

The Grid High-Performance Networking Research Group (GHPN-RG)

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GHPN-RG

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GHPN-RG ?

- To bridge gaps between Networking and Grid advanced communities
 - E.g., Grid requirements not yet understood by 'Netheads'
 - E.g., Net rules/features ignored by 'Gridheads'
- while countering any premature ossification around Grid/Net dominant scenarios
 - E.g., Advocacy of Grids using non-traditional mixes of end-systems and net infrastructures
- Outcomes: Informational or BCP Drafts, new RGs/WGs, liaisons with other Groups

2 Drafts in the Publisher's Queue

- draft-ggf-ghpn-opticalnets-2
 - Convergence of optical nets and Grids
 - Greenfield-charting realm
 - It just became GFD.36
- draft-ggf-ghpn-netissues-4
 - Pain points in attaching Grids to the network
 - Level-set realm
 - 30 days PC finished on 11/08/04

3 More Drafts in the making

- draft-ggf-dt-transportsurvey-1
 - A survey of L4 protocols for bulk data transfer other than TCP
- draft-ggf-ghpn-netservices-usecases-2-3
 - Black-box use cases of Grids setups exploiting network behaviors, and quantitative analysis of the same
- draft-ggf-ghpn-netservices-1
 - Scoping of Grid Network Services that elevate the network resource to being a Grid Managed Resource akin to processing and storage

Future Work: Can the GHPN (or spinoff)
assist in producing Agreement Documents,
for R&E testbeds to inter-work?

S.O.W. Sampler

- If testbeds only gave L3 services, then $SOW = \{ \}$
 - IETF wrote it all already, sort of
- If testbeds are Lx , $x = 0,1,2,3$, SOW is about rules
 - To exchange external connectivity info
 - To dial a congruent connection end-to-end
 - To handle advance reservations
 - To pass a principal's credentials
 - To define an SLA's grammar
 - To secure the service plane
 - To build/use TOOLS
 - etc.

Ref Arch,
Schemas!



among heterogeneous domains

Without Agreement Documents

- We are stuck to “barn building” between neighbors
- “I will talk to everything as long as it speaks <X>”
- Handicap on innovation

```
#if    UCLP
...
#elif  ODIN
...
#elif  UNCLE  GEORGE
...
#endif
```


Future Work: Can the GHPN (or spinoff) assist in producing Agreement Documents, for R&E testbeds to inter-work?

- GHPN expressed interest in hosting selected threads, provided that there is critical mass
- GHPN wishes to abstract out Optical Resources
 - Thus eliminating resource bias as early as possible in the stack
 - IETF never standardized a "Twisted Pair BGP" either

Email über alles

Drafts in the making, new Drafts,
comments, ideas, why and why-nots,
technical news ...

... anything we do, you hear about here:

ghpn-wg@gridforum.org

Home page:

<http://forge.gridforum.org/projects/ghpn-rg/>