Information Technology Services (ITS)
Annual Assessment Report, 2002-2003
Annual Assessment Plan, 2003-2004

Focus of Assessment Plan

Information Technology Services (ITS) is responsible for academic computing, administrative computing, networking, and multimedia services. We serve the entire college – from staff in their offices, to faculty in classrooms, to cadets in the barracks. Most college departments obtain all of their computing-related services from ITS

Our enterprise administrative information systems are 15 years old, and they are mature, full-featured, exceptionally reliable, and heavily used. Some have recently gained a web interface.

Our campus network is fast and also exceptionally reliable.

Our computer labs are well equipped, our computing support staff is knowledgeable and helpful, and our users are generally satisfied with the services they receive. (One exception: cadets are not satisfied with the performance of printers in the barracks computer labs.)

There are, however, two important areas to which we need to allocate more resources. The first is academic multimedia services, where we need to provide more multimedia classrooms as well as additional faculty support services.

The second area is the development of a comprehensive, integrated cadet information system for the Commandant's Office and the Corps of Cadets. We have implemented one module of this system, and we will implement a second this fall. We intend to develop two new modules a year until the system is complete.

Given that most ITS services are mature, reliable, and generally well regarded, this and future assessment plans and reports will focus primarily on areas where we need to develop new resources and services.

Departmental Mission Statement

The mission of Information Technology Services is to provide computing, networking, and multimedia resources and services to all Citadel students, faculty, and staff.

Expected Results for 2002-2003

1. Internet response time – Average display time for Internet web pages should be 3 seconds or less during weekday academic hours (8 am to 10 pm). Internet response time complaints from students, faculty, and staff should be minimal.

2. Multimedia classrooms – Increase the number of classrooms with ceiling mounted projectors and multimedia lecterns from 16 to 36.

Assessment Tools

1. Internet response time – Observation of web page display time by ITS staff. Monitoring of student, faculty, and staff Internet response time complaints by ITS staff.

We realize these two measures are inexact. However, they are practical and useful – and measuring web page display time and user satisfaction with Internet response time more exactly would have consumed far more resources than solving the problem did.

2. Multimedia classrooms – Count number of multimedia classrooms available for use on the first day of fall 2003 classes.

Actual Results for 2002-2003

1. Internet response time – Average web page display time was satisfactory throughout the fall semester of 2002, and ITS received few complaints related to Internet response time. However, as the spring semester of 2003 progressed, average web page display time rose to as high as 10 seconds, and ITS received an increasing number of complaints about slow Internet response time during weekday academic hours.

In early April we upgraded our Packeteer 2500 Internet traffic management system to a Packeteer 6500 system. Average web page display time immediately dropped to a non-noticeable level, and we received virtually no more complaints about Internet response time.

2. Multimedia classrooms – When Citadel classes begin in late August of 2003, at least 36 multimedia classrooms will be available for faculty and student use.

Analysis of Actual Results and Recommendations

1. Internet response time – The Citadel has a 10 megabit Internet connection, which is enough to meet its academic needs (email, web page displays, remote database queries). But we don't have enough bandwidth to accommodate students' use of Internet peer-to-peer and other file transfer applications. No affordable amount of bandwidth would be enough, as student demand would simply increase when Internet response time momentarily decreased!

In the fall of 2000 we saw that recreational file transfer traffic was overwhelming academic traffic, especially remote library database queries. So we purchased a Packeteer 2500 traffic management system that allowed us to limit recreational traffic from 8 am to 10 pm on class days.

This worked well through the fall of 2002, but by the spring of 2003 the amount and variety of Internet traffic was too much for the Packeteer 2500 to handle, and Internet response time slowed significantly. ITS's network manager solved this problem by upgrading the 2500 to a Packeteer 6500, which can accommodate many more connections and protocols. Response time became a non-issue almost immediately.

As a result of this experience, ITS will monitor Internet response time more closely throughout the 2003-04 school year. If we find that the Packeeter 6500 is becoming a bottleneck, we will quickly upgrade it to a Packeteer 8500. We already have the funds we need to do this, so no additional funding is necessary.

2. Multimedia classrooms – The Citadel's greatest and most basic technology need is to increase the number of multimedia classrooms and auditoriums available for class use. We have lots of faculty who want to use multimedia in their courses, but not enough suitably equipped classrooms in which they can teach.

To help solve this widely recognized problem, ITS applied for a $500,000 technology grant in early 2003. This grant was funded, and we have used these funds to develop 20 new multimedia classrooms that are ready for use by Citadel faculty and students this fall.

We believe that multimedia will eventually be used in most college courses, and our long-term goal is to install ceiling-mounted projectors and multimedia lecterns in almost all college classrooms. We plan to use grant funds and ITS funds to create 20 additional multimedia classrooms in 2003-04.

Goals and Objectives for 2003-2004

1. Multimedia classrooms – Increase the number of classrooms with ceiling mounted projectors and multimedia lecterns from 36 to 56.

2. Class absence system for cadets – Develop and implement a web-based class absence reporting system that provides cadets and tactical officers same-day information about cadets who have not attended class or who have been late to class.

Cadets and tactical officers currently receive class absence information on the Tuesday or Wednesday following the week in which the absences were recorded.

3. Barracks computer labs and printers – Reduce the number of negative comments about barracks computer labs and printers in spring 2004 Citadel Experience Survey from 30 to 20.

The barracks computer labs are the only ITS facilities we've received complaints about. We will install new equipment in these labs and try to improve printer maintenance and trouble-shooting by ITS cadet assistants.