Channel Reflector
- Revive the session announcement draft -

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Previously...

• We worked for the session announcement requirement draft
  – draft-ietf-mboned-session-announcement-req-03
  – No update because of lack of interests...

• Goal of that draft was
  – Clarify the issues SAP causes
  – Describe the functional requirements for IP multicast session announcement protocols / procedures
  – No protocol definition nor technical solution proposed in this draft
Functional Requirements

- Information consistency
- Low information update latency
- Low bandwidth consumption
- Scalability
- High availability
- Scope control
- Sender control
- User access control
- No dependency on a routing architecture
- Security consideration
Channel Reflector

• Channel Reflector (CR) is
  – Web-based multicast session/channel announcement system
    • It is NOT a VoD server
  – No SAP, no ASM, no multicast routing dependency for announcement
  – Support global and site-local channel information
    • But this site-local information does NOT depend on routing topology
  – Content information can be expressed by various formats, e.g. SDP, metafile
    • You can use VLC, MediaPlayer, Real, DVTS, etc.
  – User management by web-based access control
  – Support secure streaming (by pointing group key server)

• CR’s components
  – Enhanced DHT with controller agent
  – Local RDB (MySQL)
  – HTTP server
Getting Started

• You can (tentatively) use our site CR
  – Open and global Channel Reflector Site
    http://www.channel-reflector.net/

Click to get content information, launch VLC player to playback
Getting Started

Show the timetable

Search the content

Locale change, Account creation

In order to register the content, login is required
Call for Participants

• Multiple CR servers create the CR system
  – Please install CR server on your site!
    • More CR servers will make the CR system be robust
    • Local CR server enable to register the site-local channel information

• Server requirements
  – OS
    • CentOS5, RHEL5 (recommended)
    • Fedora 12 or later
  – CR package, including the following common S/W;
    • Apache Web Server
    • MySQL RDB Server
    • Simple Overlay Toolkit DHT Service
How to install your site CR

• To complete installing the CR, you need only few installation steps
• See INSTALL guide on this URL
  – http://www.channel-reflector.org/rel1/INSTALL

• If you cannot install the server on your site but want to use it...
  – For browsing page and contents, you can just access to the global CR site, visit
    http://www.channel-reflector.net
  – For channel announcement, please tell me. I’ll enable your account at the global CR site tentatively, and you can register content information on that CR
Next Step

• Next release includes
  – Secure Streaming Support
    • IPsec tunnel-based Streaming Tool
  – Group Key Management
    • Key Server, Management Tool for IPsec based secure streaming cooperated with CR

• And now, can we revive the draft for moving forward?
  – draft-ietf-mboned-session-announcement-req-03