WP7 Report

Outline

- ◆ Network Monitoring in EDG 2.x

- ◆ Test Campaign over GEANT network

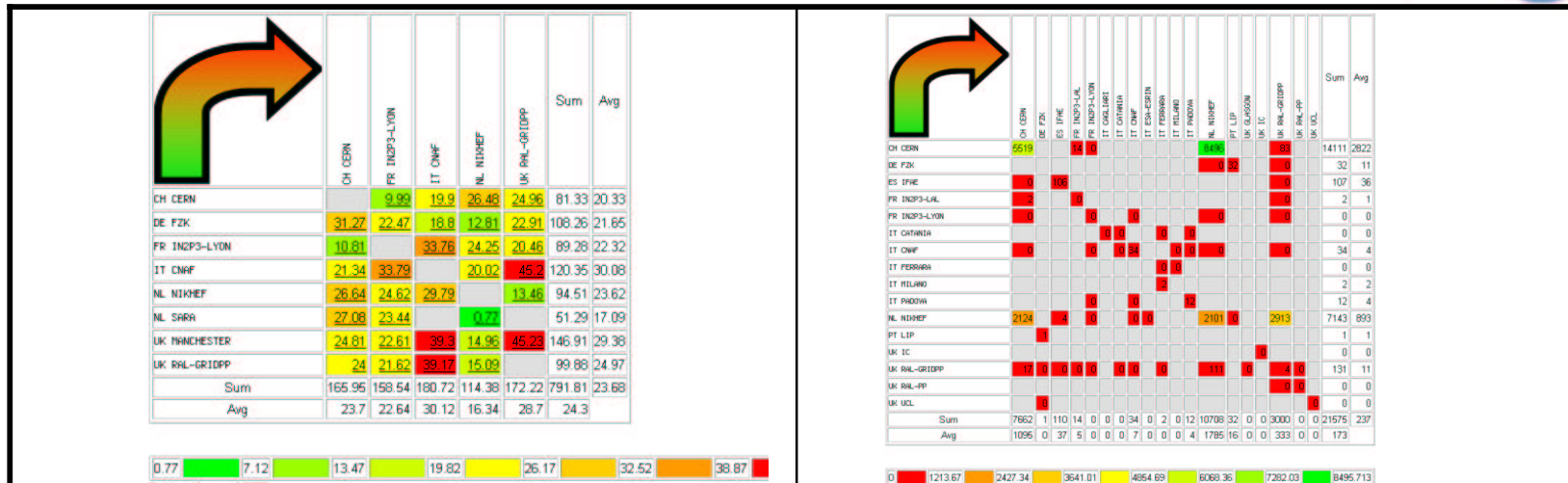- ◆ Beyond EDG … Grids and Networks interactions in the near future

EDG 2.x Network Monitoring

- ◆ NetworkCost function deployed on all sites

  - Called by the WP2 ROS service installed on MON nodes

  - Used by RBs for optimized matchmaking (getAccessCost) , and by also directly by applications (getBestFile…)

- ◆ Probe Coordination Protocol deployed, scheduling all network measurements between NM.

- ◆ Large successful usage of RGMA

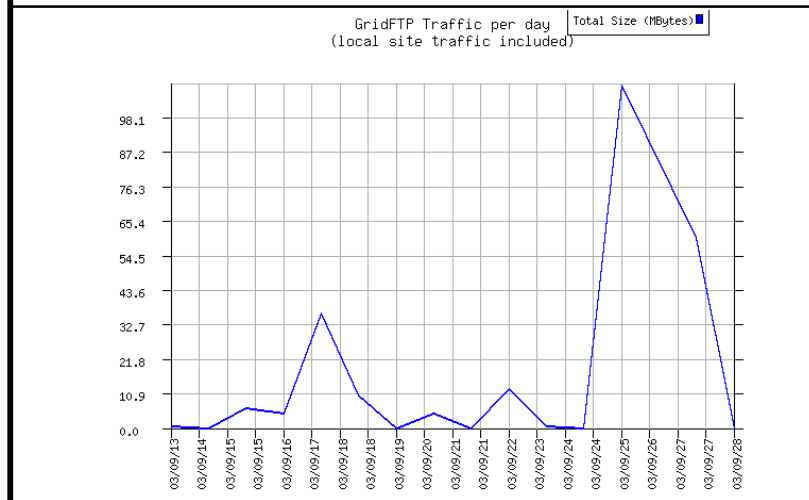- ◆ Central MySQL Archive hosting all network metrics and gridFTP logging for online analysis.

Visualization of Network Performances
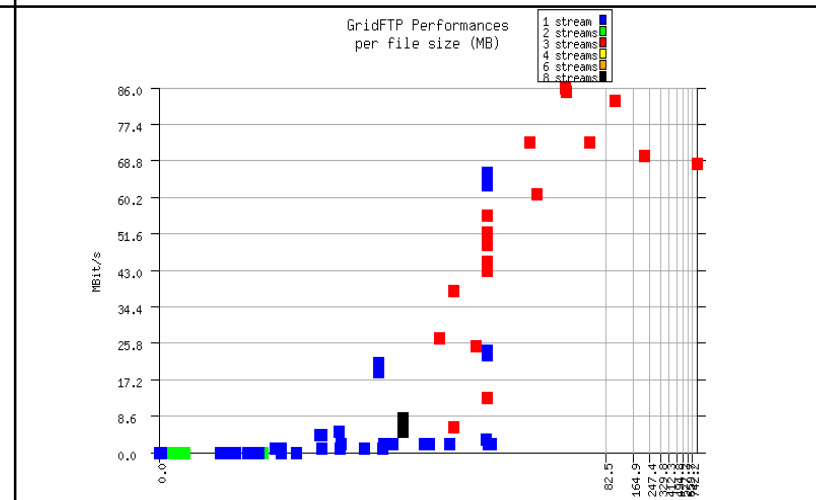## http://ccwp7.in2p3.fr/wp7archive/

RTT between NMs

Grid Traffic between all sites

Total Grid Traffic

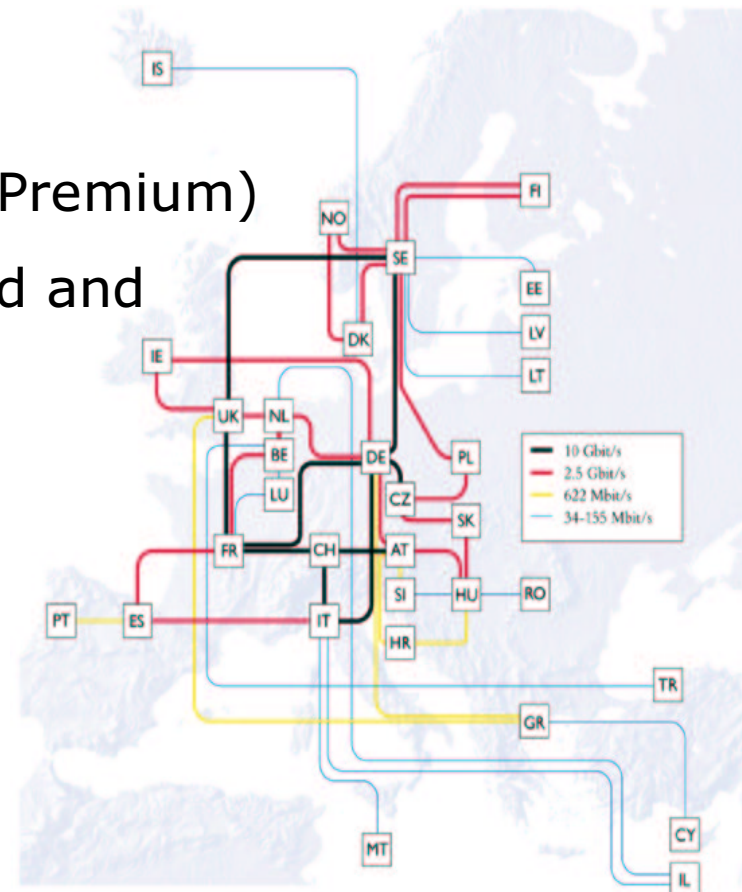GridFTP performances analysis

GEANT Test campaign

Started last week … ongoing until end of October
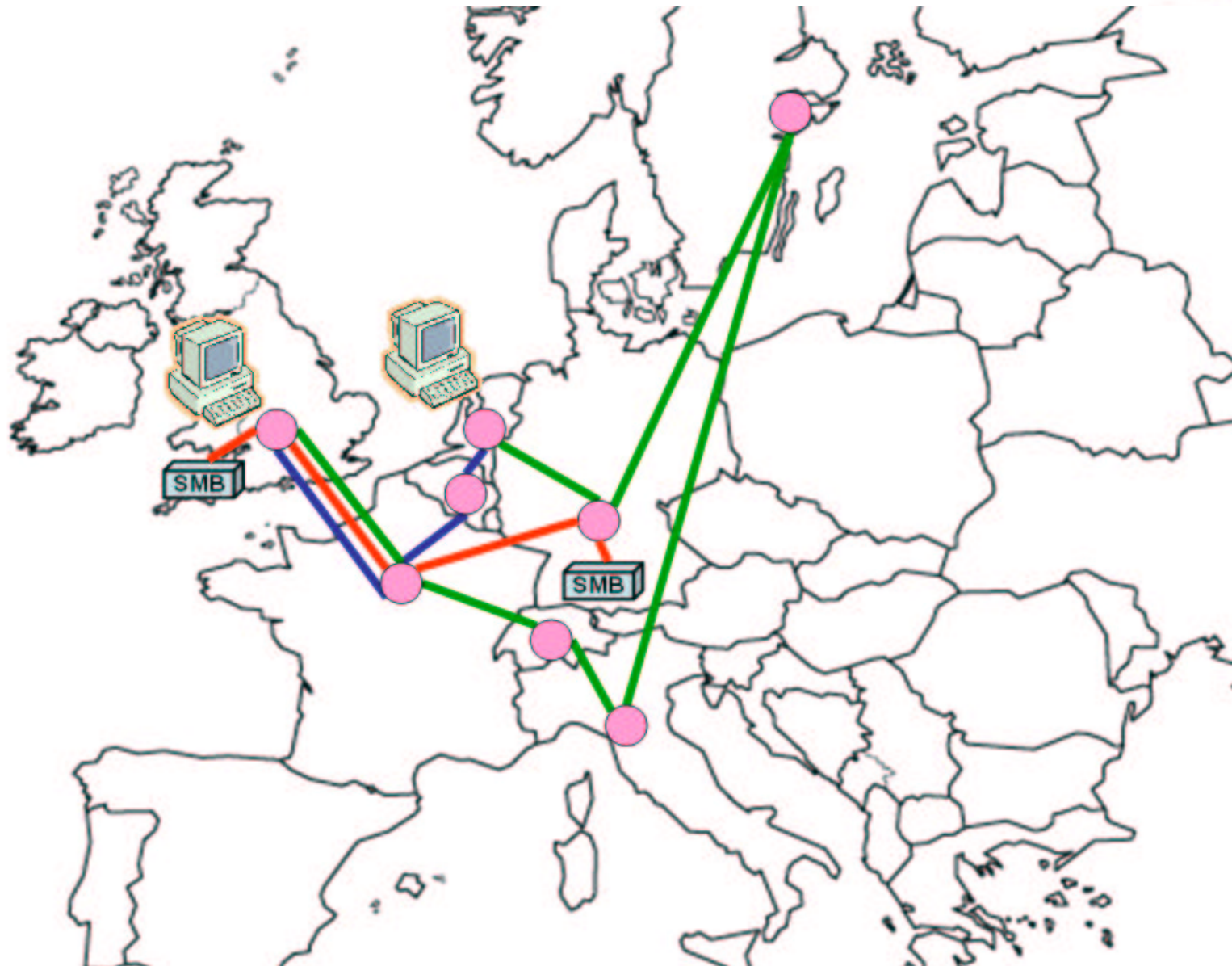
◆ Large scope of network tests :

  ▪ Network Quality Of Service (LBE, IP Premium)

  ▪ High-Throughput Transfers (Standard and advanced TCP stacks)

◆ Close collaboration with DANTE

  ▪ Set-up of the testbed

  ▪ Access granted to all internal GEANT monitoring tools

  ▪ Analysis of results

WP7 Geant Testbed

Beyond EDG...

- ◆ GEANT and NRENs are almost all over provisioned … only in term of bandwidth.

- ◆ All future potential European network projects (GN2, GRANDE, GARDEN, INVITED…) will concentrate effort on network services
  - Layer 2/3 VPNs
  - Secure channels
  - Inter-domains QOS
  - End-to-end monitoring

- ◆ Next grid projects will be the major consumers of these network services
  - Large collaboration between EGEE, GN2 and others.