

## The WNY High Performance Networked Video Initiative Extended Grand Rounds Project Outline

### Application:

Extended Medical Grand Rounds conferences among geographically dispersed medical and educational institutions.

### Prioritized Supporting Technology Components:

1. 323 MP-VC with cascaded facilities
2. Simulcast and on-demand at MPEG-1
3. Low-latency bi-directional MPEG-1 appliances for remote host site support
4. Simulcast and on-demand delivery via RealVideo/Quicktime
5. Simulcast and on-demand delivery of multimedia adjuncts: PowerPoint slides, notes, discussion threads
6. Production of hard-copy, in the form, for example, of a multimedia DVD CME prototype

### Known Problem Areas To Be Addressed:

1. Achieving successful inter-operation of heterogeneous H.323 endpoint systems and H.323 infrastructure components
2. Achieving successful inter-operation of such components across heterogeneous firewalls, proxy servers, caching servers and management policies
3. Achieving appropriate quality of service (QOS) before QOS technology has been developed for the transport network
4. Resolving inter-operation and QOS issues in mixed I1/I2 contexts and across multiple commercial broadband ISP's. This might include local ISP/institutional peering trials.
5. Developing dial-plans and H.323 asset management strategies in multi-zone multi-institution contexts with mixed sets of collaborating and non-collaborating institutions
6. Supporting multicast streaming video and adjunct media delivery in the contexts described
7. Management of stored content for on-demand delivery in the contexts described
8. Determining the reliability, performance, and cost/effectiveness of emerging "*appliances*" for H.323 endpoints, H.323 infrastructure components, streaming media broadcast and content management, and low-latency high-quality bi-directional audio/video transport – also in the contexts described
9. Effectively sharing known problems with complex emerging technologies among large groups of early adopters
10. Identifying or developing and sharing effective sets of tools for HPNV problem identification and resolution
11. Developing better correlation between measurable IP path characteristics and observed HPNV performance

### WNY-HPNVI Support Priorities:

1. Core institutional participants: UB, ECMC, BGH
2. Core regional HPNVI member groups: RCN, BISSNET, business partners
3. Core EGR project remote host-site participating institutions: UofR, Stanford, Columbia, The Netherlands' SurfNet
4. Links to other regional HPNV activity participant/support groups: OSU Megaconference, SURA LSVNP
5. Links to any other interested and self-supporting HPNV sites or support groups possible with available resources

### General Plan, Priorities and Timeframe:

1. Start now with ECMC/CenTIR Grand Rounds and perceive as long-term process more than one-time project.
2. Emphasize attainment of production-grade quality, production-grade reliability levels and resolution of important HPNV deployment issues instead of project pace
3. Communicate and coordinate initially through a listserv group for medical/academic/administrative and technical support contacts. Develop Web-based collaboration, communication and management facilities as resources permit.
4. Bring facilities and technologies on-line as problems and available resources permit
5. Use WNY-HPNVI Sandbox assets, LSVNP grant assets, and other local and remote institutional HPNV assets wherever appropriate to support build-up.
6. Continue with the development of the project as long as participants find continuing benefit commensurate with resource commitments with intent to migrate to professionally staffed production facilities as funding permits.

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