

CTO Forum - 6 November 2017

Logistics

- date: 06.11.2017
- time: 10:00 - 15:00 CEST
- venue: NORDUnet office Kastrup (tentative)
- VC room for remote participation: 632462520

Agenda

1. In-depth topics (2 hours)
 - a. Nordic ideas and planning for GN4-3
 - b. Next GÉANT network - roadmap, Nordic views, preparation
2. Lunch (45 minutes)
3. 2018 Meeting Calendar
 - a. January meeting + topical workshop?
4. Updates (45 minutes)
 - a. GN4 update
 - i. GN4-3 status
 - ii. geteduroam
 - iii. InAcademia operations
 - b. GÉANT Update
 - c. Big Users
 - i. ESS
 - ii. EISCAT-3D
 - d. Tenders
 - e. NDN Next Gen process, meetings
 - f. Shibboleth Consortium
 - g. Pacific Research Platform & Data Transfer Nodes
5. Country / NORDUnet updates (max. 15 minutes per NREN)
 - FUNET
 - SUNET
 - UNINETT
 - DelC
 - RHnet
 - NORDUnet
6. AOB

Participants

- NDN: Lars, Jørgen, Josva, + Erik-Jan by VC
- SUNET: Per, Valter
- UNINETT: Olav, Vidar
- FUNET: Teemu, Harri
- DelC: Tangui
- RHnet: Jón-Ingi (by VC)

Notes

- GN4-3 planning
 - The budget indication from EC is 24 M€/yr for 4 years, + 16 M€ for a IRU project. The budget split between the two is flexible.
 - The GN4-3 [White papers & WP process](#) was discussed. It was agreed to track evolving WPs, and to submit task ideas.
 - LF will organize process to identify Nordic ideas for submission
 - WPs
 - Security: outline looks good so far. Vidar, Tangui to engage. Tangu to send information
 - T&I: appear under control. LF to distribute wiki and process links. NRENs to engage
 - Network
 - Concerns about software effort. JK to engage.
 - PN argued that encrypted services must be offered.
 - Applications
 - It was felt to skew toward procurement. More NREN-provided services should be considered, especially container services
 - VF, OK to push for Data Analytics services
 - Both general containerized data analytics, science-specific data analytics, and data analytics for networking (security, optimization) should be considered.
 - Cloud activity should target also "cloud development"
- GÉANT Network Refresh
 - Reference Documents
 - [GÉANT Network Evolution Plan](#)
 - Presentations from GÉANT Symposium: [Network evolution plan](#), [Open line systems](#).
 - [Network and projects rough roadmap](#)
 - IRU project
 - The GÉANT expectation is to transition to new network equipment and new fibre in 2020-2021

- There was some uncertainty as to how much fibre coverage we can achieve for the available funding. The options may be limited
 - It was argued that fibre contracts should not be longer than the expected lifetime of the optical platform
 - We agree that there should be a preference for using existing NREN fibre, and that paying for new NREN fibre is OK, but that NRENs most demonstrate the cost and offer spectrum at cost.
 - There was agreement that
 - The strategic decision is topology, high-level design. This will have long-term implication for our collaboration. Unfortunately, it is also hard. Technology is comparably easy.
 - There was consensus that optical layer disaggregation and DCI equipment is the way to go.
 - There was consensus that it is critical to agree a small set of required core functions of the packet layer. It was argued that MPLS is such a function.
 - There must be an open line system, and the NDN require access to European footprint wavelength service
 - That routers should be thought of as stackable and low-cost appliances
 - IP must be a service offered, but that alternate means (i.e., peering fabric) should also be supported.
 - There was doubt about
 - The feasibility and usefulness of pursuing router unbundling / routing as an application at this stage
 - The useful life on IP service layer equipment. Probably no more than three year should be expected
- GN4 update
 - Budget for geteduroam development has been allocated. Contracting process has been initiated
 - NORDUnet has taken on NOC services for InAcademia during pilot. Transition has just been initiated. Pilot will run until e2018
- GÉANT update
 - The process for hiring a new CEO is ongoing. The application deadline is in December. A decision is expected ultimo February.
 - Morten @ DeIC has become chair of the newly started TF-DPR (data protection, privacy). There is some interest in organizing a Nordic GDPR workshop.
- Tender update
 - Video: contract with Kaltura, MediaSite, Panopto signed. On-boarding and migration in progres
 - Zoom: Process completed, transition in progress.
 - IP Support: vendor process in final stages
- Shibboleth Consortium
 - HAKA, SWAMI and NORDUnet have agreed to transition from individual to joint membership
 - Will attempt to upgrade Nordic membership to become principal member, with board seat.
 - Awaiting final conformation from consortium board.
- NDN NGN
 - There will be a Engineering + Board workshop 6-7 Feb
 - As preparation, it was agreed to do a CTO meeting on 17 January, focused on options and requirements
- Country Updates
 - FUNET:
 - Fibre procurement done
 - Deadline for equipment offers 10.11.17
 - Deployment to start Q2/18
 - Piloting campus-network-a-a-Service. Huge initial demand. Consider kicking off some sort of Nordic workshop or make it topic on CTO Forum meeting. Also, is it topic for GN4-3.
 - Splitting into a FUNET network team, Data Centre team. Recruiting.
 - Zoomi to be launched Q4/17
 - Backup as a service in pilot; to launch H2/18
 - FUNET CERT certified as Trusted Introducer
 - SUNET
 - Campus network support strategically important. It really is a longterm project that need good analysis and design. I has to be standard and automated. SUNET is developing a reference design. SUNET is requesting budget to develop the service over the next three years.
 - Is this for GN4-3 or is it for a GÉANT TF?
 - UNINETT
 - Split into infrastructure company and services company. 34 out of 80+ moving into new entity - education (LMS, digital exams), Campus administration, cloud services and procurement. Also bringing on board two other education and research entities. New entity will in total be 200 people, of which 100 will be in Oslo. Network, middleware, FEIDE, network services to remain w UNINETT.
 - New entity will have to be a 3rd party for GN-x projects.
 - Should this new entity be represented in CTO forum etc?
 - New UNINETT CEO since September 1st. Roar Olsen is new head of UNINETT:
 - Finished mini-competition for networking equipment. Will buy MX204, 18 in all.
 - Will deploy MPLS for LHCOPN in Q4.
 - Looking at doing network analytics for network operations data and security incidents, incl machine learning and elastic search. Maybe an idea for GN4-3.
 - Initiating initiative to improve quality, especially when it comes to short-term outages. The challenge is how to make this initiative
 - DeIC
 - Developing reporting a 10-year perspective on e-Infra in DK. Decision of future DeIC construction is postponed.
 - Optical deployment will be finished in Q4/17.
 - DeIC has launched DPO-as-a-Service. Has signed up the first institutions. DeIC is leading the GÉANT TF on Data Protection and Privacy.
 - DDoS mitigation service is pre-production on production routers. There's a an (open source) detections system. Campuses so far more interested in using an API to put in their own rules.
 - RHnet
 - University of Iceland has allocated a person for eduGAIN in Iceland.
 - Some JISC organizations are moving equipment to Verne on Iceland. JISC is looking to get their own connection, most likely. As a result, there will be a 2nd link to Verne.
 - Current FARICE contract expires in October 18.
 - Verne has upgraded to 100G via TeleGreenland to New York.
 - NORDUnet

- Contract to Helsinki - Hamburg signed.
- AOB
 - Next VC 25 January
 - NDN NGN specific meeting 17 Jan 2018
 - LF to Doodle for F2F meeting, end of February.
 - JQ to send out invites

Actions