

CMS-2200 Network Transfer Guide

Overview

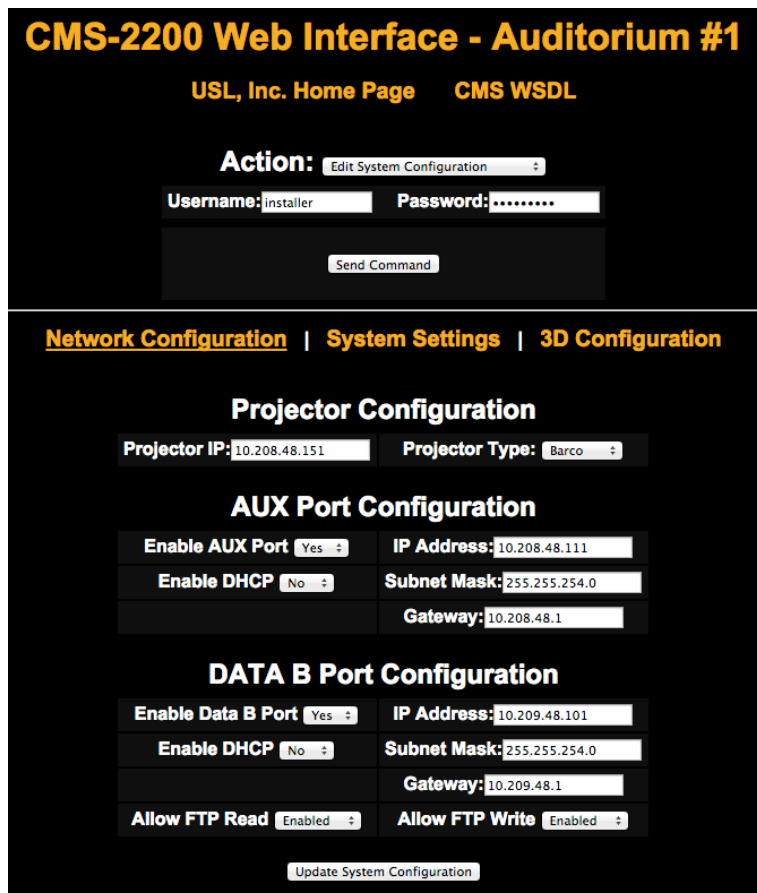
The CMS-2200 supports several methods of content transfers over a data network (Data B Ethernet port). These include FTP Ingests, CMS to CMS transfers, and Network Attached Storage over NFS protocol.

Web Tool Setup

To configure your CMS-2200 for network transfer capability visit the Web Interface for each device and chose 'Edit System Configuration' from the dropdown menu.

In the *Network Configuration* and *System Settings* tabs that appear fill in the Data B Port Configuration and NAS Server Settings according the IP Scheme Table in this document.

Shown below is a typical System Configuration for the #1 screen in a multiplex equipped with a NAS server.



CMS-2200 Web Interface - Auditorium #1

USL, Inc. Home Page CMS WSDL

Action: Edit System Configuration

Username: installer Password:

Send Command

Network Configuration | System Settings | 3D Configuration

Projector Configuration

Projector IP: 10.208.48.151 Projector Type: Barco

AUX Port Configuration

Enable AUX Port Yes IP Address: 10.208.48.111

Enable DHCP No Subnet Mask: 255.255.254.0

Gateway: 10.208.48.1

DATA B Port Configuration

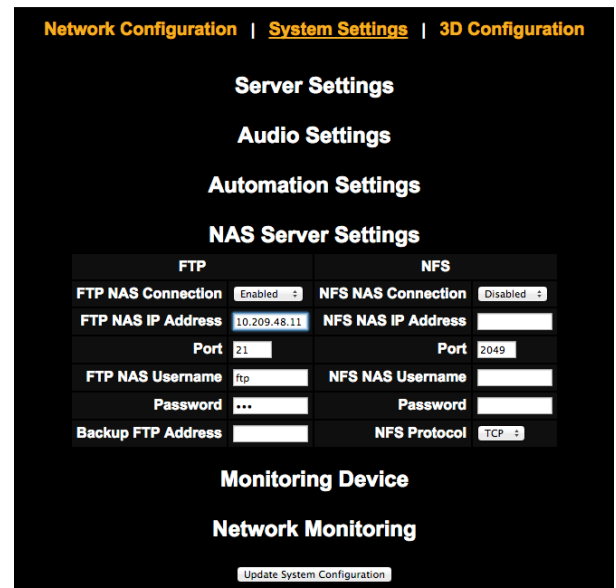
Enable Data B Port Yes IP Address: 10.209.48.101

Enable DHCP No Subnet Mask: 255.255.254.0

Gateway: 10.209.48.1

Allow FTP Read Enabled Allow FTP Write Enabled

Update System Configuration



Network Configuration | System Settings | 3D Configuration

Server Settings

Audio Settings

Automation Settings

NAS Server Settings

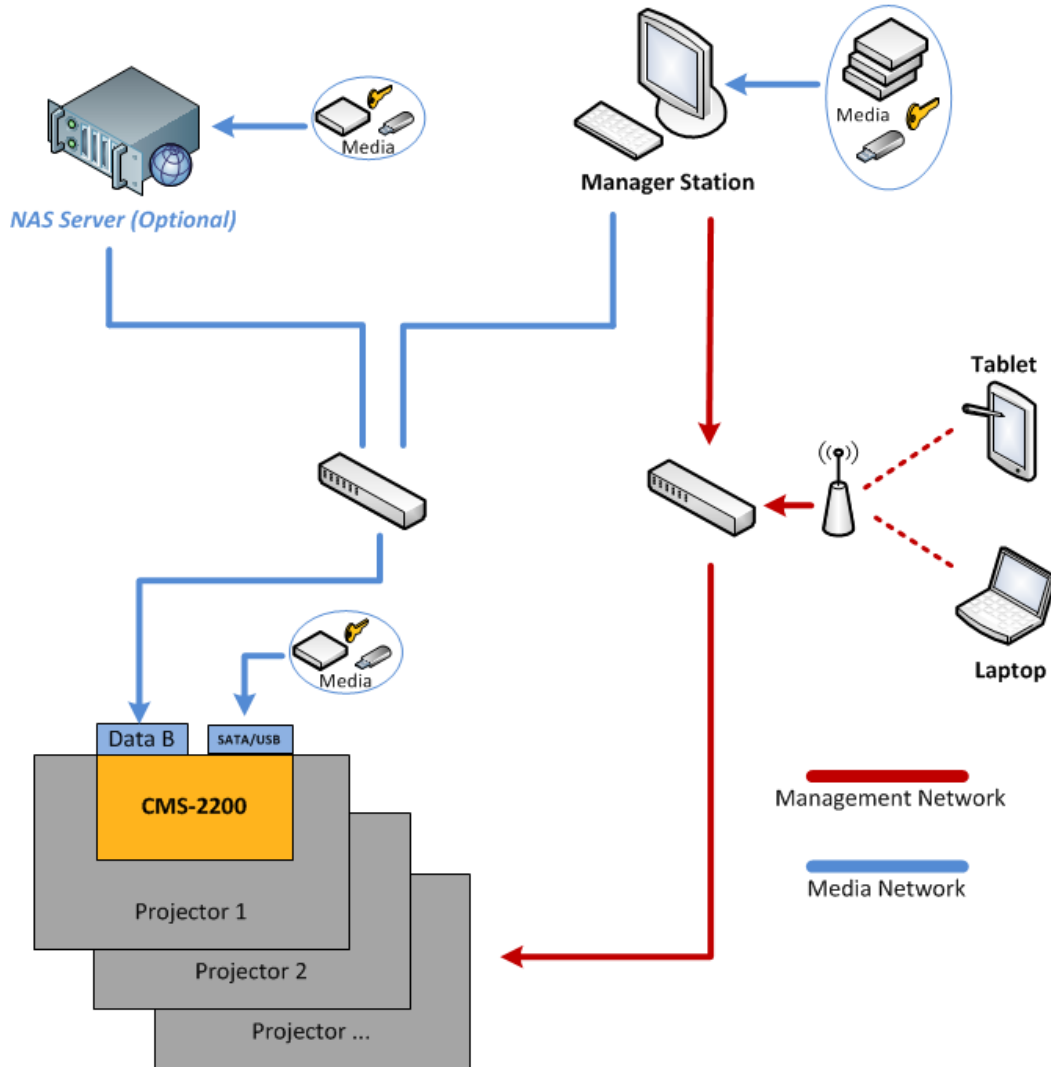
FTP		NFS	
FTP NAS Connection	Enabled	NFS NAS Connection	Disabled
FTP NAS IP Address	10.209.48.11	NFS NAS IP Address	
Port	21	Port	2049
FTP NAS Username	ftp	NFS NAS Username	
Password	***	Password	
Backup FTP Address		NFS Protocol	TCP

Monitoring Device

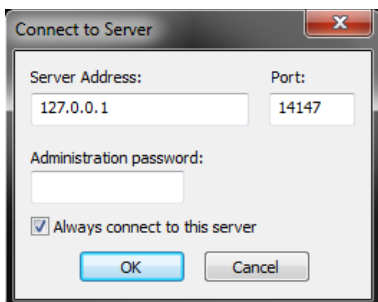
Network Monitoring

Update System Configuration

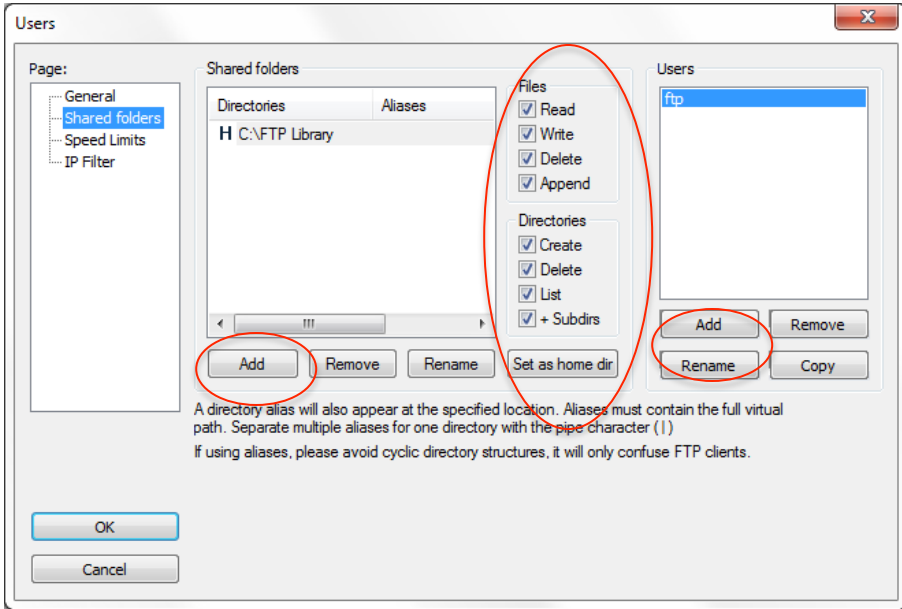
Mini-TMS Setup



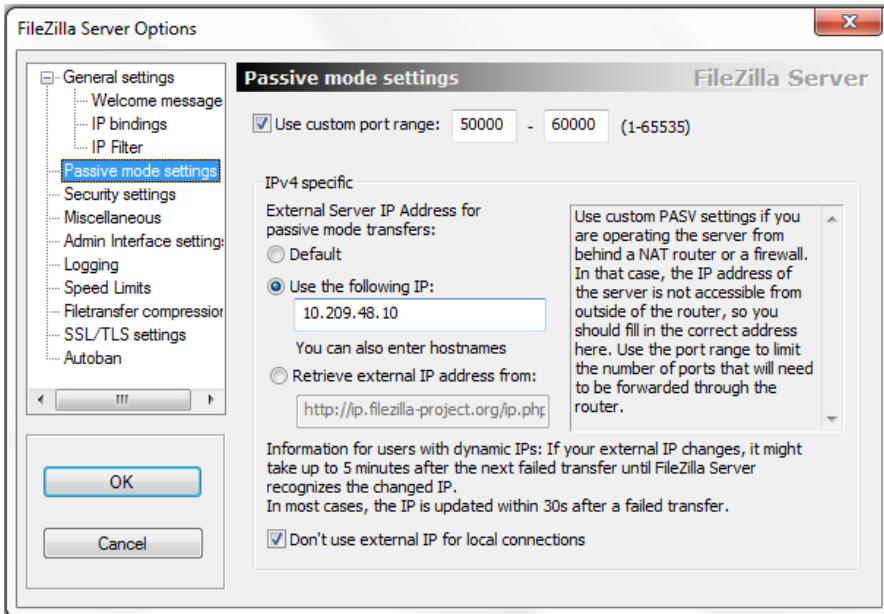
When using a Windows machine as an FTP Server use [FileZilla Server software](#) to host content from the manager station. After launching the FileZilla server software use the following settings at the first menu. This will start an FTP server configuration connection to the FTP service on the computer.



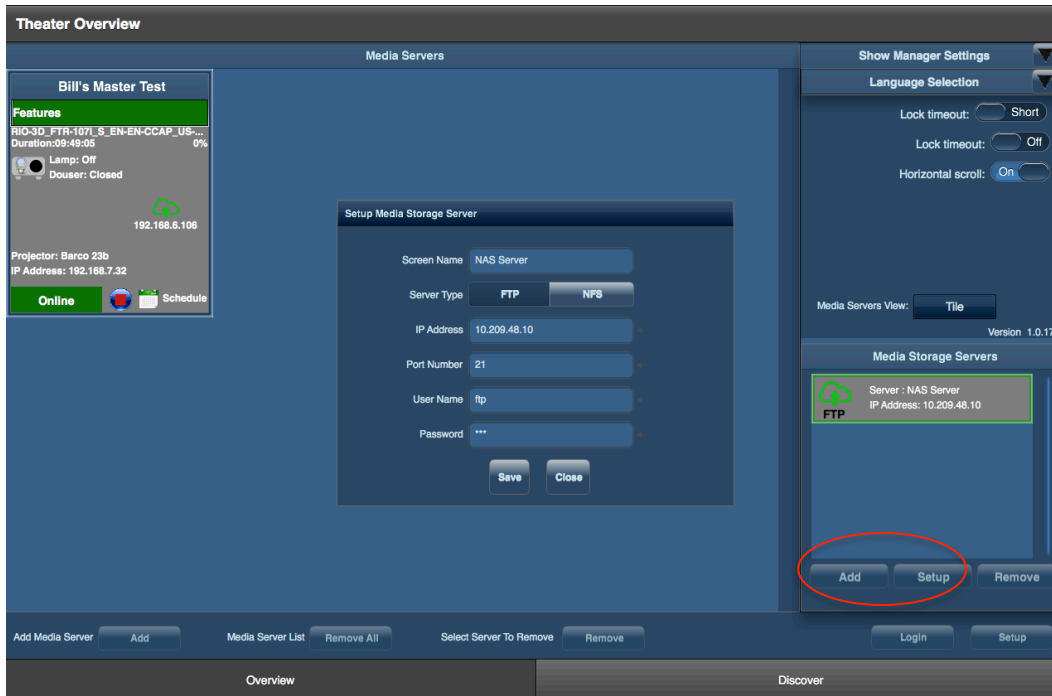
Next you must choose the directory you would like to share on the network. This will be the same directory where content is dropped on the manager’s computer. You may need to add a user profile first. The settings shown below are recommended.



Finally, we must configure the FTP sever Passive port range. Navigate to the FileZilla Server Options menu and enter the settings below. In the Settings menu of FileZilla Server set passive port range from 50,000 to 60,000. Your IP maybe be different based on your network setup. Refer to the Recommended IP Scheme portion of this document for more info.



The FTP server is now ready to be added in the Theater Overview pane of the Show Manager User interface.



Once added and visible in the Media Storage Servers section of the UI, the Manager station server can be mounted like a drive within the settings for each CMS-2200.

In the System Tab -> Server subsection select the appropriate server in the External Server pane and turn the File Service option On. The Cloud icon at the top menu should light up bright green. Please allow up to 10 minutes for the CMS to catalog all external FTP assets and have them appear in the Content Tab. Ingests will now occur in the same manner as attached drives.

NFS Ingests

NFS setup steps are similar to those for the FTP servers covered in the previous section. Add an NFS type network location to the Media Storage Section in the Show Manager Overview screen.

In the System Tab -> Server subsection select the appropriate server in the External Server pane and turn the File Service option On. The Cloud icon at the top menu should light up bright green. Assets located on the NFS location will now appear in the Content Tab.

CMS to CMS Content Delivery

FTP 'Push' and 'Pull' functionality has been added to the CMS-2200 to allow content transfer between devices in a multiplex. In the Builder or Content select a playlists or clip you wish to send to another FTP server, then press the push to cloud button. A dialog will open identifying the content being sent and allow you to specify the network location to send it to.





Recommended IP Scheme

Below is a generic IP scheme for a theater Management and Media network. Depending on you equipment it may be tailored as needed.

USL Digital Cinema Network - Quick Start 1 to 20 Screens					
Management Network Base Address: 10.208.48.0					
Management Network Subnet Mask: 255.255.254.0					
Media Network Base Address: 10.209.48.0					
Media Network Subnet Mask: 255.255.254.0					
Management Network (x = auditorium number)		Screen 1	Screen 2	Screen 10	
10.208.48.1	Gateway / Router				
10.208.48.9	SMS/TMS NAS Device (single screen - no media network)				
10.208.48.10	Central SMS Workstation (Management Network NIC)				
10.208.48.3x	Automation Controller (Optional 3rd Party)	10.208.48.31	10.208.48.32	10.208.48.40	
10.208.48.9x	Digital Audio Converter (ECI-60, DAX-602, DAX-802)	10.208.48.91	10.208.48.92	10.208.48.100	
10.208.48.11x	Media Player (CMS-2200 AUX / Eth1 Port - Management Network)	10.208.48.111	10.208.48.112	10.208.48.120	
10.208.48.13x	Cinema Audio Processor (JSD-60, JSD-80, JSD-100)	10.208.48.131	10.208.48.132	10.208.48.140	
10.208.48.15x	Projector Head (Barco, NEC, Christie)	10.208.48.151	10.208.48.152	10.208.48.160	
10.208.48.17x	Projector Touch Panel	10.208.48.171	10.208.48.172	10.208.48.180	
10.208.48.19x	Auditorium Monitoring (LSS-100)	10.208.48.191	10.208.48.192	10.208.48.200	
10.208.48.251	Tech Laptop 1				
10.208.48.252	Tech Laptop 2				
10.208.48.255	Reserved Broadcast Address				
Media Network (x = auditorium number)		Screen 1	Screen 2	Screen 10	
10.209.48.10	Central SMS Workstation (Media Network NIC)				
10.209.48.11	NAS Device				
10.209.48.10x	CMS Media Network (Data B)	10.209.48.101	10.209.48.102	10.209.48.110	

Known Issues

- FTP transfers may cause issues during high bitrate (4K or HFR) playback.
- FTP transfer speeds may vary based on the capabilities of the data network supporting the CMS - 2200(s) and manager stations.
- NFS file system transfers are supported on native NFS systems. Configuring NFS to work on Windows based network locations may not work.
- When External File Service is enables physically mounted USB and eSata drives will take longer to appear.
- Large feature transfers over FTP or between CMS devices may become corrupt.