eduCONF

Effective Video Conferencing can save time, money and improve teamwork. With eduCONF users will be able to find and use videoconferencing facilities across Europe. eduCONF services are helping to provide the tools for an effective pan-European videoconference infrastructure, including tools for locating, validating and certifying rooms, managing and monitoring a videoconferencing network.

eduCONF is providing an end-to-end video call verification feature that will allow participating national research and education networking (NREN) organisations to verify their video conferencing services and rooms, and allow end uses to verify their devices or soft-phones.

The overall vision of the eduCONF videoconferencing service is to provide a high-quality collaboration environment that will be easily accessible to research and academic users.

Video; How to create a videoconference that works

eduCONF Directory Service

eduCONF World Gatekeepers

eduCONF World Gatekeepers are the part of the top routing infrastructure for H.323 e.164 alias schema (GDS).

In order to be compliant with eduCONF basic certification, VC infrastructure must integrate with GDS (Global Dialing Schema). eduCONF World Gatekeepers provide an attachment point for national and institutional gatekeepers, and provides the signaling routing required to establish calls between multiple H.323 zones. World Gatekeepers are enabled to accept registrations from independent terminals and integrate them on GDS hierarchy using eDDi (eduCONF Direct Dialing). eduCONF's gatekeepers are ENUM and IPv6 enabled. By providing ENUM resolution and signaling over IPv6 at the gatekeeper tree top, they enable ENUM reachability, by default, to all child gatekeepers.

The service is directed at H.323 VC infrastructures that want to peer directly with eduCONF's World Gatekeepers. To gain access to World Gatekeepers and other eduCONF tools register your Institution. For more information about setting up the infrastructure contact educonf@geant.net.

Development of eduCONF

The eduCONF service was defined in the 2010 business plan and introduced to the portfolio of GÉANT services. The main objectives of eduCONF were described as a set of tools and services that will ease and simplify videoconference setup procedures, enable and consolidate multi-domain NREN services in a coherent Europeanwide service and increase the awareness of videoconference services.

During the 2010 Lisbon Workshop discussion, general consensus was reached on the following conclusions:

- Solve basic issues first (for example, GDS, monitoring, etc.) and as quickly as possible.
- Develop higher level services or service functions only after solving basic issues.
- There is a need for knowledge dissemination tools and activities such as: NREN Services Certification, NREN Advisory/Helpdesk, GDS Administration Tools and Workshops.

The service was structured to follow these two main goals:

- Address, Monitoring and Directory.
- Videoconference Certification (network and rooms).

After a few months within the project it become clear that eduCONF's tools should be much more integrated than foreseen. The directory and certification should be integrated within a single web tool in which the registered rooms on the directory would have to go through the certification process.

The directory and certification platform have been implemented and are available on https://educonf.geant.org/.

On the backend of the eduCONF infrastructure two seamless systems were created:

- eduCONF World Gatekeepers – a set of h.323 gatekeepers that handle call routing at world level.
- H.323 monitoring engine – a mechanism that tests videoconference rooms and videoconference services on request.

Additionally, a set of documentation was produced to help videoconference service managers and videoconference room managers to improve their service.