

FCWnx 7.7 Release Notes



UTC Fire & Security

A United Technologies Company

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Introduction

Note: A new license is required for all FCWnx 7.7 installations, including new installations and upgrades.

For installation instructions, refer to the *Facility Commander Wnx 7.7 Installation Manual* (Professional, Enterprise, or Global Edition) included on the Facility Commander Wnx Installation DVD and on the Documentation CD.

Included in your shipment

The following CD/DVDs are included in your Facility Commander Wnx media kit:

FCWnx 7.7 Software Installation DVD: Contains installation software for FCWnx 7.7. Also contains basic training demonstration modules and Application Program Interface (API) tools.

The DVD also contains currently available FCWnx Service Packs, Feature Packs, and/or Hot fixes as well as the latest PXNplus, DirecDoor, and ACUXL controller firmware files.

FCWnx 7.7 Video Drivers DVD: Contains separately licensed third-party video drivers optionally supported by FCWnx. UTC Fire & Security video drivers are standard and are automatically installed from the FCWnx Software Installation DVD for your convenience.

FCWnx 7.7 Microsoft Updates DVD: Contains Microsoft product updates.

Documentation CD: Contains the latest manuals for UTC Fire & Security products.

FCWnx 7.7 system requirements

FCWnx 7.7 is supported in the following system configurations:

Table 1: FCWnx 7.7 Product Configurations

Server Windows OS	Client Windows OS	SQL Server Database
Professional Edition		
Win XP SP3 (P) 32-bit	Win XP SP3 (P) 32-bit	2008 Express SP1 32-bit
Win 7 (U/P/E) 32-bit	Win 7 (U/P/E) 32-bit	2008 Express SP1 32-bit
Win 7 (U/P/E) 64-bit	Win 7 (U/P/E) 32-bit or 64-bit	2008 Express SP1 64-bit
Enterprise Edition		
Win 2008 Server SP2 (S/E) & Win 2008 Server R2, 32-bit	Win XP SP3 (P) 32-bit	2008 SP1 (S/E) 32-bit & 2008 R2 32-bit
	Win 7 (U/P/E) 32-bit	
Win 2008 Server SP2 (S/E) & Win 2008 Server R2, 64-bit	Win XP SP3 (P) 32-bit	2008 SP1 (S/E) 64-bit & 2008 R2 64-bit
	Win 7 (U/P/E) 32-bit or 64-bit	
Global Edition		
Win 2008 Server SP2 (S/E) & Win 2008 Server R2, 32-bit	Win XP SP3 (P) 32-bit	2008 SP1 (S/E) 32-bit & 2008 R2 32-bit
	Win 7 (U/P/E) 32-bit or 64-bit	
Win 2008 Server SP2 (S/E) & Win 2008 Server R2, 64-bit	Win XP SP3 (P) 32-bit	2008 SP1 (S/E) 64-bit & 2008 R2 64-bit
	Win 7 (U/P/E) 32-bit or 64-bit	

Note: FCWnx Imaging clients must run in a 32-bit environment and the operating system must be installed on the C drive.

Recommendations for Media Server:

- Minimum 6 GB RAM and 64-bit operating system to host more DVRs

Please check with your sales engineer to properly configure your application servers, communication servers, media servers, and clients to optimize performance for your specific configuration.

VSC 4.4 is supported in the following system configurations:

- VSC Master Station and VSC Redundant Station:
 - Windows XP Pro SP3
 - Windows Vista Business Edition, 32-bit, SP2
 - Windows 7 Professional Edition, 32-bit and 64-bit
 - Windows 2008 Server Enterprise and Windows 2008 Server Standard Edition, 64-bit, R2

- VSC Client Station:
 - Windows XP Pro SP3
 - Windows Vista Business Edition, 32-bit, SP2
 - Windows 7 Professional Edition, 32-bit and 64-bit
 - Windows 2008 Server Enterprise and Windows 2008 Server Standard Edition, 64-bit, R2

Note: When FCWnx is licensed for VSC and when VSC and FCWnx are installed on the same machine, install an operating system that is supported by **both** products. Refer to the *FCWnx 7.7 with VSC Setup Guide* for details. In all other cases, the FCWnx system requirements detailed in Table 1 on page 4 and in the *FCWnx Installation* manuals apply.

New system features

FCWnx 7.7 provides the following enhancements:

- Integration of the Video Security Center (VSC)

The VSC is responsible for configuring VOS-based video and storage devices, and assigning them to FCWnx facilities and media servers. VSC 4.4 integration is tested for use with FCWnx 7.7 Enterprise and Global Edition systems only.

Note: Please refer to the *FCWnx 7.7 with VSC Setup Guide* for information on integrated operation, including instructions on configuring FCWnx 7.7 and VSC, synchronizing the databases, assigning video and camera equipment to FCWnx hosts and facilities, and impacts on FCWnx system behavior when integrated with VSC.

- Support of VOS 4.4

The support of VOS 4.4 devices brings the support of PSIA IP cameras (UltraView, TruVision and third-party IP cameras) and non-PSIA IP cameras (UltraView IP cameras and third-party).

This support of IP cameras includes different camera types from standard resolution up to HD resolution (up to 2 Mpx) and from fixed cameras to PTZ cameras in different shapes (brick, dome, etc).

VOS 4.4 also provides a robust IP camera recovery mechanism in case of network service disruption.

With the VSC 4.4 integration and support of VOS 4.4 devices, FCWnx 7.7 is now also capable of supporting:

- Multi-cast video
- Multi-channel IP audio
- Multi-streaming (fps and resolution)
- Video authentication (only on FCWnx systems with VSC license)
- Video tagging with access control event information
- Advanced video forensic tools (powerful video recording search criteria)
- Access control and video databases synchronization (only on FCWnx systems with VSC license)

Support for TVR30 and TVR60 with VMC license.

A single Media Server supports hosting a maximum of 600 devices (VOS-based devices; cameras are not to be included in this number). However, the total channel count should not exceed 1500. Please contact Sales Support for detailed information on the system requirements (e.g., RAM) necessary to support this number of devices.

Application notes

Installing FCWnx or applying Service Packs/Feature Packs

When installing FCWnx or applying an FCWnx Service Pack on any computer, you must be logged on with a Windows user account (local or domain) that is a member of the Administrators group. The Administrators group must have permission to apply required registry changes (full permission control).

Note: The recommended installation for a workgroup environment is to use a common Windows user account and password with local administrator permissions on all computers. This allows the remote FCWnx client installations to register their license on the server.

To install the FCWnx application or an FCWnx Service Pack/Feature Pack on any National Language Support (NLS) operating system that does not have a local "Administrators" group created in English by Windows, a fully permissioned Administrators group must be created.

General

After upgrading to FCWnx 7.7, you must make sure that the correct Windows User Name password is entered on the Preferences form, or you will get an error when trying to flash the controller.

If upgrading from FCWnx 7.0 to 7.7, FCWnx 7.0 Service Pack 3 must be applied before performing the database conversion.

Microsoft no longer includes WinHlp32.exe as a component of the Windows operating system. This may cause problems for customers who want to upgrade to Windows Server 2008, but still rely on the 32-bit .hlp files. The Microsoft WinHlp32.exe for Windows Server 2008 is available on the Microsoft Updates CD included with your media kit.

FCWnx 7.7 is not supported on Windows Server 2000 or SQL Server 2000.

Microsoft Outlook Exchange is the only recommended email server for use with FCWnx. Disregard any statements in the *FCWnx User Manual* and online Help regarding other types of email servers.

FCWnx 7.7 licensed for VMC is supported on Citrix Presentation Server 4.5 with Rollup Pack 6 and Hot Fix PSE450R06W2K3001. Please contact Technical Support for other supported Citrix products.

FCWnx 7.7 licensed for VSC is supported on Citrix Presentation Server 4.5 with Rollup Pack 6 and Hot Fix PSE450R06W2K3001 only when the installation does not require having VSC installed on the same machine. VSC does not support installation on a thin client.

FCWnx allows configuring the log file path used by the FCWnx Diagnostics service. The path information is in the SQL Server database. If the FCWnx Diagnostics service starts before the SQL Server service, FCWnx uses the default log file located in the `GE\FCWnx\Logs` folder.

Running FCWnx

As part of the initial FCWnx installation, a local SPAdmin group is created on each machine that FCWnx is installed on. A default local Windows user account "secure" is also created and assigned membership to the local SPAdmin group. This allows you to log on to the Windows "secure" user account and then run the FCWnx application.

To open and operate FCWnx on any computer, the Windows user account must be a member of the SPAdmin group, but that Windows user account is not required to be a member of the Administrators group.

Firewall

The VSC installer turns the firewall OFF. To turn the firewall ON, please refer to section “VSC firewall configuration” in the *FCWnx 7.7 with Video Security Center (VSC) Setup Guide*.

Controller support

FCWnx 7.7 supports the following controllers and firmware:

Table 2: Controller support

Controller	Firmware version
ACURS, ACU2X, ACUXL,	ACU firmware 9.00.05 or newer
ACUXLplus	Micro firmware 120.00.00 or newer
M5, M3000, and Micro/2000 using a PX, PXN, or PXNplus CPU board	Micro firmware 121.00.01 or newer
DirecDoor	Micro firmware 121.00.01 or newer

Camera support (FCWnx systems with VMC license)

The number of cameras supported by the video devices listed below has been enhanced. To take advantage of these additional cameras, you must create new video equipment records when upgrading from FCWnx 7.5 and earlier to FCWnx 7.7. The additional cameras will not be created for existing video equipment records during an upgrade.

- Ultraview Recorder 40 24 → 32 cameras
- Ultraview Recorder 60 32 → 72 cameras
- Pelco DX8000 8 → 16 cameras

Global edition

During FCWnx Global edition installation, if you receive a User Account Control popup stating Unknown Publisher, select Yes to acknowledge the warning and continue the installation.

Credential aliasing is not supported for Global installations. During installation, always select “Do not use aliases.”

M-Series Controller Parameter Block configuration: M5, M2000, and M3000 PXNplus based controllers and DirecDoor controllers can be flash upgraded from within FCWnx using the Controller Monitor. Although Parameter Block information can also be viewed using the Flash Controller option from the Controller Monitor, that information can only be edited for reconfiguring these controllers directly using the browser-based integrated configuration tool on the controllers.

If a Micro type controller is created in FCWnx, but the actual controller hardware is configured for ACU protocol (FCWnx in ICT), communications will fail. Likewise, if an ACU type controller is created in FCWnx, but the actual hardware is configured for Micro protocol (Secure Perfect in ICT), communication will fail. In these cases, the Controller Monitor will simply show the controller in error state since there is no way to determine if the communication error is due to configuration or corrupt data.

Elevator controller configuration: When configuring an elevator controller in FCWnx, always create a new record. Do not reconfigure an existing ('non-elevator') controller into an elevator controller. Likewise, do not reconfigure an elevator controller into a non-elevator controller.

Navigation tree behavior in VSC Security Center vs. VMC Console

When the user double-clicks the "+" icon of the navigation tree in the VSC Security Center, the navigation tree expands and all cameras are displayed.

When the user double-clicks the "+" icon of the navigation tree in the VMC Console, the navigation tree expands and collapses immediately, i.e., it displays in the original position.

Batch printing and encoding credentials

Please refer to Chapter 8 of the *FCWnx 7.7 User Manual* for detailed instructions on "Batch printing and encoding credentials" and "Batch printing and encoding credentials with multiple fields encoded as expressions".

When creating credential design layouts with fields to be evaluated as expressions, then any default or previously created dynamic text fields in existing credential designs must be removed and re-added using the procedure provided in the User manual.

Backup Clients

The *Backup Clients Assignment Dialog Box* dialog box allows you to select and assign backup clients associated with the selected client. This list includes only clients available for assignment by the current operator and defined as a client that does not exceed the limit of controllers and DVRs allowed. In FCWnx 7.7 the total number of controllers cannot exceed 128. The total number of DVRs cannot exceed 64 for systems with VMC license. The total number of DVRs cannot exceed 600 for system with VSC license.

Known issues

General

- If .NET Framework 3.5 (with no service pack) is installed on your system, you must uninstall it and all versions of .NET Framework before installing FCWnx 7.7, which installs .NET Framework 3.5 SP1.
- Some graphics cards may have problems rendering video for UltraView EVP, SymSuite, and TruVision devices. Verify that the graphics card driver is upgraded to the latest available version. If the latest video card driver is installed and there are still issues, reduce the hardware acceleration feature for the graphics card (if applicable).
- When configuring a Pelco video device, the device's time zone must be set to GMT time.
- The Windows 7 operating system has the following limitations rendering video for UltraView EVP and SymSuite devices:
 - Graphic cards may not function, even if the latest drivers are installed (such as NVIDIA QUADRO FX 500).
 - Systems with two or more graphic cards may not function.
- If you are using multiple network interface cards (NICs) for FCWnx-related use:

On Windows 7 and Windows 2008, make sure that your selection is the same network profile for each NIC. When attaching your NIC to a new (not previously configured) network, a popup window

opens asking whether this new network is Home, Work or Public. Make sure you choose the same for both NICs so that when FCWnx is installed and SecurityCnfg is run, the profile will have the correct FCWnx ports open.

The Network Interface Cards must be configured for static IP addresses. FCWnx does not support multiple NICs configured for DHCP.

- For M5 PXN controllers, when a schedule is changed, the controller will not use the new schedule until the start of the next schedule interval.
- When the database is converted during an upgrade procedure, the *Convert Database* window shows the *Back* button as still active after the database has already been converted. If the *Back* button is pressed, the *"Collect login information"* window is shown. If the *Next* button is pressed from here, an *Application Error* message is displayed. Do not click the *Back* button after the database conversion is completed.
- If a time schedule is created and assigned on the Area form to Arm by schedule, the Activity Monitor inconsistently shows *"Area Disarmed by Schedule"* events after the end of the time schedule. The disarm messages in the Activity Monitor stop only if the schedule is removed from the area or the schedule itself is deleted.
- In FCWnx Global Edition, the *Client Region Failover* check box on the Client tab of the Client form is not grayed out as stated in the *FCWnx User Manual*.
- While upgrading a Global System from FCWnx 7.6 to 7.7, an error occurs before database conversion on the regional server. The error states: *"Errors encountered during conversion. Please see CreateDatabaseLog.txt in the logs folder for details."* This error is to be ignored; there is no loss of functionality.

Installing GemAlto drivers

After installing the GemAlto external encoder drivers, the PC must be rebooted. If the PC is not rebooted, a "Cancelled" status message is returned to the Print Credential Queue when attempting to encode a credential.

UltraView EVP and SymSuite devices (FCWnx systems with VMC license)

In FCWnx 7.5.1 and newer, support has been increased to a 4x4 display (16 streams at full fps/resolution). While it is possible to process more streams of video based on reducing the frame rate and resolution, when the system is used to process more than 16 streams, it will continue to consume system resources until it reaches the system maximum (dependent on configuration and resources). Exceeding the system resources available for video processing will cause the video client to disappear or lock up.

Log off and log on will restore the video session, but will require reducing the total number of simultaneously viewed streams to maintain stability of the video viewer.

Evidence CD (FCWnx systems with VMC license)

Open a video console window before opening the *Create Evidence CD* option to be sure it displays in the correct language the first time the application is used.

The “*Send Files To: Windows CD Burning*” option does not function on systems using Windows 7.

To create an Evidence CD, select the “*Send Files To: Directory*” option to write the files to a local directory. Create the Evidence CD using a CD burning program such as Roxio.

The *Snapshot* tool does not work when files from the Evidence CD are copied to a local drive and the user plays the video.

When creating an Evidence CD, the *Notes* tab contains previously entered notes.

ACUXLplus - Multipanel Dialup

If more than two controllers are wired to the RS422 port, the modem on the controller will not pick up on dial from the host.

When more than one controller has a transaction to dial the host, the modems connect at the same time instead of sequentially.

Alarms under schedule

If the description for an alarm under schedule is changed during the schedule and the alarm is active, the alarm will lose its association with the schedule. Therefore, the description for an alarm under schedule should not be saved during the schedule period.

Single step reverse playback (FCWnx systems with VMC license)

When playing an MPC video clip using the single step reverse playback option, the video plays a single step forward. As a workaround, the user should pause the video clip, reposition it as necessary using the slider bar on the bottom of the video player, and then single step forward to view each frame as needed.

Flash updates

When initiating flash updates of multiple controllers via the Controller Monitor, all the selected controllers must be of the same type. You can have different controller types concurrently flashing, but the flash operation must be initiated by separately selecting each group of controller types.

For machines running Windows XP or Windows 2003

- You must be logged in with local administrator rights to run the SecurityCnfg utility.
- If the Firewall is selected ON, File and Printer Sharing on the Firewall Exceptions list must be enabled.
- Simple File Sharing is a feature in Windows XP that removes file sharing security options available in other versions of Windows. This setting must be disabled for FCWnx to operate successfully between servers and clients.

For machines running Windows 2008 or Windows 7

- You must be logged in as the local administrator to run the SecurityCnfg utility.
- You must be logged in with administrator rights to create databases and licenses.
- User logged into the machine must be part of the SPAdmin Group to run FCWnx.

- The automatic windows updates feature must be disabled during installation.
- If the Video Management Console (VMC) will be running on this computer, Windows Communication Foundation HTTP Activation must be enabled.
- Photo ID credentialing printers and image capture devices may not have compatible drivers for 64-bit operating systems.
- If the Firewall is selected ON, the following selections must be enabled in the Firewall Exceptions List:
 - File and printer sharing
 - Network discovery
 - Workgroup Only: Remote Administration
(The Remote Administration selection is not available in Windows 7 by default. Refer to your Window 7 documentation for details on enabling this selection.)
- Third-party video drivers are not compatible on machines running Windows 7 or 64-bit operating systems.

Micro Controllers only (PXNPlus and DirecDoor)

On the Reader tab of the Reader form, the reader's Physical Type must be set to "*Normal*" (not "*Credential and PIN Required*" or "*Credential or Keypad Entry*") to use the Reader Type Event Schedules to switch between physical types.

Launching a command prompt window

For Windows 7 and Windows 2008, if it is necessary to launch a command prompt window, always use the right-click "Run as administrator" option.

SQL installation warning on Windows Server 2008 R2 or Windows 7

There is a known installation warning when SQL Server 2008 is installed on a Windows 2008 R2 Server or SQL Express is installed on a Windows 7 system. Disregard the warning "*SQL Server version has known compatibility issues.*" and select Run Program.

Video

Video streaming quality is heavily dependant on the video card and available memory of the client machine. Two recommended video cards are the NVIDIA GeForce 9 Series or higher (with 512 MB or more of video memory) and the ATI Radeon HD 4000 Series or higher (with 512 MB or more of video memory).

For VSC, the minimum recommendation for video cards is "DirectX 9.0.c, HW 3D acceleration and Pixel Shader 2.0."

TruVision TVR 10, DVSRxU, TVR 60, and TVR 30 video devices (FCWnx systems with VMC license)

By default, these devices do not automatically notify the FCWnx video subsystem when an alarm occurs. The alarms and notifications must be set up and configured on the device. Refer to the device documentation on how to enable notification for the alarms/events in the table below. The tables below show the mapping of the device alarm/event types to the FCWnx alarm types.

Table 3: Mapping of video device alarms/events to FCWnx alarms

DVSRxU, TruVision TVR 10, and TVR 60 Alarms/Events	FCWnx Alarms
Sensor Alarm	Camera General Alarm
HDD Full	Video Device Disk Full
Video Loss	Camera Video Loss
Motion Detection	Camera General Alarm
HDD Not Formatted	Video Device Health Trouble
Failed to Read HDD	Video Device Health Fail
Mask Alarm	Camera Health Trouble

Table 4: Mapping of video device alarms/events to FCWnx alarms

TruVision TVR 30 Alarms/Events	FCWnx Alarms
Relay Alarm	Camera General Alarm
HDD Full	Video Device Disk Full
Video Loss	Camera Video Loss
Motion Detection	Camera General Alarm
HDD Setup Failure / Device offline	Video Device Health Fail
Failed To Read HDD	Video Device Health Trouble

For the TVR 10, DVSRxU, TVR 60, and TVR 30, if automatic adjustment of daylight savings time is configured both on the physical device and in the device definition in FCWnx, the time could be off by an hour in FCWnx. To fix this issue, only configure the automatic adjustment of daylight savings time in FCWnx, and do not configure it in the device itself.

For the TVR 10, DVSRxU, TVR 60, when playing recorded video from a device, the playback will continue only until the time when the search was initiated.

For the TVR10, DVSRxU, and TVR 60 video devices, DirectX9.0c or later must be installed, the driver for the display card must be installed for better rendering effect, and the Direct Draw Acceleration must be enabled to avoid poor resolution when numerous streams are displayed simultaneously.

It can be expected that the performance of the graphics card has direct influence on decoding or rendering of video.

TheTVR30 device takes around 1 minute 30 seconds to report a communication failure for the default poll interval and polling count (The default poll interval is 15 sec and the default poll count is 2). If the poll interval is changed to 5 sec and the polling count to zero, then a communication failure is reported in 45 sec. However, in case of a communication failure, the video window will show the black screen in 10 sec.

The wild card text search (for example, using "*" characters) is not supported in the text search of TVR30.

Note: For a list of currently supported video devices and capabilities, please consult your local UTC Fire & Security sales representative.

Known issues with workarounds and/or patches

The following issues are being addressed with patches that will be distributed through UTC Fire & Security Technical Support processes.

DeviceDateTime

When FCWnx is licensed for VSC, the DeviceDateTime for video related alarms on the FCWnx alarm monitor is reported at GMT without taking into consideration the timezone of video equipment.

SPManagersService failure

On FCWnx communication server machines, the FCWnx service *SPManagersService* grows in memory causing the FCWnx system to become non-operational. Furthermore, the *SPManagersService* may crash when it reaches the limit of allowed system resources. This can happen in the following scenarios:

- When an excessive number of alarms configured for video event tagging is generated (>10000 alarms per day)

and/or

- When a remote client workstation becomes disconnected from the network.

SPManagersService terminates unexpectedly

The *SPManagersService* terminates unexpectedly when removing alarms and readers from a security area (*Secure Area* form).

SPManagersService terminates on alarms from Multi-drop ACUs

On FCWnx communication server machines, the FCWnx service *SPManagersService* terminates when additional alarm traffic is generated from Multi-drop ACU controllers and the alarms are tagged with video event tagging.

FCWnx GUI terminates prematurely

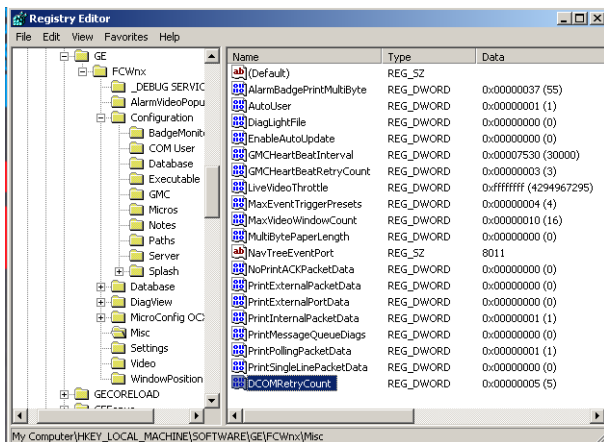
Selecting the *Disconnect* option from a remote Client Monitor terminates the FCWnx GUI prematurely and causes an error message.

Client services remain running after shutdown, even when auto shutdown is enabled

When exiting the FCWnx application from a client, the FCWnx services may not stop, and, as a result, the license for that client is not freed up. Perform the following workaround to resolve this issue:

1. Open Registry Editor on the FCWnx server machine (select Start > Run, and type "regedit").
2. Navigate to the correct path for your server's operating system:
 - On a 32-bit system, navigate to:
HKEY_LOCAL_MACHINE > SOFTWARE > GE > FCWnx > Misc
 - On a 64-bit system, navigate to:
HKEY_LOCAL_MACHINE > Wow6432Node > SOFTWARE > GE > FCWnx > Misc
3. Right-click on the right hand side and add a new key of type DWORD.
4. Name the new key "DCOMRetryCount" and set its data value to 5, decimal. See Figure 1 below.

Figure 1: Registry Editor



Contacting technical support

You can reach technical support by phone 8 a.m. to 7 p.m. EST, Monday through Friday.

North America
T 855 536 3573
F 561 998 6224

Asia
T 65 639 19314
F 65 639 19306

Australia
T 61 3 9239 1200
F 61 3 9239 1299

Canada
T 800 267 6317
F 613 737 5517

EMEA
T 48 58 326 22 40
F 48 58 326 22 41

Latin America
T 503 691 7294
F 561 994 6572

Email: rs-bctsupport@fs.utc.com

Web site: www.utcfireandsecurity.com