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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

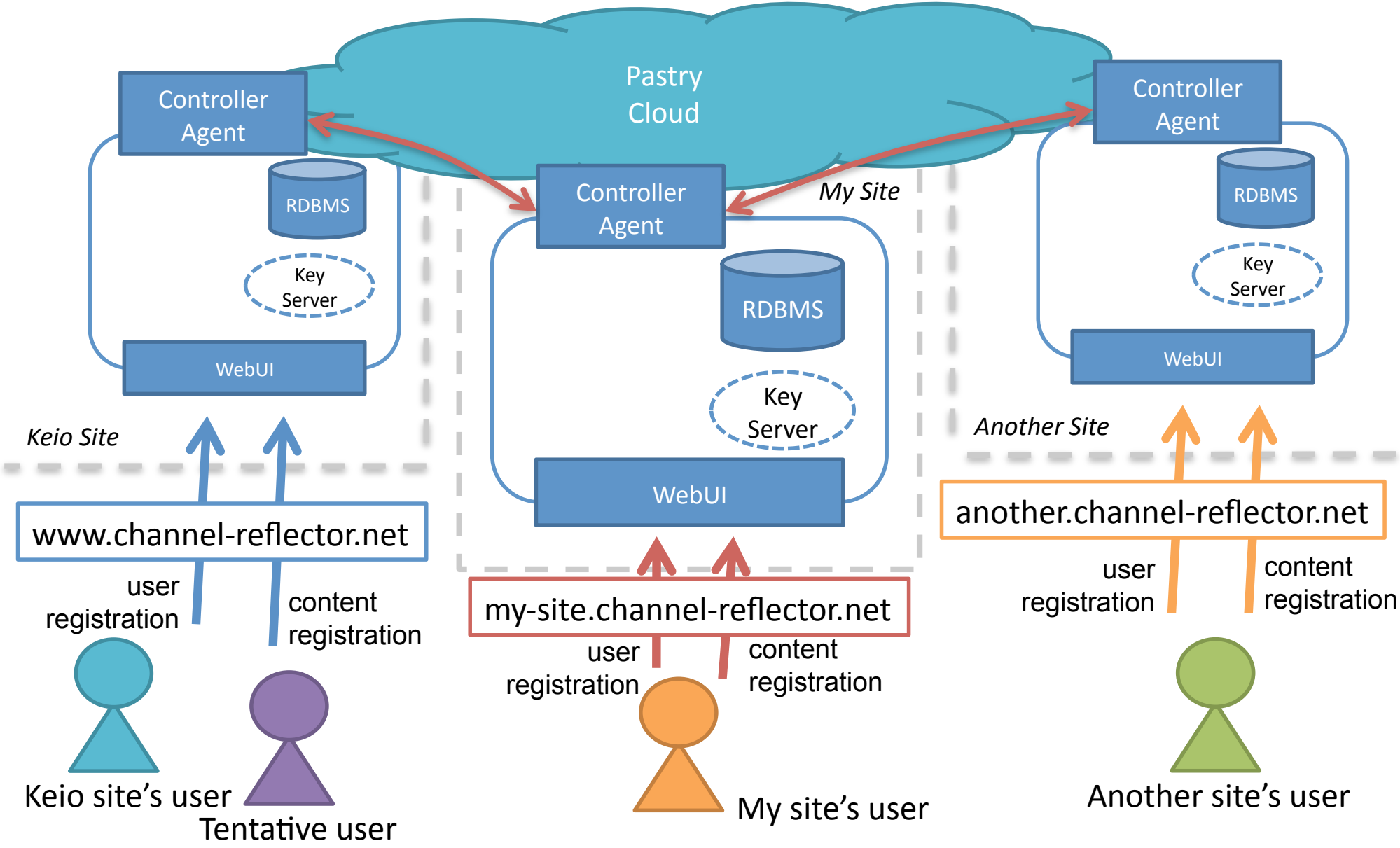
- Information consistency
- Low information update latency
- Low bandwidth consumption
- Scalability
- High availability
- Scope control
- Sender control
- User access control
- No dependency on a routing architecture
- Security consideration

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

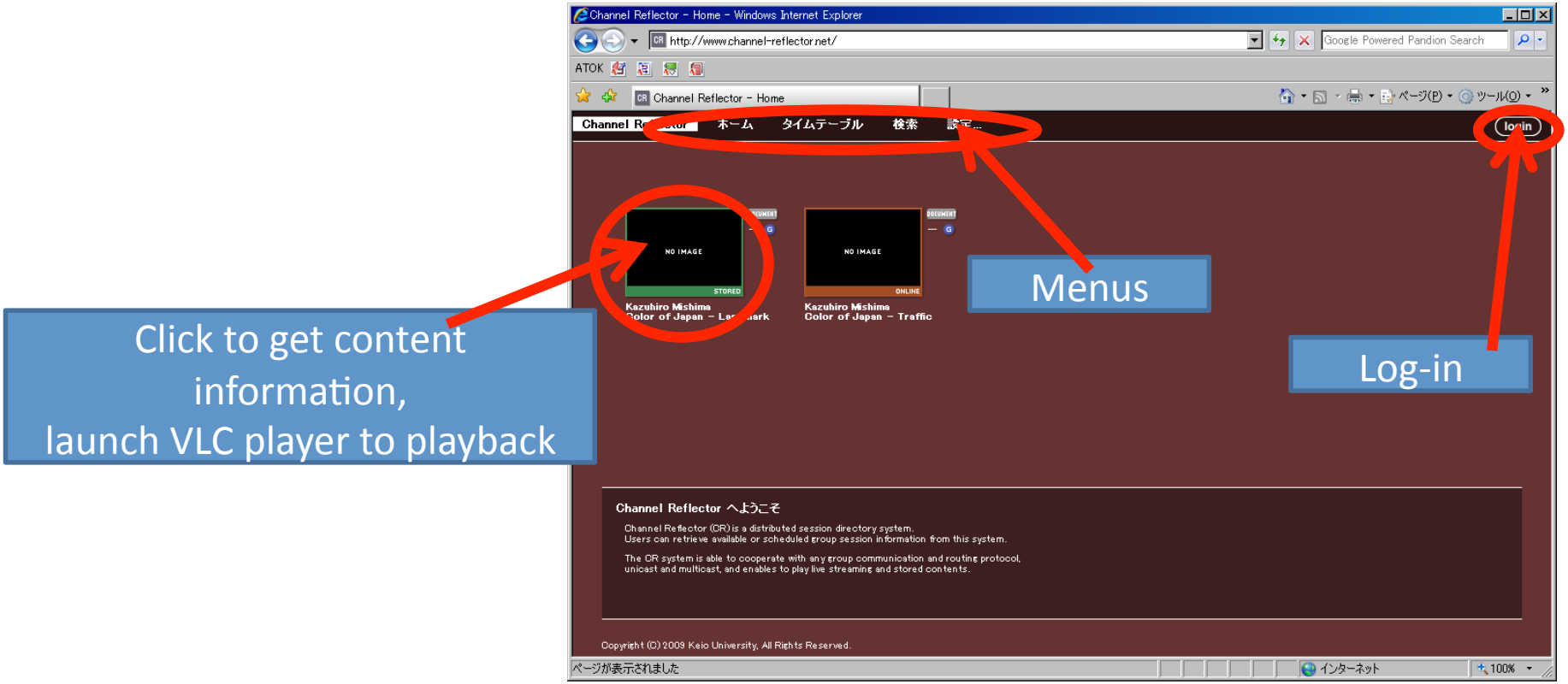
CR Use Image


Pastry Cloud
Controller Agent
RDBMS
Key Server
WebUI
My Site
Keio Site
Another Site
www.channel-reflector.net
my-site.channel-reflector.net
another.channel-reflector.net
user registration
content registration
Keio site's user
Tentative user
My site's user
Another site's user

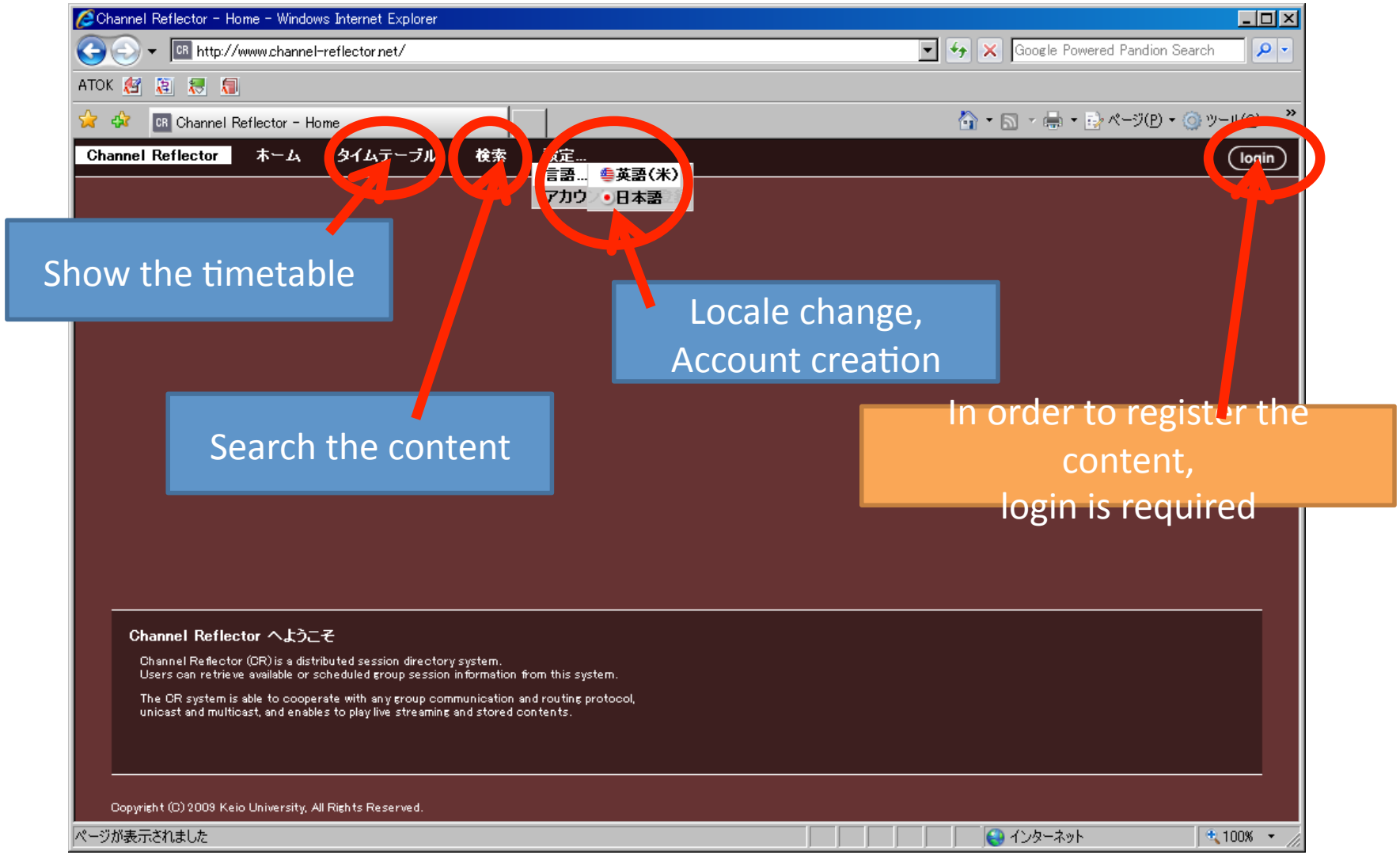
Getting Started

- You can (tentatively) use our site CR
  - Open and global Channel Reflector Site

    http://www.channel-reflector.net/



Getting Started



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