

04.07.06

Deliverable DN2.0.3,4: GÉANT2 Technical Leaflet: Network Performance Measurement and Monitoring



Deliverable DN2.0.3,4

Contractual Date:	31/12/2005
Actual Date:	04/07/06
Contract Number:	511082
Instrument type:	Integrated Infrastructure Initiative (I3)
Activity:	NA2 – Dissemination Activities
Work Item:	N/A
Nature of Deliverable:	Leaflet
Dissemination Level	PU - Public
Lead Partner	DANTE
Document Code	GN2-06-151v2

Authors: Simon Watts (DANTE), Ruth Kirkman (DANTE)

Abstract

The purpose of this Deliverable is to officially notify the European Commission of the production of a leaflet to explain aspects of the performance measurement and monitoring activities carried out within the GÉANT2 project.

Table of Contents

0	Executive Summary	iii
1	Leaflet Overview	1
2	Purpose and Usage of Leaflet	2
3	Conclusions	3
Appendix A	GÉANT2 leaflet –Network Performance and Measurement Monitoring	4

0 Executive Summary

This Deliverable formally reports to the European Commission the creation of a leaflet describing Network Performance Measurement and Monitoring activities being carried out within the GÉANT2 project.

For any organisation running a network it is important to know if the infrastructure is performing adequately and how it is being utilised. As part of the GÉANT2 project, there is an extensive research and services programme dedicated to developing and testing the tools and services which will shape the way networks are run in years to come. This leaflet describes this work.

A hard copy the leaflet is included as Appendix A. An online version is accessible from the media centre on the GÉANT2 website, www.geant2.net/media

Project:	GN2
Deliverable Number:	DN2.0.3,4
Date of Issue:	04/07/06
EC Contract No.:	511082
Document Code:	GN2-06-151v2

1 Leaflet Overview

The leaflet has been created to give information about the network monitoring tools and services being developed within the GÉANT2 project. It is intended to impart complex information in a clear and concise manner.

One of the GÉANT2 research activities addresses the need for accurate, flexible and universal methods to assess the performance of Europe's research and education networks, and the pattern of their usage. In connecting two end users, data may be transferred across several networks. Historically, the monitoring tools employed in each of these domains have been different, and it has proved difficult to locate problems affecting long distance data transfers. The primary goal of GÉANT2's Performance Measurement and Monitoring (PMM) activity is to provide the means to gather information from across network domains, and to present it in a consistent and accessible form. Accurate end-to-end information is essential if engineers are to assess, troubleshoot and optimise these networks to achieve the highest levels of performance.

A key aspect of the PMM activity is the development of the perfSONAR monitoring framework, which is being developed jointly by GÉANT2 and US research networks Internet2 and ESnet. This international collaboration is providing a powerful new resource for network diagnostics.

The leaflet outlines the aims of the research and highlights its potential to network engineers and users. The leaflet is levelled for both an experienced and a non-technical audience. This is so that those without a background in networking can learn the basics about the research and its potential, whilst more technically aware readers can gain a greater understanding of the specific technology behind it. This approach is also reflected in the design of the leaflet, which is laid out in a clear and accessible manner. The text is accompanied by supporting explanatory illustrations.

Project:	GN2
Deliverable Number:	DN2.0.3,4
Date of Issue:	04/07/06
EC Contract No.:	511082
Document Code:	GN2-06-151v2

2 Purpose and Usage of Leaflet

The leaflet has been produced for general dissemination purposes and will be available to all project partners. It will be distributed at events, and will be available to download from the website. It is aimed at a number of key stakeholders, including end users and NREN participants. It can also be used to accompany a “GÉANT2 network demonstration”, which was first shown at the 2006 TERENA Networking Conference.

The leaflet is included in the appendix to this report. A PDF copy is available at www.geant2.net/media

Project:	GN2
Deliverable Number:	DN2.0.3,4
Date of Issue:	04/07/06
EC Contract No.:	511082
Document Code:	GN2-06-151v2

3 Conclusions

The leaflet is an important tool for extending the information disseminated about GÉANT2. It builds on the existing GÉANT2 dissemination material by providing more detail about the project's research activities. It also demonstrates that the research work being carried out within the project will have benefit for a wider audience. It is intended that other technical leaflets will be produced to complement this publication. This is to further expand the understanding of GÉANT2's technical advances and research programme, amongst the general public, the political and the user community and the NRENS.

Project:	GN2
Deliverable Number:	DN2.0.3,4
Date of Issue:	04/07/06
EC Contract No.:	511082
Document Code:	GN2-06-151v2

