The Shared Services Initiative, announced by the UNT Board of Regents in November of 2009, is "a collaborative system-wide governance model for Information Technology and Human Resources functions." Since that time it has been a topic of conversation in a variety of venues around the North Texas area, frequently regarding the definition of "shared services" and what they will mean to the employees of UNT, UNT Dallas and the UNT Health Science Center.

Campus Computing News

IT Shared Services: Your questions answered here.

Computing and Information Technology Center Employees Moving to the UNT System

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Computing Resources at UNT - Finding Your Way Around

Welcome, or welcome back, to UNT! If you're new, or if you've just been away for awhile, it is our hope that this article will serve as a handy starting point to get you acquainted (or re-
acquainted) with the resources that are available to you here at the University.

Alert! Alert! Important Messages Will Never Miss You Now!

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

"Wouldn’t it be great if students had a buzzer that went off in their heads every time they received an important message from the university?" asked a colleague of mine at a meeting several years ago. Well, students actually DO have the next best thing: text messages to their cell phone of choice can alert them every time they get an important message in the Message Center located on the my.unt.edu portal.

Computing Services for UNT Faculty

By Claudia Lynch, Benchmarks Online Editor

Computing has become an integral part of the university experience for everyone. Computing starts at your desktop, but can involve systems managed by your department or by the Computing and Information Technology Center (CITC). The information that follows is from a handout that is made available to faculty members. It provides information on some of the central services which can support teaching or research activities at UNT.

Data Management Services Update

By Claudia Lynch, Benchmarks Online Editor

As we announced back in February, UNT’s Data Management department now offers an exam grading service: The Dell Printer Station. The Dell Printer Station does more than grade exams, however, it is also a time-saving printer solution for testing and managing classroom documents.

Gartner Core Research Services Available to the UNT Community

By Claudia Lynch, Benchmarks Online Editor

In 2006 the Computing and Information Technology Center (CITC), the Library, the College of Arts & Sciences, the College of Engineering, and the College of Business Administration cooperatively purchased a subscription to Gartner Core Research Services for all UNT faculty, students, and staff. Since that time,
This is the time of year when departments begin preparing for new faculty to arrive. In previous years, an introduction to EIS and employee self-service has been led by the EIS Training, Communications, and Administration Manager during departmental orientations held for new faculty. This information is now available as online training and can be accessed at a time that is convenient for the new employee.

Click on the link above for an information age laugh.
The Shared Services Initiative, announced by the UNT Board of Regents in November of 2009, is "a collaborative system-wide governance model for Information Technology and Human Resources functions." Since that time it has been a topic of conversation in a variety of venues around the North Texas area, frequently regarding the definition of "shared services" and what they will mean to the employees of UNT, UNT Dallas and the UNT Health Science Center.

Speaking to inHouse in July, Terry Pankratz, vice chancellor for finance and leader of the system’s shared services implementation, stated that shared services is a collaborative method of performing everyday business functions by optimizing resources - people, expertise, capital, time and technology. "Shared Services will allow the UNT System to standardize business processing which will reduce secondary and tertiary (departmental) costs and frustration by simplifying and streamlining processes," said Pankratz. "We also will simplify and reduce IT costs associated with implementing and managing technology support services."

As part of fulfilling that goal, Michael Di Paolo (pictured above) was named associate vice chancellor and chief information officer for the UNT System this spring. Mr. Di Paolo has been meeting with IT staff members to answer questions they may have about shared services and their place within UNT and/or the UNT System. As a result of these meetings Di Paolo produced two FAQs:

1. IT Shared Services FAQs 07-25-2011.pdf
2. IT Shared Services FAQ #2.pdf (This answers employee questions arising from the first FAQ.)

In an e-mail message introducing the first FAQ, Di Paolo said:

Attached is an FAQ document that answers employee questions about the new IT shared services organization. The answers to questions posed through July 25th are included. I have not received any additional questions since then. I hope that these answers help you understand what will change in the short run. Also, note that nothing will change with your existing benefits.

If anyone has additional questions, please forward them to me directly so I can answer it for everyone. If it’s a personal question, please pose it to either myself or your campus CIO (Wil Clark, Dr. Renee Drabier, or John Hooper).

UNTHSC CIO and Directors, please forward this FAQ to your staff.

Thanks.

Michael Di Paolo
Associate Vice Chancellor
Chief Information Officer
University of North Texas System
817.308.3211
michael.dipaolo@unt.edu
<table>
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Computing and Information Technology Center Employees Moving to the UNT System

By John Hooper, Acting Vice President for Information Technology and CIO for UNT, Deputy CIO for the UNT System

UNT’s Computing and Information Technology Center employees that are already providing and supporting shared services will be moving to the UNT System on September 1. This first move of IT workers to the system will include around 180 regular employees and 26 student workers from CITC. No employees from the IT organizations at the other institutions will be moving in this first wave. This is because all of the current shared services for the UNT System are provided by UNT.

The portions of CITC that will be moving to the system effective September 1 are:

- The Enterprise Applications Division led by Dorothy Flores
- The Communications and Collaboration Services Division led by Joe Adamo
- The Administration and Compliance Division led by Charlotte Russell
- The Enterprise Systems Technical Services Division led by Craig Terrell

This move should be transparent to everyone in the UNT System. The same staff members that deliver the services provided by these divisions of CITC will continue to provide them after August 31.

Organizations not impacted

The remaining organizations in CITC are not impacted in this first wave of moves:

- The Classroom Support Division led by Jim Curry
- The Administrative Information Technology Services Division led by Abraham John
- The Academic Computing and User Services Division led by Philip Baczewski

Next wave of transfers?

The next wave of transfers are being determined by 8 teams of individuals from the three UNT institutions who are each working on service areas that are currently locally provided but will be provided by shared services in the future. Teams will identify services and individuals to remain local or be transferred to the system. There are also discussions about support models for system underway that may lead to some additional transfers. This will be determined by mid-October. Although it is expected there will be some individual moves from the groups identified above that were not impacted by the first wave of moves on September 1, in general the three divisions excluded in the first wave are not expected to move to the system due to their direct support of services that are unique to UNT. This second wave of moves would occur on December 1.

Questions?

If you have any questions about IT shared services, please see the article about IT shared services in this issue.
Computing Resources at UNT - Finding Your Way Around

Welcome, or welcome back, to UNT! If you're new, or if you've just been away for awhile, it is our hope that this article will serve as a handy starting point to get you acquainted (or re-acquainted) with the resources that are available to you here at the University. Students, faculty and/or staff members should all benefit from the information that follows.*

When all else fails ...  

If you have a computing question and/or problem and can't think of who to contact or where to look for a solution, just remember this: Contact the Helpdesk

The Computing and Information Technology Center (CITC) Helpdesk is located in room 119 of Sycamore Hall (SYMR - formerly the Information Science Library, ISB ), directly beside the The Eagle Commons Library. Their hours are listed on the Helpdesk website: http://helpdesk.unt.edu/. Besides stopping by or searching for answers on the website, you can call the Helpdesk at 940-565-2324 or send mail to helpdesk@unt.edu.

Speaking of the Helpdesk, Benchmarks Online, publishes a column each month called "Helpdesk FYI." This month's article is Creating a Custom Search Filter in ITSM 7.6 (Remedy) for the Incident Overview Console. Following is a selection of articles published within the past year. Perhaps one of these topics is something you've been wondering about:

- Using Microsoft SharePoint Workspace 2010
- EUID Passwords
- myUNT Mobile
- Configuring EagleConnect Email on your iPhone
- EagleConnect Exchange ActiveSync Changes
- IT Outages and Maintenance Events Page

We hope that new students are familiar with the Tour of Student Computing Services at UNT. There are lots of topics touched on that are of interest to non-students also. For Example, in the Documents for Student Computing area are PDF files of things like a Computer Security brochure and a General Access Computer Lab brochure. Check out the complete website: http://www.unt.edu/helpdesk/studenttour/

General Access Computer Lab System

The UNT General Access Computer Lab System is a collection of 13 computer labs spread across the UNT Denton campus. They have been set up to provide computing to the University community. The GACL website states:

The labs are intended to meet the general academic computing needs of UNT students. These labs are supported and maintained primarily through a portion of the Technology Use Fee.

Students with a valid UNT photo ID card may use any General Access Lab except where noted.

A list of labs and their locations and operating hours is available from the GACL website. The lab in SYMR 104 is an Adaptive Lab. As the website states:

The University of North Texas Academic Computing Services General Access Lab is located in Sycamore Hall, Room 104. The mission of this lab is to provide general services to the UNT community with an emphasis on the special
features that Academic Computing Services has to offer including helpdesk support and research assistance. Additionally the ACS lab is the designated adaptive lab on campus providing state-of-the-art adaptive equipment for those who need it. For more information about adaptive services on the UNT campus visit the Office of Disability Accommodation at [http://www.unt.edu/oda](http://www.unt.edu/oda).

**Computer Based Training**

Rising costs of training, shrinking budgets and changing technology have contributed to changes in computer-based training offerings at UNT over the last several years. The Computer-Based Training website has a list of training resources currently available to the UNT community.

**Online Learning/UNT eCampus**

For students, a good starting place is found on the student tour. Faculty will want to visit the Center for Learning Enhancement, Assessment, and Redesign (CLEAR) website and/or the Center itself. The Benchmarks Online article, How Green is Our Learning?, about, in part, Blackboard Vista (our centrally-supported learning management system), may be of interest to faculty members. iTunes U at UNT is an offering that has lots of people excited. Read all about it here.

**Other Items of Interest**

- **Online Student Health Portal (OSH)** -- OSH is a web-based portal connecting students to the Student Health and Wellness Center (SHWC) 24 hours a day, 7 days a week. See the Benchmarks Online article "Just in time for the fall semester: an Online Student Health Portal" for further information.

- **Videoconferencing** -- Videoconference Technology allows you to meet with your colleagues on campus, at the Dallas and Ft. Worth campuses, or almost anywhere in the world. See the Benchmarks Online article "Save Time, Money, and Avoid Parking Frustrations Using Videoconference Technology" for further information.

- **Ask Us** - The UNT Libraries' virtual/online help services; they're available from your computer 24/7.

- **Gartner Research** -- UNT students, faculty, and staff have access to Gartner Research at: [https://gartner.unt.edu/](https://gartner.unt.edu/) CITC also sponsors direct access to Gartner researchers. For more information see the article Gartner Core Research Services Available to the UNT Community in this issue of Benchmarks Online.

- **Campus Subscription to Higher Education Newsletters**-- UNT 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. Click here for more information.

- **Statistical and Research Support Services** -- "The mission of the Research and Statistical Support (RSS) group at the University of North Texas (UNT) is to facilitate access to current research tools and statistical methodologies and to promote these methods to the research, instructional, and administrative communities at UNT; to encourage a collaborative research environment for researchers through the development and use of innovative computing technologies; to provide training and consultation in the appropriate use of statistical methodologies and computer software; and to facilitate access to data collection and data management technologies." [From the Research and Statistical Support website]. The RSS Group publishes a monthly column in Benchmarks Online.

- **LISTSERV.UNT.EDU** -- Listserv web interface makes it much easier to manage your listserv lists. See this past Benchmarks Online article for more information.

- **CITC Data Management Services** - Services include:

  1. **Exam Grading/Analysis**: See the Data Management Services Update article in this month’s issue for more information.

  2. **Research Projects**: Key-Entry of survey or research projects (grad student dissertation research allowed!) into a custom data file, ready for analysis.
3. **Scannable Form Design**: Customized scannable survey forms created using any current form, or just a new idea! Our service includes scanning the completed forms into a data file, ready for analysis, quick and easy!

4. **Faculty Evaluation Processing**: Scan, edit and process UNT departmental faculty evaluations. Standardized reports provided: Department Overall, By Instructor-Course-Section, and By Instructor. An Excel data file will be provided to run any customized reports desired.

Location: Sycamore Hall (SYMR), north entrance, Room 140.

For more information contact: Joann.Luksich@unt.edu 940.369.7416

- **High-Performance Computing Initiative** - The High-Performance Computing Initiative is available for use by UNT researchers whose research or scholarship requires use of computationally-intensive applications. See this Benchmarks Online article for further information. The HPC website states: "The Academic Computing and User Services division of the CITC supports multiple clusters of 64-bit processor systems running Linux for compute-intensive scientific research. Cluster computing provides dedicated systems for concurrent processing of jobs in a batch environment."

- **Information Security** -- "The Information Security Team helps protect UNT Information Technology assets from misuse, abuse, and unauthorized access. The mission of the Information Security Team is to assist and collaborate with UNT administrative, academic, and student communities to help assess, implement, and maintain information security needs." [From the Information Security Website]. UNT Faculty, Staff, and Students are required to read the Security Handbook. Links and further information can be found on the Information Security homepage.

Information Security has recently created an announcement board on UNTRANET to post important security updates/alerts as an additional security resource. See this past Benchmarks Online article for further information on the announcement board.

- **Managing Spam** -- Actively manage e-mail that is sent to your campus e-mail address. See the article Managing Your Spam for more information.

- **Campus VPN** -- The Campus VPN is an interface that will allow you to connect remotely to on-campus resources. For more information click here.

- **Free or cheap software**

  - McAfee VirusScan -- Free download or $3 purchase in the UNT Bookstore.

  - Free Office Live Applications -- Microsoft now includes Office Live applications in EagleConnect. Office Live applications are web-based (cloud) versions of MS Word, Excel, PowerPoint, and OneNote which provide the full functionality of their Office Suite installed counterparts. Further information can be found here.

  - Microsoft Campus Agreement -- UNT has had an agreement with Microsoft for a number of years that allows us to distribute various Microsoft products to employees of the University. According to the agreement, you can "use the software for school-related purposes on a personally-owned computer or an institution-owned computer designated for your exclusive use" and you must remove the software from your home machine if you leave UNT. *This agreement does not cover students unless those students are also UNT employees. UNT Health Science Center employees CAN purchase their software on the HSC campus via the ITS Helpdesk.*

Employees wishing to install these products on University-owned computers should contact their Network Manager for further instructions. Contact the UNT Bookstore at 940-565-3185 for additional information about the Microsoft products available to faculty and staff and/or visit www.unt.bkstr.com.

- The Microsoft Home Use Program -- Reduced price software for faculty/staff home use.
- **Student discounts in the UNT Bookstore** - As described on the [StudentTour](http://it.unt.edu/benchmarks/issues/2011/08/computing-resources-unt-finding-your-way-around).

- **DreamSpark** - UNT students can take advantage of DreamSpark, Microsoft’s program that provides free development software to students. Click [here](http://it.unt.edu/benchmarks/issues/2011/08/computing-resources-unt-finding-your-way-around) for more information.

- **Free/Open Source software** - Two articles on that topic from the RSS staff:
  2. [Free your research](http://it.unt.edu/benchmarks/issues/2011/08/computing-resources-unt-finding-your-way-around): Open source and other alternatives to cut your costs and improve productivity as a graduate student.

*Various versions of this article are published each semester. -- Ed.*
Network Connection

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

A Bevy of Anniversaries

The anniversaries just keep coming. Already this year, we've noted the significant anniversaries of IBM, FTP, Apple, and Windows, and of course the 25th anniversary of .com last year. That's quite a bevy of anniversaries or should we call the collective a "birth of anniversaries."

Following a theme, we have two related anniversaries to report. 30 years ago on August 12, the IBM PC was introduced with a hail (well, at least one) of good reviews. July 27 of that same year saw the creation of MS-DOS. It wasn't exactly creation in the literal sense, since only days before delivering it to IBM for their PC, Microsoft bought the software from a company named Seattle Computer Products, rebranded it with their name, and jumped on one of the bigger band wagons of the 20th century (and in the process proved that software was much more important than hardware -- hardware is easily replaced, but software changes at a much slower pace.)

Since this is still the irony age, it's only fitting that on one of the designers of the first PC has declared IBM to have been "in the vanguard of the post-PC era." But, a VP for Microsoft has labelled this the "PC-plus era" and asserted that Microsoft will "continue to lead the industry forward in bringing technology to the next billion (or 2 billion or 6 billion) people on our planet." This may be true for a billion or so people, but Apple will still make all the money. So, a mere 30 years after it all started, it appears that the post PC era is upon us (at least where profits are concerned.)

There does seem to be an inevitable progression away from the PC. When I joined Academic Computing in 1987, the computer was an IBM mainframe and the IBM PC I inherited in my new position was there to test connectivity to the "real" computer. Today, my server is a desktop and my desktop is a laptop. My PC is a virtual desktop on my laptop. Some day my desktop will be a virtual presence somewhere in the cloud and my desktop will be whatever piece of hardware I may be holding (preferably a Web-OS tablet, but we'll talk about that some other time.)

There's one more anniversary to discuss. Just 20 years ago on August 6 the first web page was published. So, if you can read this column, thank Tim Berners-Lee. He didn't make a lot of money off of his invention that has changed our world, but at least he got a knighthood out of the deal (it's Sir Tim to us mere Internet serfs.) So now that you can read the web on your phone, where will all the old PC hardware go? I guess to silicon heaven, or remembering MS-DOS, perhaps to the opposite place.
UNT has implemented a revised FERPA policy that is effective immediately. This was in response to new federal interpretations, as well as to meet the needs of the University of North Texas faculty, staff and students. (via InHouse). According to the InHouse article, "key changes to the policy affect many faculty and staff members who have access to students’ records. Most notable of the changes are revisions to those items listed as "Directory Information,” which is information typically allowed to be released without student consent, unless the student has requested that their directory information be withheld.”

Now, faculty and staff may not release or provide telephone numbers of students but, if requested, may provide dissertation and thesis titles, graduation dates and honors and awards. It is important for anyone who might provide information to fulfill an outside request be familiar with the FERPA policy and procedures.

Visit www.unt.edu/ferpa/UNT_directory_info.htm for a complete listing of the new UNT Directory Information items.

Questions should be directed to the Registrar’s Office by either emailing registrar@unt.edu or by phoning 940-565-2112.
Creating a Custom Search Filter in ITSM 7.6 for the Incident Overview Console

Currently the ITSM 7.6 Incident Overview console shows all tickets either Owned or Assigned to your group. Generally when working tickets you will only want to see those tickets Assigned to your group. At this time there is not a simple method for filtering between Assigned and Owned tickets. It is possible to create a custom search filter that will allow you to see only those tickets you want.

Finding your Support Organization.

To create a custom Filter you will need to know your "Assigned Group and Support Organization." You may have more than one. To find this information:

1. Open a New Incident
2. Click on the drop-down menu for Assigned Group.
3. Click on your Support Company (not ticket transfer) and a pop-out displaying your Support Organization should appear. In this example we see CITC Helpdesk. Your group may have multiple Support Organizations. Write down the names of the Support Organizations you wish to view exactly as they appear.

Creating the filter

Now that you have recorded the Support Organizations you wish to use it is time to create a filter

1. From the Incident Management Console click on the magnifying glass located next to the Filter By field.
2. The Manage My Searches window will appear
3. Type in your Search Name, in the example we will use Helpdesk Assigned.
4. Now we will enter in our Search Qualification

- The first method outlined will be using a couple of "templates" to create your search. These searches will display only tickets assigned to the specified Support Organization(s) that are in the Assigned, Pending, or In Progress states.
- If you have one Support Organization please copy and paste the following search (substituting CITC Helpdesk for your Support Organization) exactly:

`'Assigned Support Organization' = "CITC Helpdesk" AND ('Status' = "Assigned" OR 'Status' = "In Progress" OR 'Status' = "New" OR 'Status' = "Pending")`

- If you have two Support Organizations use the following format:
('Assigned Support Organization' = "CITC Helpdesk" OR 'Assigned Support Organization' = "CITC Helpdesk") AND ( 'Status' = "Assigned" OR 'Status' = "In Progress" OR 'Status' = "New" OR 'Status' = "Pending" )

- Alternatively, you can create a custom search string using the Build Search Qualification option. Please note that not all searchable fields, such as Assigned Support Organization, will be listed.

1. Click Save, and then Close.

Using the Filter

After clicking close, from the Manage My Searches window, you will return to the Incident Console.

Click on the Pulldown menu from the Filter By field. From this menu choose My Searches > Your Search.

Your queue should automatically refresh, but if it does not click on the refresh icon.

If you receive an error, or the Filter does not appear to work, please go back and verify that you have the search qualification entered correctly.

Need Help?

If you are having trouble implementing a filter contact Mac Edwards at jonathan.edwards@unt.edu
IRC News

Minutes provided by Christine Valenzuela 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.

*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.
Multinomial Logistic Regression

Multinomial logistic regression is used to predict categorical placement in or the probability of category membership on a dependent variable based on multiple independent variables. The independent variables can be either dichotomous (i.e., binary) or continuous (i.e., interval or ratio in scale). Multinomial logistic regression is a simple extension of binary logistic regression that allows for more than two categories of the dependent or outcome variable. Like binary logistic regression, multinomial logistic regression uses maximum likelihood estimation to evaluate the probability of categorical membership.

Multinomial logistic regression does necessitate careful consideration of the sample size and examination for outlying cases. Like other data analysis procedures, initial data analysis should be thorough and include careful univariate, bivariate, and multivariate assessment. Specifically, multicollinearity should be evaluated with simple correlations among the independent variables. Also, multivariate diagnostics (i.e. standard multiple regression) can be used to assess for multivariate outliers and for the exclusion of outliers or influential cases. Sample size guidelines for multinomial logistic regression indicate a minimum of 10 cases per independent variable (Schwab, 2002).

Multinomial logistic regression is often considered an attractive analysis because; it does not assume normality, linearity, or homoscedasticity. A more powerful alternative to multinomial logistic regression is discriminant function analysis which requires these assumptions are met. Indeed, multinomial logistic regression is used more frequently than discriminant function analysis because the analysis does not have such assumptions. Multinomial logistic regression does have assumptions, such as the assumption of independence among the dependent variable choices. This assumption states that the choice of or membership in one category is not related to the choice or membership of another category (i.e., the dependent variable). The assumption of independence can be tested with the Hausman-McFadden test. Furthermore, multinomial logistic regression also assumes non-perfect separation. If the groups of the outcome variable are perfectly separated by the predictor(s), then unrealistic coefficients will be estimated and effect sizes will be greatly exaggerated.

There are different parameter estimation techniques based on the inferential goals of multinomial logistic regression analysis. One might think of these as ways of applying multinomial logistic regression when strata or clusters are apparent in the data.

Unconditional logistic regression (Breslow & Day, 1980) refers to the modeling of strata with the use of dummy variables (to express the strata) in a traditional logistic model. Here, one model is applied to all the cases and the strata are included in the model in the form of separate dummy variables, each reflecting the membership of cases to a particular strata.

Conditional logistic regression (Breslow & Day, 1980; Vittinghoff, Shiboski, Gildden, & McCulloch, 2005) refers to applying the logistic model to each of the strata individually. The coefficients of the predictors (of the logistic model) are conditionally modeled based on the membership of cases to a particular strata.

Marginal logistic modeling (Vittinghoff, Shiboski, Gildden, & McCulloch, 2005) refers to an aggregation of the strata so...
that the coefficients reflect the population values averaged across the stata. As a rudimentary example, consider averaging each of the conditional logistic coefficients, from the previous paragraph, to arrive at set marginal coefficients for all members of the population – regardless of stata membership.

Variable selection or model specification methods for multinomial logistic regression are similar to those used with standard multiple regression; for example, sequential or nested logistic regression analysis. These methods are used when one dependent variable is used as criteria for placement or choice on subsequent dependent variables (i.e., a decision or flow-chart). For example, many studies indicate the decision to use drugs follows a sequential pattern, with alcohol at an initial stage followed by the use of marijuana, cocaine, and other illicit drugs.

**Example**

For the following example a fictitious data set will be used. The data includes a single categorical dependent variable with three categories. The data also includes three continuous predictors. The data contained enough cases (N = 600) to satisfy the cases to variables assumption mentioned earlier. First, import the data using the 'foreign' package and get a summary.

```
R version 2.13.1 (2011-07-08)
Copyright (C) 2011 The R Foundation for Statistical Computing
ISBN 3-900051-07-0
Platform: i686-pc-linux-gnu (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type ‘license()’ or ‘licence()’ for distribution details.

Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type ‘contributors()’ for more information and ‘citation()’ on how to cite R or R packages in publications.

Type ‘demo()’ for some demos, ‘help()’ for on-line help, or ‘help.start()’ for an HTML browser interface to help.
Type ‘q()’ to quit R.

> library(foreign)
> mdatal <- read.spss("http://www.unt.edu/rss/class/Jan/R_BC/Module9/MultiNomReg.sav",
+ use.value.labels=TRUE, max.value.labels=Inf, to.data=TRUE)
```

Next, we need to identify the outcome variable as a factor (i.e. categorical).

```
> mdata2 <- mdatal
> mdata2$y <- as.factor(mdata2$y)
> summary(mdata2)
```

Next, we need to load the ‘mlogit’ package (Croissant, 2011) which contains the functions for conducting the multinomial logistic regression. Note, the ‘mlogit’ packages requires six other packages.
Next, we need to modify the data so that the multinomial logistic regression function can process it. To do this, we need to expand the outcome variable (y) much like we would for dummy coding a categorical variable for inclusion in standard multiple regression.

Now we can proceed with the multinomial logistic regression analysis using the 'mlogit' function and the ubiquitous 'summary' function of the results. Note that the reference category is specified as "1".

```r
> mdata3 <- mlogit.data(mdata2, varying=NULL, choice="y", shape="wide")
> head(mdata3)

    code y x1 x2 x3 child alt
 1   1.1 TRUE 6.345698 6.762624 6.083055 1 1
 2   1.2 FALSE 6.345698 6.762624 6.083055 1 2
 3   1.3 FALSE 6.345698 6.762624 6.083055 1 3
 4   2.1 TRUE 6.102071 5.757376 3.719470 2 1
 5   2.2 FALSE 6.102071 5.757376 3.719470 2 2
 6   2.3 FALSE 6.102071 5.757376 3.719470 2 3
```

```
> model1 <- mlogit(y ~ 1 | x1 + x2 + x3, data=mdata3, reflevel="1")
> summary(model1)

Coefficients:

  Estimate  Std. Error t value  Pr(>|t|)
alt2  -212.8519   81.8105  -2.6018   0.0092745 **
alt3   -453.6373  126.4855  -3.5865  0.0003352 ***
alt2:x1  25.5902   9.7736   2.6183  0.0084362 **
alt3:x1  52.3354  15.1260   3.4600  0.0004602 ***
alt2:x2  4.6797   2.2705   2.0611   0.0392950 *
alt3:x2  9.9523   3.1821   3.1267  0.0017622 **
alt2:x3  2.3603   1.4547   1.6225 0.1046953
alt3:x3  2.5404   1.7377   1.4620 0.1437443

---

Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Log-Likelihood: -13.388
McFadden R^2:  0.97869
Likelihood ratio test : chi^2 = 1291.4 (p.value=< 2.22e-16)
```
The results show the logistic coefficient (B) for each predictor variable for each alternative category of the outcome variable; alternative category meaning, not the reference category. The logistic coefficient is the expected amount of change in the logit for each one unit change in the predictor. The logit is what is being predicted; it is the odds of membership in the category of the outcome variable which has been specified (here the first value: 1 was specified, rather than the alternative values 2 or 3). The closer a logistic coefficient is to zero, the less influence the predictor has in predicting the logit. The table also displays the standard error, t statistic, and the p-value. The t test for each coefficient is used to determine if the coefficient is significantly different from zero. The Pseudo R-Square (McFadden R^2) is treated as a measure of effect size, similar to how R^2 is treated in standard multiple regression. However, these types of metrics do not represent the amount of variance in the outcome variable accounted for by the predictor variables. Higher values indicate better fit, but they should be interpreted with caution. The Likelihood Ratio chi-square test is alternative test of goodness-of-fit. As with most chi-square based tests however, it is prone to inflation as sample size increases. Here, we see model fit is significant χ² = 1291.40, p < .001, which indicates our full model predicts significantly better, or more accurately, than the null model. To be clear, you want the p-value to be less than your established cutoff (generally 0.05) to indicate good fit. To get the expected B values, we can use the 'exp' function applied to the coefficients.

![Image of the 'exp' function applied to the coefficients](http://it.unt.edu/benchmarks/issues/2011/08/rss-matters\[4/28/16, 9:49:47 AM\])

The Exp(B) is the odds ratio associated with each predictor. We expect predictors which increase the logit to display Exp(B) greater than 1.0, those predictors which do not have an effect on the logit will display an Exp(B) of 1.0 and predictors which decease the logit will have Exp(B) values less than 1.0. Keep in mind, the first two listed (alt2, alt3) are for the intercepts.

Further reading on multinomial logistic regression is limited. Several authors (Garson, 2006; Mertler & Vannatta, 2002; Pedhazur, 1997) provide discussions of binary logistic regression in the context of graduate level textbooks, which provides insight into multinomial because it is a direct extension. Clearly those authors believe that if one is inclined to understand binary logistic, then one is also likely to understand multinomial logistic. There is merit in this position because one is an extension of the other and both use maximum likelihood (an ogive function). However; other authors provide either direct examples of multinomial logistic regression (Schwab, 2002; Tabachnick & Fidell, 2001) or a full discussion of multinomial logistic regression (Aldrich & Nelson, 1984; Fox, 1984; Hosmer & Lemeshow, 1989; Menard, 1995).

Until next time, you can tell everybody this is your song...

**References & Resources**


Instructor-led courses are not currently being offered. Please contact an RSS member or Claudia Lynch if you are interested in taking such a class or wish to have someone offer a class for your students. SPSS and SAS courses are now offered online only. RSS staff will be still be available for consultation on those topics, however. Another class available online is Introduction to R.

Surf over to the Short Courses page to see instructions for accessing the SPSS and SAS online learning and other training that is available to you. You can also see the sorts of instructor led courses that have been offered in the past.

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 and expanding. Please see the article EIS Training Available Online for New Faculty & Staff in this issue of Benchmarks Online for further information.

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. If you haven't accessed the training since last year you will need to get a new access code.

Microsoft Outlook Tutorials and much more

The Enterprise Messaging and Directory Services Group has all sorts of useful information on their website, including tutorials and FAQs. The home page displays a list of their newest tutorials with tutorial topic pages displaying the most accessed pages. You can search the site for whatever you're interested via a Search Box on the left-hand side of the page.

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

CLEAR offers courses especially for Faculty Members. A list of topics and further information can be found here.
The center has, in the past, offered a "Brown Bag" series which meets for lunch once a month at noon. 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.

Ed2go

Ed2go are courses that are offered, for a fee, to UNT faculty, staff and students as well as the general public. According to the CALL website:

CALL has partnered up to provide online learning on a variety of topics. From standardized test preparation to database programming to training for libraries and their staff, there's a variety of areas from which to choose in online learning.

The online minicourses, provided in conjunction with Ed2go, are standardized 12-lesson modules released over a six week period. (Courses are active for eight weeks to provide some flexibility). Each module features a quiz. Lessons are instructor-led and course participants and instructor communicate through a course discussion board. Lessons can be downloaded and saved. At the end of the course there is a final quiz. A passing grade opens a window that allows students to print out a course completion certificate.

All courses are $89, and UNT faculty, staff and students may receive a $10 discount.

For additional information surf over to http://www.ed2go.com/unt/

Information Security Awareness

The UNT Information Security team offers 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.

It is a policy requirement that ALL staff take an information security course at least once a year.

Please contact Allan Anderson in CITC Information Security if you have any questions, or would like more information about the online training. Either attending a live class or going through the online training will count towards your training requirement. You can also request a customized course to be taught for your department.

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 Library Instructional Unit also offers workshops and training, including "tech skills" training. Visit their websites for more information: http://www.library.unt.edu/library-instruction

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

UNT has offered Gartner Core Research Services to all UNT faculty, students, and staff since 2006. All you need to do to access the subscription is to log into the UNT Gartner portal page at https://gartner.unt.edu/. Once you have logged in, you can view upcoming webinars: http://www.gartner.com/webinars/ and listen to Gartner podcasts here: http://www.gartner.com/it/products/podcasting/asset_137461_2616.jsp. For more information about Garther Research Services, see the article Gartner Core Research Services Available to the UNT Community in this issue of Benchmarks Online.

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.
New Horizons Computer Learning Centers

New Horizons is a DIR vendor, which means that state agencies, like UNT, get special pricing for their services negotiated at the State level (click here for more information about DIR vendors). New Horizons offers courses at their own facilities in Dallas and Fort Worth, but will arrange for onsite training as well.
Staff Activities

Transitions

New Employees:

- **Christopher Justin Good**, IT Programmer Analyst, HR Benefits Systems Team, Enterprise Applications.
- **Adam Krawiec**, IT Specialist, Central Web Support, Enterprise Systems Technical Services.
- **Angel Gutierrez**, Telecom Student Employee (part-time).
- **Alicia Fountain**, Student Assistant Data Communications (part-time).
- **Karen Renee Dowdy**, Administrative Specialist, Telecommunications, Communications Services.
- **Donley Antoine**, CSS Tech, Classroom Support Services (part-time).
- **Steven Franklin Donovan**, IT Programmer Analyst, Student Records Systems Development Team.

No longer working in the Computing and Information Technology Center:

- **Monica Salazar**, Student Assistant Data Communications (part-time).
- **Travis Fraser**, Student Assistant, Data Communications (part-time).
- **Mikal Hensarling**, ACUS/Adaptive Lab Manager.
- **Travis Rogers**, MMS Tech, Microcomputer Maintenance Shop (part-time).
- **John Wing**, MMS Tech, Microcomputer Maintenance Shop (part-time).
- **Sree Vani Koneru**, Student Assistant, Project Management (part-time).
- **Iqan Kamal**, IT Manager, AIS Tools and User Services.

Changes, Awards, Recognition, Publications, etc.
Changes/Reorganizations

John Hooper, Acting Vice President for Information Technology and CIO for UNT, Deputy CIO for the UNT System, recently made the following announcements:

I am pleased to announce that Craig Terrill has accepted the position of Senior Director, Enterprise Systems Technical Services. In that role Craig will be responsible for the provision of shared technical and infrastructure services including:

- Server virtualization
- Database hosting & infrastructure services
- Enterprise server management
- Data center operations
- Storage
- Backups

Craig has a long history of relevant experience in the areas to be directed. He has led major software, hardware, and storage installations and operations. He has participated in many of the transitional, strategic efforts that have gotten our technology where it is today. Further, since this experience has been at UNT, he is uniquely knowledgeable of our environment, configuration and organization. Finally, Craig is well respected by both his technical peers and the consumers of the technical services provided.

AND

I am pleased to announce that Dorothy Flores has accepted the position as Executive Director, Enterprise Applications within CITC. This position is responsible for delivery of many key shared enterprise applications to the UNT System components including EIS, ImageNow and Blackboard Vista.

Dorothy has been with UNT since 1995 and has accepted increasing levels of responsibility and has acted as a leader in many critical IT projects including the EIS implementation, establishment of the Dallas campus and numerous PeopleSoft upgrades. She is currently responsible for the human resources, payroll, and financial applications for the UNT system. Since October she has led the AIS council which has managed AIS since I moved into my role.

Dorothy is well respected by her colleagues and the units she serves. As I spoke to a variety of people about this move I heard similar comments about her thoroughness, leadership, communication skills, ability to understand the big picture while not losing sight of the important details, and her success at delivering on difficult initiatives.

Graduation

Congratulations to Katherine Bynum, CITC Helpdesk Consultant, who graduated 8/13/2011 with a BA in history, minor in psychology. More than 2,000 students received degrees this summer!

Service to UNT

Congratulations to Bryan Galloway, Communications Manager, Telecommunications, who celebrated 15 years of Service to UNT. He was recently recognized in InHouse.

Fun Fact Winner

We have another InHouse prize winner! Lauren Lucas, Administrative Specialist, Budget & Employee Services, Administration and Compliance, was a winner in the July 18 InHouse prize giveaway.

Now you really don’t want to mess with her!

Back in February we announced that she won first place in creative empty-hand kata, first place in traditional weapons kata, and third place in sparring in her competition age/rank divisions at the 2011 Lone Star Open (North American Sport Karate Association). Now, Dr. Elizabeth Hinkle-Turner, Director - Academic Computing Technical Services, has earned her first degree black belt in American Karate. Check out her August 20 post-test photo on the homepage of redtigerkarate.com.
Alert! Alert! Important Messages Will Never Miss You Now!

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

"Wouldn’t it be great if students had a buzzer that went off in their heads every time they received an important message from the university?" asked a colleague of mine at a meeting several years ago. Well, students actually DO have the next best thing: text messages to their cell phone of choice can alert them every time they get an important message in the Message Center located on the my.unt.edu portal.

Students should be checking the my.unt.edu portal as part of their daily routine in their career at UNT. On the opening page of the portal, easy links to the Message Center and to the EagleConnect email system are provided. A visual alert is also given if there is a message in the Message Center. These Message Center messages tend to be from areas with time-sensitive materials that students need to complete such as financial aid applications, housing business, or registration procedures:

Students can choose to receive text message alerts about these important communications from different campus departments by checking the appropriate box and putting in their cell phone number and the name of their carrier. Students can change these options at any time:
When different areas send a student a message via the Message Center, they also can send a text alerting the student to the presence of that message. That way no matter where the student is, his cell phone will let him know that his attention is needed immediately. The Message Center will now look like this:

Note that many official university communications are actually sent via email to EagleConnect because of their size and other considerations. Areas send out notifications about these emails to the Message Center as well and with the texting option, students learn about their email quickly as well.

Students are strongly encouraged to "opt in" for text alerts about official university communications. Administrative areas are likewise encouraged to send these text alerts when distributing messages via the Message Center. With all those "buzzers" going off, UNT students can be assured of successfully navigating many of the important procedures vital to their experience here at UNT.

For further information about digital student communications resources and how they can be used to better guarantee student success at UNT, contact me at ehinkle@unt.edu.
Computing Services for UNT Faculty

By Claudia Lynch, Benchmarks Online Editor

Computing has become an integral part of the university experience for everyone. Computing starts at your desktop, but can involve systems managed by your department or by the Computing and Information Technology Center (CITC). The information that follows is from a handout that is made available to faculty members. It provides information on some of the central services which can support teaching or research activities at UNT.

Getting Started

- Desktop computing support is provided by a College or Department-level IT support organization. To find your first point of contact for desktop computing issues, refer to the following page: www.unt.edu/helpdesk/netmanDepartments.htm

- What's my EUID? -- One of the most common questions fielded by the CITC Helpdesk is "What's my EUID?" EUID stands for "Enterprise UserID" and has been created to simplify access to computer resources across campus. If you are not sure what your EUID is, you can find out at the "Account Management System" website: ams.unt.edu You can also check your password status, change your password, and configure your preferred E-mail address there.

- E-mail -- Your employing department or college provides you with access to Microsoft Outlook, the E-mail system supported for official University business. Educational resources for Outlook can be found here (you will need to log in with your EUID to see the tutorials): emds.unt.edu Microsoft E-Learning courses are also 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.

- CITC Helpdesk -- helpdesk.unt.edu -- If you don't know where else to call, or when no one else can help you with your computer on campus, contact the Helpdesk: 940-565-2324 helpdesk@unt.edu Sycamore Hall, Room 119 (formerly the Information Sciences Building) directly across from the Eagle Commons Library. The Helpdesk staff provides computing support to all faculty, staff, and students at UNT. They have primary responsibility for supporting general purpose computing services provided directly by CITC and also provide a link to distributed computer support areas in the various colleges, departments and administrative units.

- IT Help Center -- helpdesk.unt.edu/service -- The CITC has implemented an IT support request system that has items specifically designed for employees to request IT service. Some, such as the request for CITC RSS services, are specific to faculty needs.

- The Enterprise Information System (EIS) portal -- Visit the EIS portal, my.unt.edu, to do a variety of things related to your employment at UNT. Once you have logged-in with your EUID, you can do things like view your paycheck, check your benefits, sign-up for training with human resources and more. You can also verify or update your contact information to make sure you receive Eagle Alert messages: www.unt.edu/eaglealert The my.unt.edu portal also provides access to the Faculty Center which allows you to view your course schedule and class rosters, and assign grades. For more information about the Faculty Center, see: essc.unt.edu/eis/faculty.htm

Academic Computing and User Services (ACUS) -- ACUS is a division of the CITC that provides a variety of
Computing Services for UNT Faculty | Benchmarks Online

computing services to the academic community. Besides the CITC Helpdesk, ACUS services include:

- **ACUS Research and Statistical Support** provides support services on data acquisition and statistical analysis for faculty members and students at UNT. The data acquisition service includes access to data from ICPSR, CRSP, Standard & Poor’s COMPUSTAT II, other data resources, and downloadable data for political and social research. Other services include consultation, application support, and instruction: [www.unt.edu/rss](http://www.unt.edu/rss)

- **Classroom Desktop Services -- [www.cds.unt.edu](http://www.cds.unt.edu)** -- ACUS provides desktop computer management for four computer classrooms located at the UNT Discovery Park, including one classroom set up in a configuration to support collaborative work by students.

- **High-Performance Computing Services --** [www.citc.unt.edu/hpc](http://www.citc.unt.edu/hpc) -- ACUS High-Performance Computing staff manage the Talon HPC system designed for compute-intensive scientific research. For more information about Talon, see: [citc.unt.edu/hpc/talon](http://citc.unt.edu/hpc/talon)

- **Research and Visualization Environment (RAVE)** -- ACUS operates a Research and Visualization Environment (RAVE) at the UNT Discovery Park to support research data visualization and display. The facility features multiple high-powered workstations, each having 8 processor cores and 24 GB of RAM. The flagship visualization tool is a 40-core Linux display cluster, powering a 4 X 3 array of 30-inch LCD monitors for large-scale display of data: [citc.unt.edu/rave](http://citc.unt.edu/rave)

- **Data Management** is responsible for research data entry and automated scanning services for test scoring and course evaluations: [www.unt.edu/ACS/datamanage.htm](http://www.unt.edu/ACS/datamanage.htm)

- **Benchmarks Online** is the ACUS/CITC monthly online newsletter you are reading now: [www.unt.edu/benchmarks](http://www.unt.edu/benchmarks)

**Bulk Mail, Web Publishing, Blackboard Vista and More**

- **BulkMail** is the automated system which allows authorized University faculty and administrators to send targeted messages to all or selected UNT students. BulkMail provides faculty the ability to (1) send E-mail to their entire class or several classes by making a simple selection via a web-based interface (2) see a list of their class members and send individual mail messages by clicking on the student's name in the list. For more information see: [www.unt.edu/bulkmail/unt_bulk_communication_system.htm](http://www.unt.edu/bulkmail/unt_bulk_communication_system.htm)

- **Blackboard Vista**, the online course management system, is supported by the CITC Distributed Learning Support group along with the Center for Learning Enhancement, Assessment, and Redesign (CLEAR). To learn more about Blackboard Vista and UNT's distance learning initiatives, visit (check for popup blockers first): [ecampus.unt.edu](http://ecampus.unt.edu) and [clear.unt.edu](http://clear.unt.edu)

- The UNT **Copyright Resources** website provides the UNT community with information about copyright law and resources to help people make good decisions when utilizing copyrighted material: [copyright.unt.edu](http://copyright.unt.edu)

- **Classroom Support Services --** Classroom Support Services (CSS), a division of CITC, is funded by the student Technology Use Fee to provide and maintain the audio-visual equipment in UNT’s general-purpose (type “110”) classrooms on the Denton campus. For more information, see: [www.css.unt.edu](http://www.css.unt.edu)

- **Staying Connected at UNT --** The Data Communications Group provides data and video services for the students, faculty and staff of the University: The wireless network at UNT is called Eaglenet: [www.unt.edu/wireless](http://www.unt.edu/wireless) The UNT video conference network provides a resource instruction or collaboration over long distances: [www.unt.edu/untvn](http://www.unt.edu/untvn)

- **Information Security and Virus Protection --** Learn about secure ways to protect your computer by visiting: [security.unt.edu](http://security.unt.edu) Download McAfee anti-virus products (FREE to UNT faculty, staff and students) from: [security.unt.edu/resources/antivirus](http://security.unt.edu/resources/antivirus) The UNT bookstore offers a variety of software from many companies at significant educational discounts. Dell and Apple computers are sold in the bookstore as well

as a variety of peripheral devices, cables, and accessories.

- **General Access Computer Labs** -- UNT’s General Access Labs are open to anyone with a valid UNT ID card. There are labs throughout the main Denton campus and two at the Discovery Park. The lab in Sycamore Hall (SYMR 104) has adaptive hardware and software for students with special needs. These labs are student-fee funded, but are open to faculty on an as-available basis. For more information, including lab hours (some are open 24/7) see: www.gacl.unt.edu

- **Restrictions** -- UNT computer systems can only be used for activities related to academic work or other professional activities, but use for personal commercial gain is not allowed. Learn the rules, by reading: policy.unt.edu/policy/3-10"
Data Management Services Update

By Claudia Lynch, Benchmarks Online

As we announced back in February, UNT's Data Management department now offers an exam grading service: The Dell Printer Station. The Dell Printer Station does more than grade exams, however, it is also a time-saving printer solution for testing and managing classroom documents. The Dell Printer Station bundles a set of education-specific applications for print-on-demand test bubble sheet templates, instant grading results and reporting. These capabilities are designed to allow professors to react quickly to an individual student's challenge areas, as well as adjust overall lesson plans to impact full class achievement. **Dell Key and Answer forms are available in Data Management, ISB Rm #140.**

Data Management will continue to process NCS exam forms #4521 and #106173, however, **NCS forms #4521 or #106173 will no longer be stocked after August 31st.** If your department wishes to continue using the NCS forms, you may purchase them online at [https://store.scantron.com](https://store.scantron.com) (enter 4521 or 106173 in search field).

See Dell Report sample and forms:

- Answer Key: [http://www.unt.edu/helpdesk/DataMgmt/AnswerKey.pdf](http://www.unt.edu/helpdesk/DataMgmt/AnswerKey.pdf)

As always, the reports can be emailed and stored electronically. Turnaround time is approximately 15 minutes. Come by and try out our service soon!!
Gartner Core Research Services Available to the UNT Community

By Claudia Lynch, Benchmarks Online Editor

In 2006 the Computing and Information Technology Center (CITC), the Library, the College of Arts & Sciences, the College of Engineering, and the College of Business Administration cooperatively purchased a subscription to Gartner Core Research Services for all UNT faculty, students, and staff. Since that time, CITC has maintained the subscription. To access the subscription, you must log into the UNT Gartner portal page at https://gartner.unt.edu/.

Gartner Core Research contains a large base of knowledge regarding IT technologies, markets, and industries. It supplies easy access to data and analysis about the latest news, trends, products, and insights within the field of information technology. The Research for Higher Education section is designed to meet the specific needs of students, faculty and staff as well as technology professionals within the University. It offers unparalleled depth and breadth of research developed by analysts who have extensive backgrounds and it strives for objectivity and independence.

The Gartner research includes:

- Emerging trends in technology
- Governance best practices
- Strategic Planning Best Practices
- Strategic document review
- Wireless technology trends
- Security: Disaster Recovery, Business Continuity
- Administrative and Student Financial Systems
- Distance Learning
- Open Source

Once you have logged in to the portal you can view upcoming webinars: http://www.gartner.com/webinars/ and listen to Gartner podcasts here: http://www.gartner.com/it/products/podcasting/asset_137461_2616.jsp. For a more comprehensive view of the Gartner offerings you can visit their web site via the UNT Gartner portal. View the latest Gartner Higher Education poster here.

Getting Direct Access to Gartner Researchers

CITC began sponsoring direct access to Gartner researchers in 2007. Faculty and staff can conference directly with Gartner researchers on specific topics for thirty minute technical discussions. Having direct access to a researcher may provide information not addressed in the published reports and surface new developments since the last publishing.

Scheduling a session

Our contract requires that one person schedule the sessions and facilitate the calls. Allen Bradley, CITC Contracts &...
Analytics, is the liaison between UNT and Gartner, so when you need to schedule a session, send him an email with the specific topic from the Gartner website and he will make the request. Gartner will respond with several times the researcher is available. We will select a time and schedule the call.
This is the time of year when departments begin preparing for new faculty to arrive. In previous years, an introduction to EIS and employee self-service has been led by the EIS Training, Communications, and Administration Manager during departmental orientations held for new faculty. This information is now available as online training and can be accessed at a time that is convenient for the new employee.

By navigating to the EIS Training site (https://eis.unt.edu/training), faculty will find information of particular interest under the topics of:

- Introduction to EIS
- EIS Employee Self Service
- EIS Manager Self Service (appropriate for faculty who supervise others)

Additional resources on the EIS Training site benefiting new faculty are located under the “Additional Resources” section. Selecting the “MyHelp” link provides access to online tutorials for the myUNT Faculty Center accessed via the myUNT portal. Selecting the link to the “Purchasing and Payment Services” site provides listings of training services for Asset Management, ePro, PCard, and university related travel.

New staff can also benefit from many of the tutorials available on the EIS Training site. Questions regarding EIS online training can be directed to Rebecca.padia@unt.edu.

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A note from the Editor: The above article appeared recently in inHouse. According to the author:

This is only the beginning of e-learning topics that will be available. By the end of September, new courses in using query manager in EIS for both Financials & Learning solutions will be available. The EIS Training page mentioned above is a great resource for helpdesk and desktop support staff both in administrative and academic areas.

All of these e-learning tutorials are being created with an Oracle product named “User Productivity Kit (UPK).” If you have training that could be delivered in electronic format, my team welcomes you to contact us and discuss your need. Training that is required for compliance purposes is ideal for UPK as there is a tracking feature that verifies who took the training, how long it took them, and how successful they were in learning the material.
Today's Cartoon

From "Today's Cartoon by Randy Glasbergen", posted with special permission.
For many more cartoons, please visit www.glasbergen.com

“My boyfriend and I aren’t ready to move in together, but we’ve started keeping our data on the same cloud.”

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