

ETSI TC GRID in 5mn!

e-Infrastructure concertation meeting, 5-6 December 2007

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5 minutes to explain:

- ☐ What is TC GRID working on
- □ Call for expert
- ☐ How to participate

+ many other slides that I won't show...



ETSI and **GRID**

- ☐ History:
 - > 3 GRID Plugtests organized 2004, 2005, & 2006
 - Identification of interoperability needs!!!
 - > 1st ETSI GRID BoF GGF#17 at Tokyo 12 May 2006
- **☐** Support from European Commission
- ☐ ETSI TC GRID#1, September 2006
- ☐ 4 TC GRID meetings since then,
- □ Co-operation agreement with OGF signed in May 2007.
- □ next meeting = GRID#6, 19-20 Feb 2008 at ETSI



ETSI TC GRID Charter (1)

- Address IT and Telecommunications convergence
 - Note lack of interoperable GRID solutions
 - ➤ Focus on GRID applications and services based on global standards and associated validation tools
- ☐ Actively involve and support GRID stakeholders
 - Complement existing activities
 - Interoperability in end-to-end applications
 - > Formal test specifications
- Develop consensus-based technical specifications and reports
 - > Networking widely with relevant standardization bodies



ETSI TC GRID Charter (2)

- □ Broad technical scope
 - Resource and service access
 - > Protocols, middleware
 - > Security
- □ Broad view of convergence
 - GRID and Web Services
 - > IT and Telecommunications
 - > Fixed and mobile communications
 - Ubiquitous services
- □ Broad range of stakeholders
 - Standardization bodies, fora,...
 NESSI-GRID, GSCG, OGF, W3C, WS-I, OASIS, IETF, IST GRID Projects ...etc
 - Industry (software vendors, manufacturers, network operators, service providers, ...)
 - Academia & Research world



Focus of ETSI TC GRID

- NOT trying to duplicate standards development already underway in other bodies
 - ➤ Aim is to complement existing work with formal standards writing methods and test specifications in order to achieve levels of <u>interoperability</u> needed in GRIDs and Next Generation Networks.
- ETSI uniquely placed to do this:

Assets:

- Ability to address IT and telecom convergence
 - wide membership base
- NGN already being standardized at ETSI
 - TISPAN, 3GPP (IMS).
- Proven experience in developping testing methodologies and languages (TTCN-3)
- Proven experience in interoperability and conformance <u>test specification</u> writing (e.g. GSM/UMTS, DVB, WiMAX, OMA, IPv6, SIP,... and many others)
- Proven experience in organizing interoperability events (over 20 Plugtests events every year)



TC GRID Workprogramme

"Inventory of ICT GRID Stakeholders"

| □ Scope: | |
|----------|--|
|----------|--|

Identification of interoperability gaps in existing and emerging Grid standards.

Elaborate an inventory and analysis across the range of standards, de facto standards, industry practices, with the aim of determining the shortcomings, overlaps and loopholes at all levels of the middleware/protocol stack (network to application interfaces).

- ☐ Publication planned: Q1 2008
- **□** Supporting organisations
 - **▶BT, Alcatel, Siemens, Minefi, INRIA, EADS, FSCOM**
- □ Reference: DTR/GRID-0001-1



TC GRID Workprogramme

"Study of ICT GRID interoperability gaps"

For selected gaps, make practical recommendations on how to address and resolve them.

Example:

- application best practices compilation,
- definition of profiles,
- specifications of compliance test suite,
- · development of test tools,
- capture of new standards requirements etc...
- ☐ Publication planned: Q3 2008
- **☐** Supporting organisations
 - **▶BT, Alcatel, Siemens, Minefi, INRIA, EADS, FSCOM**
- ☐ Reference: DTR/GRID-0001-2



"ICT GRID Interoperability Testing Framework"

- ☐ Define a GRID testing framework
 - > Test and validation methodology, approach and tools
 - Use tools developed by MTS-IPT (IP testing)
 - generate "Requirements Catalogue"
 - transform existing specifications into formal test scenarios corresponding to selected interoperability case studies
 - > Best practice recommendations in both IT and Telecom
 - > Use and complement existing interoperability activities
 - events (e.g. Plugtests), profiles, testbeds, test suites, ...
 - GRID but also consider NGN, IPv6 etc
- ☐ Publication planned: Q1/2 2009
- **□** Supporting organisations
 - > BT, Alcatel, Siemens, Minefi, INRIA, EADS, FSCOM
- □ Reference: DTR/GRID-0002



Plugtests event

☐ Interoperability event based on the "ICT GRID Interoperability Testing Framework"

Date: ~October 2009

"Grid Services and Telecom Networks:

→ Architecture and Functional Specifications"

☐ Scope:

Provide:

- · requirements,
- architecture description,
- functional specification

to the realization of <u>commercial Grid services over production level</u> <u>telecommunications infrastructures</u>.

Will include a reference architecture for Grid service management in the framework of the (converged) Next-Generation Network.

- ☐ Supporting companies: Alcatel-Lucent, Nokia Siemens Networks, INRIA, BT, Telefonica. And many others already showing interest for this document.
- Reference: DTR/GRID-0005



TC GRID Workprogramme

"Grid Component Model (GCM) Interoperability Deployment"

☐ Scope:

Describing Components and Deployment in a Standard manner to be used as building blocks for Grid applications. Targeting different Grid frameworks.

☐ Supporting companies: INRIA, HUAWEI, FSCOM, FT, Fraunhofer, BT, Alcatel-Lucent, IBM

Future parts:

- Part 2: GCM Application Description
- Part 3: GCM Fractal ADL (Architecture Description Language)
- Reference: DTR/GRID-0004-1 (TS 102 650-1)



Vacancy in our Specialist Task Force!

□ Looking for 1⁺ part time Grid expert to join our team (STF 331).

What is a Spesialist Task Force: http://portal.etsi.org/stfs/process/home.asp

☐ TC GRID Specialist Task Force (STF 331):

Short description: http://portal.etsi.org/STFs/STF HomePages/STF331/STF331.asp

Full description: http://portal.etsi.org/STFs/ToR/ToR331v03 GRID ECproposalFinal.doc



Come and contribute!

Work based on members' voluntary contribution

Mailing list: GRID@LIST.ETSI.ORG

Send email to GRID@LIST.ETSI.ORG with keyword subscribe in email body

Contact me: Laurent.vreck@etsi.org

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To get any information related to TC GRID work (incl participate to STF331 work).

Come to our next meeting as guest: GRID#6, 19-20 Feb 2008 at ETSI

Invitation will be sent on the GRID@etsi.org mailing list.

Thank you!





More slides below...



Introduction to ETSI & TC GRID

- ☐ What is ETSI ...
- ☐ ETSI and Grids?
- ETSI TC GRID charter
- ☐ ETSI GRID workprogramme (current work)



ETSI stands for...

European Telecomunication Standards Institute

- □ Officially Recognized as Standards Development Organization
- ☐ Created in 1988 as an <u>independent</u>, <u>not-for-profit</u> entity
- Based in Sophia Antipolis, south of France, a technology park with 25 000+ employees
- 18,000 publications freely downloadable http://www.etsi.org/
- □ <u>Direct</u> member participation
 Almost 700 members from 56 countries



manufacturers, network operators, service providers, administrations, research bodies, universities...

Once member no limitation in number of meetings attended, technical committee participation, ...

Reduced membership fee for universities & research bodies.



Some of our World Class Standards

- ☐ GSM Developed by ETSI
 - > 2.4 billion users in over 200 countries
 - > 1.3 million new users every day!!
- □ ETSI's Lawful Interception
 - Being deployed in Europe, USA and Australia, where laws are being developed to comply with the ETSI Standard
- □ DECT Digital Enhanced Cordless Telecommunications
 - > 200 million terminals in more than 110 countries
- DVB system specifications
 - > Based on DVB Project proposals
 - > Services available on every continent



Global Standards Collaboration





Working relations with ITU, IEC & ISO and Standards Bodies





















Europe









- (60+ active)
- CCSA
- OMA
- DVB Project
- IEEE
- GCF
- WIMAX forum
- The Parlay Group
- IPv6 Forum
- CITEL
- GSM LA
- AHCIET
- NENA
- TETRA MoU
- OGF



ETSI Organization Chart

