Telecomm Community Group
Global Grid Forum, Industrial Applications Area
DRAFT Charter

Administrative Information

Name and Acronym:
> Telecomm Community Group, telco-cg

Chairs:
> Frank Falcon (British Telecom)
> Pramila Mullan (France Telecom)
> Franco Travostino for GHPN/ITU/OIF liaison

Secretary/Webmaster:
> The chairs will fill these roles.

Email list:
> To be hosted by GGF -- anticipated as telco-cg@ggf.org

Web page:
> To be hosted on gridforge.

Charter

Focus/Purpose

The Telecomm Community Group **(telco-cg)** focuses on how network providers and the Grid community can seek to create common approaches in dealing with significant changes in the offering of services and applications, as well as using infrastructure that will support grids and their evolution. The Community Group will seek advice and opinions from customers, network providers, network equipment vendors, Grid middleware and applications vendors and technologists.

Objectives/Scope

The objective of the **telco-cg** is to develop roadmaps for technical evolution and standards requirements in the following three areas:

1. How network providers (carriers, PTOs) will need to evolve their networks and support services in order to support large-scale grid traffic and other novel requirements posed by Grids? The goal of this roadmap is to facilitate the deployment of large-scale, dependable Grids.

2. How can network providers use Grid technologies to improve their own internal operations (e.g., billing, events' analysis, and modeling)?

3. How can network providers become suppliers of Grid managed services and adopt new business models that are profitable?

However, the key aspect that the telco-cg will focus on in developing the Roadmap will also be the inter-relationship between these three areas as the network provider operates in all or some of these areas.

Each of these areas can be classified according to whether it includes a core network paradigm exposed to customers (e.g., IP vs. circuit-switched vs. others), a group of inter-provider agreements, etc.

The scope of the telco-cg will consider both the technical and policy viewpoints (including business drivers). Both aspects are of crucial importance to the work of this community group.

Furthermore, the telco-cg will serve as a focal point for outreach and liaison activities between the GGF and other networking communities (inclusive of standard bodies).

Goals & Milestones

The telco-cg will document, publish, and socialize its findings by way of several informational documents:
1. Surveys of customer requirements
2. Use cases that identify the distinctive characteristics that need to be understood in order to appreciate how much grids will affect the business areas being considered in the telco-cg.
3. A roadmap document that focuses on the most urgent needs for progress to take place in the three areas of interest and where there are common strands among providers, vendors and customers that can be leveraged to insure results.

By GGF14: Kick-off of telco-cg activities as a chartered group. Achieve consensus on the approach to 1st deliverable.

By GGF15 cut off date: First drafts of the Customer survey and Use Case document.

By GGF16 cut off date: Second drafts of the Customer survey and Use Case document.

By GGF17 cut off date: Customer survey and Use Case document considered for public comment.

By GGF18 cut off date: First draft of the roadmap document.

Management Issues

The group will meet at each GGF and may meet face-to-face at other times. Most of its work will be carried out by email.

Evidence of commitments to carry out CG tasks

The proposed chairs have explicit direction from their upper management to begin execution on this proposed community group.

Preexisting Document(s) (if any)

GGF Research and Working groups have analyzed the implications of scaling Grids over medium to large distances. See for instance:

Optical Network Infrastructure for Grid. This document charts the convergence of optical networks (present and future) with Grids
http://www.ggf.org/documents/GWD-I-E/GFD-I.036.pdf

Networking Issues for Grid Infrastructure. What are the pain-points in attaching Grids to Networks?   Which tidbits can the "net-heads" pass along to the "grid-heads"?
http://www.ggf.org/documents/GWD-I-E/GFD-I.037.pdf

GridFTP: Protocol Extensions to FTP for the Grid
http://www.ggf.org/documents/GWD-R/GFD-R.020.pdf

Survey of transport protocols other than Standard TCP. Work in progress.
https://forge.gridforum.org/projects/data-rg/document/Survey_of_Transport_Protocols_Other_than_Standard_TCP/en/2

Use Cases highlighting the qualitative and quantitative aspects of Grids exploiting the Network element (Work in progress)
https://forge.gridforum.org/docman2/ViewProperties.php?group_id=53&category_id=750&document_content_id=3362

While these GFDs and GWD represent a solid foundation, no work has focused yet on the specific reality of network providers engaging on Grids. As well, these GFDs and GWDs look at the technical aspects only without appreciation for the push & pull dynamics of both technical drivers and business drivers, as they apply to network providers.

Any other relevant information

Exit Strategy

This proposed community group will be finished when the Roadmap Document is accepted as a GGF Informational Document.

Seven Questions (From GFD-34)

1. Is the scope of the proposed group sufficiently focused?

It is strictly focused on the reality of Network Providers enabling, using, and providing Grids.

2. Are the topics that the group plans to address clear and relevant for the Grid research, development, industrial, implementation, and/or application user community?

There is wide recognition that Network Providers hold key to Grids' successful scaling along the orthogonal dimensions of reach (e.g., many users separated by large distances) and dependability (e.g., in the presence of partial failures and malicious attacks).

3. Will the formation of the group foster (consensus based) work that would not be done otherwise?

The SDOs that focus on Network Providers' traditional interests (e.g., IETF, ITU, OIForum) do not have depth on the paradigm shifts prompted by Grids. There is a need to bring Network Providers' representatives directly into the Grid community.

4. Do the group s activities overlap inappropriately with those of another GGF group or to a group active in another organization such as IETF or W3C?

No. The Telco-cg is a much-needed complement, not a replacement, to work underway in the SDOs listed in the previous point. New formal liaisons between GGF and aforementioned SDOs are anticipated.

5. Are there sufficient interest and expertise in the group's topic, with at least several people willing to expend the effort that is likely to produce significant results over time?

The Telco-cg has been tested in several occasions throughout 2004 and 2005:
- GGF 10 Berlin
- Meeting @Supercomm 2004
- GGF 11 Hawaii
- GGF 12 Brussels (providers only)
- Meeting @SC04
- GGF 13 Seoul

These events always raised meaningful and representative participation by Network Providers, network equipment manufacturers, and solution specialists worldwide. The representatives have stated their willingness to collaborate on the activities listed in the Charter.

6. Does a base of interested consumers (e.g., application developers, Grid system implementers, industry partners, end-users) appear to exist for the planned work?

The evidence from the aforementioned events shows that there is a complete ecosystem of network providers, network gear manufacturers, system and service integrators, middleware vendors, visionaries from Academia, and user advocates,

7. Does the GGF have a reasonable role to play in the determination of the technology?

The Telco-cg takes on the challenge of developing a vertical more so than a specific technology. As such, the Telco-cg is seen formulating requirements and roadmaps, which it will be transitioning to the GGF WGs and other SDOs that are best qualified to develop the actual technologies.