstClass are available on FirstClass Online (FCOL, fc.firstclass.com).

3.1 Packaging and Delivery Information

FirstClass 12 component sets will be released in phases, as they become GA (generally available). The software and documentation for this release of FirstClass includes:

Windows Platform Name	Component
fcs64.exe	Core Server 12 Build 1264
fcs64.pdb	Core Server 12 Build 1264 Prog DB
fcintsrv64.exe	Internet Services 11.1 Build 11.137
fcintsrv64.pdb	Internet Services 11.1 Build 11.137 Prog DB
fcws120035.msi	Web Services 12 Build 35
fcc12005.msi	Desktop Client

Mac OSX Platform Name	Component
fcsd_12.0.1264.dmg	Core Server 12 Build 1264
fcisd_11.1.11.137.dmg	Internet Services 11.1 Build 11.137
fcws_12.0.035-osx_installer.dmg	Web Services 12 Build 35
fcc12005.dmg	Desktop Client

Linux Platform Name	Component
fcisd_11.1.11.137.tgz	Internet Services 11.1 Build 11.137
fcws_12.0.035-linux_installer.gz	Web Services 12 Build 35

3.2 Related Documentation

For additional information on FirstClass, or for supplemental information on related products, refer to FirstClass Online (FCOL, fc.firstclass.com).

3.3 Documentation Errata

N/A.

4   Supported Environments and Compatibility

This section provides details on supported platforms and version information.

4.1 Supported Systems

4.1.1   Core Server

Hardware Requirements Summary

Operating system differences are not significant in comparison, resulting in hardware requirements that are fairly consistent across all platforms. The most demanding recent feature by far is the index searching, but other core features are also making more use of memory and processors.

The core server requirements in FirstClass 12 are primarily determined by the size of the FCNS (FirstClass Network Store) content size. Larger capacity sites under significant load should consider an octa-processor configuration.

Minimum Hardware Requirements (smaller sites with small FCNS)

> dual-processor 64-bit (2 CPUs in any configuration, e.g. a single dual-core)
> 4GB RAM (smaller FCNS, up to 250GB)

Typical Hardware Requirements (most sites)

> quad-processor 64-bit (4 CPUs in any configuration), or more
> 4GB RAM (FCNS not exceeding 250GB), more would be better
> 8GB RAM (FCNS exceeding 250GB), more would be better

Recommended Hardware (larger sites)

octa-processor 64-bit (8 CPUs in any configuration), or more
16GB RAM (depending on the size of the FCNS), or more

4.1.2 Internet Services (IS)

Hardware Requirements Summary

Internet Services hardware requirements in FirstClass 12 are determined by a number of factors
including base software requirements, resources used by the cluster, the number of IS sessions
configured, and caching requirements. In general, larger sites making more extensive use of HTTP
will require more RAM.

Minimum Hardware Requirements (smaller sites)

dual-processor 64-bit (2 CPUs in any configuration, e.g. a single dual-core)
4GB RAM

Typical Hardware Requirements (most sites)

quad-processor 64-bit (4 CPUs in any configuration), or more
8GB RAM (sites with high HTTP utilization will benefit from more - see the calculator below)

Recommended Hardware (larger sites using multiple IS clusters)

octa-processor 64-bit (8 CPUs in any configuration), or more
16GB RAM (sites with very large numbers of IS sessions configured will benefit from more -
see the calculator below)

Calculating Memory Requirements

To determine how much memory to provision on top of operating system requirements, please use
the following guidelines:

Allow 128MB as a base requirement (includes basic overhead for all the protocols, config
files, 1 language worth of resources)
Add the size of any extra resources installed (i.e. add up all the additional .rez files, icons.rez
files, 'x' resources equivalents etc. from the Resource Registry folder). Allow 1-3 MB for each
extra language and/or web site custom resource set.
If the cluster has HTTP enabled, add 6MB for each IS session configured on the Basic
Internet Setup form. If the cluster does not have HTTP enabled, reduce this to 3MB for each
IS session.

If the cluster has HTTP enabled, allow 1MB of HTTP cache data for each of the first 1,000 web enabled accounts on the system, then 256kB for each web enabled account after that, up to a maximum of 4x the session allocation.

An Example

For an HTTP-enabled IS cluster connected to a core server with 9,000 user accounts, configured for 300 internet sessions, with Swedish and Danish resources in addition to English, the recommended RAM requirement would be:

128MB (base) + 4MB (2 extra language resource files @ 2 MB each) + 1800MB (300 internet sessions @ 6MB each) + 3048MB (cache allowance of 1MB x 1,000 + 256kB x 8,000 for the users on the system) = 4980MB = ~5GB

4.1.3 FirstClass 12 Single Server Hardware Requirements

(Core Server and IS on One Physical Machine)

This specification is for small sites only. Although not definitive, the following is a guideline for what constitutes a small site

- less than 1,000 total active accounts
- peak concurrency under 250
- Network Store of less than 200GB

Recommended Hardware

- octa-processor 64-bit (e.g. two quad-core processors)
- 16GB RAM or more (refer to the above IS memory calculation guideline)

4.1.4 Windows System Requirements

4.1.4.1 FirstClass 12 Server and Services

All server components require a 64-bit operating system.

Operating Systems Supported (Tested)

- Windows Server 2008 x64, R2 x64 , Enterprise x64
- Windows Server 2003 x64, R2 x64

4.1.4.2 FirstClass Web Services

- Windows Server 2008 x64, R2 x64 , Enterprise x64
- Windows Server 2003 x64, R2 x64
- Python 2.7

4.1.4.3 FirstClass Client

Windows 8, 7, Vista

- Windows 7/Vista capable system
- 1GB available RAM
- 1GB available disk space

Windows XP

- Intel Pentium 4 class CPU or better, or equivalent AMD CPU
- 1GB available RAM
- 1GB available disk space

Windows Server 2008, 2003

- Intel Pentium 4 class CPU or better, or equivalent AMD CPU
- 1GB available RAM
- 1GB available disk space

4.1.5 Mac OS X System Requirements

4.1.5.1 FirstClass 12 Server and Services

All server components require a 64-bit operating system.

Operating Systems Supported (Tested)

- Mac OS X (64-bit Intel) Server/Desktop 10.6.2 - 10.6.5

4.1.5.2 FirstClass Web Services

- OS X 10.7 - 10.8
- Python 2.6. If running OS X 10.7 - 10.8.x, it should already be present even if it is not the default Python version.

4.1.5.3 FirstClass Client

Mac OS X 10.6.1 - 10.6.2, 10.5.2 - 10.5.8

- PPC G5 CPU or better (Intel Core Duo/Core 2 Duo CPU recommended)
- 1GB available RAM
- 1GB available disk space

4.1.6 Linux System Requirements

4.1.6.1 FirstClass 12 Server and Services

All server components require a 64-bit operating system.

Operating Systems Supported (Tested)

- Any 64-bit Linux distribution with a 2.6.23-2.6.xx based kernel

4.1.6.2 FirstClass Web Services

- Cent OS 6.3 Linux distribution has been our primary test platform, but it should run on other distributions as well if all the requirements are met.
- Python 2.6

4.1.7 HTML5 Web Client Browser Requirements

The HTML5 Web Client requires presentation by a modern web browser that supports HTML5, and is best viewed on displays that have a minimum screen resolution of 1024 x 768. Windows, Mac OS X, and Linux desktop platforms are each supported by at least one of the browsers listed below:

- Internet Explorer 10
- Safari 6 and above
- Firefox 16 and above
- Chrome 22 and above
- Opera 12 and above

4.2 Compatibility Matrix

N/A.

4.3 Language Support

FirstClass is currently localized in the following languages. Future releases may add additional languages.

Component	Languages							
	EN	DE	JA	FR	IT	ZH	ES	RU
Desktop Client	B	UI	UI	UI	UI		UI	
HTML5 Web Client	B	UI	UI	UI	UI		UI	
Mobile Client for iOS	B	B	B	B	B		B	
Mobile Client for Android	B	B	B	B	B		B	
Mobile Client for BlackBerry	B	B		B	B		B	

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Component	Languages							
	UK EN	NL	DK	FI	NO	SE		
Desktop Client	UI	UI	UI	UI	UI	UI		
HTML5 Web Client			UI	UI	UI	UI		
Mobile Client for iOS	UI	B	UI	B	UI	B		
Mobile Client for Android		B	UI	B	UI	B		
Mobile Client for BlackBerry		B	UI		UI	B		

UI = user interface only
B = both user interface and online help

5 Installation and Upgrade Notes

This section provides additional installation and upgrade information, including related or third party product information and any required critical patches.

5.1 Installation Notes

Before you install FirstClass, review these additional installation notes and verify related product or third party product requirements.

! **Important**

Important notes help you avoid major problems.

- **You must have a FirstClass 12.0 server license** in order to login to this server as anything but the administrator account.

- Upon first start of the 12.0 server against an 11.1 network store a license validation process will occur which should take approximately the same length of time as doing a network store directory rebuild. No logins will be permitted until this process completes.

- This FirstClass 12.0 B1264 server release should not be used as a FirstClass archive server.

- Once you run the server version 12.0 and above you may roll back to 11.1 B1127, but you would need to remove the search "index" folder in the FCNS prior to doing so.

- For sites upgrading to FirstClass 12, to prevent new licensing restrictions from taking effect on your existing FirstClass server, it is very important that you have your FirstClass Suite license installed before applying this server update. The FirstClass Suite license was made available to all existing customers at the time the 11.0 version of the FirstClass server was released.

How do you know if you have the FirstClass Suite license installed?

On a pre 12.0 build server you can confirm that it is installed by looking on the "Admin / System Profile" under the licensing tab.
If the number of OTSW users matches that of the Regular users, it is an indication that the FirstClass Suite license is installed. If those numbers do not match it indicates you need to install the FirstClass Suite license prior to installing this release.

Limits
Regular users : 2005
Remote sessions : 22
Archive users : 10
OTSW users : 2005

If you do not have it installed, please check in your 'FC Update Service' container for the license file, and apply it. If you do not have it installed, and cannot find it, please contact us with your server serial number requesting us to reissue the FirstClass Suite license.

What will happen if I run this server build with out first installing the FirstClass Suite license?

If you do not have the FirstClass Suite license installed when you run this server build, the number of named (published) containers you can have on your server will be limited to the default of 10.
Being in violation of this limit will mean that you cannot create any new published containers, and the server will shut down at the end of an audit.
Under the admin system profile on the license tab you would see a limited value for "Named Containers:" being the default of 10.

5.2 Upgrade Notes

Before you upgrade, review these instructions.

- Please ensure that you have your server specific FirstClass 12 licenses, along with reviewing both the FirstClass 12 instructions accompanying the installer thoroughly before proceeding with the upgrade.

5.2.1 Client

For Windows or Mac OSX:

1. Download the client installer file into a temporary folder.
2. Double-click the file and follow the on screen instructions to complete the installation.

5.2.2 Core Server

5.2.2.1 Windows Installation

1. You must have a correctly installed and licensed version of the shipping FirstClass® Server 11.1 B1127 (or better) for x64 Windows on your test server before proceeding.
2. Download FirstClass Server (FCS12.0B1264.zip) into a temporary folder on your FirstClass Server computer.
3. Extract the contents of the archives.
4. Move the version of the FirstClass Server application you just extracted into the FirstClass Server (FCServer) folder. It is advised that you make a copy of the current version first.
5. Delete (or back up to an alternate location) any PDB files that are in the FirstClass Server (FCServer) folder.
6. Once the installation is complete you can delete the archives and temporary folder.

5.2.2.2 OS X Installation

Installation Overview

The fcsd_12.0.1264.dmg file is for updating the FirstClass Server executables on OS X.

Installation Prerequisites (one-time requirements):

The installer assumes that at least the server has been installed.

The installer must be run as the 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.

Installation Instructions

1. Make sure that you have a properly installed and configured FirstClass Server 11.1 before proceeding.
2. Download the disk image (fcsd_12.0.1264.dmg) and extract on your FirstClass Server machine.
3. Once the image is mounted (e.g. fcsd_12.0.1264), execute the "installer.command". This command will replace and apply correct permissions automatically for the fcsd, fcsd.rez, fcslang.rez, fcfixvol files (if necessary). - It will rename the existing files for backup purposes.
4. Once the installation is complete you can eject the mounted image.

5.2.2.3   Linux Installation

Installation Overview

The fcsd_12.0.1264.tgz file is for updating the FirstClass Server executables on Linux.

Installation Prerequisites (one-time requirements):

The server requires 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.

Installation Instructions

1. 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.
2. Download the (`fcsd_12.0.1264.tgz`) tar file.
3. Start a shell Terminal window, and "cd" to your download location.
4. Extract the files in the installer tar file, using this command:
   ```
   tar xzf fcsd_12.0.1264.tgz
   ```
5. "cd" into installer package directory as in the below example.
   ```
   cd fcsd_12.0.1264
   ```
6. 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.
   ```
   ./installer
   ```
7. Once the installation is complete you can delete the temporary package directory and downloaded tar file.

5.2.3 Internet Services

5.2.3.1   Windows

1. Make sure that you have read these entire release notes before proceeding, especially the above requirements. Make sure you have previously successfully installed the FirstClass Server 11.1 Build 1126 or later update and the FirstClass 11.0 Internet Services Build 11.000 upgrade.

2. Download the **fcintsrv64.exe** and **fcintsrv64.pdb** files to the machine on which your current FirstClass Internet Services runs.
3. Shutdown your current FirstClass Internet Services.
4. On the machine on which your current FirstClass Internet Services runs, replace the current versions of the **fcintsrv64.exe** and **fcintsrv64.pdb** files with the downloaded versions (make a backup of the old versions if you want to before doing this).
5. Start the new FirstClass Internet Services.

5.2.3.2   Mac OSX

1. Make sure that you have read these entire release notes before proceeding, especially the above requirements. Make sure you have previously successfully installed the FirstClass Server 11.1 Build 1126 or later update and the FirstClass 11.0 Internet Services Build 11.000 upgrade.
2. Download the self-extracting disk image file **fcisd_11.1.11.137.dmg** to the machine on which your current FirstClass Internet Services runs.
3. Shutdown your current FirstClass Internet Services.
4. Once the image is mounted, execute the "installer.command". This command will replace and apply correct permissions automatically for the fcisd and fcisd.rez (if necessary). It will rename the existing files for backup purposes.
5. After the installation is complete, you can eject the mounted image.
6. Start the new FirstClass Internet Services.

5.2.3.3   Linux

Make sure that you have read these entire release notes before proceeding, especially the above requirements. Make sure you have previously successfully installed the FirstClass Server 11.1 Build 1126 or later update and the FirstClass 11.0 Internet Services Build 11.000 upgrade.

Installation Prerequisites (one-time requirements)

1. The server requires 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.
2. 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.

Instructions

1. 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.

2. Download the **fcisd_11.1.11.137.tgz** tar file.
3. Start a shell Terminal window, and "`cd`" to your download location.
4. Extract the files contained in the installer tar file, using this command:

    `tar xzf fcisd_11.1.11.137.tgz`
5. "cd" into installer package directory as in the below example:

    `cd fcisd_11.1.11.137`
6. 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.

    `./installer`
7. Once the installation is complete you can delete the temporary package directory and downloaded tar file.

5.2.4 Web Services

5.2.4.1   Windows

Installation Overview

The fcws120035.msi file is for installing/updating the FirstClass Web Services on Windows.

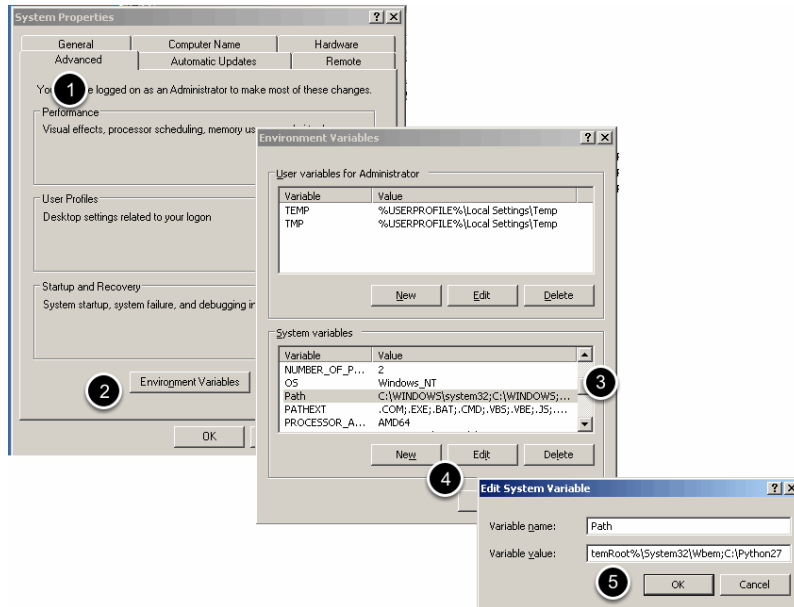**Installation Prerequisites (one-time requirements):**

On Windows systems, FCWS 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-2.7.4.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.
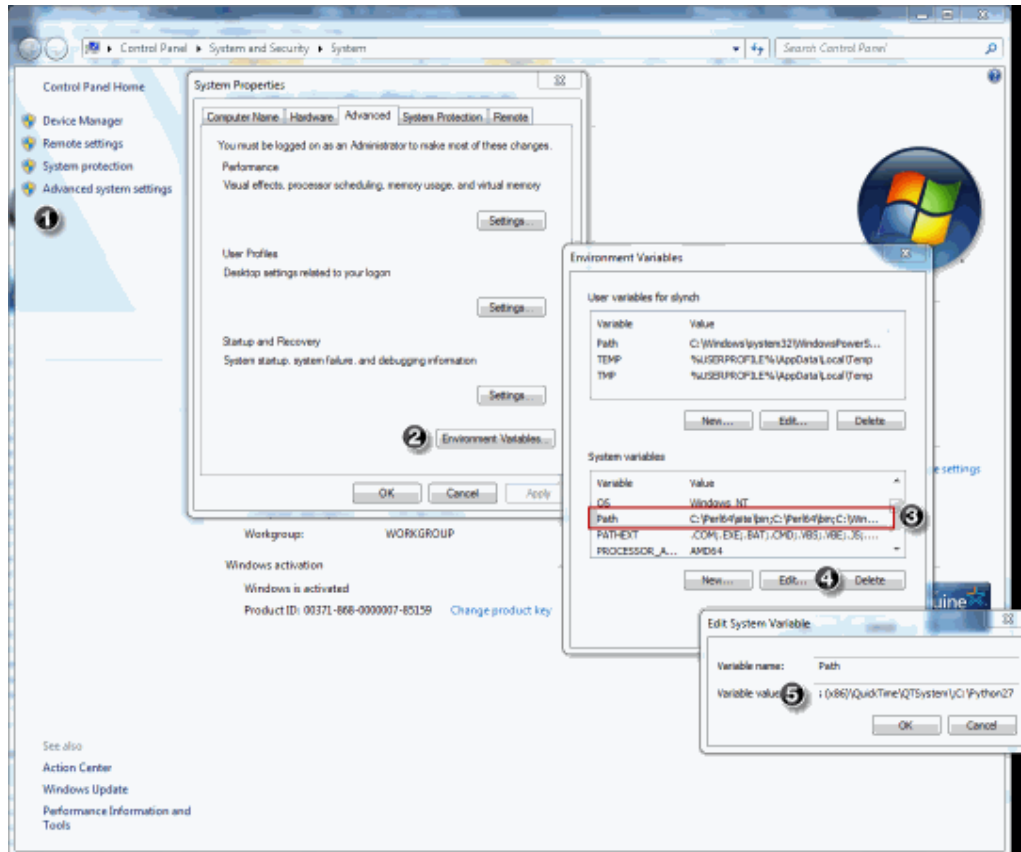

- (Windows 2003) Add C:\Python27 to your path environment variable

Add C:\Python27 as an additional path to either your System or local Path environment variable. Above is showing how on a Windows 2003 server to change the system path variable. Right click on "My Computer"

1. Click on Advanced
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

- (Windows 7) Add C:\Python27 to your path environment variable

Add C:\Python27 as an additional path to either your System or local Path environment variable. Above is showing how on a Windows 7 server to change the user path variable. Right click on "My Computer and choose **Properties**, then

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 2.7.4

Installation Instructions

- Download and run the fcws120035.msi installer
- 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.

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

Contents:
- "fcws" is a link to the "<PythonLib>\SitePackages\fcws_12.0.035-win-py2.7.egg" package directory.
- "startfcws.bat" is a preconfigured startup script for starting the FirstClass Web Services. This script can be customized and does not get overwrote by upgrades.
- "PkgArchives" is used during upgrades 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 'fcws.cfg' file located in the "C:\FirstClass Web Services\fcws" folder.
   This file is used to configure which FirstClass servers your instance of Web Services can connect to and on which FCP port.
   - **FCSPort** - The FCP port over which FCWS will connect to your FirstClass Server
   - **ValidFCServers** - A ';' delimited list of <Server Label>,<Server Address> pairs. The label will be displayed to the user at the login screen in a drop down list only if more than one server option exists.   Example: testServer,192.168.1.54;FirstClass,fc.mydomain.com
     NOTE 1: If there is only one entry in the list, the drop down list on the login screen will be suppressed
     NOTE 2: If administrators wish to make their system content available via the new API, one of the entries in the list must be **default.** For Example:
     ValidFCServers=default,fc.mydomain.com;testServer,192.168.1.54 or simply
     ValidFCServers=default,fc.mydomain.com if single server
   - **WebSocketEnabled** - This option should currently be set to 1 if running the CherryPy web server, and 0 if running an Apache web server.
   - **LoggingLevel** - Current values are: DEBUG,INFO,WARN,ERROR,CRITICAL,FATAL

     fcws.cfg sample:
     FCSPort=510
     ValidFCServers=default,fc.mydomain.com
     WebSocketEnabled=1

2. The 'startfcws.bat' file located in the "C:\FirstClass Web Services" folder.
   This file is currently in place to start the installed web server with the proper configuration.
   With the default installed file it should start a web 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 fcws 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.

   Note: On some Windows OS's for the web server to initialize properly, it may be necessary to
   set a specific IP or domain name, rather than using the default of 0.0.0.0. See below for
   details on setting this.

   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 'startfcws.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

   C:\python27\python.exe "C:\FirstClass Web Services\fcws\cherry.pyc" -H 192.168.1.111 -s
   8443 -ep 8000

C:\python27\python.exe "C:\FirstClass Web Services\fcws\cherry.pyc" --host=192.168.1.111 --sslport=8443 --enablehttp --httpport=8000
Note: On pre Windows 2008 server installations, the path above to the cherry.pyc file is expanded to the actual path through the Python site packages.

Starting & connecting to FirstClass Web Services:

For starting FirstClass Web Services, you can double click the 'startfcws.bat' file located in the "C:\FirstClass Web Services" folder.
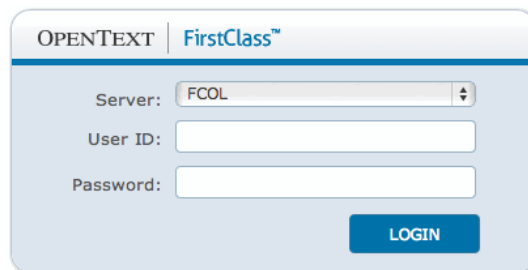Pressing CTRL+C will stop the FirstClass Web Services.

Connecting to your FCWS server.
    Open a web browser and type in the URL which points to the machine on which you installed FirstClass Web Services
    Example: http://www.mydomain.com or if you configured it to start on an alternate port; http://www.mydomain.com:8080
    If all has gone well, you should be presented with a log on screen such as the following. Note if only one server is configured as a valid server you will not see a Server choice on the login screen.

5.2.4.2   Mac OSX

Installation Overview

The fcws_12.0.035-osx_installer.dmg file is for installing/updating the FirstClass Web Services on OS X.

Installation Prerequisites (one-time requirements):

- Python 2.6 is required. If you are running OS X 10.7 - 10.8.x, it should already be 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

- 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.

Installation Instructions

- Download the disk image (fcws_12.0.035-osx_installer.dmg) and extract it on your Web Services machine.
- Once the image is mounted (e.g. fcws_12.0.035-osx_installer), execute the "installer.command" by double clicking it.
- 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 Web Services" folder is created at "/Library/FirstClass Web Services".
   Contents:
   - "fcws" is a link to the "<PythonLib>\SitePackages\fcws_12.0.035-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 during upgrades 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 'fcws.cfg' file located in the "/Library/FirstClass Web Services/fcws" folder.
      This file is used to configure which FirstClass servers your instance of Web Services can connect to and on which FCP port.
      - **FCSPort** - The FCP port over which FCWS will connect to your FirstClass Server
      - **ValidFCServers** - A ';' delimited list of <Server Label>,<Server Address> pairs. The label will be displayed to the user at the login screen in a drop down list only if more than one server option exists.   Example: testServer,192.168.1.54;FirstClass,fc.mydomain.com
        NOTE 1: If there is only one entry in the list, the drop down list on the login screen will be suppressed
        NOTE 2: If administrators wish to make their system content available via the new API, one of the entries in the list must be **default.** For Example:
        ValidFCServers=default,fc.mydomain.com;testServer,192.168.1.54 or simply
        ValidFCServers=default,fc.mydomain.com if single server
      - **WebSocketEnabled** - This option should currently be set to 1 if running the CherryPy web server, and 0 if running an Apache web server.

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

  fcws.cfg sample:
  FCSPort=510
  ValidFCServers=default,fc.mydomain.com
  WebSocketEnabled=1

2. The 'startfcws.command' file located in the "/Library/FirstClass Web Services" folder.
   This file is currently in place to start the installed web server with the proper configuration.
   With the default installed file it should start a web 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 fcws 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 'startfcws.command' 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

/usr/bin/python2.6 "/Library/FirstClass Web Services/fcws/cherry.pyc" -H 192.168.1.111 -s 8443 -ep 8000
/usr/bin/python2.6 "/Library/FirstClass Web Services/fcws/cherry.pyc" --host=192.168.1.111 --sslport=8443 --enablehttp --httpport=8000

Starting & connecting to FirstClass Web Services:

For starting and stopping FirstClass Web Services, you will find a 'fcwsctl' control script under /usr/sbin.
For example, you can start the FirstClass Web Services with '/usr/sbin/fcwsctl start',
and stop the FirstClass Web Services with '/usr/sbin/fcwsctl stop'.
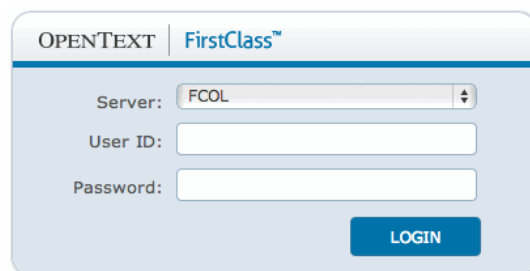Check status with '/usr/sbin/fcwsctl status'.

Connecting to your FCWS server.
Open a web browser and type in the URL which points to the machine on which you installed FirstClass Web Services
Example: http://www.mydomain.com or if you configured it to start on an alternate port; http://www.mydomain.com:8080
If all has gone well, you should be presented with a log on screen such as the following. Note if only one server is configured as a valid server you will not see a Server choice on the login screen.

5.2.4.3   Linux

Installation Overview

The fcws_12.0.035-linux_installer.tgz file is for installing/updating the FirstClass Web 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.

OPENTEXT

Installation Prerequisites (one-time requirements):

- 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 '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

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 (`fcws_12.0.035-linux_installer.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 fcws_12.0.035-linux_installer.tgz`
- "cd" into installer package directory as in the below example.
      `cd fcws_12.0.035-linux_installer`
- 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.
      `./installer`
- 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_12.0.035-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 during upgrades 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 'fcws.cfg' file located in the "/opt/FirstClass Web Services/fcws" folder.
   This file is used to configure which FirstClass servers your instance of Web Services can connect to and on which FCP port.
   - **FCSPort** - The FCP port over which FCWS will connect to your FirstClass Server
   - **ValidFCServers** - A ';' delimited list of <Server Label>,<Server Address> pairs. The label will be displayed to the user at the login screen in a drop down list only if more than one server option exists.   Example: testServer,192.168.1.54;FirstClass,fc.mydomain.com
     NOTE 1: If there is only one entry in the list, the drop down list on the login screen will be suppressed
     NOTE 2: If administrators wish to make their system content available via the new API, one of the entries in the list must be **default.** For Example:
     ValidFCServers=default,fc.mydomain.com;testServer,192.168.1.54 or simply
     ValidFCServers=default,fc.mydomain.com if single server
   - **WebSocketEnabled** - This option should currently be set to 1 if running the CherryPy web server, and 0 if running an Apache web server.
   - **LoggingLevel** - Current values are: DEBUG,INFO,WARN,ERROR,CRITICAL,FATAL

     fcws.cfg sample:
     FCSPort=510
     ValidFCServers=default,fc.mydomain.com
     WebSocketEnabled=1

2. The 'startfcws.sh' file located in the "/opt/FirstClass Web Services" folder.
   This file is currently in place to start the installed web server with the proper configuration. With the default installed file it should start a web 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 fcws 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 'startfcws.command' 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

/usr/bin/python2.6 "/opt/FirstClass Web Services/fcws/cherry.pyc" -H 192.168.1.111 -s 8443 -ep 8000
/usr/bin/python2.6 "/opt/FirstClass Web Services/fcws/cherry.pyc" --host=192.168.1.111 --sslport=8443 --enablehttp --httpport=8000

Starting & connecting to FirstClass Web Services:

For starting and stopping FirstClass Web Services, you will find a 'fcwsctl' control script under /usr/sbin.
For example, you can start the FirstClass Web Services with '/usr/sbin/fcwsctl start',
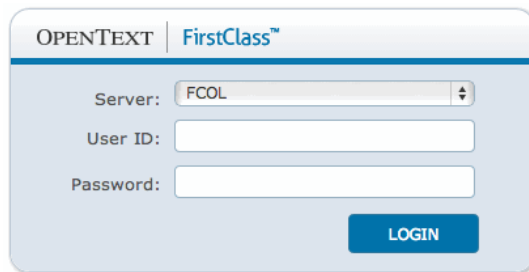and stop the FirstClass Web Services with '/usr/sbin/fcwsctl stop'.
Check status with '/usr/sbin/fcwsctl status'.

Connecting to your FCWS server.

Open a web browser and type in the URL which points to the machine on which you installed FirstClass Web Services

Example: http://www.mydomain.com or if you configured it to start on an alternate port; http://www.mydomain.com:8080

If all has gone well, you should be presented with a log on screen such as the following. Note if only one server is configured as a valid server you will not see a Server choice on the login screen.

5.3 Patches

The following patches must be applied to FirstClass 12. OpenText also recommends that you check FirstClass Online (FCOL, fc.firstclass.com) for any patches or documentation updates that may have been posted after this release.

- N/A

6 Fixed Issues

This section provides information about past issues that have been fixed in this release.

6.1.1 Core Server

- Fixed audit crash when UserProfile could not be loaded.
- Fix for crash during authentication caused by malformed voucher
- Fix for crash when adding watch.
- Crash fix relating to a NULL dereference
- Crash fix relating to search indexing
- Fix for memory leak related to intertask message queue
- Don't check a user's password compliance for IMAP and POP connections.
- Fix auto reply loops when using receive mail rule.
- MailRules: Initialize the default body searches to the correct string check.
- MailRules: NULL terminate the body prior to appending it to the body of a pager message.
- Transition from Polite to Fast shutdown when the last user logs out. (Fixes polite shutdowns not shutting down)
- Fix to prevent users from physically moving items into a trash can via "Move to Folder" option.
- Validate From name prior to attempting to deliver message. Use session as the "From" when invalid and message to console when no session.
- Ensure all default values for an unlicensed server remain by not allowing further "upgrades". Avoids license violations.
- Confirm user group licensing during all upgrades.
- UDP resolver on Windows returns correctly ordered IPv4 addresses - Fixes notifier issue
- Corrected check for max session logins allowed.
- Correction to the accounting of how many messages are in each queue
- Avoid multiple message reque requests by tracking IS updates and suppressing unnecessary notifications.
- Added the new Web Services platform identifier (plWebServices) in place of the DOS platform (plDOS).
- Fix to ensure proper message is deleted via iOS client.
- Fix to prevent relaunch of Internet Services executable when already running on Refresh or change in Start Automatically setting
- Statistics and logfiles now support file sizes greater than 2GB.

Audit:
- Allow moved items to be removed during Protected and Single audits

Batch Admin:
- Whitespace characters are now allowed at the beginning of a comment line.
- Fix for issue that could cause the POPULATE command to fail.
- POPULATE will not include conferences by default and will sort the list on close. To include conferences you must now use the +C option

Calendar:
- Fix for calendar events deleting same named items during a resend.
- Fix to finding the next calendar event. Bug discovered when repeating event started at midnight.
- Fix for creator of calendar events changing after an edit is made.
- Change to only place personal calendar subscriptions into the target account's calendar as a punch through calendar.
- Fix for issue where inviting someone from a resource calendar and their calendar is locked down, an NDN was returned.
- When moving a group calendar from the users calendar, make it approved if the user has approve rights on the destination.
- Send cancellation messages to external recipients when they are removed from events
- Fix for drop through case which caused events not to be updated in participants' calendars when modified.
- Fix for requesting an open of a user's calendar.
- Update calendar with accepted event from the mailbox.
- Added timezone correction for external IS calendar subjects
- Fix for "All Mailboxes" mail rules causing all calendar invites to be rejected.
- Fix for imported calendar items with no From name.
    - When a user pressing Decline for on of these items already in the system, a message will open with the subject "Decline: .... " and the TO field blank.
    - When a user opens an imported calendar event and addresses it to someone and sends it, they will get a NDN with error 1007, object damaged.

FirstClass Communities:
- Fix to allow deleted containers to have their watches checked during audit.
- Fixed removal of watches to operate on all watches instead of just the first
- Send Buddy List updates to the desktop of any user subscribed to a user's SharedDocs at logon and last logoff

RSS Feeds
- Rework to use a request interval instead of an absolute time.
- Initial fetch will now return all available feed items.
- Adjusted the dumping of RSS feeds to show dates in a readable format.

```
Dump of 2 RSS Feeds:

OWNER: [7709:191300] Daily Feeds
PUBLIC: http://www.tsn.ca/datafiles/rss/Stories.xml
LAST POST: Thursday, June 14, 2012 12:25:19 PM
NEXT REQUEST: Thursday, June 14, 2012 4:07:57 PM
INTERVAL: 5 minutes

OWNER: [7709:191118] Daily Feeds
PUBLIC: http://feed.dilbert.com/dilbert/blog
LAST POST: Wednesday, June 13, 2012 2:00:01 AM
NEXT REQUEST: Friday, June 15, 2012 8:52:23 AM
INTERVAL: 5 minutes
```

Search:
- Fix for classic search when defaulted from indexed search to still display the window title.

Unread Tracking:
- Fix for random reflagging of all containers in a user account.
- Additional fix to address unread tracking issues.
- Crash fix relating to an unread tracking issue.
- Improved the check for personal containers prior to purging unread tracking entries. Fixes an issue where a single container could repeatedly become unflagged for a user account.
- Better support for unread tracking of shared personal containers.

Who's On Line:
- Performance enhancement: New clients will no longer receive complete list repeatedly. Once the initial list has been received only updates will be sent.
- Names will only appear once regardless of how many connections exist.

Archive Services:
- Numerous archive services issues are being addressed which will be announced once we have a 12.0 server version approved for use as an archive server. Please note this release build 1264 should not currently be used as an Archive server.

6.1.2 Internet Services

- Suppress altbody data when output is set to text/plain only.

OPENTEXT

- Added support for retrieving unread messages only (BB/Android clients).
- Suppress file not found error messages when rolling the SMTP log.
- Check for bad pointers when expiring DNS records
- Fix issue when delivering to non-responsive MX host with only 1 IP record.
- Fixed crash processing RSS feed item if there is no date attribute.
- Fixed "<X-FC-FIELD fieldid STRING> issue with 2 byte characters".
- Fixed crash trying to decode misidentified BinHex attachment.
- Fixed mangled JSON object when Android client tries to login when Chat has been disabled.
- Fixed issue where the latest Android client can't log in if the Admin has not enabled saved passwords.
- Fixed CSS parsing issues that caused some forward messages to display a blue background.
- Fixed Japanese outbound message crash.
- Obey the Include sent messages checkbox on the Advanced Mail/IMAP4 tab.
- Fixed crash if the feed item doesn't have a link.
- Fixed sending blank message body when Outbound/Message body is set to Plain Text, and there is only AltBody (HTML) content (no FC content.)
- Fixed problem where the smtp.log is written to the Windows system32 directory when IS is started as a service, plus better handling of full paths in the Active/Archive log file name fields.
- Fixed a case where the end of HTML message body input processing wasn't done, which had the effect of causing the IS mailrules to run against an empty body.
- Fixed crash when resolving travobject.com multiple times (after the IP record timeout but before the main record timeout.)
- Fixed an IMAP FETCH BODY[n] issue where a line in the body consisting of just -- would cause the wrong data to be sent.
- Fixed wrong UTC to local timezone adjustment for text/calendar date/times coming from Google calendar.
- Prevent IMAP clients from being disconnected prematurely if they only call IDLE/NOOP periodically.
- Fix for web search returning 1081 if folder has a space or special character in the name.
- Fixed a couple of problems handling multipart/alternative messages when the Inbound HTML handling is set to Add as Attach.
- Fix crash doing reverse IP lookups when Advanced DNS:General:Max cache entries is set to zero.
- Fixed error parsing IP mask with four wildcards and a domain name, e.g.: *.*.*.*.sample.com.
- Changed the behaviour of IMAP STORE FLAG \Seen and STORE +FLAG \Seen on messages with the Unread flag set to open the message instead of simply turning the Unread flag off. This will cause a Read history entry to be added by the server each time this sequence happens.
- Added exception handling around pSessionUserInfo operations (source of crashes that end in CHashTable::GetSlot).
- Changed "New public connection when one already exists?..." and "Mismatched public connection?..." log messages from level zero to level one.
- Added missing parameter in some level 4 HTTPScript log calls (would cause crashes)

- Fixed VTIMEZONE parsing to require either STANDARD or DAYLIGHT sections, not both.
- Fixed issues with messages that have nested MIME parts.
- When receiving a message with a text/calendar attachment, as opposed to a message where the text/calendar part is an alternative version of the text/plain or text/html parts, just add the text/calendar part as an attachment, instead of turning the message into a calendar event. Addresses the issue of the message body text being overwritten with the calendar event description text.
- IMAP: Fixed returning \Seen for unread messages when the \Seen flag wasn't set/reset.
- IMAP: Fixed flagging of deleted messages for IMAP clients.
- Fixed Global Signature embedded images turning into regular attachments.
- Set the peeking flag when FETCHing the UID (if it hasn't been explicitly turned off.) The FirstClass Classic, Enhanced, Mobile, and ScreenReader Web Clients rendered by Internet Services will continue to be supported.

The FirstClass Communities templates rendered by Internet Services will continue to be supported.

6.1.3 Client

- Fixed repeat settings disappear if you visit participants tab.
- Fixed Test Link function does not work.
- Fixed links in HTML Messages open in Internet Explorer, not default browser.
- Fixed Mailto links do not work on Internet Explorer.
- Fixed making FirstClass default browser during installation does not save in preferences afterwards.
- Fixed viewing Resume prompts for save without changes.
- Fixed opening Resume for user results in infinite loop.
- Fixed Find Previous not working properly.
- Fixed copy to multiple folders.
- Fixed 10.8 client install Gatekeeper warning.
- Fixed UDP: Can't connect via domain name.
- Fixed Spell Check - missing lexicon file default behavior.
- Fixed client ignores system date formats.
- Fixed can't save Voice Greeting.
- Fixed viewing signature of a user as an Admin doesn't work.
- Fixed copy to multiple folders.
- Fixed FCCTEMP does not get deleted when extended characters are used.
- Fixed Chat shows server time on time stamps, should show in local time.
- Fixed shared calendar events print with wrong creator info.
- Fixed ICS Import: Repeat until date not followed.

- Fixed long FROM field printed cuts off date.

- Fixed printing calendar in Day View issue.
- Fixed issue printing message from Internet address.
- Fixed printing: right side of header and footer cutoff.
- Fixed printing HTML email adds a blank page at end.
- Fixed printing HTML emails results in blank pages.
- Fixed HTML email prints extra page or blank body.

- Fixed Import: UTF-8 issue.
- Fixed VCF import issues. "TYPE" not recognized, UTF-8.
- Fixed stuck in Chinese input way if switch between CN and US.

- [Mac OSX] MAC installer Certificate not-trusted issue.

6.1.4 Archive Server Features

Ongoing maintenance enhancements and bug fixes.

6.1.5 Directory Services

Ongoing maintenance enhancements and bug fixes.

6.1.6 Voice Services

Ongoing maintenance enhancements and bug fixes.

6.1.7 Synchronization Services

Ongoing maintenance enhancements and bug fixes.

6.1.8 FCAS Applications

Ongoing maintenance enhancements and bug fixes.

6.1.9 Mobile for iOS

Ongoing maintenance enhancements and bug fixes.

6.1.10 Mobile for BlackBerry

Ongoing maintenance enhancements and bug fixes.

6.1.11 Mobile for Android

Ongoing maintenance enhancements and bug fixes.

6.1.12 Designer

Ongoing maintenance enhancements and bug fixes.

6.1.13 Log Analyzer

Ongoing maintenance enhancements and bug fixes.

7 Known Issues

The following known issues exist in this release.

7.1 Core Server

- FCAS build versions equal to or greater than 4098 up to but not including 4524 are not supported with this server build.
- FCAS build versions prior to 3243 are not supported with this server build.

7.2 Internet Services

- The POP3 and IMAP servers do not support attached FC objects.

7.3 Web Services

- Support for PIM-less users is not included in this initial release but will follow soon.
- Can't delete own pulse entries.
- Preferences: Handheld Devices: Wipe Status not functioning.
- Preferences: Forward to field doesn't display entries after close.
- Directory Matching: Tab doesn't work after cancel.
- Group Calendar: Calendar within a Conference can't create repeating events.
- File Storage: Upload File button doesn't work.
- Better draft visual clues (Draft Icon will stay).
- Community: Wiki order in Feed tab.
- Reply message field focus (should be in Body not subject).
- FCP Links not working.
- Limited Opera browser support.

8 Contact Information

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