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Columns, July 2014

- Network Connection
- Link of the Month
- Helpdesk FYI
- RSS Matters
- Training
- Staff Activities

Benchmarks - July, 2014

Campus Computing News

Office 365 Email Migration

By **Abraham John**, **Senior Director, Administrative Information Technology Services (AITS), University Information Technology (UIT)**

By this time you've no doubt heard or read about the email migration away from our on-premises implementation of Microsoft Exchange to the Microsoft cloud. Most of what you need to know has already been communicated via Administrative announcements and/or through *InHouse* articles. This, then, is a compilation of some of the key points about the advantages, the process, and where to go for help during and after this email migration.

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Make Your Fall Reservations Now at the Sage Hall Academic Testing Center

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

The Sage Hall Academic Testing Center made its debut in the summer of 2012. Since that time use has grown steadily, adding 10 percent capacity usage per semester with increasing numbers of faculty and staff in a variety of schools, colleges, divisions, and department taking advantage of what the facility has to offer.

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Update on Freedom Scientific Products: JAWS and MAGic

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

Our holdings of JAWS (Job Access With Speech) - the popular screen reader from Freedom Scientific - and MAGic screen magnification software from the same company have remained fairly stable during the past few years. Some important upgrades are on the horizon for these products so it is a good time to review accessibility software resources available at UNT.

By the Numbers

Down the Corridor of Years

2003

Benchmarks Online publications from 2003 note:

- The research UNIX system (Sol) is migrated to a Sun E3500 server running version 8 of the Sun Solaris UNIX operating system.
- The Computing System discontinues dialup networking services.
- Academic mainframe services are discontinued.
- Printing Services entered the era of digital printing.
- USENet news service is discontinued.
- The CheckIn 4 system is debut as a fully web-based application for support of General Access Lab access control.
- Apple debuts its online music store in iTunes.
- UNT upgrades to WebCT Vista.
- A new account management system is implemented to support activation and password changes for Enterprise User IDs (EUID.)
- The EagleNet wireless network is implemented in several key buildings on campus.
- SPAM blocking technology is implemented on UNT Mailhosts.
- The Computing Center is renamed the Computing and Information Technology Center (CITC) and management positions receive new

titles.

Read more   BOOKMARK

Summer Hours

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

Summer is *still* here! Summer 2014 consists of six sessions and not all campus facilities are open during all the sessions. *

Read more   BOOKMARK

TODAY'S CARTOON

Click on the link above for an information age laugh.

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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

Home

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By Abraham John, Senior Director, Administrative Information Technology Services (AITS), University Information Technology (UIT)

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Cloud -- now there is a word that we hear quite often these days. Everything, apparently, lives in the cloud. Microsoft's business FAQ regarding Office 365 provides the Microsoft answer to the question of "What is the cloud?

> *"The cloud" is a friendly way of describing web-based computing services that are hosted outside of your organization. When you use cloud-based services, your IT infrastructure resides off your property (off-premises), and is maintained by a third party (hosted), instead of residing on a server at your home or business (on-premises) that you maintain. With Office 365, for example, information storage, computation, and software are located and managed remotely on servers owned by Microsoft. Many services you use every day are a part of the cloud—everything from web-based email to mobile banking and online photo storage. Because this infrastructure is located online or "in the cloud," you can access it virtually anywhere, from a PC, tablet, smartphone, or other device with an Internet connection.*

You can also watch a short video on "How office 365 works for business."

Here at UNT.

So, Office 365 is powered by the cloud and you will be able to access your files anywhere. As stated in a recent *Inhouse* article, the first step to accessing your files from anywhere is for email to be migrated this summer. SharePoint Online, OneDrive for Business and Office 365 ProPlus services will be made available Fall of 2014.

All faculty/staff users will have 50 gigabytes of email storage once their email boxes are migrated. This will mean that you will be able to store "a lot" of email before getting any irritating "out of space" messages. However, taking take a line out of Spiderman, "with great power comes great responsibility" or in this case "with great space comes proactive email management." Added storage means user will have to proactively manage their email box to keep it clear of clutter by removing emails that are no longer relevant or no longer need.

Tutorials are available.

Information Technology Shared Services (ITSS) is working with campus technology groups to obtain user lists for the migration and to convert dynamic distribution lists (which will not migrate) to static distribution lists. ITSS is also requesting campus technology groups to take this opportunity to remove deactivated accounts. Migration is now slated to begin July 25 and is expected to be completed by August 1.

The information that ITSS has made available is extremely useful and can be found here. You can login to this SharePoint location to review the tutorials and the migration calendar.

Further assistance.

Users can contact their IT support personnel to obtain assistance in reconfiguring their phones and other mobile devices. iPhone reconfiguration is as simple as pointing the email account to a new server and changing the user name from an EUID to the user's email address. Android and Windows phones will, most probably, have to delete and recreate their UNT email account profile. Desktops and laptops that are in a wired configuration will reconfigure automatically once the Outlook client is restarted. If your IT support group opted to have the migration done during the day, as email boxes are migrated the respective users will receive prompts suggesting that they restart the Outlook client at which point the local client will reconfigure to point to the new email server.

What you'll see ...

One very visible change will be how you login to your email account. After the email migration, users will login with their email address instead of their EUID and will use the password associated with their EUID. If your IT support group has completed the Universal Principal Name (UPN) change and you are on a Windows desktop, you can login to your workstation with your email address and the password associated with your EUID. On your Windows workstation this is the same as logging in with your EUID.

When logging into Lync after the email migration, users will login with their email address rather than their EUID.

Let's review.

IT support groups would be well served by reviewing this information to adjust any GPO's that might prevent email access after the migration. ITSS has an excellent screen shot of the correct GPO configuration.

Both users and IT groups can benefit from the FAQ's that ITSS Messaging has put together about Exchange and general questions.

On to Phase II.

Once the email migration to Office 365 is complete, phase II of the move to Office 365 will begin. This will provide faculty and staff with access to SharePoint, OneDrive, Office Professional Plus and Mobile Office. SharePoint and OneDrive will facilitate collaboration and sharing of documents at a scale that was cost-prohibitive with on-premises implementations of file sharing. It will also provide users with 1TB of cloud storage.

In sum ...

The migration to Office 365 should prove beneficial with additional storage and once all the components of Office 365 are implemented, accessibility of applications and documents from "anywhere" will improve collaboration and response speed.

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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

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

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The Sage Hall Academic Testing Center (it.unt.edu/test) is located on the third floor of Sage Hall and features four rooms and 135 computers that can be reserved as a complete large block or in smaller blocks for exams and other computer-based needs by faculty and staff. Currently the Center is utilized for everything from orientation activities such as placement testing, advising and registration to mathematics homework sessions and exams both large and small (one professor funnels her over-600-student class through multi-hour midterm and final exams sessions ever semester!). Give the Testing Center staff your online testing situation and they will find a solution for you!

A view of the largest (39-station) room of the Testing Center

Word has definitely gotten around about this great instructional resource and reservations for the Fall 2014 semester are already coming in. Crucial hours and days during midterm and finals weeks are beginning to fill up completely. Professors wishing to schedule exams and other online sessions are **strongly encouraged** to do so **NOW** to avoid scheduling conflicts.

Testing Center staff are also beginning to experiment with expanding its services to laptop testing so look for updates on that in the future. In the meantime, all users are encouraged to explore the Testing Center website listed above to

get a clear picture of the hours and resources found at the facility. Additional questions should be directed to Elizabeth Hinkle-Turner at ehinkle@unt.edu. Reservations can be made by clicking on the "Request a reservation" link at the top of the website screen, logging in to the reservation service and filling out the automated form..

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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

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JAWS is now at version 15 which is compatible with the Windows 8.x operating system. This includes support of Windows 8 touch screens and gestures. JAWS provides speech and Braille output for PCs (Mac users utilize VoiceOver - a screen reader built in to the Mac OS). MAGic is currently at version 12. This version is *not* compatible with Windows 8. In August 2013, Freedom Scientific will release MAGic 13 which is fully compatible with Windows 8 (in the meantime Windows 8 users can use Magnifier which is built in to the OS). UNT will have MAGic 13 as soon as it becomes available and in plenty of time for deployment prior to the Fall semester.

The UNT-licensed JAWS and MAGic applications may be utilized in capacities which directly support the students and their success. JAWS and MAGic are deployed in the majority of computer labs and other computer-based facilities (including the Sage Hall Academic Testing Center) around campus and also in the Office of Disability Accommodation (ODA). Students who need JAWS or MAGic at a campus computing resource and yet are unable to find it there should talk to the ODA so that the application can be deployed for them (UNT does not provide JAWS or MAGic for students' personal devices only for university facilities).

Network managers needing to deploy JAWS and/or MAGic in their areas will need access to the **acslicense2vm** server. The applications are found in appropriately-named folders on the **statapps** volume of this server. In order to properly license these products, some environment variables need to be set on the PC. Complete instructions and variable values are found in the *How to Install and License JAWS* and *How to Install and License MAGic* documents found on the server. For further questions and access to these applications, please contact Elizabeth Hinkle-Turner at ehinkle@unt.edu.

The Freedom Scientific website has also undergone a complete facelift and interested users can easily find more information about JAWS and MAGic and their other hardware and software products on the new site.

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Columns, July 2014

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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

Play it Again, (Uncle) Sam

Remember back in 2010 when the FCC voted to adopt new rules to preserve the "open Internet" and required that network service providers disclose their network management practices, and not block lawful content, and not discriminate on what content was transmitted? Remember that we thought that the net neutrality issue had been settled, and that we wouldn't have to pay more to view our Netflix shows, or only do so at 3:00 a.m. Remember all that? Good times. Good times.

But, in April of this year, the FCC announced that it would propose new rules for the Internet that would allow some companies to pay network service providers for faster transmission of their content. What changed? An appeals court in the District of Columbia issued a ruling that the FCC did not have the authority to justify the rules as constructed those three years or so ago. So, it's back to the drawing board for net neutrality.

Net Neutrality?

If you don't remember, net neutrality is the concept that all Internet content should be treated equally, regardless of the origin of the information. In other words, you should have the same access to a small independent bookstore's web site as you do to Amazon. I provided a detailed explanation when this column last discussed the concept. Or if you want a more entertaining explanation of net neutrality, you can watch a video done by the site CollegeHumor (warning: "adult" and irreverent content included.)

The FCC has proposed to allow some broadband service providers to prioritize some Internet traffic in exchange for a charge to the Internet content providers. July 15 was the closing date for comments on net neutrality and over one-half million comments had been transmitted by that date. In fact, so many people have attempted to provide comments that the FCC site for doing so has been overwhelmed and the FCC has extended the comment deadline in response, with the total rising to three-quarters of a million.

It was Verizon, a broadband service provider, that won the appeal overturning the FCC's rules supporting net neutrality. So it's not surprising that on the other side of the issue are the content providers. About a dozen of them (Facebook, Google, Twitter, Netflix, etc.) supported a comment to the FCC that discouraged segregation of Internet traffic. With such heavy hitters on both sides of the issue, you have to wonder if the other 700,000 comments will receive the same consideration.

Deja vu, all over again.

As a longtime observer of and commentator on the Internet, I can't shake this feeling of deja vu. It's not the just the rerun of FCC Internet rules, but a long-running tension as the Internet has developed. The Internet wasn't designed as an information platform to change the way we interact with our family, friends, and world. It was an experiment to find a way to maintain network communications between diverse and widespread computer installations. The world changing stuff just happened on its own, and not in an organized way. It happened because the Internet was a true free market of ideas ond technology. Yet, as the Internet has developed as a commercial marketplace, there have been calls and attempts to regulate Internet content and activity and attempts by one party or another to gain a commercial advantage, if not a monopoly, on one aspect or another of the Internet.

In 1994, the privatization of the Internet just held the promise of access for a much broader segment of society. By 1998, we were already experiencing a proprietary technology attempting to influence people's access to Internet

information. My comment at the time was, "So the fuss is really about what the Internet will look like in 20 years. Will it be a thriving and egalitarian international communications and commerce media, as accessible in libraries as it is in executive offices? Or will it be "television," A.K.A. a "wasteland" of commercial and meaningless information driving a consumption-based economy and culture, filling the coffers of a few very rich companies and people?" Like I said: deja vu.

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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

Link of the Month

Account Management System (AMS)

AMS is the system used to change your password and mange your account. It has recently been updated and simplified and is the topic of this month's Helpdesk FYI column. Check it out!

UNT|SYSTEM

Account Management System

https://ams.unt.edu/

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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

Helpdesk FYI

By Jacob Flores, UIT Support Services Manager

Exciting   changes   to   AMS

The next time you stop by the Account Management System to update your password, you may notice things look a bit different than usual. AMS has been updated visually to be more mobile friendly and provide a more cohesive look with the new MyUNT portal(s), it has been simplified, and has instituted some password policy changes that are more aligned with modern security practices.

As of July 1, 2014, the following new password guidelines were set in place:

- Passwords expire after 365 days (up from 120 days) from the time of the password change.

- Minimum password length is 8 characters (up from 6 characters).

- Passwords must include at least one uppercase letter, lowercase letter, and a number. Symbols are optional.

These guidelines encourage the use of stronger passwords rather than frequent password changes. For instance, the small jump from 6 character minimum length to an 8 character minimum length offers a pool of potential passwords over 9,000 times larger.

Along with these policy changes, the number of redundant options and processes at AMS have been reduced and consolidated into only those which are necessary, enhancing both effectiveness and user experience.

Below you'll find the new layout:
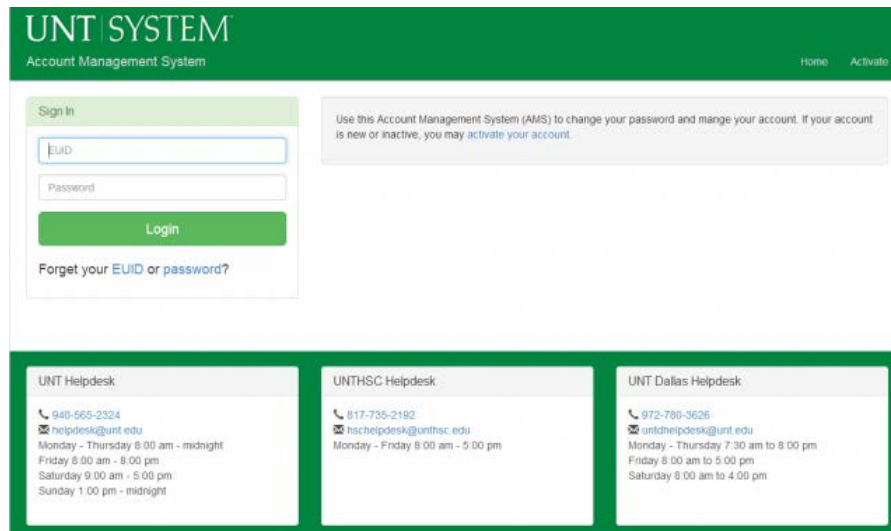
Login fields and login support options found on the left, site navigation pages found on the top-right, and campus support information found below.

Large Screen Mobile Device	Small Screen Mobile Device

Notice top-right items are now in a collapsed menu in this view.

Once logged in, you'll see account information in the center, account changing action items below that, and of course site navigation items at the top-right.

What do I do if my account has been compromised?

Please remember, UNT will never ask you for your password. If you feel your account has been compromised, please reset your password and security question as soon as possible at http://ams.unt.edu/, then contact the UIT Helpdesk.

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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

RSS Matters

R_stats

Research and Statistical Support
University of North Texas

A *new* recommended way of dealing with multiple missing v Using missForest for all your imputation needs.

Link to the last RSS article here: Basic Graph Creation and Manipulation in R. -- Ed.

By Dr. Jon Starkweather, Research and Statistical Support Consultant

A couple of months ago we provided an article tutorial for using the 'rrp' package for multiple missing value imputation. The 'rrp' package has consistently been our most recommended tool for dealing with missing values. However, the 'rrp' package has not been updated (i.e. adapted) to new versions of R since the release of R-2.15.1 (over a year ago). This has presented challenges to its utility – basically necessitating the install of R-2.15.0 in order to use the 'rrp' package. Very recently it was discovered that the rrp package is no longer available (even from R-forge) for any Windows install of R. This prompted us to find a new *go-to* package for missing value imputation.

The good news is this: we have now found a satisfactory replacement for the beloved 'rrp' package. The 'missForest' package (Stekhoven, 2013, Stekhoven, 2012) provides not only a function for conducting multiple imputation of mixed data (numeric and factor variables in one data frame), but it also has a utility to parallelize the process of doing such imputations. Below we offer a quick example of how to use the function with a simple data set. Please keep in mind, the function is not terribly fast and when applied to large data sets it may take a considerable amount of time to complete the imputations (even when using the parallelize argument).

First, import some (simulated) example data. Notice we are importing the same data set twice; one version with no missing values and one version with missing values (Missing Completely At Random [MCAR]). Note the data files can be imported directly from the RSS URLs provided (i.e. simply copy the script and paste into your R console to follow along).

```
no.miss <- read.table(
    "http://www.unt.edu/rss/class/Jon/R_SC/Module4/missForest_noMiss.txt",
    header=TRUE, sep=",", na.strings="NA", dec=".", strip.white=TRUE)

wi.miss <- read.table(
    "http://www.unt.edu/rss/class/Jon/R_SC/Module4/missForest_Miss.txt",
    header=TRUE, sep=",", na.strings="NA", dec=".", strip.white=TRUE)
```

Next, we may want to take a look at the proportion of missing values (cells) which are present in the data file (i.e. number of missing cells divided by the product of the number of rows multiplied by number of columns). Below, we see only 4.37% (1181) of the total cells (6 columns * 4500 rows = 27000 cells) are missing values (i.e. 1181 / 27000 = .0437).

```
ncol(wi.miss); nrow(wi.miss)
```

[1] 6

[1] 4500

length(which(is.na(wi.miss) == "TRUE")) / (nrow(wi.miss)*ncol(wi.miss))

[1] 0.04374074

Next, we need to load the required package (missForest) and its dependencies (i.e. randomForest, foreach, itertools, & iterators).

library(missForest)

Loading required package: randomForest

randomForest 4.6-7

Type rfNews() to see new features/changes/bug fixes.

Loading required package: foreach

foreach: simple, scalable parallel programming from Revolution Analytics

Use Revolution R for scalability, fault tolerance and more.

http://www.revolutionanalytics.com

Loading required package: itertools

Loading required package: iterators

Apply the 'missForest' function with all arguments set to default values. The function returns a list object with 3 elements: "ximp" which is the imputed data, "OOBerror" which is the estimated (out of bag) imputation error, and "error" which is the true imputation error (the "error" is only returned when an 'xtrue' value is provided). Please note: the function **does** accept a data frame; the package documentation states that the data must be in a matrix (all numeric); however that is not the case.

im.out.1 <- missForest(xmis = wi.miss, maxiter = 10, ntree = 100,

      variablewise = FALSE,

      decreasing = FALSE, verbose = FALSE,

      mtry = floor(sqrt(ncol(wi.miss))), replace = TRUE,

      classwt = NULL, cutoff = NULL, strata = NULL,

      sampsize = NULL, nodesize = NULL, maxnodes = NULL,

      xtrue = NA, parallelize = "no")

  missForest iteration 1 in progress...done!

  missForest iteration 2 in progress...done!

  missForest iteration 3 in progress...done!

  missForest iteration 4 in progress...done!

  missForest iteration 5 in progress...done!

  missForest iteration 6 in progress...done!

  missForest iteration 7 in progress...done!

  missForest iteration 8 in progress...done!

  missForest iteration 9 in progress...done!

  missForest iteration 10 in progress...done!

To extract only the imputed data from the output (list), we use the familiar "$" operator to index the output object and retrieve the 'ximp' data frame. We can then compare the summaries of the original (no missing) data to the missing data and the imputed data.

im.miss.1 <- im.out.1$ximp

summary(no.miss)

    id   region   city.names   gender

 Min. :   858 I :1713 New Jork   : 457 female:2241

 1st Qu.: 245659 II :1167 Los Angelinas: 438   male :2259

 Median : 499423 III:1620 San Francis : 393

 Mean : 501929   Bahston   : 356

```
3rd Qu.: 758180           Astin      : 352
Max.   :1012027           Carlot     : 346
                          (Other)    :2158
    age          education
Min.   :18.00   Min.   : 2.00
1st Qu.:29.00   1st Qu.: 9.00
Median :33.00   Median :11.00
Mean   :34.69   Mean   :11.12
3rd Qu.:39.00   3rd Qu.:13.00
Max.   :82.00   Max.   :22.00
```

summary(wi.miss)

```
     id          region          city.names      gender
Min.   :    858   I  :1627   New Jork     : 434   female:2119
1st Qu.: 245659   II :1090   Los Angelinas: 415   male  :2143
Median : 499423   III:1541   San Francis  : 373   NA's  : 238
Mean   : 501929   NA's: 242  Bahston      : 334
3rd Qu.: 758180              Astin        : 332
Max.   :1012027              (Other)      :2387
                             NA's         : 225
    age          education
Min.   :18.00   Min.   : 2.00
1st Qu.:29.00   1st Qu.: 9.00
Median :33.00   Median :11.00
Mean   :34.66   Mean   :11.12
3rd Qu.:39.00   3rd Qu.:13.00
Max.   :80.00   Max.   :22.00
NA's   :234     NA's   :242
```

summary(im.miss.1)

```
     id          region          city.names      gender
Min.   :    858   I  :1713   New Jork     : 457   female:2239
1st Qu.: 245659   II :1167   Los Angelinas: 438   male  :2261
Median : 499423   III:1620   San Francis  : 393
Mean   : 501929              Bahston      : 356
3rd Qu.: 758180              Astin        : 352
Max.   :1012027              Carlot       : 346
                             (Other)      :2158
    age          education
Min.   :18.00   Min.   : 2.00
1st Qu.:29.00   1st Qu.: 9.00
Median :34.00   Median :11.00
Mean   :34.67   Mean   :11.11
3rd Qu.:39.00   3rd Qu.:13.00
Max.   :80.00   Max.   :22.00
```

The OOBerror rates are returned as two statistics; the first number returned is the normalized root mean squared

error (NRMSE; for continuous variables) and the second is the proportion falsely classified (PFC; for categorical variables). The OOBerror rates can be retrieved by using the familiar "$" from the output object. Others (Waljee, et al.; 2013) have compared the 'missForest' function to other imputation methods and found "it [missForest] had the least imputation error for both continuous and categorical variables … and it had the smallest prediction difference [error]…" (p.1).

im.out.1$OOBerror

    NRMSE   PFC

0.0000187039 0.1652550716

One of the major benefits of the 'missForest' function is that it has an argument for utilizing multiple cores (i.e. processors) of a computer in *parallel*. Below we repeat the example from above showing how to exploit this functionality. Keep in mind, the larger the data set, the greater the benefit achieved by parallelizing the imputation. First, we need to load the 'doParallel' package and its dependency (i.e. the 'parallel' package).

library(doParallel)

Loading required package: parallel

Next, we need to register the number of cores (or processors) of our computer.

registerDoParallel(cores = 2)

Now we can apply the 'missForest' function while breaking the work down into equal numbers of 'variables' or 'forests' for each core to work on (here we break the number of variables).

im.out.2 <- missForest(xmis = wi.miss, maxiter = 10, ntree = 100,

        variablewise = FALSE,

        decreasing = FALSE, verbose = FALSE,

        mtry = floor(sqrt(ncol(wi.miss))), replace = TRUE,

        classwt = NULL, cutoff = NULL, strata = NULL,

        sampsize = NULL, nodesize = NULL, maxnodes = NULL,

        xtrue = NA, parallelize = "variables")

  missForest iteration 1 in progress…done!

  missForest iteration 2 in progress…done!

  missForest iteration 3 in progress…done!

  missForest iteration 4 in progress…done!

Again, extract only the imputed data from the output (list) using the familiar "$" operator to index the 'ximp' data frame. We can then compare the summaries of the original (no missing) data to the missing data and the imputed data.

im.miss.2 <- im.out.2$ximp

summary(no.miss)

     id   region   city.names   gender

 Min.   :   858   I :1713   New Jork   : 457   female:2241

 1st Qu.: 245659   II :1167   Los Angelinas: 438   male :2259

 Median : 499423   III:1620   San Francis : 393

 Mean   : 501929   Bahston   : 356

 3rd Qu.: 758180   Astin   : 352

 Max.   :1012027   Carlot   : 346

                              (Other)   :2158

     age   education

 Min.   :18.00   Min.   : 2.00

 1st Qu.:29.00   1st Qu.: 9.00

 Median :33.00   Median :11.00

 Mean   :34.69   Mean   :11.12

 3rd Qu.:39.00   3rd Qu.:13.00

```
Max.   :82.00   Max.   :22.00
```

summary(wi.miss)

```
     id            region          city.names       gender
Min.   :    858   I  :1627   New Jork      : 434   female:2119
1st Qu.: 245659   II :1090   Los Angelinas: 415   male  :2143
Median : 499423   III:1541   San Francis  : 373   NA's  : 238
Mean   : 501929   NA's: 242   Bahston      : 334
3rd Qu.: 758180              Astin         : 332
Max.   :1012027             (Other)       :2387
                             NA's          : 225
     age          education
Min.   :18.00   Min.   : 2.00
1st Qu.:29.00   1st Qu.: 9.00
Median :33.00   Median :11.00
Mean   :34.66   Mean   :11.12
3rd Qu.:39.00   3rd Qu.:13.00
Max.   :80.00   Max.   :22.00
NA's   :234     NA's   :242
```

summary(im.miss.2)

```
     id            region          city.names       gender
Min.   :    858   I  :1713   New Jork      : 457   female:2244
1st Qu.: 245659   II :1167   Los Angelinas: 438   male  :2256
Median : 499423   III:1620   San Francis  : 393
Mean   : 501929              Bahston       : 356
3rd Qu.: 758180              Astin         : 352
Max.   :1012027              Carlot        : 346
                             (Other)       :2158
     age          education
Min.   :18.00   Min.   : 2.00
1st Qu.:29.00   1st Qu.: 9.00
Median :34.00   Median :11.00
Mean   :34.67   Mean   :11.12
3rd Qu.:39.00   3rd Qu.:13.00
Max.   :80.00   Max.   :22.00
```

Conclusions

RSS has previously been recommending the use of the 'rrp' package for multiple missing value imputation, primarily because unlike alternatives, the 'rrp.impute' function could accept and impute categorical variables as well as continuous (or nearly continuous) variables. However, the 'rrp' package has not been consistently maintained since the release of R-2.15.1. The 'missForest' package, which recently came to our attention, offers the same benefit and is available for the most recent release of R (R-3.1.0). Furthermore, the 'missForest' function contains the added benefit of parallelization for larger data sets. It is for these reasons (i.e. benefits) which RSS recommends its usage in any missing value situation. For those interested in learning more about what R can do; please visit the RSS Do-it-yourself Introduction to R course page.

Until next time; document everything, audio is good but audio with video is better.

References / Resources

Little, R. J. A., & Rubin, D. B. (1985). *Statistical Analysis with Missing Data.* New York:John Wiley & Sons.

Stekhoven, D., J. (2013). Package missForest: Nonparametric missing value imputation using random forest. Package documentation available at CRAN: http://cran.r-project.org/web/packages/missForest/index.html

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Waljee, A. K., Mukherjee, A., Singal, A. G., Zhang, Y., Warren, J., Balis, U., Marrero, J., Zhu, J., & Higgins, P. DR. (2013). Comparison of imputation methods for missing laboratory data in medicine. *BMJ Open, 3*(8), 1 – 7. DOI: 10.1136/1136-bmjopen-2013-002847

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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

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.

UNT   System   Training   Resources

Visit my.unt.edu and login to access tutorials.

🎓¡ UNTS Training

University of North Texas System (UNTS) Training

These tutorials provide a place to learn and practice key processes in a simulated environment. First time users should view the User Productivity Kit (UPK) player introduction before proceeding.

All Faculty & Staff

Supervisors & Administrative Staff

Additional Training Resources

Microsoft   Virtual   Academy

Who is eligible to participate in MVA?

- Anybody interested in growing their career can be a part of MVA.

- MVA courses and events are free, but you need to identify yourself using a Microsoft account in order to sign up for MVA and create your MVA profile.

- To sign up for MVA , on the MVA home page, MVA courses and events are free, but you need to identify yourself using a Microsoft account in order to sign up for MVA and create your MVA profile.

- There is no minimum level of technical expertise required.

Microsoft   E-Learning

Microsoft E-Learning courses are available for faculty, staff, and students via our UNT System Microsoft Campus Agreement. *Instructions for accessing Microsft E-Learning have recently changed.*

If you are a student and/or have a my.unt.edu email account you can access courses provided under UNT's agreement with Microsoft. Faculty and staff members will be able to access these courses via their unt.edu account in August (2014), once UNT Exchange (Outlook) e-mail accounts have been migrated to Office 365. Until that time, faculty and staff members will need to login using Integrated Authentication. Either way, you will need to follow the instructions below to access E-learning until you arrive on the "UNT System authenticated service Page."

- Go to: https://onlinelearning.microsoft.com

- Click **Sign In**:

A whole new kind of learning.
It goes where you go.

Sign in

-

- Then choose:

Organizational account
Sign in with the account provided by your work or school to use with Office 365 or other Microsoft services.

-

- You will be taken to the following sign in page:

Sign in with your organizational account

someone@example.com

-

- Fill in your my.unt.edu address on the sign in page and press the TAB key.

- You will be taken to the UNT System authenticated service Page:

You are entering a UNT System authenticated service - Please log in

Username: firstname.lastname@my.unt.edu   Example: Email address or domain\username

Password:

Sign In

Login Using Integrated Authentication

-

- You MAY be prompted for an Enrollment code. If so, input your multiuse access code: **IWO11DC02B** (The code is case-sensitive.) along with your email address.

- To login using **Integrated Authentication**, click on that link and type **UNT\EUID** where **EUID** is *your* EUID. This should take you to the UNT courses that are available. If you are using Internet Explorer the following box will appear and you should enter your EUID where it says "Username."

Windows Security

Connecting to adfs.wip.ads.unt.edu.

User name

Password

Domain: UNT

☐ Remember my credentials

OK   Cancel

-

- Once signed in, you should be able to access the courses that are available to the UNT community.

- You can access courses available to the general public by choosing the Microsoft Account option:

- Microsoft account
  Sign in with the account you use for OneDrive, Xbox Live, Outlook.com or other Microsoft Services.

- If you do not currently have a Microsoft account (previously called a "Live ID") you can create one at Microsoft's Live Sign-up site.

Microsoft   E-books

Click on the link and access the largest collection of FREE Microsoft eBooks ever, including: Windows 8.1, Windows 8, Windows 7, Office 2013, Office 365, Office 2010, SharePoint 2013, Dynamics CRM, PowerShell, Exchange Server, Lync 2013, System Center, Azure, Cloud, SQL Server, and much more!

Central   Web   Support

Central Web Support provides "web hosting and support to appropriate campus entities free of charge." 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. You can subscribe to their newsletter also.

Information Security Awareness

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 Virus Information Page and the Information Security Handbook -- for Faculty, Staff and Students for further information.

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. The March 2014 BSC Solution Source Newsletter has instructions for registering for their online courses.

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 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. They have a "Tips and Tricks" page that has helpful information. You can also join their mailing list to receive their monthly newsletter, event invitations and specials.

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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

Staff Activities

Staff activities for UIT are reported in this column.

Transitions

No longer working in UIT:

- **Robert Wellman**, IT Manager, Administrative IT Services (AITS).

- **Curry Searle,** IT Manager, Academic Computing Technical Services. As reported last month, Curry has moved to ITSS as part of its Shared Services IT Service Management Team.

Changes, Awards, Recognition, Publications, etc.

- **James Martin**, formerly IT Manager I, Administrative IT Services (AITS), has taken Robert Wellman's position as IT Manager II, Administrative IT Services (AITS).

- **Leah Atinda,** was promoted from student assistant (Administrative IT Services (AITS)) to IT Specialist II replacing **Mark Hurtado** (recently promoted to IT Specialist IV, Administrative IT Services (AITS)).

- **James Curry**, who retired last fall as Director of Micro Maintenance/Classroom Support, was one of the people honored at a recent luncheon held to honor retirees.

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Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

Summer Hours

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

Summer is *still* here! Summer 2014 consists of six sessions and not all campus facilities are open during all the sessions. *

Following are the hours for University Information Technology-managed facilities over the summer.

- The **Helpdesk** will maintain their normal operating hours for the remainder of the summer.

- **Data Management Services** will maintain their normal operating hours for the remainder of the summer except: ** **Data Management's Exam service will be open extended hours on Friday, August 8 for 10W and 5W2 finals - until 8:00 pm. **

- The **ACUS General Access/Adaptive Lab** (SYMR 104) will maintain the following hours during the summer:

  Monday - Friday: 8 a.m. - 9 p.m.

  Saturday & Sunday: 9 a.m. - 5 p.m.

	Hours for Other Campus Facilities

Student   Computer   Labs

24 Center (formerly known as WILLIS) Check hours here: http://www.library.unt.edu/location-hours/willis-library	Maintainiing a normal schedule through the summer except as noted.	**Close** at 7 p.m. August 8, **closed** August 9-10. **Open** at 7 a.m. August 11 & open 7 a.m.- 7 p.m. August 11-15. **Closed** August 16-17.
College of Information General Access Computer Lab (CI-GACLab) (B205) **CLOSED**: August 10-24 (semester break).		**May 12 - August 9, 2014**: Monday - Frisday: 8 a.m. - 6 p.m. Saturday & Sunday: **Closed**

MUSIC: **CLOSED**: August 10-24 (semester break).		**May 12 - August 9, 2014**: Monday - Thursday: 8 a.m. - 9 p.m. Friday: 8 a.m. - 5 p.m. Saturday: 10 a.m. - 5 p.m. Sunday: 1 p.m. - 8 p.m.
PACS Computing Center (College of Public Affairs and Community Service, Chilton Hall) **CLOSED**: Friday, July 4 (Independence Day); August 10-24 (semester break).		**May 12 - August 9, 2014**: Monday - Thursday: 8 a.m. - 10 p.m. Friday - Saturday: 8 a.m. - 5 p.m. Sunday: Noon - 10 p.m.
CVAD **CLOSED**: August 10-27 (semester break).		**May 12 - August 9, 2014**: Monday -Thursday: 8 a.m. - 10 p.m. Friday: 8 a.m. - 5 p.m. Saturday: Noon - 5 p.m. Sunday: Noon - 8 p.m.
COE **CLOSED**: August 10-24 (semester break).		**May 12 - August 9, 2014**: Monday - Thursday: 7 a.m. - 9 p.m. Friday: 7 a.m. - 5 p.m. Saturday: Noon - 8 p.m. Sunday: **Closed**
COB (BLB 190) **CLOSED**: August 9-24 (semester break).		**May 30 - August 9, 2014:** Monday – Thursday, 8:00 a.m. - 11:50 p.m. Friday – Saturday, 8:00 a.m. - 7:50 p.m. Sunday, Noon - Midnight
CAS - All labs will be **close**d August 10-24 (semester break).		**Lab Hours for May 12 – August 9, exculding closings**
		GAB 330: Monday - Thursday: 8 a.m. – Midnight Friday: 8 a.m. - 5 p.m. Saturday: Noon - 8 p.m. Sunday: Noon – Midnight **GAB 550:** Monday - Friday: 8 a.m. – 5 p.m. Saturday - Sunday: ***Closed*** **Closed July 5 & 6** **Terrill 220:** Monday – Thursday: 8 a.m. – 8 p.m.

Friday: 8 a.m. – 5 p.m.
Saturday - Sunday: *Closed*

Closed July 5 & 6

Wooten 120:

Monday – Thursday: 8 a.m. – 10 p.m.
Friday: 8 a.m. – 5 p.m.
Saturday - Sunday: *Closed*

Closed July 5 & 6

Engineering General Access Lab (CENGAL, englab@unt.edu, Discovery Park, B129, 891-6733) **CLOSED:** August 10-24 (semester break).		**May 12 - August 9, 2014**: Monday – Friday: 9 a.m. - 5 p.m. Saturday - Sunday: *Closed*

UNT Shuttle Service

Check out the transit website to keep up with the shuttle schedule throughout the summer. A 2013-2014 calendar is available here: http://www.unt.edu/transit/pdf/2013-2014_calendar.pdf.

*Accoding to the Registrar's Office, the terms this year are:

1. **3W1** *(3 week 1) May 12 - May 29, 2014*

2. **8W1** *(8 week 1) May 12 - July 3, 2014*

3. **SUM** *(summer) May 12 - August 8, 2014*

4. **5W1** *(5 week 1) June 2 - July 3, 2014*

5. **10W** *(10 week) June 2 - August 8, 2014*

6. **5W2** *(5 week 2) July 7 - August 8, 2014*

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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Columns, July 2014

Network Connection

Link of the Month

Helpdesk FYI

RSS Matters

Training

Staff Activities

Home

Today's Cartoon

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"If I can't find the perfect ringtone for your calls,
I'm afraid I don't see much future for our relationship."

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

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