

Uncompressed HD Streaming

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SHORT USE CASE DESCRIPTION

High Definition media is becoming important in the industry because of the needs in the movies and entertainment industry. Streaming uncompressed HD requires high bandwidth dedicated links. Such links are hard to obtain in multi-domain networks. In this use case different cinematic studios want to share and stream HD content over a high speed network. This use case is interesting to run via the Panlab facilities because these networks are not available everywhere.

A. Technical environment

Figure 1 displays the infrastructure used to run this use case scenario. The equipment used is as follows:

- Ultragrid [1] receiving server
- Ultragrid emitting server
- HPDMnet Testbed [2] where Ultragrid servers are running

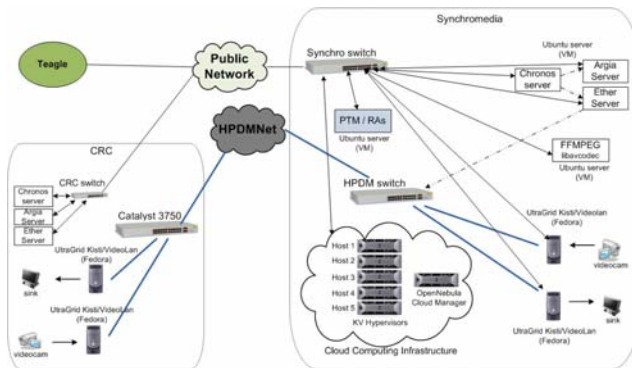
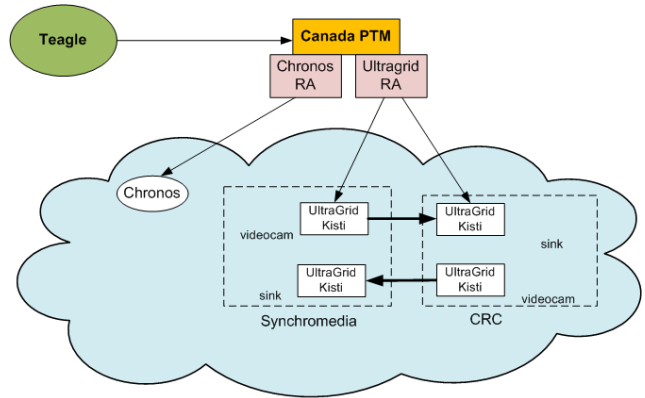


Figure 1: The Testbed Infrastructure

The Ultragrid Resource Adapter is controlling the Ultragrid software instances installed on the dedicated servers. Because of the demanding requirements, these servers have specific requirements and cannot be configured as virtual machines. They must be installed on baremetal. As shown on Figure 2, the Chronos resource Adapter controls the Chronos instance in order to create the desire connections. These connections will be used by Ultragrid software instances to stream and receive uncompressed HD live video stream.



HPDMnet Testbed

Figure 2: Logical Use Case Description

B. Results

The ultragrid use case is currently being tried and tested and needs to be evaluated with more results and experiments.

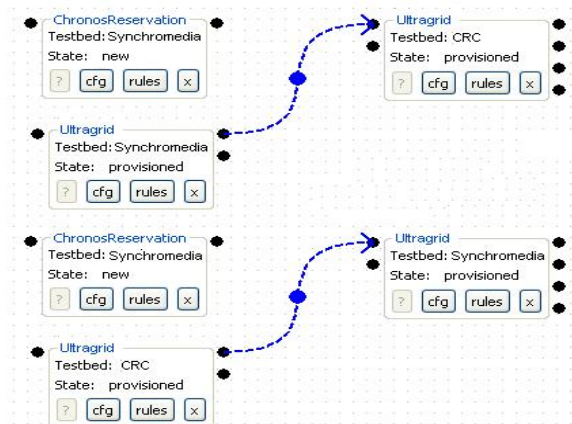


Figure 3: Resource Orchestration

TEST BED AVAILABILITY

The resources for creating similar scenarios are going to be available under the Panlab Office offerings. We expect to make more resources available as demand increases.

- [1] Ultragrid Kisti http://good.kreonet.net/monet/doku.php?id=monet:uncompressed_hdtv_uchd
- [2] HPDMnet, <http://www.hpdmnet.net>