

Joint Venture ITAC funding request

Requested for 2009-2010 funding cycle

Campus-wide Virtual Desktop Infrastructure

Purpose, scope and benefits of the project:

Student computer labs have been a mainstay of campus computing for a couple of decades. They remain a cornerstone of campus computing in order to provide access to institutionally licensed software, which must be hosted on University owned CPUs. The Virtual Desktop Infrastructure (VDI) environment transcends the historical geographical constraints of physical computer labs and offers 24x7 access to academic resources for students and faculty via the Internet.

Faculty can have the same computing experience in their office as they prepare for class as in the classroom presenting to students. Students could participate in class or access the environment the faculty member desires immediately after class from their personal CPU, a campus lab or even from off campus.

Communication, Engineering and ITS have piloted these environments and it is time to leverage these infrastructures for the benefit of the campus at large on a broader scale. Students would simply need a web browser on a wide array of supporting platforms and use their EID to logon to the VDI environment. Within ninety seconds a virtual desktop would be provisioned for them, providing access to the applications for which they are authorized. Both the hosting servers and preferred data file storage capabilities would be housed in the University's Data Center. The core infrastructure would be maintained by ITS and the application layer would be curated by Colleges/Schools in order to deliver applications unique to their disciplines.

The benefits and impact of this capability have already been discussed with campus networking and security offices and they view this progressive environment as a way to rapidly promote best practices across campus. The VDI environment effectively serves as a virtual computer lab and could offer an option across campus in lieu of a physical computer labs in many situations. It is not yet, however, conducive to high video resolution or graphic intensive applications, although similarly architected options do exist – addressing these needs is beyond the scope of this proposal.

For the initial installment, four-hundred sessions are envisioned for the campus, hosted by ITS, and curated by ITS and partner Colleges/Schools across campus. It is felt to be vitally important to have a campus-level investment toward this infrastructure at this time in order to properly channel the potential of this innovative environment before it fractures into ad hoc components across campus.

The magnitude of savings compared with conventional approaches and benefits to the campus at large are significant in terms of equipment, labor and space savings. A demonstration of the production environment within Engineering is available upon request. The partners of this initiative are keenly interested in helping to deploy this much needed model across campus and find it reasonable to have the capital costs of this endeavor to be funded by an ITAC investment. College and School investments will come in the form of software licensing and labor to provision and maintain the environment.

Units involved and lead unit:

Engineering will lead this cooperative endeavor in close coordination with ITS, Communication and Business. Law, Nursing and Social Work have also shown keen interest in this endeavor, but all Colleges/Schools will be invited to participate in the resulting VDI environment.

Key contacts: Engineering-Bob Gloyd, ITS-Anh Selissen, Business-David Burns, Communication-Charles Soto.

Funding requested:

\$155,000 is requested to purchase the hosting hardware and infrastructure software licensing. This capital investment will provide **four-hundred sessions for four years**, (44% hardware, 40% software and 16% disk resources), resulting in an **annual cost per session of \$97**. This price-point should prove compelling to transform computer labs and faculty desktops across campus.