

TNC 2016 session proposal from

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The hidden power behind the clouds

A session on cloud network peerings: towards a 'cloud network infrastructure', why and how

Introduction

Cloud services are becoming core to our client institution's business. Using those cloud services requires fast data networks. Network infrastructures are the bedrock on which service providers can deliver their online applications and users depend on it. Without networks, there are no cloud services.

NREN networks and cloud service providers

For NRENs, providing advanced network capabilities is a core competence and the main reason we exist.

This therefore brings up the question how NRENs should interact with and connect to cloud service providers, from a network infrastructure perspective.

How will NRENs ensure their communities can reach and use cloud services in the best possible way? How will we evolve our current networks into a cloud network infrastructure?

There are threats and opportunities:

- Cloud providers offer direct connectivity options (as a product), which could result in our institutions bypassing our networks.
- Institutions have been dealing directly with cloud providers to date, with mixed results.
- The NRENs can provide better solutions (in cost, performance, scalability, fully managed and secure), but this is not the 'norm' for cloud providers. How should we collaborate, to ensure we are not only relevant in this area, but play a leading role?

Proposed session structure

HEAnet, SURFnet and the GÉANT GN4-1 supply chain and cloud services activity (SA7, the NREN cloud collaboration in GÉANT), propose to organise a session on this topic at TNC 2016, divided in two parts:

1.

To tell the audience about the choices HEAnet, SURFnet and the GÉANT SA7 cloud activity made in this area and the results thus far:

- The demand from the community;
- The pan-European NREN collaboration in GÉANT on cloud network infrastructures;
- The interaction with cloud service providers, cloud network peering solutions

put in place and the impact on the design and operations of the NREN networks (who does what);

- The lessons learned.

2.

To have a discussion with the audience, structured by pre-prepared statements and questions on:

- How NRENs could / should be active in this area;
- How next steps in the NREN collaboration could / should be shaped.

Through this session, HEAnet, SURFnet and the GÉANT GN4-1 SA7 activity hope to contribute to the NREN collaboration in GÉANT on clouds in general and cloud network infrastructures in particular.