



22nd TF-Mobility and Network Middleware Meeting - Thursday, 23 September 2010

Copenhagen, Denmark. The meeting was hosted by WAYF.dk.

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1. Welcome and Apologies

Klaas Wierenga welcomed everyone to the meeting. Apologies were recorded on the event registration page: http://www.terena.org/events/details.php?event_id=1649

2. Minutes of Last Meeting and Update of Action List

The minutes of the last meeting held on the 18th February 2010 were approved without corrections and are available at: <http://www.terena.org/activities/tf-mobility/meetings/21/minutes.pdf>

Reference	Who	Action	Status
20100218-01	Stefan	Provide references of mailing lists for community interest (to the mobility mailing list).	<i>Stefan will/has distributed the mailing list information on the website.</i>
20100218-02	Mark	Keep community abreast of visualization tool licensing.	<i>Mark will present details of the BSD Licensed version during this meeting.</i>
20100218-03	Brook	Locate a time at TNC for a DNSSEC meeting.	<i>Done. DNSSEC workshop was held on Thursday, 3 June 2010 at the conclusion of TNC.</i>
20100218-04	Brook	Track the location of REFEDs Q3/Q4 meeting to determine whether a half-day DNSSEC meeting could be held.	<i>Held @ TNC.</i>
20100218-05	Brook	Determine the authority to make wholesale changes to the eduroam website for future discussion.	<i>Brook announced that TERENA is the custodian of the website and the community seems happy with our update plans.</i>
20100218-05	Brook Jacob	Liaise with WAYF regarding the logistics of the next event.	<i>Done.</i>

3. National Updates

Verbal national updates were provided by participants. Updates should be sent to mobility@terena.org prior the meeting so they can be linked from the agenda page. All communication on the mailing list is archived at <http://www.terena.org/mail-archives/mobility/>

Croatia

- eduroam Wired is now the standard for university dormitories.

UK

- In the process of securing 3G wireless dongle service.
- The provider will provide a NAT translation into the organisational address space.
- Public transport eduroam is being trialled on two coach routes to determine whether eduroam availability influences travel patterns – encourage operators to deploy.
- Develop the feature set of eduroam within JRS with the tiered service. The tiers will be collapsed into a single specific service. JANET 802.1x special interest group which will publish information on these specifications.

Finland

- 6 new organisations have joined eduroam. Very impressive growth figures.
- Will be translating the AARNet video into Finish. *Now online.*
- Investigating 3G co-operation or virtual operator - similar to UK.
- Hoping to bridge between 3G address space and academic IP addressing.

USA

- Small eduroam network. Interest and a desire for a larger eduroam network.
- Internet2 office and the I2MM broadcast the 'eduroam' SSID.

The Netherlands

- Memo issued to eduroam sites to ensure compliance with WPA2. Very fast uptake.
- eduroam as a service - ability to purchase pre-configured access points that will tunnel to a central controller.
- Potential users in remote locations investigate used a backpack hotspot with 3G uplink has been used to monitor use in public areas. 500 authentications per day at Utrecht Centraal during this monitoring trial.
- Talking to commercial providers to offer eduroam SSID on their commercial services.
- eduroam was at the EGITF2010 conference and approximately 300 people used the service and this represents more than 75% of attendees.
- 802.11n is growing in relevance and is increasing the adoption of WPA2.

There was discussion on the support of mixing 802.11a/b/g/n as some chipsets encountered problems.

[**ACTION**] Paul + Victoriano to document the issue of mixing 802.11a/b/g/n and post to the mailing list. Stefan posted this followup to the discussion:

<http://www.terena.org/mail-archives/mobility/msg03584.html>

Which received a summary of the problem identified by Philippe Hanset, eduroam US initiative, that by using "11n and 11a at 5Ghz 11n without channel bonding enabled and 11b and 11g at 2.4 GHz In many systems you can decide to enable HT (High Throughput, a feature of 802.11n) at 2.4 GHz, but leave Channel Bonding (using 2*20MHz) unchecked. This will have the effect to boost 2.4 GHz efficiency while leaving the regular non-overlapping channels available at 2.4 GHz." For more information follow the discussion thread.

Sweden

- There is also a project to cover the train station of Umeå with eduroam.
- There are 4 new institutions connecting.
- Some issues with the XML database for the database are being resolved and new locations will be made available shortly.
- There is a need to support multiple devices and the user configuration of these devices. A local surge of Android. If IdP requires different inter/outer identities it is a problem.
- The major institutions are included and smaller institutions are now a target.
- Have had approaches from local government and schools.

Denmark

- Status quo - uptake is slow and rollout continues at a slow pace.

Czech Republic

- Status quo - there are limited additional sites needing connection.

Norway

- 35 out of 37 institutions connected and at a high coverage rate.
- Some issues with SSID overlap between neighbouring institutions.
- Increasing mobile use is exhausting the IPv4 address space and sites are demanding more addresses. This has focused work on IPv6 - and issues with some equipment vendors still need to be addressed.

- Hoping that 802.11b is deprecated and it is hoped it will be phased out quickly. *802.11b is deprecated from a policy standpoint and can be phased out in favour of 802.11g as sites see fit.*
- Campus best practice document on configuring Cisco 4400 + 5500 equipment has been translated into English and will be released shortly.
- Central procurement underway and are looking at wireless options from vendors.
- Trouble-shooting issues is still required even though the service is very reliable.
- eduroam on 802.1x wired is increasingly a focus of attention for secured wired access.

Switzerland

- 12 additional organisations are deploying eduroam this year.
- There is a reciprocal arrangement between SWITCH and commercial providers. It is hoped that the eduroam platform can be made available to all.
- Hospital deployment varies wildly as there is no consistent deployment.

Luxemburg

- City Wide eduroam has a splashscreen which interrupts the connection to agree to "terms and conditions". Work is underway to limit the impact of the splashscreen.

Greece

- IdP only eduroam connections? There have been requests and it is discouraged but some sites will never offer a network themselves.
- Looking at providing equipment to bootstrap hotspot deployment.

Latin & South America

- Meeting in May in Madrid. CLARA technical meeting in August.
- Diego/RedIRIS are abreast of the situation and a mailing list *in Spanish* is being used to co-ordinate effort in this region.

Japan

- Hideaki Goto from Tohoku University presented on eduroam progress in Japan. <http://www.terena.org/activities/tf-mobility/meetings/22/TF-Mobility-22nd-eduroamJP-HGoto.pdf>

4. WiFi portals and end user support

Victoriano Giralt presented on federated portals and a need to improve monitoring and end user support efforts. The slides are available at:

<http://www.terena.org/activities/tf-mobility/meetings/22/federatedPortals.pdf>

The motivation of federated portals is because they are perceived to provide better user feedback when something doesn't work.

Brook Schofield detailed a project with Vince Librandi from UniSA that diverted users into a walled garden after 3 failed login attempts. While successful – Windows XP clients (predominant at the time) would mistake this walled garden network access as "eduroam Success" and store the users password. This would make it difficult in encouraging the client to "forget their password" once they had remediated the configuration issue.

Mark O'Leary pointed out that a connection problem can be one of:

- user config + credentials
- local infrastructure
- national/international infrastructure
- home processes

Mark suggested looking at a range of better reporting issues within the RADIUS infrastructure so that a degradation into a walled garden VLAN would be useful.

Ken raised the point that the French eduspot proposal is a product of federations and you can't stop federations from exploring these services.

Paul Dekkers questioned "What is the support scenario if 3G doesn't work?" Since there isn't an alternative mechanism to find out what is/isn't working other than calling your provider – this scenario should be used for eduroam.

Stefan stated that by exposing EAP-Type and other configuration or support requirements it would be easier to direct users.

Klaas closed the discussion with some background on the evolution of the mobility testing and trials which investigated captive portal, VPN connectivity and 802.1x backed by federated RADIUS which eventually lead to the eduroam service we have today.

[**ACTION**] Lalla to investigate why the Italian Anti-Terrorism/User Identification Laws aren't compatible with the eduroam usage scenario.

5. Rechartering of TF-Mobility and Network Middleware

5.2 Support for the development of the next generation eduroam

Stefan Winter presented on the standardisation work he is involved with and the future activities of this work item. The slides are available at:

<http://www.terena.org/activities/tf-mobility/meetings/22/tf-mobility-workitem-copenhagen-2010.pdf>

5.3 Location awareness

Mark O'Leary presented on the history behind the creation of a visualization tool for eduroam use. The slides are not available at this time. Check <http://www.terena.org/activities/tf-mobility/meetings/22> for updates.

The eduroam flight map visualisation tool that Mark demonstrated at the previous TF-MNM meeting and at TNC2010 is now licensed under the 3-clause BSD license and available at: <http://www.ja.net/development/network-access/visualisation.html>

As part of the student development projects that Mark co-ordinates (with student support from the University of South Hampton) there is: an iPhone App based on Molly Project <http://mollyproject.org/> to find the 'nearest eduroam'; an iPhone configurator and other mobility projects still being defined. Updates will be provided at milestone completion and via TF-MNM meetings.

Stefan commented that existing Apps such as WiFi Finder list “open” and “commercial” and that there isn’t an educational category.

Roland stated that “loc” records in DNS (reverse DNS) can be used to aid discovery from blocks of addresses. There is already some IP addresses using loc for geolocation as well as IP address to geolocation services.

Stefan voted for a mechanism for hotspot rating – so if you were at a Hotspot you could state its “quality”.

Mark took the comments and suggestions on board. The final determination on projects is based on available effort for the student participants.

5.4 DNSSEC

Roland van Rijswijk presented on DNSSEC process and some of the issues related to validation. The slides are available at: <http://www.terena.org/activities/tf-mobility/meetings/22/Presentatie%20TF%20MNM%2020100923.pdf>

There was discussion on whether the eduroam.org domain should be signed (this was a previous action item), when this should occur and what are the implications. Due to the fact that the eduroam European top-level RADIUS servers being located under eduroam.org any signing mistakes could cause an outage of this infrastructure.

DNSSEC improves the validity of Dynamic Discovery responses. Discussion on whether you should root ‘cz’ under ‘cz.eduroam.org’ and have policy on sharing key material. Further discussions are required.

With the discussion of DNSSEC as well as services via DNS such as “loc” this work item will review whether it should be retitled in the updated terms of reference.

The discussion went on a tangent from key material and the previous discussion on EV Certificates and talked about two-factor authentication.

Ken discussed that some two-factor communities have little use while the largest two-factor authentication community in the world is the online game “World of Warcraft”.

Leif talked about the initiative for open authentication (OATH <http://openauthentication.org/>) and various token based authentication services.

This lead to the discussion for a 2-factor work item to be covered by the TF-MNM group. The following actions will be taken as a result.

[ACTION] Leif + Roland van Rijswijk to lead the preparatory work on this work item.

[ACTION] Brook to create a mailing list for “2factor’@terena.org” work item.

These will be completed in time to provide additional work item text to the updated TF-MNN terms of reference.

5.5 Integration with other operators

Paul Dekkers presented on the current investigations of SURFnet in the area of 4G/LTE and pervasive WiFi and how this will feed into this work item. The slides are not available at this time. Check <http://www.terena.org/activities/tf-mobility/meetings/22> for updates.

Paul detailed the need for a survey of the NREN landscape and their plans in this area. Klaas highlighted to Paul that he's just identified the first deliverable of his work item. It is important to publish the results of work items so that people can discover the output of the group.

As this area is wider than integration with "other" operators this work item will be retitled in the updated terms of reference.

5.6 Metering and monitoring

Miroslav Milinović, Srce presented the progress and future of metering and monitoring. The slides are available at: <http://www.terena.org/activities/tf-mobility/meetings/22/tf-mobility-copenhagen2010-mm.pdf>

Future concentrations of effort will be in monitoring CUI and F-Ticks work (which Stefan presented later), RadSec & Certificates and DNSSEC infrastructure.

5.7 Sensor and mesh networking

Kurt Bauman presented the progress and future of the sensor and mesh networking work item which will focus on the exchange of expertise within the NREN community. The slides are available at: http://www.terena.org/activities/tf-mobility/meetings/22/Charter_SMNetwork_TFMNM_20090923.ppt

5.8 Integration of network middleware with identity federations

Lief Johansson presented on this new work item. The slides are available at: <http://www.terena.org/activities/tf-mobility/meetings/22/tf-mobility-2010-leif.pdf>

This work item blurs the line between WebSSO and Network Middleware and will integrate with the efforts within TF-EMC2. There are many active groups within the community and many opportunities to participate.

6. Work Item Planning

Work item leaders resolved to create their activity plans and co-ordinate with interested parties.

[**ACTION**] All work item leaders to send updated text (if necessary) by end of October.

7. Mobility and Network Middleware Activities

Josh Howlett sent his apologies for having to cancel his presentation. It will be rescheduled to the next TF-MNM meeting.

[**ACTION**] Transfer Josh Howlett's presentation to the next TF-MNM agenda.

7.1 eduroam and the CSIRT community

Stefan Winter presented a summary of his presentation to TF-CSIRT on 17 September 2010. <http://www.terena.org/activities/tf-mobility/meetings/22/tf-mobility-reportcsirt-copenhagen-2010.pdf> Coordination with up to 3 CSIRT teams is required to deal with incidents on eduroam.

7.2 F-Ticks: Decentralised statistics collection in eduroam

Stefan Winter continued to present this time on F-Ticks. Slides available at:

<http://www.terena.org/activities/tf-mobility/meetings/22/tf-mobility-fticks-copenhagen-2010.pdf>

F-Ticks support decentralised statistics generation to support usage metrics as the eduroam infrastructure is transitioned to RadSec.

8. Date of Future Meetings

The date chosen by TF-EMC2 (week of February 14th, 2011) was acceptable to the TF-MNM participants.

9. Any Other Business and Close

The meeting closed at 17:00. (Minutes published 27th October 2010).

10. Summary of Actions

Reference	Who	Action	Status
20100923-01	Paul Victoriano	Document the issue of mixing 802.11a/b/g/n and post to the mailing list.	<i>Stefan has posted the question with some community follow-up</i>
20100923-02	Lalla	Report on why the Italian Anti-Terrorism/User Identification Laws aren't compatible with eduroam use	
20100923-03	Leif Roland	Lead the preparatory work on a 2-factor this work item.	
20100923-04	Brook	Create a mailing list for '2factor' WI	<i>Done.</i>
20100923-05	All	Send updated text for Work Items by end of October to TF Chair.	
20100923-06	Brook	Transfer Josh Howlett's presentation to the next TF-MNM agenda.	<i>Done.</i>

Document History

Date	Comment	Status
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