



cnarioTM
Digital Signage Suite

CnarioTM Suite 3.9

Installation Guide

December 2020

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Introduction

Cnario Suite is an all-in-one solution that allows content creation, editing, distribution, scheduling, monitoring, and control of an entire Digital Signage system - where one control station can support thousands of players and canvases. Cnario Suite consists of the following components:

- **Cnario Server** - Our new Transfer Module Mechanism. The new mechanism is based on Client/Server approach. A new WCF service will be the communicator module that is responsible for transferring data to and from the Database. Three Services will be installed - DTS (Data Transfer Service), FHS (File Hashing Service), and TMS (Transfer Module Service).
- **Cnario Messenger** - A comprehensive toolkit for content creation and management (CMS). It also provides full network administration including content distribution and monitoring.
- **Cnario Player** - Is responsible for the playback engine operation and for the monitoring and controlling inputs sent to the Control Center application.
- **Chainmail Gateway** - a server component, once installed, operates as a service, and enables unlimited scalability, redundancy and high efficiency of file transfer and caching.
 - **Chainmail Gateway Client** - a user interface tool for management and configuration of gateway instances, locally or remotely.

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Cnario Suite Download

Please use the following links to download Cnario Suite 3.9 from YCD Download Center:

- [Cnario Server](#)
- [Cnario Messenger](#)
- [Cnario Player](#)
- [CM Gateway](#)
- [CM Gateway Client](#)

The Current Version is Cnario Suite 3.9 (build 704).

Cnario Suite 3.9 was developed and tested with Windows 10 build 1809 and newer (Cnario Messenger, & Player) and Windows Server 2012 R2 and Newer (Cnario Server & Gateway) and as the only supported operating systems and with hardware component that support DirectX 11.1 or newer.

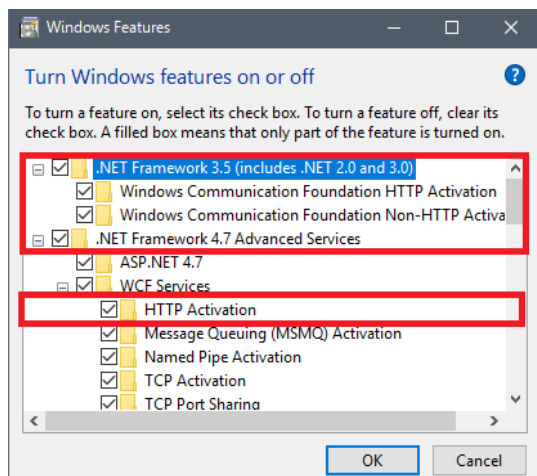
If upgrading a Windows 7 installation or installing on a new machine, some default settings may require adjustments. Please contact ycdsupport@ycdmultimedia.com for specific instructions.

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Cnario Suite Pre-Installation Requirements

For brand new installations and existing systems of the Cnario Server:

- Make sure you are running as Administrator with full permissions.
- Make sure you get the latest Windows updates installed (prior to Cnario SW installation).
- Make sure .Net 3.5 SP1 (includes 2.0 and 3.0) and the latest .Net is installed in Windows features (prior to Cnario SW installation).¹
- Make sure HTTP activation feature is installed (prior to Cnario SW installation).²



- Make sure you get the latest GPU Driver updates installed (prior to Cnario SW installation).
- Make sure Windows firewall is turned off (during SW installation).
- Make sure that the Region & Language Settings on both Messenger and Server are identical³.
- If you are using Windows Server 2012 R2 OS, install **Desktop Experience Features** is mandatory prior to Cnario SW installation.
- Use Cnario Suite Installation Files (Cnario Server **must be installed** prior to Cnario Messenger).
- When setting up a single instance Messenger (CMS) station, begin with the Cnario Server installation, which will also install the SQL Database setup as well.
- When setting up a Player, only the Cnario Player installation file is required.
- Make sure all relevant **Ports (8008, 8009, 8010 by default)** are open to communication between the Server, Messengers, and Players.

¹ Only required when installing on a Windows Server OS.

² Only required when installing on a Windows Server OS.

³ Player Region & Language settings should preferably be identical – if multiple languages are required, all relevant language packs must be installed on the Server and Player PC's and for some languages Non-Unicode language must be defined locally on the player to properly present all characters.

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- If using a Virtual Machine for Messenger, make sure full DirectX and Direct 3D elements are available, as well as assigned GPU. Otherwise, the Preview feature will be unavailable on Messenger.

For existing systems (SW update/upgrade):

- Backup Messenger and Server Tree.dat file.
- Backup existing SQL Database (using **SQL Server Management Studio** is recommended).
- Backup your Media folder, if the system is being migrated to a new hardware, make sure that the items in the Media folder retain the same file path.
- Upgrade all Players (Clients) first – Before upgrading Server and Messenger (CMS).
- If necessary, you may send Player Upgrade Patch from Messenger to target Players to perform remote SW updated/upgrade, for more information please contact YCD support.

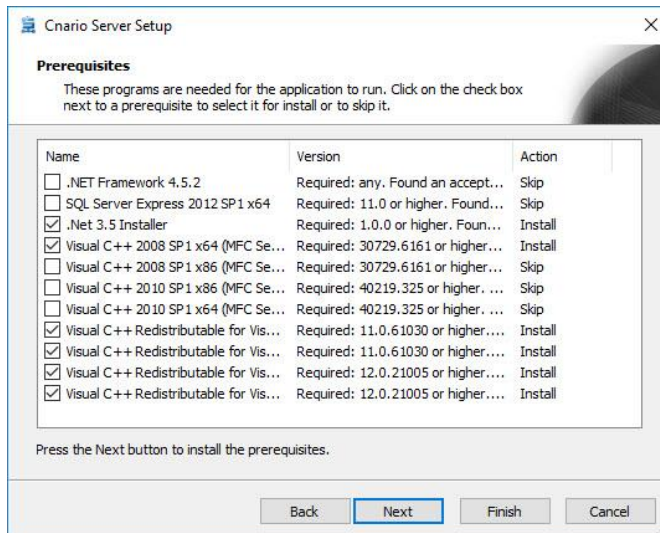
Notes:

- For specific user permissions and process privileges please refer to '[Cnario Products IT Requirements](#)' section.

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Installing Cnario Server

1. Launch **Cnario Server** installation file, 'Cnario Server Setup 3.9.0.exe'. If the Prerequisites Wizard appears (see screenshot below), then it will proceed to install the prerequisites required for Cnario Server to operate. If this menu does not appear, then please proceed to step #3.
2. Click Next and follow the instructions that appear to install the required prerequisites.



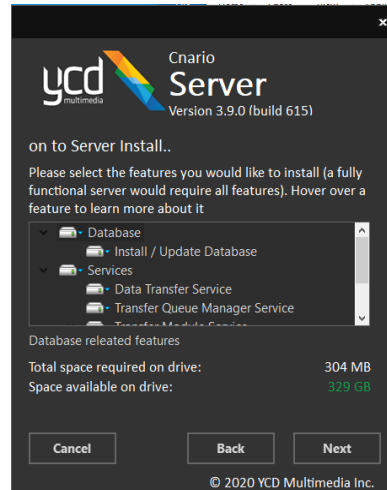
3. The Prerequisites Wizard will check for missing applications on the server OS prior to Server installation.
4. If SQL Server⁴ needs to be installed and you are unfamiliar with the process, please contact your IT administrator.⁵
5. Make sure to click on OK or Finish on all menus. The Cnario Server installation will continue after the Prerequisites Wizard has completed.

⁴ SQL Server supported versions are from 2012 and onward. The Cnario Server installation package automatically downloads Microsoft SQL Server 2012 SP1.

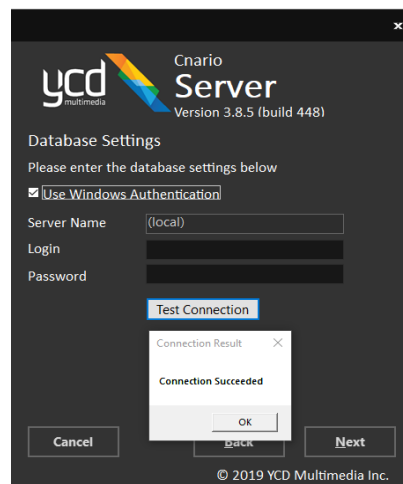
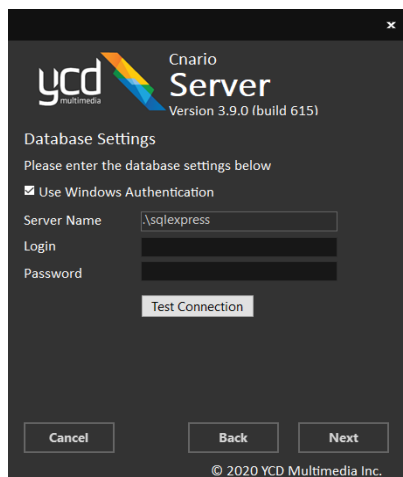
⁵ If SQL Server is remotely installed, "SQLCMD" utility is required to be installed or present (as part of other Microsoft utilities like SQL Management Studio) on server machine.

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- The next dialogue box describes the features that will be installed during this process. Go ahead and click Next when ready.



- Next, choose **Windows Authentication** or specify the credentials that will be used to log into the SQL database.
- In **Server Name**, enter the name of the SQL instance. Click on 'Test Connection' to test connectivity to the SQL database. If the connection is unsuccessful, double check the Server Name. See notes for additional information.



Notes:

- If the SQL database server is installed locally (on the same machine as the Cnario Server), leave the default Server Name: (local)\sqlexpress or (local), depending on how the SQL Server instance was named.
- If the SQL database is installed on another computer, replace "(local)" with the IP address of the other computer. For example, replace "(local)\sqlexpress" with "150.50.60.70\sqlexpress".

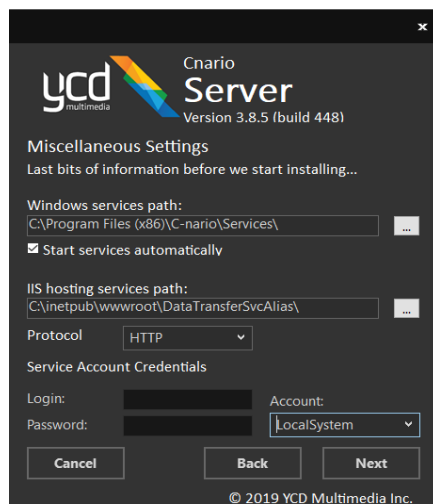
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- Do not proceed until you have a successful connection test. Contact your IT administrator for further assistance.
9. If you would like the Cnario Server to send you notifications and alerts, add applicable SMTP settings.⁶

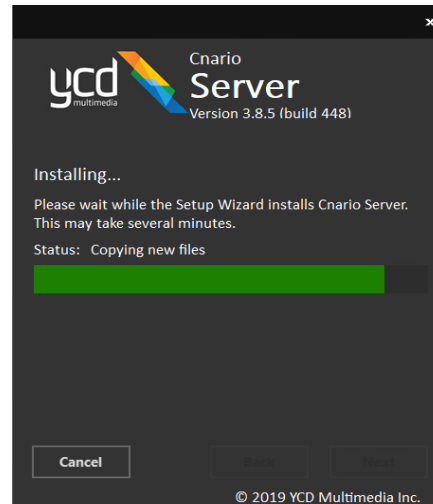


The screenshot shows the 'Cnario Server' window, Version 3.8.5 (build 448). It features the 'ycd multimedia' logo. The 'Email Address' field is populated with 'notification@ycdmultimedia.com'. Under 'SMTP settings', the 'Host' field is empty, 'Port' is set to '25', and 'User' and 'Password' fields are empty. At the bottom are 'Cancel', 'Back', and 'Next' buttons. The footer reads '© 2019 YCD Multimedia Inc.'.

10. For the Services Account Credentials, YCD recommends using **Local System**. If you think you should be using a specific user, choose **User** and enter the appropriate credentials. If you are uncertain which to use, choose Local System. For **Local System**, leave Login and Password fields empty.



The screenshot shows the 'Cnario Server' window, Version 3.8.5 (build 448), with the 'Miscellaneous Settings' tab selected. It includes fields for 'Windows services path' (C:\Program Files (x86)\C-nario\Services\), a checked 'Start services automatically' box, 'IIS hosting services path' (C:\inetpub\wwwroot\DataTransferSvcAlias\), and a 'Protocol' dropdown set to 'HTTP'. Under 'Service Account Credentials', the 'Account' dropdown is set to 'LocalSystem', while 'Login' and 'Password' are empty. 'Cancel', 'Back', and 'Next' buttons are at the bottom. The footer reads '© 2019 YCD Multimedia Inc.'.



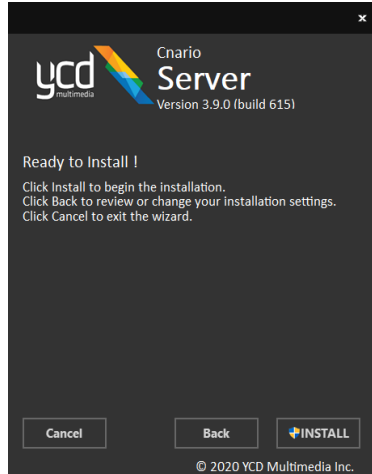
The screenshot shows the 'Cnario Server' window, Version 3.8.5 (build 448), in the 'Installing...' state. It displays the message: 'Please wait while the Setup Wizard installs Cnario Server. This may take several minutes.' Below this, the 'Status' is 'Copying new files' with a green progress bar. 'Cancel', 'Back', and 'Next' buttons are at the bottom. The footer reads '© 2019 YCD Multimedia Inc.'.

11. Choose Next and the installation will begin. When it has completed, click on Finish, and move on to Installing Cnario Messenger.

⁶ At this point in time, SSL\TLS connection is not possible to define.

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12. Ready to Install



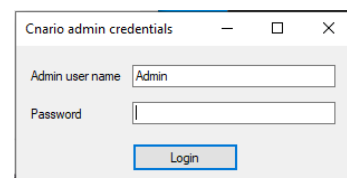
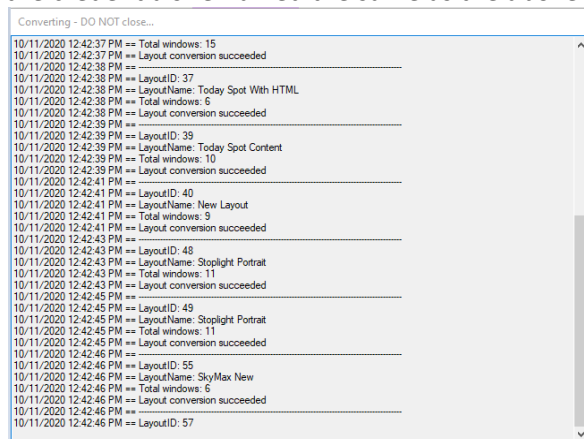
13. Upgrade Step: DB Conversion Process

The conversion process handles the conversion of database objects to fit the new Cnario architecture.

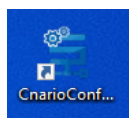
This process may take some time.

In case the credentials have changed, then the conversion process will not start until the credentials will be inserted to the following window “Cnario admin credentials”:

The default user credentials are user: “**Admin**” (case sensitive capital A) password: “**fastfast**” In case the credentials remained the same as the above then the next step is the conversion process:



14. Server Installation Done & Cnario Configuration Icon created on the desktop



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15. Server Configuration

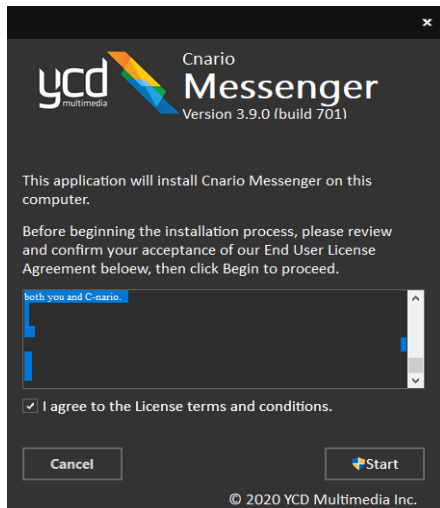
- a. “Server URL”: during the installation, the default value is set on “HTTP”, however when selecting “HTTPS”, Server services will communicate with Messenger over a secured HTTP tunnel. To complete the SSL configuration, the following manual settings should be made at the IIS level after the setup:
 - i. Check for SSL certificate.
 - ii. Add as https binding to Cnario Server on port for example 444 using your SSL certificate.
 - iii. Add an inbound firewall rule for port 443 (or other).
- b. A separate configuration is required for Web Messenger inbound access.

16. You can now browse to <http://localhost/CnarioMessenger> or <https://localhost/CnarioMessenger>

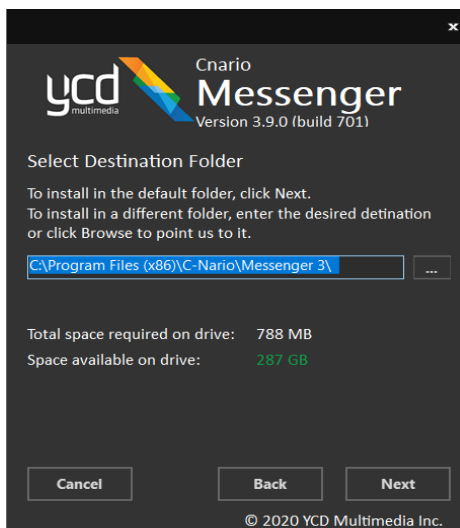
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Installing Cnario Messenger⁷

1. Double click the **Cnario Messenger** installer file, 'Cnario Messenger Setup 3.9.0.exe'.
2. Accept the EULA



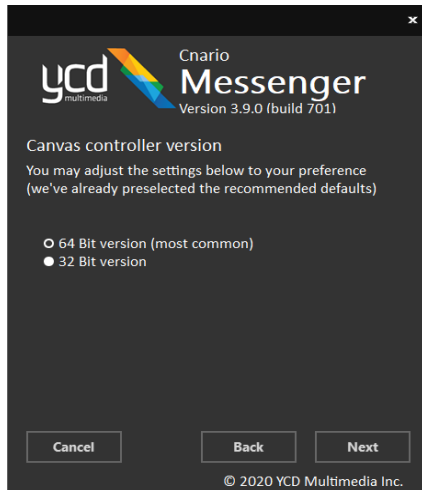
3. Select the appropriate destination folder for the installation, or simply leave at default and click **Next**.
 - a. YCD recommends using the default destination folder, however you can select another folder.



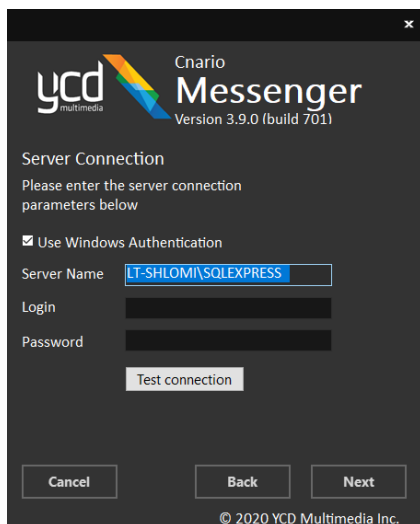
⁷ Cnario Messenger can only be installed if it has a Cnario Server and a MSSQL Server to connect to.

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4. Select either the 64- or 32-bit version (based on your Windows version).
 - a. When using Messenger on a 64-Bit Windows PC, YCD recommends using 64 Bit installation

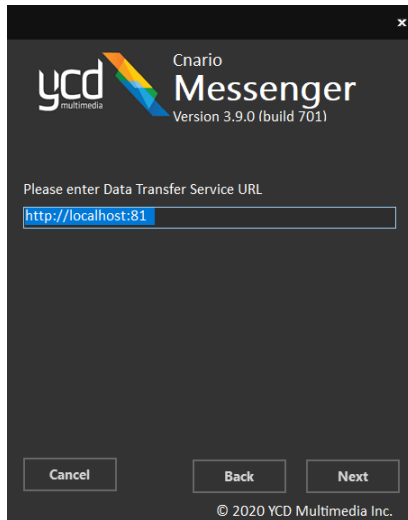


5. Server Connection – Enter the server connection parameters and test connection

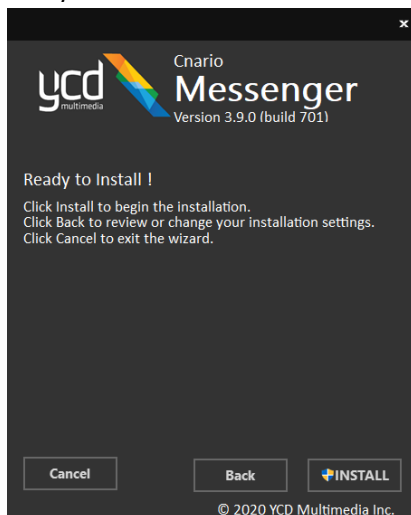


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6. Enter Data Transfer Service URL

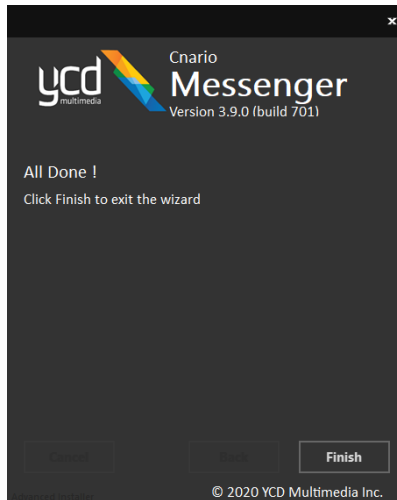


7. Ready to Install



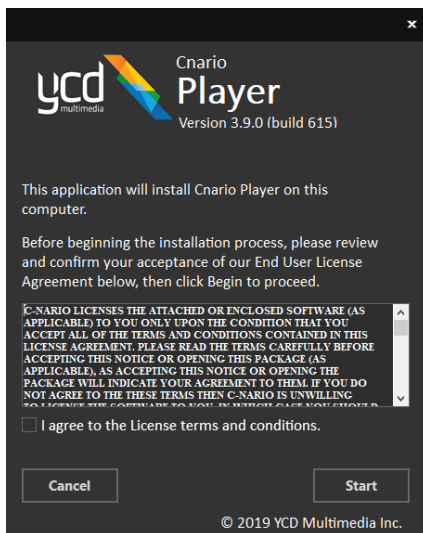
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8. Finish Installation



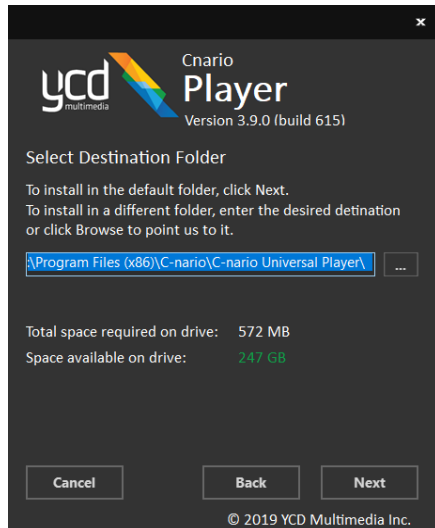
Installing Cnario Player

1. Double click the **Cnario Player** installer file, 'Cnario Player Setup 3.9.0.exe'.
2. Click on Start to begin the installation process once you have agreed to the terms and conditions.

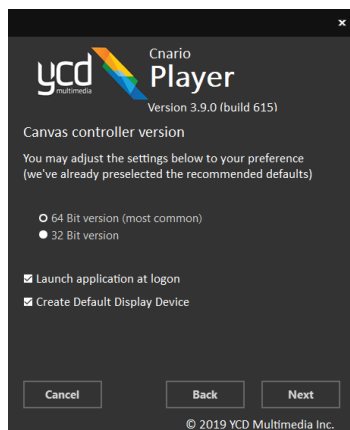


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3. Select destination folder for installation. If you are unsure, leave it at the default, and click Next.



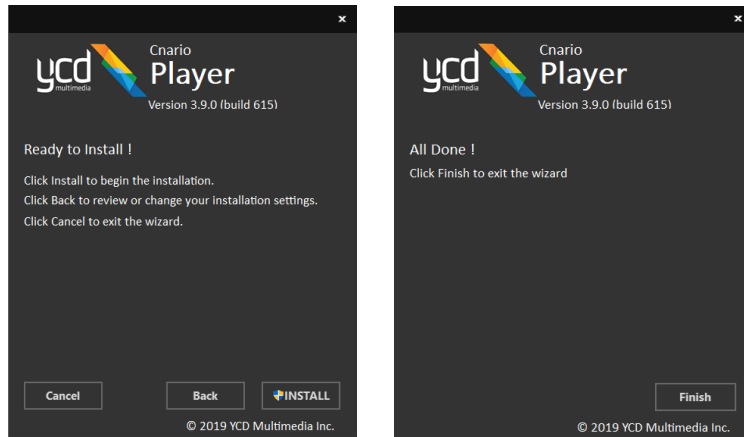
4. Next, select either the 64- or 32-bit version (based on your Windows version). Unless instructed otherwise, leave the 'Launch application at logon' and 'Create Default Display Device' checked. Click Next to proceed.



5. Click on Install to begin the installation. Note that prerequisites will be automatically installed, along with system files, during this process.

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6. Finish installation process.



Notes:

- The Gateway and its Client are to be installed on separate workstations\servers\VM. Installation instructions are trivial and configuration support is done on a per-case basis. For more information, please contact YCD Support.

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Certifying Cnario

1. The first time either Cnario **Messenger** or Cnario **Player** is opened, you will be asked for a certificate. Follow the instructions below to generate a request, send it to YCD support, and activate your software.
 - a. If you received a “*[CertPortal] - New demo activations*” email from YCD support, you can follow the instructions there and simply run the Cnario application you installed (Messenger / Player) and continue to [configure Chainmail](#)
 - b. **Cert Portal:** If you are a user and have access to the [Cert Portal](#) please activate the certification using the following manual [link](#)

Login Page

Email

sbar@ycdmultimedia.com

Password

The password field is required.

☐ Remember me?

Log in

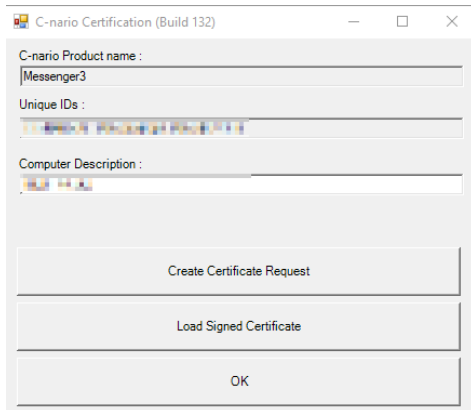
If you dont have a user, you can request one by [contacting us](#)

© 2021 - YCD Cert Portal, build: 1.2.7639.28879

Theme ☐Icons provided by [Icons8](#)

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2. Double click the Cnario application icon (Messenger / Player). The following dialog box will appear.

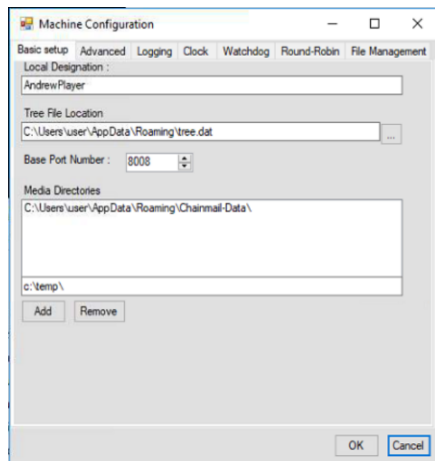


3. Enter a computer description (for example: My Company Messenger) and click the Create Certificate Request.
4. Choose where to save the certificate request file.
5. E-mail the certificate request file to YCD Support.
6. Wait for a response from YCD support with the signed certificate.
7. Save the signed certificate on to the machine that is running the Cnario application.
8. If the above dialog box does not appear, simply open the Cnario application again.
9. Click on Load Signed Certificate and choose the signed certificate file and hit Open to load the certificate.
10. A confirmation window will appear, if the certificate was not loaded successfully, please contact YCD Support. Otherwise click OK.
11. Congratulations! Your application is certified.
12. If both Messenger and Player are certified, please proceed to Configuring Chainmail.

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Configuring Chainmail⁸

1. Open Cnario Player, then click Cancel or hit ESC to stop the countdown to playback
2. Click on Network -> Machine Config.
3. Under the Local Designation, note the name of your Player machine (for use in the next section: Configuring the Chainmail Tree).

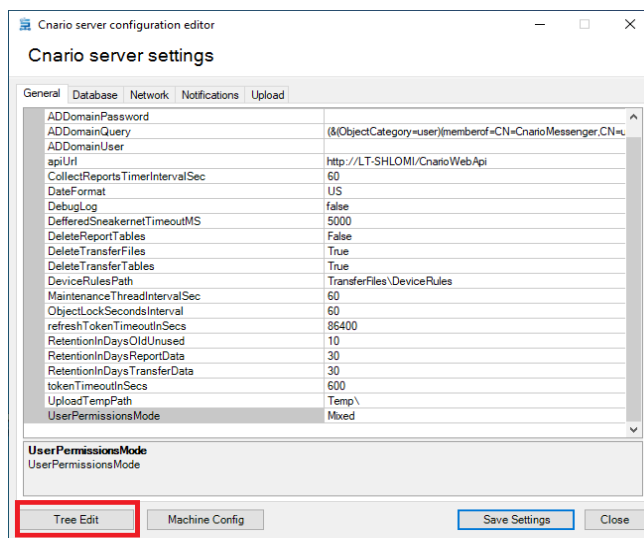


⁸ If you upgraded a Cnario 3.8 or earlier version, an automatic upgrade of the “Chainmail Tree” and a conversion of the old XML files onto an SQLite file is initiated automatically on the first run of the Cnario application.

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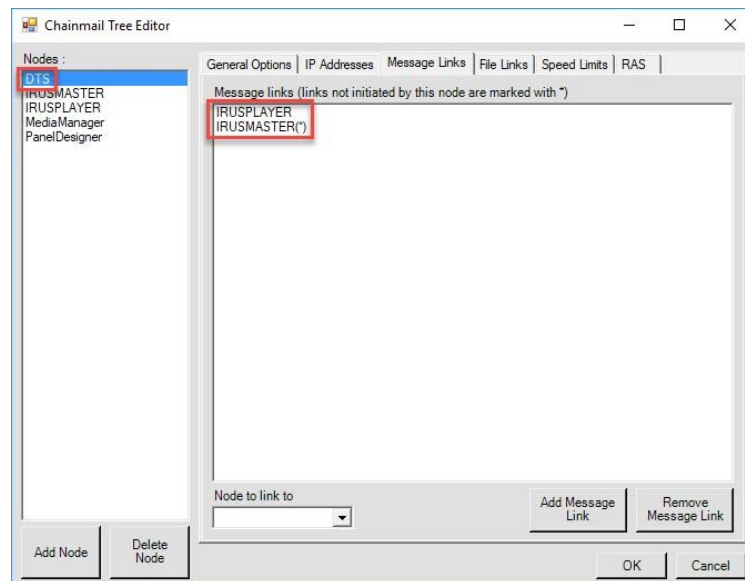
Configuring the Chainmail Tree

1. In CnarioConfiguration, go to Tree Edit



2. Click on **Add Node**, and a new node will be created. Select this node, then under **Node Name** enter the name of your **Messenger** machine.
3. Select the **IP address** tab, then enter the IP address of your **Messenger** machine.
4. Repeat steps 2 and 3 for your **Player** machine.
5. Select the **Server** node, then click on the **IP address**, and enter the IP of your server machine. Note, if your **Messenger** and **Server** are installed on the same machine, enter the same IP address for both nodes.
6. While the Messenger node is selected, click on the **Message Links** tab.
7. Under **Node to link**, select the Server node, then click on **Add Message Link**
8. While the Message Links tab is selected, select the **Server** node
9. Under **Node to link**, select the **Player** node, then click on **Add Message Link**
10. Select the **Messenger** node once more, then click on the **File Links** tab
11. Under **Node to Link** select the **Server** node, then under **Link Type** select **TCP outgoing**, then click on **Add File link**
12. Select the **Server** node once more
13. Under **Node to Link** select the **Player** node, then under **Link Type** select **TCP outgoing**, then click on **Add file link**
14. Click on OK to continue and distribute your changes to the tree

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IT Requirements

User Account Policy

- User Rights Assignment/Adjust memory quotas for a process
Purpose: Allows the applications to share the memory among them optimally
- User Rights Assignment/Debug Programs
Purpose: Allows Cnario Watchdog to shut down and restart its peers
- User Rights Assignment/Increase Scheduling Priority
Purpose: Allows CCCore.exe and Cnario Universal Player.exe to set the priority of their time-critical threads.
- User Rights Assignment/Profile Single Process
Purpose: Allows CM Watchdog to log performance data
- User Rights Assignment/Profile System Performance
Purpose: Allows CM Watchdog to log performance data
- User Rights Assignment/Shut down the system
Purpose: Allows Watchdog to shut down the system restart it if restarting processes does not work
- User Rights Assignment/Create global objects
Purpose: Allows CCCore.exe and Cnario Universal Player to create global objects - required for flash playback under non-administrator user
- Firewall: Allow all processes listed under 'list of processes' below.

Network ports required

1. For Chainmail Communication:
 - 8008- Message link between Master and Player
 - 8009- File link from Master to Player (Forward file link)
 - 8010- File link from Player to Master (Backward file link)
2. For Watchdog and broadcast Communication:
 - 8111- For Watchdog itself
 - 8112- Watchdog for Wolfpack (Used for Multi-Display)
3. Canvas Controller (where applicable):
 - 8222 - 8223 Commands, TCP+UDP
 - 8334 - Clock distribution, UDP

Windows Server

When installing a C-nario product on Windows Server Edition (2012 R2 and above):

1. Before commencing installation of the Cnario Product, ensure "Desktop Experience" Feature, "Microsoft.NET Framework" with all its versions and IIS 7 or later are installed on the server.

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2. In case the DB installation fails due to missing component, make sure SQLCMD is installed. There is an option for remote Data Base installation for installing the Cnario Server. There is a need to have SQLCMD installed for the database installation to take place. If SQL Server or SQL Management Studio is already installed, there is no need for it since our software includes it as part of the server installation. Here is the link for the utility <https://docs.microsoft.com/en-us/sql/tools/sqlcmd-utility?view=sql-server-ver15>

List of Processes (Case Sensitive)

1. WatchDog.exe
 - i. x64 - (c:\program files (x86)\c-nario\c-nario Universal Player)
 - ii. x86 - (c:\program files\c-nario\c-nario Universal Player)
2. CCCore.exe
 - i. x64 (c:\program files\c-nario\c-nario Universal Player\CCCORE64)
 - ii. x86 (c:\program files\c-nario\c-nario Universal Player\CCCORE)
3. C-nario Player.exe
 - i. x64 - (c:\program files (x86)\c-nario\c-nario Universal Player)
 - ii. x86 - (c:\program files\c-nario\c-nario Universal Player)
4. MFslave10.exe (MultiFlash player component)
 - i. x64 – (C:\Program Files\C-nario\C-nario Universal Player\CCCORE64\Plugins\MultiFlash\MFSlave10.exe)
 - ii. x86 – (C:\Program Files (x86)\C-nario\C-nario Universal Player\CCCORE\Plugins\MultiFlash\MFSlave10.exe)
5. Coherent (HTML5 renderer)
 - i. x64 – (C:\Program Files\C-nario\C-nario Universal Player\CCCORE64\Plugins\CoherentPn\host\CoherentUI_Host.exe)
 - ii. X86 – (C:\Program Files (x86)\C-nario\C-nario Universal Player\CCCORE\Plugins\CoherentPn\host\CoherentUI_Host.exe)

Notes

- ❖ Folder paths shown for C-nario Player. For Messenger, replace “\C-nario Universal Player\” with “\Messenger 3\”.

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List of Services

1. Cnario File Hashing Service.
2. Cnario Transfer Module Service.
3. Cnario Transfer Queue Manager Service.

List of Folders

Cnario applications require **full control** and **read/write access** to the following folders:

1. Tree.dat location:

- i. Windows 10: C:\Users\<userName>\AppData\Roaming\tree.dat

2. Where AutoSystemSetter is being used:

- i. Windows 10: C:\ProgramData\

3. Chainmail folder:

- i. Windows 10 (C:\Users\<userName>\AppData\Roaming\Chainmail-Data)

4. Cnario General Access Read and write Folders:

- i. %ProgramFiles%\C-nario
- ii. "%ProgramFiles% (x86)\C-nario"
- iii. "%ProgramFiles%\C-nario"
- iv. "%SystemDrive%\Temp"

5. Cnario products registry key locations:

- i. X86 (HKEY_LOCAL_MACHINE\SOFTWARE\C-nario)
- ii. X64 the path used for x86 AND path used for x64
(HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\C-nario)

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YCD Support

Visit: [YCD Customer Portal \(Support Tickets & Solution Center\)](#)

International (EMEA+APAC):

Support: +972-9-9570123 Ext. 231

E-mail: SupportINT@ycdmultimedia.com

CHINA

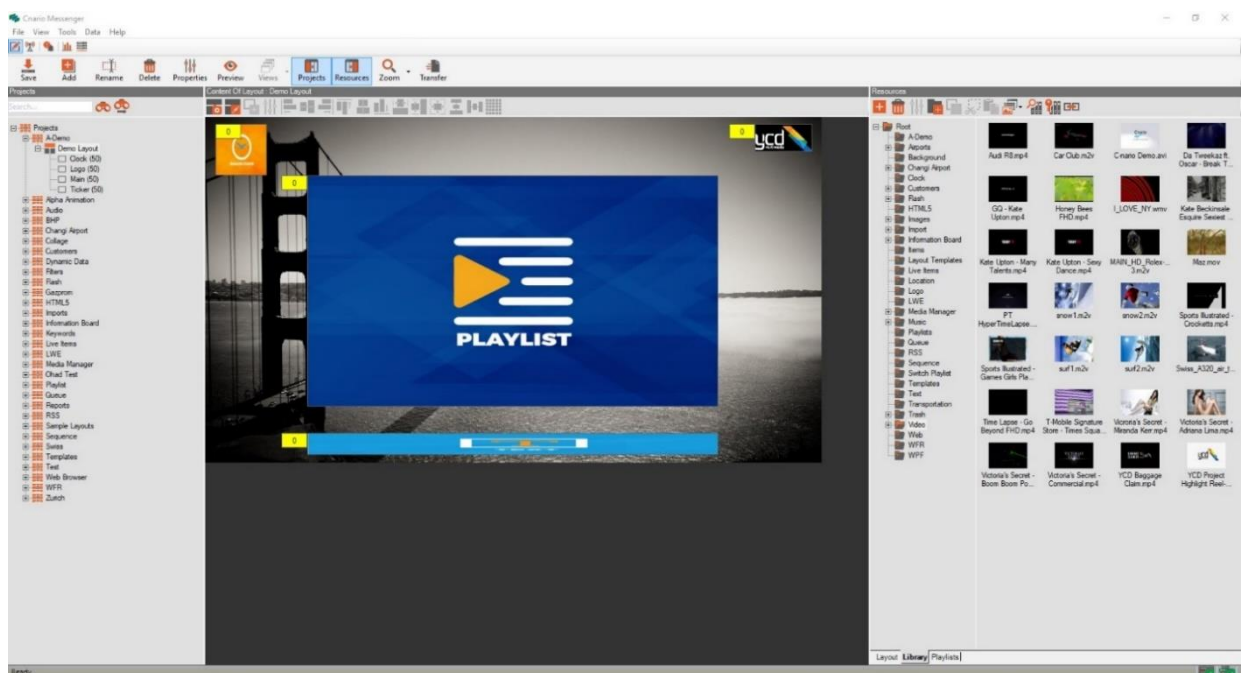
Phone: +86 18602123678

Email: info@ycdmultimedia.cn

US and the Americas:

Support: 1-888-442-4678

E-mail: SupportUS@ycdmultimedia.com



Thank You!

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