



UNIVERSITY of ST. THOMAS

## FACT SHEET

### University of St. Thomas Sun Center of Excellence

#### Technology at the New Sun Center of Excellence July 2005

**SCOPE** – The technological environment at the Schulze School of Entrepreneurship and its Sun Center of Excellence for Entrepreneurial Application of Innovative Information Technologies will be used to support the school and students; new research and development in business/entrepreneurship education; and the development of technologies that help create or support new business ventures, or address real-life business challenges.

**TECHNOLOGY ELEMENTS** – The following technological features comprise this Sun Center of Excellence:

- **An Integrated, Open Source Environment** – In support of the school and the students, the Schulze School will deploy Sun “thin client” technology – the SunRays. SunRays will allow students, faculty and staff to use Sun’s Java Desktop System (JDS), a complete desktop environment built around open source software. With support from partner Cisco Systems, the Sun Directory will not only support JDS users, but also network with Windows aspects of St. Thomas technology infrastructure.
- **Stateless Computing** – SunRays plus Sun Java SmartCards will allow students access to a stateless computing environment – one which allows them to have their work follow them wherever they go, able to freeze their current desktop simply by pulling their SmartCard out of one workstation and putting into another and providing their password.
- **Solaris 10 OS** – The Java Desktop System (JDS), the SunRay server software, and the Sun Directory will run atop Solaris 10, Sun’s sophisticated, new open sourced operating system.
- **Identity Management Software** – Sun’s Identity Management software will help link all the various back-end systems and directories involved in providing and managing the accounts and permissions users need to get their work done on University systems.
- **Top-Notch Servers** – The Sun software will run in load-balanced, fail-safe farms of Sun servers

(more)

- **VoIP Capabilities** – The Schulze School will also be the first building in which St. Thomas provides desktop phones that function as network devices – using the same network as the computers – rather than traditional phones. This Voice-over-IP (VoIP) system, in addition to reducing the cost of building and maintaining the building, will allow the phones to be much more active and intelligent desktop tools. The VoIP system, as well as other network gear, is from this Center of Excellence’s partner Cisco Systems.

**NEW RESEARCH AND PEDAGOGICAL MODELS** – All of the aforementioned technologies will also be used to develop new pedagogical models for teaching entrepreneurship and for facilitating student-led collaborative research projects. In addition, a farm of Sun servers will be available for research purposes, able to be freely configured and reconfigured using Sun’s N1 management automation software and the full array of Sun Java Enterprise System software and Sun’s whole portfolio of development tools. Faculty and students will be able to, for instance, model a variety of datacenters via this academic cluster, freely experiment with computing grids, or compare different processor technologies or the benefits of horizontal and vertical scaling.

**POSSIBILITIES FOR BUSINESS** – All of the aforementioned technologies may serve as the subjects of entrepreneurial endeavors, whether in the form of startup ISPs that are also desktop providers, or companies that build ads to run on VoIP phones’ displays when they are not handling calls, or services built around use of smart cards. Additionally, Sun’s strong presence in the nascent market for RFID (radio-frequency ID tags) will allow students access to cutting-edge tools and techniques built around that technology. As they develop an idea, University of St. Thomas entrepreneurship students will continue to have access to the academic cluster for testing ideas and conducting simulations of real datacenters before they build them. In so doing, they will have before them model environments showing how to provide low and predictable costs in starting up and then scaling a business data center to meet identified needs. They will also see tools (like SunRay and Identity Manager) that will contribute hugely to an organization’s ability to comply with –and demonstrate compliance with – state and federal laws such as the Sarbanes-Oxley Act, the Gramm-Leach-Bliley Act and HIPPA.

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