Contact: Patrice Sayre

IOWA STATE UNIVERSITY
EQUIPMENT PURCHASE

Action Requested:

Consider approval of the equipment purchase of a Storage Area Network (SAN) infrastructure with an estimated cost of $1,874,136 to $2,044,080, depending on the final configuration.

Executive Summary: Iowa State University Information Technology Services requests approval to proceed with the purchase of a Storage Area Network (SAN) infrastructure from Dell/EMC.

Strategic Area Network

Description of Equipment

The SAN infrastructure consists of a primary disk storage system hosting 30 terabytes of usable storage along with a secondary disk storage system hosting an additional 15 terabytes of usable storage. The secondary system will be housed in a separate campus building and used primarily for disaster recovery purposes.   The SAN infrastructure includes redundant data switches with dark fiber connectivity between computer centers.   The solution also includes management software, installation services, and a complete disk-to-disk backup solution. This infrastructure can be easily expanded when additional disk storage needs are recognized.

Justification of Need for Equipment

Electronic storage requirements are growing at extraordinary rates.   Industry survey results indicate that storage needs for businesses are growing at a 40% annual rate.   Iowa State University's needs are also growing at a similar, if not higher, rate. Up to this point, ISU's ITS (Information Technology Services) has met campus-wide storage requests primarily with what is commonly referred to as "direct attached" storage architectures where each application/database server has it's own dedicated disk storage. While this model has been cost efficient and manageable up to this point, the rate of increasing storage needs requires that the university move to SAN-based storage services architectures to increase flexibility and availability, responsiveness to current and future needs, and overall support staffing efficiencies (for the overall amount of storage required).

Expected initial use of the system will be focused on providing storage for ISU's course management application, for faculty research storage needs, and for "high availability" requirement applications. Long term, the SAN will be the default storage solution for all ITS supported storage needs.

Any Known Alternatives to the Equipment Proposed

A formal Request for Proposal process incorporating detailed functional specifications has been completed. The RFP was sent to 11 vendors for consideration. Four vendors responded with proposals; MSI System Integrators, Dell/EMC, Open Technologies and Vion. From the four proposals, two finalists were chosen - Dell/EMC and Open Technologies. Dell/EMC has been chosen as the apparent awarded bidder, pending approval by the Board of Regents.

Estimated Cost and Source of Funding

The estimated cost of all items is $1,874,136 to $2,044,080 depending on the final configuration. This includes the following:

Equipment	$1,040,768 – $1,120,225
Software	$366,126 – $456,613
Software Maintenance	$262,492
Services	$204,750

ISU plans to finance the acquisition using funds accumulated in the ITS equipment fund.

Board Policy

Chapter 7.05B(12) of the Regent Policy Manual requires that:

- Equipment costing more than $1,000,000 must be submitted to the Board for approval; and

- Requests submitted to the Board Office for approval must include the following information:

  o Description of the equipment;

  o Justification of the need for the equipment;

  o Any known alternatives to the equipment proposed; and

  o Estimated cost and source of funding.