

Fighting Back Against Spam and Scams with Software

INTERNET SPAM AND SCAMS BECOME WORSE EVERY YEAR. SECURITY DEPENDS ON CRITICAL THINKING, BUT AUTOMATED PROCESSES CAN HELP.

Thinking before acting is essential. Consider a message “from” PayPal. It’s clearly a scam, so let’s examine the obvious clues:

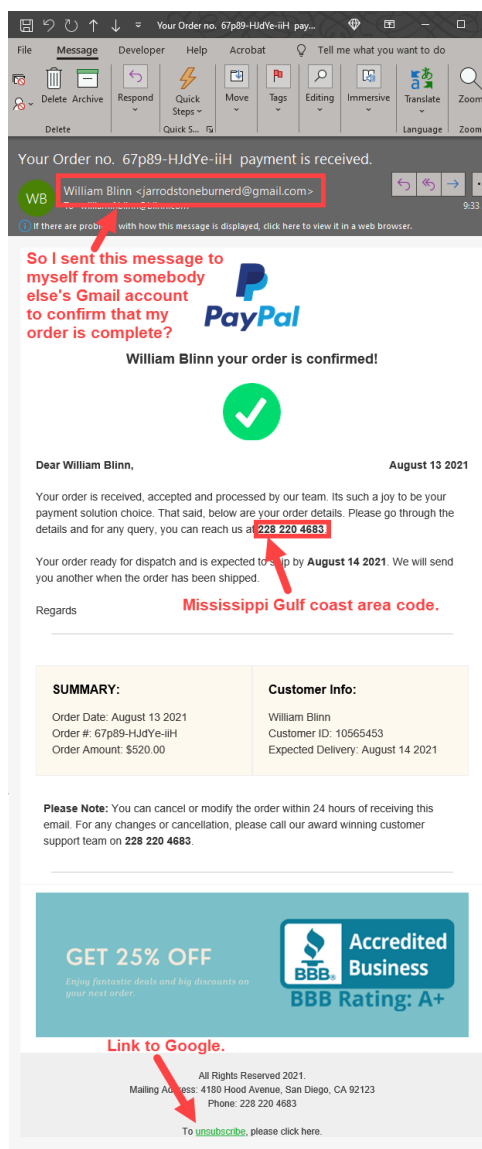
Although the message claims to be a PayPal message, my name is shown as the sender and the displayed address is somebody else’s Gmail account. There’s no need to look further, but much remains to be found.

- Merchants, not PayPal, send purchase confirmations.
- The message says that the unidentified \$520 purchase will be delivered tomorrow, but that I can cancel the order within 24 hours. (Huh?)
- An unsubscribe link at the bottom of the message goes to Google.
- The phone number offered to cancel the order goes to a number in Mississippi.
- The text was written by someone with a minimal understanding of English
- An advertisement is combined with a phony Better Business Bureau graphic.

So the person who created this scam is an idiot, but many scammers are intelligent, and even this scam displays a bit of advanced thinking. Except for the unsubscribe link, there’s nothing click. Those who are sufficiently well informed to know that email links can be hazardous might not attach the same concerns to the phone number.

PayPal would provide a toll-free number, and any standard number would be in a San Jose area code, where PayPal’s primary office is, but the San Diego street address shown on the email doesn’t exist.

What happens if you call the phone number? You’ll probably be told that someone



The screenshot shows an email interface with a message from 'William Blinn <jarrodstoneburner@gmail.com>'. The subject is 'Your Order no. 67p89-HJdYe-iIH payment is received.' The body of the email contains a PayPal logo and text: 'So I sent this message to myself from somebody else's Gmail account to confirm that my order is complete? William Blinn your order is confirmed! Dear William Blinn, August 13 2021. Your order is received, accepted and processed by our team. Its such a joy to be your payment solution choice. That said, below are your order details. Please go through the details and for any query, you can reach us at 228 220 4683. Your order ready for dispatch and is expected to ship by August 14 2021. We will send you another when the order has shipped. Regards Mississippi Gulf coast area code.' Below the email body is a 'SUMMARY' section with order details and a 'Customer Info' section with the name 'William Blinn' and 'Customer ID: 10565453'. At the bottom, there is a 'GET 25% OFF' banner and a 'BBB Accredited Business' logo with 'BBB Rating: A+'. A red arrow points to a 'Link to Google.' text below the banner.

has used your credit card to place an order. To cancel it, they will need your credit card number, your name as it appears on the card, your billing postal code, and the card’s security number to cancel the order. Give them that

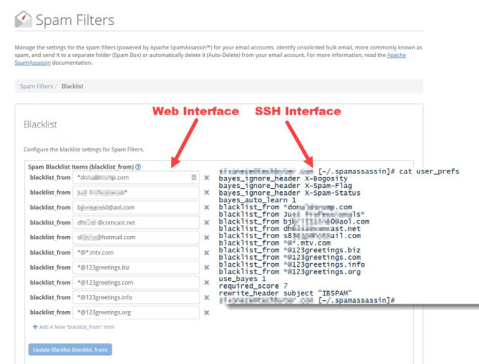
and, although your credit card hasn’t been used by crooks yet, it soon will be.

Cutting Spam Limits Scams

SEVERAL METHODS EXIST FOR DEALING WITH SPAM, EITHER ON THE SERVER OR ON YOUR COMPUTER. LET’S CONSIDER ONE SERVER-BASED OPTION FIRST.

Those who receive mail through their own domain (such as blinn.com) and have access either to the server’s control panel or secure shell can activate one of the internet service provider’s anti-spam functions.

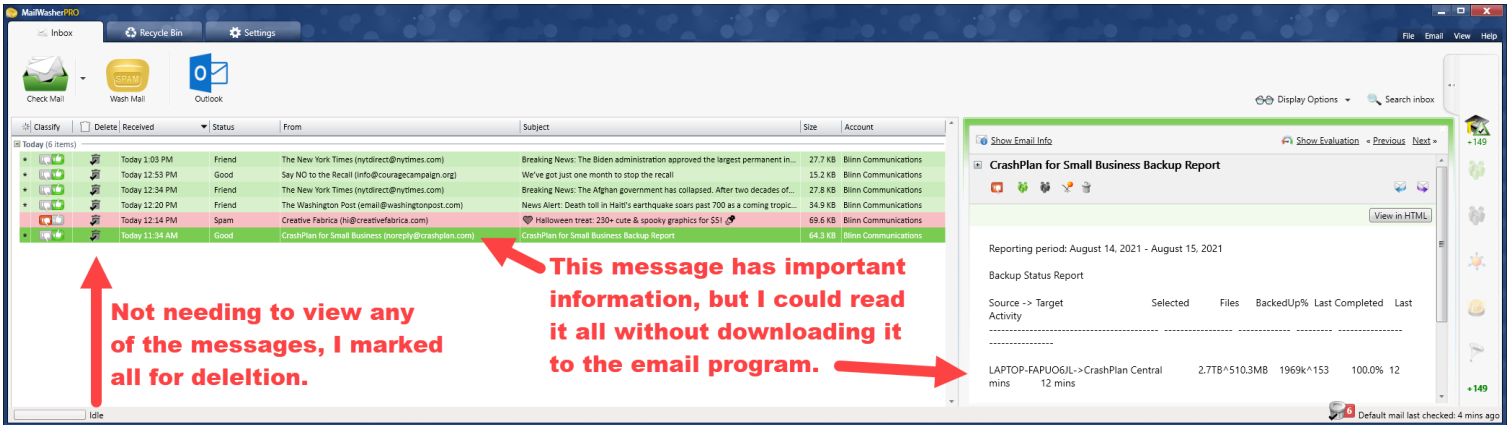
SpamAssassin, installed by many ISPs, analyzes messages, scores them, and marks them as possible spam so that they can easily be identified when an email application downloads them.



The screenshot shows the 'Spam Filters' configuration interface. It features a 'Blacklist' section with a table of email addresses and domain names. The table has columns for 'Spam Filter Name', 'Blacklist From', and 'Action'. The 'Blacklist From' column contains various email addresses and domain names, including 'dual@blinn.com', 'jull@blinn.com', 'jordan@blinn.com', 'dbs@blinn.com', 'aj@blinn.com', 'sp@blinn.com', 'h23@greetings.biz', 'h23@greetings.com', 'h23@greetings.info', 'h23@greetings.org', and 'h23@greetings.net'. The 'Action' column contains 'X' for each entry. A red arrow points to the 'Web Interface' and another red arrow points to the 'SSH Interface' at the top of the configuration area.

The server application has blacklist and whitelist sections. A whitelisted address will never be marked as spam; a blacklisted address will always be marked as spam.

Even though I have full access to the server and could easily set up SpamAssassin, I prefer to use MailWasher Pro on my computer. I’ve used it for nearly a decade because it gives me a way to delete spam before my email applica-



MAILWASHER PRO'S INBOX VIEW SHOWS ALL MESSAGES THAT ARE ON THE SERVER AND HAVE NOT YET BEEN EITHER DOWNLOADED TO THE EMAIL APPLICATION OR MOVED TO THE APPLICATION'S RECYCLE BIN. ANY MESSAGE IN THE RECYCLE BIN CAN BE RECOVERED IF THE USER ACCIDENTALLY DELETES A NEEDED MESSAGE.

tion downloads it. A free version can monitor only a single mail account and does not contain a Bayesian learning component. The Pro version can monitor multiple accounts, enables a learning feature, and offers additional capabilities and support.

I like this approach because I can quickly review a list of all messages on the server and decide whether to let the email application retrieve them.

I subscribe to several newspapers and news organizations that send email updates. I've whitelisted their domains, but I rarely need to read the email updates and I can delete them from the server.

I receive daily messages from a backup program. Successful backup messages always

contain "if blank, no errors" in the subject; if there are no errors, I don't need to download the messages.

MailWasher Pro marks messages for deletion from any sender or domain that I've blacklisted, from dodgy sites known to blacklisting organizations, and whenever its analysis indicates the message is probably a spam. I make the final decision, quickly reviewing the list of messages on the server so that the email application will download just the few messages I want to see.

Beware Questionable Domains

I HAVE SET UP MAILWASHER PRO TO MARK AS SPAM ANY MESSAGES FROM CERTAIN TOP-LEVEL DOMAINS.

Many new top-level domains have joined .com, .org, .gov, and .edu in recent years. These TLDs aren't inherently less trustworthy than the older ones, but scammers seem to like them and I have never received a valid message from any .accountant, .bid, .buzz, .click, .club, .country, .cyou, .date, .download, .gdn, .guru,

.jetzt, .icu, .kim, .loan, .men, .mom, .monster, .party, .pro, .racing, .ren, .review, .site, .stream, .top, .trade, .vip, .wang, .win, .work, .xin, or .xyz address.

MailWasher Pro users can scan through message on the server and decide which ones to delete, and accidentally deleting a message isn't a problem because the application retains messages for a while. The user decides how long "a while" is, and messages in the Recycle Bin can easily be restored.

Like SpamAssassin on servers, MailWasher Pro offers whitelists (messages will be considered good regardless of content) and blacklists (messages will always be considered spam).

Although automation, either on the server or on your local computer, can help reduce spam and alert us to scams, we humans must be the final line of defense. **Ω**

MAILWASHER PRO USERS CAN DEFINE FILTERS USING REGULAR EXPRESSIONS OR, FOR THOSE WHO DON'T WANT TO MASTER THE BASICS OF REGULAR EXPRESSIONS, PLAIN-TEXT.

