Clean Out the Junk!
Outsmarting Unsolicited E-mail
NUTT Tech Talk Presentation
February 18, 2005
Sherry Minton
Dan Frommer

Agenda
• Junk E-mail: What and why?
• Blocking junk e-mail at the server level: Northwestern’s new E-Mail Defense System
• Blocking junk e-mail locally using Outlook, Apple Mail, and Eudora
• Preventing junk e-mail

Junk E-mail: What do we mean?
• Unsolicited e-mail advertisements
• Commonly called “spam”
• Sent in mass mailings

Junk E-mail: What do we mean?
• Usually in the form of advertisements
• Often inappropriate for work setting
• May also include malicious attachments, such as viruses, trojans, worms, and/or spyware
The Prevalence of Junk E-mail

- Approximately 80% of e-mail transmitted is considered “junk”
- Of 169 million “online adults” in the United States, 78% receive junk e-mail on a daily basis
- Nearly half of those receive more than 10 junk e-mails per day

One person’s trash...

- Americans spent a total of 1.2 billion hours deleting junk e-mail in 2004
- That equates to approximately $22 billion in lost productivity
- Does not include the toll on infrastructure and the cost of junk e-mail filtering software

...another person’s treasure

- 14% of American adults open their junk e-mail to see what it is; a solid ratio for sales “leads”
- 4% (about 5 million people) made purchases from junk e-mail ads in ’04

Clean Out the Junk

Get Control of Junk E-mail

Server-Side Junk E-mail Filtering
Northwestern’s “E-mail Defense System”
E-mail Defense System Overview

- New technology coming soon to Northwestern’s e-mail servers
- Scans for junk e-mail before reaching your computer
- Reduces junk e-mail that reaches your Inbox
- Deletes viruses before reaching your computer

E-mail Defense System Overview

- Why implement a University-wide junk e-mail filter?
  - 2004: 15 million junk e-mails at NU
  - Increasing popularity of Web mail, which has no built-in filtering
  - Increasing threat of e-mail transmitted viruses, which can paralyze even the strongest networks

E-mail Defense System

- Concerns before evaluation
  - Legality/Ethics: Ensure that server-level filtering does not violate academic freedom
  - Effectiveness: Both in terms of performance and value
  - Universality: Applicable for all users, including handheld/PDA & Webmail

E-mail Defense System

- How it works
  - Scans e-mail messages “on their way in” for viruses; if present, messages are deleted
  - Assigns each message a “junk score”
  - Depending on settings, quarantines e-mails marked as junk in special Web-accessible mailbox
E-mail Defense System

- How it works (continued)
- Users receive daily e-mail listing quarantined messages marked as highly probable junk
- Users can log in to a Web site with NU NetID/password and select marked messages, if any, to deliver to regular e-mail Inbox

- Users can set personal choices, such as blocking or accepting all e-mail from a certain sender or domain
- Messages from northwestern.edu are never considered to be junk e-mail unless the “from” address is spoofed

E-mail Defense System

- What to expect
- Later this spring, the entire University will be moved over to the E-mail Defense System
- Users may opt out at any time
- System effective and easy to use: 93% of testers believed it would benefit the Northwestern community

Clean Out the Junk

Get Control of Junk E-mail
Client-Side Junk E-mail Filtering
Client-Side Junk E-mail Filtering

• What is it?
• Your e-mail software (Outlook, Apple Mail, Eudora) scans incoming mail, applies pre-set “rules,” and filters junk from legitimate e-mail.

Client-Side Junk E-mail Filtering

• How does it work?
• Red flags include:
  - Suspicious sender addresses: sammy30284@mailbox958302.net
  - Baad speelllinge, lot s of s p ac es, ALL CAPS FOR MILES
  - Excessive! Use!! Of! Exclamations!!!
  - Your name in the subject line: Hi Daniel, need a new mortgage?

Client-Side Junk E-mail Filtering

• Why use it?
• Saves time, cuts clutter; less annoying than deleting manually
• Won’t load junk images that advertisers use to track your participation
• Can help prevent spread of viruses, infections attached to junk e-mails

Client-Side Junk E-mail Filtering

• Common features:
• Separate mailbox for junk e-mail
• Automatic filtering and/or labeling
• Customizable lists to “always allow” or “always block” domains or people
  - Always allow: *@united.com
  - Always block: your-in-laws@hotmail.com
Junk E-mail Filtering: Outlook

Mailboxes

Options

Junk E-mail Filtering: Apple Mail

Filtering Mode

Safe Senders

Junk E-mail Filtering: Outlook

Safe Senders

Add a safe sender

Helpful automation features:
- Trust e-mail from Contacts
- Add outgoing addresses to safe senders list

Junk E-mail Filtering: Apple Mail

Advanced Settings Screen

Information Technology
Preventing Junk E-mail

- If you don’t know who an e-mail is from, don’t even open it: just loading the images can tip off advertisers and increase junk e-mail sent to your account
- Use a second e-mail address (such as Yahoo or Hotmail) for online shopping, filling out Web forms, and non-NU e-mail lists
Resources

- Get Control, NUIT’s Web Site for computer security: www.it.northwestern.edu/getcontrol
- More information about NU’s new E-mail Defense System
- Instructions for setting up junk e-mail filters in popular e-mail clients
- Tips for preventing junk e-mail

Questions?

- Next Tech Talk: Stay Connected - Your Internet Connection Off-Campus
  - Friday, March 11, 2005, Noon - 1 p.m.
  - Same locations - Evanston & Chicago
  - Please register online @ www.it.northwestern.edu
  - Thank you for attending!