

## 5<sup>th</sup> TF-Mobility Meeting Minutes

06-06-2004, Rhodes, Greece

### Attendees List

Andrea Baldi	ESA
Angelos Vavitsiotis	GRNET
August Jank	ARNES
Baiba Kaskina	TERENA
Carsten Bormann	Universitaet Bremen, TZI
Christos Kanelloulos	GRNET
Claudera Christian	CRU
Diego Lopez	RedIRIS
Dimiris Zacharopoulos	GRNET
Hansruedi Born	SWITCH
Jaeen Paul Leguigneur	CRU
James Sankar	UKERNA
Jan Furman	CESNET
Jan Ruzicka	CESNET
Jardar Leira	UNINETT AS
Juergen Rauschenbach	DFN-Verein
Jurgen Raushenbach	DFN
Kaisa Haapala	CSC/Funet
Karel Vietsch	TERENA
Klaas Wierenga	SURFnet
Kolbjørn Barmen	UNINETT
Licia Florio	TERENA
Magnus Strømdal	UNINETT
Massimiliano Pala	Politecnico of Turin
Matti Saarinen	TUT
Mikael Linden	CSC
Milan Sova	CESNET
Miroslav Milinovic	SRCE
Miroslav Milinovic	SRCE
Sami Keski-Kasari	TUT
Stig Venaas	UNINETT
Valentino Cavalli	TERENA

### Introduction

James welcomed the participants and provided an update of the work of the group. The task force started in January 2003 and will officially terminate its mandate at the end of June 2004. James went through the deliverables list to discuss what needs to be finalised. Below is the update of deliverables due.

#### ***Deliverable H***

Deliverable H has been posted to the list, but it is not its final state yet.

Klaas Wierenga was responsible for this deliverable, he described the work carried out so far. The work focused on how to support the three roaming solutions that had been identified in Deliverable G as follows:

- 802.1X seems to be the solution of the future, it is easy to scale, secure (through the EAP channel used to carry the credential over the RADIUS servers), but at the moment it is not as cheap as non-802.1X supported Access Points.
- VPN is one of the most secure approaches, but it has scaling issues to overcome in a simplistic manner, it is also fairly expensive (costs due to VPN concentrators);
- Web based redirection approach uses a RADIUS backend (the same as 802.1X), this is the most flexible and reachable solution to implement, it is the cheapest, but is also less secure.

Studies to integrate these three solutions at site level have been carried out and reported in the deliverable H. Due to the nature of the three solutions (802.1X uses secure SSID, whereas VPN and Web-based redirection uses open SSID), to allow for interoperability, it was recommended that two SSIDs (one WEP protected and other one not protected) should be broadcasted. For the backend, a RADIUS infrastructure common to both 802.1X and Web-based portal access is possible. To support VPNs, connectivity to another infrastructure is needed. It is possible to have all the three solution working at the same time and this deliverable provides a cookbook on how to achieve this.

As a RADIUS-based site implement an open SSID with CASG VPN; as VPN site you need to set up a RADIUS server and implement a secure SSID (eduroam). Some access points are able to broadcast two SSID's, but in most of the cases two access points are needed.

Klaas gave an update about the European top level RADIUS server, which has been set-up a few months ago to allow for European inter-NREN roaming. The infrastructure is now known as Eduroam, due to the name of the broadcasted SSID.

At the moment there are 8 countries connected. Klaas also specified that security issues that must be taken into consideration as RADIUS is not secure end-to-end, therefore users and their local institution must give due consideration for end-to-end security. Eduroam was in use during the TNC2004 conference thanks to GREANET and SURFENT. Members of the task force have reported that access via a SSID broadcasted "Eduroam" wireless connection worked properly (providing both IPV4 and IPV6 addresses).

**ACTION:** comments on the deliverable H are required by the end of June.

### ***Deliverable I***

Deliverable I provides a high level policy for institutions that intend to join the top European RADIUS server. The document is in three parts: a general introduction to roaming, a policy for participating NREN's and a policy for participating institutions. The overall aim of the policy is to assist in fostering trust between academic institutions and between NRENs so that these critical relationships can encourage active participation, and the development of roaming services (transparent guest access).

The policy foresees two levels: the first one is called TERENA (as TERENA is responsible for the European top level RADIUS server) policies and defines the

agreements for participation between NRENs and TERENA. The second level defines the roaming agreements between the NREN and their institutions.

Licia has circulated the last version of the policy to the TTC some time ago but at the moment there have been no comments. Licia during the meeting has submitted the latest version to the list for further comments.

ACTION: (ALL) Comments required on Deliverable I by the end of the June

### ***Deliverable L***

Tim Chown who is responsible for this deliverable could not attend the meeting. The deliverable is slightly late compared to the deadline. It is expected to be ready within one month.

ACTION: LF to contact Tim and agree a new deadline.

### **Terms of Reference of the new TF-Mobility**

James presented the new charter for the follow-up of TF-Mobility. The task force, which will run for the two years and will maintain the same name. The new group will liaise with Geant2 (JRA5), and will also disseminate the results of both groups with respect to inter-NREN roaming services to the community at large. The new task force will continue the work of the TF-Mobility in the field of inter-NREN roaming and will test and expand roaming over the current RADIUS hierarchy with the aim to provide a service solution. The task force will also consider the impact of future development on roaming.

The list of deliverables is not completely finalised; this provides flexibility for additional deliverables that can be considered during the lifetime of the taskforce. Due to the overlap between the TF-Mobility group and JRA5 group it was proposed and agreed that future TF-Mobility meetings will coincide with JRA5 meetings in terms of date and venue to minimise the travel and time costs for participants.

Klaas Wierenga and James Sankar were appointed as chairmen of the future task force.

ACTION: Comments on the proposed new TF-Mobility charter by the end of June; the charter will be submitted to the TTC for formal approval in July.

### **Final Report**

To describe the results achieved by the task force a Final Report will be prepared by James Sankar with the support of Carsten Bormann and Klaas Wierenga. James presented the structure of the document and asked for comments. He asked members to contribute details of their national roaming solutions to the final taskforce report.

A first draft will be circulated to the list for comments at the end of July.

ACTION: All TF-Mobility members were asked to write one side of A4 on their national roaming developments during the lifetime of the taskforce by the end of June 2004.

ACTION: JS to circulate the report the list at the end of July.

## **Overview at the national level**

### **UK (James Sankar)**

UKERNA is currently building a two-tier national RADIUS proxy hierarchy as part of its Location Independent Networking (LIN) development. Proof of concept tests are taking place in August with five universities. Work has also been done in the area of policy. Greater participation with UK academic organisations is expected for the LIN trial that is due to start in January 2005.

### **US (Ken Klingstein)**

Ken provided an overview about the US. There is working group called SALSA, which will provide an architecture definition. Another group inside SALSA tries to generalise authentication and authorisation. Ken said that that he would like institutions to use the same consistent policy structure.

### **Netherlands (Klaas Wierenga)**

At SURFnet some 20 institutions are currently using a “eduroam” service. The activities are aimed at:

- getting more institutions to join
- getting a policy for guest use into the contracts with the institutions
- expanding the existing infrastructure to other types of networks to provide authentication services (GPRS, UMTS etc.)
- integrating application access (A-Select) with network authentication (eduroam)
- improving the SecureW2 tool
- providing tools for tracking and tracing of users

### **Spain (Diego Lopez)**

Rediris will join the European Top level Radius server shortly. Rediris will start providing mobile services for the universities.

### **DFN (Juergen)**

DFN implemented a solution for test purposes that provides 802.1X in one VLAN and VPN/Web (open) redirect in another VLAN. The RADIUS service is based on Radiator and available for 802.1X and web redirect. At the moment approximately 15 institutions are connected to the DFN top level RADIUS service.

## **Closing remarks**

James thanked the TF-Mobility members for their active participation and contribution to what has been a successful taskforce.

## Summary of the actions

Action	Deadline	Description
ACTION1	30-06-2004	(ALL)To comments on the deliverable H.
ACTION2	30-06-2004	(ALL) To comment on deliverable I.
ACTION3	ASAP	LF to contact Tim and agree a new deadline for deliverable L.
ACTION4	done	Comments on the proposed new TF-Mobility and submitted to the TTC for formal approval in July.
ACTION5	30-06-2004	(ALL) TF-Mobility members to write one side of A4 on their national roaming developments during the lifetime of the taskforce
ACTION6	30-07-2004	JS to circulate the report the list at the end of July.