Scheduling and Content Management on a Codian MCU and IP-VCR
Agenda

- Northwestern Videoconferencing Infrastructure
- RYO Codian Scheduling Software
- Branding Codian Streaming Web Pages
- Content Management for Archived Codian Files and a Tandberg TCS
Northwestern Videoconferencing Infrastructure

- **Codian MCU**
  - 40 port standard definition
  - Live streaming of audio/video/content

- **Codian IP-VCR**
  - 5 simultaneous recordings
  - Live or on-demand streaming
    - Audio, video, and/or content
    - RealVideo, Windows Media, or QuickTime
    - Number of streams limited
  - ~50 hours of recording space
Northwestern Videoconferencing Infrastructure Continued

- Radvision Gatekeeper and Gateway
- Codian now owned by Tandberg
SCHEDULING SOFTWARE

http://www.it.northwestern.edu/videoconferencing/index.html
Scheduling System

- User accessible Web pages
  - Tutorial information
  - Room availability
  - Directory information
  - Forms to drive automated scheduling of MCU

- Northwestern written code
  - Written in Cold Fusion
  - Access Database
  - Drives Codian API to schedule using XML
# Videoconferencing Services

## Getting Started
- Videoconferencing Overview
- Getting Started Overview
- Information for Beginners
- How to View, Schedule, or Modify Videoconferences
- Technical Documents for Advanced Users
- Videoconference Locations

## Our Services
- Services Overview
- Consultation and Project Management
- Videoconference
- Support and Testing
- Contract Services
- Videoconferencing Infrastructure
- Public Videoconferencing Rooms

## Researchers
- Researchers Overview
- Research Collaboration and Academic Technologies
- Alternative Conferencing Technologies for Research Collaboration
- Examples of Collaboration

## Scheduling and Calendar
- Schedule and manage videoconferences
- Videoconferencing Calendar
- NUI Room Availability

## News
- Videoconferencing News

## Other
- H.323 Video Directory Lookup
- H.323 Video Modify Directory
Technical Documents for Advanced Users

Understanding Data Sharing
Sharing data in a videoconference is frequently crucial to the successful outcome of the conference.

Network Address Translation and Firewalls
This is a detailed technical description of the use of network address translation devices and firewalls in videoconferencing.

Understanding Addressing Issues
This describes the addressing scheme used at Northwestern and elsewhere for dialing videoconferencing units.

Access Grid Videoconferencing
This describes an immersive videoconferencing environment that is widely used for research collaboration.

Additional Information

- My Conferences - Schedule and manage videoconferences

Last Updated: 26 September 2007
Videoconferencing Services

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Other
- H.323 Video Directory Lookup
- H.323 Video Modify Directory
DIRECTORY LOOKUP

Enter a valid user name. Wild cards can be used (e.g. *Smith). The search will return all Northwestern users that match the search criteria. Records for users that do not have H.323 information available will have N/A indicated.
DIRECTORY LOOKUP

Search

Query: amiot

Submit

Enter a valid user name. Wild cards can be used (e.g. *Smith). The search will return all Northwestern users that match the search criteria. Records for users that do not have H.323 information available will have N/A indicated.

Larry William Amiot

Department: IT Academic Technologies

Address: UNIVERSITY LIBRARY

2 East

EVB303

Email: amiot@northwestern.edu

Telephone: +1 847 467 6885

Video address: Click here to retrieve the video address
LOOKUP BY NETID

**End Point Type:** Terminal

**Description:** My Argonne (ANL) Viewstation

**H.323 Alias:** amiot@anl.gov

**H.323 In Zone Extension:** 125432

**H.323 Out of Zone Extension:** 0011169125432

**Gatekeeper Address:** gk.northwestern.edu

**H.323 Terminal IP Address:** 146.139.96.142

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**End Point Type:** Terminal

**Description:** My Northwestern (NU) Viewstation

**H.323 Alias:** amiot@northwestern.edu

**H.323 In Zone Extension:** 176885

**H.323 Out of Zone Extension:** 0011169176885

**Gatekeeper Address:** gk.northwestern.edu

**H.323 Terminal IP Address:** 129.105.110.18
**MODIFY DIRECTORY**

Your Current H.323 Record(s)
- My Argonne (ANL) Viewstation
- My Northwestern (NU) Viewstation

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**Add an H.323 Record**

<table>
<thead>
<tr>
<th>Field</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>H.323 Alias:</td>
<td>e.g. j-doe.northwestern.viewstation</td>
</tr>
<tr>
<td>H.323 Extension:</td>
<td>e.g. 171234</td>
</tr>
<tr>
<td>H.323 Terminal IP Address:</td>
<td>e.g. 129.105.123.123</td>
</tr>
<tr>
<td>Description:</td>
<td>e.g. &quot;My ViewStation at Northwestern&quot;</td>
</tr>
</tbody>
</table>

The H.323 information contained in these records will be made available using the directory search for "people" that is accessible from Northwestern's Home Page. If you set the "Off Campus" field in your Directory Information to full, both off-site and campus people will be able to see the link to your video information. If your directory information is not set to "full" ("partial" or "no"), neither off-site or on-campus users will be able to see the link to your video information.
## MY CONFERENCES

<table>
<thead>
<tr>
<th>Conf ID</th>
<th>Conference Name</th>
<th>Date and Time</th>
<th>Sites Info</th>
<th>MCU Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>6247</td>
<td>INTERNET2 DIGITAL VIDEO INITIATIVE</td>
<td>Wed, 04/23/08 07:45 AM to 09:15 AM</td>
<td>Total Sites: 4 50025432 07:15 AM-09:45 AM</td>
<td></td>
</tr>
<tr>
<td>My Conferences</td>
<td>Date</td>
<td>Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------</td>
<td>--------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QATAR</td>
<td>Wed, 02/27/08</td>
<td>07:00 AM to 08:30 AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEST STREAMING</td>
<td>Thu, 02/14/08</td>
<td>03:30 PM to 04:30 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QATAR CONFERENCE</td>
<td>Thu, 02/07/08</td>
<td>06:45 AM to 08:45 AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QATAR TEST CONFERENCE</td>
<td>Tue, 02/05/08</td>
<td>07:00 AM to 09:00 AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIDEOCONFERENCE WITH QATAR</td>
<td>Wed, 01/30/08</td>
<td>06:45 AM to 08:30 AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QATAR TEST</td>
<td>Tue, 01/29/08</td>
<td>07:00 AM to 08:30 AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QATAR TEST</td>
<td>Mon, 01/28/08</td>
<td>01:00 PM to 02:00 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEST</td>
<td>Tue, 01/15/08</td>
<td>05:00 PM to 06:00 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEST</td>
<td>Thu, 01/03/08</td>
<td>01:30 PM to 02:45 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MERIT PRESENTATION</td>
<td>Tue, 11/20/07</td>
<td>01:00 PM to 03:30 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEST11</td>
<td>Tue, 09/25/07</td>
<td>11:30 AM to 12:00 PM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## ADD A CONFERENCE

### CONFERENCE INFORMATION:

**Conference Name:** Internet2 Digital Video Initiative  

**Conference Purpose:** Conference  

**Do you have a computer presentation?** No

**Description of the conference:**

This is a I2DVI conference

**Participants' Email Addresses (Optional):**

Press ENTER after each e-mail address

### ENTER THE DATE AND TIME OF THE CONFERENCE:

**Start Date:**  
(format: mm/dd/yyyy)
entery the date and time of the conference:

Start Date:
(format: mm/dd/yy)

04/23/08

Start Time:

Duration:

Repeated Conference?

Room Reservations:

Do you need to reserve a room? Yes

Select "No" above to remove these settings from Room Reservations

You have indicated that you plan on using one of the NUIT Supported Videoconference rooms. Please select the room from the list below. If the room is booked, you will be notified when you submit your request.

View NUIT Support Room Schedule.

- Chicago Wisholt 421 (24 Seats)
MULTI-SITE RESERVATION:

When you are conferencing with more than two sites, or someone needs to use telephone to call to join your conference, or you need to enable web streaming for your videoconference, you need to reserve the Northwestern videoconferencing infrastructure (MCU).

Would you like to reserve Northwestern MCU? Yes

Select "No" above to remove these settings from Multi-Site Reservation

Total Number of Videoconferencing Sites: — Please select —

Total Number of Telephone Connections: 0

Screen Layout

![Screen Layout Options]

ADVANCED OPTIONS:

Stream your videoconference Live (all or some sessions)? More info. No

Enable security PIN for your conference? No

Do you want to specify your multi-site dial-in number? No
BRANDING CODIAN
STREAMING WEB PAGES
Play back a recording

Recording ID
PIN
Media: Highest rate using QuickTime
Prefer multicast
Play audio and main video
Video size: Auto
View content channel
Content size: Medium
Stream this recording

Public folders
- Top-level folder
- Factory Physics II - Winter '08
- NCLT Seminar Series
- Oncofertility
- QATAR - NFS

Click here to log in
Standard Codian Web page Scenario

Browser → URL Request → Codian MCU

Browser ← Form ← Codian MCU

Browser ← Input Parameters ← Codian MCU

Browser ← Audio/Video/Content ← Codian MCU

Windows
Branded Web Page Scenario

1) Send URL
2) Post Form
3) Form par/values
4) Form par/values
5) Codian branded
6) Project branded page
7) Audio/video/content
ONCOFERTILITY TEST WEBCAST

Please sign in to view the test webcast

Sign-in name: Larry

Stream this conference
SOME THOUGHTS ON CONTENT MANAGEMENT
Content Management

- How do you get achieved audio/video/content off of the Codian IP-VCR
  - Download from the IP-VCR to your computer in a Codian proprietary format
  - Run “codian_to_mpeg_format.bat”
    - Format the size, position, and existence of video and/or content
  - Edit (trim) the resulting MPEG1 file and save as appropriate type (MOV, MPEG4, WM, RealVideo, etc)
  - Put on server/deliver to user
Content Automation

- Schedule the session; include recording
- Write the file to NFS from the IP-VCR
- Periodically check to see if the file has been written
- Allow the users to select:
  - Type of output (encoding/un-encoded MPEG1)
  - Trimming or not
- Tell user when complete
**Tandberg TCS Complementing the Codian IP-VCR**

**TCS**
- Windows Platform
- Content server with H.323 recording added
- 5 live recordings & 2 live streams
- Large aggregate number (100s) of WM streams native- supports links to QTSS or RealVideo servers

**IP-VCR**
- Linux Platform
- H.323 recorder with streaming added
- Up to 10 live recorded and/or live streams
- Limited aggregate number (50 to 75) of live or archived streams- stream as WM, QT, or RealVideo
Tandberg TCS Complementing the Codian IP-VCR

**TCS**
- Recordings from MCU only
- 250 GB disk - no NFS
- Content encoded in video stream
- Archives streamed in pre-encoded format
- Can archive in various encodings and formats

**IP-VCR**
- Recordings & playback from MCU or Client
- 57 GB of disk plus NFS
- High resolution (1024x768) JPEG content
- Archives streamed with on-the-fly encoding
- Archived in proprietary Codian format - can be converted to MPEG1
Tandberg/Codian Evaluation
Configuration

- Tandberg TCS
  - 1 RealVideo, WM, or QT streams
  - 5 WM Streams
  - n QuickTime Streams

- Codian MCU
  - 1 RealVideo, WM, or QT streams
  - 5 n RealVideo, WM, or QT streams

- Codian IP-VCR
  - 1 RealVideo, WM, or QuickTime streams

- Helix Server
  - 1 RealVideo Streams
  - n QuickTime Streams

- QuickTime Streaming Server
  - 1 QuickTime Streams