

TAC at TNC'15

15 June 2015, Porto, Portugal

45 attendees

1) Opening and introductions

Valter Nordh (SUNET CTO, Chairman of TTC) opened the TAC meeting and called for a quick round of introductions. Natalie announced that the 2015 Compendium is now open, 24 July is the deadline for answering the questions. Natalie Allred, JISC will be the coordinator of the Compendium work this year.

Valter gave an overview on the TAC topics discussed last year. Follow-ups are happening in each technical areas. On the technical programme TF-WebRTC, TF-Storage, TF-MNM and TF-CSIRT are the technical task forces running at the moment. (TF-MSP and TF-CPR deal with management and communications, respectively) The new activity format recently introduced is the Special Interest Group. SIG-ISM and SIG-NOC are the two activities taking benefits from the new format. Network Performing Arts Production Workshop was the most attended one organised in May 2015 in London. Among the services Valter mentioned the certificate service and the new TCS launch. REFEDS is already 10 years old and pulling together a lot of experts in the global trust and identity workspace.

2) Innovations on the edge challenging the core

For NRENs to maintain their leading edge, they need to support users at the edge of the network making their innovations available to the rest of the Internet. To enable that, the core of the network must be able to scale, whether the core is the core of a campus network, a regional network, an entire NREN, or the global collection of R&E networks. IPv6 is needed to make the first work, and centralised network control (i.e. OSS/BSS architectures) is increasingly becoming the method to enable the latter.

Dave Wilson, HEAnet, gave an interactive presentation by reading out a story loud where the attendees had the opportunity to choose between two options at the end of each chapter. Based on the preferences of the majority Dave drew some potential future scenarios on what's going to happen with the Internet and IPv6 in the NREN world and industry.

IPv4 shortage is not really an issue for NRENs today and in the next coming years. It is a problem for mobile industry and content providers, for instance. Industry is addressing these issues that has impact on NREN services, obviously.

Afrodite Sevasti, GRNET, talked about the lightweight adaption of operations / business support systems (OSS/BSS) architecture developed at GRNET. The service silos must be broken up. The interactions between the business and operations layer must be orchestrated properly (i.e. by defining a service bus middleware) following the TMF recommendations.

The disruption on the legacy operations workflow is minimal but obviously there is a lot of work ahead of us to reach consensus and get buy-in from both operations and business process teams.

3) I say middleware, you say identity

The term "middleware" has been used more or less exclusively for what networking people today would consider identity-related stuff (identity, authentication, authorization, directories, groups, collaboration). Naturally in the context of NRENs "middleware" will be something in the "middle" of the network and something else, applications, commonly. None of these uses have any accepted meaning, and everyone could mean different things by that.

Michael Enrico, GÉANT, reflected on the fact that middleware is not only about trust and identity. There is network centric middleware and the "software-ization" of networks is happening as we speak. Do we need more open-call like actions in this field? Do NRENs have sufficient software engineers or are they willing to invest more to build the proper expertise?

The general feeling was that the NRENs should spend more efforts in this. In a multi-stakeholder environment - such as the NREN environment - OSS/BSS is fundamental and much more challenging than at a single operator.

4) Approaches to ensure software sustainability in our community

There is demand from both well established and developing open source software produced within the NREN community to make use of a variety of support structures to ensure the maintainability and sustainability of the product. The aim of the GÉANT Greenhouse initiative would be to create a framework to support the networking community at large in creating new software, maintaining it and sustaining it when the initial funding has been exhausted. Even for products that go beyond the proof-of-concept stage and gain sufficient support from the community (see Djangora, FileSender, etc.), there is no coherent approach at community level regarding their sustainability. Moreover, this problem is not specific to Europe, challenges in front of the Shibboleth Consortium are prime examples that require coordinated move.

Shelton Waggener, Internet2, elaborated on the software sustainability issue. The problem is not with the initial solution – we are good at solving problems – but the longer term funding and sustainability. We need better methodologies and frameworks in the R&E space.

Licia Florio, GÉANT, presented the GÉANT Greenhouse initiative. Nurturing community software in a sustainable support framework to be tailored to the specific needs of the software products and their communities (i.e. developers, funders and governors) is essential.

Communication, outreach and training would be necessary to know what is already available out there as support for novel software products. The entering criteria to Greenhouse must be that the software code is available under an open source licence. Greenhouse should not build communities around new ideas, but provide a sustainability model for software products that are mature enough

to maintain their own user community and governance (e.g., FileSender, SimpleSAMLphp, Shibboleth, etc.). There must be clear criteria to enter the Greenhouse.

5) Summary of the meeting

Valter closed the 2015 TAC meeting with some remarks. Would there be any interest in starting a SIG about novel NREN network architectures and next steps? Support received from HEAnet and SUNET, other NRENs are invited to start a brainstorming.