

1. Assessment Plan - Three Column

PIE - Administrative Services: IT - Security & Infrastructure

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>1. Where We Make an Impact: Closing the Loop on Goals and Resources</i>
<p>IT Infrastructure Improvements - Implement, upgrade, and maintain infrastructure for future growth and support of emerging technologies in an educational environment.</p> <p>Status: Active Goal Year(s): 2019-20 Goal Entered: 05/13/2019</p>	<p>Request - No Funding Requested - Ongoing budget to support the service. Current one time funding was provided in April 2019 to purchase required hardware. Still requires on-going funding. Discussions with the solutions provider from Iron Mountain are required to obtain funding requirements.</p> <p>Describe Plans & Activities Supported (Justification of Need): Streaming backup services will provide greater reliability for data recovery to enhance disaster recovery and data loss, and reduces technical debt for maintenance of backup hardware. The current offsite data storage system requires physical tape library media rotation and management with transportation via courier service. Tape media wears out over time, and the backup appliance requires contractual maintenance that is expensive to maintain.</p> <p>The proposed update will connect to a remote storage appliance with our current service provider to eliminate</p>	

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physical tape requirements and enable instant secure data transfer for backup and recovery operations.

Type of Request: IT SUPPORT: Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: High
On-Going Funding Requested (if applicable): 3304

Request - Full Funding Requested - Funding for phone system upgrades and enhancements. Replace legacy hardware that is over 10 years old that routes phone calls (3 Mitel MXE-III phone controller gateways).

Describe Plans & Activities Supported (Justification of Need): The current phone system converts voice protocols from one type provided by our voice provider, to a different type, then back to the same protocol. The planned upgrade will replace physical hardware with virtualized infrastructure, and simplify the phone system.

Type of Request: IT SUPPORT: Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: High
Request - Full Funding Requested - Funding to license software and

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professional support to upgrade voicemail system (MiCollab).

Describe Plans & Activities Supported (Justification of Need):
 The voicemail system requires an upgrade and migration of data from Mitel's unsupported legacy system to MiCollab. This will allow the campus to receive support and updates in addition to modern voicemail features.

Type of Request: IT SUPPORT:
 Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: High

Request - Full Funding Requested -
 Funding to increase licensing of the CheckPoint security appliances from 8 cores to 16 cores.

Describe Plans & Activities Supported (Justification of Need):
 With the latest internet bandwidth increasing from 2gbps to 10gbps, a firewall upgrade is required. This increased licensing of the CheckPoint security appliances from 8 cores to 16 cores will allow it to process more internet traffic related to the internet bandwidth upgrade. The system with its current 8 cores is 70% utilized on average.

New servers to run the security appliances was purchased May 2019. Licensing increases from 8 CPU cores to 16 CPU cores is still needed, and will be an on-going

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cost.

Type of Request: IT SUPPORT:

Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: Medium

On-Going Funding Requested (if applicable): 80000

Request - Full Funding Requested -

Network infrastructure refresh to replace 10+ year old network infrastructure.

Describe Plans & Activities

Supported (Justification of Need):

Replace all aging HP ProCurve switch infrastructure to refresh network with updated hardware.

Replacement parts for the existing infrastructure is increasingly harder to acquire. The campus network is critical to campus operations, including the phone system, campus alerts, network connectivity, wireless, Luminis, and Banner.

The new hardware will provide greater reliability, and will upgrade the infrastructure to support Power over Ethernet (PoE) technologies. This is currently used for new phones and wireless infrastructure. It is a critical requirement for the AlertUs mass alerting project to power alert beacons for the entire campus.

The quote attached outlines a 75% trade-in of existing hardware, and

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must be ordered in multiples of 10. The total from this list is \$780,675 given the quantities required to receive the discount.

Type of Request: IT SUPPORT: Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: High
One-Time Funding Requested (if applicable): 780675

Request - Full Funding Requested - Enterprise storage refresh for OnBase document management system.

Describe Plans & Activities Supported (Justification of Need): The storage appliance used for production OnBase document management system is over 6 years old. Replacing this system with new hardware will ensure ongoing reliability of the system.

The Infrastructure team will identify a storage solution that fits the operational requirements for this specialized system. One-time and on-going funding needs will be obtained after determining this requirement.

Type of Request: IT SUPPORT: Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: Medium

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Request - Full Funding Requested -

Network Load Balancer system hardware and support

Describe Plans & Activities

Supported (Justification of Need):

The campus Banner and Luminis systems utilize network load balancers to create redundancy and provide extra user capacity. The critical role of the load balancers is to synchronize and make many servers work efficiently as one system that is transparent to the endusers.

The existing A10 load balancers are 8 years old, and reaching end of life for support. The team will evaluate load balancing solutions that best fit system requirements and security needs for Banner and Luminis. One-time and on-going funding will be updated after a solutions is identified by the Infrastructure team.

Type of Request: IT SUPPORT:

Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: Medium

Request - Full Funding Requested -

Aruba WiFi Access Points

Describe Plans & Activities

Supported (Justification of Need):

Replace the remaining 200 legacy HP MSM WiFi access points with Aruba WiFi access points. The campus standardized on Aruba for its WiFi

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refresh implementation, with high user satisfaction compared to the legacy HP MSM WiFi system.

Type of Request: IT SUPPORT:
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Planning Unit Priority: Medium
One-Time Funding Requested (if applicable): 238069
Request - No Funding Requested -
 Project and resource time with Senior Systems Integrator, Systems Administrators, IT Helpdesk, and IT Technicians staff to implement Two-Factor Authentication (2FA).

Describe Plans & Activities Supported (Justification of Need):
 Configure, implement, and test 2FA and Ethos integration to protect sensitive campus resources and data. Implementing this system would bolster the information security capabilities against password attacks and leaked credentials. Implementation of 2FA is listed as best practice in NIST Publication 800-171, CIS Critical Security Controls documentation version 7, and the California Community Colleges Information Security Policies and Procedures documentation.

Implementation would require configuration of 2FA, Ethos service clustering for high availability, and enduser support and training.

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What would success look like and how would you measure it?: All campus users accessing Banner INB, Argos Reports, and other systems containing sensitive data using 2FA.

Type of Request: IT SUPPORT: Requests for projects related to the implementation, integration, application, delivery, and support of information and instructional technologies.

Planning Unit Priority: Medium