

# Filtering E-mail for Spam: PC

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## **Introduction**

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In this course, *Filtering E-Mail for Spam*, you will learn how to identify the senders of unwanted e-mail by viewing the full headers and how to filter these messages to another folder so they won't arrive in your inbox. This handout contains specific instructions for Microsoft Outlook, Microsoft Outlook Express, Eudora, Yahoo! Mail, and Hotmail.

## **Objectives**

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The learning objectives of this workshop are:

1. To learn about spam and how it can affect your computer and network.
2. To understand filters, their uses and limitations.
3. To learn how to view headers and create filters or rules in Microsoft Outlook, Microsoft Outlook Express, Eudora Pro, Yahoo! Mail, and Hotmail.

## Filtering E-mail for Spam

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### What Is Spam?

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Spam is unsolicited e-mail that crowds inboxes with unwanted and objectionable materials and hinders e-mail communication. Spammers abuse the use of e-mail messages as a direct marketing tool, sending sometimes thousands of unwanted messages each day.

Spam has never been more pervasive, and it is no longer merely an annoyance; it has begun to impact the performance of e-mail systems and networks.

### What Is UT Doing About Spam?

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The University's Information Technology Services (ITS) department investigates anti-spam solutions for the major resources it manages. ITS evaluates commercial tools made by private companies and, if they are found helpful, offers them to the University community.

ITS also monitors the mail server's system performance. When an excess of incoming messages is received, ITS blocks communication from the offensive, external sites that overload and crash the UMBS (mail.utexas.edu) mail service.

### What Can You Do About Spam?

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While spam is an unavoidable part of having an e-mail account, there are ways to reduce the amount you receive.

The following best practices will help you manage unwanted e-mail.

- **Create filters and rules** to screen unwanted mail using the instructions in this workbook.
- **Learn how to view the full headers in spam messages** to make filters and rules more effective and to enable ITS Help Desk staff to better assist you.
- **Avoid the "unsubscribe" feature included in spam messages.** Most spam includes instructions on how to "remove yourself from the list." More often than not, these removal instructions do not work. Instead, when you click on the link to unsubscribe, you are verifying that you have a valid e-mail address and spammers will then permanently add you to their list or sell your address to others.
- **Do not reply to spam messages.** Responding lets spammers know they have found a valid e-mail address and they will continue to use it.
- **Install anti-virus software and update it often.** Current students, faculty, and staff can download anti-virus software from the BevoWare site. <http://www.utexas.edu/its/bevoware/>
- **Be careful where you share your personal information online.** Be wary of filling in address, phone number, or e-mail information on non-secure sites. Some users create "junk" e-mail accounts with a free service to use on Web forms so their real e-mail address doesn't receive large amounts of spam.

- **Report the problem to the spammer's provider.**
- **Report spammers to the ITS Information Security Office (ISO).** When junk mail originates outside the University, ITS has little control. However, if the offending e-mail violates UT policies, the ISO will investigate the report and take appropriate action. Repeated incidents involving offensive e-mail may be harassment. If you feel you are being harassed, write [abuse@utexas.edu](mailto:abuse@utexas.edu). If you feel threatened, immediately call UT Police at 471-4441.
- **Contact the University's ITS Help Desk for additional help.**  
<http://www.utexas.edu/its/help/>
- **Always abide by the University's *Responsible Use Policy*.**  
<http://www.utexas.edu/its/policies/responsible.html>  
Specifically, you must not:
  - \* Threaten violence or vandalism against the site or user that sent you spam.
  - \* Hack into the site.
  - \* Mail-bomb, ping-storm, SYN-flood, or otherwise attack the site or user.

## **What Are Filters and Rules?**

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Filters, called Rules in Outlook and Outlook Express, are tools within e-mail programs that use specific criteria to identify incoming messages as spam. Filters can then transfer messages detected as spam to a specified folder—such as Junk Mail, Trash, or Deleted Items—before they reach your inbox.

The process for creating filters and rules differs slightly in each program but the basic concept is the same. Once you understand generally how to create a filter, you can apply that understanding to any e-mail program that you use in the future.

## **Other Filtering Options**

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In addition to creating specific filters and rules, your e-mail program can filter messages on a broader level. For example, Microsoft Outlook can use a default list of terms to filter suspected junk e-mail. This list of terms is stored within the Outlook folder as **filters.txt**. Other e-mail programs also offer pre-defined terms to filter suspected junk or adult content mail.

## **Limitations of Rules and Filters**

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Successfully filtering e-mail requires constant attention. Filters are rarely completely effective because junk mail senders change constantly. Thus, you must constantly update rules and filters.

As a rule or filter may sometimes target personal mail that is not spam, it is best to filter spam into a folder that you can periodically check to make sure you are not losing essential mail. Also, you must frequently empty your junk mail folder as mailbox space is limited and exceeding your limit could cause new incoming mail to bounce.

## **Viewing Full Headers**

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Filtering using the sender's e-mail address is an effective method if the address is correct. Often spam is sent from fake, or "spoofed," addresses, so it is ineffective to filter based on the address listed in the **From:** line. However, you can learn the real address of the sender by viewing the full headers.

The full header of an e-mail displays additional information about the sender and the route an e-mail takes before arriving in your inbox. Filters can be more effective if you block a sender's complete address as displayed in the full header. Instructions on how to view full headers are included within the procedures below for the e-mail programs discussed in this workbook.

## **Filtering for Spam**

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Filtering for spam can be a challenge since spam messages usually come from many different senders, including senders who use fake e-mail addresses or send from multiple addresses. Below are several strategies that can increase the effectiveness of your filters:

- Filter for offensive words that might appear in a spam message, but not in a message you would want to keep.
- Filter for URLs that appear in spam.
- Use the e-mail address from the full header view to create a filter or rule.

## Creating Rules in Microsoft Outlook

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### Viewing the Full Headers

To view complete header information in Microsoft Outlook:

1. **Right-click** on the message and select **Options**. The bottom of this window presents you with the full mail headers, including the real address of the sender.
2. Look for lines that begin with **Received:** — they detail the path the e-mail took to reach your inbox. **Received:** lines are listed in chronological order, with the most recent mail server listed first. The last **Received:** line in the list contains the address of the original server that sent the mail. It also lists an authenticated timestamp that shows when the message was sent.
3. On the last **Received:** line in the list, click-and-drag to highlight the server address that appears in parentheses, then press CTRL-C to copy the text.

For example, if you see this line:

Received: from [192.168.2.2] (user-12345.cable.mindspring.com [192.168.1.300])

Highlight and copy the text marked in bold below:

Received: from [192.168.2.2] (**user-12345.cable.mindspring.com** [192.168.1.300])

4. Close the window and use this server address to create a rule, as described below.

**Note:** Do not copy any server address that contains “utexas.edu.” This will filter out legitimate mail.

### Creating a Rule

To create a rule in Microsoft Outlook:

1. On the **Tools** menu, click **Rules Wizard**.
2. Click **New**.
3. Click **Start from a blank rule**.
4. Select **Check messages when they arrive** from the list of options, then click **Next**.
5. Scroll down the **Which condition(s) do you want to check?** list and select **with specific words in the message header**.
6. In the **Rule description** window, click **specific words** to display the **Search text** dialog box.
7. Enter the problematic spam address into the **Specify a word or phrase to search for in the message header** text box. Click **Add**, then click **OK**.
8. Click **Next**.
9. Select **move it to the specified folder**.
10. In the **Rule description** window, click **specified**. Select the folder where filtered spam should be sent (e.g., a Junk Mail folder), then click **OK**.
11. Click **Next**. This screen asks if any exceptions should be made for mail sent from this address. Unless you receive valid mail from users at this address, skip this section by clicking **Next** again.
12. In the **Please specify a name for this rule:** text box, enter a name for your rule. Be as descriptive as possible.

13. Select the **Run this rule on items in the <chosen folder name>** and **Turn on this rule** checkboxes, then click **Finish**.
14. Click **OK** to close the Rules Wizard.

## **Filtering Current and Future E-mail**

You can view the list of the rules you have created using **Rules Wizard**. If the rule is turned on, any mail from the specified domain will be filtered. If you have spam already in your Inbox that you suspect is from the same sender, click **Run Now** to run the rules in all of your Inbox's subfolders. Should you need to add new rules, or modify, rename, or delete existing rules, open the **Rules Wizard**.

## **Deleting a Rule**

To delete a rule in Microsoft Outlook:

1. On the **Tools** menu, click **Rules Wizard**.
2. Highlight the rule you want to delete.
3. Click the **Delete** button.
4. Click **OK** to close the Rules Wizard.

## **Blocking a Sender**

To block specific senders in Outlook:

1. Right-click on the e-mail message in the main window, then click **Add to Junk Senders List** or **Add to Adult Content Senders List**.
2. Click **OK**.

To edit or view your blocked senders list:

1. From the **Tools** menu, click **Organize**.
2. In the **Ways to Organize Inbox** area, click the **Junk E-mail** tab.
3. Click the link titled **click here** (in the last paragraph of text).
4. Click **Edit Junk Senders** or **Edit Adult Content Senders**.
5. For edits, select the sender and click **Modify**.  
For deletions, select the sender and click **Remove**  
For additions, click **Add**. Enter the e-mail address and click **OK**.

## Creating Rules in Outlook Express

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Outlook Express is a free e-mail program that comes with the Windows operating system and should not be confused with Microsoft Outlook.

### Viewing the Full Headers

If you use a third-party tool to manage spam, you can examine e-mail headers for junk mail messages following the procedure below.

To view complete header information in Outlook Express:

1. **Right-click** on the message and select **Properties**. Then, click the **Details** tab. This window presents you with the full mail headers, including the real address of the sender. (You can click **Message Source** to open the headers in a new window that you can enlarge.)
2. Look for lines near the top that begin with **Received:** — they detail the path the e-mail took to reach your inbox. **Received:** lines are listed in chronological order, with the most recent mail server listed first. The last **Received:** line in the list contains the address of the original server that sent the mail. It also lists an authenticated timestamp that shows when the message was sent.
3. On the last **Received:** line in the list, click-and-drag to highlight the server address that appears in parentheses, then press CTRL-C to copy the text.

For example, if you see this line:

Received: from [192.168.2.2] (user-12345.cable.mindspring.com [192.168.1.300])

Highlight and copy the text marked in bold below:

Received: from [192.168.2.2] (**user-12345.cable.mindspring.com** [192.168.1.300])

4. Use this server address to create a filter in your third-party spam tool.

**Note:** Do not block any server address that contains “utexas.edu.” This will filter out legitimate mail.

### Creating a Rule

You can't filter for header content directly in Outlook Express. However, you can set up rules to filter messages with certain words in the Subject line or messages from certain e-mail addresses. Every message is checked against all rules as it arrives in your Inbox.

**Note:** The “from” address that displays may not be a real e-mail address. Many spammers use temporary accounts or deliberately use a fake “from” address when sending junk mail.

To create a rule in Outlook Express:

1. On the **Tools** menu, click **Message Rules**, then click **Mail**. Click **New**.
2. Select the checkboxes for one or more **Where...** conditions in the **Select the Conditions for your rule** window.

3. Specify one or more actions the rule should take in the **Select the Actions for your rule:** window.

Three common conditions you may want to use:

- a. **Where the Subject line contains specific words**
  - b. **Where the message body contains specific words**
  - c. **Where the From line contains people**
4. In the **Rule Description** window, click on each underlined text link to enter specific words or flags for each condition, and specific folders for various actions.
  5. In the **Name of the Rule** text box, enter a descriptive name.
  6. Click **OK** to save the rule.

## **Creating a Rule from a Message**

If you create a rule directly from a message, Outlook Express will make a **Where the From line contains people** rule based on the sender's apparent e-mail address.

To create a rule directly from a message:

1. Select the e-mail message in the main window.
2. On the **Message** menu, click **Create Rule from Message**.
3. Follow Steps 3-6 in **Creating a Rule**, above.  
The rule will be created based on the information in the **From:** line.

## **Deleting a Rule**

To delete a rule in Outlook Express:

1. On the **Tools** menu, highlight **Message Rules**, then click **Mail**.
2. Highlight the rule to remove, then click **Remove**.
3. Click **Yes**, then click **OK** to close the window.

## **Blocking a Sender**

Outlook Express 5 and 6 also include a *Block Senders* function to prevent mail sent from specified addresses from entering your mailbox at all.

To automatically block a specific sender:

1. On the **Message** menu, click **Block Sender**.
2. Click **Yes** to delete all messages in your Inbox from this particular sender. This also adds the sender to your blocked senders list.
3. Click **OK**.

To manually block a specific sender or edit your blocked senders list:

1. On the **Tools** menu, highlight **Message Rules** and click **Blocked Senders List**.
2. For edits, select a blocked sender and click **Modify**.  
For deletions, select a blocked sender and click **Remove**.  
For additions, click **Add**. Type in the e-mail address and click **OK**.
3. Click **OK** to save changes.

## Creating Filters in Eudora Pro

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Eudora Pro has filters that allow you to automatically sort your incoming and outgoing mail. The simplest filters sort incoming messages into specified folders. For example, each time you check your mail, you can have Eudora automatically transfer all incoming messages that contain “get rich quick” to the Trash folder.

### Viewing the Full Headers

To view full headers in Eudora Pro:

- Open the message and click the **Blah Blah Blah** icon in the message window.

### Creating a Filter

To create a Filter in Eudora Pro:

1. Open an incoming message containing the e-mail address or other information you want to filter.
2. On the **Special** menu, click **Make Filter**.
3. In the **Make Filter** dialog box, select conditions from the **Match** menu. Select the **Incoming**, **Outgoing** or **Manual** check boxes.
  - Select **From contains** if you want to filter future messages sent by the sender of this message.
  - Select **Any recipient contains** if you want to filter messages that are sent to any recipients of this message.
  - Select **Subject contains** if you would like to filter all future messages with a certain subject.
4. In the **Action** menu, select where you would like to transfer filtered messages. You have three options:
  - Select **Transfer to a new mailbox** and enter the name of the new folder in the text box.
  - Select **Transfer to existing** and select the name of the folder from the drop down menu.
  - Select **Delete message (Transfer to Trash)** to filter messages to the trash.
5. Click **Create Filter**.

The new filter is added at the bottom of your filter list in the **Filters** window (on the **Tools** menu, select **Filters**). When the filters are activated, every message is matched against all filters. If the message meets a filter’s criteria, Eudora transfers the message to the specified folder.

### Deleting a Filter

To delete a filter in Eudora Pro:

1. On the **Tools** menu, select **Filters**.
2. Highlight the filter in the filters list.
3. Click **Remove**.

## Creating Filters in Yahoo! Mail

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To create filters in Yahoo e-mail:

1. Click on **Options**.
2. Select the **Block Addresses** option to keep certain addresses from reaching your account.
3. Select the **Filters** options to sort incoming messages for specific conditions. Conditions can be set to match a message's full header or just to match the To, Cc, and Subject lines. You can also create filters based on words within the body text of a message. Yahoo! Mail also uses a Spamguard to automatically forward bulk mail to a **Bulk Mail** folder.

## Creating Filters in Hotmail

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To filter junk mail in Hotmail:

1. Click **Options**.
2. On the **Mail Handling** menu, click **Junk Mail Filter**. In the **Junk Mail Filter** window, select your preferred options.

Hotmail also provides **Block Sender** and **Custom Filters** options that you can use to create filters for specific e-mail addresses and other criteria.