

2005-2006 :: CaTS

1. Mission Statement:

The mission of the Communications and Technical Services (CaTS) is to provide highly available, flexible, and end-user enabling data, voice, and server systems administration services for The University of Texas at Dallas in support of student/faculty teaching and learning activity, university staff, and the institution's strategic missions in advancing outstanding education and research programs.

2. Objectives:

2.1 Increase internet/Internet-2 performance : The University's Wide Area Network connectivity needs to maintain sufficient capacity to stay ahead of bandwidth demand. FY06 began with 100Mbps interfaces which have become a bottleneck on latency-sensitive applications, such as H.323 videoconferencing.

2.1.1 Related Strategic Plan Item(s):

I-1 Research Enterprise Initiative; II-2 Living-Learning Communities; V-2 Enhanced Quality of Life; VI-1 K-16 Education; VI-4 Community Outreach

2.1.2 Related Institutional Priority Item(s):

SP-2 Add 5,000 New Students; SP-4 Tell UTD's Story Better; COM-2 Protect Enrollment Gains, Access and Student Quality as part of moving toward Tier One Status; COM-3 Sustain Progress toward Tier One Status in terms of programs, research and faculty quality

2.1.3 Standards and Associations: Lonestar Education and Research Network organization, Educause.

2.2 Improve online courseware experience:

Feature set expansion, stability, and integration of UTD's WebCT course management system is called for to enhance the experience.

2.2.1 Related Strategic Plan Item(s):

II-2 Living-Learning Communities; VI-1 K-16 Education; VI-5 University Village

2.2.2 Related Institutional Priority Item(s):

COM-1 Reallocate Existing Resources to Preserve Quality in Teaching and Research Programs; COM-2 Protect Enrollment Gains, Access and Student Quality as part of moving toward Tier One Status; COM-3 Sustain Progress toward Tier One Status in terms of programs, research and faculty quality; COM-4 Enhance research, graduate education and technology-driven economic development

2.2.3 Standards and Associations: Educause

2.3 Improve enterprise portal experience:

The University has maintained a Campus Pipeline web portal for services for several years but it has not proven to be reliable or full-serviced. The SCT Luminis platform will be implemented to enhance this service and provide a common gateway for customer services.

2.3.1 Related Strategic Plan Item(s): VI-1 K-16 Education; VI-4 Community Outreach; VI-5 University Village

2.3.2 Related Institutional Priority Item(s):

COM-1 Reallocate Existing Resources to Preserve Quality in Teaching and Research Programs; COM-2 Protect Enrollment Gains, Access and Student Quality as part of moving toward Tier One Status; COM-3 Sustain Progress toward Tier One Status in terms of programs, research and faculty quality; COM-4 Enhance research, graduate education and technology-driven economic development

2.3.3 Standards and Associations: Educause

3. Measures & Findings:

3.1 Traffic monitoring – new h/w works:

Traffic monitoring – new hardware removes previous limitations on bandwidth consumption.

3.1.1 Success Criteria: Burst levels exceed 100Mbps

3.1.2 Related Objective(s): Increase internet/Internet-2 performance

3.1.3 Results Related To Success Criteria:

Bursts exceeded 100Mbps after upgrading router and firewall interfaces – bottleneck removed 14May 2006

3.1.4 Achievement Level: Met

3.1.5 Further Action: Yes

3.2 H.323 videoconferencing : H.323 videoconferencing experience is stable and consistent.

3.2.1 Success Criteria: Smooth video and audio

3.2.2 Related Objective(s): Increase internet/Internet-2 performance

3.2.3 Results Related To Success Criteria:

2006Q3 still shows jerky video – meeting with OTS to review options for improvement.

3.2.4 Achievement Level: Partially Met

3.2.5 Further Action: Yes

3.3 Traffic Monitoring - errors and loss: Ongoing traffic monitoring to ensure continuity and low error/loss rates.

3.3.1 Success Criteria: 1% or less traffic errors or packet loss.

3.3.2 Related Objective(s): Increase internet/Internet-2 performance

3.3.3 Results Related To Success Criteria: Error rates are substantially below the 1% target.

3.3.4 Achievement Level: Met

3.3.5 Further Action: Yes

3.4 Review of WebCT training log: Review of WebCT training log

3.4.1 Success Criteria: 20 or more students and faculty sign up for Web CTv6 training.

3.4.2 Related Objective(s): Improve online courseware experience

3.4.3 Results Related To Success Criteria:

Training session filled (45 participants) with a 2nd session required to accommodate demand.

3.4.4 Achievement Level: Met

3.4.5 Further Action: Yes

3.5 WebCTv6 administrator report: WebCTv6 administrator reporting allows us to determine efficacy of new CMS.

3.5.1 Success Criteria: 50% online courses switch to WebCT6 from v4 by Sept2006

3.5.2 Related Objective(s): Improve online courseware experience

3.5.3 Results Related To Success Criteria: pending

3.5.4 Achievement Level: Partially Met

3.5.5 Further Action: Yes

3.6 WebCT6 downtime log: WebCT6 downtime log measures the availability of the CMS.

3.6.1 Success Criteria: Less than 4hrs/semester based on quarterly reviews.

3.6.2 Related Objective(s): Improve online courseware experience

3.6.3 Results Related To Success Criteria: 2006 summer semester – down 6 hours for maintenance and server relocation

3.6.4 Achievement Level: Not Met

3.6.5 Further Action: Yes

3.7 Luminis delivery report: Luminis delivery report describes installation success on replacement service.

3.7.1 Success Criteria: Service started on schedule, Aug2006.

3.7.2 Related Objective(s): Improve enterprise portal experience

3.7.3 Results Related To Success Criteria: Luminis went live on schedule, 7Aug2006 under “Galaxy” brand.

3.7.4 Achievement Level: Met

3.7.5 Further Action: Yes

3.8 Luminis stability monitoring report:

Luminis stability monitoring report details the availability of this mission critical service.

3.8.1 Success Criteria: less than 4hrs unscheduled downtime/semester

3.8.2 Related Objective(s): Improve enterprise portal experience

3.8.3 Results Related To Success Criteria: Pending

3.8.4 Achievement Level: Partially Met

3.8.5 Further Action: Yes

3.9 Luminis customer satisfaction survey:

Luminis customer satisfaction survey characterizes the overall delivery success of the service.

3.9.1 Success Criteria: 75% or more respondents satisfied in annual survey (March timeframe)

3.9.2 Related Objective(s): Improve enterprise portal experience

3.9.3 Results Related To Success Criteria:

Initial results on service turn-up are positive, will see after Fall Semester

3.9.4 Achievement Level: Partially Met

3.9.5 Further Action: Yes

5. Closing the Loop:

5.1 Review stats: Statistics reviewed in weekly network meetings.

5.1.1 Related Objective(s): Increase internet/Internet-2 performance

5.1.2 Related Measure(s): Traffic Monitoring - errors and loss

5.1.3 Responsible Person: Network Services Manager

5.1.4 Target Date: Wednesdays.

5.1.5 Priority: Low Priority

5.2 Quarterly stats review for H.323:

Statistics reviewed in quarterly network meetings together with other observations of videoconferencing behaviors.

5.2.1 Related Objective(s): Increase internet/Internet-2 performance

5.2.2 Related Measure(s): H.323 videoconferencing

5.2.3 Responsible Person: Network Services Manager

5.2.4 Target Date: Quarterly, 1st Tuesday of each quarter.

5.2.5 Priority: Low Priority

5.3 WebCT6 training.: Additional training classes being setup for subsequent semesters.

5.3.1 Related Objective(s): Improve online courseware experience

5.3.2 Related Measure(s): Review of WebCT training log

5.3.3 Responsible Person: WebCT support(Mary Dziorny)

5.3.4 Target Date: January 2007

5.3.5 Priority: Medium Priority

5.4 WebCT maintenance window.:

Instituted maintenance window to schedule downtime, minimize disruptive/unplanned events.

5.4.1 Related Objective(s): Improve online courseware experience

5.4.2 Related Measure(s): WebCT6 downtime log

5.4.3 Responsible Person: Aaron Simpson, UNIX group

5.4.4 Target Date: Aug 2006

5.4.5 Priority: High Priority

5.5 Monitor utilization:

Routine periodic monitoring of internet activity to examine no bottlenecks exist, either from hardware or service provider limitations.

5.5.1 Related Objective(s): Increase internet/Internet-2 performance

5.5.2 Related Measure(s): Traffic monitoring – new h/w works

5.5.3 Responsible Person: Network Services Manager

5.5.4 Target Date: Monthly, first Wed. of each month.

5.5.5 Priority: Low Priority

5.6 Monitor utilization of WebCT CMS:

Routine periodic monitoring of the utilization of WebCT to assess 1) hardware performance and 2) features used.

5.6.1 Related Objective(s): Improve online courseware experience

5.6.2 Related Measure(s): WebCTv6 administrator report

5.6.3 Responsible Person: Aaron Simpson, UNIX group.

5.6.4 Target Date: Quarterly review, 1st week each quarter

5.6.5 Priority: Low Priority

5.7 Confirm delivery of Luminis portal:

Report on success in achieving Galaxy/Luminis design goals in initial implementation.

5.7.1 Related Objective(s): Improve enterprise portal experience

5.7.2 Related Measure(s): Luminis delivery report

5.7.3 Responsible Person: Cary Delmark, Manager of Web Services

5.7.4 Target Date: 15 January 2007

5.7.5 Priority: Low Priority

5.8 Luminis/Galaxy stability reporting:

Routine periodic monitoring to maintain the stability and availability of this service.

5.8.1 Related Objective(s): Improve enterprise portal experience

5.8.2 Related Measure(s): Luminis stability monitoring report

5.8.3 Responsible Person: Brian McElroy, UNIX services

5.8.4 Target Date: Monthly, 2nd Wed. each month

5.8.5 Priority: Medium Priority

5.9 Luminis/Galaxy satisfaction survey: Annual user survey to determine utility of the enterprise portal.

5.9.1 Related Objective(s): Improve enterprise portal experience

5.9.2 Related Measure(s): Luminis customer satisfaction survey

5.9.3 Responsible Person: Cary Delmark, Manager Web Services

5.9.4 Target Date: Annual, last week of April

5.9.5 Priority: Medium Priority

6. Analysis:

6.1 Program/Unit Strengths:

6.1.1 Objectives/Outcomes Exceeded or Met:

Larger scale issues of service dependability and performance were successfully addressed.

6.2 Program / Unit Weaknesses:

6.2.1 Objectives / Outcomes Partially or Not Met: Ongoing service support issues require more active monitoring and reporting.

7. Report:

7.1 Executive Summary:

CaTS brought substantial upgrades to the main Course Management System (WebCT) and portal (replacing Campus Pipeline with Luminis/Galaxy). The network was upgraded to allow high bandwidth applications and support internet-based collaborative efforts.

7.2 Top 3 Program/Unit Accomplishments: There are three major highlights for CaTS in 2005-2006:

- 1) Upgrade of WebCT
- 2) Luminis installation
- 3) Upgrade of network edge to 1Gbps

7.3 Research Activities or Publications: No direct involvement with research.

7.4 Instructional/Training Activities (presented or received): No direct involvement with teaching.

7.5 Public Service:

Shared 802.1X networking expertise with sister institution, participated in Collin County Emergency Communications Committee, continued active role in architecting North Texas GigaPOP and LEARN regional

networking collectives supporting Research and Education networking.

7.6 Other External Activities: No international activities.

7.7 Contributions to UTD:

The Communications and Technical Services (CaTS) directorate continued fulfilling our mandate of providing operations of various mission-critical services (web, email, core computing services) with acceptable rates of availability and performance. Particular enhancements providing direct customer service included upgrading WebCT to the latest version on new hardware and installation of the Luminis campus portal. The campus network received a substantial upgrade at the edge to allow higher bandwidth and alleviate congestion.

7.8 Top 3 Program / Unit Challenges:

Capital funding for establishing substantial test environments and refreshing server hardware is needed.