

Periodic Progress Report 1

Period: 10.2002 - 12.2002

IST-2001-37580

SILK Project Operations Networking and GEANT Extension

SPONGE

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Date:

15 January, 2003

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1 OVERVIEW

2 TECHNICAL ACHIEVEMENT

WP 1 - Administration and Management

The project has had to set up both the administration of the Silk Project and of the Sponge Project itself. There are three tasks:

- A1.1 SPONGE Project Management
- A1.2 SILK Project Management
- A1.3 Relationships with Funders.

As is to be expected, the first activity has not taken up very much effort. We have had two teleconferences, and took the opportunity of the first SILK Board meeting to have a preliminary meeting of the SPONGE partners. One important aspect of the support from Cisco was their provision of IP telephones to the SPONGE partners; at the 1st SILK Board meeting, the opportunity was taken to distribute two such telephones to the Armenian and Georgian SPONGE partners.

This first SILK Board meeting, chaired by Prof Kirstein, was not itself actually supported from the project; we had arranged it for September 24 in Zagreb, because this coincided with a workshop being given there; hence many of the SILK Board participants were already there. Since the SPONGE project started only on October 1, the travel to that SILK Board meeting could not be covered by SPONGE. Nevertheless, the minutes of that meeting were written, and the supporting papers were put together, after October 1, and come entirely into the remit of this workpackage. We have set up a password-protected SILK Board site; the minutes are available on that site <http://www.silkproject.org/password-sb.htm>

The more significant management of the SILK project has been the chairing of the SILK Task Force (STF). This is chaired by Prof. Kirstein, and has regular teleconferences. The membership is currently from the UK, Netherlands, Belgium the US, Norway, Germany, Armenia, Georgia and the Kyrgyz republic. Even setting up the teleconferences has been a challenge. Cisco has kindly made their audio-conferencing system available with local-number dialling in all the Western countries of the STF; the partner country members come in via the Voice/IP system, described under WP3. Up to the end of the current period, only Georgia was using the SILK network for its Internet path. This gave us some temporary problems, because Armental, who provided the Internet path, chose to block the port numbers used for VoIP. When we realised the problem, this blocking was removed.

WP 2 - Infrastructure Services

Here the project has three tasks:

A2.1 Liaison with other relevant projects

A2.2 Dissemination of information on the SILK project itself

A2.3 Workshops

Under the first, we gave a general talk on the SILK project at an INTAS meeting hosted by the Commission in November, and have started contact with the electronic library access activities that are being piloted there; there is a strong possibility of their wanting to use the SILK network. We have made contact with another project providing satellite-based voice/IP in Afghanistan; there we have agreed to share information, but different satellites are being used, and that project is not really targeted at Internet access. We have had serious discussions with the World Bank, who have a Global Distance Learning Network (GDLN). They have many centres in Africa, and are now interested in expanding into Central Asia. Early tests have been done between Tashkent, Hamburg and Washington with PCs. Now we are planning how more ambitious videoconferencing tests could be carried out, with a view to the World Bank making a serious investment into the SILK Network, and providing videoconferencing equipment in each Central Asian SILK partner country.

Under the second, we have given two talks on the SILK project. The first was at the Internetworking conference in Perth, October 13-16; the second at the INTAS meeting in Brussels November 14. In addition a paper has been submitted to the Terena Networking Conference to be held in Zagreb in May.

Also under dissemination, a web site has been set up <http://www.silkproject.org> This has a considerable amount of information on the SILK project, and a pointer to the SPONGE project

<http://www.silkproject.org/sponge/sponge.htm> The site is also starting to contain pointers to the Acceptable Use Policies of the different SILK NRENS <http://www.silkproject.org/NRENaups.htm>. The web site also operates two mailing lists for the Silk project: Silk and Silk-NREN.

No Workshops have been set up yet; these will be discussed at the next SILK Board meeting in February.

WP 3 – Technical Activities

Here the project has three tasks:

A3.1 Configuration

A3.2 Infrastructure Measurement

A3.3 Caching

A SILK Network Operations Centre (NOC) has been set up under joint SILK auspices <http://www.radio-msu.net/>. It is run by Sergey Berezhev at the Moscow State University (MSU). The actual statistics we have chosen to put onto a password-protected set of pages, since this information can be considered sensitive. The SPONGE partners all have access to this page, of course, and are discussing what additional statistics the NOC or the partners should gather. To this end, we have obtained a Cisco network measurement package as part of their support for the project, and have put it up in Groningen and Tbilisi.

The figures already show that our assumed 1:4 ratio of transmit/receive bandwidth is not necessarily accurate, and we are reviewing our policies on bandwidth expansion in the light of these figures.

By the end of the reporting period, only stations (Tbilisi and Tashkent) were operational; we had not had the effort to investigate the caching, nor was it valuable until the network had grown somewhat.

WP 4 – Personal Communications

The first important task here was to obtain voice communication between the SPONGE partners. The Georgian and Armenian ones could not really afford the telephone charges, and we wanted larger conferences also for the SILK Task Force (STF). Hence Cisco donated two IP phones to the Georgian and Armenian SPONGE partners, and also to the Kyrgyz partner who is also on the STF. UCL put up a telephone server – deliberately using the SIP version of the software, since it is this that may be extended more broadly. The present Cisco phone software allows only three-way conversations on the phones by themselves. By dialling into the server at UCL, and then organising dial-out into a commercial audio-conferencing system, the number of participants can be increased greatly. Because UCL controls the software, we can ensure that the system is used only for carefully controlled usage – avoiding the accusation of running a general telephony system. We then arranged that the server dial out to a constrained set of telephone numbers. These are currently the Cisco and the BT audio-conferencing systems.

This arrangement has required tuning of the router parameters; the early perceived performance was too poor for comfortable usage. It is now used on a regular basis both for the STF phone conferences and for the SPONGE ones. This is considered so successful, that Cisco is now adding two phones to all its future shipments of equipment to the SILK partner sites.

The SIP server will also be used for one-to-one communication between the project participants. A small test using soft phones (VoIP software on a PC) between Groningen and Tbilisi was successfully executed in November. Soft phones will allow more flexible communication between the participants as it is not necessary that one has to go to the location where the Cisco phone is located.

3 STATUS OF DELIVERABLES AND MILESTONES

The Technical Deliverables

Del. No	Del. Name	WP No	Lead Parti-Pant	Est. pm	Plan	Target	Actual
D1	Terms of Reference of the Different Committees	1	UCL	1	03-03	03-03	
D2	Covering paper on the services available and the status of the Silk Sites	2	RUG	6	09-03	09-03	
D3	Detailed Report on the performance of the SILK system over the previous quarter	3	RUG	3	08-03	08-03	
D4	Report on resources required for, parameters needed for, and experience with VoIP in the SILK Environment	4	UCL	4	09-03	09-03	
D5	Status of NRENs and their regulatory environment in the SILK countries	1	UCL	1	12-03	12-03	
D6	Minutes and Working Papers of the Committees after first year of operation	1	UCL	1	03-04	03-04	
D7	Table of Contents of two co-sponsored workshops	2	RUG	2	03-04	03-04	
D8	Preliminary Report on the advantages gained on caching	3	RUG	3	03-04	03-04	
D9	Report on the performance of the SILK system over the previous quarter	3	RUG	4	08-04	08-04	
D10	Report on resources required for parameters needed for, and experience with the Mbone tools in the SILK Environment	4	UCL	4	11-04	11-04	
D11	Minutes and Working Papers of the Committees after second year of operation	1	UCL	1	11-04	11-04	
D12	Final Report on the advantages of caching	3	RUG	4	02-05	02-05	
	Total			34			

No Deliverables are due during the quarter, and none has been produced.

4 ISSUES

None

5 PARTNER DETAILS

None

6 MEETINGS

Project Meetings

Here we list only physical meetings. The bulk of the meetings are telephone meetings.

Date	Location	Participants	Outcome
November 13-22	Kazakhstan and Uzbekistan	R.F. Janz	NATO funded mission to Central Asia to co-ordinate Silk activities in both countries. In Kazakhstan co-ordination of metropolitan activities in Almaty with the Silk plans was accomplished. In Uzbekistan a report was produced regarding the location of the Silk dish in Tashkent. The underlying problem was to minimise governmental control of the Internet connection.

Conferences/workshops organised

No Conferences or Workshops have been organised in this Quarter.

Date	Location	Participants	Outcome

Conferences attended

Date	Location	Topic	Participants	Outcome
Oct 13-16	Perth, Australia	Internetworking	Peter Kirstein	Paper presented on SILK
Nov 14	Brussels, Belgium	The INTAS Programme	Peter Kirstein	Presented a talk on SILK

Submission of papers

Topic	Abstract	Journal/Conference	Status
The SILK Project	Internet Extension to S. Caucasus and Central Asia	Interworking 2002, Perth, October 13-16, 2002	Presented
The SILK Project	A two page extended abstract: Experiences with Regional Satellite Internet Access for the Southern Caucasus and Central Asia– The 'SILK' Project	Terena Networkshop, Zagreb, May 19-21, 2003	Submitted

7 EFFORT FOR THE REPORTING PERIOD

Resource allocation (Partner vs. WP) for the reporting period (man-months)

SUMMARY – Q1

	WP 1	WP 2	WP 3	WP 4	Total	Est	Uncharged
P01	0.6			0.5	1.1	1.2	0.5
P02							
P03							
P04							
Total	0.6			0.5	1.1	1.2	0.5
Est							

Previous – Q1 – Qn-1

	WP 1	WP 2	WP 3	WP 4	Total	Est	Uncharged
P01							
P02							
P03							
P04							
Total	0	0	0	0	0	0	0
Est							

Cumulative – Q1 – Q1

	WP 1	WP 2	WP 3	WP 4	Total	Est	Uncharged
P01	0.6			0.5	1.1	1.2	0.5
P02							
P03							
P04							
Total	0.6			0.5	1.1	1.2	0.5
Est							

8 EXPENDITURE

The financial information contained in this report is estimated and does not represent a legally binding statement of costs.

The figures are quoted in Euros, using the exchange rates on 31 December 2002.

Durable Equipment Expenditures

Date*	Description	Depr	% Allocation to Project	Used for	Amount
Total Cumulative from start of the project					
Total Cumulative from start of the project as originally planned					

Travel and Subsistence Expenditures

Date*	Description	Used for	Amount

			Total Cumulative from start of the project
			Total Cumulative from start of the project as originally planned

Consumables Expenditures

Date*	Description	Depr	% Allocation to Project	Used for	Amount
					Total Cumulative from start of the project
					Total Cumulative from start of the project as originally planned

* Invoice Date

9 OTHER INFORMATION

None