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CITC Portfolio & Project Management Update

By Andy Novak, EPM Project Manager and Manager, CITC Project Management Office (PMO)

The Computing and Information Technology Center (CITC) is in the midst of deploying an Enterprise Portfolio and Project Management System which will help provide greater transparency/operational visibility, enhanced team communication/collaboration, and more consistent delivery to our customers at UNT.

Read more

The ACUS/Adaptive Technology Lab Moves to ISB 104

By Dr. Elizabeth Hinkle-Turner, Assistant Director - Academic Computing and User Services

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Read more

Planned Outage to the myUNT portal and EIS Learning Solutions for Software Upgrade

By Cathy Gonzalez, EIS Training, Communication, and Administration Manager, CITC

Some portions of EIS, the university's Enterprise Information System, are being upgraded to an enhanced version of software.

By the Numbers

Primary Data Centers:

GAB 560

7,100 sq ft
Staffed 24 hrs/day X 365 days/yr

614 servers

231 TB storage

Discovery Park E268

1,675 sq ft

"Lights out" (no staffing)

189 servers

199 TB storage

Read more BOOKMARK

Campus Subscription to Higher Education Newsletters

By Jane Himmel, Associate Director, CLEAR

Faculty will be pleased to learn that the University of North Texas has negotiated a group online subscription allowing campus members free access to the *Online Classroom* & *The Teaching Professor* higher education newsletters produced by Magna Publications.

Read more BOOKMARK

Thanksgiving Hours

By Claudia Lynch, *Benchmarks Online* Editor

Turkey Day is just around the corner; hard to believe!

Read more BOOKMARK

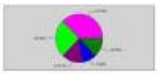
Skype Should Rule the World!

By Dr. Elizabeth Hinkle-Turner, Assistant Director - Academic Computing and User Services

Well, at least in my humble opinion it should!

Read more BOOKMARK

What We Do All Day (In Case You Were Wondering)



By Allen Bradley, Computer Systems Manager, AIS Business & Process Management

The CITC is always looking for ways to improve our efficiency and increase the quality of service we provide to our users. To that end, we implemented Microsoft Project and are now reaping big rewards.

Read more BOOKMARK

Why do we share...?

By DaMiri Young, HPC Systems Administrator

The topic of efficient resource sharing has been and continues to be hotly debated amongst computer scientists, system programmers, and system administrators. However, before diving in, let's consider why we even share at all?

Read more BOOKMARK

Today's Cartoon

Click on the link above for an information age laugh.

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Campus Computing News

CITC Portfolio & Project Management Update

By Andy Novak, EPM Project Manager and Manager, CITC Project Management Office (PMO)

The Computing and Information Technology Center (CITC) is in the midst of deploying an Enterprise Portfolio and Project Management System which will help provide greater transparency/operational visibility, enhanced team communication/collaboration, and more consistent delivery to our customers at UNT. This more formal approach to managing IT projects is in compliance with Texas Administrative Code (TAC), chapter 216.

The CITC has selected Microsoft's Enterprise Project Management (EPM) solution, consisting of Portfolio Server for managing the list of projects to be justified, prioritized, and selected from ("excellence in selection"), and Project Server (used in conjunction with MS Project 2007 desktop client software) for scheduling and implementing individual projects as carefully as possible once selected ("excellence in execution").

Both products use a central repository and provide a web component for collaborating with customers as well as colleagues. Although we have continued to be "enterprise-wide aware" as the software configuration has been underway, at this time there are no specific plans to roll out the EPM software beyond the scope of delivering CITC projects at UNT.

Portfolio Management -- Defined

Portfolio Server will provide a mechanism for introducing the concept of (Project) Portfolio Management to UNT. Portfolio Management is similar to managing a financial portfolio – weighing the cost of investments (project proposals) against capacity, reward, and risk so that the final selection of investments (projects) for execution provide the greatest business value and contribution to the strategic goals of the investor (UNT).

More specifically, it is about having a way to manage the intake of customer requests, pre-defining an objective process for the review and approval of project proposals, and continually monitoring the "mix" of both proposed and in-progress projects to assess which ones are on track, which ones need intervention, and which ones are no longer viable investments or are candidates for cancellation.

A formal Portfolio Management process will ensure that IT projects match the strategic goals and objectives of UNT and executives have a clear view of what they are approving and why. Other anticipated benefits are improved communication and alignment between leaders in CITC and the business units we serve, more efficient scheduling of resources, a reduction in the number of redundant projects, and a "safety valve" to prevent an attempt to take on more projects than there is the capacity to deliver.

Project Management Rollout Status

Over a year ago, we began the process of formally educating the CITC staff and rolling out the Project Server portion of EPM for managing individual projects and tracking operational activities. A vast majority of the staff has gone through the training process and rollout is well underway across all CITC Divisions. Several Divisions are actively utilizing the product for on-going project planning, execution, and collaboration (e.g., UNT-Dallas Administrative Systems Implementation project). As part of the rollout, a centralized mechanism has been established for addressing custom reporting needs.

"I am very pleased with the progress of the rollout and the tremendous effort of the PMO. There has been widespread cooperation and engagement in this critical project." says Charlotte Russell, Director of CITC Administration and

Compliance.

Dr. Maurice Leatherbury, Acting Vice President for Information Technology and Chief Information Officer, states "I am extremely pleased with the progress that the Project Management Office within CITC has made on implementing our project management software and processes. We're essentially using Project in all areas of the CITC now to plan, monitor, and report on the many projects that the CITC undertakes for the campus. I'm particularly excited by the reporting that the system provides me, since I can now tell how much of our efforts go into enhancing systems as opposed to just maintaining them."

Portfolio Management Rollout Status

During the summer and early fall of this calendar year, an initial pilot was administered for the deployment of the Portfolio Server portion of EPM. System configuration has been solidified based on Senior Management feedback and training sessions for "early adopter" teams within CITC is currently in progress. Internal testing within CITC will commence in early December, followed by an introduction to external customers for use concerning CITC projects by the end of FY10 (specific timeline TBD). Part of the rollout will include a "Project Idea" form for submitting project requests.

"Portfolio management acts as an umbrella for the project infrastructure. It will provide more insight into the health, status, priority, and justification for implementing projects. This service will be very beneficial." says Charlotte Russell, Director of CITC Administration and Compliance.

According to Dr. Maurice Leatherbury, Acting Vice President for Information Technology and Chief Information Officer, "The portfolio system will provide some much-needed rigor in the way that the CITC defines and selects projects on which to put our efforts to benefit UNT. It also provides visibility into the many demands on our services from our users for new or enhanced software and hardware systems and documents for the campus which projects our users think are worth our tackling."

Questions concerning this article may be directed to Andy Novak, EPM Project Manager and Manager, CITC PMO, by email at andy.novak@unt.edu or by phone at 940-369-7143. You can visit the PMO's home on the web at http://pmo.unt.edu

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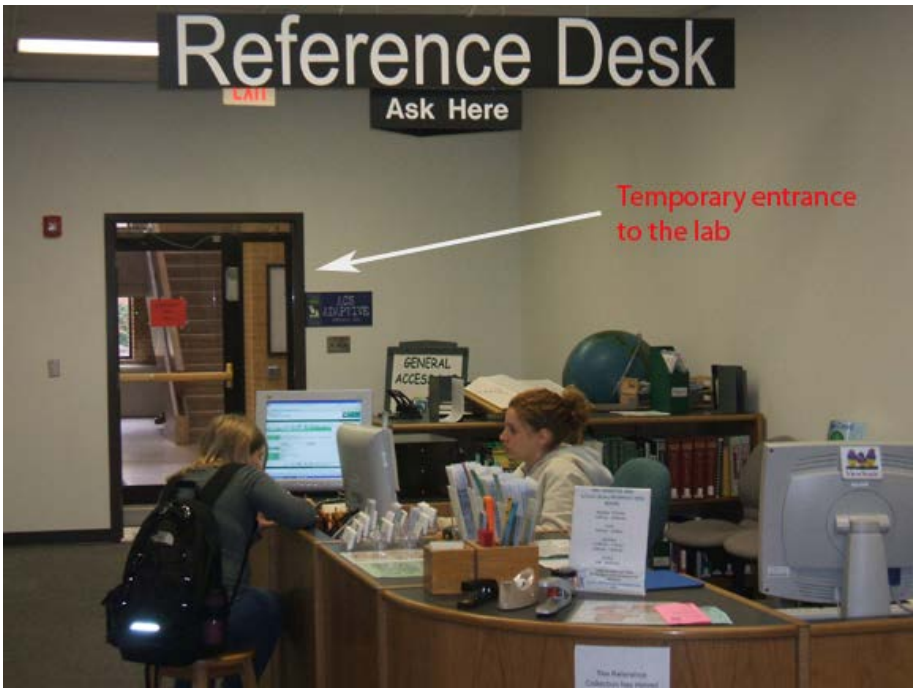
The ACUS/Adaptive Technology Lab Moves to ISB 104

By Dr. Elizabeth Hinkle-Turner, Assistant Director - Academic Computing and User Services

The ACUS/Adaptive Technology General Access Computer Lab has completed its move from ISB 110 to ISB 104. Now located in the front of the Science and Technology Library, the lab will allow greater access for persons with disabilities. Currently, students still need to enter the lab through the SciTech Library (this temporary entrance is pictured below) but in a few weeks, students will be accessing the lab through the wide automatic doors at the side of the ISB. This will be a big improvement for persons with disabilities who had issues navigating through the library.



Students will need to temporarily enter the lab through the library

The new lab space is much more efficient in its layout and features the new iMacs purchased this summer for the facility. These machines can boot into either the Window or Mac OS. The lab also features two rooms with adjustable lights and noise levels to assist persons with a variety of issues including dyslexia and sight issues.

The new lab uses space more effectively and comfortably

Next month's *Benchmarks Online* will feature more extensive coverage of the new lab, its new entrance, and other features. But for right now, everyone should take note of the new location and poke your head in the door and check it out!

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Planned Outage to the myUNT portal and EIS Learning Solutions for Software Upgrade

By Cathy Gonzalez, EIS Training, Communication, and Administration Manager, CITC

Some portions of EIS, the university's Enterprise Information System, are being upgraded to an enhanced version of software. The upgrade allows the university to stay current with federal regulatory updates and takes advantage of new features and software improvements delivered by Oracle PeopleSoft.

Beginning at **5:00 p.m. on Friday, November 20th**, the myUNT portal (my.unt.edu) and the EIS Learning Solutions (myls.unt.edu) websites will be unavailable until Monday, November 23rd.

Some business processes that students, faculty and staff access through EIS will be out of service during this upgrade period:

- myls.unt.edu provides administrative functions in support of human resources, payroll, advancement and student administration.
- The myUNT portal provides self-service capabilities for faculty and staff (human resources access, academic advising, grading, etc.) and for students (financial aid, registration, grades, payments, etc.)

Services independent of myUNT, such as UNT eCampus, EagleConnect, EIS Financials (myfs.unt.edu), www.unt.edu, and Outlook webmail are not effected by the outage and will continue to be in service.

The early shutdown of the EIS and myUNT services is required to complete the lengthy upgrade tasks and restore services by the following Monday. Many employees in the Computing and Information Technology Center (CITC) as well as Academic Affairs, the Graduate School, Finance and Administration, and Advancement both at UNT and the Health Science Center in Fort Worth, will be working throughout the weekend to complete the upgrade.

Don Butler, CITC Student Services Assistant Director and Upgrade Project Manager, says “While the upgrade project team realizes the shutdown of these services during normal business hours is less than desirable, we are hopeful that advanced notification and planning will help minimize the impact on operations. The university community’s understanding and flexibility is greatly appreciated by CITC and the project team.”

For more information regarding the upgrade project, you may contact Cathy Gonzalez via email, cathy.gonzalez@unt.edu .

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Network Connection

By Dr. Philip Baczewski, Director of Academic Computing and User Services

Are You Older than the Internet?

This year the Internet turns 40. A lot of other things are 40 too, including UNIX, CCD (digital camera) technology, men landing on the moon, the Boeing 747, The Brady Bunch, Walmart, and Heavy Metal. How do I know? I looked it up on the Internet.

My grandfather was born before the Wright brothers flew at Kitty Hawk and lived to see men land on the moon. I was born before the invention of the Internet and wonder what the next 20 years will bring. While the early space program and Apollo missions have yielded much technology from which we've all undoubtedly benefitted, unless you are still drinking Tang every morning, it's likely that the Internet has a greater impact on your life.

1969 - The Year Everything Changed*

You might say that the Internet was born on October 29, 1969, when the first message was sent using the nascent Internet technology. The first communication was to be a login command sent from a computer at UCLA to one at the Stanford Research Institute (auxiliary to the University), however, because of a system crash, the message never go past the "O", and "lo", the Internet was born. Or, you might say that the Internet was born when the first permanent connection between Interface Message Processors (early routers) at UCLA and SRI. Either way it was still a 1969 birth. By December of that year the first four sites on the network were connected.

In retrospect, the idea of a network of computers was a pretty innovative one for the time. In science fiction, Isaac Asimov had already posited the idea that someday there would only be one large and supremely authoritative computer named Multivac. However, these days a rereading of Asimov makes Multivac a bit reminiscent of Wikipedia or Google, so maybe Asimov was actually ahead of his time in concept, but just got the tech wrong.

The most innovative communication technology in 1969 was the IBM Selectric typewriter, which was introduced in 1961. If you're older than the Internet, you are probably thinking, "yeah, those were cool." If you're younger than the Internet, you're probably thinking, "what's a typewriter?" Suffice to say that a typewriter was something that you could use to produce the equivalent of e-mail on sheets of paper, as if you'd ever want to do that.

In 1969, the prime example of a computer was the IBM 360 series, or what became known as "The Mainframe." If you are older than the Internet, you are probably thinking, "I remember when I had to use the mainframe." If you are younger than the Internet, you are probably thinking, "IBM made computers?"

In 1969, the Bell system would provide you with a rotary dial phone, the most sophisticated method of electronic communication. If you are older than the Internet, you are thinking "twick-twick-twick-twick." If you are younger than the Internet, you are thinking, "were those mobile?" (Only one.)

Happy Birthday!

So, happy birthday Internet. Someday, it may take its place alongside fire, moveable type, steam engines, airplanes, and space flight as a technology which changed the entire human experience. If you are older than the Internet, it may be sobering to realize that the average college freshman this year is not even older than the World Wide Web. If you are younger than the Internet, this candle's just been lit, so enjoy the ride.

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* Video montage

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UNTHealth.org
The Physician Group of the UNT Health Science Center

We're all aware that flu season is upon us and we are encouraged to be vigilant about our health. The UNT Health Science Center website is a great place to visit for up-to-date information about all sorts of health issues, including H1N1. Clink on the link below and see for yourself:

http://www.unthealth.org/health_information.aspx?x=2

If you feel like you might be coming down with the flu, take this handy "Flu Self Assesment" from Midwestern State University Vinson Health Center before heading to the doctor's office or clinic. If you are a student at the UNT Denton Campus, you can click here to make an appointment at the University of North Texas Student Health and Wellness Center.

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Helpdesk FYI

By Jonathan "Mac" Edwards, Assistant Manager of the CITC Helpdesk

Connecting to EagleConnect using Thunderbird

Mozilla's Thunderbird mail client will use the default mail settings for connecting to EagleConnect. To Set up your Thunderbird account use the following steps:

Account Settings Wizard

1. Open Thunderbird and choose Tools> Account Settings.
2. In the Account Settings Window Choose **Add Account**.
3. The **Account Wizard** window will open. Choose **Email account** and click Next.
4. **Your Name:** Type in your name.
5. **Email Addres:** Type in your EagleConnect Email address. Click Next.
6. Under Server Information choose **IMAP**. **Incoming Server**: outlook.com. Click Next.
7. Under User Names, **Incoming User Name:** Your EagleConnect username (generally firstlast@my.unt.edu, which is the same as your email address).
8. **Outgoing Server name:** pod51000.outlook.com. Click Next.
9. Under Account Name, **Account Name:** Name the account as you wish to see it displayed in Thunderbird. Click Next.
10. Verify that your settings are correct, and click Finish.

Additional Settings

1. You should now be back at the Account Settings window. Choose the **Server Settings** option.

- **Server Name:** Outlook.com
- **Username:** EagleConnect Login name (generally firstlast@my.unt.edu).
- **Security Settings:** SSL. This should reset **Port** to 993. If it does not automatically update please change your **Port** to 993.

1. Choose the **Outgoing Server (SMTP)** option. You should see your Account listed; make sure it is selected, and click **Edit**.

- **Description**: Choose a name to help you identify this Outgoing Server, ex. EagleConnect.
- **Server Name:** pod51000.outlook.com.
- **Port:** 587, make sure this does not change after updating connection type.
- **Check** User name and password.
- **User Name:** your EagleConnect Login name (generally firstlast@my.unt.edu).
- **Use secure connection:** Choose TLS, if available. Click OK.
- Doublecheck your settings, and click OK.

Checking Account:

1. Click **Get Mail** to verify that you are able to retrieve your messages.
2. Send a test email to verify that your outgoing settings are correct.

Using Eaglenet?

If you are using the Eaglenet wireless network be sure to sign in before attempting to retrieve or send messages. To sign into Eaglenet open your internet browser and sign into the EagleNet login page.

Connecting to your Work Account

You can use the same basic instructions for connecting Thunderbird to your staff email account.

Incoming

- **Incoming Server:** webmail.unt.edu
- **Username:** unt/euid

Outgoing

- **Outgoing Server:** mailhost.unt.edu
- **Username:** EUID

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IRC News

Minutes provided by Susan Richroath Recording Secretary*

The IRC -- unofficially now known as the INFORMATION TECHNOLOGY COUNCIL (ITC) -- is currently undergoing a reorganization, see the May 20, 2008 minutes for more information.**

No IRC/ITC minutes were available for publication this month.

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*For a list of IRC Regular and Ex-officio Members click here (last updated 12/12/08). Warren Burggren is now the Chair.

**DCSMT Minutes can be found here.

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RSS Matters

Research and Statistical Support
University of North Texas

Farewell

Link to the last RSS article here: Fall 2009 RSS Software Update - Ed.

By Dr. Mike Clark, Former Research and Statistical Support Services Consultan*

It's been awhile since we've had a goodbye here at RSS, but with the change in season comes a transition here as well. I began at RSS toward the tail end of my graduate career in 2003, and maintained it in conjunction with teaching for the psychology department ever since. Even when I had full-time teaching duties at one point I kept a 10 hour schedule just to continue to gain the knowledge and skills which this position provides, and despite my part-time role my abilities grew immensely over the years thanks to those staff members at RSS.

Patrick and Rich were valuable sources of knowledge that I could always rely upon when I hit a snag or just wanted to learn something new. But it was our camaraderie that allowed for the easy flow of ideas and assistance between all of us, and we all benefited from and appreciated one another's presence throughout my tenure. One thing I will miss the most is the relaxed and friendly environment, where one had as much chance to hear a good joke as some profound insight, and both were in ample supply.

Statistical analysis is far too easily relegated to the realm of a 'results only' enterprise, but that was never the case here. None of us were the type of folk to lose sight of the big picture, or forget to ask 'Why?' before even bothering with some analysis. Scholarship was held in as high esteem as the practical application of it, and even when our efforts might have been readily accepted by a client as 'good enough', our own standards were typically much higher, and we were willing to learn along with the client and each other to get the most out of the projects that came our way.

Such an environment is rare and must be allowed to thrive through careful consideration, and this would not have been feasible without appropriate leadership. That credit of course goes to Dr. Philip Baczewski. He has always been keen to recognize our relative strengths and weaknesses, and allowed us to serve complimentary roles and take our own route to learning within the position. He gave us immense freedom, but when the time came he would put his foot down and reel us in, a necessity for those like us that have the tendency to wander among all the tools available to us. He has always had clear respect for our abilities, and I hope that our respect for his was just as visible.

I know that RSS will continue to carry on well without me because such excellent people will remain. It is my hope the UNT community will come to better realize the valuable service they already have available in their quest to become a Tier 1 research institution. I for one will always look fondly on my time here, and wish the RSS group the best of luck. So long, and thanks for all the stats!

**Mike Clark was a member of RSS from 2003-2009. He is now statistical consultant at the new Center for Social Research at the University of Notre Dame.*

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Short Courses

The fall Short Courses are over. Surf over to the Short Courses page to see the classes that were offered and will likely be offered in the future.

Special classes can always be arranged with the RSS staff. See "Customized Short Courses" below for further information. Also, you can ***always*** contact the RSS staff for one-on-one consultation. **Please read the FAQ before requesting an appointment though.**

Especially for Faculty and Staff Members

In addition to the ACS Short Courses, which are available to students, faculty and staff, staff and faculty members can take courses offered through the Human Resources Department (they have a new comprehensive training curriculum), and the Center for Learning Enhancement, Assessment, and Redesign. Additionally, the Center for Achievement and Lifelong Learning offers a variety of courses, usually for a small fee.

EIS training is available. Questions or comments relating to EIS training should be sent to EISTrn@unt.edu.

Microsoft E-Learning

Microsoft E-Learning courses are now available for ***faculty and staff*** via our UNT-Microsoft Campus Agreement. Please contact Claudia Lynch at lynch@unt.edu for instructions on accessing this training.

Microsoft Outlook Training and more

The Messaging Systems Group has all sorts of useful information on their website, including training information.

Central Web Support

Consult Central Web Support for assistance in acquiring “Internet services and support.” As described on their website:

CWS provides Internet services and support to UNT faculty, staff and students. Services include allocating and assisting departments, campus organizations and faculty with web space and associated applications. Additionally, CWS assists web developers with databases and associated web applications, troubleshooting problems, support and service.

CLEAR (was Center for Distributed Learning)

CLEAR offers courses especially for Faculty Members. A list of topics and further information can be found here.

The center also offers a "Brown Bag" series which meets for lunch the first Thursday of each month at Noon in Chilton 245. The purpose of this group is to bring faculty members together to share their experiences with distributed learning. One demonstration will be made at each meeting by a faculty member with experience in distributed learning. More information on these activities can be found at the CLEAR Website.

UNT Mini-Courses

There are a variety of courses offered, for a fee, to UNT faculty, staff and students as well as the general public. For additional information surf over to http://www.unt.edu/minicourses/

Information Security Awareness

The UNT Information Security team has been offering Information Security Awareness courses to all UNT faculty and staff. Topics to be covered will include workstation security, sensitive data handling, copyright infringement issues, identity theft, email security, and more.

For more information, or if you would like to request a customized course to be taught for your department, contact Gabe Marshall at x4062, or at security@unt.edu.

Also, Information Security Training is now available through Blackboard Vista (formerly known as WebCT).

Alternate Forms of Training

Many of the General Access Labs around campus have tutorials installed on their computers. See http://www.gal.unt.edu/ for a list of labs and their locations. The Willis Library, for example, has a list of Tutorials and Software Support.

The Training Website has all sorts of information about alternate forms of training. Computer Based Training (CBT) and Web-based training are some of the alternatives offered, although due to the rising costs of training, shrinking budgets and changing technology, computer-based training at UNT is in a state of transition. For up-to-date information on CBT at UNT, see the CBT website.

Gartner Research Services

Way back in 2006 we announced *Gartner Core Research Services Now Available to the UNT Community*. Our subscription for Gartner services has always included ***all*** UNT faculty, students, and staff. All you need to do to access the subscription is to log into the UNT Gartner portal page at https://gartner.unt.edu/. Gartner is now offering "Webinar Wednesdays." To view all the offerings see: http://my.gartner.com/portal/server.pt?tbb=webinarcalendar You can also listen to Gartner podcasts here: http://www.gartner.com/it/products/podcasting/asset_137461_2616.jsp.

State of Texas Department of Information Resources

Another possible source of training for staff and, perhaps, faculty members is the Texas Department of Information Resources. A look at their Education and Training website reveals some interesting possibilities. For example, under Conferences, Briefings, and Events is a "Microsoft Training Series" described as "free training classes ... delivered by Microsoft and hosted by DIR as part of the Technology Today Series (TTS)."

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Transitions

New Employees:

- **Bhaskara Ajjarapu**, IT Programmer Analyst, Financial Information Systems (AIS).
- **John Crawford**, Security Intern, Information Security (part-time).
- **Lauren Lucas**, Student Assistant, Computing & IT Planning and Administration (part-time).

No longer working in the Computing and Information Technology Center:

- **Mike Clark**, Research and Statistical Support Services Consultant.

Changes, Awards, Recognition, Publications, etc.

Dr. Elizabeth Hinkle-Turner, Assistant Director - Academic Computing and User Services, was profiled October 21 in *InHouse*. The parenthetical introduction noted that "Elizabeth Hinkle-Turner supervised the transition from student EagleMail to EagleConnect in spring 2009. She's also a nationally recognized composer of electroacoustic music and holds a brown belt designation in karate."

Service to UNT

The following people were recognized in the November 9 *InHouse* for their years of service to the University. Congratulations and thanks to:

25 years of service

Susan Pierce, Manager, Micro Maintenance/Classroom Support (ESTS).

5 years of service

Paula Davis, Programmer Analyst, EIS Application Infrastructure Management (AIS).

Michael Heredia, Manager, Infastructure & Technical Services (ESTS).

Don McClure, Specialist, Call Tracking Administration (ACUS).

UNT TechFest 2009

Lots of folks, including **Duane Gustavus**, Research Computing Support Manager (ACUS) - center back row in the

picture below, got together to help Girl Scouts "investigate the uses of technology in our modern world."

UNT TechFest 2009 participants "Engineering a Better Tomorrow!"

Coming Next Month -- Lots of Star Performers and Soaring Eagles along with some graduations!

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Campus Subscription to Higher Education Newsletters

By Jane Himmel, Associate Director, CLEAR

Faculty will be pleased to learn that the University of North Texas has negotiated a group online subscription allowing campus members free access to the *Online Classroom* & *The Teaching Professor* higher education newsletters produced by Magna Publications.To access these publications, go to www.magnapubs.com and click on the appropriate title in the left sidebar. No password is necessary to access either publication from a campus computer. If you wish to access from off campus or if you would like to receive an email message each time a new issue is posted, you will need to register and enter a campus voucher code and pin number. Please email jane.himmel@unt.edu to obtain this information.

ONLINE CL@SSROOM
IDEAS FOR EFFECTIVE ONLINE INSTRUCTION

Online Classroom provides practical advice and examples of proven, research-based pedagogical techniques to help instructors and course developers create and teach outstanding online courses. Includes expert advice on:

- Course design
- Learner-centered pedagogy
- Synchronous and asynchronous interaction
- Online learning communities
- Appropriate use of technology
- Course management
- Assessment

View November 2009 Issue

(http://www.magnapubs.com/issues/magnapubs_oc/)

The Teaching Professor

With each issue, *The Teaching Professor** delivers thought-provoking and inspirational articles on a wealth of critical topics. Brief and to the point, it covers such subjects as:

- Student-centered learning
- Mentoring new and adjunct faculty
- Overcoming student apathy
- Energizing and re-inspiring experienced faculty
- Integrating new technology
- Responding to course evaluations and feedback

*Available in text and full audio (MP3)

View November 2009 Issue

(http://www.magnapubs.com/issues/magnapubs_tp/)

Links to the November 2009 issues of both newsletters are provided above. Please contact jane.himmel@unt.edu if you have any questions or problems gaining access.

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Thanksgiving Hours

By Claudia Lynch, *Benchmarks Online* Editor

Turkey Day is just around the corner; hard to believe! The Helpdesk will close at 6 p.m. on Wednesday, November 25 and will be **closed** on Thanksgiving Day. They will reopen for normal hours on Friday, November 27. The University is **officially closed** November 26 - November 29.

- **Data Management Services** will be **closed** over the Thanksgiving holiday.

- The **ACS General Access/Adaptive Lab** (ISB 104):

  Close: 7 p.m. Wednesday, November 25
  Closed: Thursday, November 26 & Friday November 27
  Reopen: Saturday, November 28, resume normal hours

Hours for Other Campus Facilities

General Access Labs

- WILLIS:

  Close: 7:50 p.m. Wednesday, November 25
  Closed: Thursday, November 26
  Open: 8 a.m.-5:50 p.m. Friday November 27
  Open: 9 a.m. Saturday, November 28, resume 24hr schedule

- College of Information General Access Computer Lab (CI-GACLab) (B205):

  Closed: Thursday, November 26 -- Saturday November 28
  Reopen: 10 a.m. Sunday, November 29, resume normal hours

- MUSIC:

  Close: 5 p.m. Wednesday, November 25
  Reopen: 1 p.m. Sunday, November 29, resume normal hours

- PACS Computing Center (Chilton Hall):

  Close: 10 p.m. Wednesday, November 25
  Reopen: 7 a.m. Monday, November 30, resume normal hours

- **CVAD** (formerly SOVA):

Close: 11 p.m. Wednesday, November 25
Reopen: Saturday, November 28, resume normal hours

- COE:

Close: 5 p.m. Wednesday, November 25
Reopen: 7 a.m. Monday, November 30, resume normal hours

- COBA:

Close: 4 p.m. Wednesday, November 25
Reopen: 8 a.m. Sunday, November 29, resume normal hourss

- CAS**:**

GAB 330

Close: 10 p.m. Wednesday, November 25
Closed: Thursday, November 26 & Friday November 27
Reopen: Saturday, November 28, resume normal hours

GAB 550

Close: 5 p.m. Wednesday, November 25
Reopen: 8 a.m. Monday, November 30, resume normal hours

Terrill 220

Close: 7 p.m. Wednesday, November 25
Reopen: 8 a.m. Monday, November 30, resume normal hours

Wooten 120

Close: 8 p.m. Wednesday, November 25
Reopen: 8 a.m. Monday, November 30, resume normal hours

- **UNT Dallas Campus - 155A**

Close: 6 p.m. Wednesday, November 25
Reopen: 7 a.m. Monday, November 30, resume normal hours

- **Engineering General Access Lab (englab@unt.edu, Discovery Park, B129, 891-6733)**

Close: 5 p.m. Wednesday, November 25
Reopen: Monday, November 30, resume normal hours

Remember:

	
Get your alerts fast in case of inclement weather	
Visit the new Emergency Management website	
City of Denton Residents, sign up for the CodeRED Emergency Notification System	

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Skype Should Rule the World!

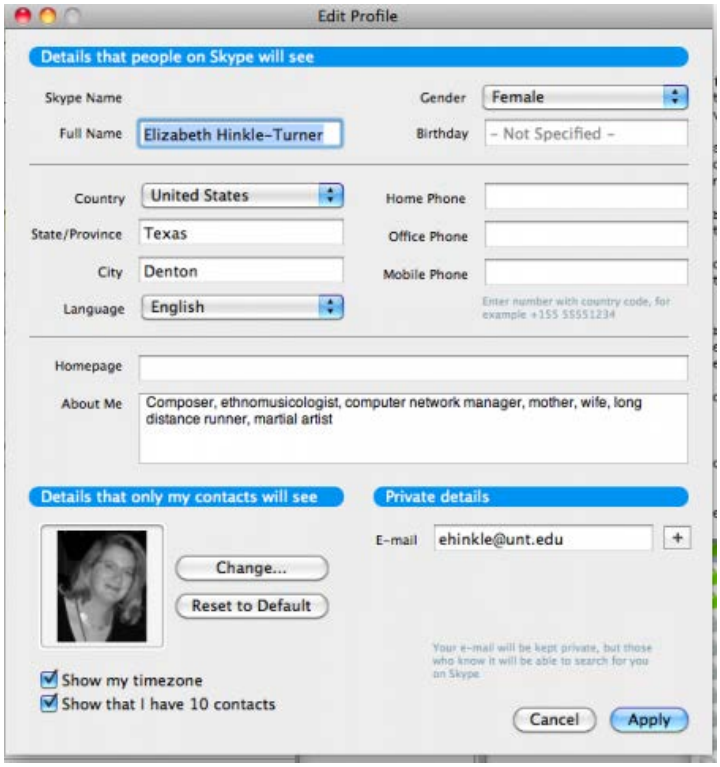
By Dr. Elizabeth Hinkle-Turner, Assistant Director - Academic Computing and User Services

Well, at least in my humble opinion it should! In my job at UNT as well as in "my other life" as a composer and music researcher, I find myself increasingly relying on Skype as a tool for communicating quickly and effectively with others. But first, for those of you who are unfamiliar with this application, let me give you some background.

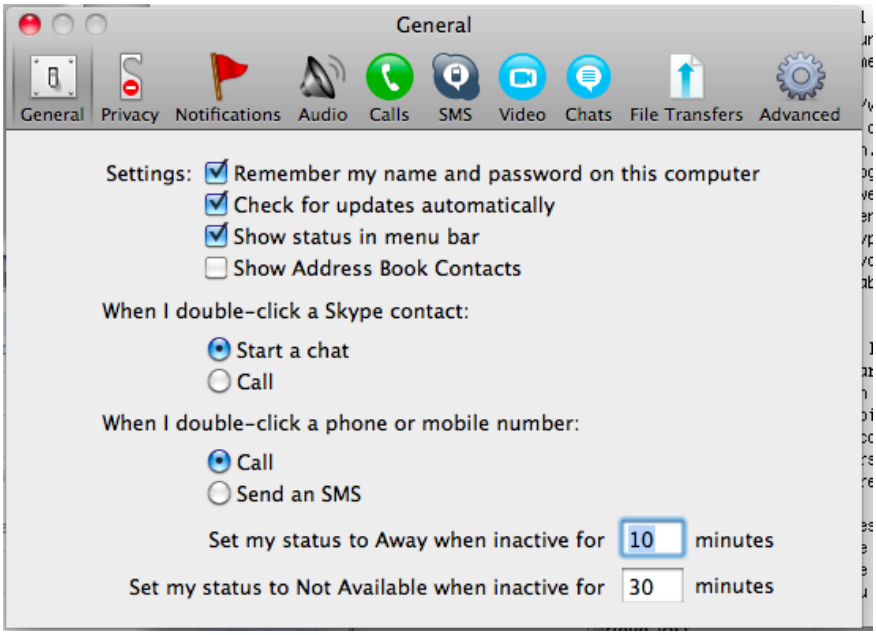
Skype is a free application that can be downloaded from www.skype.com and is available for Mac OS X, Windows, Linux, and a variety of cellphones and other mobile devices. It is a VoIP (Voice Over IP) telephony application which allows one to "talk on the phone" via internet connection. In past articles I have discussed the ACUS Adaptive Lab's Sorenson Video Relay System which uses similar VoIP technology. Skype "callers" can have conversations with video connectivity (make sure that you have not just gotten out of the shower or something! Depending on the call, you may want to look really nice!), can instant message each other, can send documents to each other during the "phone call". The sharing of computer screens is also possible with the latest version of Skype. Basically, depending on the capabilities of your computer (does it have a built-in camera or microphone for example), you can conduct an entire meeting complete with face-to-face contact, the distribution of supplemental hand-outs, and collaborative on-the-spot work with people from all over the world for hours...FOR FREE!

I recently had a chance to test the full powers and ease of Skype. The International Alliance for Women in Music (IAWM), an organization of which I am vice-president, needed to have its annual board meeting. Since we are an international organization, we have board members from the U.S., Canada, Argentina, South Korea and several other locations. Some of the board came to Denton for a traditional sit-down meeting but we were also joined by our other members via Skype. We could see each other in many cases (some board members did not have in-computer cameras) and talk with each other for the whole meeting (one member who did not have a microphone, texted all of her answers to us instead) which lasted about six hours. It allowed the entire board to participate without having to travel anywhere!

Downloading and configuring Skype is pretty straightforward (all examples shown here are from a Mac but the instructions hold true for PC and Linux as well). First, simply go to the Skype website and download and install the application. When you open Skype for the first time you will be asked to type in a Skype name and a password. You can also edit a Profile for yourself as well, putting in a photo and other details about yourself (you enter things under public details, details that only contacts will see and private details as appropriate):



With the Preferences, you can select a variety of security, audio, and video features as well as chat and IM options:



To "dial" someone, all you need to do is click on their Skype name and Skype will attempt to connect. If you do not know a friend's contact information, you can look them up via an international directory provided in the application.

Finally, back to the conference call I was talking about; conference calling is really easy and what a great way to have a conversation with your entire family or a group of friends all at the same time! Under the call menu, select Start Conference Call and add folks to your conference via their Skype names. This is simply accomplished by dragging their Skype names into the conference participants area. In fact, MOST things in Skype are accomplished by dragging - to send a document to someone, you simply drag it over to their icon. By the way, all Skype conversations and other communications are encrypted. Skype conversations and calls are completely free when conducted Skype-to-Skype regardless of where the participants are located. Skype calls to cellphones and mobile devices DO come with a charge and you can open a Skype account if such services are needed. Personally, my friends and colleagues are all on Skype and so we simply call each other on our computers.

The uses for Skype seem endless to me! In addition to the professional meeting I described above, it has proven to be an invaluable tool as I conduct research interviews for my current book project. I am working on a history and survey of women in electroacoustic music in Canada, the UK, and continental Europe and Skype allows me to talk with these composers for no charge with full video and audio capabilities. Even better, if you google "record Skype calls free",

you will find that there are a large number of free applications out there that allow you to archive your conversations (even the video!) and save them to your computer for future review and playback. This is a lifesaver for me as far as my book is concerned!

Recently when conducting interviews for a new position in ACUS, we were able to have video conversations with off-campus candidates using Skype and once we hired an employee, we were able to have further Skype conversations helping him to get moved to the UNT campus and started on the job.

Until I find out otherwise, Skype is currently my "wonder application of 2009" and probably of 2010 as well! I imagine that they are fighting off the big phone companies tooth and nail (I mean, I am having all these hours-long conversations with people in Europe and my phone company is not getting one penny of long distance from me... all I am paying them for is the broadband internet access) and I wish the Skype folks well in these legal tangles. So go ahead and get to the Skype website and find out more! Maybe connect via video call with your loved ones over the holidays for free! Just be sure to comb your hair before connecting!

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What We Do All Day (In Case You Were Wondering)

By Allen Bradley, Computer Systems Manager, AIS Business & Process Management

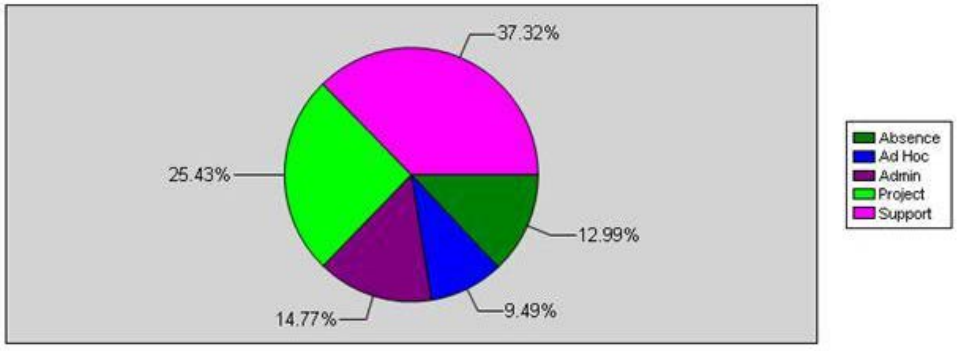
The CITC is always looking for ways to improve our efficiency and increase the quality of service we provide to our users. To that end, we implemented Microsoft Project and are now reaping big rewards. The biggest reward is valuable information, information that tells us how we are spending our time. An interesting fact from CITC's Strategic Directions Document indicates that we may have as many as 200 projects either currently being worked on or are "on hold" pending available resources. We now have tools to track the progress of each project, allocate resources to new projects, analyze trends and so much more.

An organization like ours is either working on new initiatives or keeping old initiatives working at peak levels. This is a delicate balancing act as the demand for new services continues to grow, so knowing where we spend our time helps ensure that our service is well balanced and is consistent with industry trends and best practices for universities of our size.

The Project Management Office brought the system up at the beginning of this year and AIS began the pilot phase of that implementation. Andy Novak worked tirelessly to get us all trained and develope Standards and Guides which keep us all playing by the same rules. AIS's goal was to have everyone trained and using the system during the summer and have some good numbers starting September of 2009. We have accomplished that goal and present a pie chart with the results.

AIS - Hours by Activity type

September 2009



As you can see, we track our time by various "Activity types". Also immediately obvious are the two "overhead" slices of the pie. "Absence" accounts for vacation, sick time, holidays, jury duty and stuff like that. "Admin" is basically, non-project and non-support administration time which includes new employee orientation, non-project training, evaluations, and daily office, workstation and accounting activities.

"Support" constitutes a large chunk of our time and represents production support and customer facing time concerning on-going operations. Production support includes fixing things that break, scheduled maintenance and implementing minor patches & fixes. Exceptions would be PeopleSoft upgrades, patches & fixes or other activities that require multiple tasks, resource allocation and / or more than 40 hours of effort.

"Ad-hocs" are activities that represent less than 40 hours of effort. They are usually customer driven, of an urgent nature and [most often] only 1 task. Examples would be adding a new field to a screen, running an ad hoc query, or creating a new report.

"Projects" are activities that represent scheduled work greater than 40 hours of effort. They are usually customer driven, may require participation / coordination across multiple groups and are composed of interrelated tasks that

are undertaken to achieve a specific aim.

Many reports are available in the Project Management system that break projects and time down every which way. I recently provided an overview report to AIS staff and said, “Print out these reports and keep them with you. Then when you get home and someone asks you what you did at work today, you won’t have to say, ‘Nothing’."

More information about the CITC's implementation of the Portfolio and Project Management System can be found in the "Campus Computing News" article in this issue of *Benchmarks Online*. -- Ed.

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Why do we share...?

By DaMiri Young, HPC Systems Administrator

The topic of efficient resource sharing has been and continues to be hotly debated amongst computer scientists, system programmers, and system administrators. However, before diving in, let's consider why we even share at all? Is it that Earth is over-populated and sharing is the only way to ensure everyones needs are met? Or is there an instinct that drives us to seek others happiness? It's highly doubtful that the latter is the case. We can see this by watching children barely able to talk play. Notice how they quarrel over toys and incessantly scream "MINE!". Sharing happens autonomously in nature. In organisms that respirate, the pulmonary system transports oxygen throughout the body via the bloodstream. This is essentially sharing oxygen. Anytime there is a limited set of resources such as toys, oxygen, or computing power, there must be a way to share. In the case of children not sharing, someone will be left unhappy. In the case of the body not sharing oxygen, death is likely. As for not sharing computing resources, vital processing is in jeopardy. No matter the reason, sharing is a fact of life. It is not only why we share that is important, but also having efficient ways to share. When we speak of sharing computing resources, we're really talking about resource management i.e., job scheduling. Now that we are all sharing the resources, we notice several scheduling problems. How do we determine whose job will get run and when? More importantly, how can we guarantee that the scheduling decisions will be fair? As one might expect, the problem gets incredible difficult as more people need access to resources.

Scheduling Resources

Ideally, scheduling is handled by a batch processing system. Think about the batch job queuing systems from mainframes of yesteryear. Currently there exists several fairly advanced resource and workload managers. Resource managers schedule the allocation of resources by storing incoming jobs in work queues and executing them as resources become available. Workload managers usually track grid workloads, query multiple resource managers, implement service levels, and reserve resources for use. Among resource managers are Torque, Simple Linux Utility for Resource Manager (SLURM), and Solaris Resource Manager. Some current workload managers are Maui, Sun Grid Engine (SGE), and Load Sharing Facility (LSF). Life is not easy for these applications in any way. They're expected to always make the best scheduling decision in all possible cases, which is often impossible. Remember, users jobs are completely random in arrival time, resource usage, and length of job execution. The situation gets more complex when we consider parallel applications that may require several machines simultaneously.

Allocating Resources

So you've waded the mucky waters and installed a manager. Now everybody can compute to their heart's content, right? Wrong, unless you've already devised a way to allocate the resources with your manager. A resource manager is a simple tool that needs sharpening before use. In order to sanely allocate compute resources, it might be wise to define exactly what is being allocated. A few approaches to this are allocating compute time, allocating job queues, and allocating shares.

Allocating Compute Time

Traditionally, compute resources are allocated in terms of time on the system. With this approach groups are given units of time i.e., 5000 compute hours representing use of one machine for 5000 hours. Groups "spend" their units as they run jobs on machines. With 5000 hours, a group could run a parallel job on roughly 200 machines for one day. The downside here is that groups could exhaust their allocation for a year in days if not hours. Now they are unable to run jobs until their allocation is renewed. Another downside, is that groups may choose to wait until the end of the year to use their units. Most likely there would not be enough resources to even use their allocation in that time

frame. So to summarize the pros of this method:

- Users have flexibility in how they spend their time, i.e., they could request a massive job at once.
- Easy for users to track their own usage.
- It fairly easy for administrators to track and report usage.

The cons:

- It is possible for users to exhaust their allocation in a short period of time.
- It is possible for users to wait to long to use their allocation, thus making unlikely that resource will be available.

Allocating Job Queues

An alternative approach is to assign groups ownership of job queues. With this scheme, each group gets exclusive access to a specific work queue. The queues normally enforce several limits. These might include, length of time a job can run, number of jobs per queue, number of jobs per users, and user access controls. A group can never run jobs on any queue but their own. A large group will quickly notice that their jobs fill up the queue resulting in waiting. This is the case even if there is resource available elsewhere, users still must still wait. Another, disadvantage is there is little wiggle room here to cope with increase or decrease of resource once policy is set. In summary the pros are:

- Users are guaranteed that their resources are theirs only, i.e., guaranteed mutual exclusion.
- If no other members of the group are currently using the queue, the is no wait time.

The downsides of this method:

- Large groups will constantly be waiting on resource, even if there is resource elsewhere available in other queues.
- Due to the "hard quotas", it's unlikely that the resource will be %100 utilized. Unless, groups use %100 percent of their allocation %100 percent of the time.
- Significant administrative overhead may be required to constantly monitor and adjust queue quotas.

Allocating Shares

Yet another approach is allocating resources in terms of shares. This is also known as fair sharing. In this system, groups are assigned shares which are percentages of computing resources. This is similar to allocating queues without "trapping" users to their queues. Instead, priorities to use resources are statistically calculated dynamically in "real" time. When properly configured, fair sharing ensures that no user or queue can monopolize the resources and that no job will be starved. Groups whose usage is below their allocated share are given priority over groups whose use is above their allocated share. The deviation from the allocated share is calculated based on past usage with an exponential decay formula. The formula is applied to the deviation with a specified half-life. With this system, it is possible if not encouraged to utilize the spare capacity available. This could be because resource has not been allocated, or groups have no jobs to run. So if a group underuses their allocation it is utilized by groups that need to use it. For instance, lets suppose a group is assigned a share of 25% of the system. Lets further say this equates to 32 machines. Within a month, if they utilize %100 percent of allocation, they can achieve: 32 machines x 24 hours x 30 days = 23,040 compute hours. However, if the rest of the machines are not being utilized, the same group could use above their share of resources. For example if 32 more machines are available, it is possible to achieve 64 machines x 24 hours X 30 days = 46,080 compute hours in one month. This is significantly more compute hours. This offers the benefit of the first approach i.e., using a large amount of compute time without the downside of exhausting their allocation. The idea of using more than allocated is not possible with the queue allocation method already detailed. So this method leaves the group with much flexibility in terms of utilization. Their priority would be reduced temporarily, but would eventually increase back to normal. So to summarize the pros:

- Individual priorities are based on past usage, allowing fair usage amongst groups.
- It is possible and likely to reach %100 utilization of the system.
- Groups are encouraged to utilize spare capacity because they are not nearing their "hard quota".

- Significantly less administrative overhead is required since no constant "policing" of queues is necessary.
- Resources can be adjusted dynamically without impacting a particular group's share.

As with most things in life, there are cons:

- A group may lose time on the system if they constantly underuse for long periods of time, due to exponential decay.
- Fair sharing works best in a homogeneous environments. For instance, say Group A needed a special resource for their work. Fair sharing would equate to allocating a queue because now Group A can only use a portion of the resources. But if multiple groups need the special resource, we again have a fair setup.
- If Group A is utilizing all spare capacity when Group B comes along, Group B must now wait on resources. However, this is likely to be short time since all the resource is being used for work. Also, Group B will have more resource allocated to them to compensate for their time spent waiting.

Conclusion

I hope that it is apparent that the difficult part of scheduling is the balance between policy enforcement and resource utilization. The scheduler must carefully "weigh" these factors among others in order to consistently pick the "best" job to run. We have identified why scheduling decisions play such a key role in sharing resources. We have also explored several methods for sharing resources and pointed out some advantages and disadvantages to each. It seems that fair sharing is the approach with more advantages and less disadvantages than the other proposed methods. This especially seems true in a homogenous environment with many users needing access to a large resource. By calculating users priority in "real-time", fair share schedulers are always aware of the changing requirements. This allows on average higher throughput of workloads composed of a diverse job mix. Due, diligence is required to decide on a successful resource manager scheduling algorithm. It would be wise to scrutinize each scheduling approach as resources, users, and workloads change often. The trade-offs made with various approaches come at high costs in terms of users perception of reliability and usefulness. Any trade-off that increases the chance that resource sharing is fair, is likely a good choice. In other words, the wrong approach upfront could have undiserable consequences for users. In the case of sharing, ensure that err is made in favor of the user.

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