



Volume 3 - Number 6 * June 2000

Columns

[RSS Matters](#)

[The Network Connection](#)

[List of the Month](#)

[WWW@UNT.EDU](#)

[Short Courses](#)

[IRC News](#)

[Staff Activities](#)

Other Resources

[Back Issues](#)
[Text Search](#)

[UNT Main Page](#)

[UNT Calendar](#)

[Support Services](#)

[General Access](#)
[Lab Hours](#)

[Tutorials & References](#)

[Training Web](#)

[Academic Computing Services](#)

[Computing Center](#)

[About Benchmarks Online](#)

Feature Articles

[Campus Computing News](#)

After more than a year of development, UNT's "Bulk Student E-mail" system is now in place and operational. This system is intended for use by faculty, staff, and administrators at the University to send official messages to students.

[Test Your Knowledge about Student Computing Services](#)

What you don't know **can** hurt you, as well as those you are trying to assist. Take this true/false quiz to make sure you're up to speed on such topics as student E-mail and dorm wiring.

[Linux Lab](#)

A project named "Linux Lab" was started earlier this year to offer a UNIX environment for people to work in. Read all about it.

[Virus Threats Still Plague Public, UNT](#)

If you thought the "virus trolls" or whoever it is that dreams up and periodically releases those things into cyberspace were going to take a summer vacation, think again.

[Routing Messages in GroupWise](#)

Have you ever written E-mail that you wanted to send to a group of people in a certain order?

[Subscribe to
Benchmarks
Online](#)

Well, here's your opportunity to start doing it.

TODAY'S CARTOON

We have a new cartoon feature for your viewing pleasure. Just click on the title to laugh about the foibles of the information age.

Don't forget to check out our monthly columns. This month's topics:

- [RSS Matters](#) -- "So Long, Farewell, Auf Wiedersehn, Good Bye . . ."
- [The Network Connection](#) -- "Bullies of the Internet"
- [List of the Month](#) -- "The Earth Edition of the Hitchhikers Guide to the Galaxy"
- [WWW@UNT.EDU](#) -- "Worried about ADA compliance on your Website?"
- [Short Courses](#) -- Update on the various training opportunities on campus, including ACS Summer Short Courses.
- [IRC News](#) -- Minutes of the Information Resources Council are printed here when they are available.
- [Staff Activities](#) -- New employees, employees that have resigned, and staff awards and recognition are included in this article.

[Page One](#)[Campus
Computing News](#)[Test Your
Knowledge
about Student
Computing
Services](#)[Linux Lab](#)[Virus Threats
Still Plague
Public, UNT](#)[Routing
Messages in
GroupWise](#)[Today's Cartoon](#)[RSS Matters](#)[The Network
Connection](#)[List of the Month](#)[WWW@UNT.EDU](#)[Short Courses](#)[IRC News](#)[Staff Activities](#)[Subscribe to
Benchmarks
Online](#)

Research and Statistical Support

University of North Texas

RSS Matters

By [Craig Henderson](#), Research and Statistical Support Services Consultant

So Long, Farewell, Auf Wiedersehn, Good Bye . . .

I wanted to take a brief moment to make my farewells and extend my gratitude for making my two years working in the Research and Statistical Support office a great two years. I have come to the point in my degree (Ph.D. in Psychology), where I need to complete a year's internship. In February, I accepted a position in the Psychology Department of the University of Miami School of Medicine. This is a pediatric psychology position, which basically means that I will be working in the hospital with children there for medical reasons, but they have psychological issues complicating their treatment.

This is an exciting move for me, since it will allow me to finish my Ph.D. However, it is with regret that I am leaving. I have greatly enjoyed my work here, and if it were possible to be two places at once, I would definitely want to continue my work here. I have appreciated being able to work with each of you. I want to thank the computing center staff for all the kindness and support they have offered, and especially my colleagues, Rich Herrington and Karl Ho. I have learned and grown a great deal over the last two years. Thank you very much for the opportunity to work with you. I wish you all well.

Not only is Craig entering a new phase of his educational and professional life by moving to Florida, he is also entering the exciting world of fatherhood. On May 30th at 8:25 a.m. Craig and his wife Susan became the proud parents of Calvin Everett Henderson (6 lbs. 8 oz., 19 1/2" long). We wish the entire Henderson family the best of luck as they embark on their next great adventure.
-- Ed.

[Page One](#)[Campus
Computing News](#)[Test Your
Knowledge
about Student
Computing
Services](#)[Linux Lab](#)[Virus Threats
Still Plague
Public, UNT](#)[Routing
Messages in
GroupWise](#)[Today's Cartoon](#)[RSS Matters](#)[The Network
Connection](#)[List of the Month](#)[WWW@UNT.EDU](#)[Short Courses](#)[IRC News](#)[Staff Activities](#)[Subscribe to
Benchmarks
Online](#)

Network Connection

By [Dr. Philip Baczewski](#), Associate Director of Academic Computing

Bullies of the Internet

We've all experienced bullies. Whether it be on the schoolyard or in the board room, the experience is always the same. The bully holds the power, real or imagined, and wields that power to get their own way. Seldom do bullies actually follow through on their threats. Usually, the lunch money is forthcoming just at the threat of violence. There are times when an example is made, but most bullies are really cowards in disguise and back down when faced with any real opposition. Their power is in the imagined consequence. It is people's fear which provides bullies their power. As long as they keep the fear alive, they will remain powerful.

The RIAA and Napster in the Internet schoolyard

Because the Internet is a reflection of human society, it is not necessarily surprising that you'd find Internet bullies as well. There is no better example of this lately than the case of the Recording Industry Association of America (RIAA) and the Internet program named "Napster". The RIAA, along with its "muscle" in the form of "Metallica" and "Dr. Dre", have made an example of Napster and are successfully holding the bully power over the rest of the Internet. The club they wield is the threat of a [lawsuit](#).

The RIAA is such a successful bully that they have most of the Higher Education community in the United States fairly well covered. Napster traffic is complained about, rerouted, or blocked, in some cases in the name of Internet bandwidth. I hate to tell you, but if you give a young technology-savvy population uncontrolled access to bandwidth they will figure out a way to use it. If the bandwidth hog is not MP3 files, then it will eventually be video or any number of yet-imagined technologies. Napster isn't the only way to exchange MP3 files, yet it is the one currently targeted. In spite of the "legal implications" of Napster, the truth is that the technology is not the perpetrator. People violate intellectual property laws and they can use any number of technologies to do so, Internet or otherwise. Yet the RIAA currently chooses Napster to rough up in the Internet schoolyard.

Whose lunch money is it anyway?

This won't be the only time we see an Internet bully pop up. It is interesting, however, to analyze this particular case, because it illustrates who holds the power and what is behind it. What's behind it is a whole lot of money. The [RIAA](#) represents "companies that comprise the ... national music industry..." and claims "...to protect intellectual property rights worldwide and the First Amendment rights of artists." If you look at their list of [members](#), you'll recognize a lot of names of record companies and distributors, that is, a lot of commercial and popular record companies.

I have to admit that as a creative artist myself (a composer of orchestral concert music) I have no sympathy for violators of intellectual property rights. I just can't believe any sincerity on the part of the RIAA in this regard. I'm sure they do protect property rights, but their interest is much more in the property which fills their pockets and not out of any altruistic principle. As an example, there is a television commercial for [Philips Electronics](#)

which features someone recording their own "CD mix" from apparently commercial CD sources. I have yet to hear the RIAA decry Philips for airing a commercial "...aiding and abetting wide-scale piracy....", RIAA CEO Hilary Rosen's description of Napster.com's behavior. If you know anything about the electronics industry, you know that Philips is the inventor of CD technology, and licenses that technology extensively to Sony, which just happens to be a prominent name (several times over) amongst the RIAA membership list.

Money talks (or hires high-priced lawyers to do the talking). The question remaining is, amongst the landscape of MP3 technology and the myriad of software which supports the creation, distribution, and rendering of MP3 files, why Napster? The answer is simple. Fear. Like most bullies, what the RIAA fears most is a loss of their power. Napster represents what the RIAA and its members fear most. A loss of control over the production and distribution of commercial music.

Imagine...

Imagine for a moment that the phonograph record was never invented. Musicians would make their living as they once did: performing for audiences of people. Their income would depend upon how many people would be willing to pay to hear them play (by the way, this is still the case for the large majority of those who choose to make music performance their profession - the RIAA "artists" represent the minority). Enter the Internet and a program like Napster. Suddenly, musicians can distribute their music worldwide for just the cost of production (a minimal cost, considering that any garage band these days can and often does produce their own CD).

As we've seen time and time again, the power of the Internet is its ability to harness the intellect and energy of a worldwide community. On the Internet, the free flow of information puts power in the hands of the individual and makes useful information available to the whole community. Internet music distribution does not involve any cost for the production of media, any cost for the distribution and sale of media, any cost for marketing, etc. In our thought experiment, instead of putting control in the hands of those with the money to front the production, distribution, and marketing costs, musicians would keep control over their own music. Distribution of music would allow some popular musicians to increase their popularity and thus increase their income from additional and larger bookings. The "music industry", however, would not be a large money machine which disproportionately provides income to a small group of "artists" who place themselves under the control of that industry.

Facing the reality

It is no wonder that the RIAA is scared. Napster is something they can't control so they must squelch it. The same thing was unsuccessfully tried by the film industry when the VCR was first introduced (now the film industry makes a large chunk of money on the rental and sale of video tapes). Unfortunately, digital audio tape (DAT) technology was successfully torpedoed in the United States by requiring special copy protection features. This kept the price of DAT high and the utility low, especially for those like me who could have used such a technology in support of production of intellectual property which has more artistic than monetary value. The VCR proves, however, that technology can create a new market for making money. The problem for organizations like the RIAA is that it might not be their members making the money.

This is not meant as an endorsement of Napster. The fact that if you install it, you unwittingly provide access to your hard drive to the entire Internet is downright scary to me. There is, however, a need to recognize and confront bullies when we find them and the

RIAA is certainly acting the role at the moment. There is no doubt who will win given any traditional course of events. The RIAA and its record company members have much more money for lawyers than does a bunch of talented startup technogeeks (and I mean that in the best sense) like Napster.com. Just don't be fooled about what motivates this confrontation. And remember, if you don't stand up to the bullies, they will end up running everything.

Comments, Questions? Send them to [Philip Baczewski](#).

[Page One](#)[Campus
Computing News](#)[Test Your
Knowledge
about Student
Computing
Services](#)[Linux Lab](#)[Virus Threats
Still Plague
Public, UNT](#)[Routing
Messages in
GroupWise](#)[Today's Cartoon](#)[RSS Matters](#)[The Network
Connection](#)[List of the Month](#)[WWW@UNT.EDU](#)[Short Courses](#)[IRC News](#)[Staff Activities](#)[Subscribe to
Benchmarks
Online](#)

List of the Month

Each month we highlight one Internet, USENET Special Interest Group (SIG), or similar mailing list or Website.



[h2g2.com](http://www.h2g2.com)

The Earth Edition of the Hitchhikers Guide to the Galaxy

When Douglas Adams wrote *The Hitchhiker's Guide to the Galaxy* twenty years ago, the World Wide Web didn't even exist. Today he is directing a company that hopes to make his vision of a universal guide to "life, the universe, and everything" a reality here on earth. It is a commercial endeavor, to be sure, but it is also Adams' attempt to bring to life a guide that he calls "a good idea -- something that, instead of being compiled by an editor, [everyone] could work on together."*

Adams' ultimate goal is to have the guide accessible from anywhere. As he told *Salon*, "We're beginning to get Internet access on mobile phones and things like personal digital assistants. That creates a sea change, because suddenly people will be able to get information that is appropriate to where they are and who they are -- standing outside the cinema or a restaurant or waiting for a bus or plane. Or sitting having a cup of coffee at a cafe. At those moments something different happens: You think about something that is very appropriate [to where you are at the time]. With h2g2, you can look up where you are at that moment to see what it says, and if the information you need is not there you add it in yourself. For example, a remark about the coffee you're drinking or a comment that the waiter at the restaurant is very rude."

If this sort of thing appeals to you, you probably ought to become an "h2g2 researcher." All you have to do is visit the <http://www.h2g2.com/> Website and follow the instructions for registration. As the site says, "Joining h2g2 is completely free and lets you write your own Guide Entries, join in conversations with other members, keep a journal, and you get your own personal home page from which you can keep track of all your activities on h2g2. You also get access to h2g2's registered front page, which keeps you informed of daily additions to the Guide, community activity and all that's happening in the world of the Hitchhiker's Guide."



* "[A hitchhiker in the new economy.](#)" *Salon*, June 12, 2000.

[Page One](#)[Campus
Computing News](#)[Test Your
Knowledge
about Student
Computing
Services](#)[Linux Lab](#)[Virus Threats
Still Plague
Public, UNT](#)[Routing
Messages in
GroupWise](#)[Today's Cartoon](#)[RSS Matters](#)[The Network
Connection](#)[List of the Month](#)[WWW@UNT.EDU](#)[Short Courses](#)[IRC News](#)[Staff Activities](#)[Subscribe to
Benchmarks
Online](#)

WWW@UNT.EDU

By [Sharon Marek](#), Web Developer, UNT Central Web Support

Worried about ADA compliance on your Website?

The new Web [Publishing Policy](#) and Web [Publishing Guidelines](#) reference reflect a state-wide emphasis on accessibility.* Making sure that your UNT Website is available to everyone is important - but may seem like a daunting task.

Here are some resources that can help:

- Bobby: <http://www.cast.org/bobby/>

This site allows you to enter the URL (the 'Web address') of your UNT Website, and returns a comprehensive list of what will cause accessibility problems. To be 'Bobby Approved', a site must:

- provide text equivalents for all non-text elements (i.e., images, animations, audio, video)
- provide summaries of graphs and charts
- ensure that all information conveyed with color is also available without color
- clearly identify changes in the natural language of a document's text and any text equivalents (e.g., captions) of non-text content organize content logically and clearly
- provide alternative content for features (e.g., applets or plug-ins) that may not be supported

- Lynx-me: <http://ugWeb.cs.ualberta.ca/~gerald/lynx-me.cgi?>

This site will give you an approximation of what your page will look like using Lynx, a text-only Web browser.

- AnyBrowser.com: <http://anybrowser.com/siteviewer.htm>

While not strictly an accessibility tool, this site does a very good job of demonstrating what a Website will look like in older browsers (choose HTML 2 + tables, for example) or even in WebTV.

The Adaptive Lab (Chilton Hall, rm 116) has machines with text-to-speech reading software used by students at UNT. For the full experience, try 'listening' to your Website! You may want to call x4750 to be sure that you're dropping in at a convenient time.

*For further information about these new guidelines, see ["Is Your Site ADA Compliant?"](#) in the April issue of *Benchmarks Online*.

[Page One](#)[Campus
Computing News](#)[Test Your
Knowledge
about Student
Computing
Services](#)[Linux Lab](#)[Virus Threats
Still Plague
Public, UNT](#)[Routing
Messages in
GroupWise](#)[Today's Cartoon](#)[RSS Matters](#)[The Network
Connection](#)[List of the Month](#)[WWW@UNT.EDU](#)[Short Courses](#)[IRC News](#)[Staff Activities](#)[Subscribe to
Benchmarks
Online](#)

Short Courses

By [Claudia Lynch](#), *Benchmarks Online* Editor

The summer ACS Short Courses started on June 20 (Introduction to SAS Programming). There is still time to register for two SAS Workshops, "Creating a Homepage with Netscape," and "Creating a Homepage with FrontPage," as well as courses on programming with SPSS and S-Plus. Please consult the [Short Courses](#) page to see complete schedule (send mail to lynch@unt.edu indicating which classes you would like to take).

Customized Short Courses

Faculty members can request customized short courses from ACS, geared to their class needs. Other groups can request special courses also. Contact ACS for more information (ISB 119, 565-4068, lynch@unt.edu).

Especially for Faculty and Staff Members

In addition to the [ACS Short Courses](#), which are available to students, faculty and staff, staff and faculty members can take courses offered through the [Human Resources](#) Department, the [Center for Distributed Learning](#), and the UNT Libraries' [Multimedia Development Lab](#).

Center for Distributed Learning

The Center for Distributed Learning offers courses especially for Faculty Members. Topics include those listed in the box below. The center also offers a "Brown Bag" series which meets for lunch the first Thursday of each month at Noon in ISB 204. The purpose of this group is to bring faculty members together to share their experiences with distributed learning. One demonstration will be made at each meeting by a faculty member with experience in distributed learning. Each meeting is followed, for those interested in using WebCT®, by a one hour orientation for beginners in ISB 203. More information on these activities can be found at the [Center for Distributed Learning](#) Web site.

Distributed Learning Training - August 2000 Schedule

Attend this four day workshop to become familiar with many aspects of distributed learning, including how to plan for it, course conversion, presentation skills, videoconferencing, and WebCT web course management software. The workshop is offered between long semesters and summer.

Workshop 2: August 14 - 17

See

http://www.unt.edu/cdl/training_events/webct_crashcourse_schedule.htm
for more information or to register online.

UNT Libraries'

The UNT Libraries' Multimedia Development Lab has also offered free training to all University of North Texas faculty and staff in the basics of FrontPage and information architecture in the past. For more information see

<http://www.library.unt.edu/info/media/services.htm#Distributed>.

Technical Training

Technical Training for campus network managers is available through the [Campus-Wide Networks](#) division of the Computing Center. Some of the seminars, such as one on disaster recovery/business continuity planning techniques, may be of interest to others on campus as well.

UNT Mini-Courses

These are a variety of courses offered, for a fee, to UNT faculty, staff and students as well as the general public. For a free brochure or additional information, call (940) 565-3482 or surf over to http://www.unt.edu/ccecm/cont_ed/index.html for more information.

Alternate Forms of Training

The [Training](#) Web site has all sorts of information about alternate forms of training. Training tapes, Computer Based Training ([CBT](#)) and Web-based training are some of the alternatives offered. There are also handouts for computer training (Microsoft Office 97 and Windows 95) on the following topics:

- GroupWise 5.2 -- Handout for Win95/NT
- FAQ for GroupWise 5.2
- Info on GroupWise for Win3.1
- Computers - Back to the Basics
- Introduction to Windows 95
- Introduction to Word 97
- Advanced Word 97 - MailMerge It Together
- Introduction to Excel 97
- Introduction to PowerPoint 97
- Introduction to Remedy (THE Call-Tracking Program)
- Using Netscape Communicator and the UNT Home Page

December 1999's "[List of the Month](#)" offers links to free Microsoft Word and Excel information also.

[Page One](#)[Campus
Computing News](#)[Test Your
Knowledge
about Student
Computing
Services](#)[Linux Lab](#)[Virus Threats
Still Plague
Public, UNT](#)[Routing
Messages in
GroupWise](#)[Today's Cartoon](#)[RSS Matters](#)[The Network
Connection](#)[List of the Month](#)[WWW@UNT.EDU](#)[Short Courses](#)[IRC News](#)[Staff Activities](#)[Subscribe to
Benchmarks
Online](#)

IRC News



Minutes provided by Sue Ellen Richey,
Recording Secretary

IRC Regular Voting Members: *Judith Adkison, College of Education; Ginny Anderson, Fiscal Affairs; Donna Asher, Administrative Affairs; Sue Byron, Faculty Senate; Carolyn Cunningham, Student Affairs; Jim Curry, Academic Administration; David Griffiths, Student Association, Don Grose, Libraries; Jenny Jopling, Instruction Program Group; Joneel Harris, Administrative Program Group; Elizabeth Hinkle-Turner, Standards and Cooperation Program Group; Allen Livingston, Graduate Student Council; Dan Mauldin, University Planning Council; Ramu Muthiah, School of Community Services, GALMAC; Jon Nelson, College of Music; Robert Nimocks, Director, Information Technology, UNTHSC; Steve Oeffner, UNT Health Science Center; Russ Pensyl, School of Visual Arts; Patrick Pluscht, Distributed Learning Team; Mark Rorvig, Research Program Group; Paul Schlieve, Communications Program Group; Kathleen Swigger, College of Arts and Sciences; Philip Turner, Associate Vice President of Academic Affairs for Distance Education and Dean of the School of Library and Information Resources (Chair, IRC);; Virginia Wheelless, Chancellor; John Windsor, College of Business. **IRC Ex-officio Nonvoting Members:** *Leslie Bowden, Telecommunications; Jim Curry, Microcomputer Maintenance Shop; Michael Forster, UNT Health Science Center; Richard Harris, Computing Center; Coy Hoggard, Computing Center; Maurice Leatherbury, Computing Center; Sue Ellen Richey, Computing Center (Recording Secretary). [As of 9/99]**

No new IRC minutes were available at publication time. To see past IRC minutes, consult our [back issues](#).

IRC Meeting Schedule

The **IRC** generally meets on the third Tuesday of each month, from 2-4 p.m., in the Administration Building Board Room. Planned exceptions to this schedule are that December meeting was moved to Dec. 14; that the May meeting was moved to May 9 and the August meeting will be moved to August 8.

All meetings of the IRC, its program groups, and other committees, are open to all faculty, staff, and students.

[Page One](#)

[Campus Computing News](#)

[Test Your Knowledge about Student Computing Services](#)

[Linux Lab](#)

[Virus Threats Still Plague Public, UNT](#)

[Routing Messages in GroupWise](#)

[Today's Cartoon](#)

[RSS Matters](#)

[The Network Connection](#)

[List of the Month](#)

[WWW@UNT.EDU](#)

[Short Courses](#)

[IRC News](#)

[Staff Activities](#)

[Subscribe to Benchmarks Online](#)

Staff Activities

Transitions

We welcome the following new employees:

- **John Rauschuber**, ACS General Access Lab Monitor (part-time).
- **Bishal Gupta**, ACS General Access Lab Consultant (part-time).
- **Sriram Yadavalli**, ACS General Access Lab Consultant (part-time).
- **Joseph Concannon**, Programmer on the Student Records Data Systems team.

The following people no longer work in the Computing Center:

- **Rebecca Batres**, University Information Operator (part-time).
- **Leslie Bowden**, Telecommunications Manager.
- **Keiko Miyamori**, ACS General Access Lab Monitor (part-time).
- **Kevin Mullet**, Data Communication Security Analyst.
- **Virginia Richards**, Programmer/Analyst for NT/HSC Payroll/Personnel Data Systems.
- **John Rogers**, ACS General Access Lab Monitor (part-time).
- **Nantawat Uswachoke**, VM System Programmer in Mainframe Technical Services.
- **Earn Ban (Joseph) Tan**, CPU Operator (part-time).
- **Michelle Tisby**, Programmer on the HRMIS team.
- **Curry Searle**, Computer Support Specialist on the Desktop/OS team in Network and Communication Services. Curry returned to a position in the College of Arts & Sciences, Computer Support Services area.

Awards, Recognition, Publications

- **Ryan Hickey**, UNIX Systems Administrator, graduated on May 13 with a Bachelor of Music in Oboe Performance, and a minor in Music Theory. His senior recital was on April 11 at 8 pm in the Recital Hall where he performed works by Telemann, Mozart, Dring, and Saint-Saens assisted by Nikita Fitenko, piano; Hye-Jean Choi, harpsichord; Randy George, bassoon; Shelli Mathews, violin; Eric Jones, viola; and Gudrun Raschen, cello. The recital was recorded and mastered in 24-bit high resolution by Dave Lane Productions, Lewisville, TX. (CD's are available for \$8 :) Ryan plans to continue taking oboe lessons and CSCI courses until he

decides what he wants to do with the rest of his life.

- **Dr. Elizabeth Hinkle-Turner**, Student Computing Services Manager, has been awarded an ASCAP Composers Fellowship for the year 2000. Her book, *Crossing the Line: Women Composers and Music Technology in the United States* has been accepted for publication by Ashgate Press, London with a contract for two additional volumes in the book series.

Other Changes

- **James Foreman**, part-time Report Distribution employee is now a full-time Production Control Scheduler.

[Page One](#)

[Campus
Computing
News](#)

[Test Your
Knowledge
about Student
Computing
Services](#)

[Linux Lab](#)

[Virus Threats
Still Plague
Public, UNT](#)

[Routing
Messages in
GroupWise](#)

[Today's Cartoon](#)

[RSS Matters](#)

[The Network
Connection](#)

[List of the Month](#)

[WWW@UNT.EDU](#)

[Short Courses](#)

[IRC News](#)

[Staff Activities](#)

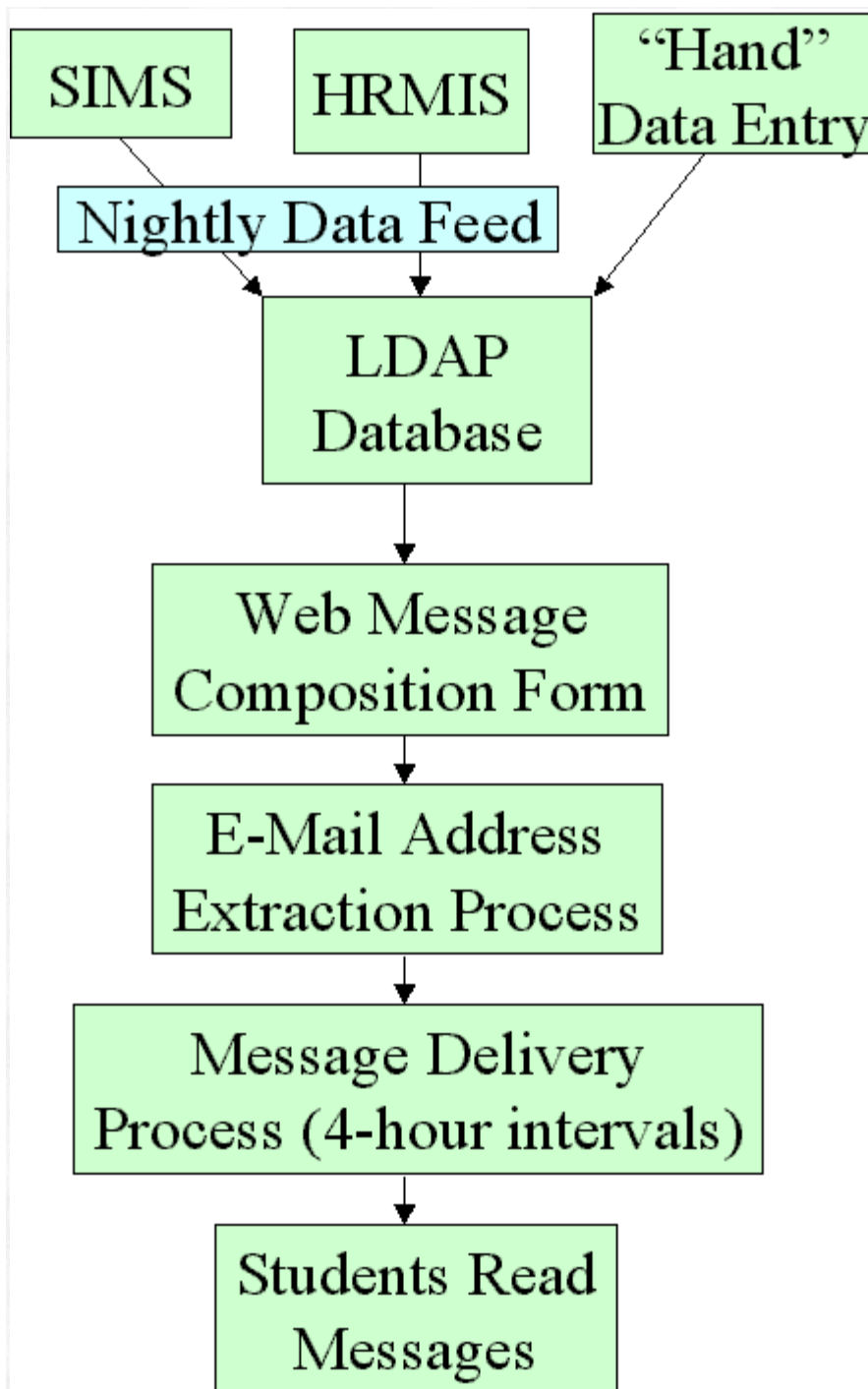
[Subscribe to
Benchmarks
Online](#)

Campus Computing News

By [Dr. Maurice Leatherbury](#), Senior Director of Academic Computing

Bulk E-mail System Now In Use

After more than a year of development, UNT's "Bulk Student E-mail" system is now in place and operational. **This system is intended for use by faculty, staff, and administrators at the University to send official messages to students.** A description of the system's implementation can be found at <http://www.unt.edu/irc/policy/emailprocedures.htm>, but that document doesn't cover some of the "behind the scenes" aspects of the new system. I thought that some readers of *Benchmarks* would be interested in the technical underpinnings of the system, both as a matter of general interest as well as to gain an understanding of the system's operation that can help in using it. Below is a simplified graphical representation of the process:



The heart of the bulk E-mail system is a Lightweight Directory Access Protocol ("LDAP") database of students, faculty, and staff at the University. That directory's data come from the SIMS (student records) and HRMIS (human resources) systems on UNT's mainframe: data on new, changed, or deleted records are extracted from those systems each night and transferred to the UNIX system that hosts the bulk E-mail system. Thus, students' course adds and drops are reflected automatically in the system and faculty members don't have to maintain lists of E-mail addresses of students in their classes.

Sending messages

Only authorized individuals can send messages from the bulk E-mail system and one of the hurdles we had to jump over in developing the new system was

determining who was a department chair, who the Registrar is, etc. Currently, there is no machine-readable database showing who are administrators on campus, so authorizations are entered "by hand" into the LDAP directory. Faculty members and the courses they are teaching, on the other hand, are identified through a separate data feed from the SIMS system so their records can be updated in LDAP with rights to send messages to their classes.

The process of sending messages from the bulk E-mail system starts with a Web form that authorized users log into (<http://www.unt.edu/bulkmail/>). Depending upon their level of authorization the logged-in person sees a list of groups (entire student body, just majors in music, just students in MUMH2040, etc.) to whom he/she can transmit a message. After filling in the form and composing the message, a "send" button on the form initiates the actual transmission of the message.

The system sends messages in a two-step process:

1. As soon as the user presses the send button, it starts a process that extracts E-mail addresses of the selected students from the LDAP database and creates a file containing those addresses plus the message.
2. The second stage of the process is a process that "wakes up" every four hours and checks for pending messages. Upon finding the file created in step one, the second program puts the message into the designated students' mailboxes and upon completion of that process sends a confirming message to the sender.

The whole process of extracting addresses and sending the message can be lengthy: our early tests took about four hours to complete a single message to about 15,000 students. While we're continuing to explore ways to tweak the system for better performance, it's unlikely that we're going to be able to significantly improve its delivery speed any time soon, so users who send messages should be aware that their messages aren't delivered instantaneously.

[Page One](#)

[Campus Computing News](#)

Test Your Knowledge about Student Computing Services

[Linux Lab](#)

[Virus Threats Still Plague Public, UNT](#)

[Routing Messages in GroupWise](#)

[Today's Cartoon](#)

[RSS Matters](#)

[The Network Connection](#)

[List of the Month](#)

[WWW@UNT.EDU](#)

[Short Courses](#)

[IRC News](#)

[Staff Activities](#)

[Subscribe to Benchmarks Online](#)

Test Your Knowledge about Student Computing Services

By [Dr. Philip Baczewski](#), Associate Director of Academic Computing

True or False?

1. Students must come to the Computing Center to activate their E-mail ID.

FALSE. Any registered student can activate their E-mail via the World Wide Web, either from their own personal computer or in any of the General Access Labs by visiting the Web page, eaglemail.unt.edu

2. Students aren't required to have a UNT E-mail ID.

FALSE. University [policy](#) established in the fall of 1999 requires students to maintain an UNT E-mail address and read official mail messages sent to it on a regular basis.

3. Reading UNT E-mail requires special software installed on your computer.

FALSE. Students can read their E-mail from anywhere on the World Wide Web by visiting eaglemail.unt.edu

4. Students must know several different Web addresses for activating, accessing, and managing their E-mail accounts.

FALSE. All E-mail access and management functions are available via eaglemail.unt.edu

5. A student's E-mail ID is used for more than just E-mail.

TRUE. The same ID is used for access to Library resources, online courses, Dialup Internet access, and other online services.

6. The same password is used for all online services.

FALSE. While the same ID may be used for a number of services, the password will not always be the same. Some systems will use the student ID number as the password, but other systems may require a unique and secure password.

7. Students should call the Computing Center for any question they have about computing.

TRUE. The Computing Center [Helpdesk](#) (565- 2324, helpdesk@unt.edu) is the primary support organization for student computing questions. If they cannot directly answer a student's question, they will refer it to the appropriate support organization.

8. The only labs students can use for general computing like checking E-mail are in the UNT Libraries.

FALSE. There are 14 different [General Access Labs](#) in major buildings all over campus. A lab is available in most buildings where students will be taking classes.

9. A UNT ID Card is required for access to any General Access Lab.

TRUE. An ID Card is necessary for General Access Lab checkin.

10. Student access to the Internet is only available in on-campus labs.

FALSE. Both free and premium [dialup access](#) is available and direct connections to the Campus are available from many dorm rooms. Premium dialup and [dorm](#) network access require payment of a small fee.

[Page One](#)[Campus
Computing News](#)[Test Your
Knowledge
about Student
Computing
Services](#)[Linux Lab](#)[Virus Threats
Still Plague
Public, UNT](#)[Routing
Messages in
GroupWise](#)[Today's Cartoon](#)[RSS Matters](#)[The Network
Connection](#)[List of the Month](#)[WWW@UNT.EDU](#)[Short Courses](#)[IRC News](#)[Staff Activities](#)[Subscribe to
Benchmarks
Online](#)

Linux Lab

By [Duane Gustavus](#), UNIX Research Analyst

This article provides a user-level introduction to the Linux systems now being introduced in some UNT General Access computer labs. The goal of this project is to provide the UNT community with access to this increasingly popular Open Source software environment.

Introduction

By this time, most people who use computer systems frequently have at least heard of UNIX, though they may have heard it as Linux or BSD. Few of these nice folks have been offered enough useful information to be able to understand what UNIX is or why they might care, and indeed most of them manage to lead full, satisfying lives anyway. UNIX is not a religion (though it certainly has zealous supporters), nor a panacea for the computing ills of the world; it is a mature, powerful computing environment which might be of considerable interest if you are a "power user" or even if you are just fascinated by information technology.

The majority of computer users, especially if you started in the last five years or so, will probably compare UNIX to Microsoft WinXX. While this comparison provides some interesting contrasts, it would be a mistake to carry it too far since Microsoft has been targeted for business use (spreadsheets and word processors) while UNIX was oriented more to technical applications (technical writing, operating system and language design). By this time, of course, there is considerable overlap, but this fundamental orientation can still be discerned. UNIX too was initially offered as a commercial product supporting expensive (in personal computer terms) workstation hardware, and was expensive software. The early versions I remember for PC hardware sold in the one-to-two thousand dollar price range -- easily an order of magnitude more than Microsoft. My view of how and why UNIX became the basis for the most common [free](#)⁽¹⁾ computing environment while Microsoft replaced IBM as the most monopolistic business in the industry was presented in an earlier *Benchmarks Online* article, "[The UNIX Question](#)."

Linux, though more appropriately called GNU/Linux, has become particularly wide-spread, finding enthusiastic acceptance in an international scope. The product of literally thousands of people working in various parts of the world, Linux has become the "poster child" of the [free software movement](#), complete with it's own [subculture](#)⁽²⁾ and mascot. Viewed as a social phenomenon, the free software movement stands practically alone in the fight to preserve some public land in cyberspace from the depredation of corporate raiders staking claims to every imaginable intellectual property. This battle for freedom of expression and communication may have repercussions for information technology felt for many years.

In an attempt to offer those of the UNT community interested in this environment the opportunity to acquaint themselves with Linux, a project named "Linux Lab" was started earlier this year. Despite the name, the Linux Lab idea is not a general

access lab full of Linux systems, but rather a network distributed implementation allowing current general access labs to add one or a number of Linux systems to their existing compliment of services. The goal is to provide access to a representative Linux installation which can be replicated by individuals on their own computers should they so desire.

What is Linux Lab?

Imagine a computing environment that is highly customizable; what it looks like, how it works, what it does for you is a matter of personal taste and initiative. Regardless of which Linux Lab system in which general access lab you login to, your personalized interface is presented, and your individual disk storage place is available. You may explore the Internet, write and print documents, generate and process images, do statistical analysis, communicate with people in other parts of the world and experience a different perspective on what a computing environment can be. When you logout and leave the lab, the next person to login to the same hardware may well get an entirely different interface and will have their private disk storage made available instead of yours.

This is the goal of the Linux Lab project which, while still in its infancy in terms of the number of installations, is nonetheless on its way. After you login, you will be presented with a GUI (graphic user interface) which has a reasonably predictable behavior (i.e. click on an icon to launch a program, click on an item to select it for processing, double-click on an item to execute its associated application).

What applications are available?

Current Linux Lab systems have quite a few applications which could be of value in an academic environment. Most will have their own Websites which discuss the application, have pointers to where it can be downloaded, and often links to personal information about the authors. The amount and quality of the documentation you find at these sites will vary widely, and can be used as a first order approximation of how interesting this application is. This is certainly not intended to be an exhaustive list, but will give you an idea of what to expect.

- **Lyx** is a graphical user interface to a document processing language named LaTeX. Don't worry; you don't have to learn to use LaTeX since Lyx does all that for you. There is an active Website at <http://www.lyx.org/>, and Lyx comes with online tutorials and reference material.
- **Gimp** is an image processing tool which is very powerful. You can read images from most popular formats, apply many processing techniques to them, and save them to disk in a number of formats. All of the images on this Website (and many others!) were made with the gimp. There are LOTS of gimp links from the home Website (<http://www.gimp.org/>).
- **Gnome** (<http://www.gnome.org>) is a session manager which offers personal productivity applications like an address book, a calendar, help browsers, clocks, calculators and more. For instance, Gnumeric (<http://www.gnome.org/gnumeric/>) is the Gnome spreadsheet program.
- **XEmacs** (<http://www.xemacs.org/>) is a variant of the GNU Emacs editor with a more graphic-oriented interface. Emacs is a very powerful text editor

oriented towards more technical users, and provides specialized interfaces for programming, reading net news, E-mail and even browsing the Web. If you are looking for a word processor, however, you should try Lyx mentioned above. GNU Emacs (<http://www.gnu.org/>) is also available on Linux Lab systems for those who prefer it.

- **Netscape Communicator**, a common graphic Web browser, and **lynx**, the most popular text-based Web browser, are both available.
- Additional graphics utilities found on these systems include **Electric Eyes** for viewing images, **GQview** which offers quick thumbnails of images in a directory, and utilities like **ImageMagick** and **netpbm**.
- Numerical computation is represented by **Scilab** (<http://www-rocq.inria.fr/scilab/>) while **R** (<http://lib.stat.cmu.edu/R/CRAN/>) is a system for statistical computation and graphics.
- Additional text processing software includes **acroread**, a free but NOT open source pdf reader from Adobe, **wordinspect** to query a public dictionary server (<http://www.dict.org/>) for word definitions, the **ghostscript renderer** for postscript files, including the ghostview postscript viewer and a full **TeX/LaTeX** installation to support Lyx.
- If you are interested in programming, Linux Lab systems include the **egcs-2.91.66 c compiler**, **perl**, **python**, **tcl/tk 8.0** and various editors like **emacs**, **xemacs**, **vi** and even **pico**.
- **System utilities** include font selectors, color browsers, various terminal emulators and graphic file managers, a strip charter, process monitors and window manager toolkits. If you're a UNIX geek, you will find most of the standard commands and text oriented utilities that are familiar. The default X Windows manager is iceWM using gnome as a session manager, but KDE and WindowMaker are also installed.

Why is everything different?

What will be substantially different about the Linux Lab environment from the one you are probably familiar with will be the applications themselves. You will not find Microsoft applications because these are proprietary, so if you want to write a paper, for example, you would use a program like LyX. Many things about LyX are different from a familiar word processor like Microsoft Word, so you will be tempted to ask why not stick with what is most familiar to the largest number of users? An easy response would be that Microsoft spends large amounts of money on litigation to ensure that other software doesn't model its products too closely, but that misses an important point. Lyx is really just a graphic front-end to the TeX text processing system.

TeX was designed by Donald Knuth in the late 1970's to produce publication quality documentation complete with drivers for typesetting machines. Remarkably for the time, TeX was free, so over the years thousands of volunteers have contributed to its refinement adding macros, style sheets, templates and GUI's like LyX. To support publication all the way through the typesetting phase, Knuth provided METAFONT, a tool for creating fonts, and included the Computer Modern font set. The result of this approach is that papers written with TeX twenty

years ago can be processed by a contemporary version today and will look exactly the same as the original -- new versions of software do not have to be incompatible with older versions; it's simply that there is a strong incentive to do so if your business is dependent on selling new software (you may, of course, not join me in my suspicion that this is what gives rise to many new "features").

This does not prove that TeX is the best tool for your writing project, but does show that it has a long history and good reputation as a document generation system. Indeed, several professional journals utilize TeX for their [publications](#)⁽³⁾. My point here is not to slam Microsoft for running a profitable business, but to point out that software development which is not driven by a profit mentality is able to make decisions which may well be sub-optimal for a business, but still preferable from a user perspective.

This example using text processing is a recurring pattern in the free software world; a simple case study in why the unrestricted availability of the source code is important, even if you're not a programmer. Portability is the mantra. Because the source code was freely available, TeX has been ported to many different hardware platforms. Linux ports can currently be found for SGI, Sun, Macs, COMPAQ, Dell, IBM and HP; platforms include PCs, workstations, mainframes, super-computers, laptops and even PDAs. While all applications have not been ported to all platforms, the only constraint to this is the willingness of some programmer or group to do so, not the decision by some corporation that it is commercially viable.

More information

The most current information on the status of Linux Lab systems, including how to get an account, where to find them, and what applications are available, can be found at the Linux Lab Website (<http://linuxlab.unt.edu>). This site also provides links to other useful Linux Websites, a few screenshots of the default interface and links to papers which describe the implementation of both the client nodes and the Linux Lab server.⁽⁴⁾

Footnotes

1 That's free as in "free speech," not necessarily free as in "free beer."

2 <http://slashdot.org/> is the best know advocacy site, though far from the only one.

3 The American Mathematical Society, American Physical Society, Optical Society of America and American Institute for Physics have all defined macro sets for TeX publication.

4 If you read this far, you might be interested in dropping in on Salon's Free Software Project. Salon is "taking a book about the history, ideas and personalities behind the free-software/open-source movement -- a book that Andrew Leonard is in the process of writing -- and posting it, in pieces. . . as it's written." The book is being published to the Free Software Project [Website](#) and Salon is "inviting readers -- Linux veterans and newbies alike -- to post their comments, criticisms and reactions. Leonard will in turn respond, and incorporate changes in the text as seems right."

© 2000 Randy Glasbergen. www.glasbergen.com



**"It's right here in your own handwriting.
You didn't ask for Linux, you asked for Linus!"**

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

[Page One](#)

[Campus
Computing News](#)

[Test Your
Knowledge
about Student
Computing
Services](#)

[Linux Lab](#)

Virus Threats Still
Plague Public,
UNT

[Routing
Messages in
GroupWise](#)

[Today's Cartoon](#)

[RSS Matters](#)

[The Network
Connection](#)

[List of the Month](#)

[WWW@UNT.EDU](#)

[Short Courses](#)

[IRC News](#)

[Staff Activities](#)

[Subscribe to
Benchmarks
Online](#)

Virus Threats Still Plague Public, UNT

By [Claudia Lynch](#), Benchmarks Online Editor

If you thought the "virus trolls" or whoever it is that dreams up and periodically releases those things into cyberspace were going to take a summer vacation, think again. A new virus sprang up last week and I'm sure there are more where that came from. The latest threat (or at least as of this writing) is something called "Stages." Like the recent "[Love Bug](#)" virus, it multiplies by sending a copy of itself to everyone listed in the infected computer's address book. Unlike that other virus, however, it masquerades as a ".txt" file even though it's really a ".shs" file that can contain executable and malicious code. You should beware of opening the attachment of any E-mail message containing the words "funny," "life stages," or "jokes" in the subject line (of course this can always be altered), especially if it is from someone you don't think would send you such a message. Since this virus -- like the "Love Bug" -- is Windows-based, you don't need to worry about it if you use a Mac or don't run the Windows Operating Environment.

Mike Williams, who is UNT's new Anti-virus Coordinator, reported detection of the "Stages" virus on campus June 19th. It was not spread however, due to the recipient's awareness that the virus was in circulation. The UNT Virus Website (<http://www.unt.edu/virus/>) has been updated -- and redesigned too! -- to reflect this latest attack on Windows-based operating environments.

Last month's *Benchmarks Online* had quite a few articles addressing the topic of viruses, including the "Love Bug" virus, and computer security:

- ["Campus Computing News"](#)
- ["Virus Protection Means Never Having to Say You're Sorry"](#)
- [The Network Connection](#) -- "Who do you trust?"
- [List of the Month](#) -- "BugNet"
- [WWW@UNT.EDU](#) -- "Security on the Internet"

[Page One](#)

[Campus
Computing News](#)

[Test Your
Knowledge
about Student
Computing
Services](#)

[Linux Lab](#)

[Virus Threats
Still Plague
Public, UNT](#)

[Routing Messages
in GroupWise](#)

[Today's Cartoon](#)

[RSS Matters](#)

[The Network
Connection](#)

[List of the Month](#)

[WWW@UNT.EDU](#)

[Short Courses](#)

[IRC News](#)

[Staff Activities](#)

[Subscribe to
Benchmarks
Online](#)

Routing Messages in GroupWise



By [Andrew McGregor](#), Messaging Support Specialist

Have you ever written E-mail that you wanted to send to a group of people in a certain order? Well, here's your opportunity to start doing it. The GroupWise Client (version 5.5.3.1) has this ability built right into it. Simply open a "Mail to" window and click on "Actions" and choose "Routing Slip". This will activate the routing feature. Now, in the "Route" field, enter the names of the recipients in the order you want them to receive the E-mail. Then the rest is the same as a regular E-mail.

The recipients are informed that the message will be automatically routed to the next user when they mark the message complete. They do this by putting an "x" in the "completed" check box in the lower right-hand corner of the message window.

Isn't that easy? Now that you know how to do it, give it a try, and start using it!

For more information on this or another feature, please feel free to send me [mail](#) or give me a call at x7688. I'll be happy to help you. Also, you can visit our [Campus Wide Networks](#) Website and keep reading *Benchmarks Online* for other helpful information.

[Page One](#)

[Campus
Computing News](#)

[Test Your
Knowledge
about Student
Computing
Services](#)

[Linux Lab](#)

[Virus Threats
Still Plague
Public, UNT](#)

[Routing
Messages in
GroupWise](#)

Today's Cartoon

[RSS Matters](#)

[The Network
Connection](#)

[List of the Month](#)

[WWW@UNT.EDU](#)

[Short Courses](#)

[IRC News](#)

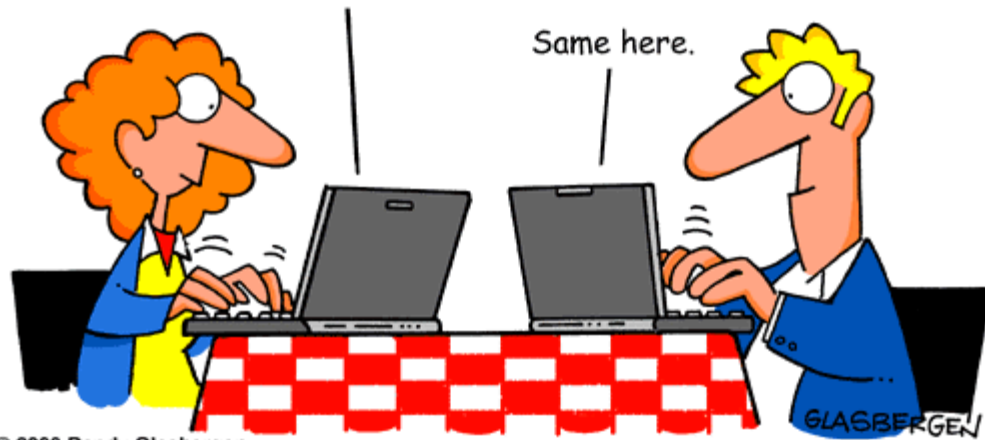
[Staff Activities](#)

[Subscribe to
Benchmarks
Online](#)

TODAY'S CARTOON

After all our online chats,
it's great to finally
meet you in person.

Same here.



© 2000 Randy Glasbergen.

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