

SERIES 7 PLAYER OPERATION FOR THE NETWORK ENGINEER

SERIES 7 PLAYERS

CE labs currently offers two networkable players, the MP70 and MP700 Series 7 network digital signage media players. Both operate in the same manor. Major differences in the players are the MP700 is equipment with more I/O options such as GPIO, RS-232, USB ports, and the ability to have an ATSC television tuner installed.



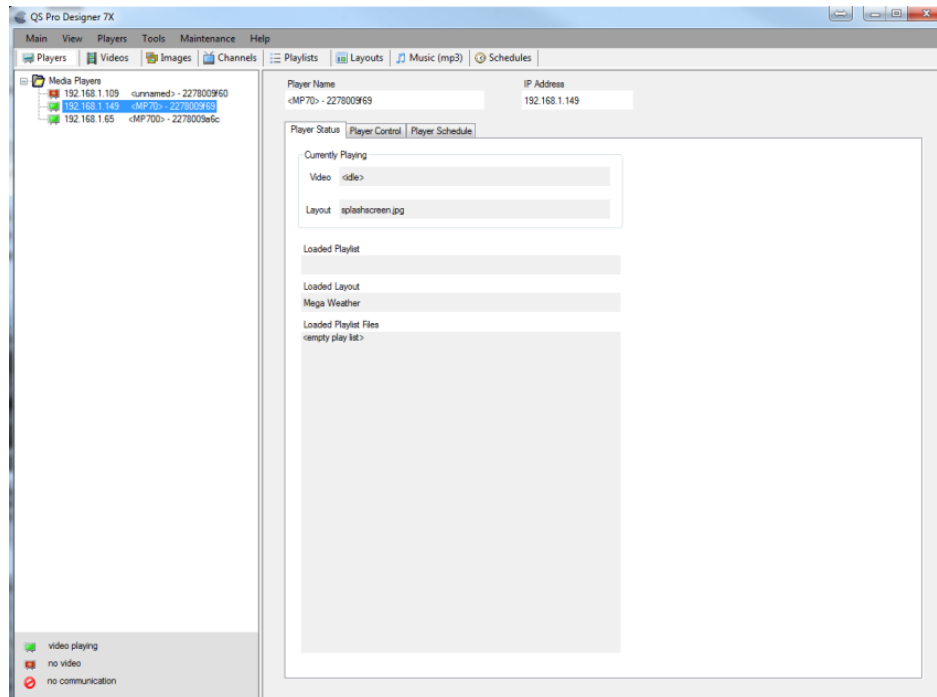
These players are small ASIC based processors running a Micro Kernel. These players **ARE NOT** PC or Android based and are designed for their one unique task only.

Because the signage players are single task machines with ASIC processors, there is little to no chance of these machines being infected with any type of malicious code or doing any harm to your network. CE labs players are used by many major retailers across the globe. We are a name you can trust.

CE labs like most others, manufacture in China. However, unlike other manufactures; each player's operating system is controlled and loaded in our U.S. facility. After loading the operating system, each player is placed in a 48-hour burn-in and afterwards fully tested to ensure you're receiving products of the highest quality.

QUICKSIGN PRO DESIGNER 7X

QuickSign Pro Designer 7X (QSPro) is our no cost software designed for a single user to controlling a small quantity of CE labs MP70 and MP700 media players on a local area network. QSPro will only work across a single subnet and some of the protocols used are not routable. If your requirements are to work in multiple locations, across multiple subnets, or with multiple users then you should definitely consider using CCM Enterprise.



QuickSign Pro Designer 7X can be downloaded for free from <http://www.celabs.net>.

Upon starting QSPro, it will scan the network (unless option is turned off) for any new player via the players mac address. Once finished scanning, QSPro will ask to add any new players and delete any players not found.

NOTE: *The serial number listed on the bottom of the unit is the player's mac address. Players are setup with DHCP enabled from the factory. If you wish to assign a static IP address, this would be done from the On Screen Display (OSD) by pressing the Menu button on the remote. Follow the menu commands for Networking.*

HOW QSPRO COMMUNICATES ACROSS THE NETWORK

The player is a SNMP agent using standard SNMP port 161, SNMP v2c. Most player commands are done with SNMP.

The player also uses TCP/IP for some functions. The player listens on port 12889 for TCP/IP commands. QuickSign connects to the player on port 12889 to send those commands.

If you have the time server option set to a NTP time server then the player will need port 123 open.

For uploading files, the player is commanded with a TCPI/IP command to listen on port 12881. QSPro connects to the player on port 12881 and sends the file data with a custom transfer protocol.

For loading X-Apps, QuickSign creates a temporary http server on the PC using port 7898 by default (it can be changed in QSPro in the Setup Menu). QSPro then instructs the player to retrieve the X-App from the http server. The server is only turned on when needed.

NOTE: *If fast loading is **NOT** enabled, the http server described above is used for **ALL** file uploading to player. This **IS NOT** the default.*

QuickSign also creates a temporary FTP server if files are transferred from player to PC using CopyFile in the File Manager. This FTP server is on port 21 and is only enabled when needed.

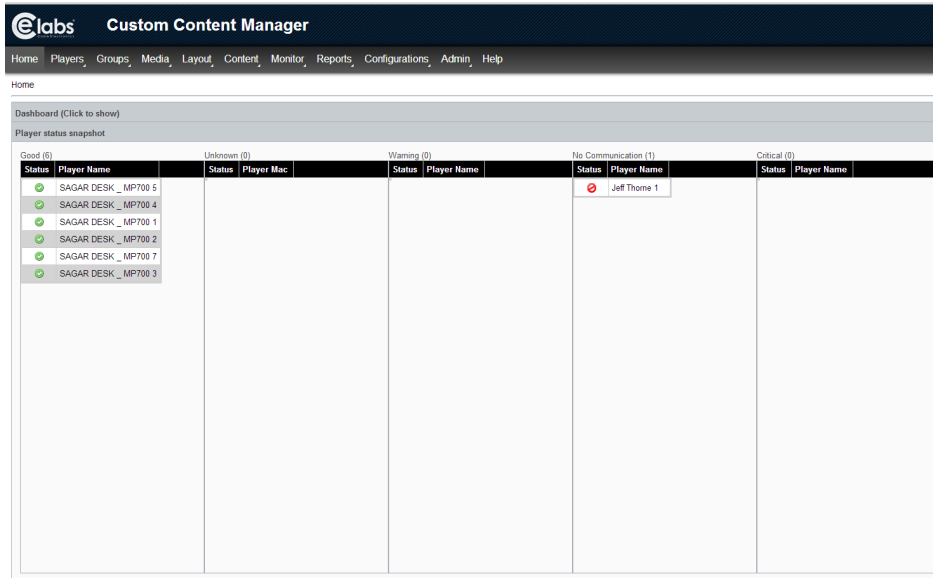
NOTE: *CopyFile is generally not used. Its only function is to allow the copy of files from the player's SD card back to the PC.*

If a layout has been designed to retrieve data from the web such as displaying a webpage, weather, or RSS feeds, the player would need access to those sites via TCP/IP port 80.

The player **DOES NOT** support Internet access though a proxy server.

CCM ENTERPRISE

CCM Enterprise is CE labs Enterprise control software. CCM will allow you to connect from one player up to thousands of players across a campus or across the globe. It allows for multiple users with different access levels.



The screenshot shows the Custom Content Manager (CCM) Enterprise dashboard. The header includes the CE Labs logo and the title "Custom Content Manager". Below the header is a navigation menu with links: Home, Players, Groups, Media, Layout, Content, Monitor, Reports, Configurations, Admin, and Help. The main content area is titled "Dashboard (Click to show)" and "Player status snapshot". The dashboard displays a table with columns for status and player information, categorized into Good, Unknown, Warning, No Communication, and Critical.

Good (0)		Unknown (0)		Warning (0)		No Communication (1)		Critical (0)	
Status	Player Name	Status	Player Mac	Status	Player Name	Status	Player Name	Status	Player Name
✓	SAGAR DESK_MP700 5					✗	Jeff Thome 1		
✓	SAGAR DESK_MP700 4								
✓	SAGAR DESK_MP700 1								
✓	SAGAR DESK_MP700 2								
✓	SAGAR DESK_MP700 7								
✓	SAGAR DESK_MP700 3								

When using CCM Enterprise, initial setup and any troubleshooting are generally done through QSPRO. A special X-APP is loaded on the player that changes the operation of the player to call into a CCM server at a timed interval instead of the software telling the player to download.

To set the servers address inside the player, one would connect to the players IP address with a browser after loaded the X-App. You will be presented with a screen to set the server address.

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CE Labs Content Manager Configuration

Enter values below, then click "Save".

Content Manager Address (ex. <http://www.ccmserver.com/sitename>)

Player Label - optional text that can be used to help identify player

Activation Code (if required)

Player Information

Player ID: 002278009A6C
Firmware: 1.2.46
Application: celabsPlayer700 v139

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NOTE: When you order a player if specified, the X-App will be preloaded from the factory and your CCM address pre-setup and tested.

CCM works by the player connecting to the CCM Enterprise server on port 80 using standard HTTP protocols. The player will check in, if any data is ready for pickup, such as videos or playlist, it will download the data. The player defaults to call in at a staggered 10-minute time interval. This can be set from 5 minutes to several hours.

If logging is enabled, the player will call same server with FTP protocol port 21 and deliver its log files to the server.

If a layout has been designed to retrieve data from the web such as displaying a webpage, weather, or RSS feeds, the player would need access to those sites via TCP/IP port 80.

If you have the time server option set to a NTP time server then the player will need port 123 open.

The player **DOES NOT** support Internet access through a proxy server.