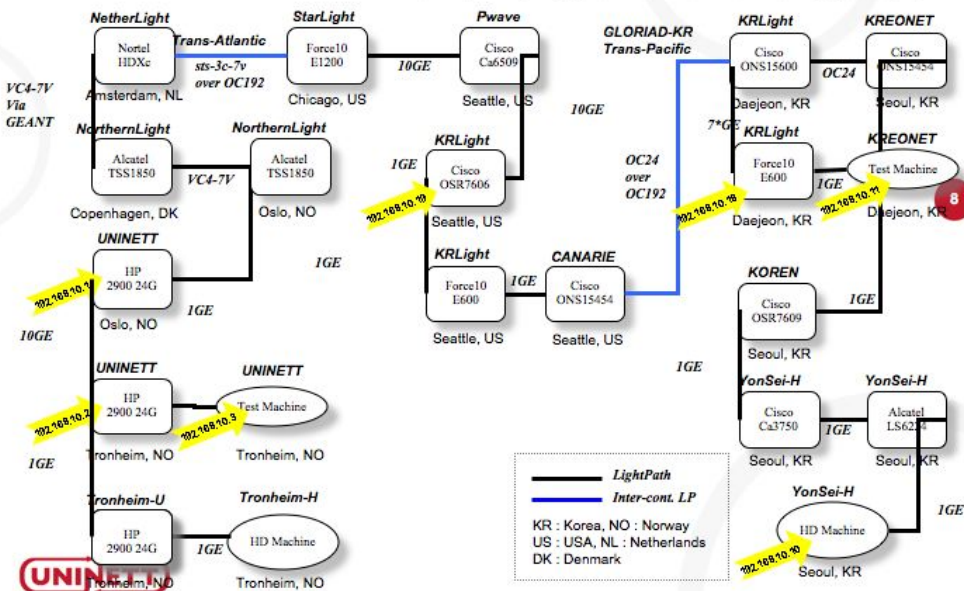


Medical Media HD Live Transmission : Norway to Korea – Trond Skjesol, UNINETT

- Pilot HD 1Gb transmission from the Norwegian University of Science and Technology, Norway, to Yonsei Hospital, Korea – to collaborate in medical research, test feasibility, and evaluate technologies.
- It's still a long way to go before a user friendly “service” is in place – thanked Lars Fischer for his coordination. And, how do users know about the possibilities?

Norway-Korea LP Provisioning

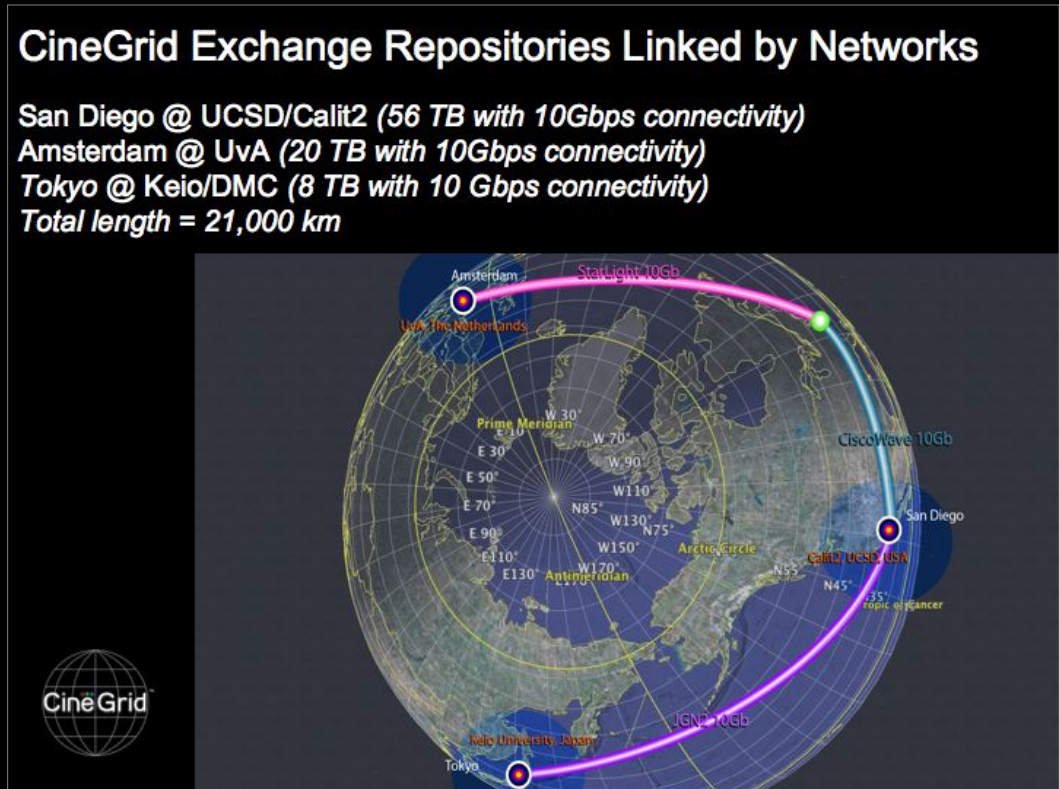
Jan. 16, 2008 updated by Dongkyun, Trond, Albert, David, Ronald, Dongkyu, Kwangjong



UNINETT

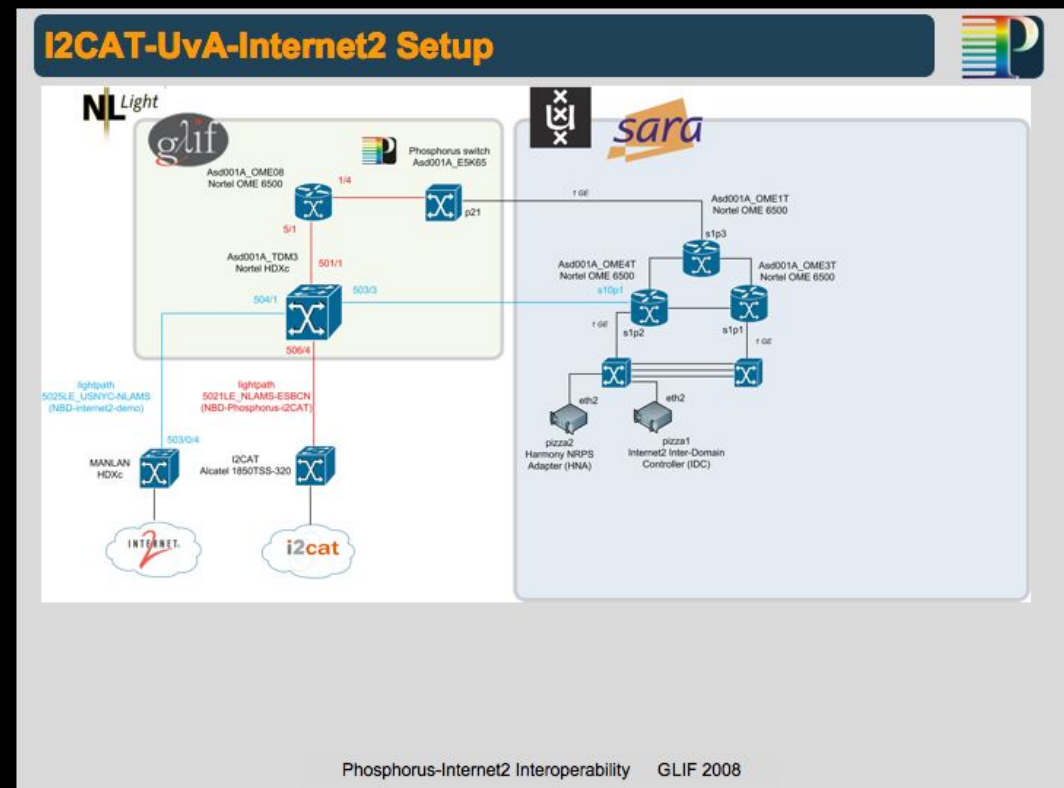
CineGrid Experience: Fast File Transfer Protocol – Michal Krsek, CESNET and Laurin Herr, CineGrid/Pacific Interface

- Real-world problem to send 2TB from Prague to Los Angeles to meet a production deadline – collaboration among Cinepost, CESNET, StarLight and UCSD/Calit2 accomplished the *network transmission in 8 hours over a 24-hour period*, including arrangements with globally located CineGrid members. Lessons learned: need for persistent infrastructure.
- CineGrid Exchange collects high quality digital media assets, including (but not limited to) 4K, 2K, HD, mono and stereo, still and motion pictures; plus audio with various channel counts.



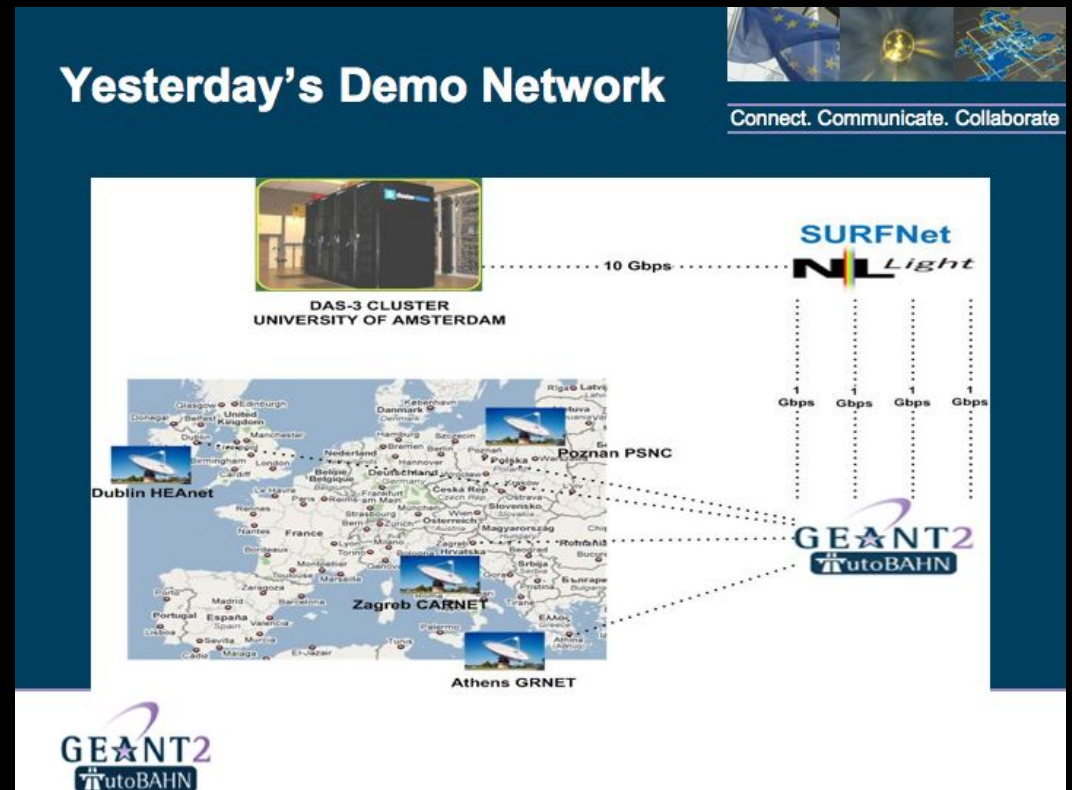
Phosphorus – Fred Wan, University of Amsterdam

- Phosphorus is an EU-funded project to address some of the technical challenges to enable on-demand e2e network services across multiple domains *by controlling different control planes*.
- Presentation described a Phosphorous-Internet2 (i2CAT-UvA-I2) testbed experiment for SC08 to explore mapping and interoperability.



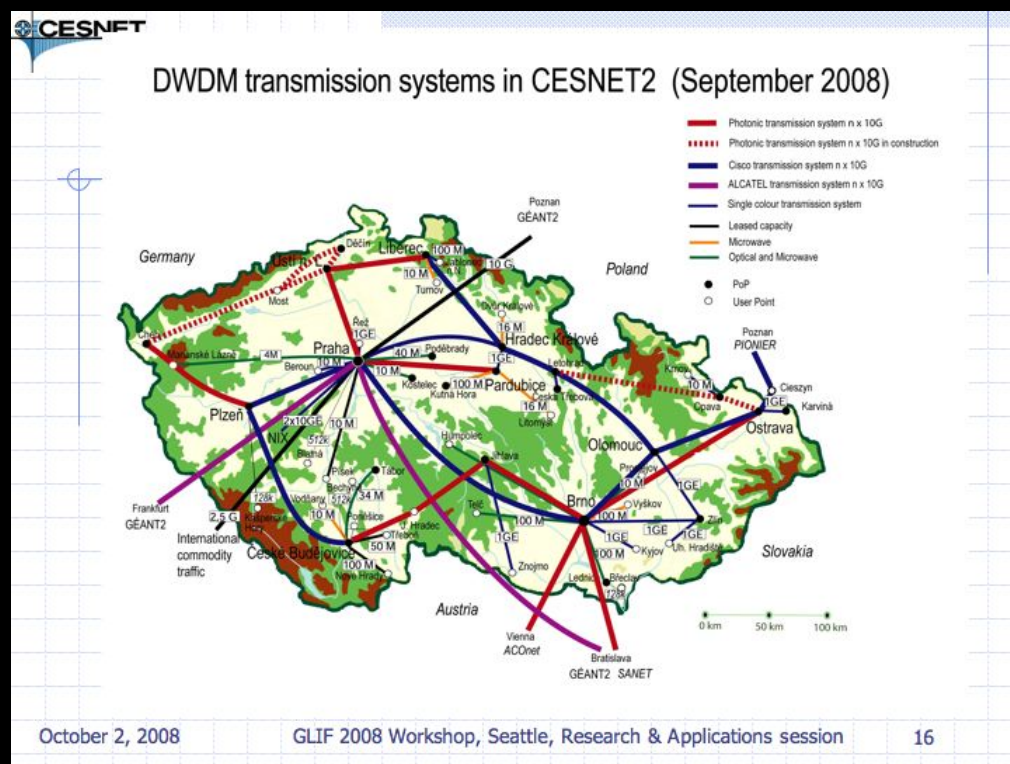
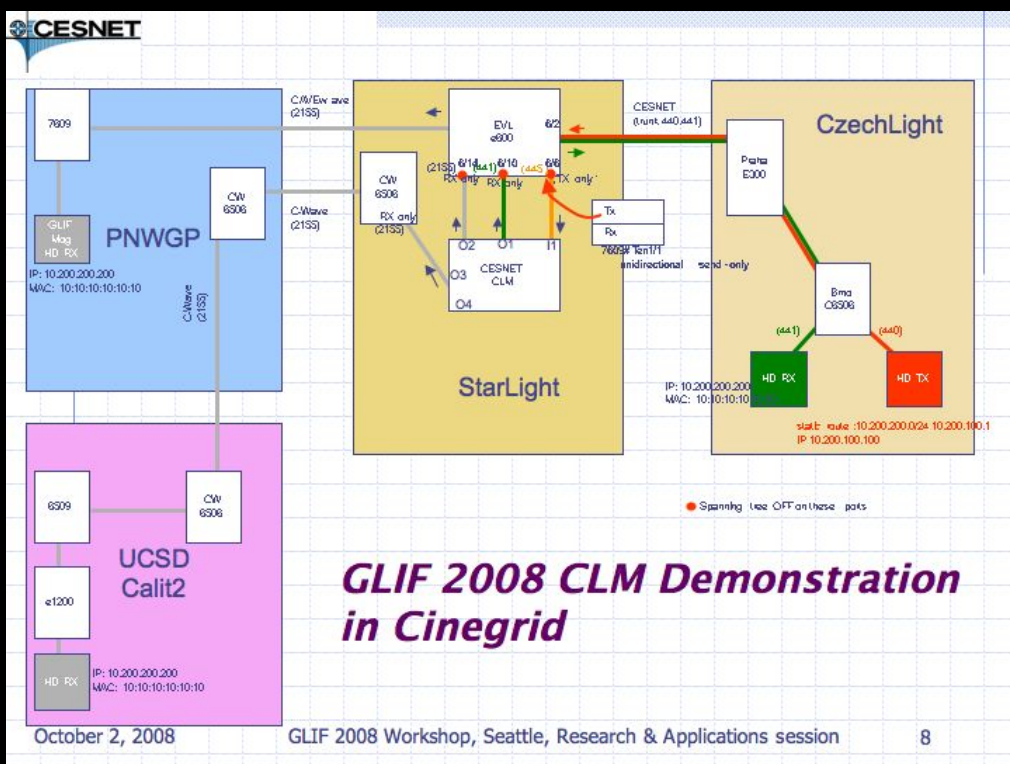
AutoBAHN and SCARle – Andrew Mackarel, HEAnet and Guy Roberts, DANTE

- AutoBAHN is a joint research activity of the EC-funded GÉANT2 NRENs for engineering, automating and streamlining the inter-domain setup of guaranteed capacity (Gbps) end-to-end paths. SCARle is a project to develop a distributed software correlator for real-time e-VLBI being developed by JIVE, University of Amsterdam and SARA.
- Presentation described yesterday's GLIF demo to set up lightpaths to connect data sources in Dublin, Zagreb, Poznan and Athens to the DAS-3 cluster in Amsterdam.






LTTx (Lightpaths To The Application) – Stanislav Sima, CESNET

- CESNET has developed a family of open photonic “devices” – in support of advanced application development (such as the optical multicast demo (shown at GLIF yesterday))
- Many application experiments with global partners presented.





Network Middleware: LambdaStation, TeraPaths, Phoebus – Matt Crawford, Fermi National Accelerator Laboratory

- New developments in control plane developments across multiple administrative network domains



*Network Middleware:
Lambda Station,
TeraPaths, Phoebus*

*Matt Crawford
GLIF Meeting; Seattle, Washington
October 1-2, 2008*

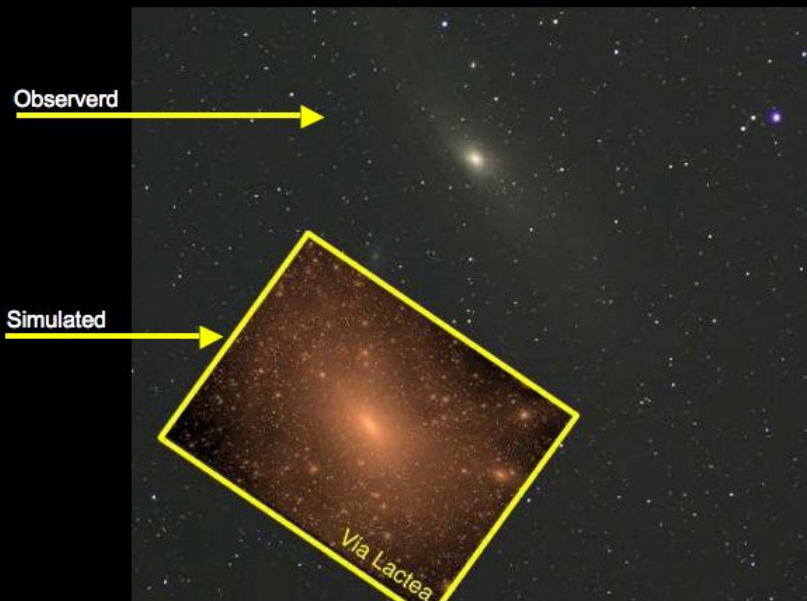


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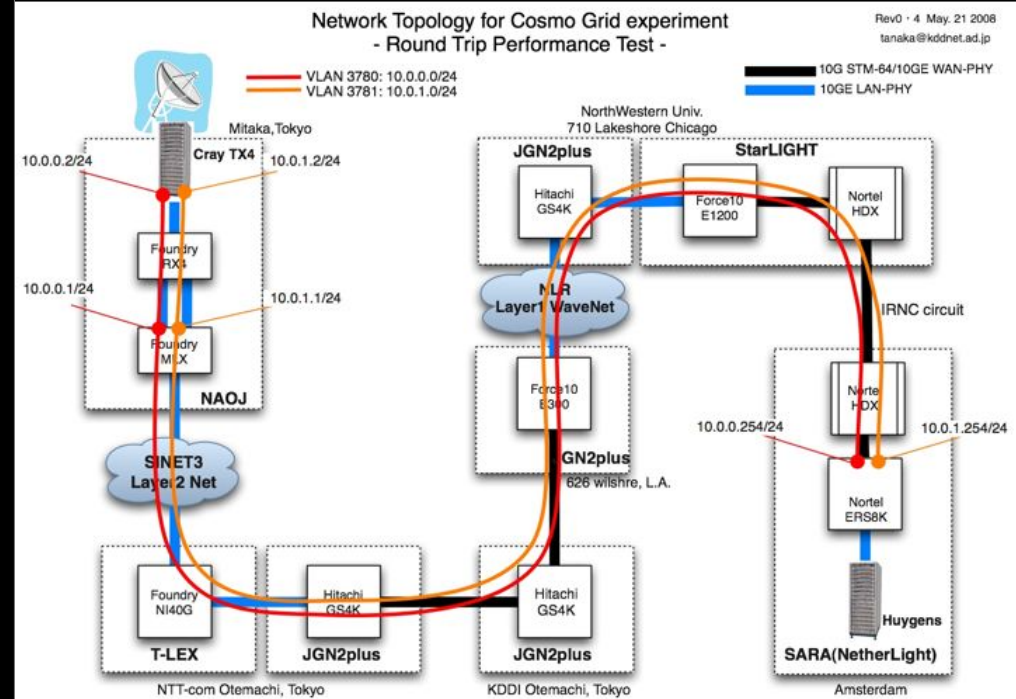
CosmoGrid – Cees de Laat, University of Amsterdam

- Previous simulations found >100 times more substructure than observed, so astronomers want to understand the discrepancies
- Developing an intercontinental supercomputer grid (in Tokyo and Amsterdam) which to run cosmological N-body simulations of 10 billion particles.

Too much substructure in simulations



CosmoGrid network



Two Themes...

- All science is global – major collaborations to not only build the infrastructure, but use it!
- Inter-domain lightpath setup and scheduling currently rely on people, and organizations like GLIF create communities that work together in trusted ways.



In Closing...

ACCESS magazine, Summer 2008 issue, published by the National Center for Supercomputing Applications (NCSA) at University of Illinois

- NCSA artist Bob Patterson created GLIF map – see inside back cover
- NCSA received US\$208M from NSF to develop the “Blue Waters” petascale computer, to come online in 2011, and has expressed interest in international collaborators. Stay tuned!

