
* * A bi-monthly electronic news bulletin
* reporting on the activities of DANTE,
* the company that organises international
* network services for the European
THE WORKS OF DANTE research community.

No.38, March/May 2000

Editor: Marine Chartois

* HTML version: <http://www.dante.net/pubs/works/38.html> *

POSITIONS AVAILABLE AT DANTE

DANTE is currently recruiting Network Engineers. More information can be found on our website: <http://www.dante.net/jobs.html>

GEANT PROPOSAL SUBMITTED

DANTE, in collaboration with the National Research and Education Networks (NREN) of 25 European countries has submitted a proposal to the European Commission's Information Society Technologies (IST) Programme for funding support of GEANT, the network service that will supercede TEN-155. The proposal is in response to the EC's call dated 13 May 2000 under Action Line IST-2000-7.1.1 (RN1) of the IST Programme.

GEANT will provide pan-European interconnection between NRENs in Europe at Gigabit speeds, based on direct access to optical connectivity where this is available in the market. Core connectivity procured will be 2.5 Gbps, enhanced to tens of Gbps as soon as possible.

The network will be extended from the current geography of TEN-155 to include connectivity to Cyprus, Poland and Israel (which were not included in the original TEN-155 design) and new connections to Bulgaria, Estonia, Latvia, Lithuania, Romania and Slovakia. Services will include a standard IP service, a premium IP service, a Guaranteed Capacity Service and Virtual Private Networks. Multicast and, later, new value-added services arising from networking developments will also be offered.

A European Distributed Access will be implemented to provide connectivity between European researchers and their counterparts in other world regions. In contrast with TEN-155, connectivity to research networks in these regions will be an integral part of GEANT.

The immediate timetable for GEANT is quite aggressive. The EC has indicated that it wishes to finalise a contract within a few weeks, although this is conditional on a positive evaluation of the proposal which was submitted on 31 May 2000. This will provide for continuity of funding support following the end of the QUANTUM and Q-MED contracts which are being extended to 31 October 2000.

As a first practical step towards the implementation of Geant, a competitive tender will be issued in July covering circuits with capacity in the range 2.5 to tens of Gbit/s and other appropriate capacity where Gbit/s capacity is not offered competitively, telehousing, and network management services. A Call for Expressions of Interest from potential suppliers has already been published in the EC's Official Journal on 6 May 2000 with a deadline for responses of 15 June 2000.

More background information on GEANT is given in <http://www.dante.net/geant>, which includes a link to the text of the Call for Expressions of Interest.

TEN-155 ACCESS PORT AVAILABILITY

Average access port availability to TEN-155 was 99.79% in February, with 11 of the 20 connected networks enjoying 100% availability, and 99.29% in March, with 9 of the networks having 100% availability, and 99.30% in April, this time with 7 100% availabilities.

It is once again the Polish network which has suffered the longest outage (70 hours) in March, mostly due to a problem with SDH equipment in Germany. This results in their availability being reduced to 90.56% for the month. RedIRIS's access was also affected by a problem in the IOS on their local access router, which caused the service to be interrupted for about 20 hours, thus reducing the Spanish network's availability to 97.24%. With these two exceptions, all networks had availabilities superior to 99% in March.

Due to a problem on the Dublin link, the London server went down for over 15 hours in April, causing 5 countries to show access port availabilities inferior to 98% over the month.

TEN-155 UPGRADES

The link between the United Kingdom and Ireland was upgraded to 34 Mbps on April 11.

On the other side of Europe, on April 19, Hungary has also seen its connection to Austria upgraded to 68 Mbps, available through an STM-1 line.

In the northern part of the continent, DFN and SURFnet are each upgrading their aggregate access capacity to 310 Mbps.

IN THE PIPELINE...

An upgrade of the Greek connection to the London PoP is scheduled for mid-June, and Greeks researchers should soon enjoy a 155 Mbps connection.

As part of this summer's upgrade on the network, the Luxembourg connection will be moved from the Netherlands to Belgium, and the line upgraded to 34 Mbps, although still only 10 Mbps are subscribed to by RESTENA.

SEQUIN

A project proposal named SEQUIN (Service Quality across Independently managed Networks) was submitted in response to the EC's RN2 Call for Proposals in January 2000 by DANTE, DFN, INFN, Renater, SWITCH and UKERNA has been positively evaluated. A contract for the project is in the final stages of negotiation which includes the addition of further NREN partners.

The objective of SEQUIN is to define and implement an end-to-end approach to Quality of Service. It will ensure that researchers across Europe have access to networking facilities which can be tailored to the requirements of individual groups and which will offer predictable and stable quality across multiple underlying management domains and networking technologies.

Work undertaken by the project will provide for a definition of Quality of Service which is independent of the underlying networking technology, will define a test-bed environment that can be used to implement and test end-to-end Quality of Service across multiple underlying technologies and management domains, and will create an operational test network interconnecting the participating national research networks and making use of TEN-155. A Virtual Private Network will be established and an appropriate set of tests will be carried out to determine the feasibility of the Quality of Service definition. The results will be used to specify a plan that will address the broader implementation of Quality of Service, will recommend the parameterisation for the different underlying technologies, and will address the operational as well as the technology lessons learned during the test phase.

The project is expected to last for 15 months.