

**TF-Mobility meeting  
Videoconference  
November 19, 2004**

**Participants**

Hansruedi Born	SWITCH
Rodrigo Castro	RedIRIS
Licia Florio	TERENA
Rui Francisco	FCCN
Luis Guido	FCCN
Sami Keski-Kasari	TUT
Joao Pagaiame	FCCN
Spiros Papageorgiou	GRNET
Rok Papez	ARNES
James Sankar	UKERNA
Milan Sova	CESnet
Klaas Wierenga	SURFnet

**Welcome**

**1. TF-Mobility update**

**a. Previous Minutes**

The minutes of the previous meeting online at [http://www.terena.nl/tech/task-forces/tf-mobility/meetings/10-09-04/draf\\_tminutesv2.pdf](http://www.terena.nl/tech/task-forces/tf-mobility/meetings/10-09-04/draf_tminutesv2.pdf) were approved. It was agreed that the action lists produced during that meeting should be finalised. To do so, everybody present was invited to confirm their responsibilities as owners or participants of work items.

**ACTION:** All work item owners to finalise the actions list.

**b. Policy update**

As a result of several discussions during the recent TF-AACE / JRA5 meeting, and the email from Restena (Luxembourg NREN) it was agreed that there was a need to formalise roaming policy. The [current policy](#) document produced during the first mandate of task force was suitable for a small community of NRENs, however, considering the success of EduRoam to date and to ensure that the EduRoam community continues to expand, a formal and detailed policy document and process is needed. JS proposed that that SURFnet, UNI-C and UKERNA (original architects of the current policy) revisit the policy as a matter of priority and put into place a suitable structure to ensure scalable management of EduRoam. JS proposed to:

1. Update the policy where necessary and seek feedback from TF-Mobility members
2. Create a formal mechanism for NREN's to sign up to eduroam and register national realms etc with an agreement with NREN signatories
3. Create a database of contact names (two administrations contact names, for instance one for the person who configures the NRPS, the other from a CERT/Security

perspective) to contact if a breach of the policy occurs. These contacts should also be members of the TF-Mobility group mailing list (alternatively a separate mailing list could be established?)

After a discussion the following was agreed:

1. To establish (under eduroam.org) a closed Admin list for NRPS administrators: – Two technical contacts responsible for each NRPS to join to discuss RADIUS related issues (KW)
2. To collect details like the RADIUS server IP, the contact people etc (KW)
3. To highlight methods for determining user traceability to counter abuse (JS- Jan 05).
4. To produce a RADIUS cookbook (JS- March 05)

### c. Eduroam logo

It was agreed that all participating NRENs and their sites can use the eduroam logo without copyright restrictions. The logo was donated by CESnet, and can be seen below.



### d. Eduroam domains and connection to euro map

The eduroam clickable map of Europe shows all the countries that are connected to EduRoam. If there is no specific eduroam page for each participating NREN, the country will link to the NREN homepage of that country. It was agreed to add more information to the map, like a link to the policy that each country needs to have a page which provides information about the location where eduroam is available.

**ACTION:** HB/KW/JS - to provide the specification to go on the EduRoam page.

### Eduroam expansion

In the USA, interest in the EduRoam concept has taken hold and the following documents have been produced by SALSA NetAuth:

<http://www.duke.edu/~kcmiller/fwna-roadmap-0.1.pdf>

<http://www.duke.edu/~kcmiller/fwna-0.4.pdf>

In the USA, the development approach will be similar to that in Europe. Internet2 will build a RADIUS hierarchy with a link that to the European EduRoam top level servers.

Also Australia is showing interest. AARNET has set up a web page about eduroam at <http://www.eduroam.edu.au/>

It was suggested and agreed that an access point and radius server database be built to help explain technical issues identified that had already by the task force in relation to eduroam. This should be called Eduroam compatibility database.

**ACTION:** Portugal will provide a list of things to feed the database by the next TF-Mobility meeting.

**ACTION:** LF to put the information online on the EduRoam web site.

## **2. TF-EMC2 update**

A brief update about the TF-EMC2 meeting was provided. The detailed minutes are online at:

<http://www.terena.nl/tech/task-forces/tf-emc2/meetings/nov04/1stTF-emc-minutes-v3.pdf>

For this group, the most interesting items of the TF-EMC2 was the pop-up free server certificate proposal by SURFnet, SWITCH and DFN (<http://www.terena.nl/mail-archives/tf-emc2/msg00009.html>).

## **3. JRA5 Update**

A very short update about JRA5 progress was provided. The deliverable about the requirements is progressing as well as the glossary.

## **4. Review of work packages followed by discussion on timescales – Overview from James (each owner to provide brief overview, ask key questions and confirm participants)**

A number of work packages have been identified; Tim Chown has added that he would like to see a work package about MobileIPv6 that continues from the deliverable he is working on from the previous TF-Mobility group. A word document with forms was circulated before the videoconference for each owner to complete. A review of the work packages and the related ownerships took place. In order to facilitate the work Klaas proposed to use a Wiki server (<http://www.eduroam.org/wiki/homepage>), which will contain all the working items, as follows:

### **a. EduRoam Next Generation (MM)**

Miro is responsible for this work package, however it could not be discussed because Miro was not in the videoconference.

**ACTION:** Miro to update the wiki page about this workpackage.

### **b. End Users Mobility (KW)**

The eduroam.org domain has been bought by SURFnet.

**ACTION:** Licia to set up the eduroam web site by January.

SURFnet has commissioned Zappwerk (<http://www.zappwerk.nl>) to build an open source access point database. As soon as a first version is ready Klaas will publish this on the TF-Mobility list for comments. The real challenge will be to fill it and maintain it up-to-date. SecureW2 has been made open source, this opens up the opportunity to customise it even more.

### **c. Managing Monitoring Use/Abuse (JS)**

James presented the proposal for this task. He said that he discussed the monitoring part with Steve Williams and that he would like to get assistance from the current Universities participating in the LIN trial to assist in developing a monitoring and measurement solution. Two issues are foreseen:

- Monitoring the service at national level
- Monitoring the service at international level

Milan proposed to check every organisational proxy server with each other when users moving from one place to another have problems connecting to their home institution. Two kinds of measurements are envisaged (both assume that no analysis will be done traffic wise):

- ad hoc measurements; this is case for instance of an user from Amsterdam being in London and not getting access. Then it is important to check whether there are problems the radius server in Amsterdam
- a constant monitor, done by all the NRENs, which should build an infrastructure to verify if all the servers work properly.

Klaas proposed to give all the institutions a test access account to eduroam, for test purposes, which can't be used for any other purpose besides testing that the RADIUS server responds.

Rodrigo proposed to restrict the clients that could be allowed to use the test account. If log files are analysed, they should not be exchanged across NRENs boundary, but only among the hierarchy.

**ACTION: Milan to send a proposal over the list about how to implement the monitoring.**

There is a well known security problem related to the way 802.1X works, due to the fact that users get authenticated at layer 2, but the IP is assigned at layer 3. This would be an area where this group could do some work in the future.

### **d. Eduroam Deployment (HB)**

This task includes EduRoam in a box. The idea was discussed during the meeting in Berlin, when it was agreed to investigate furthermore the possibility of providing in a cheap box (probably based on Linux on an open brick, soekris etc) all the necessary software to operate a fully functional integrated Web/VPN/802.1X access point, including RADIUS server and user interface to configure the device.

The hardware options that can be interesting for the purpose were discussed as follows:

- An embedded box (probably based on Linux on an open brick, soekris etc), containing all the necessary software to operate a fully functional integrated Web/VPN/802.1X access point, including RADIUS server and user interface to configure the device.
- Some existing hardware such as WRT54G (Linksys) and changed to an 'self-made'

The list of features can be split in two phases:

Phase 1 (just the basics):

- VLAN assignment on the wireless side (802.1x)
- Radius
- VPN pass-through
- web portal
- 11b|g
- NAT (option depending on the environment)
- Basis user management interface

Phase 2 (some extra things will be added later on):

- 11a
- configurable VLANs on the wired side
- Extended user management interface
- IPv6

Hansruedi raised the question about the ownership of this work package. He said that he could not spend as much time as he had foreseen in the beginning, but that he would be happy to look after the VPN side. He added that contributions from other members of the task force were needed. Hansruedi also proposed to subcontract part of the work to an external company. As far as the timeframe, he said that the work requires some time and he would expect something in place by May next year.

**ACTION: Hansruedi to provide a first prototype for eduroam in a box (May 05).**

Klaas said that he talked to an American company which produces access point and has implemented something similar to the so called EduRoam in a box.

**ACTION: Klaas to investigate further more the costs.**

Klaas said that in parallel with what will be contracted to a commercial company, the self-made development is something the group could do together on a longer timescale. Hans/Klaas/Sami could buy the same hardware and build on it the three solutions (VPN, web, 1X). The idea is to have an open source project where everybody can add something. Linux experts can help. Spiros Papageorgiou will help too.

**ACTION: HR-KW-SKK-SP to start developing EduRoam in a box.**

**e. EduRoam international (JS, KW)**

Interest in EduRoam has been showed from Internet2 in the USA. AARNET in Australia are particularly keen to develop eduroam concepts across Australia, New Zealand and the

Far East. Both Klaas and James said that they would be happy to schedule separate TF-Mobility meetings via Jabber outside of normal working hours to facilitate the growth of eduroam outside of Europe.

## 5. Next meeting

Next meeting will be in Zurich on the 18<sup>th</sup> January 2004. Videoconference will be available.

## 6. Summary of the Actions

<b>ACTION</b>	<b>Description</b>	<b>Deadline</b>
ACTION	KW to establish (under eduroam.org) a closed admin list for NRPS administrators– Two technical contacts responsible for each NRPS to join to discuss RADIUS related issues	January 05
ACTION	KW to collect details like the RADIUS server IP, the contact people etc	January 05
ACTION	JS to highlight methods for determining user traceability to counter abuse	January 05
ACTION	JS to produce a RADIUS cookbook	March 05
ACTION	HB/KW/JS - to provide the specification to go on the EduRoam page.	January 05
ACTION	Portugal will provide a list of thing to feed the database.	January 05
ACTION	LF to put the information online on the EduRoam web site.	January 05
ACTION	Miro to update the wiki page about this workpackage	ASAP
ACTION	Licia to set up the eduroam web site	January 05
ACTION	Milan to send a proposal over the list about how to implement the monitoring.	January 05
ACTION	Hansruedi to provide a first prototype for eduroam in a box	May 05
ACTION	Klaas to investigate further more the costs with the American company.	January 05
ACTION	HR-KW-SKK to start developing EduRoam in a box.	June 05