



30th TF-Mobility and Network Middleware Meeting – 14th & 15th February 2013

Vienna, Austria. The meeting was hosted by the Fachhochschule Technikum Wien and ACOnet. The meeting was held in collaboration with the European Workshop on Trust and Identity. Notes available from: <https://identityworkshop.eu/tiki-index.php?page=EIW2013%20Notes>

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1. Welcome and Apologies

Klaas Wierenga welcomed everyone to the meeting. Attendance and Apologies were recorded on the event registration page: https://www.terena.org/events/details.php?event_id=2498

2. Approval of Agenda, Minutes of Last Meeting and Update of Action List

The agenda was modified as the meeting progressed with a final version available online: <http://www.terena.org/activities/tf-mobility/meetings/30/>

The minutes of the last meeting held on the 21st and 22nd November 2012 were approved without further corrections and are available at:

<http://www.terena.org/activities/tf-mobility/meetings/29/minutes.pdf>

Summary of Actions

Reference	Who	Action	Status
29-01	Roland vRW-D	Publish an announcement to the mailing list regarding Step Up Authentication Service.	<i>Done. Including an update in agenda item 3.3.</i>

29-02	Roland vRW-D	Ensure that the DANE and Federations topic is updated.	
29-03	Paul Dekkers	Investigate WBA participation by SURFnet.	

Reminders will be sent to those responsible for action items.

3. Progress and Review of Work Items

All Work Items were asked to highlight their work plans in their respective areas:

3.1. Location Awareness

Mark O'Leary provided a verbal update of activities concerning location awareness and stated that interest has been expressed in the cultural heritage community for asset tracking of items, which should remain stationary. With the cessation of the "Blue Plaque" programme in the UK there could be interest in augmented reality as a replacement – but there would need to be a desire in that community for support.

There is a single location point in the GN3 monitoring database that is reflected over the meridian. The Janet produced data feed has been checked and is accurate and a transformation is occurring. The GN3 service activity has been asked for clarification and update.

On the topic of location data and augmented reality, Miro asked what the refresh period of service such as Layar are?

[**ACTION**] Paul/SURFnet to clarify the Layar refresh period.

3.2. New Mobile Technologies

Kurt Baumann described work underway relevant to this work item. He announced the delayed OpenFlow Testbed would be launched on 22nd February. He also announced that the integration of SDN/OpenFlow as described by Hideaki Goto at the last meeting would be able to be tested on this infrastructure.

Specifically within Switzerland SwissCom are working 802.11u deployments and testing EAP-SIM. It is unclear how SWITCH can collaborate at this time but looks forward to the GN3 Mobile Feasibility Connectivity Analysis. Mark O'Leary stated that there would be a workshop in March on the draft report.

3.3. Scalable 2-factor AuthN

Pieter van der Meulen, SURFnet provided an update on the "Step-up as a Service" development, see <http://www.terena.org/activities/tf-mobility/meetings/30/SuaaS.pdf>

This service will eventually become "SURFsure" with a focus on Level of Assurance (LoA) 4 identity vetting and LoA 2-3 for authentication. LoA 4 would be investigated at a later time if there is sufficient interest from the community. The service will only focus on web based application environments and will specifically exclude VPN – at least for now. Peter provided a walk-thru of the proposed environment which will undergo development shortly.

While heavily integrated into the SURFnet/SURFconext infrastructure the audience agreed that this would be a valuable service to sit as a proxy in front of Research Infrastructure projects that require higher LoA and removes the burden from the IdP.

3.4. Next Generation Trust Infrastructure

Pieter van der Meulen, SURFnet proxied a work item update on behalf of Leif Johansson and Roland van Rijswijk-Deij that were unable to attend this meeting. The presentation is available: <http://www.terena.org/activities/tf-mobility/meetings/30/20130214-TF-MNM-NGTI-update.pdf>

Significant discussion focused on "Trust on First Use" (TOFU) which is the leap of faith acceptance, such as SSH key verification, when you login to a service. Peter Schober stated that people could check the validity of these keys but often don't. Pieter stated that solving this issue by balancing security and reducing the overhead for users will be important. This research will be completed prior to the end of Q2 2013.

3.5. Standardisation & Outreach

Stefan Winter, RESTENA provided an updated remotely and discussed work surrounding the IETF. A Luxembourg institutional RADIUS server encountered a performance issue because of a UTF-8 whitespace character in a locally processed realm which skipped static routing rules and proceeded to use dynamic DNS discovery which identified the domain to be the local server. DNS resolution ignores/strips the whitespace character. This caused an endless loop consuming CPU on the server. Stefan identified a gap between the different standards with regards to processing this request. Tagging requests to identify loops has been implemented as the only solution.

Stefan also announced that there was a draft for dealing with i18n (Internationalised) domain names – basically realms should be forwarded unmolested. While it is permissible to change the outer username (used for routing) to a punycode string such as <http://xn--ls8h.la/> there is a difference in the definition of supplicants and EAP methods on which code point a realm is encoded. There is also multiple ways of expressing "ü" in UTF-8 which aren't visually apparent.

3.6. eduroam

Miro presented an update on the usage of eduroam, presentation available at: <http://www.terena.org/activities/tf-mobility/meetings/30/tf-mobility-Vienna2013-eduroam-mm.pdf>

Miro also presented the work of the Srce team to use a Raspberry Pi to develop a WiFi analyser <http://www.terena.org/activities/tf-mobility/meetings/30/tf-mobility-Vienna2013-probe-mm.pdf>

The use of RadSec and Dynamic Discovery will require further testing within the infrastructure to ensure that the functionality of the service is visible. Rok Papež asked about the ETA for a release of FreeRADIUS 3.0 with RadSec support. The only viable option is RadSecProxy in front of a RADIUS server and while there were instances of people running the development version of FreeRADIUS it was not recommended for a production environment.

Mark O'Leary stated that there is a need for Enterprise Support in eReaders, which is historically poor, for the institutional purchase for e-text books.

Brook reported on the Mozilla/Firefox stream at FOSDEM in Brussels. Firefox OS 1.0 will soon be released without support for 802.1X/WPA2-Enterprise (not even visible to the user). The developer community is willing to work with interested parties on standardising an API for configuring enterprise support.

An announcement was also made for the GN3 Wireless Workshop:

<http://www.eduroam.se/meetings/gn3wirelessworkshop.html>

4. Mobility and Network Middleware Activities

4.1. DjNRO

Leonidas Pouloupoulos, GRNET presented on the development of a tool to manage the location data of their eduroam service. This development work is publicly available on github.

<http://djnro.grnet.gr/tfmm30/index.html> & <http://djnro.grnet.gr/>

Leonidas provided a walk-thru of the service and hoped that others would collaborate on this project.

5. National and Community Updates

Slovenia Rok Papež stated that a reduced investment in wireless infrastructure over the past several years will require a large purchase programme to make up ground. Currently too many users on access points – IPv4 address exhaustion (increasing devices from users) are causing problems at institutions. A few institutions have gone “staff only on eduroam” because of lack of investment.

Some very small site deployments (with ADSL) would be improved with the use of RADSEC. A few ADSL operators block DHCP which is problematic in this scenario as DHCP is being hosted by ARNES. LDAP hosting is provided for accounts – but support is an issue. Layer 2 security (for autonomous access points) is an issue and it is currently recommended to block IPv6. Carrier Grade NAT is a reality. Options are: CGN, Dual-Stack, or IPv6 and use a 6-to-4 gateway. Library wifi service called LibRoam. It allows roaming around libraries.

Slovakia SANET has requested its last /22 block from RIPE. Many institutions only had small address blocks to avoid providing usage statistics to the RIPE NCC. Unclear whether there are big v6 deployments. Schools are also connected to SANET. The lack of a helpdesk is the reason that they aren't able to centrally offer end-user services. Library applied for membership but won't give the “general public” access to eduroam.

UK John Chapman announced the Moonshot pilot in collaboration with the GN3plus project. A draft paper to consolidate identity management services is being developed. Mark O'Leary announced a Janet 4G trial which is interesting in light of spectrum auctions in the UK. Seven 4G pilot organisations selected with a mix of HE & FE, Arts, Technical, Big Uni, Small Uni. 15 MiFi devices distributed per institution will be funded by Janet. Integration of 4G/LTE and eduroam will wait until release 10 of the standard that will add 802.1x support.

- Sweden Carried Grade NAT (CGN) is being deployed because of IPv4 resource issues. SWAMID + Schools Federation Collaboration. The outsourced eduroam service doesn't have reserved bandwidth for authentication was highlighted.
- Norway Many institutions have recently transitioned to Aruba infrastructure – and are happy with the move. It is unknown whether the excitement is a “honey moon” period. Most institutions are doing IPv6 in addition to IPv4. Aruba have much more facilities (EAP-pwd). There is an “Aruba” best practice document for deploying eduroam.
- Finland FUNetRoam exists in parallel to eduroam. Work on GN3 Campus Best Practice documents will result in a Workshop on Wireless Networking March 13th and 14th in Stockholm. There will be a registration call soon. There will be remote collaboration opportunities. <http://www.terena.org/activities/tf-mobility/meetings/30/funet-slides.pdf>
- Austria The host institution for this meeting isn't an AConet member but they have been introduced to the concept of eduroam. The University of Innsbruck are pushing a city wifi initiative to also offer eduroam which will be deployed by the city lighting service with Telecom Austria providing the backhaul.
- Swiss Expressed interest in DjNRO and CAT which will be highlighted at the next twice yearly working group meetings for knowledge sharing and presentations.

6. Date of Next Meeting

Attendees were encouraged to attend the OpenSpace event scheduled at the conclusion of TNC2013 in Maastricht on Thursday, June 6th, 2013. The next middleware meetings have not been finalised and will be scheduled after the summer break and announced on the mailing list.

7. AOB and Close

The meeting closed at 13:00 on Friday 15th February 2013.

8. Summary of Actions

Reference	Who	Action	Status
29-02	Roland	Ensure the the DANE and Federations topic is updated.	
29-03	Paul	Investigate WBA participation by SURFnet.	
30-01	Paul SURFnet	Clarify the Layar refresh period of monitoring location data.	