

Texas A&M University

Detailed Assessment Report 2010-2011 Computing & Information Services (CIS)

As of: 12/11/2013 04:13 PM EST

(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)

Mission / Purpose

Computing & Information Services provides information technology leadership, expertise, and resources to the Texas A&M University community in support of Texas A&M Information Technology's mission to provide reliable, cost-effective IT services in support of the academic research, administrative, and outreach missions of the university.

Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

O/O 1: Data Center Objective

The Teague and Wehner data centers house servers, mid-range, mainframe, supercomputers, and networking equipment that support several Texas A&M University and Texas A&M System mission-critical applications. The data centers are monitored by CIS Operations Center staff 24 hours a day, 365 days a year. The data centers are classified as Tier-2 under the Telecommunications Industry Association Data Standards Overview (TIA-942). A Tier-2 data center is susceptible to disruption from both planned and unplanned activity due to a single path for power and cooling. According to this standard, outages due to scheduled and unscheduled maintenance must not exceed an annual downtime of 22 hours per year. It is our goal to comply with Tier 2 Data Center standards.

Connected Document

[Assessment TIA 942](#)

Related Measures

M 1: Data Center Measures

All changes in the environment of the Teague and Wehner Data Centers are documented through our Keystone problem tracking system. Annual downtime is calculated from Keystone problem tracking system. Annual downtime is calculated from Keystone entries for the period September 1, 2010 through August 31, 2011.

Source of Evidence: Professional standards

Connected Document

[Assessment TIA 942](#)

Target:

Data Center downtime not to exceed 22 hours annually.

Finding (2010-2011) - Target: Met

The Teague Data Center had 18 hours of scheduled downtime for the chilled water valve replacement. There was 294 days of continuous operations since then. This was a partial outage. The Wehner Data Center had no downtime.

Related Action Plans (by Established cycle, then alpha):

Campus Network Resiliency

Established in Cycle: 2010-2011

Uptime measurements for the data center (Teague was 99.97%, Wehner was 100%), message services (99.98%) and internet connectiv...

For full information, see the *Details of Action Plans* section of this report.

O/O 2: Message Services Objective

The objective of CIS Message Services is to provide a robust and reliable communication and collaboration infrastructure that supports the essential business, teaching, and research functions of the University. The Message Service infrastructure includes email relays, spam and virus filters, proxy servers, LDAP servers, and mail servers. The service objectives of this infrastructure is to maintain at least 99.9% availability during scheduled service periods, and to provide the features and tools necessary to advance the business and teaching mission. Availability is calculated by subtracting the scheduled maintenance minutes from the total clock minutes available, and using the results to calculate actual availability by subtracting unplanned downtime. Calculated amount of allowed unscheduled downtime to achieve 99.9% availability is 43.2 minutes/month. Applicability and usability of features and tools will be evaluated periodically through the use of customer surveys or questionnaires.

Related Measures

M 2: Message Services Availability

Message services are to be measured using internal monitoring systems and Keystone reports of customer accessibility. Actual usage averaged over the complete service complex will be measured and reported for the period between August 1, 2010 and July 31, 2011. Service availability analyses annually will provide data necessary for capacity planning and service expansions. Downtime in excess of 43.2 minutes/month will trigger investigations into prominent causes and solutions required to bring the system back into compliance. Customer surveys/questionnaires will provide the necessary input to determine future features and changing requirements. Customer reports received through CIS's Problem Tracking System (Keystone) will also be collected. This data will be used to plan enhancements and improvements to the service. Nagios is the online tools to track and measure availability for our services. Using the described assessments will provide information essential for the continuous improvement of existing services, and to plan capacity increases as demand for the services grow. Use of customer surveys, questionnaires and information gleaned from CIS's Problem Tracking System will allow stakeholders to be involved in the assessment process. This measurement and assessment plan is feasible and achievable with current resources

and staff at current customer loads. Any substantial growth in the customer base, or additional features, may require additional staffing and financial resources to achieve significant results in a timely manner. Data collection and analyses related to Message Services will be performed by CIS's Infrastructure Systems & Services and CIS's Communications & Marketing teams.

Source of Evidence: Existing data

Target:

Calculated amounts of allowed unscheduled downtime to achieve 99.9% availability is 43.2% minutes/month. This target has been set based on capabilities of the Data Centers in which the services are housed, and established industry best practices for applying system and security patches and maintenance for servers and applications.

Finding (2010-2011) - Target: Met

Reports from Nagios showed we had an availability of 99.98% for message services for the period of 9/1/2010 through 8/31/2011.

Related Action Plans (by Established cycle, then alpha):

Message Services

Established in Cycle: 2009-2010

Findings indicated there was insufficient server redundancy exists due to all service components being housed in a single Tier-2...

For full information, see the *Details of Action Plans* section of this report.

O/O 3: Internet Access

Most critical information technology services depend upon network availability. A key aspect of network availability is access to and from the internet via the campus network backbone, which includes redundant connectivity to the Teague and Wehner data centers. Due to dependency by other services, internet access will maintain 99.999% availability on an annual basis.

Related Measures

M 3: Internet Availability

Internet availability is measured by polling campus backbone device status, user reported incidents, and periodic low level communication attempts to off campus locations. Data including network configuration and test results are kept on internal NIS server. Availability will be reported based on actual data for the period of September 1, 2010 through August 31, 2011.

Source of Evidence: Existing data

Target:

99.999% uptime which is 5.25 minutes downtime.

Finding (2010-2011) - Target: Partially Met

Downtime was 18 minutes for the period of 9/1/2010 through 8/31/2011. This equates to 99.997% uptime.

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Message Services

Findings indicated there was insufficient server redundancy exists due to all service components being housed in a single Tier-2 Data Center rated for 99.7% availability, which limits the achievable target for message services. Adding redundancy in the service architecture by replicating key operational components to a geographically disparate location will make a target of 99.9% attainable. Additional servers, storage and network components are required to initiate this action plan.

Established in Cycle: 2009-2010

Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Message Services Availability | **Outcome/Objective:** Message Services Objective

Implementation Description: Action plans were implemented as data was incoming.

Responsible Person/Group: Cheryl Cato - Infrastructure Systems and Services

Campus Network Resiliency

Uptime measurements for the data center (Teague was 99.97%, Wehner was 100%), message services (99.98%) and internet connectivity (99.997%) exceeded or partially met CIS goals. However, the TechQual+ survey indicated that CIS customer's perceptions of the services were not as good as the actual numbers. Customers do not care why they cannot compute. Any failure (power, electronics, cut lines, insufficient access points, etc.) between the customer and CIS entry points can disrupt service. The plan is to increase the overall campus network resiliency. It is a long-term project that will provide incremental progress as funding permits. Matching grant opportunities have been available to modify CIS' preferred order of implementation. The following description comes from the Strategic Plan for Texas A&M Information Technology, 2011-2015: "Campus Network Resiliency: In the face of infrastructure failures (e.g., loss of power, cooling, electronics, or fiber cuts), the campus computer network must be resilient to meet user mission-critical devices. If a building has power, the network should be operational. Improving network resiliency will require generators at key network hubs and dual fiber optic connections to each major building. Also, complete coverage of campus buildings with the next generation of Wi-Fi (802.11n) will be needed, and WiMAX (802.16d) will be added to support outdoor campus and community needs".

Established in Cycle: 2010-2011

Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Data Center Measures | **Outcome/Objective:** Data Center Objective

Implementation Description: See above

2010-2011 Educational Broadcast Services

As of: 12/11/2013 04:13 PM EST

(Includes those Action Plans with Budget Amounts marked **One-Time, Recurring, No Request**.)

Mission / Purpose

Educational Broadcast Services operates the Trans Texas Videoconference Network (TTVN), which is the Wide Area data Network (WAN) for the Texas A&M University System. The mission of TTVN is to provide premiere wide area network communications and a related portfolio of shared services to the Texas A&M System and affiliated organizations.

TTVN's mission relates to TAMU Vision 2020 Imperative 7 (Increase Access to Knowledge Resources). In particular, it relates to the precept "Lead in Information Technology". The TTVN Network is the fundamental architecture on which virtually all of the university computing communications technologies are transmitted to the outside world. The speed and reliability of this network is critical for TAMU to develop and maintain a leadership role in Information Technology.

Goals

G 1: Network Backbone Reliability of 100%

Operate a wide area data network backbone that provides 100% reliability to TAMU and TAMUS campuses connected to the backbone.

G 2: Provide Monthly Reliability Measure to Telecommunication Council

Provide an accurate tool to track the monthly reliability of the TTVN backbone and present this data to the TAMUS Telecommunications Council.

G 3: BTOP Grant Fiber to System Campuses

Deploy BTOP grant fiber to system campuses to enable a minimum of 1 Gbps bandwidth capacity to each.

Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

O/O 1: Network Architecture with 99.999% uptime

Strive for a minimum of 99.999% annual uptime (reliability); reported as the percent of time in a month that the network was up. This is a best practice benchmark for commercial internet services providers.

Relevant Associations:

Institutional Priority Associations

5 Enhance course delivery via technology-mediated instruction.

Strategic Plan Associations

Texas A&M University

- 6 Diversify and globalize the A&M community.
- 7 Increase access to intellectual resources.
- 9 Build community and metropolitan connections.
- 11 Attain resource parity with the best public universities.

Related Measures

M 1: Backbone Reliability Reports

Track each second of down time on the backbone and summarize in a monthly report. Keep a cumulative chart of the percent of uptime each month. This is a benchmarking or best practice used by commercial ISP providers.

Source of Evidence: Benchmarking

Target:

99.999% uptime of TTVN Backbone over 1 year.

Finding (2010-2011) - Target: Not Met

TTVN was unable to achieve the 99.999% goal this year, although the actual uptime of 99.9845 still only resulted in less than 57 minutes of downtime spread across three separate months. 9 months met the 99.999% goal. All outages could have been avoided if human error by staff working in the POPS had not occurred. In the future, TTVN will encourage even greater collaboration among partners and attempt to insure all involved profit by the mistakes made.

Connected Document

[TTVN Backbone Reliability FY 2011](#)

Related Action Plans (by Established cycle, then alpha):

Monthly Reliability Reports

Established in Cycle: 2008-2009

To track network reliability, monthly reports will be presented to the TAMUS Telecommunications Council. The reports will show ...

For full information, see the *Details of Action Plans* section of this report.

O/O 2: Reliability Measurement tool for tracking and presentation of backbone uptime

Use the existing network measurement tool to present backbone uptime to the TAMUS Telecommunications Council. Update / refine as needed.

Relevant Associations:

Institutional Priority Associations

5 Enhance course delivery via technology-mediated instruction.

Strategic Plan Associations

Texas A&M University

- 6 Diversify and globalize the A&M community.
- 7 Increase access to intellectual resources.
- 9 Build community and metropolitan connections.
- 11 Attain resource parity with the best public universities.

Related Measures

M 2: Reliability Graphs posted to TTVN website

The tool will be used to track monthly uptime percentages of the backbone. Output will be a bar chart for each month of the fiscal year showing percent of uptime for each month and an annualized uptime for the year. Each graph will be posted within the "Council Status Report Presentation" under the Reports/Metrics section of the TTVN web site.

Source of Evidence: Document Analysis

Target:

12 graphs of reliability statistics presented to the TTVN Telecommunications Council and documented by posting to the TTVN website.

Finding (2010-2011) - Target: Met

The 12 graphs of reliability statistics were presented to the TTVN Telecommunications Council and documented by posting to the TTVN website <http://ttvn.tamus.edu/Index.php?p=Reports>.

Related Action Plans (by Established cycle, then alpha):

Monthly Reliability Reports

Established in Cycle: 2008-2009

To track network reliability, monthly reports will be presented to the TAMUS Telecommunications Council. The reports will show ...

For full information, see the *Details of Action Plans* section of this report.

O/O 3: Forty percent of the campuses at 1 gig

Connect at least 40 percent of the campuses at 1 gig

Relevant Associations:

Institutional Priority Associations

5 Enhance course delivery via technology-mediated instruction.

Strategic Plan Associations

Texas A&M University

6 Diversify and globalize the A&M community.

7 Increase access to intellectual resources.

9 Build community and metropolitan connections.

11 Attain resource parity with the best public universities.

Related Measures

M 3: TEXASpipes Website Progress Report

Use the Texaspipes.tamu.edu website as a measure of completion. Information from the BTOP project is posted monthly on this site. The site documents a number of factors about the project, including the institutions connected. The website is located at <http://texaspipes.tamu.edu>.

Source of Evidence: Document Analysis

Target:

Connect 40% of campuses during FY11

Finding (2010-2011) - Target: Partially Met

EBS was unable to meet this goal as originally stated. The grant award was made in August of 2010, but the environmental assessment requirements took well into the spring semester. Legal activities with the subrecipients also took longer than anticipated and are still incomplete for all but one partner. As of August 31, only the Riverside campus was connected.

Related Action Plans (by Established cycle, then alpha):

BTOP Grant Construction

Established in Cycle: 2010-2011

Construction of BTOP fiber to system campuses. BTOP award was made in August, 2010

For full information, see the *Details of Action Plans* section of this report.

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Monthly Reliability Reports

To track network reliability, monthly reports will be presented to the TAMUS Telecommunications Council. The reports will show the percent of uptime for the TTVN backbone.

Established in Cycle: 2008-2009

Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Backbone Reliability Reports | **Outcome/Objective:** Network Architecture with 99.999% uptime

Measure: Reliability Graphs posted to TTVN website | **Outcome/Objective:** Reliability Measurement tool for tracking and presentation of backbone uptime

Implementation Description: Implementation of this action plan involves EBS staff in the following manner. TTVN engineering senior management must work on a continuing basis with fiber providers such as LEARN, AT&T, TLSN, etc. to insure fiber maintenance is done within maintenance windows. Next, EBS staff must actually monitor uptime on all backbone circuits, and report this uptime monthly utilizing the tool staff has developed and continues to refine.

Projected Completion Date: 08/2012

Responsible Person/Group: Wayne Pecena

BTOP Grant Construction

Construction of BTOP fiber to system campuses. BTOP award was made in August, 2010

Established in Cycle: 2010-2011

Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: TEXASpipes Website Progress Report | **Outcome/Objective:** Forty percent of the campuses at 1 gig

Implementation Description: Expend grant funds to construct fiber to system campuses. Contract this work with fiber vendors. TTVN staff will provide connectivity via the fiber as it is completed. TAMU Telecom will manage construction and requisition of equipment. TTVN will act as financial management and Project Director. One new engineering staff member at Telecom has been hired through grant resources (80% grant, 20% Telecom)

Projected Completion Date: 07/2013

Responsible Person/Group: TTVN, (Rodney Zent, PI) Telecom (Walt Magnusson, Project Manager)

Analysis Questions and Analysis Answers

For Student Learning Outcomes: Based on the assessment findings, what changes will be made to enhance student learning?

EBS is not an academic department so this section is not applicable.

For Program Outcomes: What changes will be made to the program as a result of your assessment of other program outcomes?

The TELCO industry standard for circuit reliability is 99.999% uptime. In order to do this it takes redundant circuits, redundant equipment, and highly qualified staff. TTVN attempts to reach this same standard. The network is highly redundant, but depends on a collaborative relationship among a number of network partners for operation. TTVN was unable to achieve the 99.999% goal this year, although the actual uptime of 99.9845 still only resulted in less than 57 minutes of downtime spread across three separate months. Nine months met the 99.999% goal. All outages could have been avoided if human error by staff working in the POPS had not occurred. In the future, TTVN will encourage even greater collaboration among partners and attempt to insure all involved profit by the mistakes made.

Annual Report Section Responses**Program Contributions**

EBS contributed significantly to the university 2020 imperative "Lead in Information Technology" in FY 2000-2011 by providing 99.99845 percent uptime of backbone service to the member TAMUS institutions. While disappointed we were unable to reach our target goal of 99.999% the level we did reach resulted in only 56.72 minutes of interruptions on the backbone over an entire year. We will strive for 99.999% in FY12. Reliable and robust network connectivity allows faculty to teach, to research, and provide public service in a reliable and efficient manner.

**Detailed Assessment Report
2010-2011 Enterprise Information Services**

As of: 12/11/2013 04:13 PM EST

(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request*.)

Mission / Purpose

The Enterprise Information Systems (EIS) department is responsible for the mission-critical, enterprise-wide information systems at Texas A and M University. The team manages the Compass system for the university's three campuses in College Station, Galveston, and Qatar. The university purchased the system, a software product called Banner, from SunGard Higher Education. To improve reporting capabilities, the EIS project team is also responsible for maintaining the SunGard Higher Education Operational Data Store (ODS). Additionally, the project team maintains a web portal that serves as the "front door" for Compass end-users. Compass and Howdy provide access to mission-critical information to faculty, advisors, staff and students in support of Vision 2020 imperatives 1, 2, 3, 6, and 7. Argos provides a mechanism for departments to create customized reports to evaluate their programs. The Enrollment Management tool is designed to assist in recruitment and tracking of contacts with potential students, also in support of Vision 2020.

Goals**G 1: Meet the needs of the campus community and make Compass and Howdy easier to use.**

Achieving the goals listed below will contribute to the attainment of Vision 2020 Imperatives 1, 2, 3, 6, & 7. Compass and Howdy are used by the campus community including faculty, staff, and students for a wide range of functions. Continuing to enhance Compass and Howdy to serve the needs to the campus is a top priority for EIS. 1. Ensure EIS has sufficient staff and other resources to complete work requirements as quickly as possible. 2. Work closely with functional departments and the broader campus community to ensure that all needs are identified and met.

G 2: Support the reporting needs of the campus community.

Achieving the goals listed below will contribute to the attainment of Vision 2020 Imperatives 1, 2, 3 & 7, which will be enhanced by enabling the colleges and academic units to analyze data related to their academic programs. The colleges and other departments will have direct access to Compass data. Previously, all data requests required an EIS programmer's effort.

Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

O/O 1: Meeting campus community needs within Compass and Howdy.

1. Ensure EIS has sufficient staff and other resources to complete work requirements as quickly as possible by working under the guidance of the EIS Steering and Executive committees and the Vice President and Associate Provost for Information Technology. 2. Work closely with functional departments and the broader campus community to ensure that all needs are identified and met. This is accomplished through the Compass Advisor User Group Committee, electronic newsletters and Primary Authorizing Agent (PAA) meetings. These groups allow us to communicate with stakeholders to discover and discuss the needs.

Relevant Associations:

Vision 2020 Imperatives 1, 2, 3, 6, & 7

Institutional Priority Associations

- 6 Provide high-quality advising for all students.

Related Measures

M 1: Quantitative aspects of this issue.

(1) Total number of Compass Work Requests received to date (Aug. 2010 - July. 2011): XXX (2) Total number of work requests completed or no longer pending (Aug. 2010 - July. 2011): XXX

Source of Evidence: Activity volume

Target:

EIS will complete 70% of Compass Work Requests received to meet the needs of the campus community making Compass and Howdy easier to use.

Finding (2010-2011) - Target: Met

EIS has completed 84.29% of requests for data feeds, reports and improvements to functionality received through July 2011. Of 643 requests received, 542 have been completed or are no longer pending.

Related Action Plans (by Established cycle, then alpha):

Reporting Pilot Program

Established in Cycle: 2009-2010

The Compass Reporting Pilot Program will be continued this fall with twenty additional people beginning the training and evaluat...

Compass and Howdy Enhancements

Established in Cycle: 2010-2011

EIS will continue to complete Compass Work Requests to provide data to meet campus reporting needs. We will continue to insure ...

For full information, see the *Details of Action Plans* section of this report.

O/O 2: Meeting the reporting needs of the campus community.

1. Create a reporting database and the associated technical infrastructure needed to support campus-wide reporting. 2. Complete the Compass Reporting Pilot Program and expand access to the campus community through additional classes and open access labs in which previous attendees can obtain help to create queries.

Relevant Associations:

Vision 2020 Imperatives 1, 2, 3 & 7

Strategic Plan Associations

Texas A&M University

11 Attain resource parity with the best public universities.

12 Meet our commitment to Texas.

Related Measures

M 2: Quantitative aspects of this issue.

(1) Total number of Argos Reporting Training Sessions offered Aug. 2010 - July 2011: XXX (2) Total number of Argos Reporting Training attendees: XXX (3) Total number of open lab sessions for prior Argos Reporting Training attendees (Aug. 2010 - July 2011): XXX Additional Argos Reporting Training sessions will be offered in each semester. Open lab sessions will be offered to allow additional support in developing departmental reports.

Source of Evidence: Activity volume

Target:

(1) Two additional Argos Reporting Training classes will be held for faculty and staff members. (2) Open Lab sessions for past course attendees will be offered to provide assistance on creating reports.

Finding (2010-2011) - Target: Met

(1) Argos Reporting Training classes for 18 faculty and staff members was conducted in Fall 2010. (2) A full-day Argos Reporting Training session was held for 5 Galveston employees in Fall 2010. (3) Argos Reporting Training classes for 14 faculty and staff members was held in Spring 2011. (4) Additional Argos Reporting Training classes are being scheduled for Fall 2011. (5) Open Lab sessions for past course attendees are offered the second Friday of each month to provide assistance on creating reports.

Related Action Plans (by Established cycle, then alpha):

Compass Reporting Program

Established in Cycle: 2010-2011

The Compass Reporting Program will be continued this fall with additional classes.

For full information, see the *Details of Action Plans* section of this report.

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Reporting Pilot Program

The Compass Reporting Pilot Program will be continued this fall with twenty additional people beginning the training and evaluation process.

Established in Cycle: 2009-2010

Implementation Status: Finished

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Quantitative aspects of this issue. | **Outcome/Objective:** Meeting campus community needs within Compass and Howdy.

Projected Completion Date: 08/2011

Responsible Person/Group: Ramesh Kannappan

Compass and Howdy Enhancements

EIS will continue to complete Compass Work Requests to provide data to meet campus reporting needs. We will continue to insure that there is sufficient staff to support the needs and have been approved to purchase additional SunGard consulting for technical support.

Established in Cycle: 2010-2011

Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Quantitative aspects of this issue. | **Outcome/Objective:** Meeting campus community needs within Compass and Howdy.

Projected Completion Date: 08/2012

Responsible Person/Group: Ramesh Kannappan

Compass Reporting Program

The Compass Reporting Program will be continued this fall with additional classes.

Established in Cycle: 2010-2011

Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Quantitative aspects of this issue. | **Outcome/Objective:** Meeting the reporting needs of the campus community.

Projected Completion Date: 08/2012

Responsible Person/Group: Ramesh Kannappan

Detailed Assessment Report 2010-2011 Instructional & Media Services

As of: 12/11/2013 04:13 PM EST

(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)

Mission / Purpose

Instructional Media Services (IMS) strives to enhance the classroom teaching experience for the faculty and students through the use of multimedia equipment in the Registrar Controlled Classrooms at TAMU. Our role is to provide consistency throughout classrooms at TAMU so that the faculty and students can feel comfortable with the technology provided. In order to fulfill this task, IMS installs computers and multimedia equipment, as well as maintains, develops, programs, and refines the equipment and systems under their control.

Goals

G 1: QUALITY OF SERVICE

1. Provide the standard multimedia presentation equipment that is well maintained and in working order, for the Registrar controlled classrooms placed under IMS control.
2. Provide software support in IMS controlled classrooms identical to what is in the student computing labs within CIS.
3. Ensure the least amount of down time due to equipment malfunctions or software patches.
4. Provide fast and efficient technical service to the faculty at all times.

Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

O/O 1: Minimal Equipment Downtime

IMS seeks to maintain and upgrade the classrooms under their control. This minimizes time lost to aging equipment or parts.

Related Measures

M 1: Equipment Usage

In the spring of 2011, we queried the instructors on the actual usage of equipment in the spring of 2011.

Source of Evidence: Service Quality

Target:

Provide an accurate representation of equipment usage.

Finding (2010-2011) - Target: Met

The computer and data projector was used by 98% of the faculty. The usage of the DVD player was 22.6%. The overhead (transparency) projector was used by 35.4% of the faculty; however, 41.7% stated that they

would try the document cameras instead. The Smart Sympodium had a usage rate of 39.8% and 48% agreed to attend training classes.

Related Action Plans (by Established cycle, then alpha):

Continue to hold training sessions on classrooms that have new installs.

Established in Cycle: 2010-2011

IMS holds training sessions for faculty in any new install. On the first day of classes, we follow up with one-on-one training ...

For full information, see the *Details of Action Plans* section of this report.

M 2: Software Usage

Query instructors of record in IMS supported classrooms for the 2011 spring term as to the actual usage of the software in the classrooms under IMS control. Measure software down time due to malfunctions or software patches.

Source of Evidence: Administrative measure - other

Target:

Provide an accurate representation of software usage.

Finding (2010-2011) - Target: Met

Software usage has increased since last year. The software and the percentage of the users are as follows: MS PowerPoint 85.70%; Adobe Reader 44.60%; and Smart Notebook 8.6%. In the area of Real Players the usages results were as follows: MS Media Player 26.9%; RealPlayer Media Player 14.90%; and VLC Player 11.4%. One issue that seems to appear when new software is installed is that the Smart pen tools have to be originated. The usage of the Classroom Performance System (Clickers) continues to decline due to malfunctions in the product. The university is considering a new system for the classrooms. IMS will be making a presentation on Camtasia Relay at the next Instructional Technology Services (ITS) conference in October. Camtasia Relay is the lecture capture software provided by TAMU.

Related Action Plans (by Established cycle, then alpha):

Continue to hold training sessions on classrooms that have new installs.

Established in Cycle: 2010-2011

IMS holds training sessions for faculty in any new install. On the first day of classes, we follow up with one-on-one training ...

For full information, see the *Details of Action Plans* section of this report.

M 3: Downtime

We charted equipment usage and the time lost due to malfunctions.

Source of Evidence: Administrative measure - other

Connected Document

[2011 Install Report](#)

Target:

Satisfactory response on downtime based on survey results

Finding (2010-2011) - Target: Met

IMS is showing steady improvement in their maintenance program; the length of the downtime is at a steady decrease. This Fiscal Year 30.20% of the faculty experienced no downtime. Instructional Technology Service partnered with IMS (summer of 2011) and will train instructors on the same equipment that IMS provides. This was a phenomenal year for IMS in regards to upgrading classrooms and Open Access labs. Equipment was installed in 37 classrooms and 10 labs.

M 4: Customer Service

IMS asked the faculty to rate the services of each Media Center (Blocker, Harrington, and the West Campus Media). The rating was on a scale of one to ten, in which ten was the highest rating.

Source of Evidence: Administrative measure - other

Connected Document

[2011 IMS Survey](#)

Target:

Satisfactory approval rating of each Media Center

Finding (2010-2011) - Target: Met

The overall approval rating continues to be an 8 for all three centers within IMS.

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Continue to hold training sessions on classrooms that have new installs.

IMS holds training sessions for faculty in any new install. On the first day of classes, we follow up with one-on-one training with the faculty, as requested.

Established in Cycle: 2010-2011

Implementation Status: In-Progress

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Equipment Usage | **Outcome/Objective:** Minimal Equipment Downtime

Measure: Software Usage | **Outcome/Objective:** Minimal Equipment Downtime

Implementation Description: Once a classroom is complete, IMS offers training for that department, as requested.

Responsible Person/Group: Full time employees and student technicians.

Mission / Purpose

Instructional Technology Services, as a department of the Office of the Vice President and Associate Provost for Information Technology, provides professional development opportunities, administers eLearning resources, and empowers instructors to use best practice in higher education to enhance student learning through the use of technology at Texas A&M University.

Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

O/O 1: Provide high quality training.

Ensure the scope of training provided satisfactorily meet constituent needs.

Strategic Plan Associations

Texas A&M University

- 1 Elevate our faculty in their teaching, research and scholarship.
- 2 Strengthen our graduate programs.
- 3 Enhance the Undergraduate Academic Experience.

Related Measures

M 1: Constituent Survey

Workshop participants, conference attendees, and those submitting help tickets will be surveyed.

Source of Evidence: Client satisfaction survey (student, faculty)

Target:

93% or more of ITS customers, who respond to the satisfaction survey, will rate their level of satisfaction with training events as satisfied or better.

Finding (2010-2011) - Target: Not Reported This Cycle

Survey was not assessed this cycle.

Related Action Plans (by Established cycle, then alpha):

Improve efforts to obtain customer feedback

Established in Cycle: 2008-2009

Due to the low number of completed surveys, methods for obtaining feedback will be expanded to include workshop participants, th...

Offer professional development opportunities

Established in Cycle: 2009-2010

Based on survey feedback, some individuals have difficulty attending workshops due to scheduling conflicts and/or location. To ...

Successfully Deploy Surveys Using Service Desk Software

Established in Cycle: 2010-2011

Resolve technical difficulties that prevented the deployment of the Numara Footprints survey feature.

For full information, see the *Details of Action Plans* section of this report.

O/O 2: Provide technical support which meets constituent needs.

Satisfactorily resolve requests for assistance with technical problems related to eLearning within a reasonable timeframe. Ensure the scope of training provided satisfactorily meet constituent needs.

Strategic Plan Associations

Texas A&M University

- 1 Elevate our faculty in their teaching, research and scholarship.
- 2 Strengthen our graduate programs.
- 3 Enhance the Undergraduate Academic Experience.

Related Measures

M 1: Constituent Survey

Workshop participants, conference attendees, and those submitting help tickets will be surveyed.

Source of Evidence: Client satisfaction survey (student, faculty)

Target:

93% or more of ITS customers, who respond to the satisfaction survey, will rate their level of satisfaction with support services as satisfied or better.

Finding (2010-2011) - Target: Not Reported This Cycle

Survey not assessed this cycle.

Related Action Plans (by Established cycle, then alpha):

Improve efforts to obtain customer feedback

Established in Cycle: 2008-2009

Due to the low number of completed surveys, methods for obtaining feedback will be expanded to include workshop participants, th...

Successfully Deploy Surveys Using Service Desk Software

Established in Cycle: 2010-2011

Resolve technical difficulties that prevented the deployment of the Numara Footprints survey feature.

For full information, see the *Details of Action Plans* section of this report.

O/O 3: Provide reliable systems and services

Ensure that systems which serve the university as a whole, such as eLearning, wikis@tamu.edu, and blogs@tamu.edu, have minimal downtime.

Strategic Plan Associations

Texas A&M University

- 1 Elevate our faculty in their teaching, research and scholarship.
- 2 Strengthen our graduate programs.
- 3 Enhance the Undergraduate Academic Experience.

Related Measures

M 2: Track system uptime.

System logs will serve as sources for determining system availability and downtime.

Source of Evidence: Benchmarking

Target:

To provide the 97% uptime and access of the course management system (currently Bb VISTA) and supporting applications as provided by ITS.

Connected Document

[System Uptime 2010-2011](#)

Finding (2010-2011) - Target: Met

System uptime was 99.49% for the 2010-2011 cycle. Supporting documentation has been uploaded.

Connected Document

[System Uptime 2010-2011](#)

Related Action Plans (by Established cycle, then alpha):

Develop a plan to track not only percent availability but also average response time.

Established in Cycle: 2008-2009

Continue to track availability data for eLearning. Add availability tracking for other systems like wiki, self service module a...

For full information, see the *Details of Action Plans* section of this report.

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Develop a plan to track not only percent availability but also average response time.

Continue to track availability data for eLearning. Add availability tracking for other systems like wiki, self service module and web sites. Utilize Co-radiant data to establish reasonable average response time for eLearning and track average response time over time.

Established in Cycle: 2008-2009

Implementation Status: In-Progress

Priority: Medium

Relationships (Measure | Outcome/Objective):

Measure: Track system uptime. | Outcome/Objective: Provide reliable systems and services

Implementation Description: Spring 2011. Plan to add tracking for other systems.

Projected Completion Date: 09/2011

Responsible Person/Group: ITS Systems administration and development group

Improve efforts to obtain customer feedback

Due to the low number of completed surveys, methods for obtaining feedback will be expanded to include workshop participants, those submitting support tickets, and event participants. ITS has purchased a customer relations management application to assist in this effort.

Established in Cycle: 2008-2009

Implementation Status: In-Progress

Priority: Medium

Relationships (Measure | Outcome/Objective):

Measure: Constituent Survey | Outcome/Objective: Provide high quality training.
| Provide technical support which meets constituent needs.

Implementation Description: Spring Semester 2011. Plan to go live. ITS Help

Projected Completion Date: 03/2011

Responsible Person/Group: Faculty Support Team

Offer professional development opportunities

Based on survey feedback, some individuals have difficulty attending workshops due to scheduling conflicts and/or location. To address this issue we would like to offer professional development opportunities that are not time and place bound.

Established in Cycle: 2009-2010

Implementation Status: Planned

Priority: Medium

Relationships (Measure | Outcome/Objective):

Measure: Constituent Survey | Outcome/Objective: Provide high quality training.

Implementation Description: We will begin offering online workshops and webinars that do not require participants to travel to a specified location and can attend according to their own schedule.

Projected Completion Date: 05/2011

Responsible Person/Group: ITS support team.

Resolve technical difficulties that prevented the deployment of the Numara Footprints survey feature.

Established in Cycle: 2010-2011

Implementation Status: Planned

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Constituent Survey | **Outcome/Objective:** Provide high quality training.
| Provide technical support which meets constituent needs.

Implementation Description: 1. Resolve technical issues with email integration and survey tool 2. Develop procedures for frequency of survey administration and results reporting 3. Select survey questions 4. Turn on survey tool

Projected Completion Date: 10/2011

Responsible Person/Group: Joshua Kissee, Ranil Gunesakara

Detailed Assessment Report

2010-2011 Telcommunications

As of: 12/11/2013 04:13 PM EST

(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)

Mission / Purpose

Provide customer-focused, fast, reliable, and cost-effective telecommunications services to the students, faculty, researchers, and staff of Texas A&M University and The Texas A&M University System. Additionally, Telecommunications will help Texas A&M in becoming a leader both nationally and globally in the development, implementation and innovation of telecommunications technology.

Other Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

O/O 1: Customer Satisfaction

Achieve a rating of "satisfied" or above on at least 80% of the customer satisfaction survey responses received.

Related Measures

M 1: Measuring customer satisfaction

Customer satisfaction will be evaluated and measured through the use of Qualtrics. A link to a survey will be sent via email to customers who submit work orders once the work order has been closed.

Source of Evidence: Service Quality

Target:

Target is 80%

Finding (2010-2011) - Target: Met

Telephony Services Each question rated by: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree, N/A 1. If I had questions regarding entering the order, I was able to get the questions answered quickly and clearly. 2. Submitting the work order was easy. 3. A work order reference number was provided to me in a timely manner. 4. If a technician was dispatched, I was satisfied with the over-all quality of service received. 5. The documentation made available to me (via web, email, paper) was accurate and useful. 6. The work order was completed accurately and in a timely manner. 7. My over-all experience with this order was acceptable. 8. Text field for comments. Cellular Services Each question rated by: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree, N/A 1. If I had questions regarding entering the order, I was able to get the questions answered quickly and clearly. 2. Submitting the work order was easy. 3. A work order reference number was provided to me in a timely manner. 4. The documentation made available to me (via web, email, paper) was accurate and useful. 5. The work order was completed accurately and in a timely manner. 6. My over-all experience with this order was acceptable. 7. Text field for comments. Other Services Each question rated by: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree, N/A 1. Each question rated by: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree, N/A 2. If I had questions regarding entering the order, I was able to get the questions answered quickly and clearly. 3. Submitting the work order was easy. 4. A work order reference number was provided to me in a timely manner. 5. If a technician was dispatched, I was satisfied with the over-all quality of service received. 6. The documentation made available to me (via web, email, paper) was accurate and useful. 7. The work order was completed accurately and in a timely manner. 8. My over-all experience with this order was acceptable. 9. Text field for comments. Results tabulated and available at http://telecom.tamu.edu/Reports/Customer_Service_Surveys/index.php

Related Action Plans (by Established cycle, then alpha):

Telecommunications Plan of Action

Established in Cycle: 2009-2010

Of the three assessment items that we had selected, we have immediate actions on two of the three. The first item is the custome...

For full information, see the *Details of Action Plans* section of this report.

O/O 2: Cost Effective Telecommunication Services

We will compare our services costs to institutions of comparable size and stature with the goal to be in the lower 25%. .

Related Measures

M 2: Benchmarking - Cost Effective Telecommunications Services

a Questionnaire concerning the cost of VoIP, Centrex, and PBX services will be circulated to 15 Tier 1 institutions. Our cost will then be compared to the responding institutions to gauge where we stand in our offerings. We will however, take into consideration the location of the institution and the organizational make up of the institution during

the comparison.

Source of Evidence: Benchmarking

Target:

Be able to make the comparison between our University and the other Tier 1 Universities. To be in the lower 25% comparing costs to other institutions of comparable size and stature.

Finding (2010-2011) - Target: Partially Met

Due to a lack of responsiveness to the survey by many university institutions we reached out to ACUTA for assistance. An ACUTA university member has contracted WTC consultants to perform a benchmark survey for ACUTA members. We will participate in the survey and use the results of that survey to meet the achievement target.

Related Action Plans (by Established cycle, then alpha):

Telecommunications Plan of Action

Established in Cycle: 2009-2010

Of the three assessment items that we had selected, we have immediate actions on two of the three. The first item is the custom...

For full information, see the *Details of Action Plans* section of this report.

O/O 3: Availability of Key Services

Key services (Verizon Central Office, VoIP server, Matrix card access, voice mail, PBX, long distance trunks) will be available 99.9% during the calendar year.

Related Measures

M 3: Availability of Key Services

Telecommunications will be implementing these monitoring guidelines at the end of October to be continued indefinitely. The intent is to ensure the availability of key services. Measurement Critical – catastrophic failure of entire system Major – A significant subsystem is not available but the majority of users are only slightly impacted Minor – An outage impacting 50 to 200 users Central Office – The TAMU Central Office is a Lucent 5ESS installed in 1997 and maintained by Verizon. It currently supports about 22,000 lines Critical – Complete loss of Central Office Major – A remote module being shut down or disconnected from the network that supports a significant portion of campus Minor – a cable cut involving one or two buildings TAMU VoIP system – The TAMU VoIP system is an Aastra Clearspan system installed in 2009. Currently there are a limited number of users but the plan is to grow use by about 3,000 users per year. This platform is a distributed architecture with major nodes geographically located in two hardened buildings on campus Critical – Loss of both switching nodes or loss of one node with failover provisions not functioning properly. Major – Loss of one of the two nodes with failover operating properly for the majority of the users Minor – Loss of one or two buildings. Matrix Keyless Entry System - This is the back office system for the keyless entry systems on campus. At this time we have a little over 1,000 doors on campus but it is one of our fastest growing services. It is a distributed system with the individual door units able to operate in a standalone manner in the event of a network failure. Critical - None of the card access door systems on campus are able to function. Major - Loss of functionality of 30 or more doors Minor - Loss of functionality of one building. Campus Voice Mail System - The TAMU Voice Mail system is a Broadsoft VoIP server that supports Voice mail for the campus Centrex and VoIP customers. It currently supports about 8,000 users. Critical - Loss of Voice Mail System Major - Voice Mail receives new voice mail but cannot be accessed for retrieval or message waiting link is not functioning. This can also be a complete loss of either the Centrex or the VoIP connections but not both. Minor – features such as unified messaging not functioning for the entire system 800 MHz Radio System - This is the main campus radio system that currently supports all law enforcement and operational units on campus. It is an 800 MHz Motorola Digital Trunked radio system with approximately 1500 subscribers on it. Critical - System non functional to any radios Major - System operating in a fail-safe mode Minor – System operating with less than half of repeaters operating 700 MHz P25 Radio System - This will be the main law enforcement radio system with its commissioning in January of 2010. It is a 700 MHz Motorola P25 Digital Trunked radio system and will have approximately 400 subscribers on it. It was funded through a \$2.8 million FEMA grant to provide radio interoperability with the City of Bryan, the City of College Station, the City of Brenham, Brazos County, Washington County and the greater Houston area. Critical - System non functional to any radios, including network backup from other repeaters on the network Major - System operating in a fail-safe mode, operating on other network repeaters or loss of all TAMU consoles. Minor – System operating with less than half of repeaters operating or loss of one TAMU console.

Source of Evidence: Service Quality

Target:

Key telecommunication services, (Centrex, VoIP, keyless access, voice mail, PBX, and long distance trunks) will be available at least 99.9% during the calendar year.

Finding (2010-2011) - Target: Met

Findings 2010-2011: Implementation for major systems have been completed. All systems are being monitored for critical and major events. We have seen 100% uptime on these services. We are in process of implementing monitoring for minor events as well. Uptime measurement of Broadsoft has commenced. All major Broadsoft VoIP components are being tracked including Application Servers, Network Servers, Media Servers, Unified Messaging Servers, Provisioning Servers, and Telephony Gateways. Call volumes across the Telephony Gateways are also being measured. In the coming year we look to include measurement of up time on the PoE switches, DC backup power plants as well as individual call quality. We will also be incorporating uptime measurements for the keyless access system.

O/O 4: Modernization of installed services

As technology evolves replacement cycles of old, non-supported, and legacy solutions is essential to cost effective services. We will be making a transition from legacy equipment and services to state of the art technologies that can more efficiently meet customer's needs.

Related Measures

M 4: Comparing status and rate of transition from Centrex telephone service to VoIP.

Using data gathered from our telemanagement system we will publish historical and current quantities of Centrex numbers versus VoIP numbers.

Source of Evidence: Activity volume

Target:

Our goal is to transition from the 90% of the total lines being Centrex down to 10% in 8 years' time.

Finding (2010-2011) - Target: Partially Met

We are publishing monthly reports on the quantities of Centrex versus VoIP numbers. The reports can be found at http://telecom.tamu.edu/Reports/Phone_Line_Metrics.php.

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Telecommunications Plan of Action

Of the three assessment items that we had selected, we have immediate actions on two of the three. The first item is the customer satisfaction surveys. Last year we grouped all of our services into three types: Telephone, Cellular, and Other Services. We are tracking responses for customer satisfaction improvement. While we will continue to seek improvement in the areas of Telephone Services and Other Services, we will focus our process engineering efforts on the Cellular Services. The Second Assessment area was the completion of a Benchmark Study. The study was to include other Universities, small, medium and large. While we attempted to complete the study, we were not able to do so due to a lack of response from enough other campuses to make the study valid. Our Action Item in this area is to redesign the instrument and resubmit it. This instrument is still under re-design in 2010 and is scheduled to be resubmitted by March 1, 2011. The last area of measurement will be that of uptime of critical services. Measurement hardware and software were procured in 2009, however data collection and measurement have not started due to system interfacing and workload issues. Basic functionality, including measurement of Broadsoft Voice over IP (VoIP) uptime, instrument registration failures, and call volumes across interfaces are scheduled to commence by 31 December 2010.

Established in Cycle: 2009-2010

Implementation Status: Finished

Priority: High

Relationships (Measure | Outcome/Objective):

Measure: Benchmarking - Cost Effective Telecommunications Services | **Outcome/Objective:** Cost Effective Telecommunication Services

Measure: Measuring customer satisfaction | **Outcome/Objective:** Customer Satisfaction

Implementation Description: The target date for full implementation primarily applies to uptime of critical services and the benchmark survey as the customer satisfaction survey is already implemented and working as intended in its existing form.

Projected Completion Date: 02/2011

Responsible Person/Group: The staff of Telecommunications are responsible for the Action Plan.

Additional Resources: Additional measurement tools are needed in order to measure uptime of critical services.

Plan of Action 2010-2011

Plan of Action With the three existing objectives there is continuing work to improve and expand on the work already started. The first area of measurement is the customer satisfaction surveys. We have previously grouped our services into three types: Telephone, Cellular, and Other Services. We are tracking responses for customer satisfaction improvement. While we will continue to seek improvement in all areas. We will be evaluating the survey questions this year to determine of changes are needed to better reflect customer opinion. The second area of measurement was the completion of a Benchmark Study. While we attempted to complete the study, we did not receive enough responses to make the study valid. We reached out to ACUTA for assistance: An ACUTA university member has contracted WTC consultants to perform a benchmark survey for ACUTA members. We will participate in the survey and use the results of that survey to meet the achievement target. This year (2011) in the third area of measurement will be implementing monitoring of more event metrics in the University telecommunications system. We look to expand measurement of up time on the PoE (power over Ethernet) switches, DC backup power plants, and individual call quality. We will also be incorporating uptime measurements for the keyless access system. This year we have added an additional area of measurement. This area is reporting the ratio of legacy technologies deployed to new updated technologies offered. We are collecting and publishing the raw numbers on the conversion from Centrex to VoIP on the Telecom Web site (http://telecom.tamu.edu/Reports/Phone_Line_Metrics.php).

Established in Cycle: 2010-2011

Implementation Status: Planned

Priority: High