

Ohio I2 Consortium
Conference Call 12/11/01

In attendance: Mark Faulkner, Doug Gale, Paul Hernandez, Dell Klingensmith, Joe Landwehr, Chuck Morrow-Jones, Linda Roos, Greg Seibert, Patti Vendt

Linda summarized the events that led to this counter proposal for SchoolNet. In August, Doug Gale and Linda met with the State CIO. He expressed interest in having Ohio K12 connect to the Abilene network and encouraged SchoolNet and the Department of Education to explore the options for making that happen.

Doug and Linda then met with representatives from SchoolNet, the Department of Education and DAS. The K12 proposal endorsed by the Ohio I2 Consortium was presented to the group. Subsequently, Scott Gaughn sent a counter proposal to Doug and Linda. That counter proposal was presented to the Ohio I2 Consortium in Oct and was not accepted by the group. The Ohio I2 Consortium asked that we review the original proposal and return to the group with recommendations. They also asked that the costs for the Higher Ed SEGPs be reviewed, as well.

Chuck Morrow-Jones reviewed the new proposal to be sent to SchoolNet. Some discussion regarding the proposal ensued. Dell Klingensmith recommended that a requirement for no more than 50% utilization of the bandwidth be included in the proposal. Dell Klingensmith made a motion that the modified proposal be presented to SchoolNet. Mark Faulkner seconded the motion. The vote was unanimous.

That modified proposal is included here:

Ohio K-12 Internet2 Connectivity Options

The objectives of this proposal are to provide:

- high quality, seamless, cohesive and congestion-free connectivity between Ohio K-12 schools and institutions of higher education
- the opportunity to participate in the Internet2 national K20 Initiative
- the opportunity to participate in Internet2 national K20 content and application development

Option 1 (Individual DA Sites connect to Abilene independently):

- Dedicated Internet2 PVC, running over existing 45 Mbps ATM pipe, from DA Site to an OARnet router via DAS or a separate connection from the DA site to OARnet
- Each DA Site supported and treated individually
- Cost per DA site: (\$5000 membership fee + \$10,000 per 6 Mbps bandwidth increment) per year
- Cost for each additional 6 Mbps block, \$10,000 per year
- If headroom drops below 50%, the site will have three months to purchase additional bandwidth sufficient to rectify the problem
- Implications
 - √ Each site has full local control of and responsibility for their own routing policy

- √ It is possible that not all DA Sites will participate
- √ Each DA Site must be setup as a separate AS with BGP multihoming
- √ Desirable to have independently routable address space

Option 2 (All DA Sites connect to Abilene as a group):

- Dedicated Internet2 PVC, running over existing 45 Mbps ATM pipe, from DA Site to DAS router. Single dedicated Internet2 connection (18 Mbps minimum) running from DAS router to OARnet
- DAS responsible for routing and set up
- Cost (23 sites) = (\$115,000 membership fee + \$10,000 per year per 6 Mbps bandwidth increment) per year
- Cost for each additional 6 Mbps block, \$10,000 per year
- If headroom drops below 50% at any individual site, DAS will have three months to purchase additional bandwidth sufficient to rectify the problem
- Implications:
 - √ Aggregation at single point of contact
 - √ Provides "one" network with all DA Sites included
 - √ Increasing bandwidth very economical
 - √ Intermediate equipment and personnel reduces performance and maintainability
 - √ DAS must setup a separate AS for K12 with BGP multihoming and routable address space and its own unique routing policy

Additionally, it was decided to modify the cost structure for the Higher Ed SEGPs such that, on an annual basis, for those with a DS3 or higher, they would be charged:

\$5000 for a membership fee and \$10,000 per 6 mbps block

Schools with T1s would be charged on the \$5000 membership fee.