Nordic
Testbed for
Wide Area
Computing and
Data Handling

Grid deployment in the Nordic countries

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Testbed: "NorduGrid"

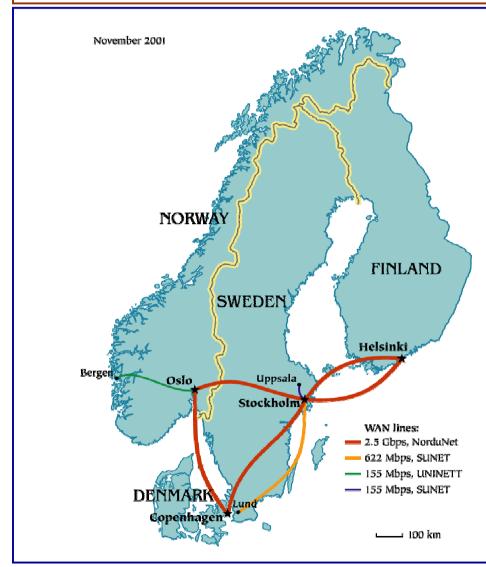*Nordic Testbed for Wide Area Computing and Data Handling*

http://www.nordugrid.org

- Aim: to create a Grid infrastructure in Nordic countries
- Supported by the Nordic Council of Ministers via the Nordunet2 programme
- Start: May 2001, end: October 2002, to be prolongued
- Part of the EU DataGrid Testbed

November 2001

NORWAY

SWEDEN

FINLAND

Helsinki

Bergen

Oslo

Uppsala

Stockholm

DENMARK

Lund

Copenhagen

WAN lines:
- 2.5 Gbps, NorduNet
- 622 Mbps, SUNET
- 155 Mbps, UNINETT
- 155 Mbps, SUNET

100 km

Resources

- Farms: Copenhagen (50 CPUs), in future: Stockholm (256), Oslo/Bergen (168), Lund (50)

- Test clusters (3-5 CPUs): Bergen, Copenhagen, Lund, Oslo, Uppsala

- Test nodes: Helsinki, Stockholm

- Manpower: 4 full-time researchers, several part-time

- Platform: Linux, various flavors

- Middleware: Globus™ toolkit, EDG tools

Services

- Nordic Certification Authority: issues Globus certificates for Nordic countries; recognized by EDG

- Virtual Organization for user management: includes people with NorduGrid certificates and NorduGrid services (e.g. GDMP, GridFTP)

- NorduGrid Information Service: database of resources on a computational grid - current configuration, capabilities, and status

- GDMP and Replica Catalog: set of tools to provide data replication

- GridFTP: fast and reliable file transfer using Globus certificates for authentication

Future Plans

The Nordic GRID collaboration will most likely be continued beyond 2002 as a common project under the four Nordic Natural Science Research Councils.

The aim will be:

- to participate in the development of the GRID
- to continue collaboration with other GRID projects
- to prepare an integration of national GRID infrastructures, based on existing hardware.
- to prepare a proposal for a Nordic Multi Disciplinary Data GRID Centre, with a possible start in 2005 and with the size of an LHC Tier1