

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HAYSTACK OBSERVATORY

WESTFORD, MASSACHUSETTS 01886

Telephone: 978-692-4764

Fax: 781-981-0590

15 August 2005

TO: Distribution
FROM: Alan Whitney
SUBJECT: 27 June 2005 e-VLBI telecon summary

Attendees:

Bill Fink, Lee Foster, Pat Gary, Ben Kobler, Paul Lang – GSFC

Russ Hobby, Internet2

Chris Tracy – MAX

Kevin Dudevoir, Hans Hinteregger, Arthur Niell, Chet, Ruszczyk, Jason SooHoo, Mike Titus,
Alan Whitney – Haystack Observatory

This telecon is one of an ongoing series of telecons to prepare for 10 gigabit/sec e-VLBI demonstrations between NASA GSFC and MIT Haystack Observatory using a combination of network facilities including all or part of GlowNet, Bossnet, ISI-E, SuperNet, Max and GSFC/HECN.

ACTION ITEMS ARE HIGHLIGHTED IN RED.

Raptor switch problems

Kevin D. reported that the Raptor switches do not properly recovered from power failures. Raptor has sent firmware updates which address the problem. Preliminary indications are that the new firmware fixes the problem.

GSFC

Pat reported that GSFC is configured to flow data across DRAGON as needed. Connection to McLean at 10Gbps should be implemented soon.

Pat attended most recent DRAGON meeting via videoconference. At that meeting, Chris and Tom reported they were well along configuring the DRAGON network to make it usefully connected to the HOPI network.

DRAGON

Chris reported that HOPI 10Gig transponders have arrived; should be installed soon.

Chris reported that work is in progress to include different technologies for videoconferencing of DRAGON meetings, including Access Grid.

Level3 should be done with splicing in Arlington, so should be getting access to that fiber soon. Also, Movaz is following through on the 15 July date of the next optical modem.

iGRID e-VLBI demo

Desire is to have JIVE coming through HOPI/DRAGON, GGAO through DRAGON, and Japan over Abilene, all coming into Haystack at the same time at 512 Mbps. Chris indicated that, in principle, this should be possible, but may depend upon availability of a sufficient number of CCC-capable GigE pics (CCC = Cross Circuit Connect).

10 Gig connection Haystack

Alan reported that Terry Gibbons of Lincoln Lab has responded to DRAGON offer to do loss and dispersion measurements on Glownet. Terry indicated LL is very reluctant to take down Glownet, but there is a plan for scheduled maintenance on Glownet, and it might be possible to make these measurements during this period, but the final decision would have to await Steve Bernstein's return from vacation. The data for the scheduled maintenance is unknown to us.

Chris indicated that making a dispersion measurement requires borrowing equipment from Movaz, and that needs to be coordinated with Movaz well in advance of the measurement period.

Tsukuba e-VLBI transfers

Jason reported that Tsukuba are now back on Bossnet. Kevin D. reported that his memory-to-memory TCP tests between Haystack and Tsukuba achieved ~506 Mbps sustained rate, but the TCP disk-to-disk transfer rates (MTU = 1500B) are ~200 Mbps, probably limited by the disk-subsystem performance at Tsukuba. Investigation is continuing.

Ben Kobler

GSFC would like to extend GSFC Storage Area Network (SAN) to the wide area network. Have been working with industry and community to explore feasibility.

Next telecon

Next telecon is scheduled for Monday, 25 July 2005 at 2pm EST.

cc:	Steve Bernstein, LL	Aruna Muppalla, GSFC	Haystack
	Jim Calvin, LL	Mary Shugrue,	Arthur Niell, Haystack
	Rick Larkin, LL	GSFC/ADNET	Joe Salah, Haystack
	Lorraine Prior, LL	Bill Wildes, GSFC	
	Peter Schulz, LL	Steve Bailey, GSFC	
	Leslie Weiner, LL	Dan Magorian, UMCP	
	Herbert Durbeck,	Tom Lehman, ISI-E	
	GSFC	Jerry Sobieski, MAX	
	Bill Fink, GSFC	Chris Tracy, MAX	
	Lee Foster, GSFC	Guy Almes, Internet2	
	Pat Gary, GSFC	Charles Yun, Internet2	
	Andy Germain, GSFC	Richard Crowley,	
	Chuck Kodak, GSFC	Haystack	
	Kevin Kranacs, GSFC	Kevin Dudevoir,	
	Paul Lang, GSFC	Haystack	
		Hans Hinteregger,	