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**Why use the
authenticated
SMTP server?1**

If you are a wireless user or you sign up for cable or DSL modem service or another ISP, you may be a candidate for using the University's authenticated SMTP server.

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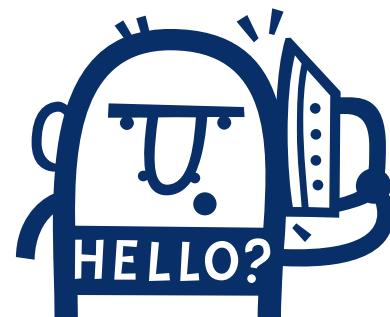
E-mail Decisions

Designating an outgoing mail server

Did you know that the University currently supports two outgoing e-mail servers, commonly called SMTP servers? They are:

1. the original server — smtp-gw.tc.umn.edu
2. the newer authenticated server — smtp.umn.edu

Did you know that you may want or need to switch between SMTP servers, depending on where you access your e-mail, the software you use and who your ISP (Internet Service Provider) is at the time you access your e-mail.



For example: if you are a wireless user or you sign up for cable or DSL modem service or another ISP, you may be a candidate for using the University's authenticated SMTP server.

Why is it getting more complicated to figure out how to set up your e-mail software? Two reasons are SPAM and the increased security that's required for sensitive or important e-mail exchanges. For more information on the role SMTP plays, read "A key e-mail component: SMTP" in this issue of the newsletter.

Why use the authenticated server?

- You use a non-UM Internet Service Provider to access your e-mail and your request to send mail using the older (smtp-gw.tc.umn.edu) server is denied.
- You are using the University's wireless network.
- The e-mail you send will be more private because it will be protected (encrypted) between your computer and the e-mail server.

What's required to use the authenticated server?

- Your e-mail software must support SSL (secure socket layer).
- Your ISP must allow you to customize your outgoing mail settings to use that server; an increasing number of ISPs require you to use one of their outgoing (SMTP) servers.

Why use the original, unauthenticated server?

- Simplicity. Since it's been around the longest, it's probably the one you are already using.
- You don't need the additional security that the authenticated service offers.
- You are using a University of Minnesota controlled IP (Internet Protocol) address, i.e., you are on campus with an Ethernet connection, are dialing in through the University's modem pool or are using the University's VPN (Virtual Private Network).

What's an alternative to memorizing e-mail settings?

- Use the University's Web-based e-mail program: WebMail Pro. It's secure. It uses SSL, and its

outgoing mail is sent via a secure relay. To start using it you just need to know your University Internet ID and password; you can forget about server names.

WebMail Pro

Links to WebMail Pros are available from many campus Web pages and directly from this page: <http://www.mail.umn.edu/>

You should be able to access WebMail Pro from anywhere on the planet where you have an Internet connection. The improved WebMail Pro supports custom folders and attachments; and a short "how to" guide is available from the same Website as the WebMail Pro program.

Using WebMail Pro can also solve the mail forwarding glitches discussed in our July 2002 newsletter.

For some people the one drawback to using WebMail Pro (the successor to WebMail Classic) is that they normally use the POP e-mail protocol rather than the IMAP protocol that WebMail Pro supports. So when that WebMail Pro user switches back to their "regular" POP e-mail setup, they encounter a message that says: Do not delete this message. The message is a leftover

A key e-mail component: SMTP

Knowing more about how Internet e-mail works, can help you understand the changes e-mail is going through.

If you're typical, you not only read, compose and send e-mail when you're on campus, you also engage in e-mail exchanges when you are off campus. Behind the scenes various administrative functions handle receiving, storing, forwarding and sending the e-mail you receive or generate at your e-mail address(es). Increasingly people must juggle work, student

and a personal e-mail address; full featured e-mail programs responded to this complexity by letting you set up profiles that save multiple e-mail address and their settings' files.

▼ You click send.

When you click the send button of the e-mail software you are using, that "mailer" program checks its configuration settings for the address of an SMTP (Simple Mail Transport Protocol) server.

Typically, SMTP server functions are handled by your Internet Service Provider (ISP). The University of Minnesota is an ISP that provides e-mail accounts for students, faculty and staff and also provides SMTP service for those account holders.

Note: if you've never seen settings for an SMTP server, your mailer and/or your Internet Service Provider (ISP) may not let you customize the SMTP properties.

IMAP warning that's intended for the IMAP server. Now that they are using the POP protocol, they can safely delete the message.

WebMail for non-central systems mail

A separate version of WebMail Pro is available for those who use a University department e-mail address rather than their centrally assigned e-mail address or who are students on the Duluth, Crookston or Morris campuses: <http://www.mail.umn.edu/>

Online SMTP set up guides

The Academic and Distributed Computing Services Website has many step-by-step online guides, including a guide for setting up authenticated SMTP:
<http://www.umn.edu/adcs/help/smtp/>

Currently the guide includes a table with links to setting for the popular e-mail programs shown in Table 1. Older versions of e-mail programs are unlikely to support authenticated SMTP.

There are thousands of ISPs; they implement SMTP in different ways, and some cannot handle authenticated SMTP while others can. The University of Illinois at

Table 1: Online guides step you through setting up authenticated SMTP for these popular programs.

E-mail software	Windows	Macintosh
Entourage	version 2000
Eudora	version 5.1
Netscape	ver. 4.5–4.7	ver. 6, 4.5–4.7
Outlook	version 2002, 2000
Outlook Express	.. ver. 6.0, 5.0	ver. 5.0, 4.5

Chicago (UIC) and University of Maryland (UMD) have impressive lists of ISP and SMTP server settings:

- <http://www.uic.edu/depts/accc/ecomm/smtpmove/isps.html/>
- <http://www.helpdesk.umd.edu/documents/1/1989/>

If your ISP is not listed, you can contact them directly and ask: Am I required to use a specific SMTP server? If I am, what is the name of that SMTP server?

■ Tips from the OIT Technology Helpline

▼ Mailer connects to SMTP server.

An SMTP server fills the role of an old fashioned mailman who accepts your message and finds a way to deliver it.

Usually the mailer connects to the SMTP server, sends the message immediately and disconnects from the SMTP server. Sometimes the mailer must contact another SMTP server before it can deliver the message, in which case it stores the message rather than delivers it immediately.

▼ E-mail gets delivered to recipient's Inbox.

When the e-mail reaches its destination, it is delivered to the recipient's Inbox. To actually read the e-mail, the recipient will use a different e-mail protocol, such as POP or IMAP.

▼ SMTP and POP/IMAP functions are separate.

The SMTP and POP/IMAP functions are separate. The functions can even be on different networks and be handled by different ISPs.

In early 1999 the University began to restrict use of its SMTP server <smtp-gw.tc.umn.edu> while trying to let all UM students, staff and faculty who used a non-UM ISP to still connect to the University's SMTP server. This temporary approach meant maintaining exceptions for approved non-UM ISPs.

For more background, see the *The open relay* sections below.

Key e-mail component: SMTP — continued

▼ Authenticated SMTP on SSL.

The longer-term solution was to set up authorized/authenticated access for SMTP on SSL (secure socket layer), a solution the Internet Services group was also working on. In this way, access from non-UM ISPs could be restricted to those with an active University account.

This solution would work for people whose e-mail software supported SSL. Although older e-mail software generally did not support SSL, new versions and new programs were adding support.

In fall 2000 final tweaking of authenticated SMTP was finished, and the University's authenticated SMTP server became available: smtp.umn.edu

This change allowed the University to more closely limit the ISPs that are allowed to go through the older server: smtp-gw.tc.umn.edu

In the summer of 2002 SSL accelerator cards will be added to the SMTP servers, improving their performance.

▼ Long term SMTP goal.

The University's long term goal is to restrict access to the unauthenticated server <smtp-gw.tc.umn.edu> to those with UM controlled IP (Internet Protocol) addresses.

▼ The open relay problem.

Once upon a more innocent time the “open relay” feature of SMTP operations enabled e-mail from different sources to be passed along from one SMTP server to another. Unfortunately, this feature also enabled spammers to use SMTP servers to help hide their identities. As a counter measure, ISPs everywhere are restricting those who can use their SMTP servers; they’re closing the open relays of friendlier days. For additional control, some ISPs — such as MSN — require that their account holders use their SMTP server rather than a different SMTP server.

Is this an aha moment for you?

Have you suddenly been unable to send mail, although you could receive it? Have you gotten strange error messages complaining about SMTP or relaying?

If yes, you've experienced a (sometimes sudden, unannounced) change in how your ISP handles outgoing e-mail.

▼ Open relay is a security issue.

Below are excerpts from the Open Relay page of the Office of Information Technology's Security Website: <http://www.umn.edu/oit/security/openrelay.shtml>

The Security Website also includes tips for fixing the problem and testing after the fix.

Many University servers were configured to relay e-mail by default regardless of origin and destination. Some vendors have been shipping servers with old insecure versions of the mail server applications...

University servers with unrestricted open “mail relays” are being hijacked by spammers to send millions of pieces of unwanted, unsolicited e-mail, often without the knowledge, much less consent, of their owners/administrators. This is misuse of the University’s good name and resources under false pretenses to mask delivery of unwanted e-mail...

Each time an open relay on campus is used to send unsolicited e-mail, the University runs the risk of being listed in a blocking service...

■ Tips from the OIT Technology Helpline

Building a Well-Rounded Digital Library

The University Libraries provides world-class library services for University of Minnesota faculty, staff and students; and these days a “Digital Library” is part of what we’ve come to expect a world-class library.

Digital Libraries are pretty new, though; and the term can mean many things. This brief article will give you a sense of what kind of Digital Library the University Libraries is building for you. This Digital Library is an extension of the University Libraries you already know, including resources, services and access. It is a Digital Library fully integrated with our physical spaces and collections. It is also a Digital Library that will continue to grow and mature for many years to come.

Digital resources

We assemble an extraordinary array of digital resources for the University’s faculty, students and staff. The University Libraries has licensed over 1,000,000 articles, 1,000 books and 200 databases in electronic form on your behalf. Often you may use these licensed resources without even realizing that this is a special privilege; it can be *that* seamless.

We have built local resources such as our IMAGES metadata aggregation system, the AgEcon repository with full-text articles from the field of agricultural economics, the Social Sciences in Forestry database, and the *Health and Medicine in the News* tracking service. And don’t forget that the recently reborn MNCAT catalog of our holdings is a vital digital resource used to support learning and research across the state.

These resources are the “books on the shelf” of the Digital Library. Acquiring electronic resources has meant a revolution in library management, from negotiating dozens of licenses with vendors hosting resources to developing systems for managing local content. Our work is not yet complete, by any means. One NSF blue-ribbon panel recently put it this way:

We anticipate a phase change, where a moderate effort can have a highly desirable and nonlinear effect. We envision an environment in which raw

data and recent results are easily shared, not just within a research group or institution but also between scientific disciplines and locations.
[Atkins, 2002]

The University Libraries will be part of that environment; but the raw material of electronic resources is not enough to make information “easily shared.” Our Digital Library must be more.

Digital services

The University Libraries has always been more than a collection of material; we have also been a reservoir of expertise for patrons who ask us for guidance. For our Digital Library to be effective, it must be possible to seek and receive expert guidance here. Some of this service can be in the form of automated tools or “expert systems,” other guidance must be provided “in person” through direct contact with staff who can analyze your needs and introduce new skills and resources to your repertoire.

These services are the “reference desk” of our Digital Library. We’ve expanded the pilot of our *Ask UsLive* online service to over 20 hours per week. Available at all hours is our *InfoPoint* digital reference service which handled over 3,000 questions last year and received a national award. *Research QuickStart* provides a way to track the resources available in each of over 200 disciplines, while *QuickStudy* and *CourseLib* introduce research techniques and course specific resources. Our *Electronic Text Research Center* helps researchers use cutting-edge text analysis tools to prepare sophisticated digital versions of important texts.

A recent survey of students and faculty at universities and colleges found that, while three quarters of respondents agreed that “the Internet contains information I use and cite,” only about half agreed that “the Internet contains information that I use and trust.” [Greenstein, 2002] Our Digital Library must guide you toward information you can trust. Our job is to develop services that help you validate the authority of online information.

Digital access

We find that even though our Digital Library can reach around the world, users often come to the physical library to use our electronic collections. You may come because you don't have appropriate computing equipment at home or in your office. You may come because you need to combine some electronic research with paper-based information. You may come because the library is a nice place to study quietly or to meet colleagues and work together. For whatever reasons you or others may visit our library locations, the fact is that these locations have to be the premier access point for digital resources and services. If you join us on campus, you deserve the best and most efficient experience we can offer you.

The renovated Walter Library exemplifies this marriage of the digital and traditional libraries. In Walter, we not only provide state-of-the-art workstations for research, we also make networking, both wired and wireless, available for those who bring their own computers into the library. We are modernizing equipment and access in all our facilities to bring digital and printed resources together in an environment where experts are available to help you reframe and answer the questions you bring to us.

Building it together

Building our Digital Library is an effort of worldwide scope with countless organizations advancing the agenda. The University Libraries belongs to the Digital Library Federation, the Coalition for Networked Information and the Council for Library and Information Resources, to name just a few national organizations working to develop exciting tools and define best practices. The Committee on Institutional Cooperation (CIC) plays an important role by providing a peer

Explore the Digital Library

- Articles: <http://www.lib.umn.edu/articles/>
- Books: <http://www.lib.umn.edu/books/>
- CourseLib: <http://courses.lib.umn.edu/>
- Electronic Text Research Center: <http://etrc.lib.umn.edu/>
- IMAGES: <http://digital.lib.umn.edu/>
- InfoPoint & AskUs: <http://infopoint.lib.umn.edu/>
- QuickStudy: <http://tutorial.lib.umn.edu/>
- Research QuickStart: <http://research.lib.umn.edu/>
- AgEcon: <http://agecon.lib.umn.edu/>
- Health and Medicine in the News: <http://www.biomed.lib.umn.edu/hmed/>
- Social Sciences in Forestry: <http://forestry.lib.umn.edu/bib/SSiF.phtml/>

group that broadens our base of expertise and a consortium that leverages our dollars when purchasing resources demanded by all of our communities.

With over a dozen points of presence on the Twin Cities campus and the need to serve users throughout the state and world, we also rely on a close relationship with the University's Office of Information Technology. OIT not only manages the robust networking and user authentication essential to the operation of our Digital Library, it also maintains key servers, supplies important programming talent and facilitates communication with technology units across the University.

Tools in the digital realm are highly interdependent, so we also make sure that the Digital Library will integrate with new gateways to information on and off campus. We ensure, for example, that our electronic resources and services will be available through the campus portal being developed under the guidance of the Web Integration Group.

The Digital Library calls on the University Libraries to reinvent itself. Clearly our Digital Library is more than a collection of digitized resources; it also includes expert services and avenues of access. The Digital Library is part of the fabric of the University Libraries, serving as a vital tool for our learners and researchers.



Citations

Atkins, Daniel, et. al. "Revolutionizing Science and Engineering through Cyberinfrastructure" (Draft 1.0, 19 April 2002), pg. 4.
[<https://worktools.si.umich.edu/workplaces/datkins/001.nsf>](https://worktools.si.umich.edu/workplaces/datkins/001.nsf)

Greenstein, Daniel, and Leigh Watson Healy. "National Survey Documents Effects of Internet Use on Libraries" in *CLIR Issues* (no. 27, May/June 2002). [<http://www.clir.org/pubs/issues/issues27.html>](http://www.clir.org/pubs/issues/issues27.html)

■ Eric Celeste, Associate University Librarian for Information Technology, fc@umn.edu

Should Performance Appraisals Be Banned?

a periodic column

Every year review time is a very stressful time for management and employees. It is stressful because most often performance appraisals are not handled properly.

Why are performance appraisals stressful? They can be stressful because they are done only once a year and in writing. They can be stressful if they include an element of surprise for the employee. They can be stressful because each manager has their own style and priorities in approaching the review time. Some managers don't want to upset their employees so they give them all top scores. Some managers use the review process to reinforce that they are the boss. Some use it as an accounting time, calculating the rights and wrongs of the employee.

If performance appraisals are really based on performance, then they must be done more than once a year. Performance has to do with productivity not with personal habits or style. Any project or task that requires the employee to produce something should include immediate evaluation. If an employee has to wait 6 to 9 months for feedback on their performance, they will not be motivated by that delay. If it's to have any value, the evaluation will lose its impact. Performance should be evaluated at the time of productivity.

Performance appraisals should not be used to correct people's bad habits or to reinforce policy issues. For example, if employees are

developing a pattern of breaking some rule or policy, the employees need correction to keep them from forming a bad habit. Once a habit is formed, it is very difficult to correct. Managers need to give employees immediate and on-going feedback before they've had a chance to form a bad habit. If this feedback is left for 6 to 9 months, it will be too late. A one time punishment at the end of the year review time will not be enough to correct an employee's bad habit.

An employee's performance should be evaluated throughout the year. This does not have to be a formal process; it can be very informal. Managers should communicate their expectations to their employees and then provide immediate and ongoing feedback. This kind of evaluation is useful; it will be in time to help motivate the employee.

The formal review process at the end of the year can then be used as a time to summarize the employee's performance. The employee will not be surprised because they would already have a knowledge of how they are doing from the informal communication they have received throughout the year. This is the proper way to do performance evaluations, and it will be less stressful for managers and employees alike.

If performance evaluations are done properly, it will not be necessary to ban them.

■ Shih-Pau Yen, Academic and Distributed Computing Services

(The views expressed in this column are the personal opinion of the author and not the official view of the Office of Information Technology.)

▼ Help**Phone: Area Code = 612**

- Computer Misuse or Abuse (also see Procedure 2.8.1.1)
- Emergency Network Help Line 625-0006
 - Non-emergency, e.g., spamming: abuse@umn.edu

1-HELP 24/7 unless otherwise noted 612-301-4357

Dial 1-HELP. Listen to the voice menu list of options.

Press the number of your desired option.

- Technology Help: <http://www.umn.edu/adcs/help>
- Passwords: new and forgotten ones
- CCO Central systems, PeopleSoft
 - by e-mail: x-help@umn.edu
- Internet, E-mail, Computers, Workstations
 - call-in Monday–Thursday • 8 am–11 pm
 - call-in Friday • 8 am–5 pm
 - call-in Saturday • noon–5 pm
 - call-in Sunday • 5 pm–11 pm
 - walk-in 8 am–5 pm, M–F:
152 Shepherd Labs; 93 Blegen Hall; 50 Coffey Hall
 - by e-mail: help@umn.edu
- Networking and Telecommunications Services: NTS
 - by e-mail: help@umn.edu

▼ Dial-in Computer Access

Internet/PPP: up to 53kps if v.90 612-627-4250
(56k K-flex, Flex56, X.2 protocols are unsupported)

▼ Quick Guide

- Modem Usage (current activity on your account)
<http://www.nts.umn.edu/services/modemusage.html>

Internet/E-mail account management
<http://www.umn.edu/validate>

MNCAT/LUMINA (Library) – <http://www.lib.umn.edu>

Office of Information Technology
<http://www.umn.edu/oit>

One Stop Services – <http://onestop.umn.edu>

Techmart – <http://www.techmart.umn.edu>

Technology Training Center
<http://www.umn.edu/adcs/info/training.html>

UM News Servers – news.tc.umn.edu, news.umn.edu

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Threats, UM Police Department 911 on campus

• off campus 624-3550

Computer Accommodations Program – voice/tty 626-0365

U Computer Services/Computer Repair Serv 624-4800

Statistical Software Support:

including SAS and SPSS 624-3330

Associate Vice President and
Chief Information Officer, Steve Cawley 612-625-8855

Newsletter subscription information and archives at <http://www.umn.edu/oit/newsletter>

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Rec# label trivia for Twin Cities campus addresses: 1st # is Rec#, 2nd # is the Campus Mail delivery code, <http://umn.edu/lookup>

<input type="checkbox"/> Add	<input type="checkbox"/> Delete/Cancel *	<input type="checkbox"/> Change Name *	<input type="checkbox"/> Change Address *	<input type="checkbox"/> Change Other *
Aug. 2002 [patone295,1205]				
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