



Command . Control . Communicate

User Manual

Before installing and using this product, please read this manual carefully.

Be sure to keep it handy for future reference.



CMS and Event Server Software



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Chapter 1: Introduction

The DW® Command, Control, and Communicate (C3) Central Management Software (CMS) is a powerful and flexible remote monitoring software solution that allows users to individually view up to 256-sites from a single dashboard as follows:

- C3™ CMS: Extensive tools are provided for viewing video recorders, registering or importing sites, remote site management using Remote Setup, scheduling video backups, viewing status and device logs, and customizing video views.
- C3™ Event Server: The C3Event Server provides quick-link access to the following functions:
 - Dashboard
 - Live Event
 - Event Search
 - Event Window
 - Health Check
 - Report

C3 CMS supports DW standalone video recorders (DVRs and NVRs) as follows:

- The following DW models support full compatibility:
 - VMAX® A1 G4™ Series
 - VMAX® IP G4™ Series
 - VMAX® A1 Plus™ Series
 - VMAX® IP Plus™ Series
- The following legacy models support C3 CMS live video monitoring only:
 - VMAX A1 Series (2.1 MP)
 - VMAX 960H Series

Section 1: C3 CMS Prerequisites

Verify that the PC has the recommended specification before installing the C3 CMS software:

Minimum System Requirements

System Requirement	Windows	Macintosh
OS	Windows 7(64bit)	10.11 (El Capitan)
CPU	2 nd Gen Intel i3	MacBook Pro 13"(2.4G)
Memory	4GB	8GB
Video	Built-in Intel HD Graphics	IRIS Graphics
HDD	500GB~ 1TB	256GB~
Monitor Resolution	1920x1080 ~	2880x1800 ~
Max Channels	32	32

Recommended System Requirements

OS	Windows 10 Pro (64bit)	10.12 (Sierra)
Channels	Up to 144 Channels	Up to 288 Channels
CPU	8 th Intel Core i7-8700 (3.2Ghz) or higher	4 th Intel i5 (2.5Ghz) or higher (MacBook Pro 15")
RAM	32GB (Windows; Linux)	32GB (MAC)
Graphics Card	NVIDIA GTX 1060~ (Memory 3GB~) or comparable	Radeon R9 M370X ~ (Standard of MacBook external video)

Section 2: Verifying Video Recorders are Setup and Configured

Any video recorders that will be remotely viewed with the C3 CMS software must be setup and configured. If this has not been completed, obtain the appropriate installation and configuration documents from the DW website for detailed instructions: www.digital-watchdog.com/productdetail/C3_CMS/

****NOTE:** Video recorders can be modified by using the C3 CMS Remote Function.

Chapter 2: Installing the C3 CMS Software

C3 CMS is a free, optional software offered by Digital Watchdog for use with current VMAX standalone recorders. This software can be downloaded and installed to your personal computer from the [C3 CMS product web page](#).

Section 1: Download and Install C3 CMS

Use the following procedure to install the software:

- 1) Use the DW provided link to download the current version of the C3 CMS Software.

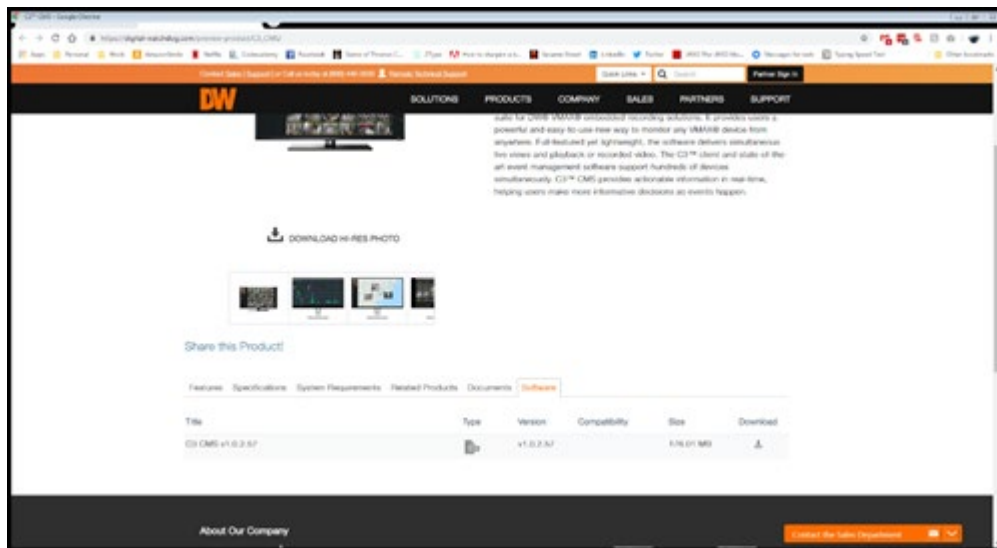


Image 1: Obtaining C3 CMS Software

- 2) Click **Download**. The `C3CMS_PRO_SETUP_<number>.exe` file will download to the computer.
- 3) Double-click the `C3CMS_PRO_SETUP_<number>.exe` file to start the installation. A confirmation message will display.
- 4) Click **Yes**. Select the appropriate language using the drop-down menu, then click **OK**.

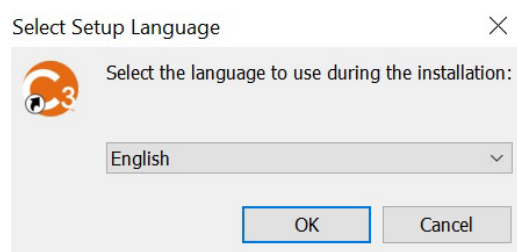


Image 2: Select Setup Language

5) The *Welcome to the C3 CMS Setup Wizard* screen displays. Click **Next**.

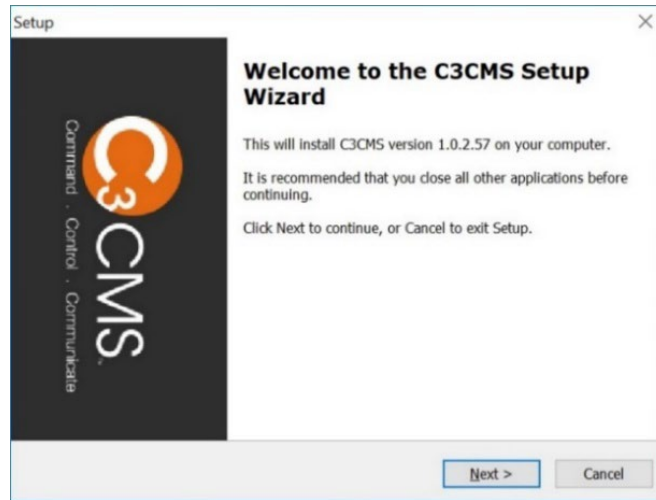


Image 3: C3 CMS Setup Wizard

6) The *Select Destination Location* screen displays. Click **Browse** to select where to save the C3 CMS file location or click **Next** to accept the current file location.

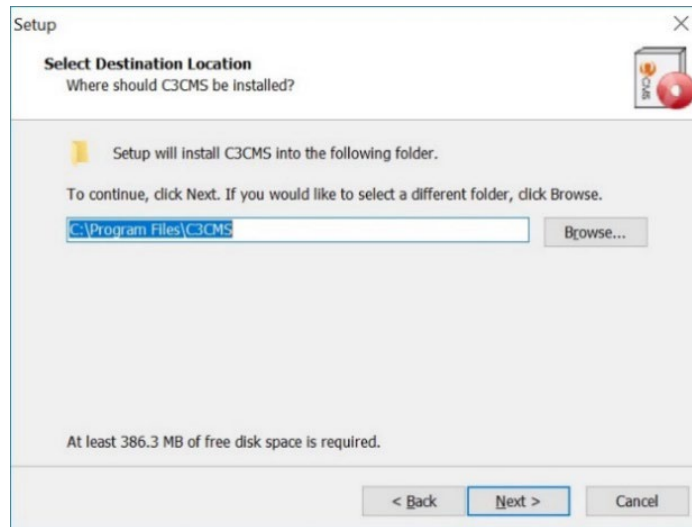


Image 4: Select Destination Location

7) The *Select Components* screen displays. Select the components of C3 CMS to install, then click **Next**.

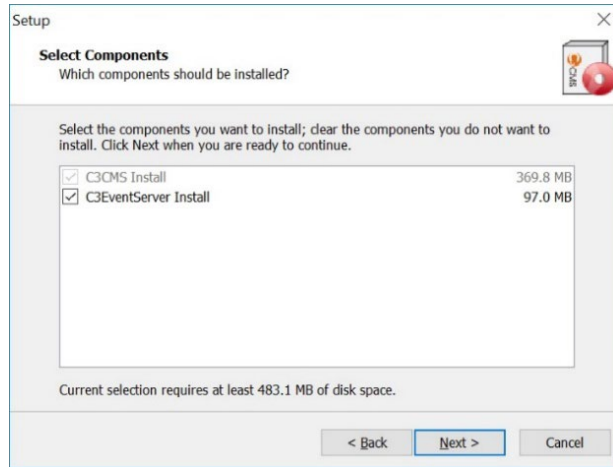


Image 5: Select Components

8) The *Select Start Menu Folder* screen displays. Select the C3 CMS shortcut location by clicking **Browse**, then click **Next**.

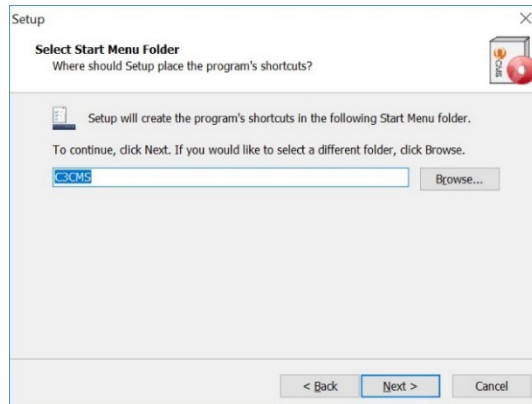


Image 6: Select Start Menu Folder

9) The *Select Additional Tasks* screen displays. Select any additional shortcuts to be created during the installation, then click **Next**.

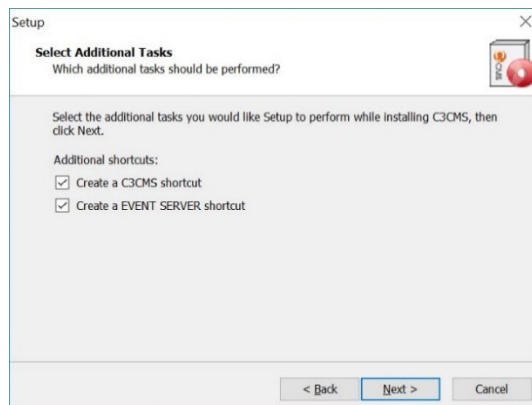


Image 7: Select Additional Tasks

10) The *Ready to Install* screen will display a summary of the proposed installation. Review the components that will be installed, then click **Install** to proceed with the C3 CMS software installation. If any changes are required, click **Back** to return to previous screens.

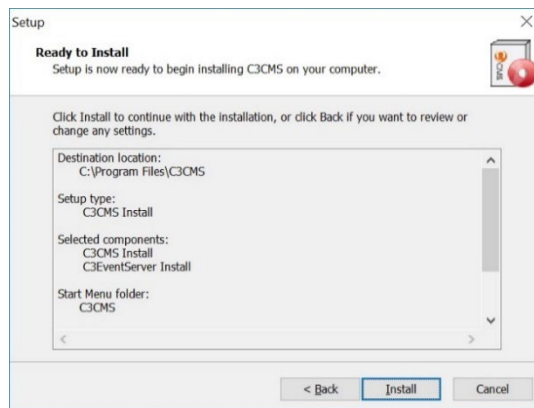


Image 8: Ready to Install

11) The *Installing* progress screen and then the *Microsoft Visual C++ 2015* screen displays. Select the “**I agree to the license terms and conditions**” checkbox, then click “**Install**”.

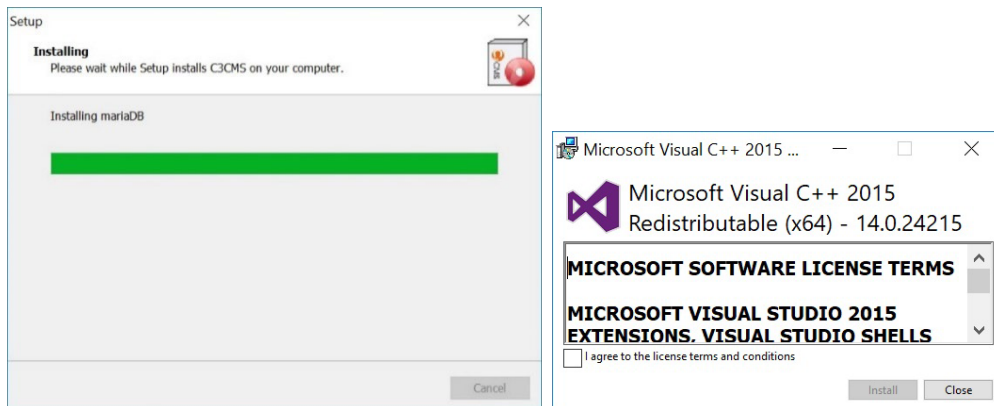


Image 9: Installing and Microsoft Visual C++ 2015

12) The *Microsoft Visual C++ 2015 Setup Progress* screen and the *Setup Successful* screen displays. Click **Close** to exit the message box.

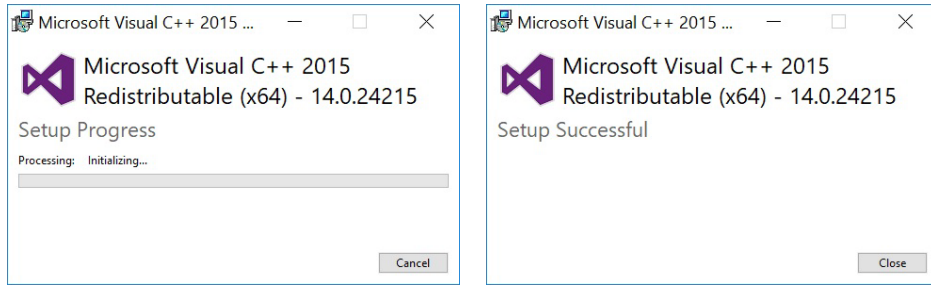


Image 10: Microsoft Visual C++ 2015 Setup Progress

13) The *Completing the C3 CMS Setup Wizard* screen displays. Select **Yes, restart the computer now**, then click **Finish**. The C3 CMS installation is complete once the computer has been restarted. The following shortcuts will then be available:

- C3 CMS
- C3EventServer

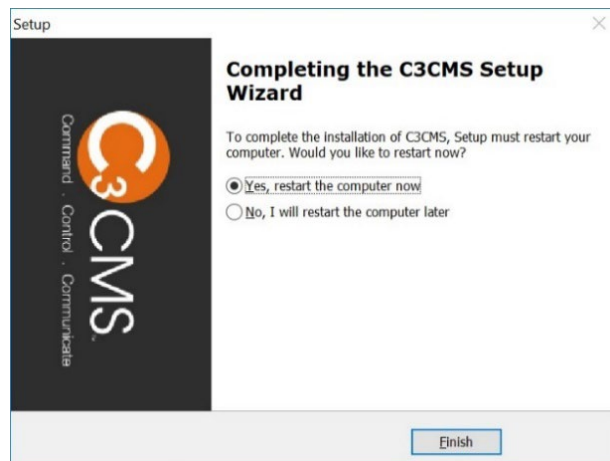


Image 11: Completing the C3 CMS Setup Wizard

Section 2: Logging in to C3 CMS

After launching the C3 CMS program, a login screen will display.

Enter your C3 CMS login information:

- *User Name* – enter the C3 CMS user ID (default: admin)
- *Password* – enter the C3 CMS user password (default: <blank>)
- *Auto Login* – enable this to automatically log in to C3 CMS with this user when launching the software; only the C3 CMS splash screen will display when starting the software
- *Save User Name* – enable this to automatically fill the *User Name* field when launching the software; the *Password* field will remain blank

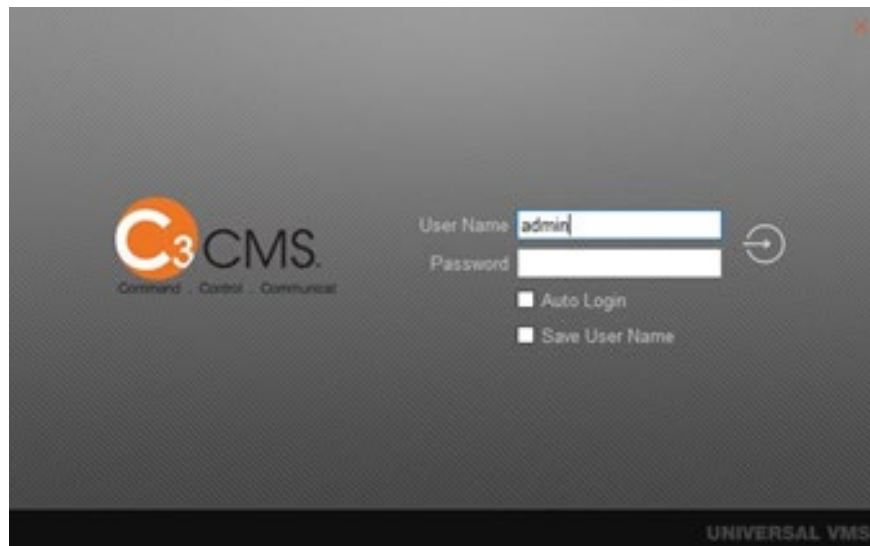


Image 12: Login Window

Chapter 3: C3 CMS Software General Setup

C3 CMS is a centralized management software solution that enables users to remotely view standalone recorder video through a local or external network connection.

****NOTE:** When prompting an entire recorder to display, all available video channels will display in the video pane. If a channel does not have a connected video camera, “No Channel” displays. You can close the channel by clicking the **X** icon in the channel menu.

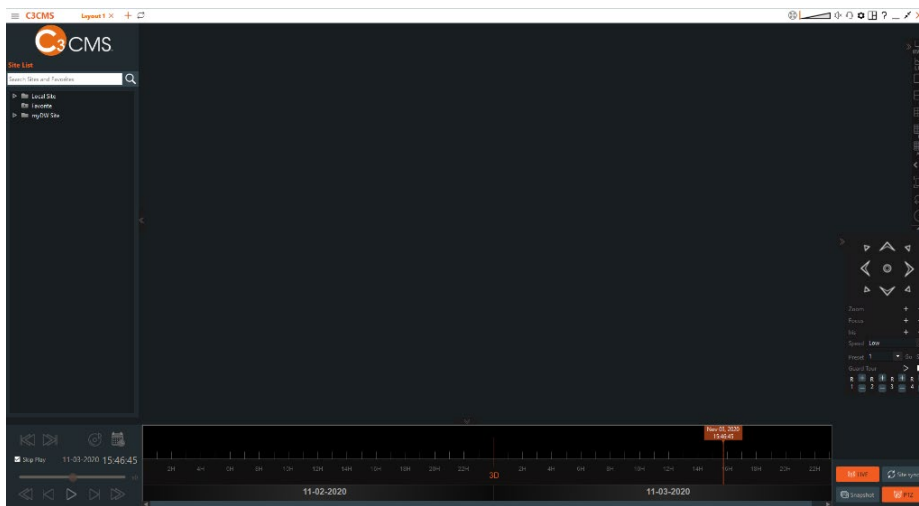
















Image 13: C3 CMS Main Screen







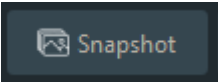
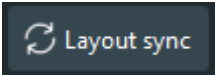
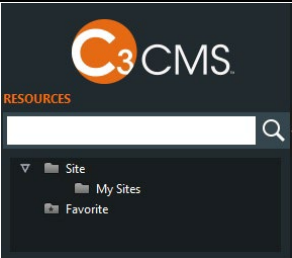


Section 1: C3 CMS Display Icons

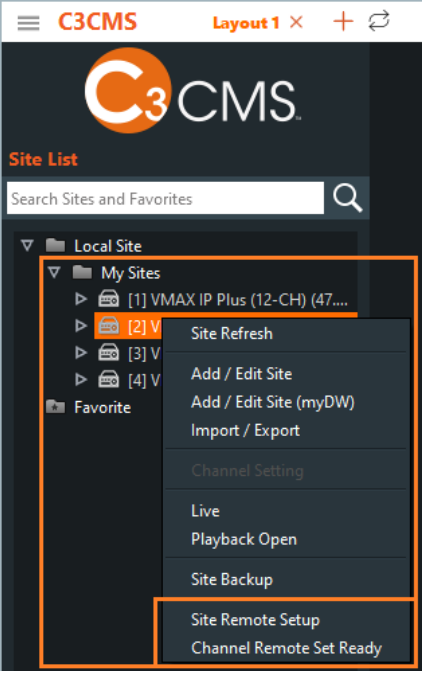
The following table describes the navigation icons available from the Main screen:

Icon	Item Name	Description
	<ul style="list-style-type: none"> Top Panel 	Controls for the C3 CMS screen.
	<ul style="list-style-type: none"> Top Menu 	Select the Top Menu icon () to Add Layout, Add Widget (Clock, CPU, Memory), new instance of C3 CMS, launch Event Server, Watchdog Run, Backup, prompt Configuration screen, prompt About screen.

Icon	Item Name	Description
	<ul style="list-style-type: none"> Layout Tab 	Use <i>Layout</i> tabs to navigate between C3 CMS display layouts. Click X to close a specific layout.
	<ul style="list-style-type: none"> Add Layout Tab 	Click <i>Add Layout</i> icon + to add a new <i>Layout</i> tab. The currently selected <i>Layout</i> tab will be highlighted in orange.
	<ul style="list-style-type: none"> Layout Sequence 	Click <i>Layout Sequence</i> icon to automatically alternate between open <i>Layout</i> displays. Feature is active when the icon is highlighted in orange.
	<ul style="list-style-type: none"> C3 CMS Agent 	Click to launch the C3 CMS Agent (Event Server).
	<ul style="list-style-type: none"> Screen Recording 	Click icon to toggle screen recording (.avi) Orange = ON (recording screen) Gray = OFF (stopped)
	<ul style="list-style-type: none"> Volume Control 	Slide the bar to the right to increase the volume output. Slide the bar to the left to decrease the volume output.
	<ul style="list-style-type: none"> Mute 	Click to turn device audio output OFF/ON.
	<ul style="list-style-type: none"> Two-Way Audio 	Click to for device two-way audio OFF/ON.
	<ul style="list-style-type: none"> Configuration 	Click to configure local C3 CMS settings, configure C3 users profiles, and local display preferences
	<ul style="list-style-type: none"> Resize Window 	Click to automatically resize the C3 CMS window to 4:3 or 1:1 sizing.
	<ul style="list-style-type: none"> About 	Click to view software version and install VMS updates.
	<ul style="list-style-type: none"> Minimize 	Click to minimize the screen.
	<ul style="list-style-type: none"> Full 	Click to maximize the screen.
	<ul style="list-style-type: none"> Exit 	Click to close C3 CMS.

Icon	Item Name	Description
	<ul style="list-style-type: none"> Playback Controller 	Control video playback and viewing speed
	<ul style="list-style-type: none"> Timeline 	Track and navigate recorded video archives with GUI
	<ul style="list-style-type: none"> Live/Viewing Toggle 	Toggle ON/OFF live viewing, synchronize archive times by <i>Site</i> or <i>Layout</i> , take a screenshot (<i>Snapshot</i>)
	<ul style="list-style-type: none"> Hide/Show 	Click arrow icon to hide or show the panel.
	<ul style="list-style-type: none"> Go To 	Click to go to the first or last play.
	<ul style="list-style-type: none"> Backup Player 	Click to prompt player for viewing saved video files.
	<ul style="list-style-type: none"> Calendar 	Click to specify date/time for file and footage playback.
	<ul style="list-style-type: none"> Skip Play 	<p>Skip Play uses compression to control the types of pictures (frames), I-Frame or P-Frame, that display during fast forward or fast rewind.</p> <ul style="list-style-type: none"> I-Frame: Intra-coded picture is a complete image, like a JPG. P-Frame: Predicted picture holds only the changes in the image from the previous frame. <p>Select Skip Play and then click the fast forward icon or the fast reverse icon to play only the <i>I-Frames</i>. When unchecked, every frame plays fast.</p>

Icon	Item Name	Description
	<ul style="list-style-type: none"> Date and Time 	Displays the date and time of the current video file.
	<ul style="list-style-type: none"> Speed 	Use the slider during playback to increase playback speed (1x – 64x) or to reverse playback.
	<ul style="list-style-type: none"> Playback 	Click the appropriate selection to view the video.
	<ul style="list-style-type: none"> Video Timeline 	Displays the video timeline.
	<ul style="list-style-type: none"> LIVE 	Enable this tile to view live video streams. The <i>Live</i> tile will be highlighted (orange) when active.
	<ul style="list-style-type: none"> Site sync 	Enable to synchronize the all video channels belonging the same site as the currently selected channel (yellow outline). The <i>Site sync</i> tile will be highlighted (orange) when active.
	<ul style="list-style-type: none"> Snapshot 	Enable to display thumbnail previews above the <i>Timeline</i> when searching recorded video. The <i>Snapshot</i> tile will be highlighted (orange) when active.
	<ul style="list-style-type: none"> Layout sync 	Enable to synchronize all channels in the same layout to the currently selected channel (yellow outline). The <i>Layout sync</i> tile will be highlighted (orange) when active.
	<ul style="list-style-type: none"> Left Panel 	Controls for device connections and site management.
	<ul style="list-style-type: none"> Device Search 	Search for a device or camera by name
	<ul style="list-style-type: none"> Site List 	Displays registered or imported sites (video recorders).

Icon	Item Name	Description
	<ul style="list-style-type: none"> Local Site List and Popup Menu 	<p>Right-click on a site in the <i>Local Site List</i> for C3 site management options:</p> <ul style="list-style-type: none"> <i>Site Refresh</i> – refresh <i>Site List</i> <i>Add/Edit Site</i> – show the <i>Site Add/Edit</i> popup window <i>Add/Edit Site (myDW)</i> – device registration window to add/edit by myDW Cloud <i>Import/Export</i> – <i>Import/Export</i> site list <i>Live</i> – select a site list or device to see live view of all cameras or single device <i>Playback Open</i> – select a site list to see playback of all cameras in site or single device <i>Remote Setup</i> – connect to web client of device <i>Site Backup</i> – prompt <i>Backup</i> window to schedule archive backup times <i>Site Remote Setup</i> – prompt web browser to open and connect with NVR/DVR web client via a localhost connection (must have <i>Channel Remote Set Ready</i> setting enabled) <i>Channel Remote Set Ready</i> – enable this setting to allow <i>Channel Remote Setup</i> feature

Icon	Item Name	Description
	<ul style="list-style-type: none"> Channel Remote Setup and Channel Remote Set Ready 	<p>Select a site, then right-click on a channel/camera of a site for C3 channel management options</p> <ul style="list-style-type: none"> Channel Setting – adjust local channel text Channel Remote Setup – prompt web browser to open and connect with NVR/DVR web client via a localhost connection Channel Remote Set Ready – enable this setting to allow Channel Remote Setup feature
	<ul style="list-style-type: none"> Favorite 	<p>To save a channel layout to the <i>Favorite</i> folder, right-click in the viewing area and select “Add Layout to Favorites”</p>
	<ul style="list-style-type: none"> Hide/Show 	<p>Click arrow icon to hide or show the panel.</p>
	<ul style="list-style-type: none"> Right Panel 	<p>Controls for layout display and PTZ management</p>
	<ul style="list-style-type: none"> Hide/Show 	<p>Click arrow icon to hide or show the panel.</p>
	<ul style="list-style-type: none"> STATUS 	<p>Click Status to check the health status by device.</p>
	<ul style="list-style-type: none"> LOG 	<p>Click LOG to view the <i>Device Status</i>, <i>C3 CMS Log</i>, and the <i>Device Log</i>.</p>

Icon	Item Name	Description
	<ul style="list-style-type: none"> 1 Mode 	Click 1 to display a single-channel screen only.
	<ul style="list-style-type: none"> 4 Mode 	Click 4 to display four-channel split screens.
	<ul style="list-style-type: none"> 9 Mode 	Click 9 to display nine-channel split screens.
	<ul style="list-style-type: none"> 16 Mode 	Click 16 to display 16-channel split screens.
	<ul style="list-style-type: none"> ALL 	Click ALL to display every screen.
	<ul style="list-style-type: none"> Channel Shift 	Click to move to the previous or to the next channel. Also moves split channel display.
	<ul style="list-style-type: none"> Full Screen 	Click to use full screen monitoring.
	<ul style="list-style-type: none"> Sequence 	Click to sequence by split-screen.
	<ul style="list-style-type: none"> Back 	Click to go back to the previous mode.
	<ul style="list-style-type: none"> PTZ 	Menu opens when PTZ (bottom panel) or the center arrow is activated; provides PTZ camera directional controls.
	<ul style="list-style-type: none"> PTZ: Zoom 	Click to increase or decrease camera zoom.
	<ul style="list-style-type: none"> PTZ: Focus 	Click to increase or decrease camera focus.
	<ul style="list-style-type: none"> PTZ: Iris 	Click to increase or decrease the iris.
	<ul style="list-style-type: none"> PTZ: Speed 	Click to select Normal, Low, or Fast movement speed.
	<ul style="list-style-type: none"> PTZ: Preset 	Use to select a camera preset from 1 to 199. Click Go to go to selected preset. Click Set to designate the preset, click again to save after designation.
	<ul style="list-style-type: none"> PTZ: Guard Tour 	Click to preset the guard tour.
	<ul style="list-style-type: none"> Relay Signal Output (#1~#4) 	Use these controls to turn the selected camera's relay output ON (+) or OFF (-). Available for relays #1~#4

Section 2: User and Password Management

Creating strong login passwords and setting user permissions can increase the cybersecurity of your recording setup. Rather than letting every general user have access to the *Administrator* user role, it may be wise to create additional user profiles to limit access to the system.

Changing the Administrator Password

Use the following procedure to add, edit, or delete user profiles, and to assign passwords and access permissions for users:

1. Launch the **C3 CMS** application. The C3 CMS login screen will display.

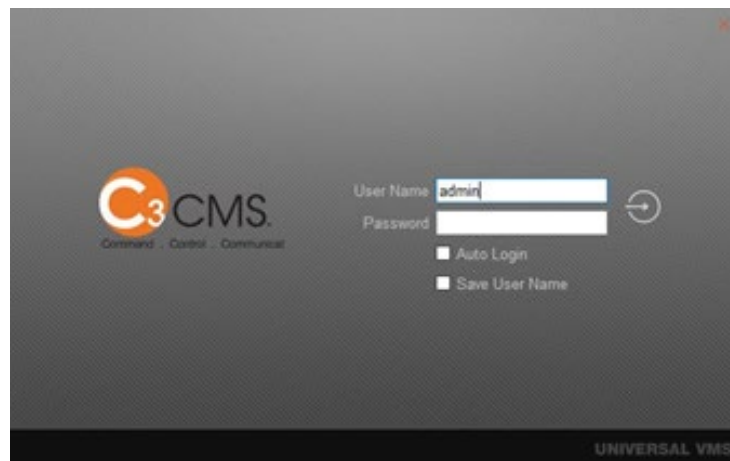


Image 14: C3 CMS Login

2. Enter the following default login credentials:
 - a. User Name: **admin**
 - b. Password: **<none>**
3. Select **Auto Login** or **Save User Name** for your preferred automatic settings, then press the **Enter** key. The C3 CMS *Main* screen will display.

****NOTE:** Selecting **Save User Name** will still require the entering of a password at each login.

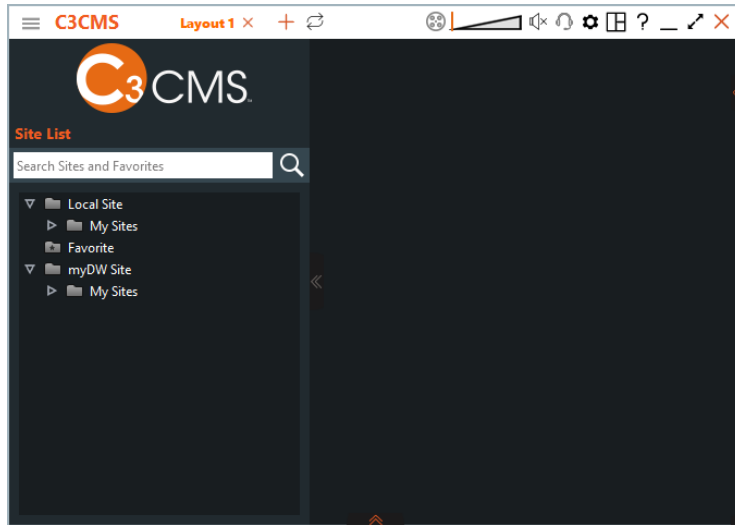



Image 15: C3 CMS Main

4. Click the Configuration  icon to open the *Configuration* screen.

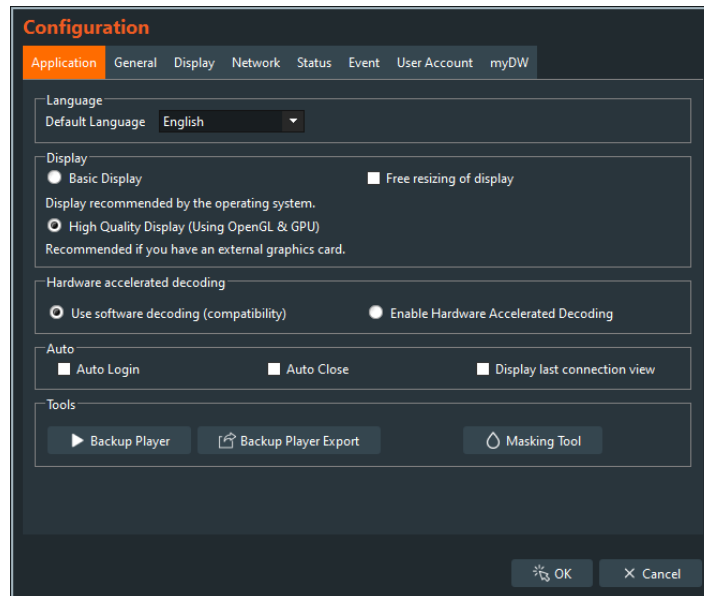


Image 16: Configuration

5. Click the **User Accounts** tab. The *User Account* screen displays.

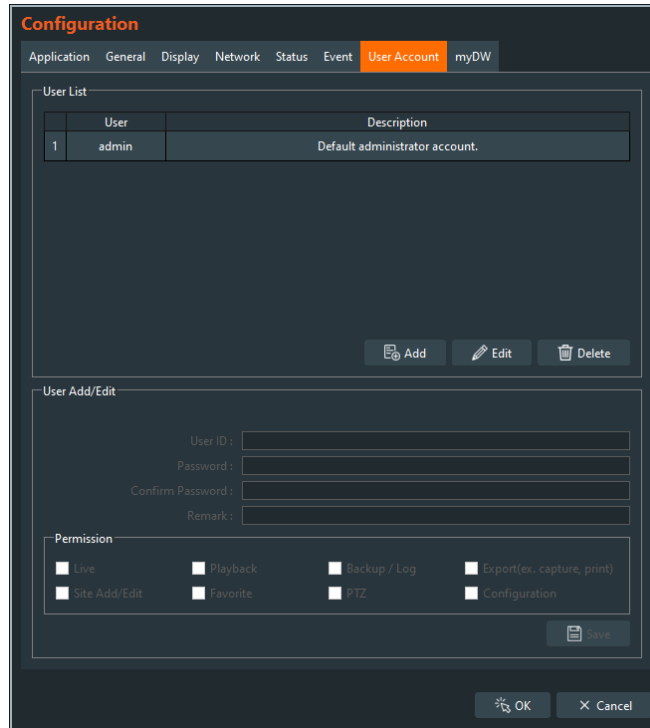


Image 17: User Account

6. To change the default Administrator password:
 - a. Highlight the user “**admin**”, the click the **Edit** button. The *User Add/Edit* menu will be enabled.

****NOTE:** By default, the Administrator has access rights and permissions to perform all supported functions.

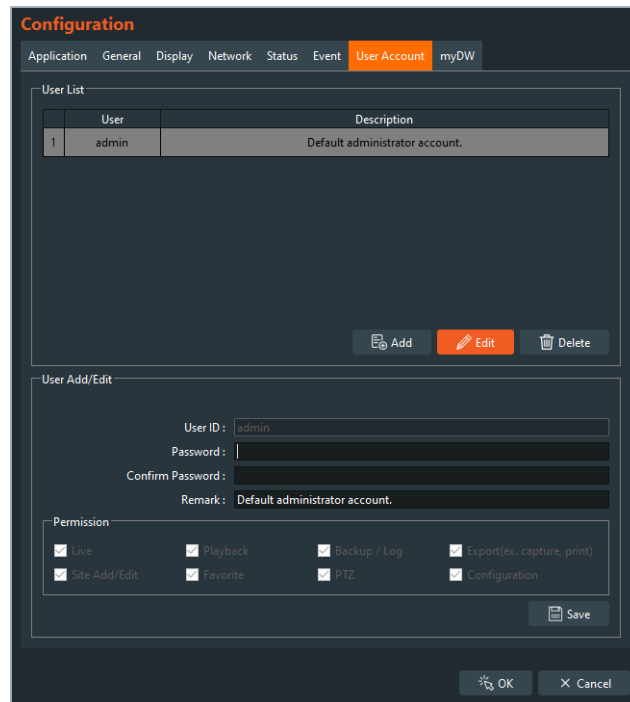


Image 18: User Add/Edit

b. Enter the following information:

- **Password:** Create a new password; use a variation of alphanumeric characters and special characters for increased password security
- **Confirm Password:** Re-enter the new password
- **Remark:** [optional] Add any comments or a password hint for the Administrator

c. Click **Save**. The confirmation screen will display.

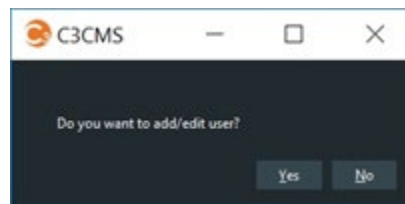


Image 19: Accept/Reject Changes

d. Click the **Yes** button. The password will be saved and will be required when logging in to C3 CMS.

Creating a New User

To add new users with defined access permissions, perform the following:

1. Under *User List*, click **Add**. The *User Add/Edit* menu is enabled.

2. Enter the following information:
 - **User ID:** Add a unique username
 - **Password:** Create a new password; use a variation of alphanumeric characters and special characters for increased password security
 - **Confirm Password:** Re-enter the new password
 - **Remark:** Add any comments, for example, role of user
 - **Permission:** Select the options that the user is permitted to perform (view live video, playback, etc.)

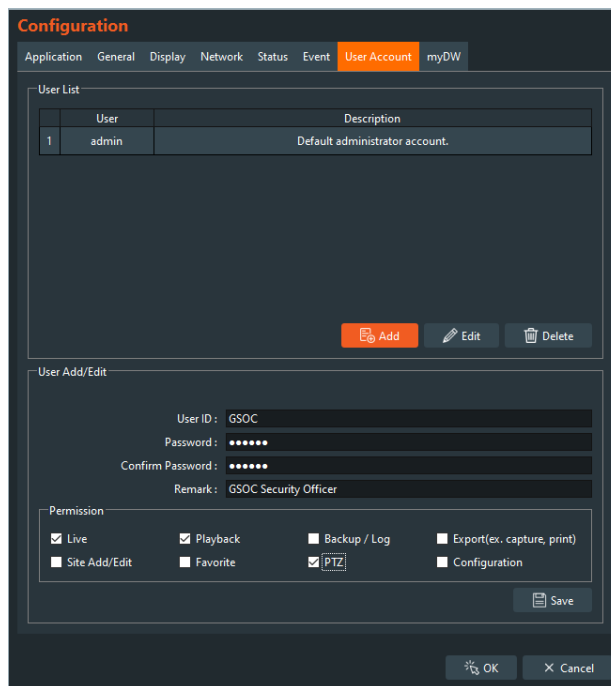


Image 20: New User

3. Click **Save** and then click **Yes** to accept the changes. The new user now displays in the *User List*.

Removing an Existing User

To remove a user:

1. Highlight the user to be removed and then click **Delete**. The confirmation screen displays.

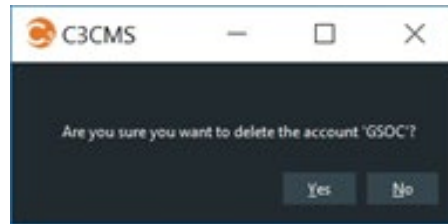


Image 21: Accept/Reject Removal

2. Click **Yes**. The user will be removed from the system.
3. When done making changes to the user accounts, click the **OK** button to close the window.

Section 3: Configuring the C3 CMS Local Preference Settings

Configuration Menu

You can customize the local C3 CMS settings through the *Configuration* menu. To open the *Configuration* menu, click on the **Top Menu** tile, then select “Configuration”.

- **Application:** Click the **Application** tab, make the appropriate changes, and then click **OK** to apply.
 - **Language:** Select the preferred (default) language
 - *Default Language* – English, Korean, Traditional Chinese, Italian, Japanese
 - **Display:** Select display preferences
 - *Basic* (recommended)
 - *High Quality* – applicable if using an external graphics card
 - *Free resizing of display* – enable to allow changing size of channels if there is no space between channels
 - **Hardware accelerated decoding:** Select hardware decoding preference
 - *Use software decoding* – video decoding through software (good compatibility)
 - *Enable Hardware Accelerated Decoding* – video decoding (display speed increase) through hardware acceleration of GPU (graphics card)
 - **Auto:** Select the preferred option(s) for the C3 CMS application behavior
 - *Auto Login* – automatically log in to current profile upon launching C3 CMS
 - *Auto Close* – close C3 CMS program upon exiting the application
 - *Display last connection view* – enable for automatic displaying of last connected layout screen from previous session
 - **Tools:** Click the appropriate option to launch supportive tools to view recorded video or to export files.
 - *Backup Player* – launch the C3 CMS Backup Player program to view exported video

- *Backup Player Export* – export the .exe file for the C3 CMS Backup Player program
- *Masking Tool* – selecting this option will prompt the *Capture Masking* window. With this, you can import and blur saved image files

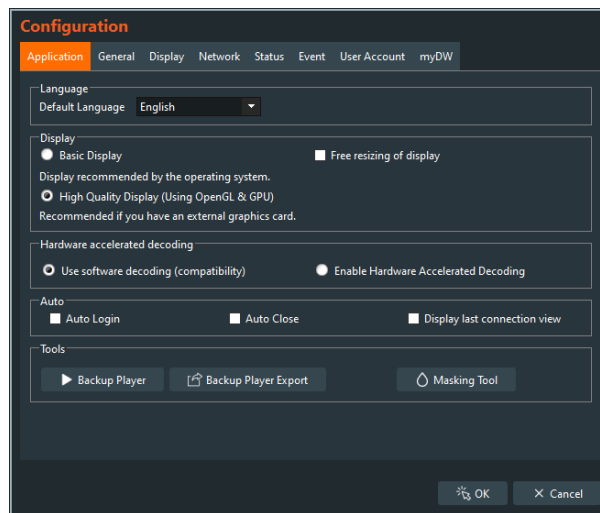


Image 22: Application

- **General:** Click the **General** tab, make the appropriate changes, and then click **OK** to apply.
 - **Export:** Select the pathing location where files will be saved
 - **Two-way Audio:** Select if *Two-way Audio* will affect all devices or only for the focused channel

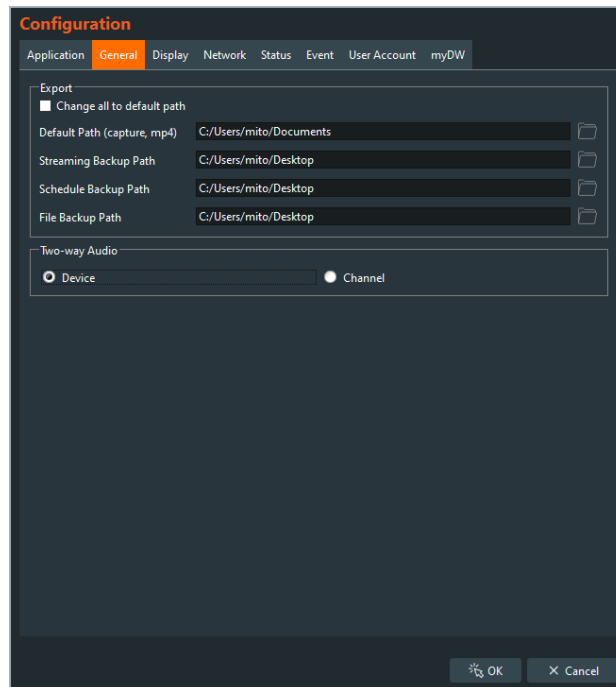


Image 23: General

- **Display:** Click the **Display** tab, make the appropriate changes, and then click **OK** to apply the changes.
 - **Default Screen Ratio:** Using the drop-down, select the preferred channel ratio setting (native, 4:3, 16:9).
 - **Default Stream Type:** Using the drop-down, select the default video stream for cameras (1st, 2nd)
 - **Fill the Screen:** Enable to fill channel image
 - **Space:** Configure the spacing between channel cells
 - **Select Size:** Adjust title font size of each channel
 - **Date/Time Format:** Select the date and time format using the drop-down menu (YYYY-MM-DD, MM-DD-YYYY)
 - **Sequence:** Enter a sequence time interval (5~3600 sec.)
 - **Display Text:** Select information text to display within each channel
 - **Display Text Color:** Set the font color of the text that will display in camera video channels

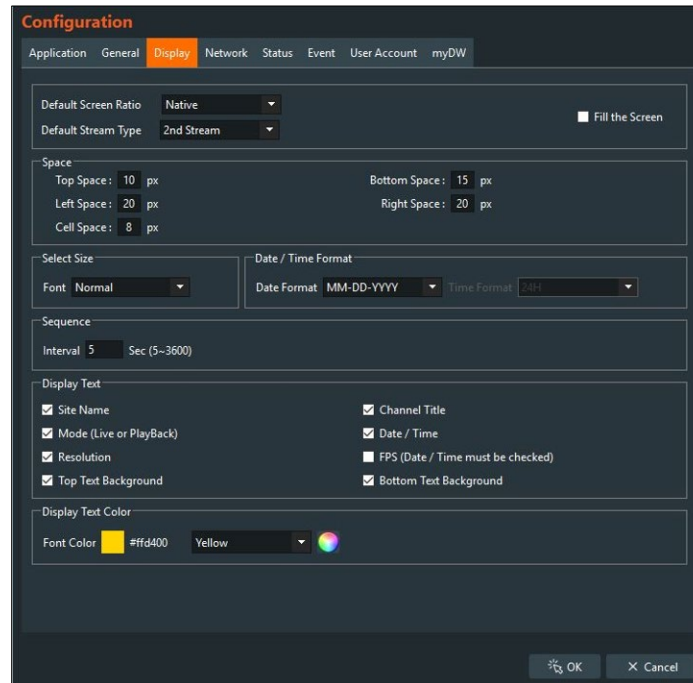



Image 24: Display

- **Network:** Click the **Network** tab, make the appropriate changes, and then click **OK** to apply.
 - **Reconnect:** By default, the system reconnects every 3 seconds. Set the *Interval* for the preferred refresh time of what is appropriate for your environment.
 - **Live Storage:** By default, *Live Storage* is not enabled. To save live video as an SSF file, select “**Live Storage**”, click the  folder icon, and select the file storage location. Next, click “**Select Folder**” and select if you are saving **I-Frame** or **Full Frame**, and then click **OK**.
 - **Live Event Data:** By default, *Live Event Data* is not enabled. Enable this feature to store metadata (GPS, sensor detection, etc.) in a database. Saved metadata can be searched with the *LogViewer*.

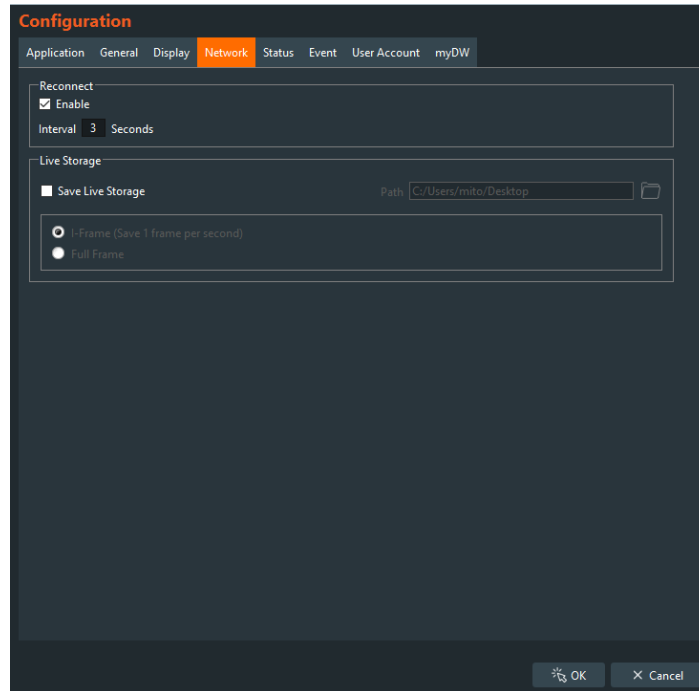


Image 25: Network

- **Status:** Click the **Status** tab, make the appropriate changes, and then click **OK** to apply.
 - **Status Setting:** Set device status check time
 - **Video Loss Display:** By default, this is enabled. When enabled, text will display within the channel when the connected device experiences video loss

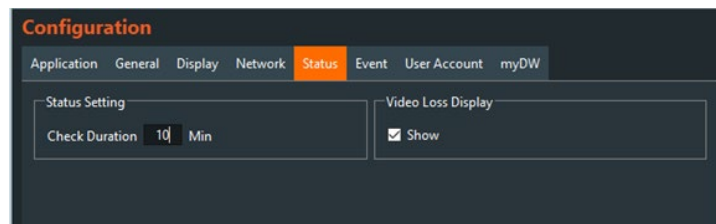


Image 26: Status

- **Event:** Click the **Event** tab, make the appropriate changes, and then click **OK** to apply.
 - **Event port number received from the Event Server (Agent):** The event port is enabled by default. Set the port number of the Event Server (8033); this is the vent port number received from the Event Server (Windows only).

- **Screen flickers at Event:** By default, this is enabled. Set the alarm color that will display on the channel when an event occurs.
 - *Color* – Select the alarm color using the drop-down menu
 - *Duration* – Enter the alarm duration time in seconds
- **Event popup (*Windows):** Click **Enable** to pop up the channel when an event occurs.
 - *Sound Output* – Emit audio output when an event occurs
 - *Speech Output* – Enable feature, enter dialogue, and select language that will emit when an event occurs
 - *Event Selection* – Choose the event(s) that will trigger the *Event Popup*. Support up to 56 events
 - *Auto Close* – Set automatic timer to end *Event Popup*
 - *Max Count* – Set maximum number of pop-ups displayed in the event window
 - *Relay Number* – Set event relay number for external relay
- **EventServer Sites List:** Automatically register device by sending a signal from the equipment to the event server.

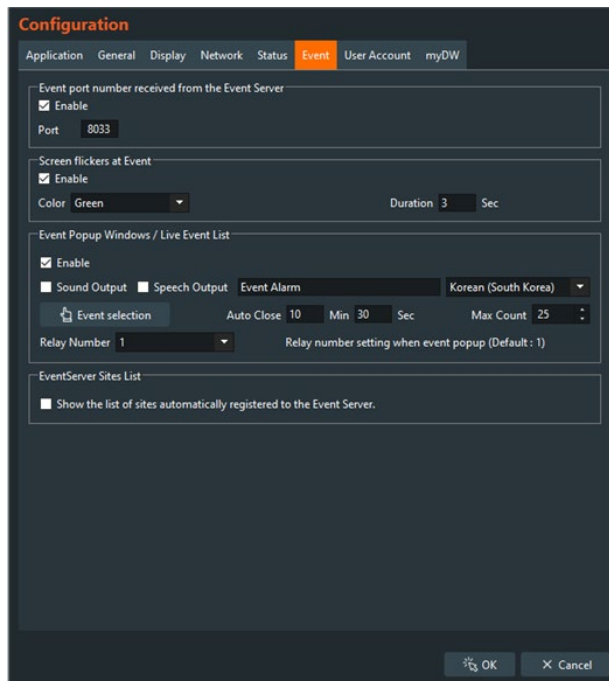


Image 27: Event

- **myDW:** Connect your *myDW* account to share sites with the C3 CMS program.

- **Account:** Enter the E-mail and Password associated with the *myDW Cloud* account. Enable the *Keep Logged In* feature for automatic access to *myDW* when *C3 CMS* is launched.
- **Site List:** *C3 CMS* site list options
 - *Hide Local Site List* – Hide local devices from Site List
 - *Auto Refresh* – Automatically update the list of local devices with *myDW Cloud* information at regular intervals
 - *Interval* – Set the *Auto Refresh* interval (5~360 min.)
- **Notification:** When disabled, a notification window will display notifying changes when *Auto Refresh* is activated.

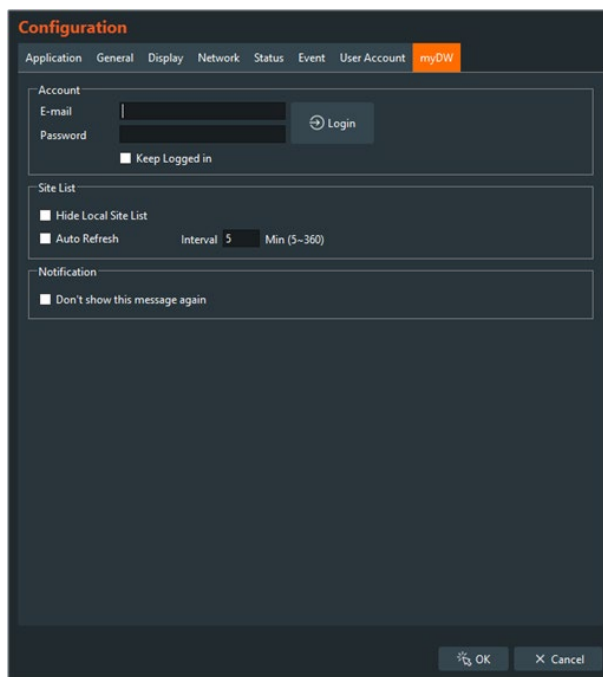


Image 28: myDW Account Configuration

C3Watchdog

To prevent the C3 CMS application from logging out, the *C3Watchdog* feature allows users to set C3 CMS to automatically relaunch the application if the process is unexpectedly terminated by the computer.

To activate *C3Watchdog*:

1. Open the **Top Menu** and select “**Watchdog Run**”.

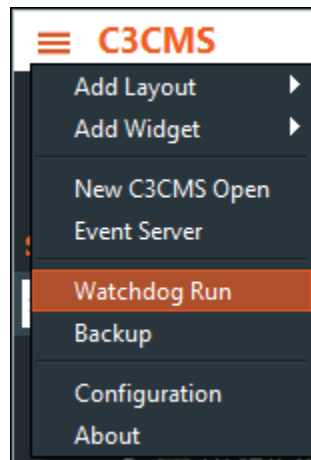


Image 29: Watchdog Run

2. The *C3Watchdog* pop-up window will display.

Configure the following:

- **C3CMS** – enable this setting to have the watchdog program monitor for needing to relaunch the C3 CMS client
- **C3 Event Server** – enable this setting to have the watchdog program monitor for needing to relaunch the C3 Event Server program
- **User Name/Password** – enter the login information to the C3 CMS application. Click the “Verify” button to confirm that it was entered correctly
- **Start Watch when OS Starts** – enable this setting to have the C3 CMS and C3 Event Server programs launch upon computer startup

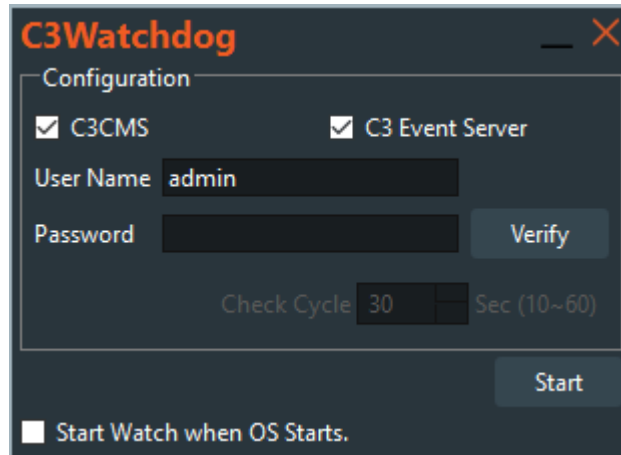


Image 30: C3Watchdog

3. Click the **“Start”** button to activate the *C3Watchdog* feature. The watchdog settings will remain active until the **“Stop”** button is clicked.

Chapter 4: C3 Recording Site Management

Video recorders are known as “sites” in the regard to the C3 CMS software. You can register specific sites or import sites that are registered to your *myDW Cloud* account.

Section 1: Registering and Importing Recording Sites

To utilize the C3 CMS management software, your recording units must be registered and added to the C3 CMS software. This is performed through the use of local or external network connections and use of the IP address information of the individual recorder(s). The IP address information of the recorder can usually be found in the device's *Network* settings.

Scanning and Registering a Recorder Site

1. From the *Main Screen*, **right-click** within the *Sites List* (left panel) and select **Add/Edit Site**. The *Site List Add/Edit* screen displays.
2. Click the **Refresh** button to scan for sites within the local network. The *Sites Found* pane displays the sites that were discovered within the same local network as your computer.

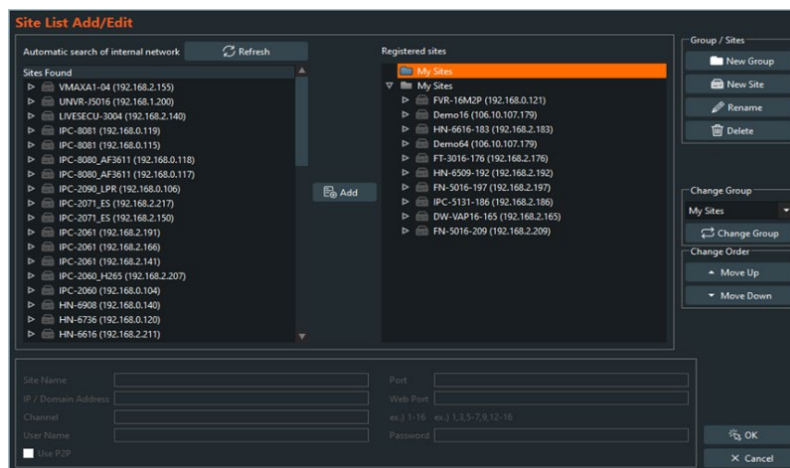


Image 31: Sites Found

3. From the **Sites Found** pane, select the desired site and then click the **Add** button to add it to C3 CMS and move it over to the *Registered sites* pane.
4. A popup window will display. Configure the following:
 - **Site Name** – enter a label/name to identify the site

- **User Name** – enter the login ID to the VMAX recorder (default ID – admin)
- **Password** – enter the login password to the VMAX recorder
- **IP Address** – lists the IP address of the detected site
- **Port** – lists the *TCP/IP Port* value that belongs to the VMAX recorder
- **Web Port** – lists the *Web Port* value that belongs to the VMAX recorder
- **Channel** – enter the channels that will be available to view for C3 CMS. For example, to view all 16-channels of a unit, you would use “1-16”.

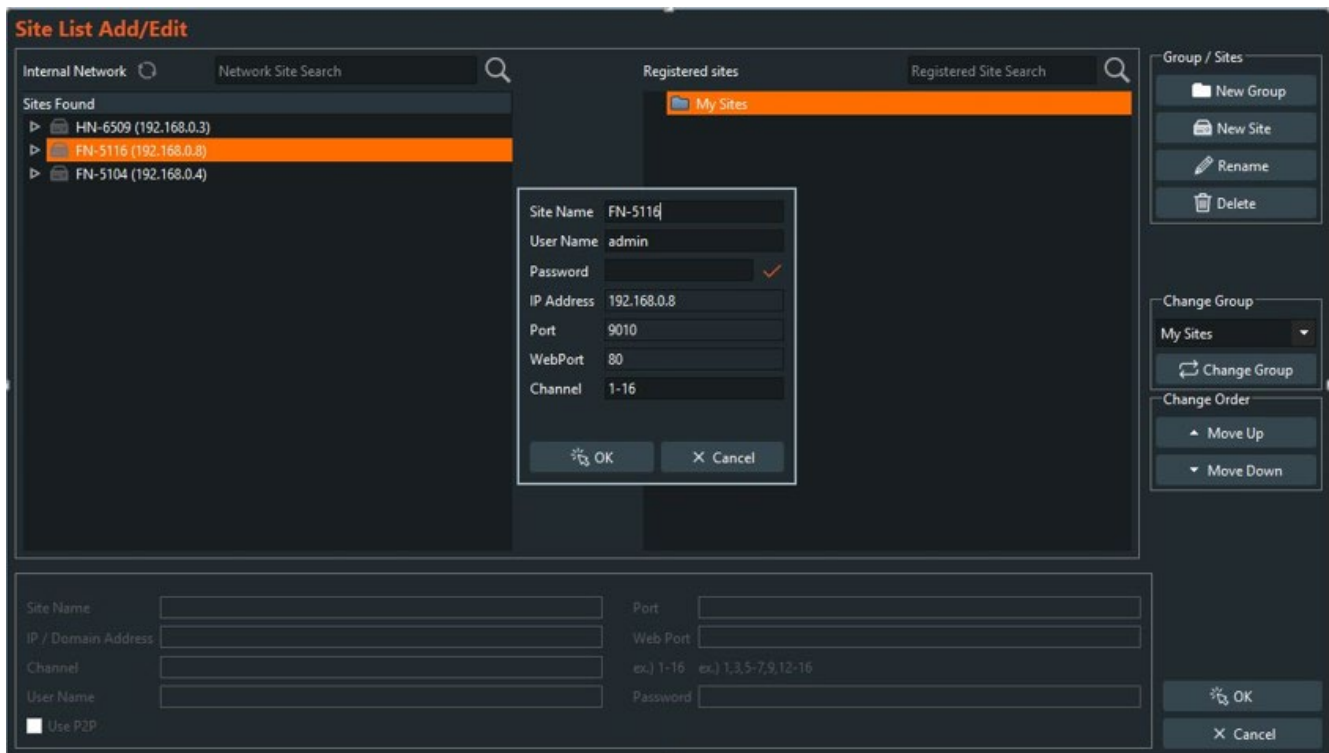


Image 32: Verify Site Connection

5. Verify that the site information, click the **OK** button. The site displays in the *Registered sites* list.
6. Repeat Step 3 and Step 4 for any additional sites that you wish to add.
7. Click **OK**. The sites now display in the left-pane under *My Sites*.



Image 33: My Sites List

Manually Registering a Recorder Site

To manually add a new site:

- 1) From the *Main Screen*, **right-click** within the *Sites List* (left panel) and select **Add/Edit Site**. The *Site List Add/Edit* screen displays.
- 2) Click the **New Site** button.

A registration window will display. Configure the following:

- **Use P2P** – [optional] enable this setting to use a *PathFinder ID* to connect with a site instead of using a direct connection (IP address, DDNS); when enabled, the *Model*, *Port*, and *Web Port* settings will not be necessary for P2P and will be disabled for the site registration
- **P2P Address** – [only available when “Use P2P” is enabled] enter the *PathFinder ID* that is generated by the VMAX recorder
- **IP/Domain Address** – enter the IP address of the VMAX recorder
- **Model** – select “VMAX Plus Series”; some legacy 960H VMAX units may be added to C3 CMS with limited support available
- **Port** – enter the *TCP/IP Port* value that belongs to the VMAX recorder
- **Web Port** – enter the *Web Port* value that belongs to the VMAX recorder
- **User ID** – enter the login ID to the VMAX recorder (default ID – admin)

- **Password** – enter the login password to the VMAX recorder

When done, click the **Verify** button. C3 CMS will validate the information and will add the new site if the connection information passes. If validation fails, a failure message will display.

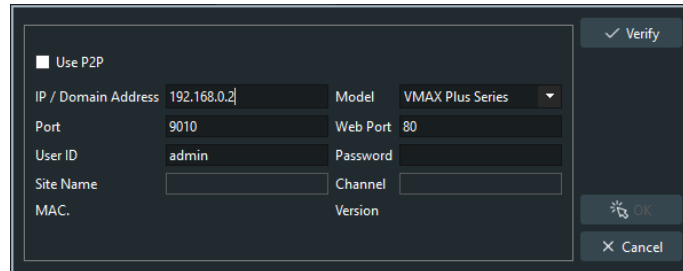


Image 34: New Site

Registering a myDW Cloud Account to C3 CMS

If there are sites registered to a *myDW Cloud* account, you may connect the account to C3 CMS for site registration.

To add myDW sites to C3 CMS:

1. From the *Main Screen*, **right-click** within the *Site List* (left panel) and select "**Add/Edit Site (myDW)**". The *myDW Site List Add/Edit* window will display.
2. Click the **Login** button. The *Configuration* window will display.

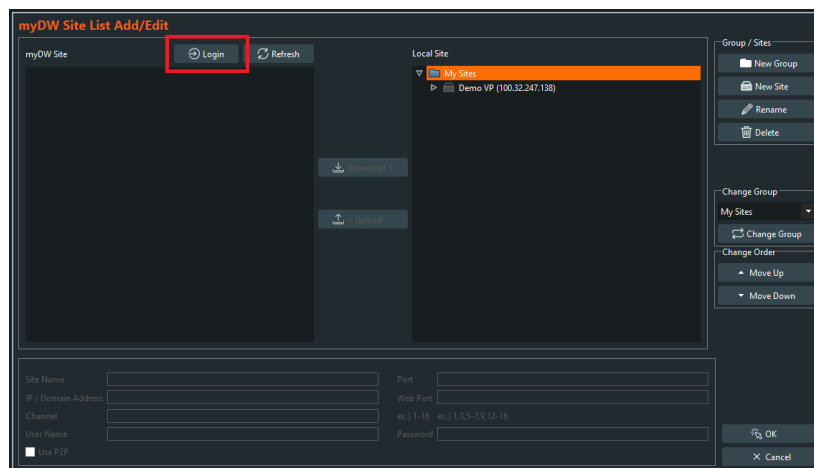


Image 35: myDW Site

3. Enter the **E-mail** and **Password** associated with the *myDW Cloud* account, then click the **Login** button.

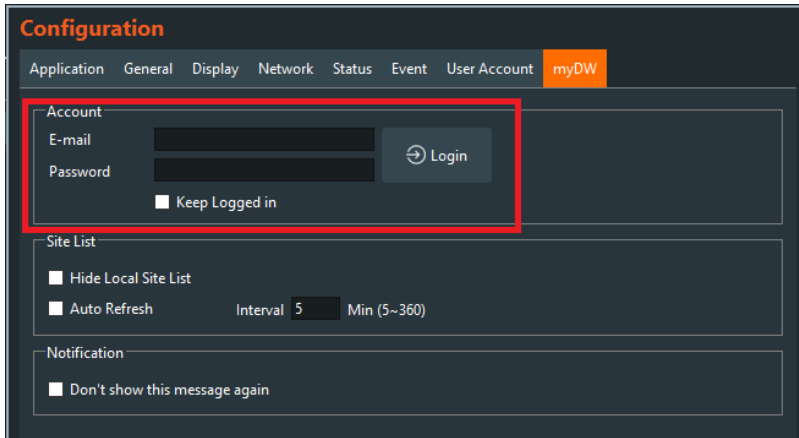


Image 36: Configuration

4. Devices registered to the *myDW* account will display in the *myDW Site* section and devices registered to the local C3 CMS instance will display in the *Local Site* section.
 - Select the site, then click the **Download** button to save the *myDW Site* device to the *Local Site* list
 - Select the site, then click the **Upload** button to save the *Local Site* device to the *myDW Site* list

****NOTE:** Devices with the same address and that are already registered to the myDW Cloud cannot be uploaded to the myDW cloud through C3 CMS.

5. Repeat Step 4 for any additional sites that you wish to register.

Importing myDW Cloud Sites to C3 CMS

1. From the left pane in the *Main Screen*, **right-click** and select **Import/Export** from the menu. The *Import/Export* screen displays.

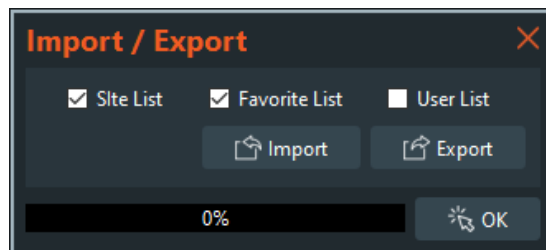


Image 37: Import/Export

2. Click **Import**. The *Import* screen displays.

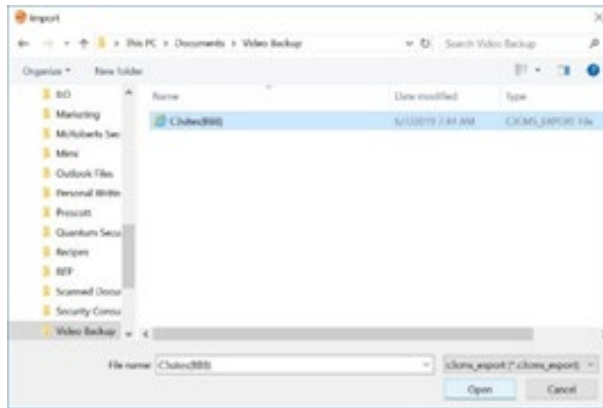


Image 38: Import

3. Select the **<site export>** file, then click **Open**. The files are imported and the progress bar on the *Import/Export* screen displays.
4. Click **OK** when 100% complete. The imported sites display in the left-pane.

Creating Site Groups

1. In the left pane, highlight the **Site** folder, right-click, and click **Add/Edit Site**. The *Site List Add/Edit* displays.

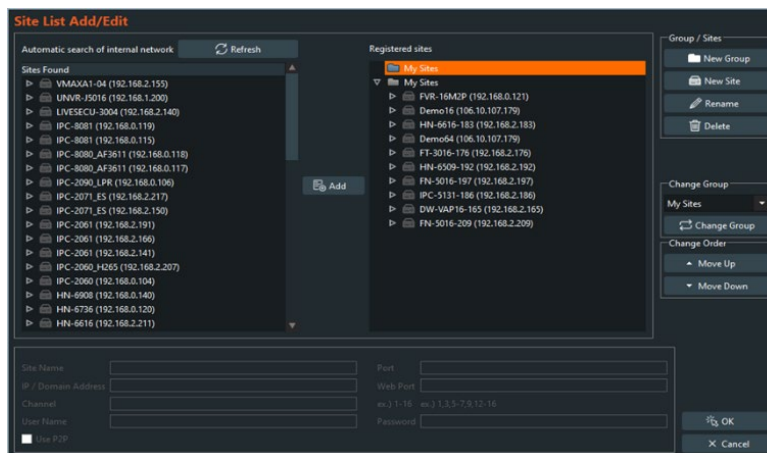


Image 39: Site List Add/Edit

2. Under the *Group/Sites* options:

- **New Group:** You can create a new group (folder) to store sites that are specific to that grouping.

Click on the **New Group** button and enable “**Add to Root**” if you would like to set the group as a child folder. Otherwise, enter a **Group Name**, then click the **OK** button.

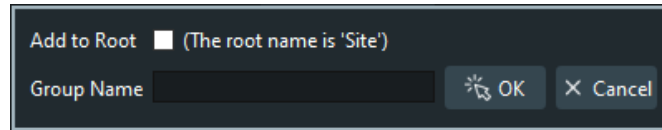


Image 40: New Group

- **Rename:** You can rename groups.

From the *Registered sites* pane, select the target site, then click the **Rename** button. Enter the new name in the **Group Name** field, then click **OK** to apply the new name. Click **Yes** to close the confirmation window.

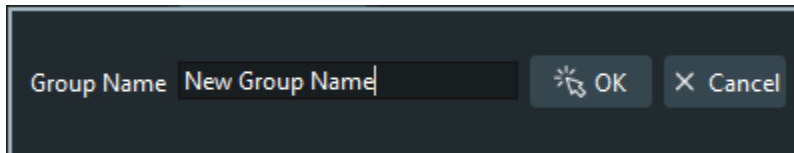


Image 41: Rename

- **Delete:** Remove Sites or Groups.

Select the group or site, then click the **Delete** button. Click **Yes** to confirm the removal.

****NOTE:** Only groups that are under a parent (main) group can be deleted.

- **Change Group:** You can move sites between groups.

Select the site, then choose a new group from the drop-down under the *Change Group* options. Click the **Change Group** button, then click **Yes** to accept moving the site to the selected group.

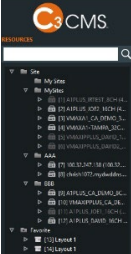
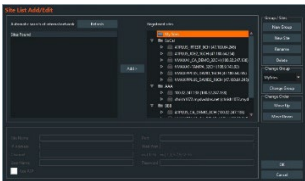
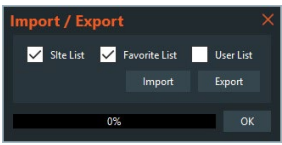

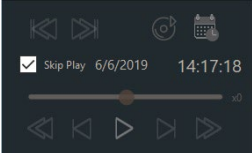
- **Change Order:** You can change the order of groups and how individual groups are sorted to display.


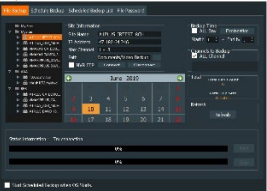
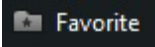
To reorder groups or sites, select the target then click the **Move Up** or **Move Down** buttons to move the order of the selected object.

Chapter 5: C3 CMS Navigation Controls

Section 1: C3 Site Navigation Controls

The following table describes the features of the *Site List*:

Icon	Name	Description
	<p>Site List</p>	<p>From the left pane, select a site for use. All recorders that are registered to C3 CMS will be listed in the <i>Site List</i>.</p>
	<ul style="list-style-type: none"> Site Refresh 	<p>From the left pane, right-click, and then click Site Refresh to refresh and update the site list.</p>
	<ul style="list-style-type: none"> Add/Edit Site 	<p>From the left pane, right-click, and then click Add/Edit Site. The <i>Site List Add/Edit</i> screen displays. Refer to the <i>Registering or Importing Sites (Video Recorders)</i> section above for detail instructions.</p>
	<ul style="list-style-type: none"> Import/Export 	<p>From the left pane, right-click, and then click Import/Export. The <i>Import/Export</i> screen displays. Refer to the <i>Registering or Importing Sites (Video Recorders)</i> section for detail instructions.</p>
	<ul style="list-style-type: none"> Live 	<p>From the left pane, right-click, and then click Live. The live video data displays in the center pane.</p>
	<ul style="list-style-type: none"> Playback Open 	<p>From the left pane, right-click, and then click Playback Open to display recorded video in the center pane.</p>

Icon	Name	Description
	<ul style="list-style-type: none"> Remote Setup 	<p>From the left pane, right-click, and then click Remote Setup to open the video recorders <i>Live Monitoring System</i> to make configuration changes. Refer to the video recorder instructions that are available at the DW website for additional information.</p>
	<ul style="list-style-type: none"> Site Backup 	<p>From the left pane, right-click, and then click Site Backup, the <i>Backup</i> screen displays. Refer to the <i>Backup</i> section for detailed setup instructions.</p>
	<ul style="list-style-type: none"> Favorite 	<p>Saves the currently displaying layout into the <i>Favorite</i> folder. Place the cursor in the video display pane, right-click, click Add Layout to Favorites, enter the Favorite Name, and then click OK. The saved layout displays in the <i>Favorite</i> folder.</p>

Section 2: Video Navigation Controls

The C3 CMS application allows users to view video from sites (video recorders). The C3 CMS platform provides the following video controls:

- View live video
- Playback video
- Export video
- Control PTZ cameras
- Control single camera (channel) or multiple camera (channel) display
- Access alarm events
- Save and manage layouts

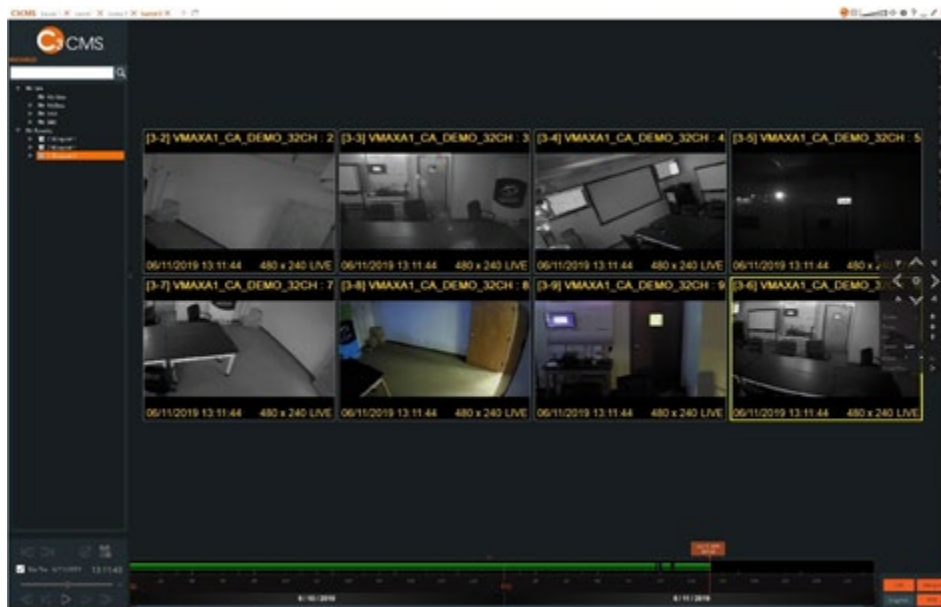
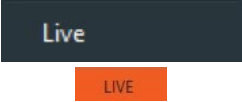

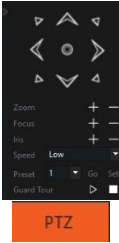








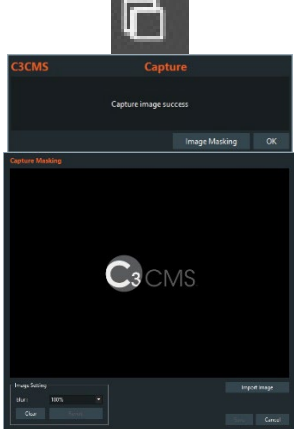


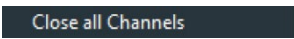
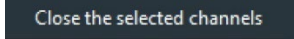


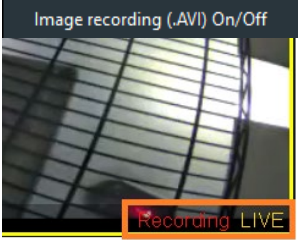
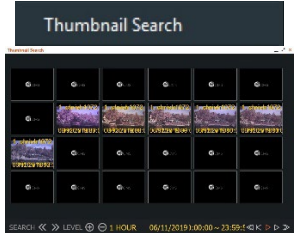
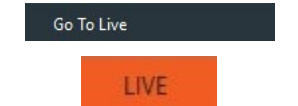

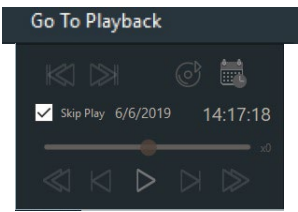
Image 42: Live Video Channels

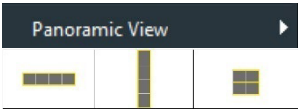

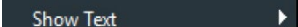
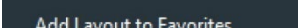
Section 3: C3 Video Playback Controls

The following table describes playback features of C3 CMS:

Icon	Name	Description
	<ul style="list-style-type: none"> Live Viewing 	<p>You can access live video from one of the following:</p> <ul style="list-style-type: none"> <i>Site list</i>: Select a site, right-click, and then click Live. The live video and the site channels display. <i>Bottom Pane</i>: From the bottom pane, click the  arrow icon, then click on "LIVE". The live video and the site channels display.
	<ul style="list-style-type: none"> PTZ 	<p>You can access the PTZ controls from one of the following:</p> <ul style="list-style-type: none"> From the right pane, click the  arrow icon to expand the PTZ menu controls. From the bottom pane, click the  arrow icon, and then click on "PTZ" to expand the PTZ menu controls.
	<p><u>Channel Controls</u></p>	<p>Control options provide critical information about the camera.</p>
	<ul style="list-style-type: none"> Status 	<p>Channel status displays as follows:</p> <ul style="list-style-type: none"> Motion or Event Recording: Green Recording Not Configured: Grey/White out Continuous Recording: Yellow
	<ul style="list-style-type: none"> Information 	<p>Displays channel and user information.</p>
	<ul style="list-style-type: none"> PTZ 	<p>When enabled, the icon turns orange and PTZ controls will display within the channel.</p>

Icon	Name	Description
	<ul style="list-style-type: none"> • Display Zoom 	<p>Click the icon to digitally zoom-in or zoom-out. You can also double-click a channel to zoom in or out.</p>
	<ul style="list-style-type: none"> • Print 	<p>Click icon to print the screen of the selected channel.</p>
	<ul style="list-style-type: none"> • Capture 	<p>Click icon to capture an image of the selected channel. You can also configure the captured image settings, click Image Masking, configure the Image Setting, and then click Save. Additionally, you can import an image by clicking Import Image.</p>
	<ul style="list-style-type: none"> • Close 	<p>Click icon to close the channel.</p>
	<ul style="list-style-type: none"> • Moving Channels 	<p>You can drag-drop selected channels within a layout to change the viewing order.</p>
	<ul style="list-style-type: none"> • Close All Channels 	<p>Right-click in the video pane, then click Close All Channels. All site views end and the display information will clear.</p>
	<ul style="list-style-type: none"> • Close the selected channels 	<p>Right-click in the video pane, close unused channels; by default, all channels display. Select a channel, hold the Ctrl key and click on channels until all are highlighted yellow. Right-click, click Close the selected channels, and they are removed from the display view.</p>

Icon	Name	Description
	<ul style="list-style-type: none"> Image Recording (.AVI) On/Off 	<p>To record a specific channel to your computer (.AVI), right-click on the channel window and click on “Image recording (AVI)”. A “Recording” status will display in the channel. Click Video Recording On/Off a second time to stop recording and to save the section as an .AVI file to the computer (file location Settings – <i>Configuration > General</i>)</p>
	<ul style="list-style-type: none"> Thumbnail Search 	<p>Right-click in the video pane, then click Thumbnail Search. Search a specific channel with multiple thumbnail images in 1 hour, 2 minutes, or 4 second intervals.</p>
	<ul style="list-style-type: none"> Event Window 	<p>Right-click in the video pane, click Event Window to open a new C3Event pop-up screen.</p>
	<ul style="list-style-type: none"> Go To Live 	<p>When viewing playback, right-click in the video pane, click Go To Live or click the  LIVE icon in the bottom pane to change to viewing live video streams.</p>
	<ul style="list-style-type: none"> Go To Playback 	<p>When viewing live video, right-click and select Go To Playback to display recorded video. You can double-click a channel to fill the display screen and use the playback controls on the channel or the playback controls in the bottom pane.</p>

Icon	Name	Description
	<ul style="list-style-type: none"> Panoramic View 	<p>Select multiple channels, then right-click and select Panoramic View.</p> <p>Select one of the following views:</p> <ul style="list-style-type: none"> Horizontal mode (max. 4x1) Vertical mode (max. 1x4) Quad-screen mode (2x2)
	<ul style="list-style-type: none"> Stream Type 	<p>Right-click, select Stream Type and then click one of the following:</p> <ul style="list-style-type: none"> Auto Stream (auto) 1st Stream (high) 2nd Stream (low)
	<ul style="list-style-type: none"> Show Text 	<p>Right-click while viewing, select Show Text, and select the items to display within a channel:</p> <ul style="list-style-type: none"> Site Name Channel Title Mode (Live or Playback) Date/Time Resolution Bottom Background
	<ul style="list-style-type: none"> Add Layout to Favorites 	<ul style="list-style-type: none"> Saves the current layout into the <i>Favorite</i> folder. Place cursor in the video display pane, right-click, click Add Layout to Favorites, enter the Favorite Name, click OK, and the saved layout displays in the <i>Favorite</i> folder.

Chapter 6: Viewing Video and Layout Management

C3 CMS provides several methods for viewing video through the software. Users, depending on their role permissions, can utilize this interface for live video streams or for watching recorded video files.

Section 1: Viewing Live Video

Connecting with Sites or Channels

To select a site or camera and view live video:

1. From the left pane, select a site. Expanding the site will show the connected cameras.
2. **Right-click** on your site or camera selection, then select “**Live**” to begin displaying live video.

Alternatively, **click-and-drag** your site or camera selection to the center video pane to begin displaying live video. Selecting the entire site will connect with all cameras of that site.

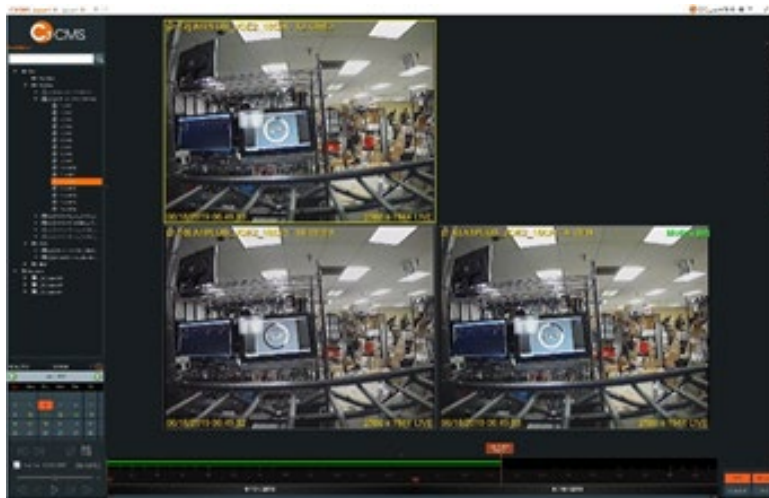


Image 43: Displaying Live Video

3. All available channels will display live video within the center video pane. If the text “No Channel” displays, the selected video channel does not detect a camera connection at the recording unit.

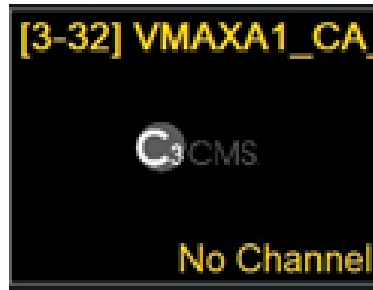


Image 44: No Camera Connection

Modifying the Channel Display Layout

Modify the channel organization within the center pane by selecting a display mode from the *Right Panel*.

Select from the display options of:

- *Single Display* – display an expanded view of one (1) video channel at a time
- *Quad Display* – simultaneously display up to four (4) video channels at a time
- *9-Channel Display* – simultaneously display up to nine (9) video channels at a time
- *16-Channel Display* – simultaneously display up to sixteen (16) video channels at a time
- *All Channels* – simultaneously display an unlimited number of video channels at a time

****NOTE:** C3 users may simultaneously view a variety of video channels from different recording sites. However, please be aware that the more active video channels that display at a time, the more processing will be required for the network and hardware. Overextending the available processing resources will result in streaming issues.



Image 45: 16-Screen Display

Section 2: Video Stream Controls and Management

Fisheye Dewarping

When viewing a fisheye camera through the C3 CMS client, using the channel controller feature for *Fisheye Dewarp* allows viewers to offset, shape, and alter the display from a fisheye effect into a panoramic effect.



Image 46: Fisheye Camera Example

To enable the *Fisheye Dewarp* function:

- 1) **Right-click** on the fisheye camera and select "**Channel Settings**".

2) In the *Channel Settings*, configure the following settings:

- **Site Name:** displays the label of the affiliated recorder
- **Camera Type:** use the dropdown to select the “**Fisheye**” setting
- **Camera Detail:** use the dropdown to select the mounting orientation of the fisheye camera [Ceiling, Table, Wall]
- **Offset/Ellipticity:** use the dropdown to select the dewarp adjustment setting type [Offset or Ellipticity]. Use the directional-pad to shape and center the warped image as needed
- **Channel Number:** displays the channel number of the camera that is currently being configured
- **Channel Title:** displays the channel label of the affiliated recorder
- **Channel Nickname:** [optional] enter an additional label for the channel
- **Channel Comment:** [optional] enter a short description or notes

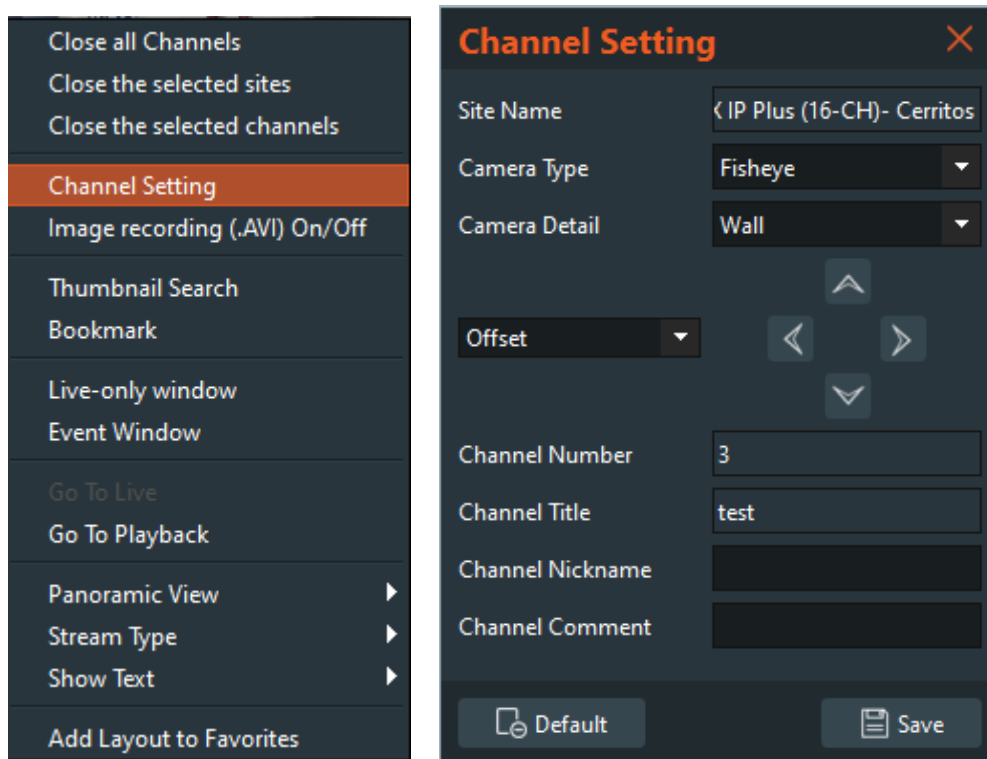



Image 47: Channel Setting Menu

3) When finished configuring, click the “**Save**” button.

Click the **Fisheye Dewarp** icon () at the top of the fisheye camera channel.

The text "FISHEYE" will display next to the viewing status text in the channel overlay while the feature is active.

- 4) You can cycle between a 360°, 180°, or 90° panoramic view by clicking on the **panoramic mode** tiles in the camera channel.



Depending on the setting selected for the "Camera Detail" setting, you can use the mouse to rotate (360°) the fisheye image or to pan (180° & 90°) the dewarped fisheye image.

Use the directional pad and *Offset/Ellipticity* controls in the *Camera Setting* menu to reposition and shape the dewarped fisheye image as needed.

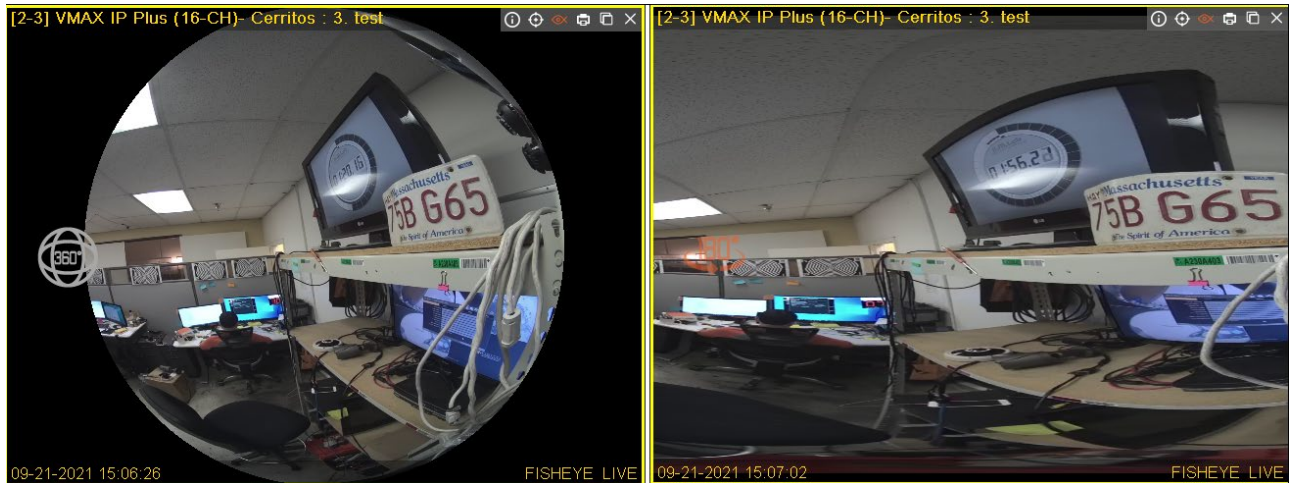











Image 48: Fisheye Dewarp - 360° to a 180 ° Display

Video Controls Descriptions

The following table describes video controls features of C3 CMS:

Icon	Name	Description
Video Channel Controls		
	Channel Controls	Control options provide critical information about the camera.

Icon	Name	Description
	Status	Channel status displays as follows: <ul style="list-style-type: none"> • Motion or Event Recording: Green • Recording Not Configured: Grey/White out • Continuous Recording: Yellow
	Information	Displays information on the channel and user.
	PTZ	Click icon, when enabled it turns orange and the PTZ controls display in the channel in orange. Use your cursor to control the 8-direction zoom in and out.
	Display Zoom	Click icon to zoom in or out using a keyboard touchpad or mouse. You can also double-click a channel to zoom in or out.
	Fisheye Dewarp	Click icon to display <i>Fisheye Dewarp</i> function controls
	Print	Click icon to print the selected channel.
  	Capture	Click icon to capture an image and then click OK . You can also configure the image settings, click Image Masking , configure the Image Setting , and then click Save . In addition, you can import an image by clicking Import Image .


Icon	Name	Description
	Close	Click icon to close the channel.
Right Panel Icons		
Icon	Name	Description
	Right Panel	
	Hide/Show	Click arrow icon to hide or show the panel.
	STATUS	Click to check the health status by device.
	LOG	Click LOG to view the <i>Device Status</i> , <i>C3 CMS Log</i> , and the <i>Device Log</i> .
	EVENT	Click EVENT to open the C3 CMS Agent.
	1 Mode	Click 1 to display one split screen.
	4 Mode	Click 4 to display four split screens.
	9 Mode	Click 9 to display nine split screens.
	16 Mode	Click 16 to display 16 split screens.
	ALL	Click ALL to display every screen.
	Channel Shift	Click to move to the previous or to the next channel.
	Full Screen	Click to use the full screen for monitoring.
	Sequence	Click to sequence by split-screen.
	Back	Click to go back to the previous mode.
	PTZ	Menu opens when click PTZ or the center arrow and provides

Icon	Name	Description
		camera directional controls.
	PTZ: Zoom	Click to increase or decrease camera zoom.
	PTZ: Focus	Click to increase or decrease camera focus.
	PTZ: Iris	Click to increase or decrease the iris.
	PTZ: Speed	Click to select Normal, Low, or Fast speed.
	PTZ: Preset	Click to select a preset from 1 to 199.
	PTZ: Guard Tour	Click to preset the guard tour.

Section 3: Viewing Video Playback

Starting Video Playback

To begin viewing video playback from connected recording devices through C3 CMS:

1. From the left pane, select a site or channel(s) to view in the center video pane.
2. Click the  *Calendar* icon in the bottom pane to display the *Calendar Search* feature.
3. Use the calendar to select a date and time for playback. After making your selections from the calendar, the *Timeline* will activate.

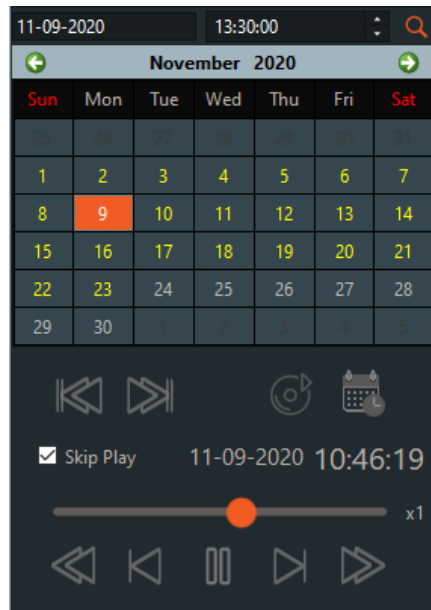



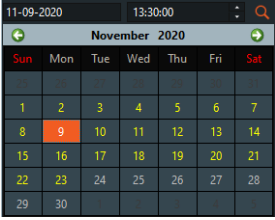
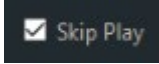
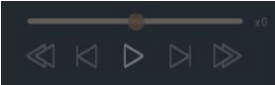
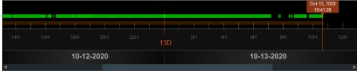




Image 49: Calendar Search

Video Playback Controls

Use the playback controls in the bottom pane to navigate the video playback:

Icon	Name	Description
	<ul style="list-style-type: none"> Calendar Search 	Click the icon to display the <i>Search Calendar</i>
	<ul style="list-style-type: none"> First/Last Play 	Use to view the earliest available footage or the most recent footage recorded.
	<ul style="list-style-type: none"> Backup Player 	Click the icon to select and begin playing an .SSF file saved to the computer.
	<ul style="list-style-type: none"> Search Calendar 	From the bottom pane, select a date and specify a time (optional) to playback recorded video through C3 CMS. Colored dates indicate that video files are available for that day.
	<ul style="list-style-type: none"> Skip Play Toggle 	Enable to playback video while frames are skipped.
	<ul style="list-style-type: none"> Playback Controller 	From the bottom pane, use the controls to navigate displaying footage. Use the slider to adjust viewing speed (x64 backward ~ x64 forward) or use the buttons.
	<ul style="list-style-type: none"> Timeline 	From the bottom pane, click on the <i>Timeline</i> to navigate to different points in the video archive. Roll the mouse wheel on the <i>Timeline</i> to zoom in/out for a micro/macro view of the feature.
	<ul style="list-style-type: none"> Live 	Enable this toggle to begin live view.

	<ul style="list-style-type: none">• Site Sync	<p>Enable this toggle to synchronize control for all channels. Disabling this toggle will result in control of only the currently focused channel.</p>
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Chapter 7: C3 Layout Management

Each C3 User is able to customize the display layout when viewing video channels through the C3 client. This feature can be organized completely by the user and saved for later use.

Section 1: Layout Setup

Creating a New Layout

Create and save site layouts using the following procedure:

1. By default, when the C3 CMS application opens a new layout (**Layout 1**) will open. This is represented by the tabs at the top of the display.
2. To add additional site layouts, click the **+** icon at the top of the window.
3. Configuring the viewing area with the procedures in the 3.6 *Viewing Live Video* section can be used to create a custom site layout.

Removing Video Channels from a Layout

If you have multiple channels displaying with the “No Channel” message, or if you would like to clear space within a layout, you may modify the layout and clear away unwanted channels.

To remove channels from a layout:

1. Hold the **CTRL** key and select every channel that you want to clear from the center video pane. The selected channels will be highlighted by a yellow box.

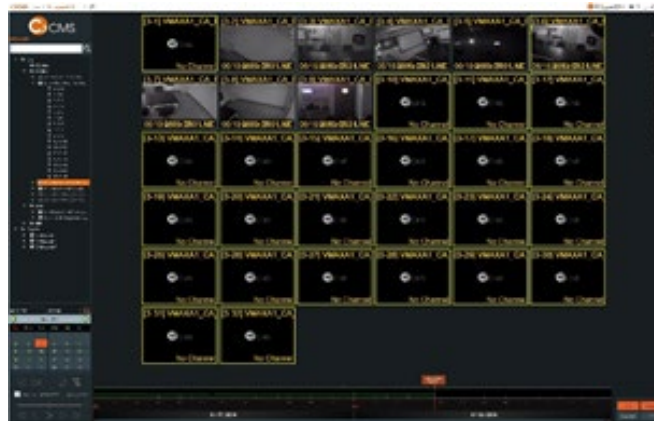


Image 50: Selected Unused Channels

2. After selecting the unwanted channels, **right-click** in the center video pane and select “**Clear the selected channels**”. The highlighted channels will then be removed from the video pane.

Saving a Favorite Layout

To save/favorite a layout:

1. **Right-click** in the center pane, then select “**Add Layout to Favorites**”.
2. The *Favorite Name* window will display. Enter a custom name for the site, then click the **OK** button. The saved site will then display under the *Favorite* folder in the *Site* list. To begin viewing, **drag-and-drop** the favorited layout into the viewing area

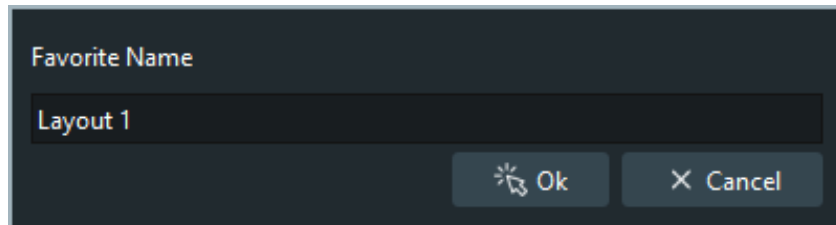


Image 51: Favorite Site Name

3. To rename a favorited site layout, **right-click** on the favorited layout, click on “**Edit favorite list**”, then select “**Rename Favorite**”.

Enter the new name, then click the **OK** button.

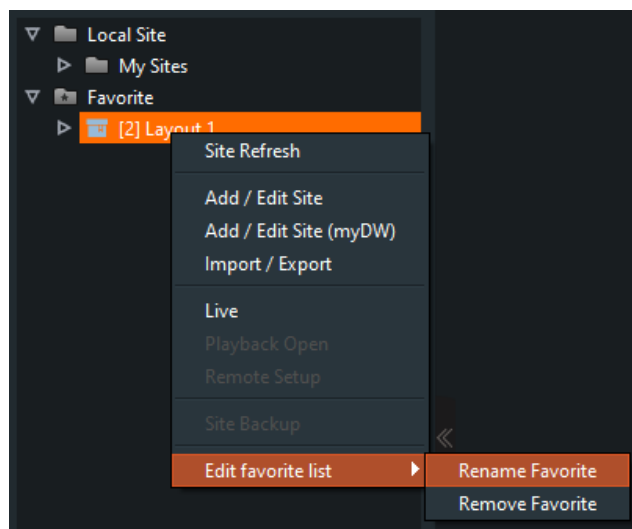


Image 52: Rename Favorite

Removing a Saved Layout

To remove a saved layout:

1. Under the *Favorite* folder, **right-click** on the saved layout, then select “**Edit favorite list**”.
2. Select “**Remove Favorite**”.
3. Click on “**Yes**” to delete the saved layout from the *Favorite* sites list.

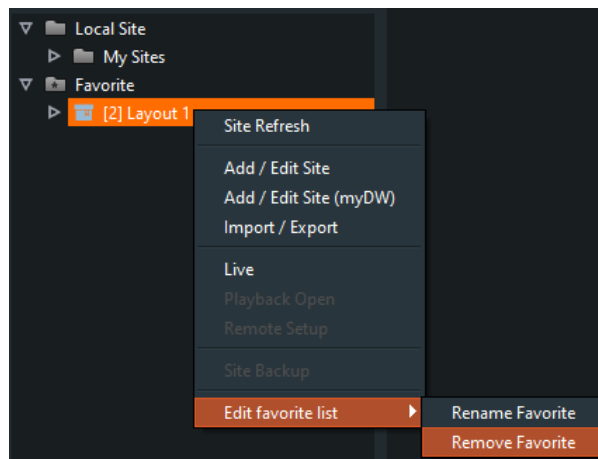


Image 53: Remove Favorite

Section 2: Additional Layout Types

Layout Type – Live Event

To add a *Live Event* layout:

1. Open the **Top Menu**, click on “**Add Layout**”, and then select “**Live Event**”.
2. A new layout tab will open titled “*Live Event*”. Select a site or camera from the **Site List** to begin displaying video.
This layout allows the user to immediately check general events that have occurred in the currently displaying monitoring screens.
3. The *Live Event List* will display detected General Events including the event name, device name, channel, time of occurrence, and bookmarked video.

Click the **Play** button once (1) for Event video playback. Click twice (2) for Event video playback with an enlarged screen.

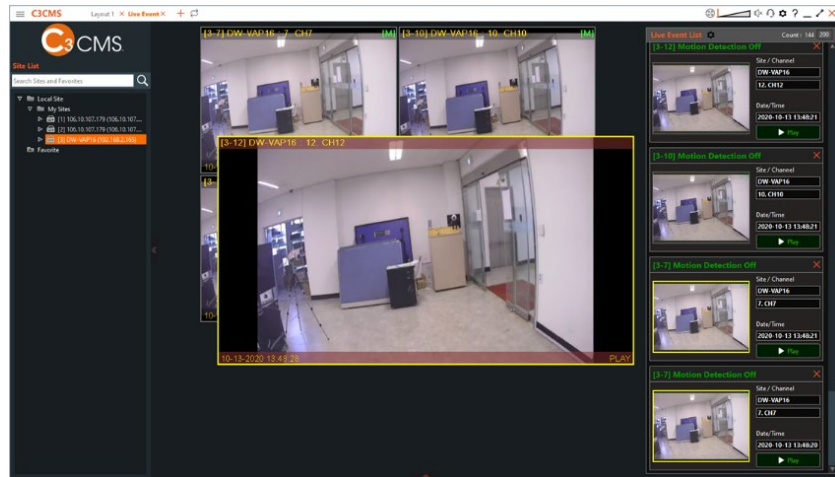


Image 54: Live Event Layout

Layout Type – G-MAP (Google Maps)

This layout can be configured to display the current camera location in association with Google Maps. Users can drag-and-drop channels from the *Site List* onto the map. To add a G-MAP layout:

1. Open the **Top Menu**, click on **“Add Layout”**, and then select **“G-MAP”**.
2. A new layout tab will open titled **“G-MAP”**. **Click-and-drag** cameras from the *Site List* onto the map. To edit the location of the camera displaying on the map, click the **Edit Camera** button.

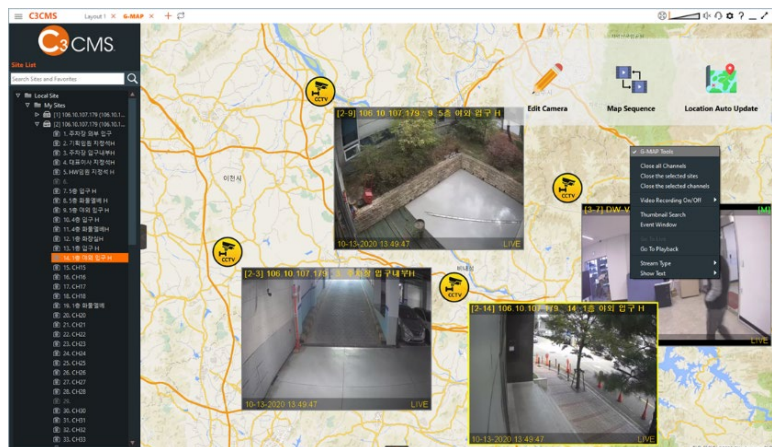


Image 55: G-MAP Layout

3. To show/hide the *G-MAP Tools*, **right-click** on the map and select/deselect “**G-MAP Tools**”.
- **Edit Camera** – edit the location of the selected camera on the map
 - **Map Sequence** – function to sequence channels in order (only open channels on the map are available)
 - **Location Auto Update** – for channels using a GPS camera, the map is updated with the current camera location

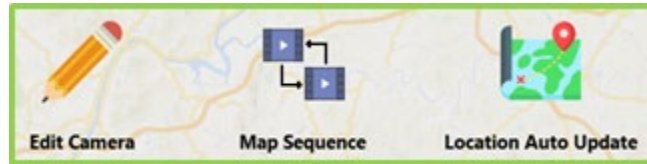


Image 56: G-MAP Tools

Chapter 8: Exporting Video Backups


Through C3 CMS, users may review recorded video that has been saved locally to the internal storage of the recorder. As so, users with the *Export Video* user permission enabled may select and export video through the network connection and save it to directly to a computer.

Section 1: Setting Up Exported Video

The following below will outline the different backup modes that are available.

Streaming Backup

To export video from the *Timeline* (streaming backup):

1. From the left pane, select a site or channel(s) to view in the center video pane.
2. Click the  *Calendar* icon in the bottom pane to display the *Calendar Search* feature.

Use the calendar to select a date and time for playback. After making your selections from the calendar, the *Timeline* will activate. Alternatively, click on the *Timeline* to skip to different areas of the recorded video.

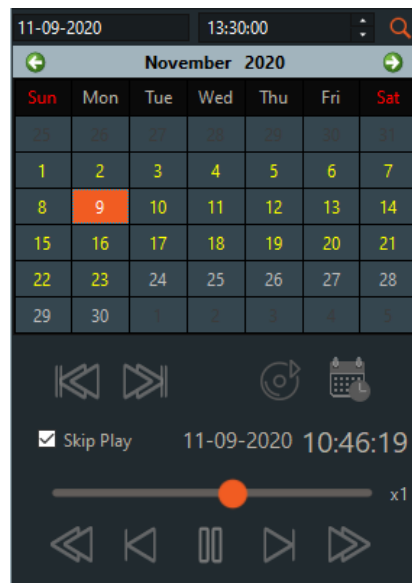


Image 57: Calendar Search

3. At the starting point of the desired section of footage, **right-click** on the *Timeline* and select "**Backup Start Set**". A *Start* marker will display on the *Timeline*.

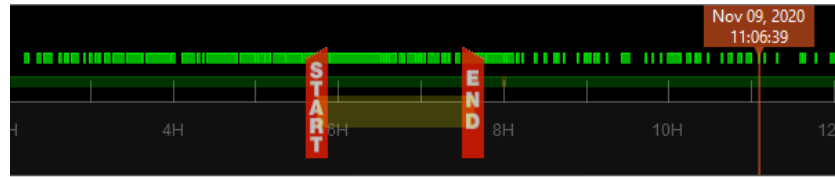


Image 58: Export Start Marker

4. Next, at the ending point of the desired section of footage, **right-click** on the *Timeline* and select “**Backup End Set**”. An *End* marker will display on the timeline.

5. The section of footage marked on the *Timeline* will be highlighted in yellow and the *Streaming Backup* settings will display. Configure the settings before beginning the backup.
 - **Device Name, IP address, max channels** – these settings will list the connection settings for the registered site
 - **Path** – under the *Device Information* section, select a save location to export to
 - **SSF Files/AVI Files** – select between exporting the video to .SSF format or .AVI format. Use “SSF Files” if you are exporting video from more than one video channel.
 - **SSF Player Export** – enable this option to include the standalone *Backup Player* executable (.exe) with the backup files. This is recommended if the files are going to be shared with anyone that does not have a media player that will support .SSF format, including C3 CMS.
 - **Backup Setting** – select the video channels to include for the selected section of footage. To export all of the video channels, enable “*ALL Channel*” to create backup files for all video channels. The more channels that are selected, the larger the file size will be.
 - **Start Time / End Time** – verify or adjust the start and end points of the video export as needed.

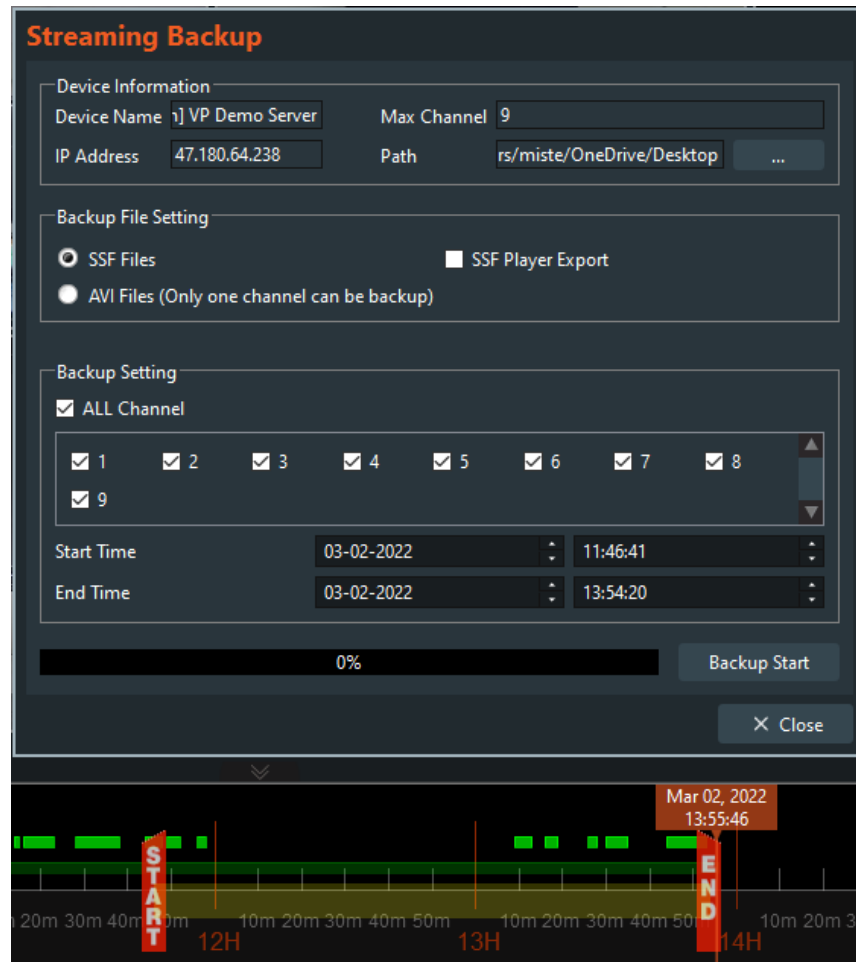


Image 59: Streaming Backup

6. Click the **Backup Start** button to begin the backup. The processing time will vary depending on the length of footage and the number of channels selected. Click the **Stop** button at any point to end the process early.

Once the backup has been completed a confirmation window will display. The exported video will be saved to the destination (*Path*) folder that was specified in the *Streaming Backup* settings window.

Creating a File Backup

The *File Backup* feature allows users to designate a specific block of time of which the C3 CMS software will export video from the recording unit to the computer. This backup feature will export footage in hour-increments only.

To export video through *File Backup*:

1. Open the **Top Menu** and select "**Backup**".



Image 60: Backup Mode

2. The *Backup* window will display. Select the “**File Backup**” tab.
From the site list (*My Sites*), select the target site for backup.

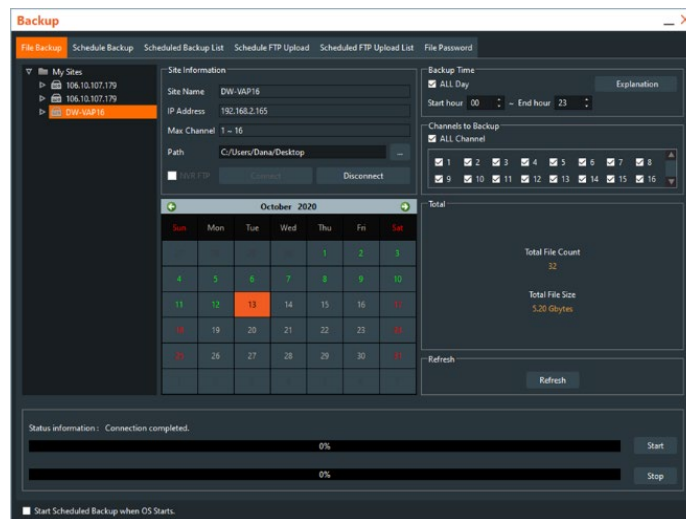


Image 61: File Backup Menu

3. The *Site Information* field will populate with the site address, channel count, and a calendar that can be used to select the date of the video footage that will be exported.

The “**Path**” setting will determine the location where the video file will be saved on the computer. To change the file pathing, click the ellipses (...) button and select the new file location.

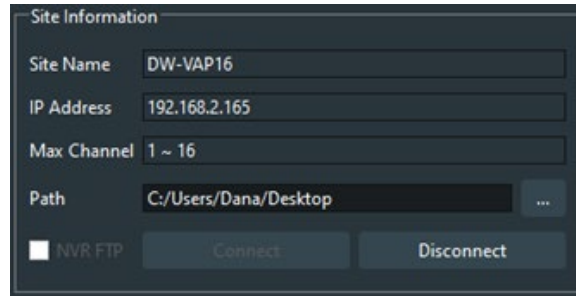


Image 62: Site Information

Use the **Calendar** to select a specific recording date for the *File Backup*. Days colored in GREEN represents that there is video recorded for that day.



Image 63: File Backup Calendar

- Under the **Backup Time** section, choose the time of the footage that you would like to backup. In the *File Backup* dialogue, footage may only be backed up by the hour.

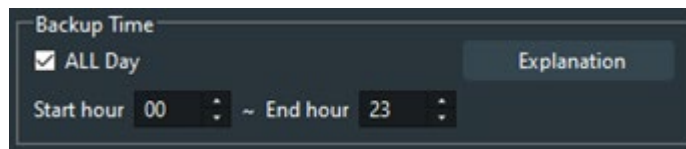


Image 64: Backup Time

- Under the **Channels to Backup** section, specify which channels you would like to include in the backup. By default, all channels will be included.

- Click the **Start** button to begin the backup process. The progress bar at the bottom will display the status of the backup.

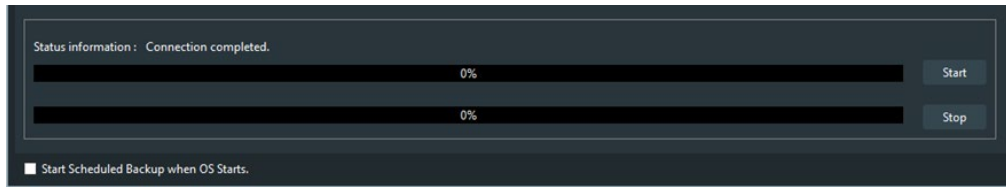


Image 65: Backup Status

Schedule Backup

Use C3 CMS to periodically backup video files on a set schedule with the *Schedule Backup* feature.

****NOTE:** The computer must remain turned on during the runtime for the scheduled backup for this feature to work.

To set up *Schedule Backup*:

- Open the **Top Menu**, then click on "**Backup**".

The *Backup* window will display. Click on the "**Schedule Backup**" tab.

- In the **My Sites** panel, select the site that you will be periodically backing up. The device information will display in the *Site Information* area.

The "**Path**" setting will determine the location where the video file will be saved on the computer. To change the file pathing, click the ellipses (...) button and select the new file location.

- In the **Backup Date** section, set the start date and end date of the backup period of the scheduled backup.

Enable the "**Continue**" setting to have C3 CMS backup footage, beginning at the designated starting date, and to continuously backup video beyond the set end-date.

In the **Channels to Backup** section, select which channels to include in the backup. Enable "**ALL Channels**" to include all video channels in the backup.

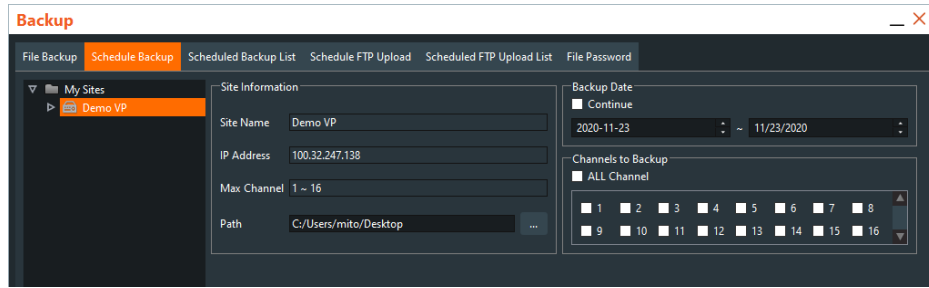


Image 66: Schedule Backup Site Information

- In the **Server Schedule** section, set the days of the week and hours of day that C3 CMS will backup footage for. Click-and-drag to mark grid.

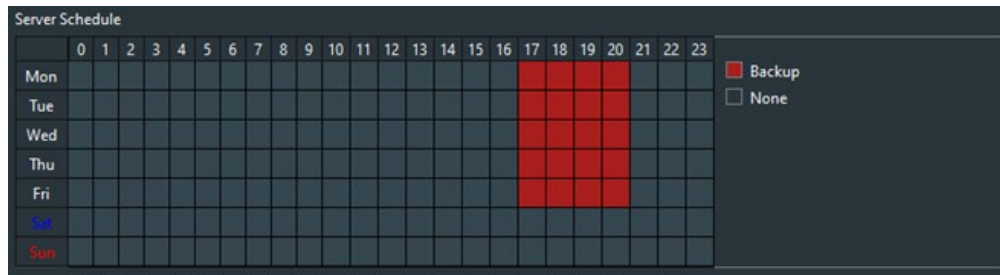


Image 67: Server Schedule

- Under the **Backup Run Time** section, set the hour of the day that the backup process is allowed to run. Click-and-drag to mark in the grid.



Image 68: Backup Run Time

- At the bottom of the window, enable [optional] **“Start Scheduled Backup when OS Starts”** to execute backup when the OS of the computer starts.

Once the settings have been configured, click the **Save** button. C3 is ready to begin following the schedule upon clicking saving the settings.

- The scheduled backup will appear in the *Scheduled Backup List* menu. Click on the **“Scheduled Backup List”** tab to view a list of the scheduled backups.

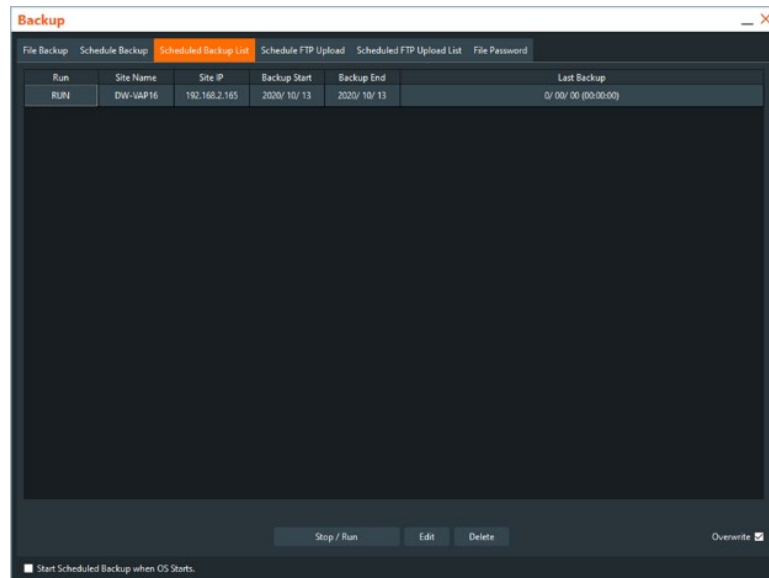


Image 69: Scheduled Backup List

Schedule FTP Upload

The *Schedule FTP Upload* function is supported for stable backup for multiple sites. To use the *Schedule FTP Upload* function, the FTP server must be operated on the backup PC.

To set up the *Schedule FTP Upload* function:

1. Open the **Top Menu**, then click on “**Backup**”.

The *Backup* window will display. Click on the “**Schedule FTP Upload**” tab.

2. Under the **My Sites** section, click on a site that you are setting this feature for. The device information will display in the *Site Information* area.

Set the **Path** of the backup file.

3. Under the **Upload Date** section, choose the dates to upload.

If you check the “**Continue**” box, the setting will be designated from the start date to the present date.

If you check the “**Latest**” box, the setting will start from the previous day and proceed like continuous backup.

Under the **Channels to Backup** section, select which channels to include in the backup. Enable “**ALL Channels**” to select all channels.

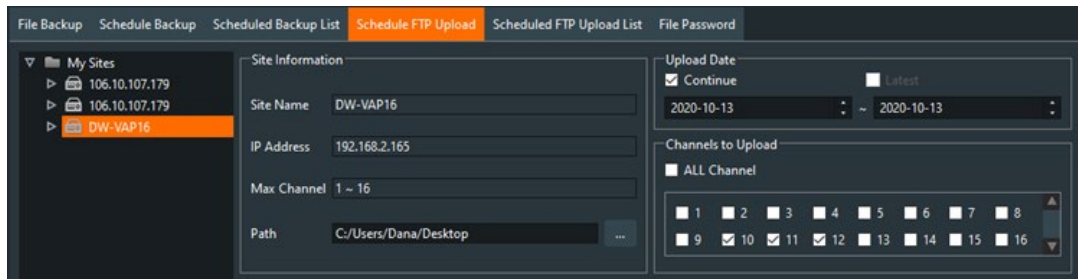


Image 70: Schedule FTP Upload

4. Under the **FTP Server Information** section, configure the following:
 - **Host** – enter the backup server’s IP Address
 - **Port** – 22 (default; if limited, you may enter a different port)
 - **User** – enter the FTP server ID
 - **Password** – enter the FTP server password
 - **Home Path** – set the home path set in the FTP

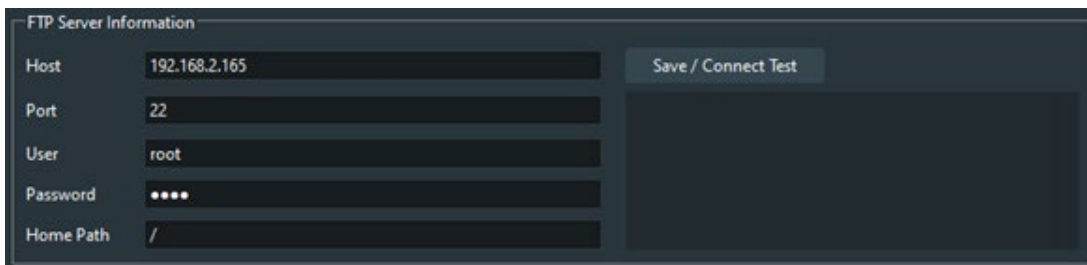


Image 71: FTP Server Information

5. At the bottom of the window, enable [optional] **“Start Scheduled Backup when OS Starts”** to execute backup when the OS of the computer starts.

Once the settings have been configured, click the **Save/Connect Test** button to test the connection and save the settings.

6. Click the **Scheduled FTP Upload List** tab to view the scheduled backup. The last downloaded file will display, not the time of the last data uploaded.

At the bottom of the window, set the **“Delete Old Folders”** and **“Days”** settings to configure the auto deletion of old recordings of the *Scheduled FTP Upload* feature.

Run	Site Name	Site IP	Upload Start	Upload End	Last Upload
STOP	SooN_9ch	192.168.2.192	2020/ 07/ 10	Continue ~	2020/ 07/ 27 (073001005.ssf) (33/70)
STOP	SooN_16ch_DW	192.168.2.197	2020/ 07/ 10	Continue ~	0/ 00/ 00
RUN	Bong_mv16	192.168.2.183	2020/ 07/ 10	Continue ~	2020/ 07/ 27 (233210015.ssf) (3/4)
STOP	SooN_16ch	192.168.2.175	2020/ 07/ 10	Continue ~	2020/ 07/ 27 (003011015.ssf) (3/70)

Buttons: Stop / Run, Run All, Stop All, Edit, Delete, Delete Old Folders, 7 Days, Save

Start Scheduled Backup when OS Starts.

Image 72: Scheduled FTP Upload List

File Password

The *File Password* menu allows users to encrypt the backup video files and require a password to view them.

To set up a *File Password* in C3 CMS:

1. Open the **Top Menu**, then click on "**Backup**".

The *Backup* window will display. Click on the "**File Password**" tab.

2. The *File Password* menu will display.

Select the file location from the **Drive List**, then select the backup file in the *Backup File List* that you would like to encrypt.

3. In the *File Encryption* area, create a password to protect the selected file(s).

Click the "**Encryption**" button to encrypt the selected file(s) and apply the password.

4. To change or delete the password, select the file, then enter the login password to the site.

Enable the "**No password**" setting to disable the current password altogether.

Enter a new password in the “**New Password**” and “**Confirm Password**” settings to change the password to something else.

Click the “**Save**” button when finished to apply the settings.

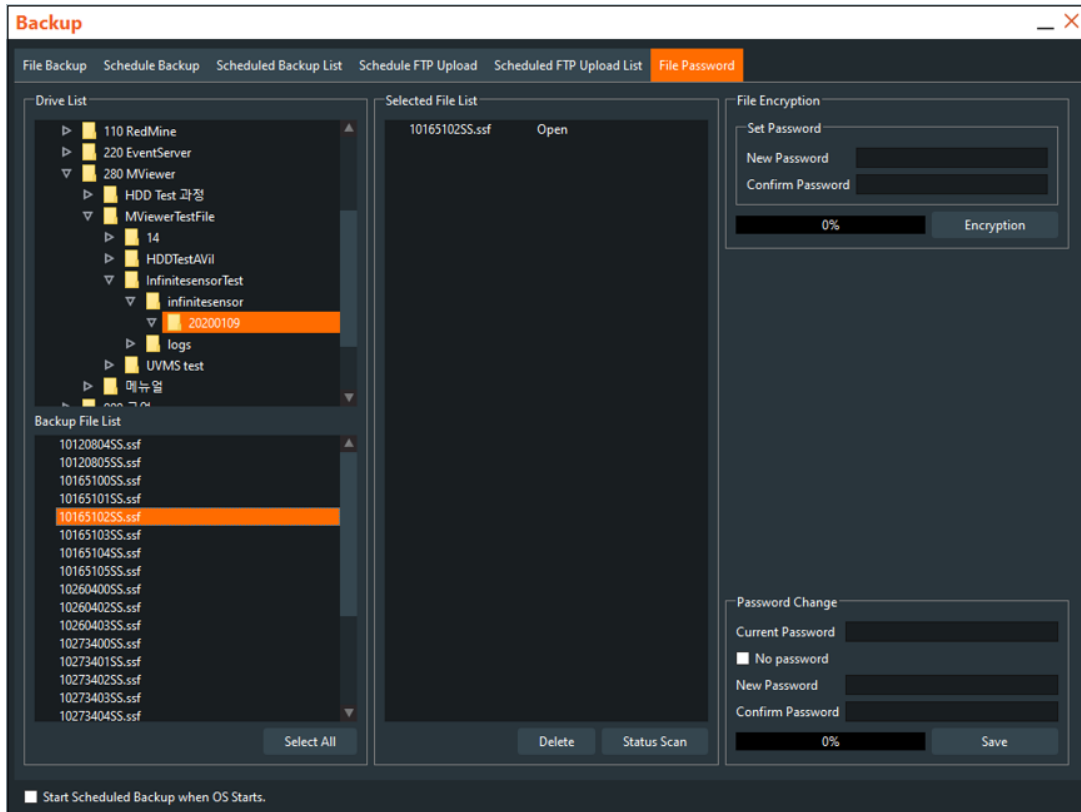


Image 73: File Password

Section 2: Viewing Exported Video Backups

Video files exported through C3 CMS can be viewed, using the C3 CMS Backup Viewer feature.

To use the Backup Viewer:

1. To prompt the Backup Viewer to display in the C3 CMS client, click the “**Backup Player**” button.”

If the Backup Player was included with the video export, launch its executable (.exe) file to use the viewer.

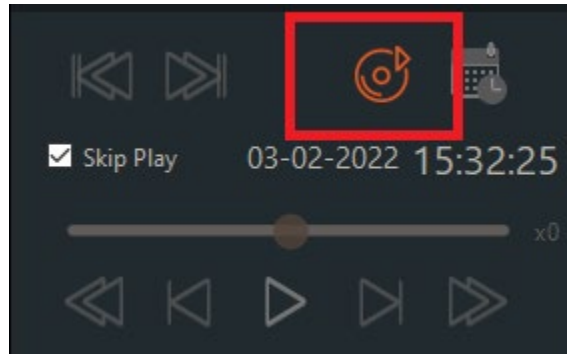


Image 74: C3 Backup Player Tile

2. In the “**File Drive List**”, select the file directory where the video files are saved.
If the files are password protected, enter the password in the “**File Password**” box to decrypt the video footage files.
3. The exported video files can be selected from the *File List* section.
To view a single channel at a time, select the “**One**” tab.
To view multiple channels at once during playback, select the “**Multi**” tab.
Double-click on a video file to begin viewing the exported video file.

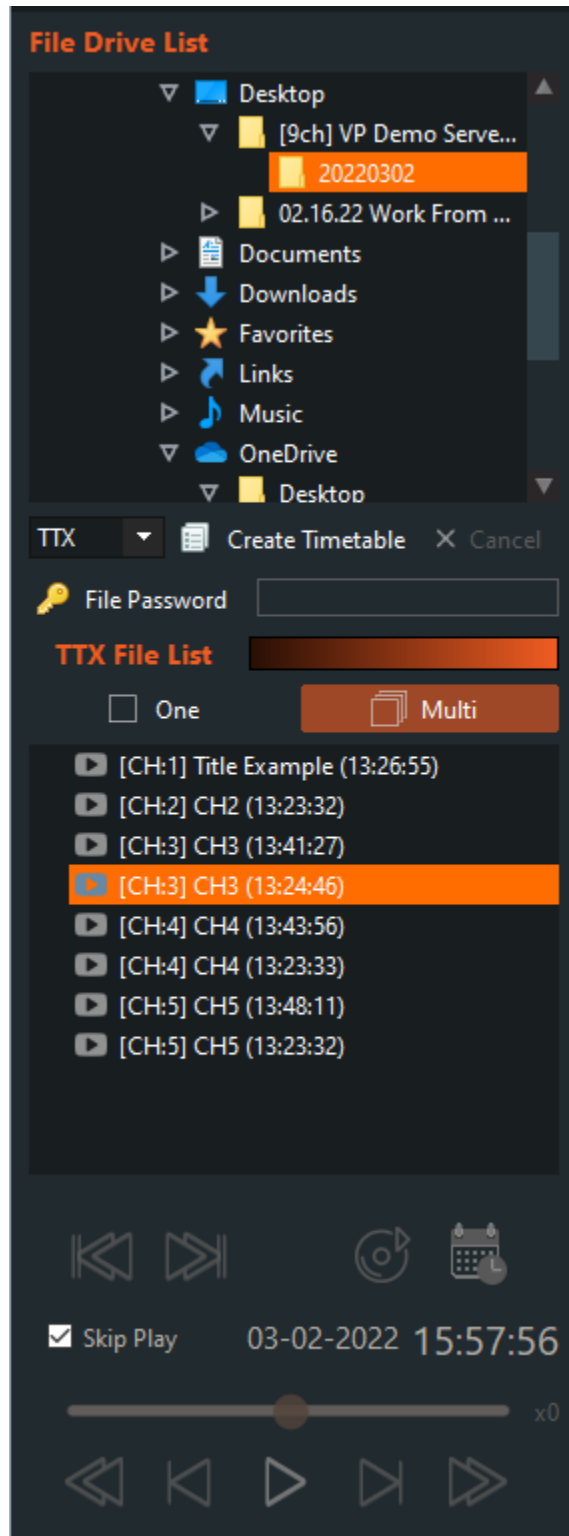



Image 75: TTX File List

Chapter 9: C3 CMS System Logs

Section 1: Viewing C3 CMS Logs

Use the following procedure to review device status and logs:

1. From the right-pane, click the  Status icon. The C3 CMS device status and log screen displays.

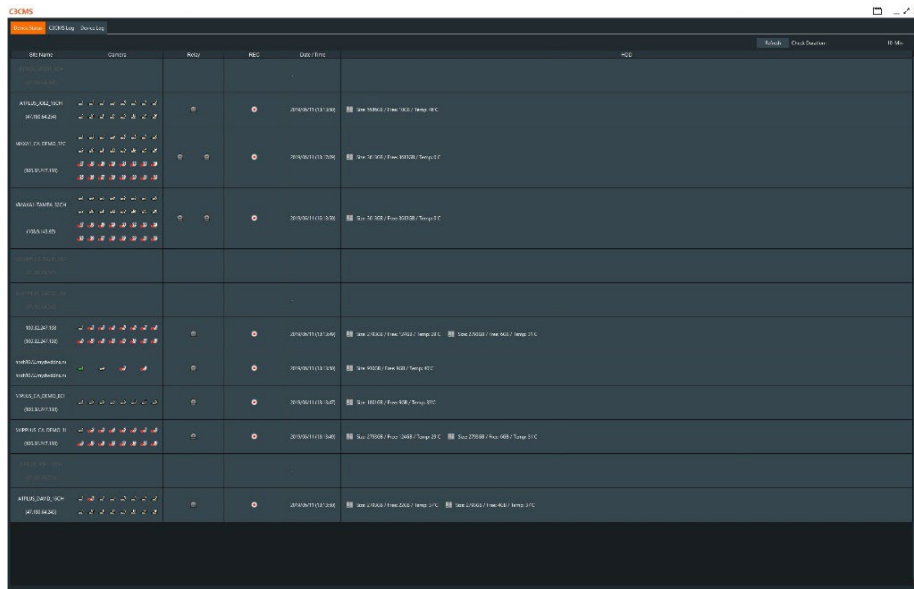








Image 76: C3 CMS Device Status

2. Click the **Device Status** tab, you can do the following:

- **Refresh:** Click **Refresh** to view the current device status information.
- **Check Duration:** Displays frequency status information is updated in minutes.
- **Status Icons:** The following table defines the status icons.

Icon	Name
	Video In
	No Video or Loss
	Motion In
	Connected Relay
	Operating Relay
	Recording

3. Click the **C3 CMS Log** tab, you can do the following:

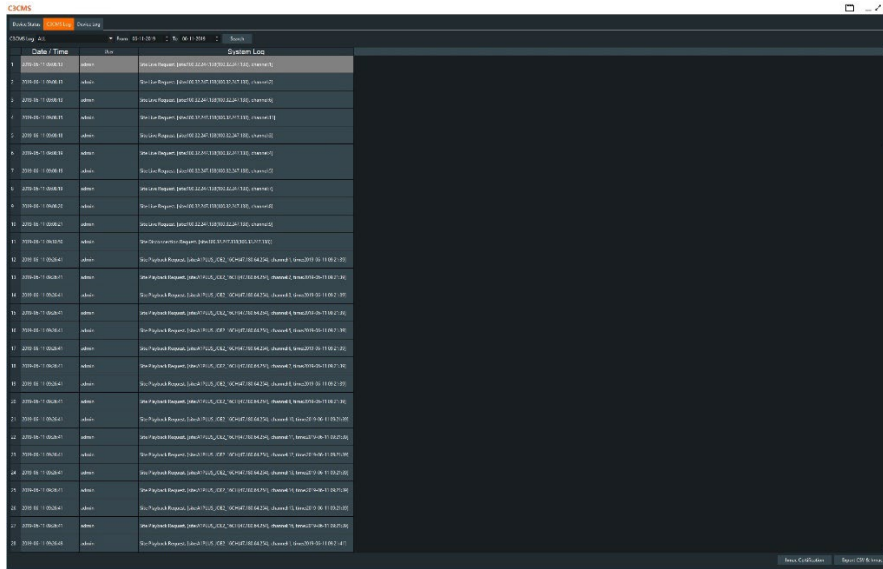


Image 77: C3 CMS Log

- **C3 CMS Log:** Select the logs to include in the search using the drop-down menu.
- **From:** Select the start date using the drop-down menu.
- **To:** Select the end date using the drop-down menu.
- **Search:** Click **Search** to run the selected log search. The results display in the screen. You can expand or reduce column size by clicking the column and dragging to the right or left.
- **hmac Certification:** Certify a file by clicking **hmac Certification**, select the file to be certified, click **Open**, and then click **OK** when the file is certified.
- **Export CSV & hmac:** Export the log file as a CSV file and perform an hmac certification. Click **Export CSV & hmac**, select the folder location, enter a file name, and then click **Save**. The file is created and certified.

4. Click the **Device Log** tab, you can do the following:

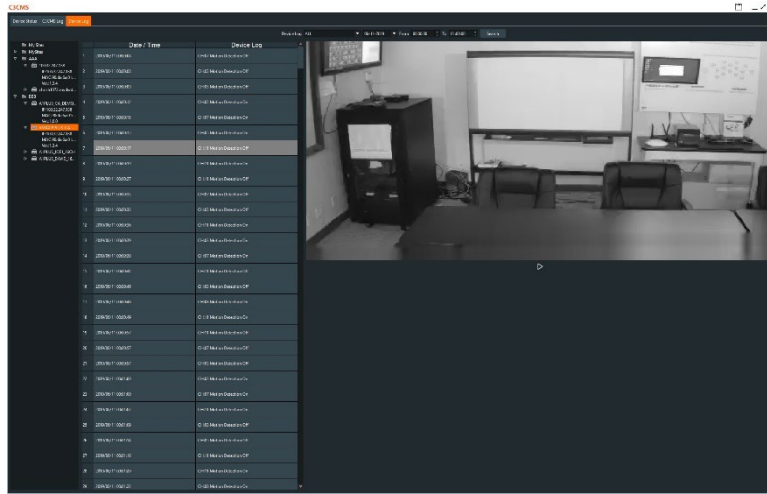


Image 78: Device Log

- **Device Log:** Select the logs to include in the search using the drop-down menu.
- **From:** Select the start date using the drop-down menu.
- **To:** Select the end date using the drop-down menu.
- **Search:** Click **Search** to run the selected log search. The results display in the screen. You can expand or reduce column size by clicking the column and dragging to the right or left.
- **Site Folders:** Select a site, device logs display in the Device Log pane and channel displays in the right pane. You play video, capture images, and record.

Chapter 10: C3EventServer Software Setup

The C3 Event Server software (*C3EventServer*) is a background software program that works alongside the regular C3 CMS client program to document and evaluate the system health and system events of registered sites.

Section 1: Setting Up C3Event Server

Configuring the C3 CMS Event Server Software

Use the following instructions to install and configure the C3CMSEventServer software:

1. Double-click the **C3CMSEventServer** icon. Upon initially launching the program, a *Windows Security Alert* screen will display. Select the preferred setting, then click the **Allow Access** button to continue.

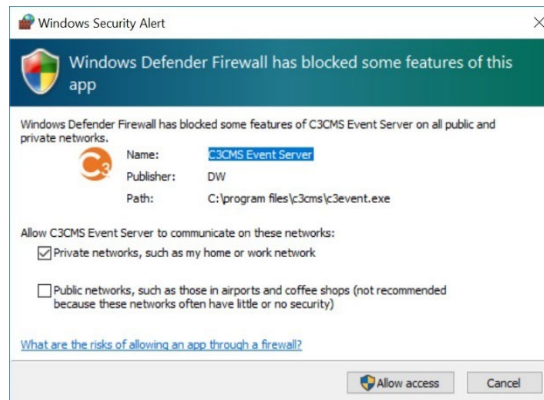









Image 79: Windows Security Alert

2. The *Event Server* will display. Click the tabs at the top or use the  *C3Event Server Agent* to navigate the menus.










C3 Event Server Agent Controls

The *C3Event Server Agent* provides quick links and access for the following:

Icon	Name	Description
	Dash Board	View the <i>Dashboard</i> menu to check the number of sites, events, cameras, and connection status.
	Live Event	View the <i>Live Event</i> log for Real-Time event data including event type (motion detection, alarm inputs, etc.), device IP address, date/time, and channel.

Icon	Name	Description
 Event Search	Event Search	Search <i>Event Log</i> by site name, IP address, port, date/time, channel, or event type.
 Event Window	Event Window	Prompt the <i>C3 CMS Event Popup</i> window.
 Health Check	Health Check	Review the status of the devices that are being monitored by <i>C3 CMS</i> .
 Report	Report	Schedule reports by group and/or site.

C3 Event Server Navigation Controls

Icon	Name	Description
	C3 CMS Agent	Click to launch the <i>C3 CMS Agent (Event Server)</i> .
	Tab Separation	Click to separate the <i>Event Server</i> menu tabs into individual windows. Click-and-drag separated tabs to combine in the same window.
	Tab Collection	Click to regroup the separated menu tabs into a single window. Click-and-drag tabs to reorganize order.
	Site Sync	Click to refresh and synchronize <i>UVMS & device list</i> .
	Site Setting	Click to register <i>Site Contact Information (Administrator information)</i> .
	Configuration	Click icon to open the <i>Event Server Configuration</i> screen.
	Minimize	Click to minimize the screen.
	Expand	Click to maximize the screen.
	Close	Click to close the <i>Event Server</i> .

Section 2: C3 Event Server Dashboard Types

The *C3 Event Dashboard* is for easy monitoring of devices overall, number of cameras, connection status, number of events, etc. Users have an option of selecting the type of dashboard best meets their needs.

Dashboard – Basic Type

The *Dashboard* type (Basic/Safety) can be selected by opening the *Configuration* screen and selecting the preferred type under *Application > Main Dashboard Type*.

Dashboard (Basic) Features:

- **Chart of Sites/Cameras** – displays the number of sites and cameras registered on the Event Server; displays number of abnormal or disconnected sites and cameras.
- **Count of Sites/Cameras** – displays number of devices and cameras registered on the Event Server in the form of a graph.
- **Health View** – displays express health status of devices that are currently connected to the Event Server; clicking each item will result in the display of the *Health Check* menu.
- **Monthly/Daily Event Chart** – displays monthly or daily event statistics of all registered devices as a chart and table; use the drop down to select search parameters.
- **Selectable Event Tables** – four of the monthly event types (of the selected *Monthly/Daily Event Chart* period) are displayed in the order of the greatest number of occurrences. Event type can be selected using the by using the drop down menu.
- **Popup Menu** – right-click anywhere in the *Dashboard* for the following options:
 - *Always On Top* – set the *Dashboard* window to always display on top of other C3 CMS windows
 - *Event Refresh* – refresh events within the *Dashboard*
 - *Monthly Event Add/Edit* – allows reorganization of the *Monthly/Daily Event Chart* health events
 - *Event output configuration* – opens the *Event Output Configuration* window

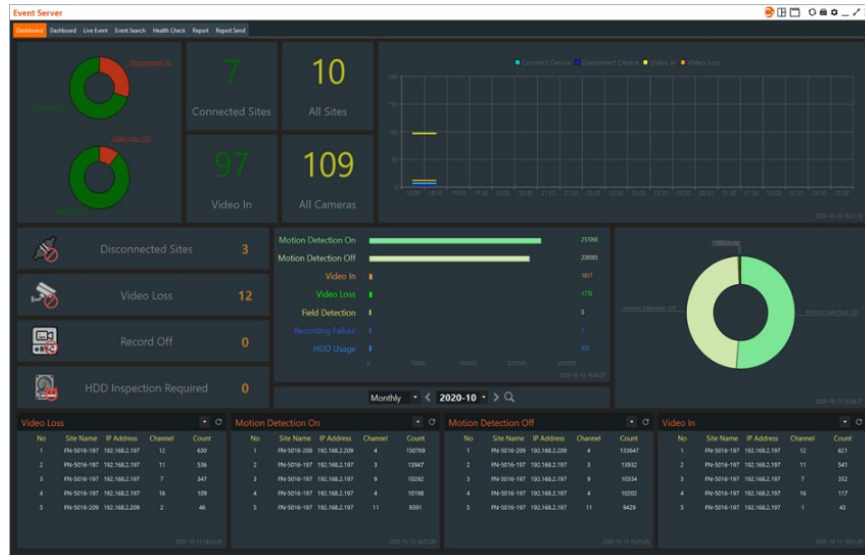


Image 80: Event Server Dashboard (Basic)

Dashboard – Safety Type

Displays the detected sensor value from connected environmental sensors. A *Safety Index* is displayed depending on the set weight of each element in the *Safety Score*.

The *Dashboard* type (Basic/Safety) can be selected by opening the *Configuration* screen and selecting the preferred type under *Application > Main Dashboard Type*.

Dashboard (Safety) features:

- **Date** – displays the current date and time; displays the date and time of the last event received.
- **Device Selection** – click to select the connected device/site for dashboard monitoring.
- **Device Information** – displays information of the connected device/site including *IP/Domain Address*, *MAC Address*, and *Port*.
- **Safety Score** – displays a calculated safety score based on the ‘weight’ of each element; click to display the *Safety score weight* window and adjust the ‘weight’ of each score.
- **Device Status Information** – displays connected camera count, channels experiencing video loss, and connection status.
- **Environmental Sensor Graph** – displays environmental sensor scores in graph form.
- **Environmental Sensor Score** – displays environmental sensor scores.

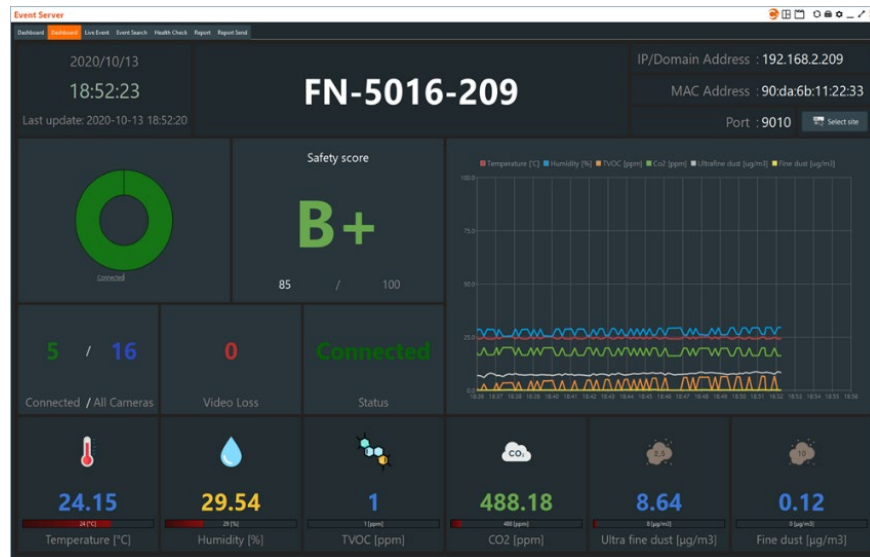


Image 81: Event Server Dashboard (Safety)

Section 3: Live Event Logs

This menu displays a log of system events as they occur in Real-Time at the registered DVR/NVR (site). The log displays events by *Site Name*, *IP Address*, *Port*, *Date/Time*, *Channel/Camera*, *Camera Title*, and *Event type*.

****NOTE:** To utilize the *Live Event* feature, additional setup at the recording unit itself must be performed. The *Notification* settings of your recording unit must be configured to connect with the IP address and Server Port number of the C3 Event Server. The C3 Event Server's address information is located in the *Local IP and Port* settings of the *Configuration* menu.

From this screen, users may:

- Double-click on a specific event to begin playback of the logged event.
- Right-click anywhere within the table to configure the displaying information within the table.
- Click on the **Event output configuration** button to set up event rules.

Site Name	IP Address	Port	Date / Time	Channel Camera	Channel Camera Title	Event	Comment
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:15	CH11	CH11	Admission Detection On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:15	CH4	CH4	Admission Detection On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:16	CH12	CH12	Admission Detection On	
FX-5014-209	192.168.2.209	8016	2020-10-13 18:23:15	CH4	CH4시안부동	Admission Detection On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:18	CH11	CH11	Admission Detection Off	
FX-5014-209	192.168.2.209	8016	2020-10-13 18:23:18	CH4	CH4시안부동	Admission Detection Off	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:18	CH11	CH11	Admission Detection On	
FX-5014-209	192.168.2.209	8016	2020-10-13 18:23:19	CH4	CH4시안부동	Admission Detection On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:20	CH12	CH12	Admission Detection Off	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:20	CH12	CH12	Admission Detection Off	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:22	CH3	CH3	Admission Detection On	
FX-5014-209	192.168.2.209	8016	2020-10-13 18:23:22	CH4	CH4시안부동	Admission Detection Off	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:23	CH12	CH12	Admission Detection On	
FX-5014-209	192.168.2.209	8016	2020-10-13 18:23:23	CH4	CH4시안부동	Admission Detection On	
DW-5018-163	192.168.2.163	8014	2020-10-13 18:22:51	CH7	CH7	Admission Detection On	
DW-5018-163	192.168.2.163	8014	2020-10-13 18:22:51	CH1	CH1	Relay On	
DW-5018-163	192.168.2.163	8014	2020-10-13 18:22:51	CH16	CH16	Admission Detection On	
DW-5018-163	192.168.2.163	8014	2020-10-13 18:22:51	CH10	CH10	Admission Detection On	
DW-5018-163	192.168.2.163	8014	2020-10-13 18:22:51	CH12	CH12	Admission Detection On	
DW-5018-163	192.168.2.163	8014	2020-10-13 18:22:51	CH1	CH1	Relay On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:24	CH3	CH3	Admission Detection Off	
DW-5018-163	192.168.2.163	8014	2020-10-13 18:22:51	CH1	CH1	Relay On	
DW-5018-163	192.168.2.163	8014	2020-10-13 18:22:51	CH1	CH1	Relay On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:25	CH11	CH11	Admission Detection On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:25	CH11	CH11	Admission Detection On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:25	CH3	CH3	Admission Detection Off	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:25	CH3	CH3	Admission Detection Off	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:25	CH6	CH6	Admission Detection On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:25	CH4	CH4	Admission Detection Off	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:26	CH14	CH14	Admission Detection Off	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:26	CH14	CH14	Admission Detection On	
FX-5014-209	192.168.2.209	8016	2020-10-13 18:23:26	CH2	CH2시안부동	Admission Detection On	
FX-5014-197	192.168.2.197	8015	2020-10-13 18:23:26	CH4	CH4	Admission Detection On	

Image 82: Live Event

Live Event – Event Play

To open the *Event Play* window, double-click on an event or right-click and select “Play”.

Use the *Play Controller* at the bottom of the video window to control viewing speed, enlarge the image, capture a frame (image), and screen record.

Event Information will display below the video window to provide *Date/Time*, *Event type*, *Device Name*, *MAC address*, *IP/Port*, and *Channel*.

Use the *Live* and *Replay* buttons to change between live viewing and playback display.

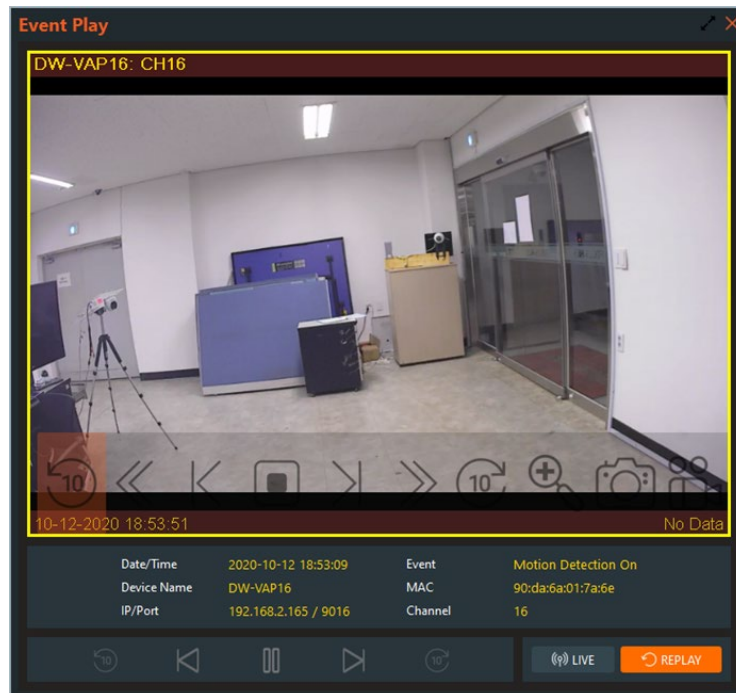


Image 83: Event Play

Event Output Configuration

From the *Live Event* screen, click the **Event output configuration** button to set up event rules.

Click the **Add** to add a new rule or select a rule, then click the **Edit** button to configure an existing rule.

Select a rule, then click the **Delete** button to remove an existing rule.

- **Edit site list selection** – click this button to unlock the ability to select the registered devices with which to associate the event rules within the *Site List*; all sites are selected by default.
- **Event Type** – select the type of event for the rule.
- **Show/Hide** – select to show or hide the event.
- **Start Time & End Time** – set up the timeframe for the event to remain active; by default, *All Day* will be enabled.
- **Color** – change the color of the event.
- **Send to CMS** – enable to send event notification to the CMS portion of the software.
- **Apply** – click to save the event rule settings.
- **Move Up/Move Down** – changes the priority order of the registered rules.

Section 4: Live Event Search

Use the *Event Search* window to search through the *Live Event* log by keyword or with a conditional search filter.

- **Export** – click this button to export the log as a .CSV file.
- **Filter** – use this search feature to enable/disable conditional search parameters including the date/time, site name, IP address, port, channel number, channel title, or event type of the logged events.

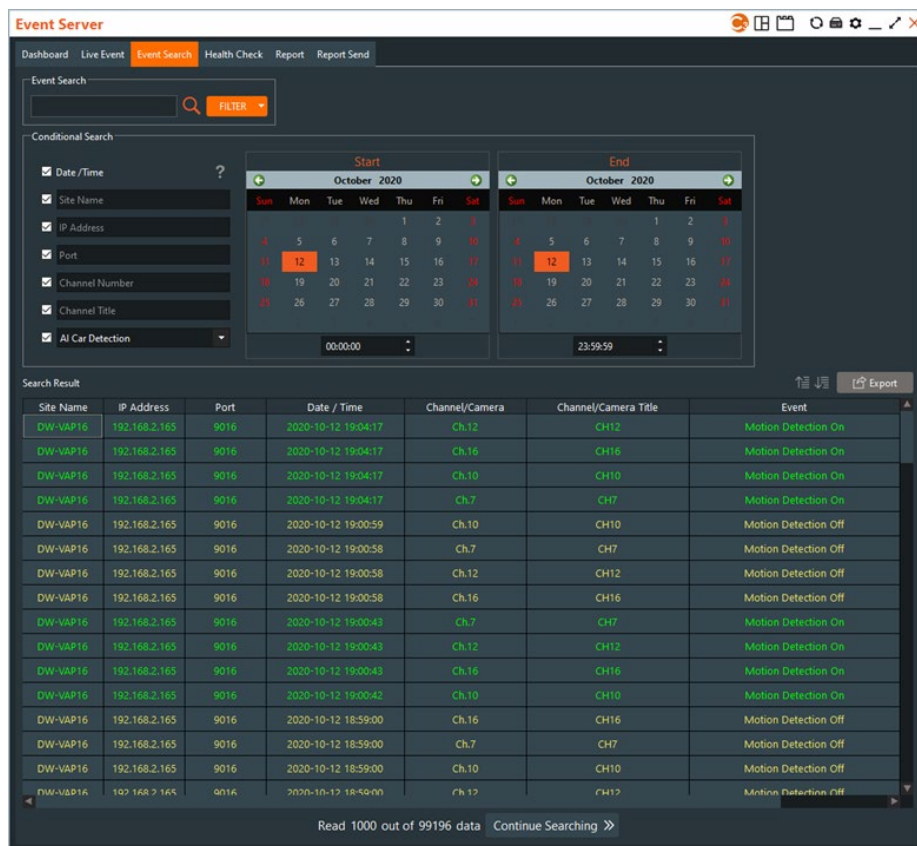


Image 84: Event Search – Conditional Search

Section 5: C3 Event Server Health Check (*Windows only)

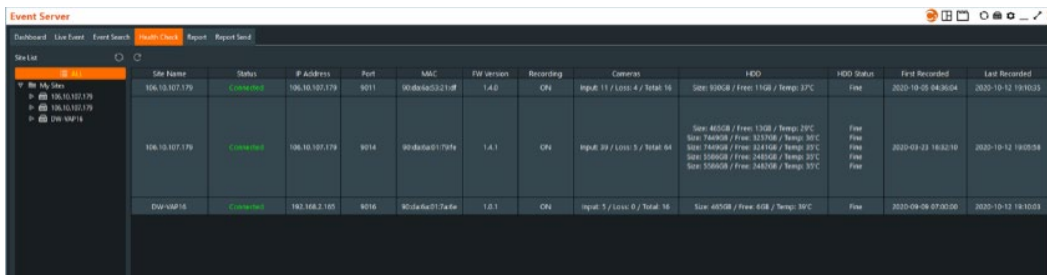
Health Check – Group

This menu displays the health information of devices selected from the *Site List*.

The health status of the group display includes:

- **Site Name** – site name/label
- **Status** – connection status

- **IP Address** – IP address of the site
- **Port** – input port of the site
- **MAC** – MAC address of the site
- **FW Version** – current firmware version of the connected recording device
- **Recording** – recording status
- **Cameras** – displays current camera count and the number of channels experiencing video loss
- **HDD** – displays the overall capacity, free space, and operating temperature of the hard drive within the recording device
- **HDD Status** – displays SMART status
- **First Recorded** – displays the timestamp of the earliest available footage for playback
- **Last Recorded** – displays the timestamp of the most recently recorded footage for playback



Site Name	Status	IP Address	Port	MAC	FW Version	Recording	Cameras	HDD	HDD Status	First Recorded	Last Recorded
106.10.107.179	Connected	106.10.107.179	9011	90ba6ac321d8	1.4.0	ON	Input: 11 / Loss: 4 / Total: 16	Size: 810GB / Free: 13GB / Temp: 37C	File	2020-10-05 04:36:04	2020-10-12 19:50:25
106.10.107.179	Connected	106.10.107.179	9014	90ba6ac31794	1.4.1	ON	Input: 29 / Loss: 3 / Total: 64	Size: 405GB / Free: 13GB / Temp: 37C Size: 746GB / Free: 321GB / Temp: 36C Size: 746GB / Free: 321GB / Temp: 36C Size: 556GB / Free: 245GB / Temp: 35C Size: 556GB / Free: 245GB / Temp: 35C	File	2020-03-23 16:32:10	2020-10-12 19:50:28
DSP-VM14	Connected	193.168.2.165	8016	90ba6ac317ade	1.4.1	ON	Input: 3 / Loss: 0 / Total: 16	Size: 405GB / Free: 41B / Temp: 38C	File	2020-09-08 07:00:00	2020-10-12 19:50:23

Image 85: Health Check - Group

Health Check – Device Information

From the *Health Check* screen, double-click on any site within the group to display detailed information.

- **Device Information** – shows detailed information of the device including device name, IP address, model name, port, user ID, F/W version, H/W version, and MAC address.
- **Camera Information** – displays recording information of connected cameras including the maximum number of channels available, number of connected cameras, number of channels experiencing video loss, recording status, and recording archive start/end times.
- **HDD** – displays hard drive information including total storage capacity, free space, internal temperature, serial number, and SMART health.

- **Remove Management** – use the control options to upgrade device firmware through the C3 CMS platform, reboot the recording device, factory default the recording device, or activate the *Panic Record* feature of the recording device.

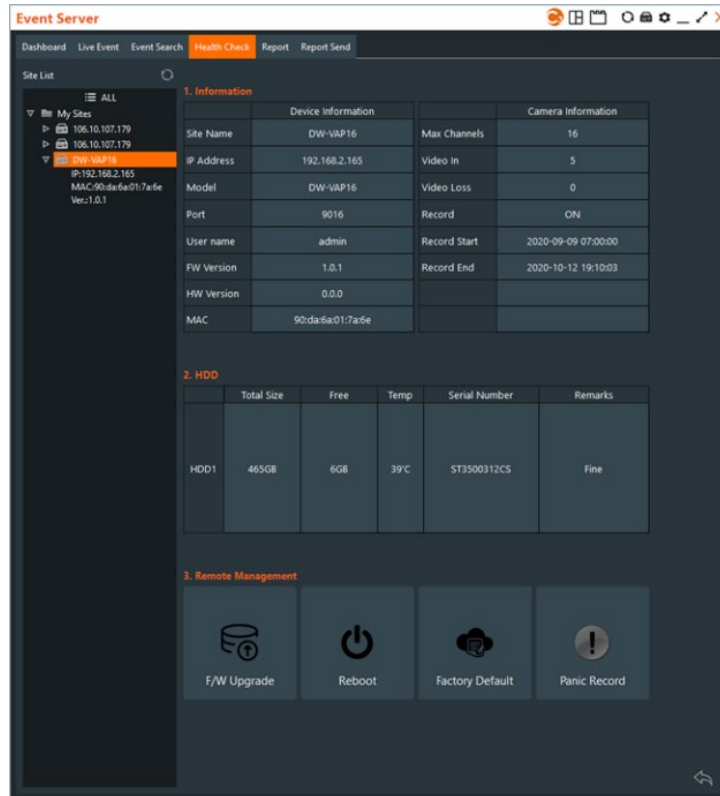


Image 86: Health Check – Device Information

Section 6: C3 Event Server Reports

Report – Group

This menu displays the number of events by event type for selected sites (all sites by default).

Features include:

- **Site List** – select sites to include in the table.
- **Period/Custom Date Selection** – select to search data by daily/weekly/monthly parameters or specify a custom date.
- **Export** – click this button to export the table as a .CSV file

Report – Data Analysis & Statistics

Select a site from the *Site List* to view a Data Analysis Report.

Features include:

- **Period/Custom Date Selection** – select to search data by daily/weekly/monthly parameters or specify a custom date.
- **PNG Export** – click this button to export the report as a .PNG image.
- **Email Export** – click this button send the report by E-mail to the registered SMTP Server (in *Event Server* configuration settings).
- **Event Share** – displays the number of critical events (max. of seven (7) events); right-click and select “*Event Share Add/Edit*” to configure which critical events to display.
- **Event Variation** – graph displays event activity (max. of seven (7) events); right-click and select “*Variation Event Add/Edit*” to configure which events to display.
- **System Status** – graph displays system CPU usage and operating temperature activity.



Image 87: Report

Section 7: C3 Event Server Report Notifications

User can have reports sent by email on a daily, weekly, or monthly basis. Click a tile to access the settings for this function.

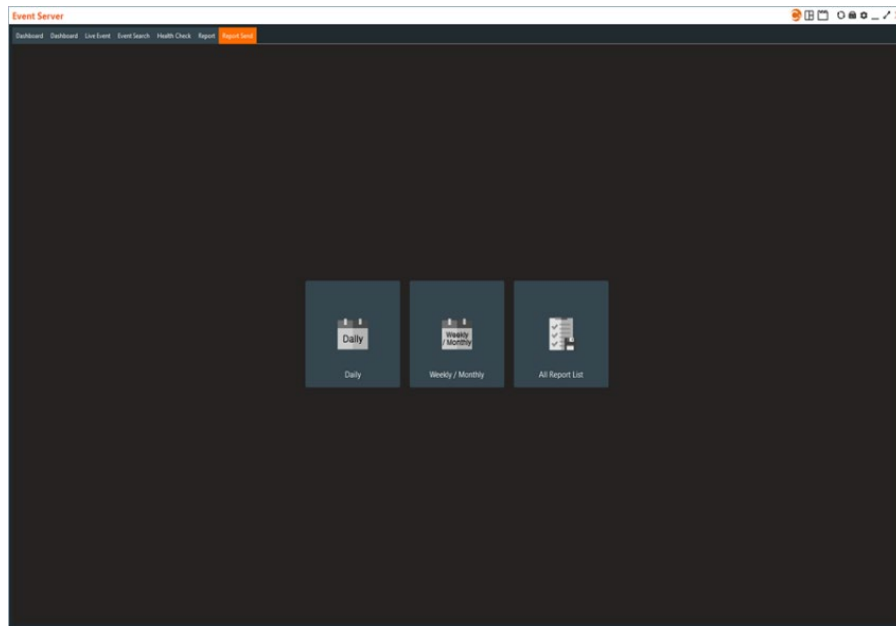


Image 88: Report Send

Report Send - Daily

Configure the following settings for *Daily* report:

- **Selected Devices** – select the sites to include in the *Daily* report.
- **Report Name** – input a report title for the email (subject).
- **Recipients** – enter the email address(es) that will receive the report. Separate recipient email addresses using a semicolon (;).
- **Create and Send a Report** – specify an hour of the day (24 hour format) for when to create and send the report.
- **Site Overview** – select which critical Events to include within the report.
- **Health Event per System** – select which System Health events to include within the report.
- **Device Detail** – enable to include detailed recorder information for each site.

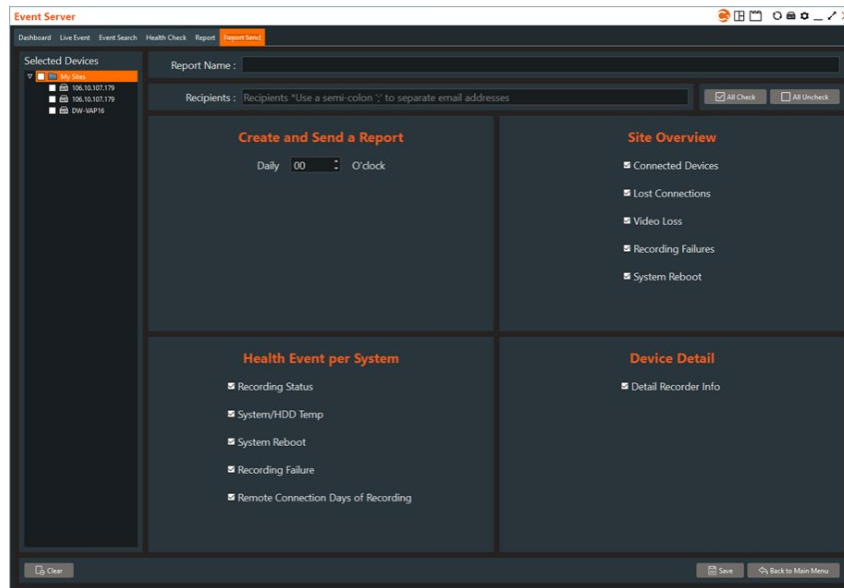


Image 89: Report Send – Daily

Report Send – Weekly/Monthly

Configure the following settings for *Weekly/Monthly* report:

- **Selected Devices** – select the sites to include in the *Weekly* or *Monthly* report.
- **Report Name** – input a report title for the email (subject).
- **Recipients** – enter the email address(es) that will receive the report. Separate recipient email addresses using a semicolon (;).
- **Create and Send a Report** – select if the report shall be sent:
 - *Weekly*, then specify a day of the week (MON – SUN) and an hour of the day (24 hour format) for when to create and send the report
 - *Monthly*, then specify the day (1 – 31) and an hour of the day (24 hour format) for when to create and send the report
- **System Health Events** – select which critical Events to include within the report.
- **System Network Event** – select which system connectivity information to include within the report.
- **Video Events** – enable to include reports of *Video Loss* within the report.

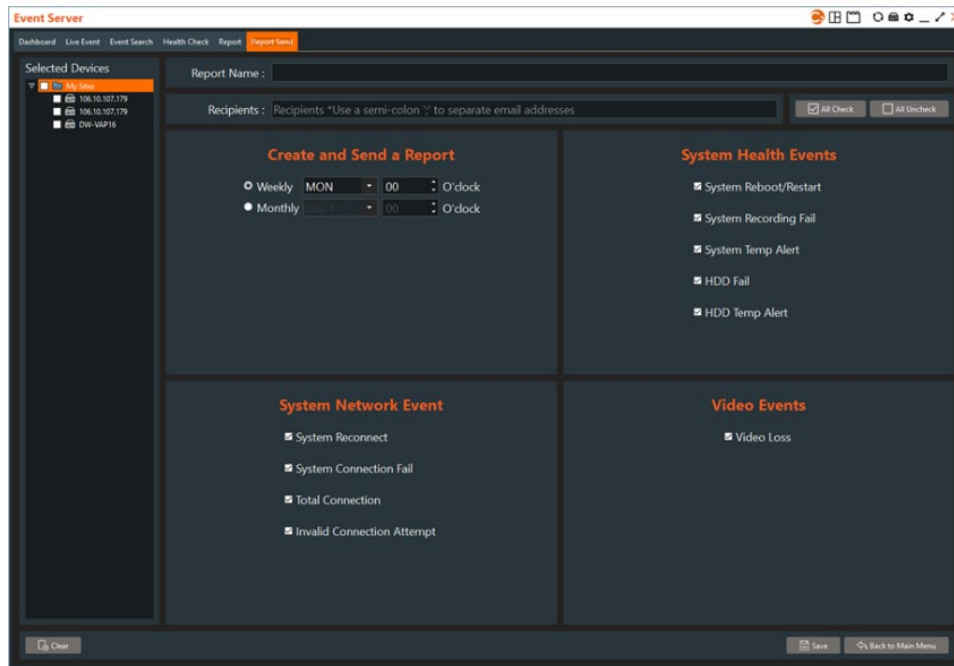


Image 90: Report Send – Weekly/Monthly

Report Send – All Reports

This menu displays all scheduled outbound reports of C3 CMS.

Features include:

- **Reports** – table will display the title (subject) and recipient emails of each report currently configured.
- **Status** – click to activate/de-activate the scheduled report(s).
- **Pause/Active All Reports** – click on a report, then use the buttons to pause or activate the configurations selected reports.
- **Send Now All Reports** – click to send all Active email reports, regardless of schedule

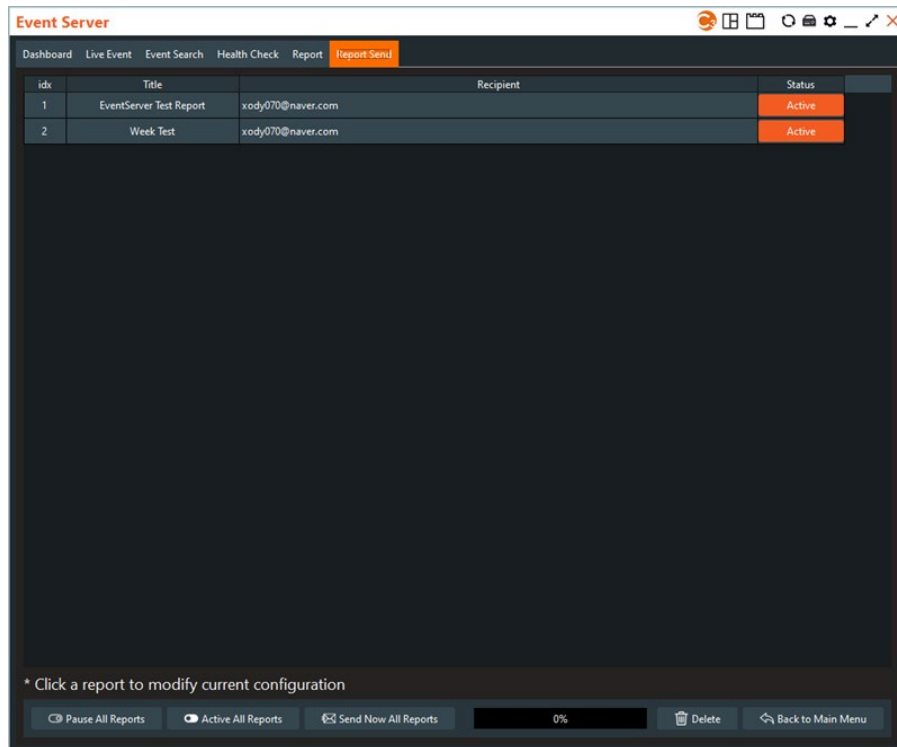



Image 91: Report Send – All Reports

Section 8: Event Server Configuration (*Windows)

To configure the *Event Server* settings, click the  *Configuration* icon on the toolbar at the top of the window.

Application

From the *Application* tab, you may:

- **'Event Server' receive port** – set the server port for receiving events.
 - *Server Port* – 8003 (default)
 - *Http Server Port* – 8803 (default)
- **Notify 'C3CMS' of the receive events** – set up the port (*default: 8033*) to communicate to C3 CMS. When an event occurs, the channel will pop-up as an *Event Window* for viewing, when selected. Select “*Send to remote 'C3CMS'*” to use this feature for a remote instance of the C3 CMS software (must specify IP address).
- **Language** – select the default language [English/Korean].

- **Event Output** – enable to allow receiving of events from devices that are not registered within the Event Server; when disabled, events are received based only on the registered output settings.
- **Auto Start** – enable to automatically start the Event Server when the OS boots.
- **Main Dashboard Type** – select whether to use the *Basic* (default) or *Safety Dashboard* (see section 4.3.1 & 4.3.2 above). Changing types will require a restart of the Event Server.
- **Device Auto Refresh** – enable and specify a time lease (10~1440 minutes) to schedule an automatic refreshment of device information.

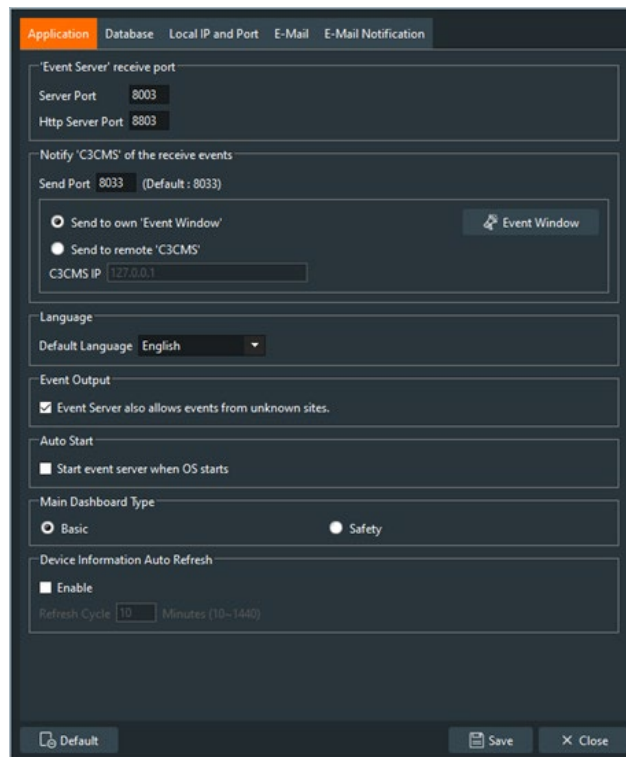


Image 92: Application

Database

From the *Database* tab, you may:

- **Use Site List Database** – select:
 - *Used together* (default) – use the same *Site List* as C3 CMS; Event Server *Site List* is synchronized with the C3 CMS *Site List* and cannot be edited
 - *Exclusive use* – use a *Site List* separately from C3 CMS; Event Server *Import/Export* feature is active through the context menu and the Event server *Site List* can be edited for the Event Server exclusively

- **Connect Account** – displays only when the *Use Site List Database* setting is set to “*Exclusive Use*”.
 - *Local Host* – current IPv4 loopback traffic address of the C3 Event Server’s host computer; MariaDB’s session manager access information (default: 127.0.0.1)
 - *MySQL Port* – Maria DB connection port (default: 3306)
 - *ID* – Maria DB user ID (default: root)
 - *Password* – Maria DB password (default: root)
 - *Connect Test* – a test function to see if the connected account information is configured correctly

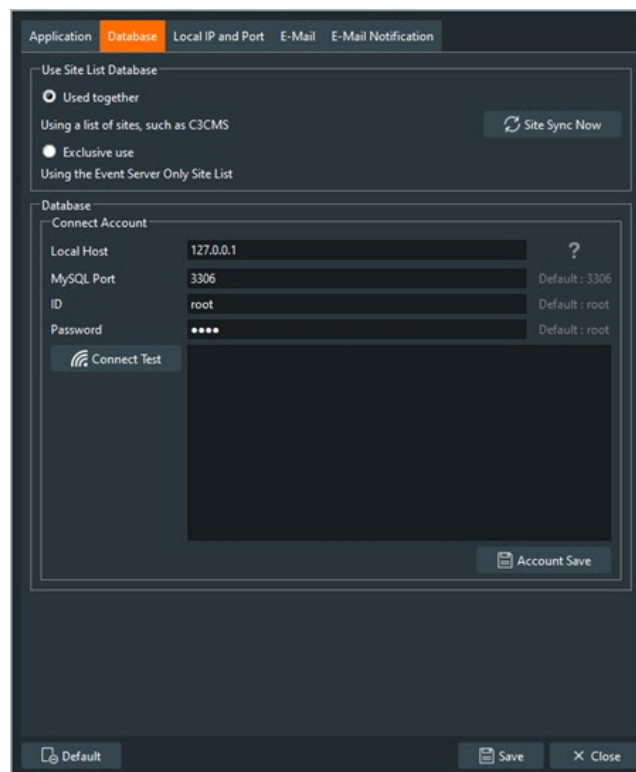


Image 93: Database

Local IP and Port

From the *Local IP and Port* tab, you may view the current WAN/*Public IP address*, *Local IPv4 address*, and port information of the local computer that is currently in use.

The information represented in this window can be utilized to register the computer that is hosting the C3 Event Server program within the Notification settings of a registered DVR/NVR recording unit (site). By registering

****NOTE:** If the C3 Event Server is on a network that is external to the recording unit, then the recording unit must be port forwarded to permit communication between the C3 Event Server and the host (recording unit).



Image 94: Local IP and Port

E-Mail

From the *E-Mail* tab, configure the following for sending reports:

- **Use Gmail** – enable this feature to use a Gmail account as the outgoing email address; additional security authorization must be configured in the Google account's "Google Account Management" setting to all "Access from less secure apps" to utilize this feature.
- **Test Recipient** – enter an email address that will receive test emails.
- **SMTP Server** – enter the outgoing email account's SMTP server address.
- **SMTP Port** – enter the outgoing email account's SMTP port number.
- **User ID** – enter the sending email address.
- **Password** – enter the sending email address's user password.
- **Test** – click to send a test email to the email specified in the *Test Recipient* field.

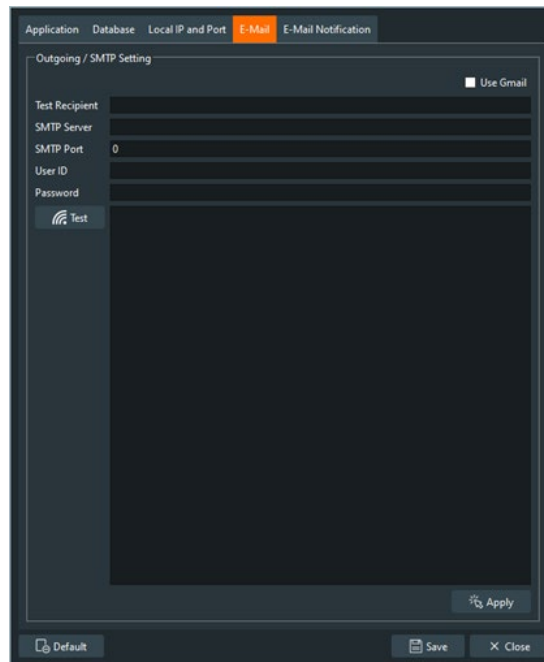


Image 95: E-Mail

E-Mail Notification

From the *E-Mail Notification* tab, configure the following to send System Health/Status reports:

- **Send Health/Status report E-Mail** – enable this feature and specify a time lease (30~1440 minutes) to send a scheduled report of the health status of selected devices/sites. The email is sent to the account that is set in the *E-Mail* tab.
- **Site List** – select the device(s)/site(s) to be included within the notification emails.
- **Recipient** – enter the email addresses that will receive the notification emails. Use a semicolon (;) when entering multiple email addresses.
- **Send mail merge** – enable this feature to send all contents from the selected devices from a single email account.
- **Send Now** – click this button to send a notification email, regardless of report scheduling.

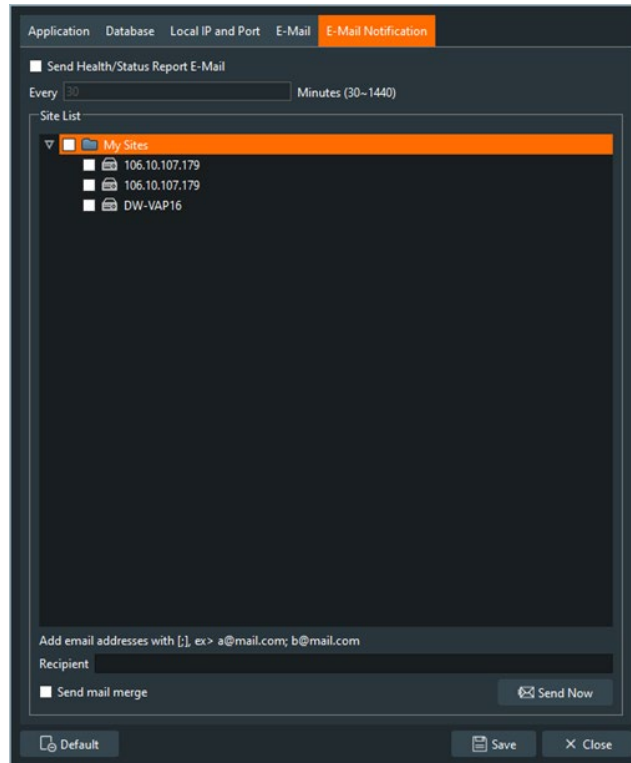


Image 96: E-Mail Notification

Chapter 11: Upgrading the C3 CMS Software Application

The DW C3™ CMS software application makes updates available within the application for installation/upgrading.

****NOTE:** Registered video recorders receive update notifications, which are communicated semi-annually on average.

Section 1: Backup Site Configurations

As a precaution, users may backup *Site List* registration prior to upgrading the software by performing the following:

1. From the main C3 CMS screen, in the left pane, **right-click** on a site or a site group, and then select **Import/Export**. The *Import/Export* screen displays.

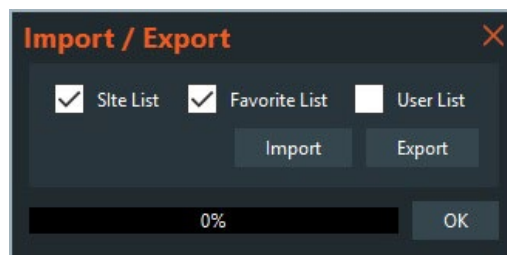


Image 97: Import/Export

2. By default, the **Site List** and **Favorite List** are exported. Select **User List** if required for export and then click **Export**. The *Export* screen displays.

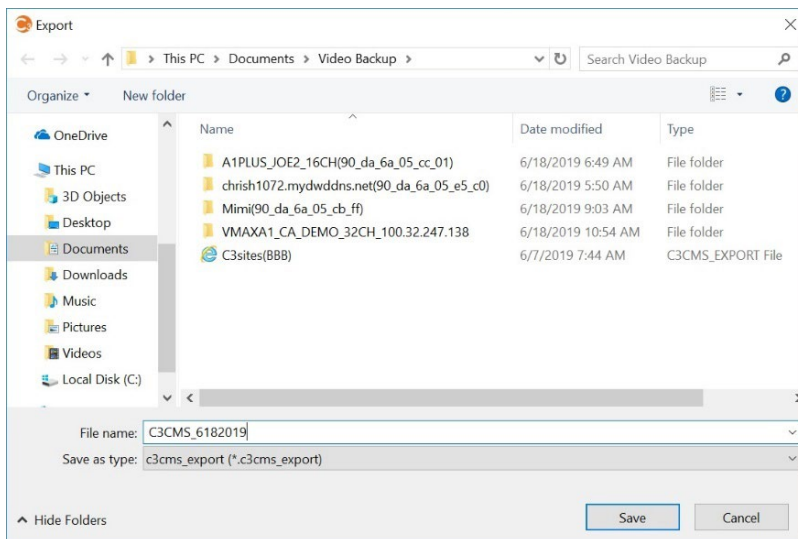


Image 98: Export File Path

3. Verify the folder location or select a new folder, enter the **File Name**, and then click **Save**. The saving confirmation screen displays.

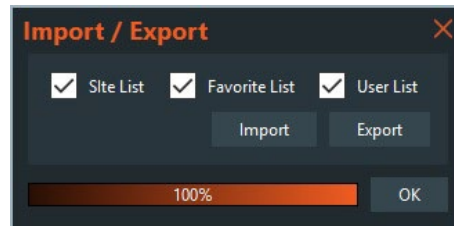


Image 99: Export Complete

4. Click **OK**. The site configuration has been saved. Repeat the process for each site.

Section 2: Upgrading the C3 CMS Software

An Internet connection is required to update the C3 CMS through the application. Use the following steps to upgrade the software:

1. From the main C3 CMS screen, click the **? About** icon.

The C3 CMS *About* screen will display the software version that is currently installed and the newest version available. If an update is available click the **Update** button.



Figure 90: About Screen

2. Click **Yes** to accept changes to your system. The *Setup – C3 CMS* screen will display. Verify the destination location for the download, then click the **Next** button.

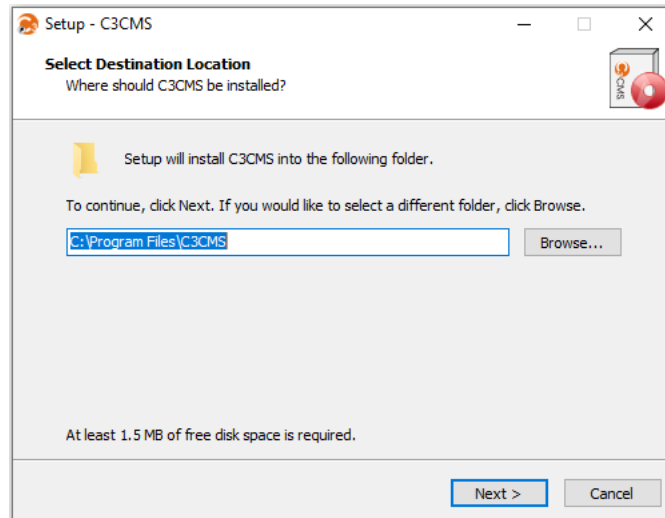


Image 100: Select Destination Location

3. Verify the destination folder, then click **Install**. The update will begin to download to the computer.

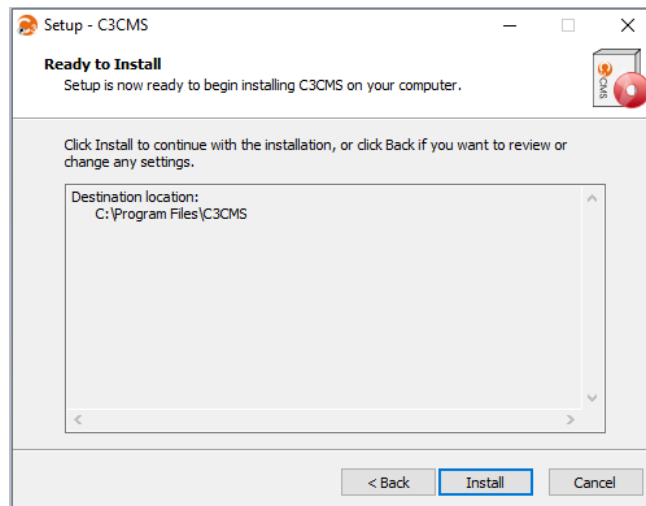


Image 101: Ready to Install

4. When the download has completed, use the *Select Setup Language* screen to choose the default language, then click **OK**.

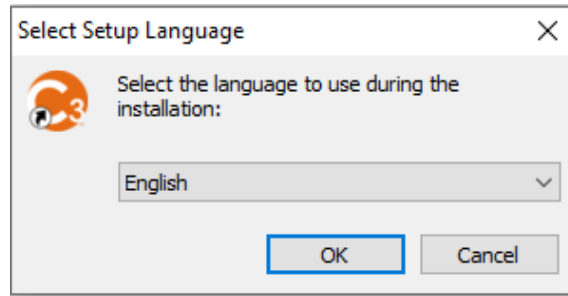


Image 102: Select Setup Language

5. The *Setup Wizard Screen* will display. Click **Next** to proceed.

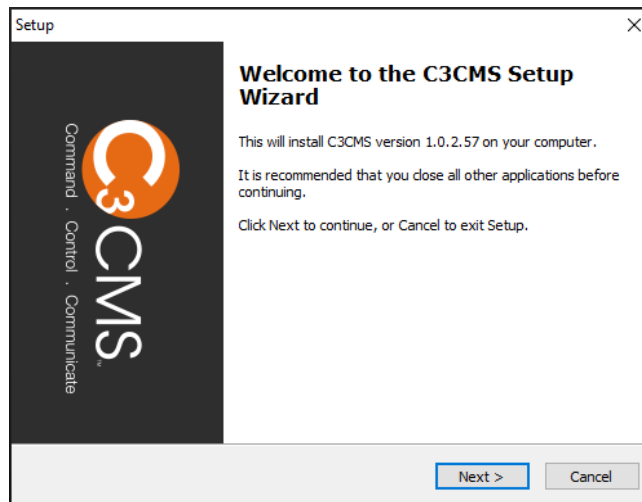


Image 103: Setup Wizard

6. Verify the destination location for the install, then click the **Next** button.

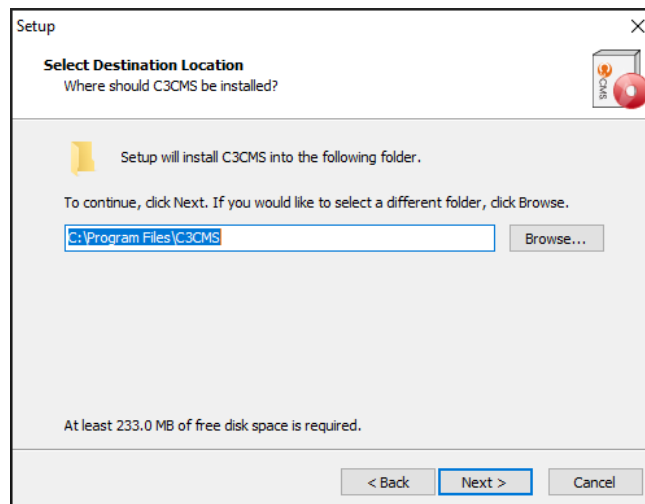


Image 104: Select Destination Location

- As C3 CMS is already installed and is being updated, the *Folder Exists* screen will display. Click **Yes** to overwrite and proceed.

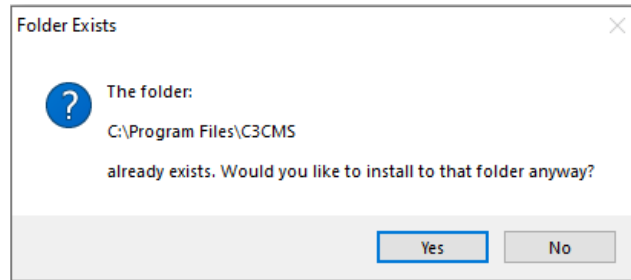


Image 105: Folder Exists

- The *Select Components* screen will display. Select the components to install. If the current computer is acting as the C3EventServer host, be sure to select/include the *C3EventServer Install* in the update.

When ready to proceed, click the **Next** button.

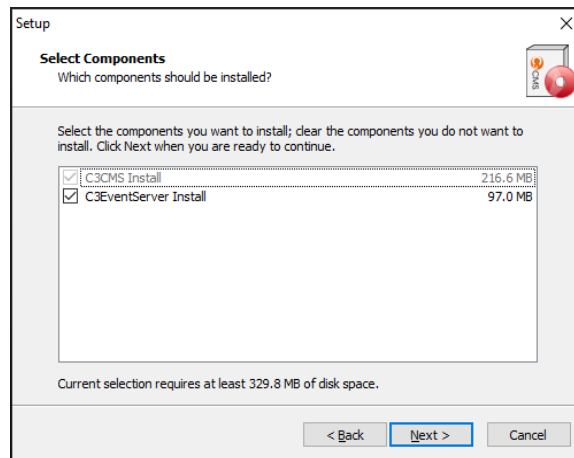


Image 106: Select Components

- The *Select Additional Tasks* screen displays. Select the appropriate shortcuts to install, then click **Next**.

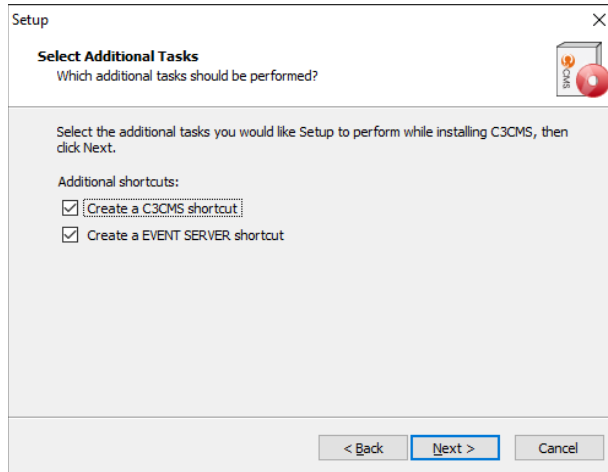


Image 107: Select Additional Tasks

10. The update is now ready to install. Click the **Install** button to run the update.

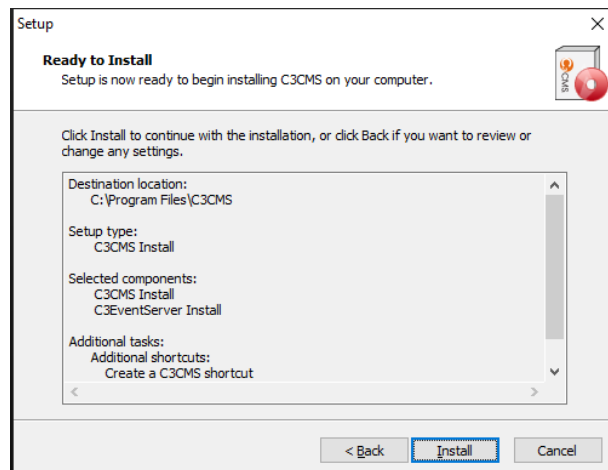


Image 108: Ready to Install

11. The *Installing and Microsoft Visual C++* screen will display. As this is an update and not the initial installation, the Microsoft Visual C++ will not need to be reinstalled. Click the **Close** button.

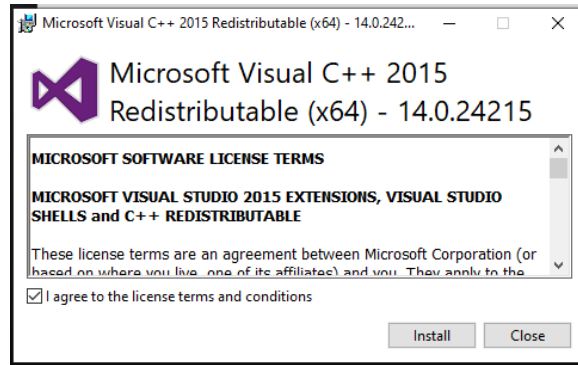


Image 109: Microsoft Visual C++ 2015

12. The *Completing the C3 CMS Setup Wizard* screen will display. Select whether or not to **Launch C3 CMS** or **Launch C3EventServer**, then click **Finish** to complete the update process.

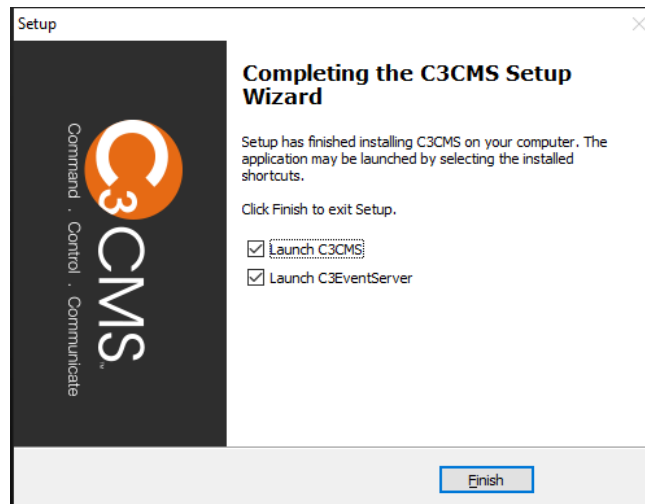


Image 110: Completing the C3 CMS Setup Wizard



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