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Campus Computing News

Software Availability Update for Faculty, Staff, and Students

By Dr. Elizabeth Hinkle-Turner, Director - Academic Computing Technical Services

Back in September (Remember September? There was no ice then...) I wrote a Campus Computing News article describing the currently available avenues for discounted software and hardware deals for UNT faculty, staff, and students. All the information in that article is current and correct, but since that time more deals and ways to take advantage of them have been added -- especially through a website run by UNT System ITSS.

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Custom UNT Exam Forms are Here!

MARKING
INSTRUCTIONS

Use a No. 2 Pencil.

By JoAnn Luksich, Data Manager, Academic Computing and User Services

We are pleased to announce the availability of a custom exam form developed especially for UNT. The form has the ability to collect EUID, EmplID, and complete name. It is also possible to collect demographics – Gender, Class & Age. Output data includes raw data, total score correct and Item analysis. Output data formatted for ExamSoft and Blackboard uploads is also available.

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From the Trenches: Managing Email

By John Murphy, Chair, Division of Jazz Studies, College of Music

Everyone who reads this newsletter is probably aware that Donald Knuth stopped using email in 1990. Even if we feel overwhelmed by the volume of email we receive, and dream about giving it up like Donald Knuth did, we know we can't get our work done without it. How can we use it better?

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By the Numbers

Down the Corridor of Years

1999

Benchmarks Online publications from 1999 note:

- UNT joined Internet 2.

- Internet Bandwith upgraded - from three (3) megabit connection is to be expanded to a nine (9) megabit connection.

- Student E-mail moved off of Jove.

- Computer Advantage Program disbanded.

- "The biggest project on-tap for this semester is to work seriously on putting in place a system for generating a standard electronic userid. This means that you will only need one userid for getting access to E-mail, the Web, the campus network and electronic class information. As part of this, we will likely be able to deploy a Web-based directory system."

- Record Number of Hits Received by UNT's Central Web Server – "During the month of January, UNT's central Web site (www.unt.edu) delivered a record number of files to users. The Web server had 6.15 million "hits", 56% of them requested by users from non-UNT sites. The previous record of 3.84 million

Spring Break Hours

By Claudia Lynch, *Benchmarks Online* Editor

Spring Break is just around the corner! Hard to believe, considering the number of "ice days" we've experienced in the recent past. Spring Break this year is March 10-16 (no classes). The following information should help you plan your activities if you need/want to access campus computing facilities over the break.

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ITSS Quarterly Newsletter

By Claudia Lynch, *Benchmarks Online* Editor

Issue 6 (February 2014) of the *ITSS Quarterly Newsletter* is now available. It is comprised of IT-related news relevant to anyone who uses or has an interest in shared services and applications throughout the UNT System and its member institutions.

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Benchmarks Online has a new URL

By Claudia Lynch, *Benchmarks Online* Editor

Time marches on and so do URLs. February 2014 marks the beginning of a new era for *Benchmarks Online* in terms of its **U**niform **R**esource **L**ocator, or web address, as it is sometimes called. The new URL is **it.unt.edu/benchmarks**, as you may have noticed.

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TODAY'S CARTOON

Click on the link above for an information age laugh.

---

hits was set in October, 1998. Much of the increase can be attributed to the new Web site design which is more graphics-intensive than the old one, but even factoring out the graphics pages, the Web server delivered 799,000 actual Web pages (HTML files) during the month."

- GroupWise can be used from home.
- "Next generation" of statistical packages announced.

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All interested UNT community members are strongly encouraged to view the site -- https://untsystem.onthehub.com -- which is easy to navigate and order from:

A view of the statistics software available at untsystem.onthehub.com

In light of this new availability the following is a complete update of software accessible at educational pricing and links on how to get it...

Microsoft Products:

EagleConnect: Students receive Office 365 web apps for free via EagleConnect. They also have 25 GB of storage, sharing, and collaboration ability with SkyDrive Pro.

Faculty and staff can receive **the latest Office suite for less than $10** and also enjoy free enrollment in **Microsoft eLearning**. Read all about it here.

Faculty and staff can also get latest Microsoft products on cd by going to the UNT Bookstore and purchasing them for around $14 - $16. The information about how to do this is found here.

Students, faculty, staff can get **the Office 365 University bundle to own** at thinkEDU (our UNT bookstore's hardware/software partner) for $119 or the Office 365 University bundle 4-year-lease at Amazon.com for $75. Find out more about this here.

They can also get this bundle from the "hub" by going here and clicking on the Microsoft tab: Office 365 University 4-year-lease for $79.99 or with 3-months-training for $89.99

McAfee Security Solutions

Don't forget to protect your machines! All students, faculty, and staff download and install free Viruscan Enterprise 8.8i from this UNT System ITSS security website.

Adobe Products

Students can get a Adobe Creative Cloud subscription available from thinkEDU for $199.95 ($16.99 per month); Many other discounted individual Adobe products are offered at thinkEDU for download at http://store.thinkedu.com/adobe-c60.aspx

However, now there is an even better deal at the system hub site:

- Students - Adobe Creative Cloud subscription available from https://untsystem.onthehub.com for $19.99 per month.

- Faculty and Staff - Adobe Creative Cloud subscription available from https://untsystem.onthehub.com - download the trial version and get the key from their network manager - this subscription is free to faculty and staff users.

Parallels - Desktop for Mac version 9

Faculty, Staff, and students can get this for $39.99 from https://untsystem.onthehub.com. Click on the Parallels tab.

Statistics Software

Special **SAS** and **SPSS** note for students: SAS does not generally sell software to individuals. They have some recommendations for students here. Their option: "SAS OnDemand for Academics" requires that a course be registered by the instructor before a student can access the software. Additionally, the university's licenses for SAS and SPSS allow for a limited number of copies to be made available for student home use. Academic Computing and User Services will support home installation of these programs for graduate students who are pursuing thesis or dissertation research and require one of these programs for their research data analysis. Requests for home use will need to be endorsed by a professor who is guiding or sponsoring the student research activity. More information about this can be found at: http://www.unt.edu/rss/Applications.htm.

SPSS:

- SPSS Standard available for $53.50 + $4.99 download fee (6 month rental) from https:untsytem.onthehub.com; SPSS Base available from $38.00 + $4.99 download fee (6 month rental) or Standard for $93.00 +$4.99 download fee (12-mo rental) and Base for $71.00 + $4.99 download fee (12-mo rental).

- SPSS Premium available for $104.00 + $4.99 download fee (12-mo rental) from https:untsytem.onthehub.com.

- Students, Faculty, Staff - SPSS AMOS available for $42.75 +$4.99 download fee (12-mo rental) from https:untsytem.onthehub.com.

- Faculty and select staff with appropriate projects may request copies of SPSS for their **UNT machines** from their respective department's network administrator.

- In addition, Faculty and staff may request installation of SPSS for academic use on their **personal home machine** by making a request via the **RSS Software Request** link here.

SAS:

- Faculty and select staff with appropriate projects may request copies of SAS for their **UNT machines** from their respective department's network administrator.

- Faculty and staff may request installation of SAS for academic use on their **personal home machine** by making a request via the **RSS Software Request** link here.

Other Statistics and Analytic Software: Faculty, Staff and Students - go to the Statistics tab on https://untsystem.onthehub.com for additional products and pricing.

*The Research and Statistical Support staff of ACUS wish for me to remind you that **R** is ALWAYS free! ;-)*

Other Products and Vendors

Faculty, staff, and students should go to the onthehub website and click on the **More Software** tab. You will see additional software discounts available under various categories such as Photo, Video, & Design; Security & Utilities; and Business & Office.

So….now the UNT Community has a STUB *and* a HUB!

That guy needs to swap out his guitar for a laptop!

And someday we will again have a SUB! Until then, happy software shopping!

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Each department can order their own supply, and/or purchase them from the UNT bookstore. Those wishing to order supplies directly from Scantron must do so via email, making sure to include the customized information shown below:

Scantron Corporation

3975 Continental Drive
Columbia, PA 17512
[T] 1.800.735.2566 x1323
[F] 717.684.1322

[E] marcia.eager@scantron.com * Please make note of my new email address

FORM #293907

500 Sheets = $170.10

1,999 Sheets = $680.38.

More than 2000 sheets, fees decrease. Contact Marcia Eager for more information.

Please feel free to address any questions about this to: joann.luksich@unt.edu or 940-369-7416

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Reverse the email spiral

The best set of ideas for using email better is found at emailcharter.org. If more of us followed these ten suggestions, we'd use email better and spend less time on it.

There's a link to the email charter in my default signature--"default" because there's more than one. The Outlook signature tool enables you to create multiple signatures. You could make a complete one to send to colleagues outside UNT and a shorter one for emails to coworkers. Or you could omit the signature. As the email charter notes, short is not rude when it comes to email. A short email that conveys the necessary information could be considered polite because it makes good use of the recipient's time.

Schedule a time for email

The nature of your job might require you to have your email client open all day. If it doesn't, you might follow Alexandra Samuel's advice and set a schedule for doing email and let your colleagues know about it.

If you find yourself using email for realtime conversations, consider using Lync, the instant messaging client UNT provides. Even if you don't use instant messaging when you're off work, you might find it useful at work. You can see at glance whether your colleague is available and have a quick exchange of messages without adding emails to your inbox.

Use Outlook tools*

Receiving too many irrelevant emails is a common complaint at UNT. Maybe a shift of perspective can help: "There's no such thing as information overload. There's only filter failure" (Clay Shirky, quoted by Jay Rosen; sounds like a version of the Norwegian saying about the weather: "There is no bad weather, only bad clothing"). Outlook gives you the tools to filter the flow of emails. The ones that work best for me:

1. Creating local folders for archiving mail by month. This way you never exceed your mail quota, but you can still search all your email in one search.

2. Creating a quick step to move a message from the inbox to one of these folders with one click.

3. Creating rules to automatically move emails into folders, such as "UNT bulk email" and "non-UNT bulk email", or into Deleted Items. The other day when I tried to create a new rule and couldn't, I learned that there is a limit to the number of rules the system can accommodate: 32KB, which works out to around 40-50 rules.

Be creative

Other ways I have managed the flow include unsubscribing from unnecessary email lists; creating a set of personal email accounts for various purposes, such as list subscriptions, online purchases, and social media notifications, and checking them with an email client that allows you to check multiple accounts at once; and using a feature phone

that doesn't have email on it instead of a smartphone.

The SharePoint option

We could use email better by making [SharePoint](#) more a part of our daily work routine. When we have files to share that are non-confidential, we can use a SharePoint document library. Why send everyone a document, which adds unnecessary MBs of storage to each person's email quota, when it can be put in one central place where all can access it? The more we use attached documents, the more we assign clerical microtasks to each other: creating a folder to save the attachment in, saving the attachment, deleting the attachment from the email before archiving it. Let's give each other the gift of fewer clerical microtasks. When we want to have an extended discussion, we can use a SharePoint Discussion to keep it organized and outside of the chaotic flow of messages in the email inbox. If we have information to share that's not urgent enough to put in an email to our working group, we can post it to a blog on SharePoint. The staff who provide support for SharePoint are highly skilled and quick to respond to questions.

If you're concerned about who can view your work on SharePoint, the permissions can be adjusted to limit access to just your working group. Remember, though, that every document you create at work, including email, is potentially available to the public. "Never put anything in an email," my wise colleague Paul Dworak advises, "that you would not like to see on the front page of the Dallas Morning News."

In closing

A favorite part of the Donald Knuth page on email:

Email is a wonderful thing for people whose role in life is to be on top of things. But not for me; my role is to be on the bottom of things. What I do takes long hours of studying and uninterruptible concentration.

I would have phrased it "to get to the bottom of things," as in thinking deeply about a task, or going to talk with someone instead of sending an email. Maybe the best email technique of all is to know when to turn it off.

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*From the Editor: See [Best practices for Outlook 2010](#) for further recommendations from "the product team that created Microsoft Outlook 2010." Also, find some online videos on Mailbox Management from Microsoft here:

- [Mailbox management 1: Use views to stay organized](#)

- [Mailbox management 3: File your stuff in folders](#)

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By **Dr. Philip Baczewski**, Senior Director of Academic Computing and User Services and Deputy Chief Information Officer for University Information Technology

The World Measured in Macintosh Time

Blame our digital heritage for a preoccupation with anniversaries in measures of 10 years. For example, the Apple Macintosh just celebrated it's 30th anniversary. It hardly seems 30 years at all to some of us (let's see -- four fingers, carry the thumb, and -- yikes, I can't be THAT old!) I guess one sign of age is the ability to note and remember the source of those times-ten-year anniversaries.

On the cusp ...

1994 was on the cusp of the real start of the Internet age. As this column pointed out, the established Internet backbone of the time, NSFNet, was about to be decommissioned, paving the way for the development of the commercial Internet or as we call it today, The Internet. *Benchmarks* noted the tenth anniversary of the Macintosh with a whole issue devoted to the topic with a lead article recounting its history, from its early years to its then modern instantiation. ACS staffer Mark Thacker closed that article with the following prophesy. "When the original Mac was introduced, no one really thought that we would be directing our computers to do things with voice command (and that they would talk back to us), playing CDs in the background and making movies, not in 10 at least. Who knows what we will do in the next 10 years as we move to even faster processors and the Macintosh picks up more capabilities. Heck, you will probably be listening to this article being read to you by some hand-held wireless system while you compose (using voice or pen and maybe a keyboard) your commentary on the 20th birthday of the Mac. Please be kind when commenting on how shortsighted those of us in the 90's were!"

10 years ago

10 years was a bit optimistic for Mark's prediction. The 20th birthday of the Mac only merited just a mention in *Benchmarks*. 2004 was a different time than 1994. The events of 9/11/2001 changed the U.S. and the world. The "dot-com bubble" had come and gone and Steve Jobs had gone from and come back to Apple, reinvigorating Apple's product line with the iMac, and relatively new iPod (but no iPhone or iPad yet.) Ten years ago, this column concerned itself with a galactic internet that linked the a newly landed Spirit Mars rover with its managers here on Earth. My comment at the time was, "I can now read E-mail on my cell phone, but I won't expect to be watching downloaded movies via that wireless network any time soon." What a difference 10 years makes.

Something else that happened 10 years ago was the genesis of Facebook. The ubiquitous social network started as a place where college students could meet on line. In 5 years it would grow beyond the college set to engulf the middle-aged middle class, and to allow teenagers everywhere to publicize their youthful indiscretions to the world. Facebook now serves a the news channel of our personal social world. We find out what our friends are eating, what our relatives are reading, and what myriad of trivial Internet sites are "liked" by our Facebook Friends.

Now ...

30 years ago, Apple promised us that we'd see *why 1984 won't be like be like "1984"*. I guess we should be glad that the Macintosh saved us from a world caught in perpetual war, with omnipresent government surveillance, and a political system controlled by an elite 2 percent of the population. As we note the Mac's 30th anniversary, we must also note the passing of its primary creative force, Steve Jobs. Recent history might cause one to forget that Jobs was pushed out of Apple in 1985, founded NeXT Computer that developed much of the technology that would later

become Mac OS X, and returned to Apple in the late 1990's to revive its fortunes and to lead Apple to a string of novel information technology developments that included the iMac, iPod, iTunes, iPhone, and iPad. These products and their competitors have changed how we personally interact with information and have made 2014 a much different world than 1984 or 1994. Today, you very well might "be listening to this article being read to you by some hand-held wireless system" and are very likely to at least be reading it on a handheld device delivered by or inspired by Apple.

And then?

I don't expect to be writing this column in 2024 (but you never know) so I'll refrain from speculating about the future and whether the Macintosh will see a 40th birthday. Instead, consider that both the Beatles and the Rolling Stones recently had significant 50th anniversaries. I wonder if in 10 years Paul McMartney and Mick Jagger will be rocking (music not chair) in their 80's? Just say "1960's rock and roll" into your iWatch to find out.

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Checking the Real-time Status of ITSS Services

The first article in the current ITSS Quarterly Newsletter discusses Service Level Agreements (SLA) and the availability of a new website to check on the status (service level) of systems and applications provided by ITSS. Check out the website to see the status of your favorite services:

http://sla.untsystem.edu/

Example SLA View

Current Status

☑ Blackbaud Raiser's Edge	☑ Business Intelligence Infrastructure	☑ Campus Local Area Network
☑ Campus Technology Support Services	☑ Campus Wireless Network	☑ Central Web Services
☑ Constituent Relationship Management	☑ Datacenter Infrastructure Services	☑ Datacenter Networks
☑ Data Protection Services	☑ Degree Management Systems	☑ Directory Services
☑ Email Hosting for Faculty/Staff	☑ Emergency Notifications	☑ Financial Information Systems
☑ Human Capital Management	☑ Imaging Services	☑ Incident Call and Support Request Tracking
☑ Learning Management System Service and Support	☑ Network Firewall and VPN	☑ Portal
⚠ Server Provisioning	☑ SharePoint	☑ Student Administration Information Systems
☑ Telephone Services (UNT)	☑ Telephone Services (UNTHSC)	☑ Unified Messaging
☑ Video Conferencing Network	☑ Virtualization Services	☑ Wide Area Network

Status updated at: 02/17/2014 01:32:09 pm

Another View from the SLA Website
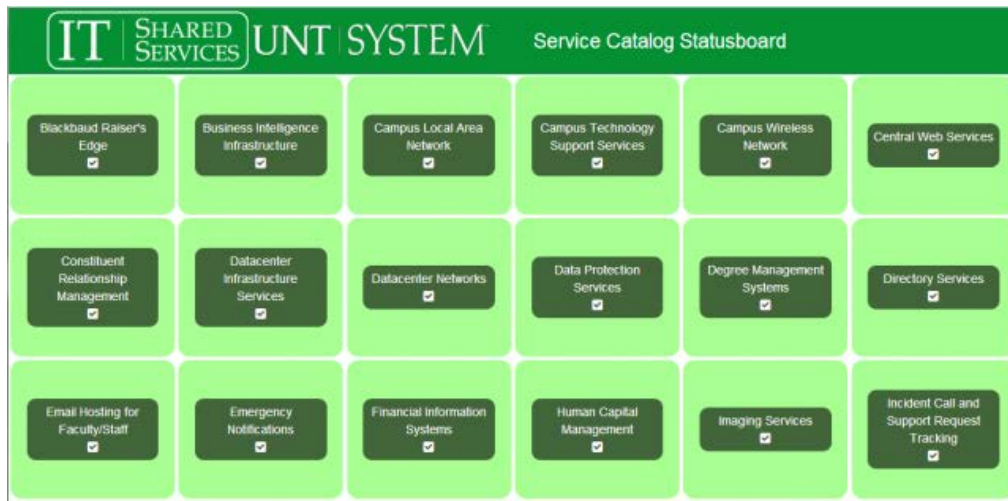
Originally published February 2013 -- Please note that information *published in Benchmarks Online* is likely to degrade over time, especially links to various Websites. To make sure you have the most current information on a specific topic, it may be best to search the UNT Website at http://www.unt.edu. You can also consult the UNT Helpdesk: http://www.unt.edu/helpdesk/. Questions and comments should be directed to benchmarks@unt.edu.

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Helpdesk FYI

By Jacob Flores, UIT Support Services Manager

The Knowledge Center at UNT's new IT Help Self Service Portal

With the introduction of UNT's new IT Help Self Service Portal comes a new central location for the customer knowledge base. Various offices between the UNT institutions are contributing to the Knowledge Center, so it serves as a great point of reference to all for instruction and information, and should only become better over time.

While you may find yourself at a knowledge base article via a direct link from a website, you may also peruse the Knowledge Center as a whole. Here's how:

After logging into the IT Help Self Service Portal, select "Knowledge Center" at the very top. If searching for a specific topic, such as "EagleConnect," enter that into the search bar along the top to find related results. We can tag articles with keywords to improve search result relevancy.

Alternatively, you may browse by a broader category from the left menus. Results from either search method may be filtered by article type or rating by use of the menus on the left.

To clear specific search terms you've selected, just hover over the term near the top left, and click on the red X in the surrounding yellow box.
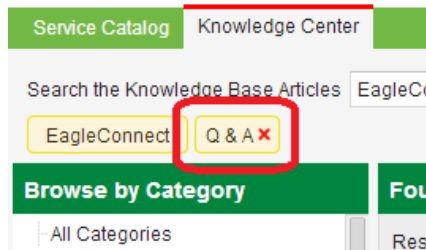
To clear all search terms, click on the red X to the right of the search box.
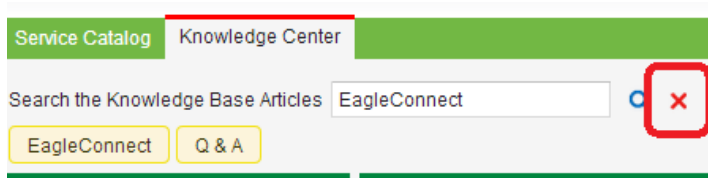
While new articles are contributed and existing entries are updated as needed, you may greatly help with a simple action: rate existing articles. We all strive to get good information out there, but it's possible some content becomes outdated. So, whether an article helped you or appears to be incorrect, feel free to give us feedback in the form of 1-5 star user rating or the feedback fields at the bottom of each knowledge base article page.

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RSS Matters

R_stats

Research and Statistical Support
University of North Texas

Your one-stop multiple missing value imputation shop: R 2.1 with the rrp package.

Link to the last RSS article here: Introduction to basic Text Mining in R. -- Ed.

By Dr. Jon Starkweather, Research and Statistical Support Consultant

This month we provide a recommendation for dealing with multiple missing value imputation. Of course, every researcher must deal with missing values at some point. The first key issue when dealing with missing values is attempting to determine if the values are missing at random or if there is some discernable pattern to the missing-ness. For a thorough treatment of that issue, please see Little and Rubin (1987). If there is no discernable pattern among the missing values and a decision to impute, or estimate, those missing values has been taken; a choice must be made among the many techniques available for imputation of missing values. Some methods for identifying, displaying, and imputing missing values have been previously discussed in this column (see: Starkweather, 2010). However, the present article will deal exclusively with the use of the rrp.impute function of the rrp package (Iacus, 2012). The *rrp* stands for Random Recursive Partitioning (Iacus & Porro, 2009 & 2007). However, the rrp package is only available from R-Forge for older versions of R (e.g. R version 2.15.0). Therefore, this article will provide instructions for downloading and installing R version 2.15.0, as well as the installation of the rrp package into R version 2.15.0. We will be using a Windows 7 PC (please note: you must have administrator privileges in order to install software). The article will then proceed to show how to use the rrp.impute function in order to impute multiple missing values with a simulated data set.

Installing R 2.15.0 and rrp

The first thing we need to do is determine where on your machine you want to install the old version of R; from here on we will refer to this version as R 2.15.0. Generally, RSS personnel recommend creating a specific directory (i.e. folder) on your machine's hard drive for all R installations. The file path location of such a directory should look something like:
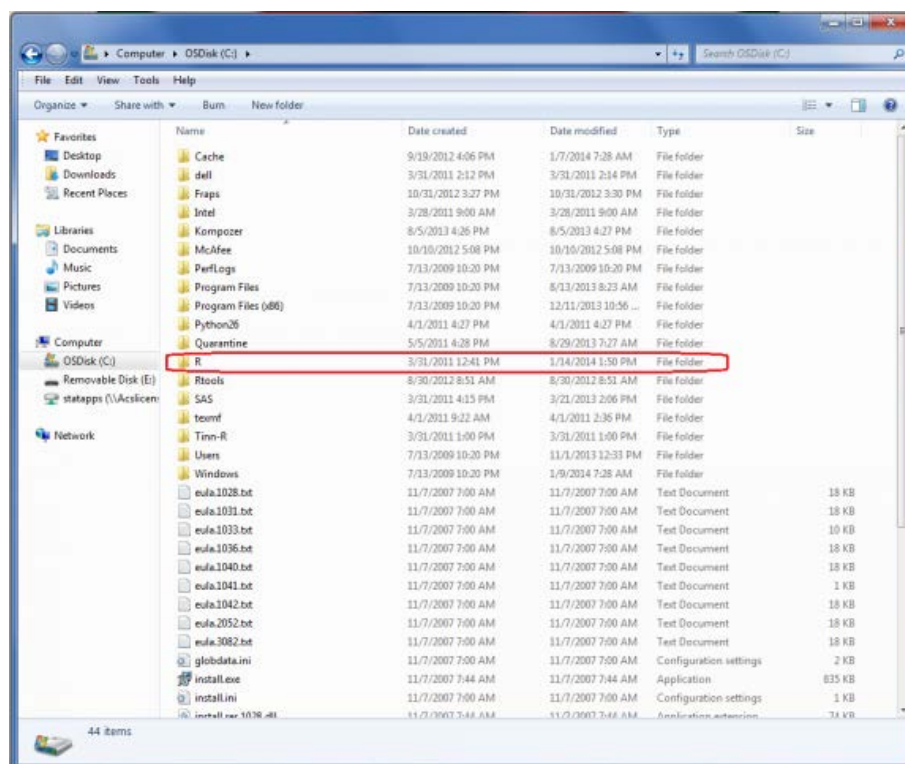
However, we recognize some people have R installed in the default location (inside the Program Files directory); in which case, your R directory will be located inside the Program Files directory. Inside the R directory there should be at least one installation of R, typically the most recent version; which as of this writing is R 3.0.2 which can be seen in the image below.
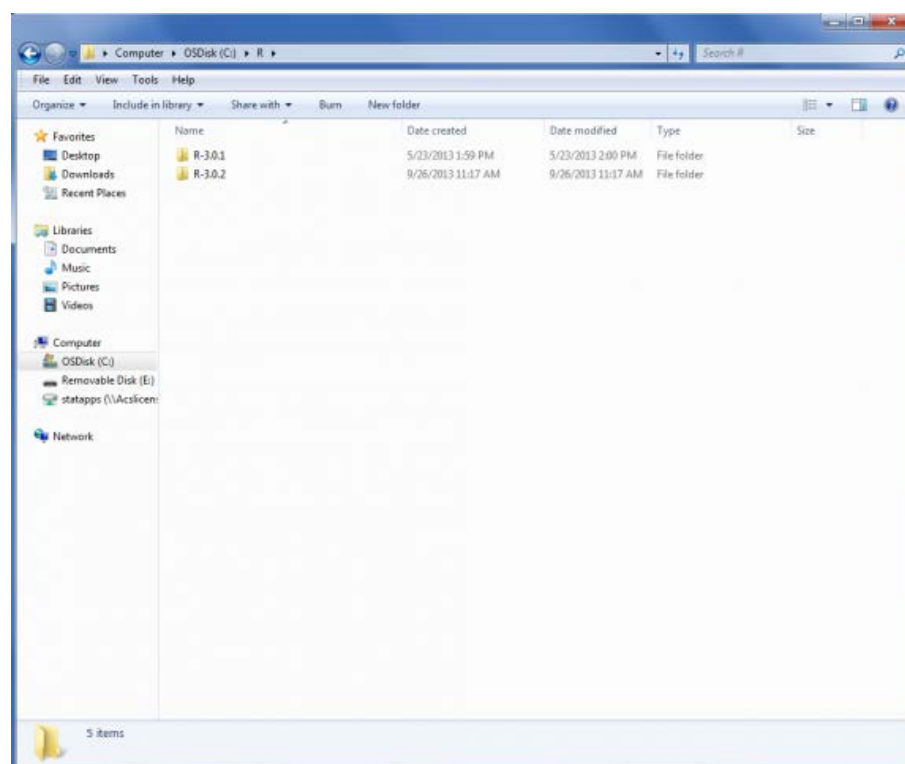

The location shown above will be referred to as the R directory; in which we will install R 2.15.0 (and which should contain the latest version of R [e.g. R 3.0.2]). Next, we need to retrieve R 2.15.0 from the CRAN archives and download it to the R directory on our machine (the location shown in the image above). Old versions of R can be accessed from CRAN (http://cran.us.r-project.org/) by clicking on the R Binaries link on the left side of the main CRAN page (see image below with binaries link marked with the red rectangle).
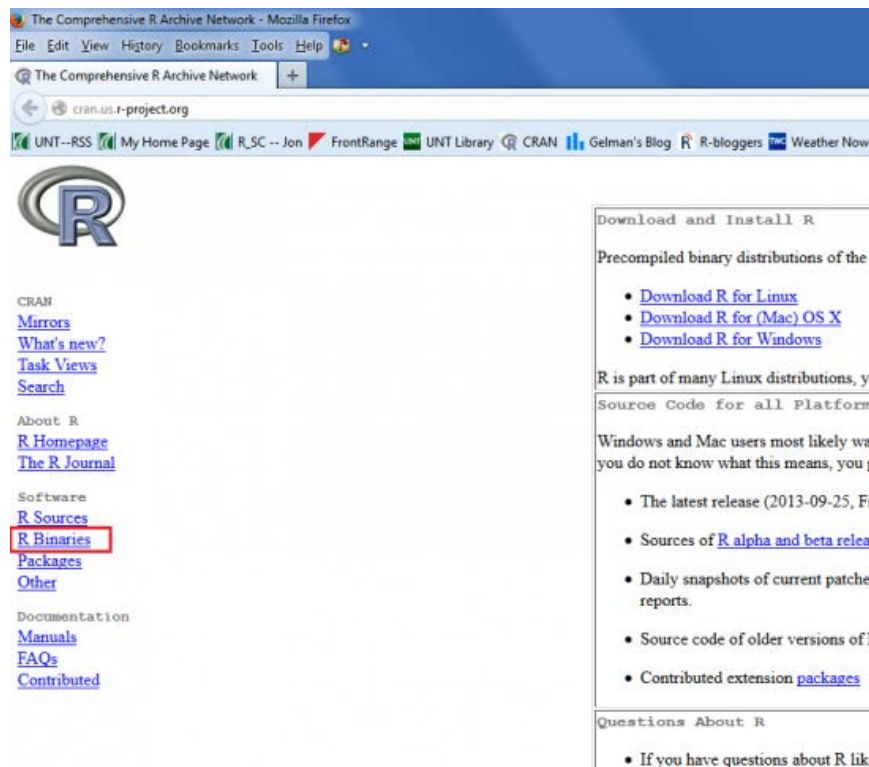
Once you click on the R Binaries link, you will then select the operating system in which you want to install ("windows" marked below with a red rectangle);

then click "base" distribution from the Subdirectories as show below;
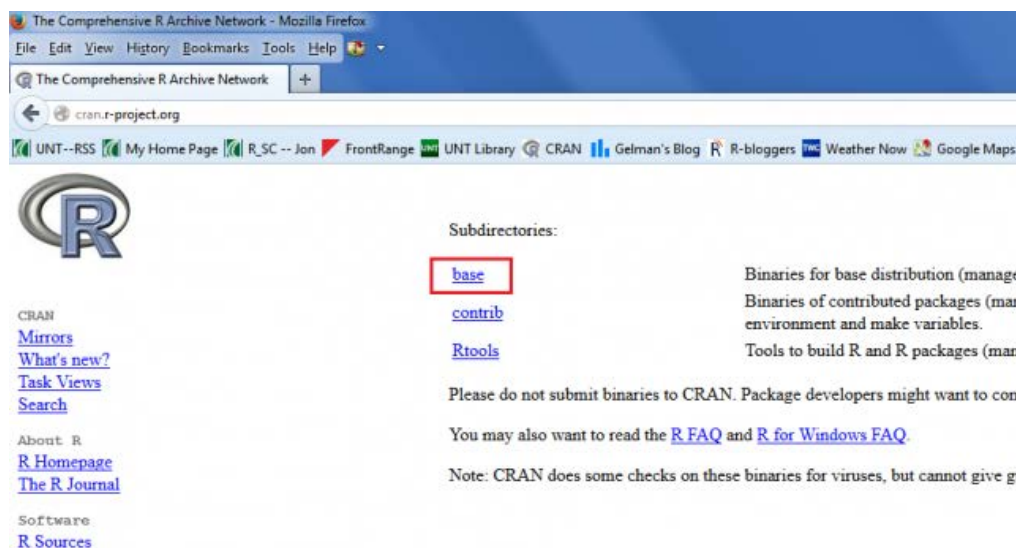
then click "Previous releases" (marked with the red rectangle in the image below).
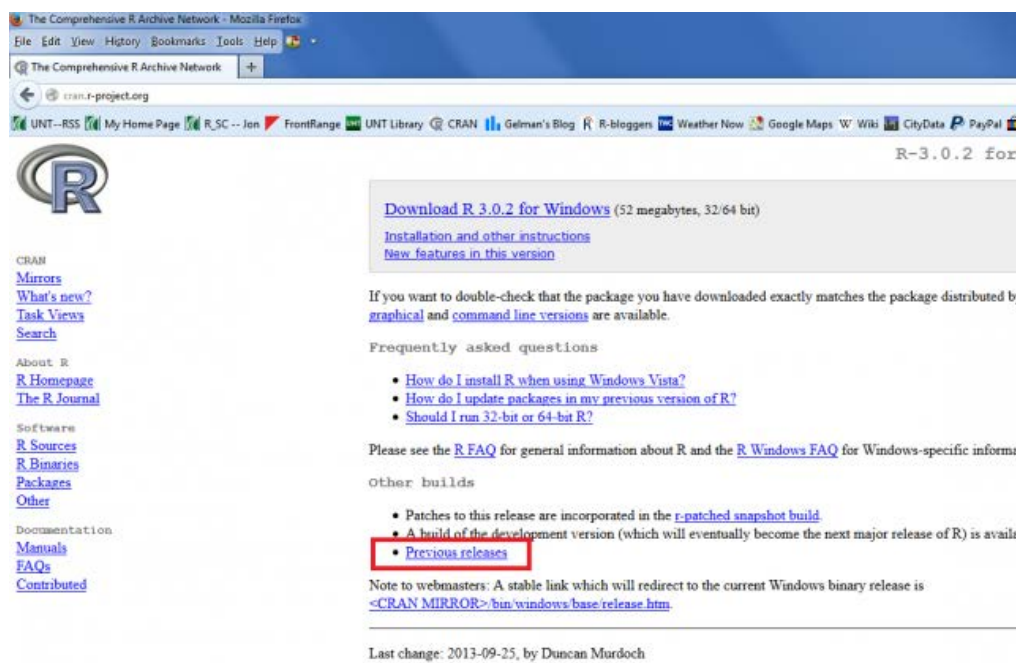
Then click on R 2.15.0 (marked with the red rectangle in the image below).

Then click on "Download R 2.15.0 for Windows" (marked with the red rectangle in the image below). This will allow you to save the installation, or executable, file to the R directory on your machine as located and discussed above.

Then, you simply navigate to your R directory and double click the installation file to install R 2.15.0. Once you have finished installing R 2.15.0, your R directory should look something like what is below.
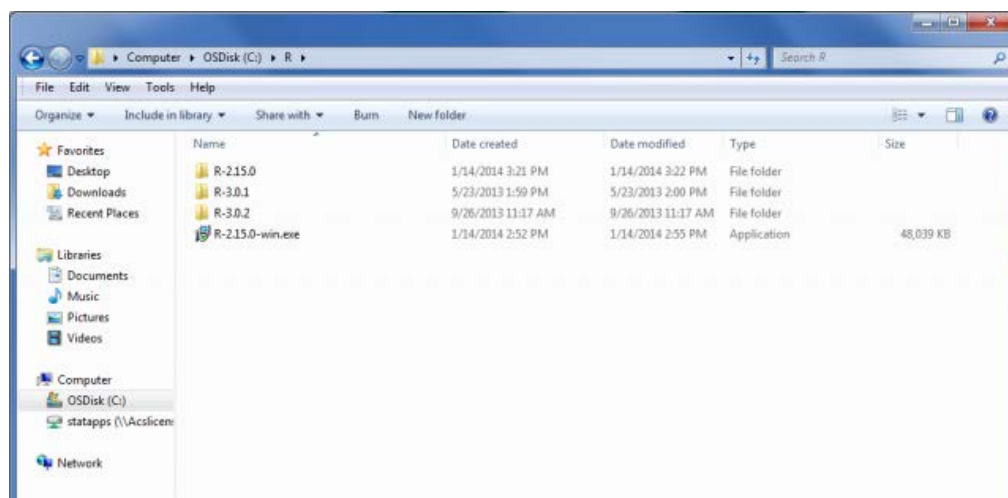
At this point, we can open the (R 2.15.0) console in preparation of installing the rrp package (Iacus, 2012).

Next, we need to point our favorite browser to the rrp package page of R-Forge (https://r-forge.r-project.org/R/?group_id=1480). Once on that page (displayed below), you will need to copy the installation script line (marked below with a red rectangle) and paste it into your R 2.15.0 console in order to install the rrp package (as shown further below).

It is very important that you never update this version of R and that you never 'update packages' associated with this version of R (if you do, you'll need to uninstall R 2.15.0 and start over). This way, you can have this old version of R for the dedicated purpose of multiple missing value imputation – and this version consume only a small amount of space on your hard drive because it should only have the rrp package installed. The latest version of R will continue to be the version you should use for all other operations.

Using rrp to impute missing values

First thing we need to do is import our simulated data (rrp.ex.data.txt) from the RSS webserver and get a summary of it. We name the data "data.1" for this example and we notice from the summary the data contains 158 cases ($n = 158$) and 8 columns: id, sex, age, Q1, Q2, Q3, Q4, Q5. We also notice from the summary there are missing values among the responses to the sex, age, Q2, and Q4 variables.

Next, we remove the (arbitrary) identification column ("id") because it contains no meaningful information (i.e. it is not related at all to any of the other columns of data).

Next, we need to load the package (rrp) which contains the imputation function (rrp.impute). We also need to set the seed (set.seed) so that we can replicate exactly the resulting imputations we get. Notice below, we simply use the 8-digit date (at the time of writing) for the seed number (2014 Jan. 14[th] = 20140114). Then, we can submit this data (data.2) to the 'rrp.impute' function. Notice below, we have a "$new.data" tacked onto the end of the function – this allows us to return just the imputed data frame (rather than the two object list which the function naturally returns). We assign the imputed data frame to a new object (data.3). You can gain a better understanding of the arguments of the 'rrp.impute' function by referring to the help files and / or package documentation (Iacus, 2009). See also Iacus, and Porro (2009); Iacus, & Porro (2007) listed at the bottom of this document.

We can see the missing (NA) have been imputed by comparing the summaries of each data frame.

```
R Console (64-bit)                                                    [_][□][×]
File  Edit  Misc  Packages  Windows  Help

> summary(data.2)
     sex          age             Q1             Q2             Q3             Q4
 female:67   Min.   :19.00   Min.   :1.000  Min.   :1.000  Min.   :1.000  Min.   :1.000
 male  :86   1st Qu.:26.00   1st Qu.:2.000  1st Qu.:2.000  1st Qu.:2.000  1st Qu.:2.000
 NA's  : 5   Median :30.00   Median :2.000  Median :2.000  Median :3.000  Median :2.000
             Mean   :35.15   Mean   :2.424  Mean   :2.788  Mean   :3.082  Mean   :2.658
             3rd Qu.:44.00   3rd Qu.:3.000  3rd Qu.:4.000  3rd Qu.:4.000  3rd Qu.:3.000
             Max.   :83.00   Max.   :7.000  Max.   :7.000  Max.   :7.000  Max.   :7.000
             NA's   :8                      NA's   :7                     NA's   :9
      Q5
 Min.   :1.000
 1st Qu.:2.000
 Median :3.000
 Mean   :3.437
 3rd Qu.:5.000
 Max.   :7.000

> summary(data.3)
     sex          age             Q1             Q2             Q3             Q4
 female:67   Min.   :19.00   Min.   :1.000  Min.   :1.000  Min.   :1.000  Min.   :1.000
 male  :91   1st Qu.:27.00   1st Qu.:2.000  1st Qu.:2.000  1st Qu.:2.000  1st Qu.:2.000
             Median :31.00   Median :2.000  Median :2.000  Median :3.000  Median :2.000
             Mean   :35.14   Mean   :2.424  Mean   :2.815  Mean   :3.082  Mean   :2.629
             3rd Qu.:41.79   3rd Qu.:3.000  3rd Qu.:4.000  3rd Qu.:4.000  3rd Qu.:3.000
             Max.   :83.00   Max.   :7.000  Max.   :7.000  Max.   :7.000  Max.   :7.000
      Q5
 Min.   :1.000
 1st Qu.:2.000
 Median :3.000
 Mean   :3.437
 3rd Qu.:5.000
 Max.   :7.000
>
```

Conclusions

As you may have noticed above, we did not need to restrict the 'rrp.impute' function to only the numeric vectors (i.e. columns) of the data. This is one reason why RSS personnel recommend going through the (minor) trouble of having an old version of R installed on our machines. Having the old version (R 2.15.0) and the rrp package installed allows us to impute missing data quickly because 'rrp.impute' is the only function we are aware of which allows us to impute both numeric and categorical variables with one run of a function. The other main reason we recommend using 'rrp.impute' is because we have run simulations to compare the performance (in terms of bias & variability of estimated / imputed values) of 'rrp.impute' to a number of other highly recommended imputation strategies (e.g. maximum likelihood multiple imputation [package norm, package Amelia], Iterative Robust Model-based Imputation [package VIM], & Sequential *k* nearest neighbors [package SeqKnn, package rrcovNA]). Our results suggest the random recursive partitioning (rrp) method provides estimates with very low bias and low variability – approximately the same amounts one would get from applying the maximum likelihood method; and of the methods tested, 'rrp.impute' is the only one which imputes both numeric and categorical values. Keep in mind; all these methods assume the missing values are missing at random (i.e. no discernable pattern to the missing values).

For more information on what R can do, please visit the Research and Statistical Support Do-It-Yourself Introduction to R course website. An Adobe.pdf version of this article can be found here.

Until next time; *make sure you get a retainer and keep your ear to the grindstone…*

References / Resources

Iacus, S. M. (2012). Package rrp. Available at: https://r-forge.r-project.org/R/?group_id=1480

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Starkweather, J. (2010). How to identify and impute multiple missing values using R. Benchmarks Online, November 2010. Available at: http://web3.unt.edu/benchmarks/issues/2010/11/rss-matters

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Training

By Claudia Lynch, *Benchmarks Online* **Editor**

Do you need training on widely used computer programs including those used in statistical analysis? If so, this monthly *Benchmarks Online* column is for you.

Statistical Analysis

Instructor-led courses are offered only by special request. 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. **SAS**, **SPSS** and **Introduction to R** **are offered online**. Make sure and check out the **RSS Matters** article *Statistical Resources* in the July 2012 issue of *Benchmarks Online.*

Special classes can always be arranged with the RSS staff. 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 online statistical courses, which are available to students, faculty and staff, staff and faculty members can take courses offered through the Business Service Center (they have a new comprehensive training curriculum), and the Center for Learning Enhancement, Assessment, and Redesign (CLEAR). Additionally, the Center for Achievement and Lifelong Learning (CALL) offers a variety of courses, usually for a small fee.

EIS training is available and expanding. Click here for online tutorials.

Microsoft IT Academy

All **students, faculty and staff** within the UNT System now have access to online learning via the Microsoft IT Academy.

Microsoft E-Learning

Microsoft E-Learning courses are available for ***faculty and staff*** via our UNT System Microsoft Campus Agreement. See the article in the November 2013 issue of *Benchmarks Online* for more information.

Central Web Support

Central Web Support provides "End-User and Administrative Support for hosted general web sites, and Drupal websites for academic and administrative departments." Visit their website for "How-Tos about Everything."

CLEAR

CLEAR offers courses especially for Faculty Members. *CLEAR training includes:*

- Blackboard

- Turnitin

- Turning Point

- Assessment

- Teaching Effectiveness

- Respondus

Please check out CLEAR's training and event calendar at http://clear.unt.edu/calendar for the latest information regarding Blackboard, CLEAR's initiatives, and on campus instructional events.

Further information can be found here.

FREE SLOAN-C ONLINE WORKSHOPS

The University of North Texas is a premium member of Sloan-C College Pass. To request FREE ENROLLMENT in an online workshop by Sloan-C, please contact Amber Bryant with the name and date of the workshop selected.

- Sloan-C 2014 Workshops

Please click on the link above to see the available 2014 workshops.

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.*

> *Most courses are $89, and UNT faculty, staff and students may receive a $10 discount. Visit the online courses page at http://www.ed2go.com/unt/ or contact Tami Russell at 940.565.3353 for more information.*

For additional information, visit the **Ed2go blog** here.

Information Security Awareness

The ITSS Information Security team offers Information Security Awareness training to all UNT faculty and staff. **It is a policy requirement that ALL staff take an information security course at least once a year.**

See the July 2013 "Link of the Month" for the latest information about Security Awareness trianing.

Business Service Center Training & Development

Provides training to UNT System institutions: http://bsc.untsystem.edu/training-development. There is also a link to download Office 2010 training (in PowerPoint 2010 format) on the BSC website.

UNT HR Training and Development

As noted on their website:

> *Monthly emails are sent to all employees with a list of current classes, many available by webcast. (Note: Few, if any classes are offered during the winter break, spring break holiday periods for all UNT System campuses.)*

> *Learn more about classes*

here: *https://untranet.unt.edu/untsystem/UNT%20System%20HR/talent_management/SitePages/Home.aspx*

If you have questions or specific needs, contact talentmanagement@untsystem.edu or call 855-878-7650 to be directed to a Talent Management staff member.

Alternate Forms of Training

Many of the General Access Labs around campus have tutorials installed on their computers. See http://computerlabs.unt.edu/ for a list of labs and their locations. The 24 Center in 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.

Info~Tech, UNT's IT Research Partner

Info~Tech is UNT's IT research partner. UNT System, UNT, UNT Health Science Center and UNT Dallas employees have access to Info~Tech research at: www.infotech.unt.edu (click on the UNT System name to login). Your standard EUID and Password gains you access to the Info~Tech system. Please take a moment to read their terms and conditions by clicking through the agreement when you set up your profile the first time you log in.

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 Horizins 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.

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Staff Activities

Staff activities for UIT are reported in this column. ITSS staff activities are handled by ITSS Communications.

Transitions

New Employees:

- **Cole Quarles**, UIT Helpdesk Consultant (part-time).

- **Milen Milchev**, IT Specialist, ABN Distributed Network Support (AIS).

No longer working in UIT:

- **Shea Rodgers**, IT Manager, Business Services Support/Student Development (AIS).

- **Laura Hernandez**, UIT Helpdesk Consultant (part-time).

- **Justin Neel**, MMS Tech, Microcomputer Maintenance Shop (part-time).

Changes, Awards, Recognition, Publications, etc.

- Congratulations to **Elizabeth Hinkle-Turner, John Hooper** and **Chris Stoermer** who are members of the President's Community Engagement Honor Roll - 2013.

- **Christopher Johnson** is now an IT Manager, Business Services Support/Student Development (AIS), moving from his previous position in ABN Distributed Network Support.

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Spring Break Hours

By Claudia Lynch, *Benchmarks Online* Editor

Spring Break is just around the corner! Hard to believe, considering the number of "ice days" we've experienced in the recent past. Spring Break this year is March 10-16 (no classes). The following information should help you plan your activities if you need/want to access campus computing facilities over the break.

Following are the hours for University Information Technology-managed facilities during Spring break. The University is officially closed Monday, March 10, 2014.

- The **Helpdesk** will maintain standard hours and availability during the week of March 10-16, except they will be **closed for walk-in traffic** on Monday, March 10.

- **Data Management Services** will be **closed** Monday, March 10, re-open for regular hours Tuesday, March 11.

- The **ACUS General Access/Adaptive Lab** (SYMR 104) will be **closed** Sunday, March 9 through Sunday, March 16. Re-open at 8 a.m. on Monday, March 17, resume normal hours.

Hours for Other Campus Facilities

General   Access   Labs

24 Center (formerly known as WILLIS)	**Close** Friday, March 7, 2014 at 7 p.m. **Closed** Saturday & Sunday, March 8 & 9. Open 7 a.m. - 7 p.m. Monday, March 10 through Friday, March 14. **Closed** Saturday, March 15. Open at 11 a.m. Monday, March 16 and return to a 24hr schedule.
College of Information General Access Computer Lab (CI-GACLab) (B205)	**Closed** March 8-10. Open Tuesday, March 11 through Friday, March 14 10 a.m.- 6 p.m. **Closed** Saturday-Sunday, March 15-16. Re-open with normal hours on Monday, March 17.

[MUSIC](#):	**Close** 5 p.m. Friday, March 7 and **remain closed** through Sunday, March 16. **Re-open** Monday, March 17 at 8 a.m. and resume normal hours.
[PACS Computing Center](#) (College of Public Affairs and Community Service, Chilton Hall)	**Close** Friday, March 7 at 5 p.m. and **remain closed** until 7 a.m. on Monday, March 17, resuming normal hours.
[CVAD](#)	**Closed** Saturday, March 8 through Friday, March 14. **Re-open** Saturday, March 15 and resume normal hours.
[COE](#)	**Close** Friday, March 7 at 5 p.m. and **remain closed** until 7 a.m. on Monday, March 17, resuming normal hours.
[COB](#) (BLB 190)	**Closed** Saturday, March 8 through Saturday, March 15. **Re-open** Sunday, March 16 and resume normal hours.
[CAS](#) - This schedule is for all CAS labs.	**Close** 5 p.m. Friday, March 7 and **remain closed** through Saturday, March 15. **Re-open** Sunday, March 16 and resume regular hours.
[Engineering](#) General Access Lab (CENGAL, englab@unt.edu, Discovery Park, B129, 891-6733)	**Close** Friday, March 7 at 5 p.m. and **remain closed** until 9 a.m. on Monday, March 17, resuming normal hours.

UNT Shuttle Service

Check out the transit [website](#) to keep up with the shuttle schedule. A 2013-2014 calendar is available here: http://www.unt.edu/transit/pdf/2013-2014_calendar.pdf. **There is no service Saturday and Sunday, March 8 & 9 and March 15 & 16.**

Remember:

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

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ITSS Quarterly Newsletter

By Claudia Lynch, *Benchmarks Online* **Editor**

Issue 6 (February 2014) of the *ITSS Quarterly Newsletter* is now available. It is comprised of IT-related news relevant to anyone who uses or has an interest in shared services and applications throughout the UNT System and its member institutions. In this issue:

- A review of ITSS SLA processes

- An update for the PeopleSoft Upgrade Project

- Vulnerabilities with Personal Devices

- News about the new IT Help portal

- An annual review of ITSS' Strategic Services.

- New Tip of the Week

- And much, much more.......

Find issue 6 of the *ITSS Quarterly Newsletter* here:

http://itss.untsystem.edu/itss-quarterly-newsletter/Feb2014/index.htm

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Benchmarks Online has a new URL

By Claudia Lynch, *Benchmarks Online* Editor

Time marches on and so do URLs. February 2014 marks the beginning of a new era for *Benchmarks Online* in terms of its Uniform Resource Locator, or web address, as it is sometimes called. The new URL is **it.unt.edu/benchmarks**, as you may have noticed.

All previous issues of *Benchmarks Online* have been re-directed to this new URL. That means that you should have no problem accessing archived articles and/or issues no matter which URL you enter or click on. Please contact me, Claudia Lynch, at lynch@unt.edu if you detect any problems in this regard.

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Today's Cartoon

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

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