



Digital Media Systems and ACNS Configurations



Agenda

1. ACNS Setup

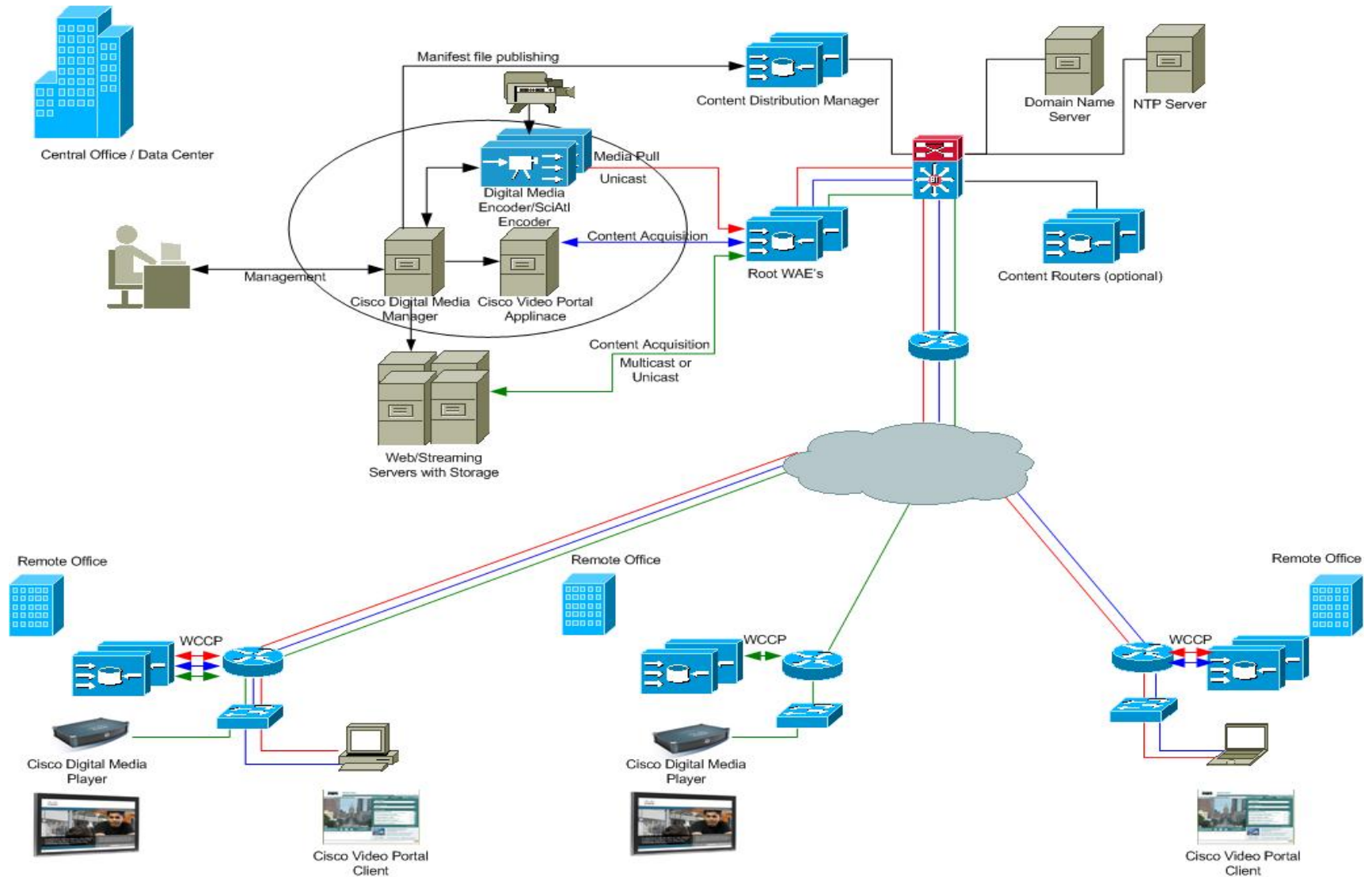
- How does DMS communicate with ACNS
- Configuring NTP
- Setting up Channels
 - Video Portal
 - Digital Signage
- ACNS System Settings

2. DMS Setup

- Video Portal Deployment Locations
- DME Broadcast Alias
- Digital Signage ACNS Settings

3. Troubleshooting

DMS/ACNS System Overview



How Does DMS Communicate with ACNS

- DMS and ACNS communicate at multiple levels
- DMM – Video Portal deploys content to defined locations which ACNS can crawl
- DMM – Encoders leverage the ACNS “Pull” Broadcast alias for live streaming
- DMM – Digital Signage automatically generates Manifest files for ACNS

NTP: Why Do We Need to Sync Systems

- Sync scheduling of DME for live events
- Sync time between DMM and CVP for SFTP connections
- Release/End dates of Cisco Video Portal content
- Sync schedule of DMM-DSM Scheduler

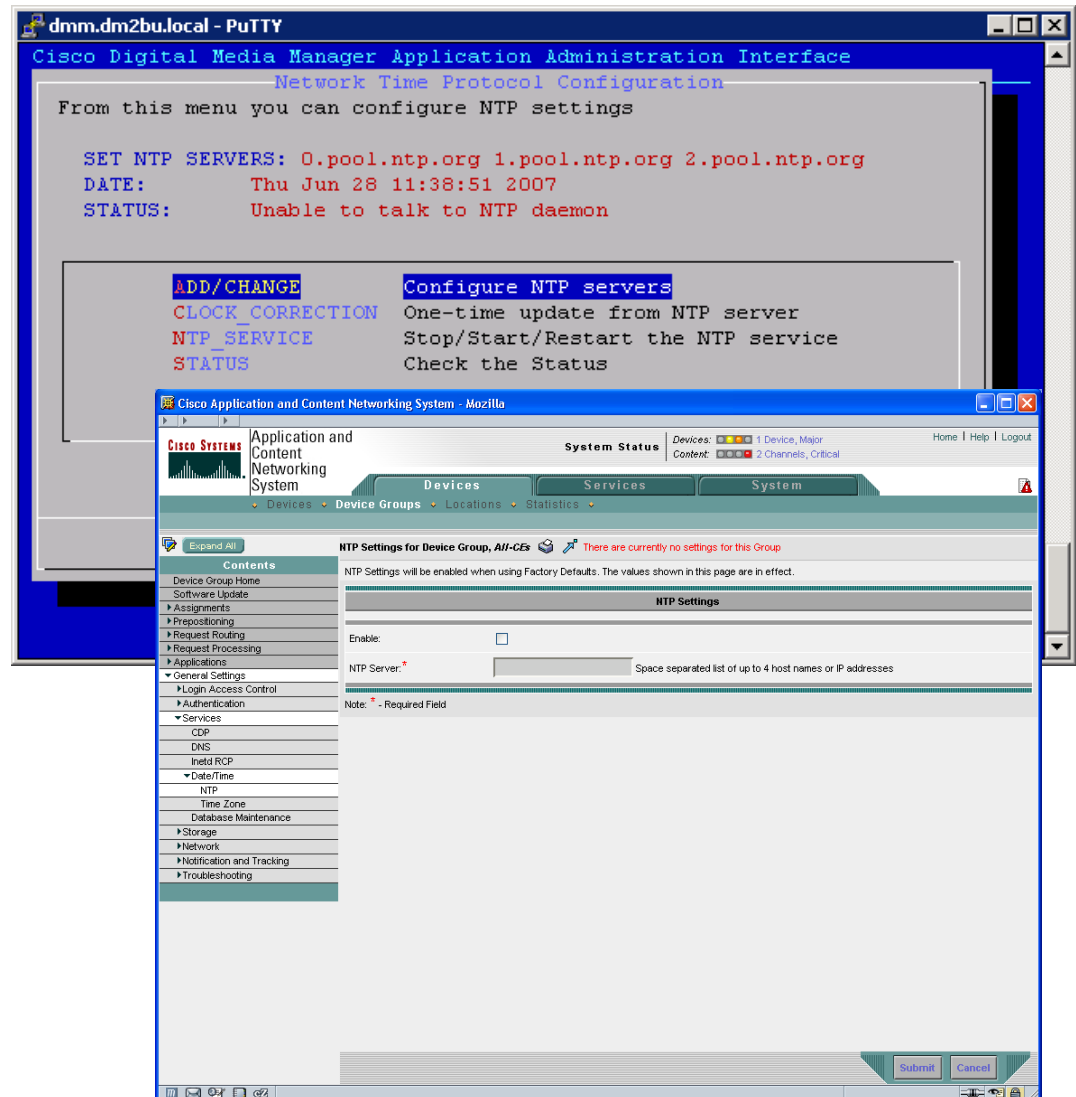


- **MOST IMPORTANT!!!**

- Digital Signage Scheduler uses time stamps on the content pieces
- DMP will request the content based on commands from DMM. If the WAE cannot match the time stamp, the content will not play!!

Configuring NTP

- DMM – AAI
 - Date_Time_Settings
 - NTP
 - Add/Change
- ACNS-CDM
 - General Settings
 - Services
 - Date/Time
 - NTP
 - Time Zone



Setting Up Channels

- Channel for Video Portal
 - Video Portal Metadata
 - VoD Content



- Live Channel for DME's
 - Broadcast Alias
 - Stream Splitting

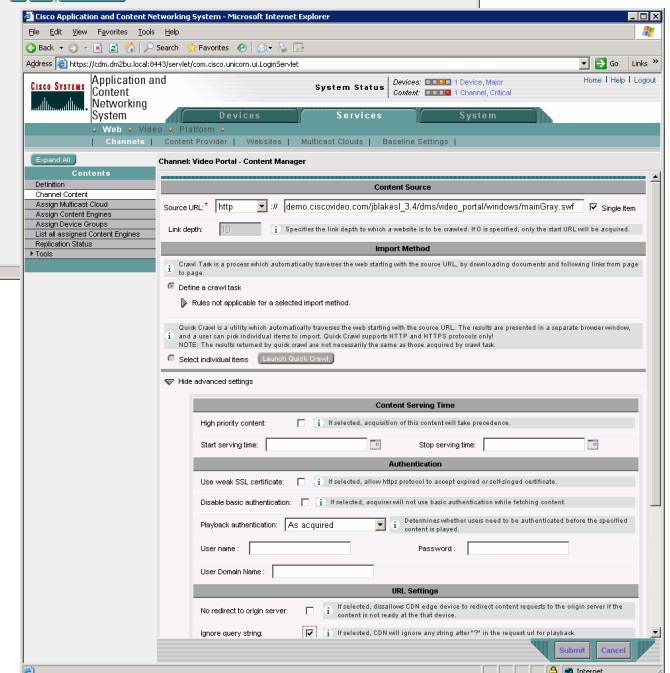
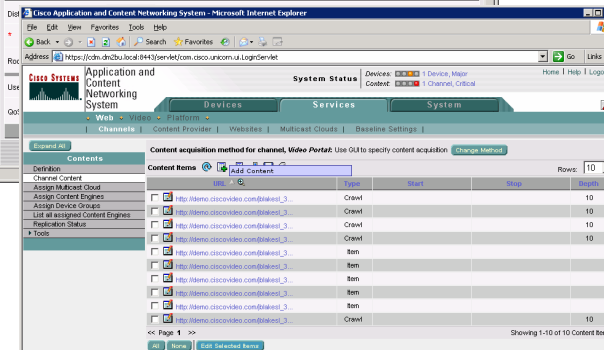
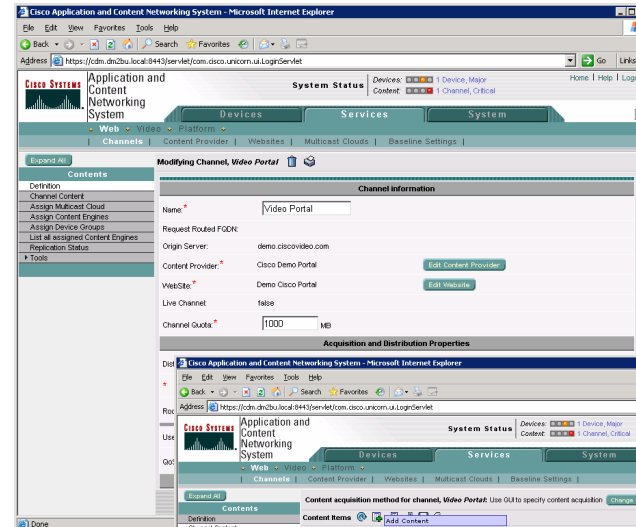


- Channel for Digital Signage
 - Digital Signage Videos and HTML Content



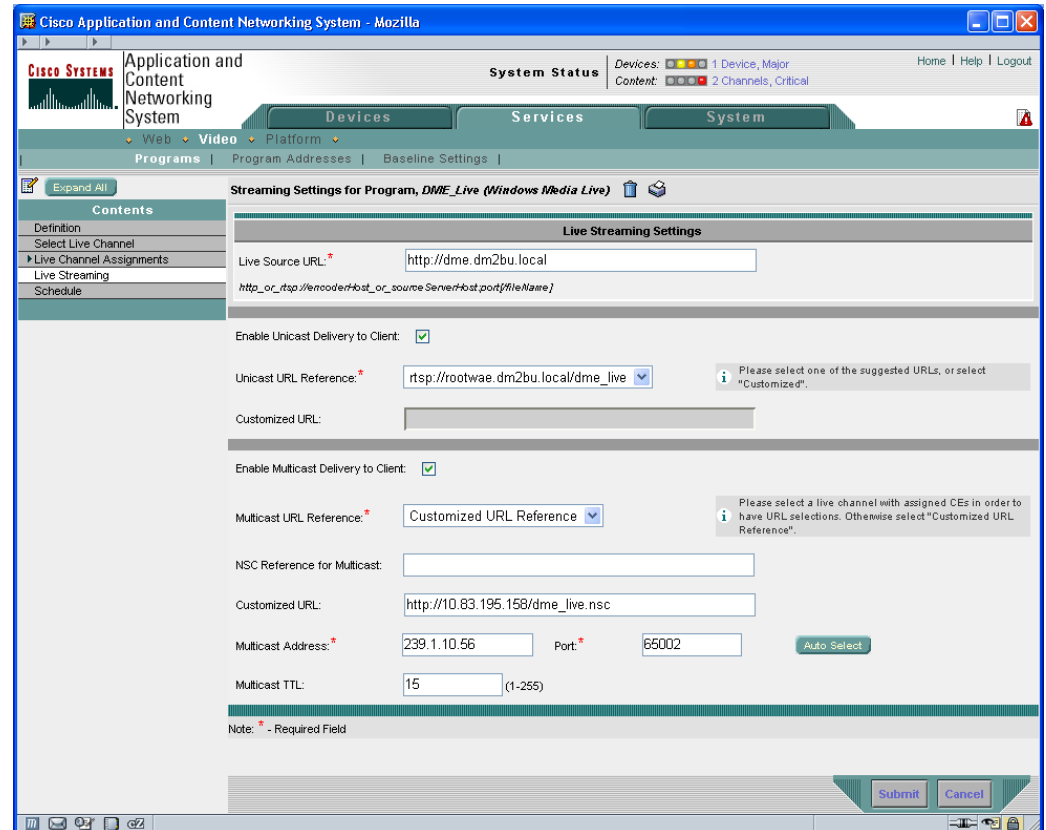
Video Portal

- Define your channel
 - Origin Server
 - Website
 - Channel Quota
- Can use the GUI to specify content acquisition locations
- Some content directories will need advanced setting
 - Ex. Ignore query string (?)



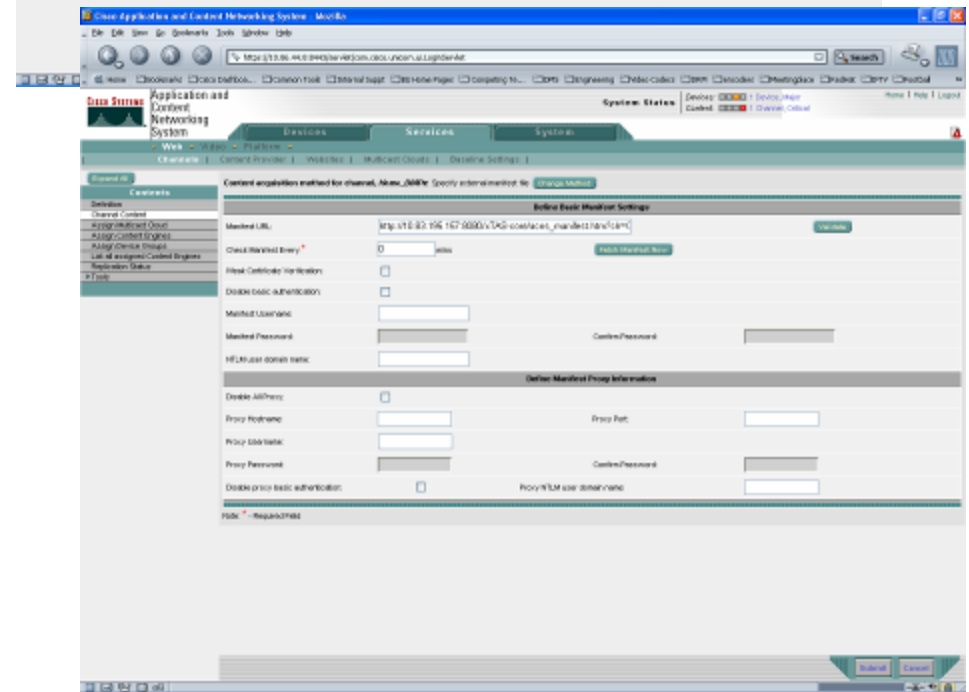
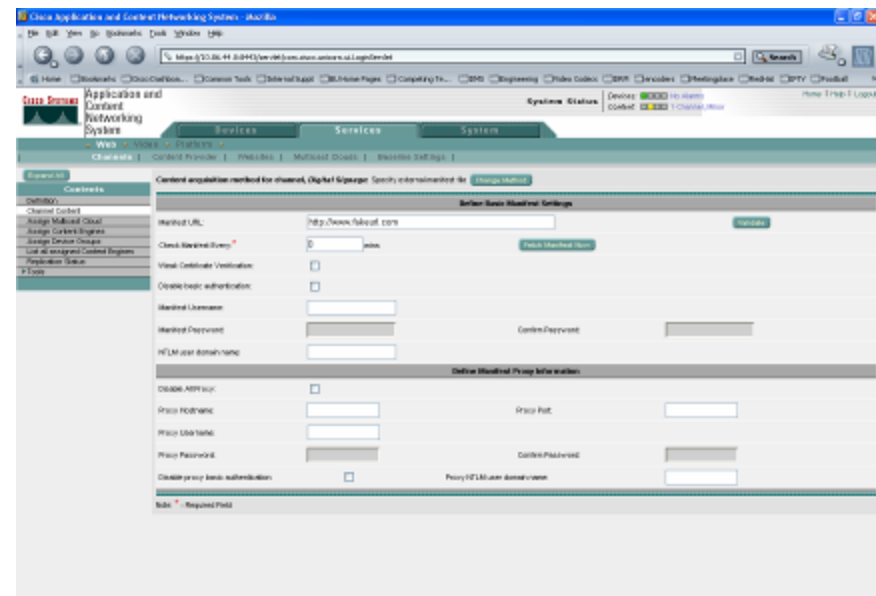
Live Channel – Broadcast Alias

- Live Streaming source points to DME
- Unicast URL points to Root WAE Broadcast Alias
- Multicast URL points to root WAE with .nsc



Digital Signage

- Define Channel Structure
- Set Channel Quota large enough to support Signage content
- Channel Content
 - Specify External Manifest File
- Manifest URL
 - 1st place a fake place holder
 - 2nd DMM will replace with 1st time deployment.
 - Check Every set to 0 (Zero)



ACNS System Settings

- Digital Signage Video content is sent over HTTP
- Set Applications->Default and Maximum BW to greater than highest encoded bitrate
- Set Applications->Web->HTTP->HTTP Caching to maximum

The top screenshot displays the 'Default and Maximum Bandwidth for Device Group, All-CEs' configuration page. The 'Content Services Default and Maximum Bandwidth Settings' table is as follows:

Service	Default Bandwidth	Max Bandwidth
Windows Media Incoming	[] Kbps	[] Kbps
Windows Media Outgoing	[] Kbps	[] Kbps
Real Proxy Incoming	[] Kbps	[] Kbps
Real Proxy Outgoing	[] Kbps	[] Kbps
Real Server	[] Kbps	[] Kbps
Cisco Streaming Engine	[] Kbps	[] Kbps
HTTP	60000 Kbps	60000 Kbps

The bottom screenshot displays the 'HTTP Caching for Device Group, All-CEs' configuration page. The settings are as follows:

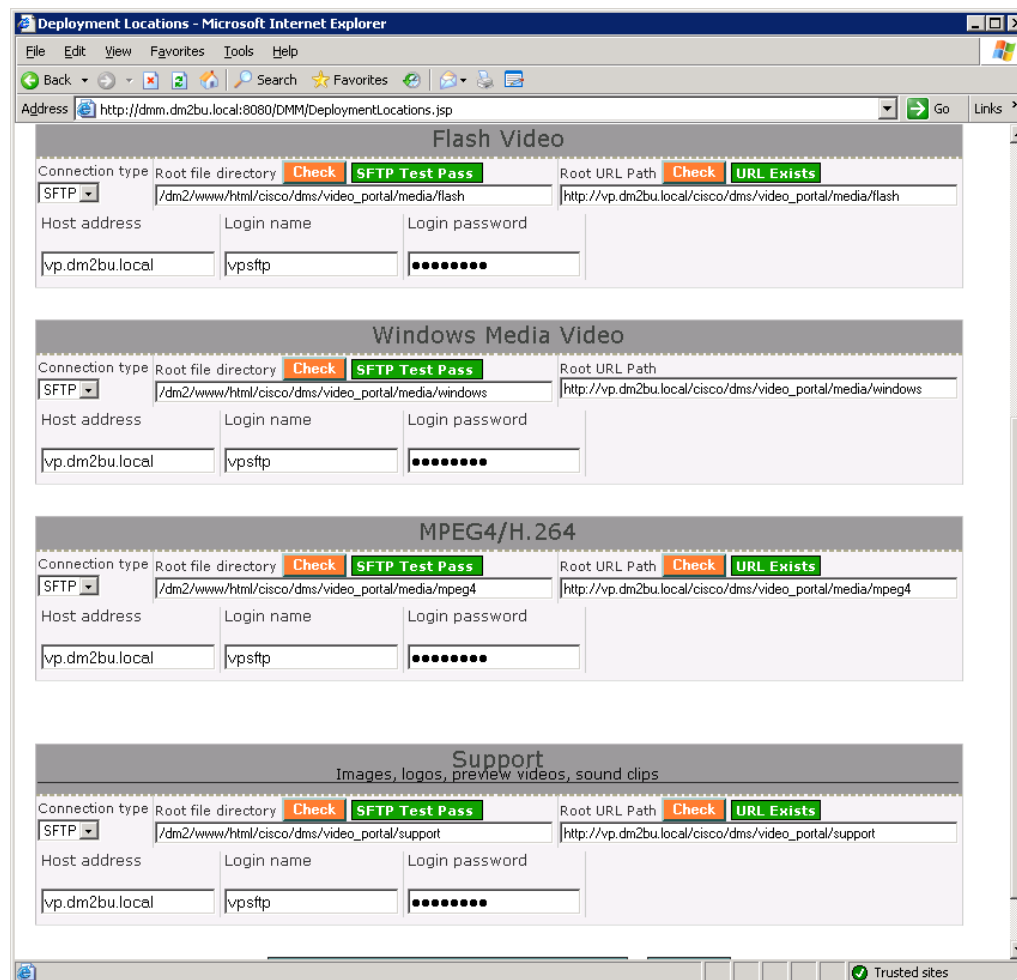
- Enable Cache Vary User Agent:
- Strict Length Checking:
- L4 Switch Spoof Support:
- Do not modify request host header:
- Enforce Max Object Size:
- Max Object Size: 204800 (KB) (1-204800)
- URL Validation:
- Client No Cache: Do not set
- Enable Smart Range:
- Max Start: 16384 (Bytes) (0-2147483647)
- Max Interval: 16384 (Bytes) (0-2147483647)
- Default Bitrate: 2000000 (Kbps) (0-2000000)
- Always Resolve Host:

Note: * - Required Field

Video Portal Deployment Locations

- Video Portal Deployment locations define where content will be published
- These Web Directories are defined within the ACNS Manifest GUI
- Root WAE will Crawl content from these Directories
- Best Practice is to set Video Portal Metadata directory to highest priority

Or else videos will deploy first and Content listing will not be up to date



Troubleshooting Tips

- Know your environment

Where is your DNS server – is it set up

Where is your NTP server – Are the DMM, VP and WAE's setup

Is my network multicast enabled?

- Size your ACNS WAE's correctly

The max HTTP throughput with ACNS 5.5.7, in direct proxy configuration or WCCP are:

NME-WAE-502 8 Mbps

WAE-512 12 Mbps

WAE-612 32 Mbps

WAE-7325 90 Mbps

