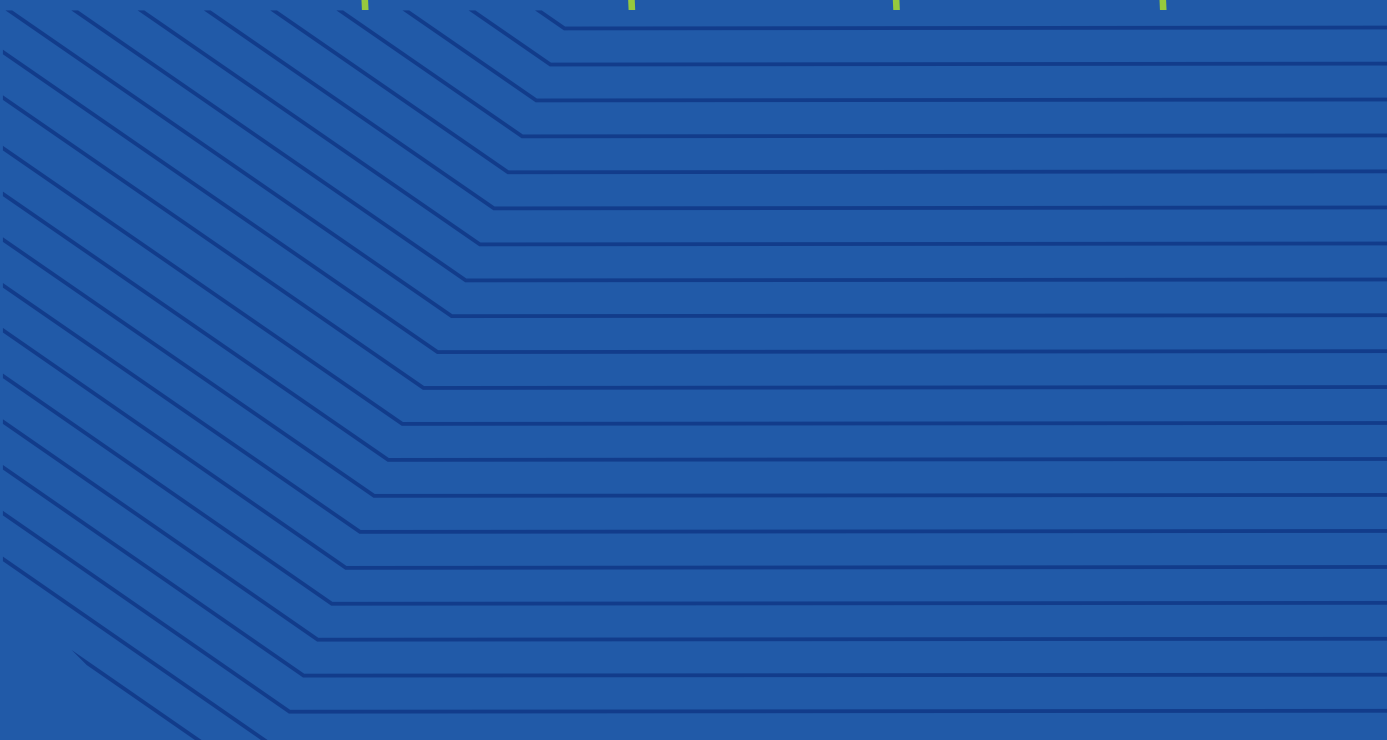
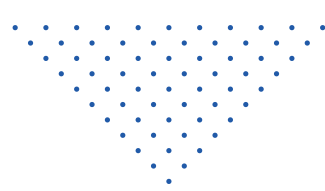




Types of Phishing Attacks You Need to Know to Stay Safe



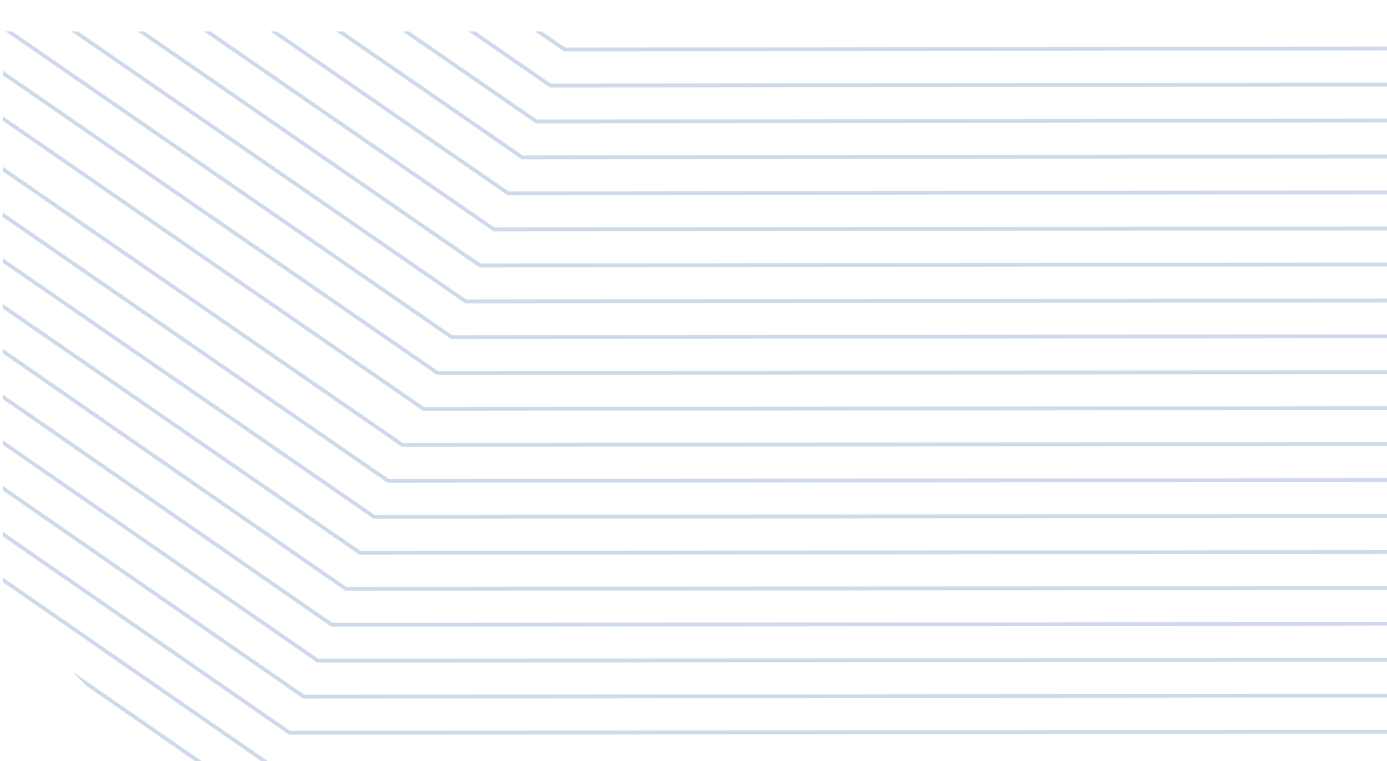


INTRODUCTION

Like Darwin's finches, phishing has evolved from a single technique into many highly specialized tactics, each adapted to specific types of targets and technologies. First described in 1987, phishing is now carried out via text, phone, advertising, and—of course—email.

Boiled down, all these tactics exist for the same purpose—to swipe confidential information from an unsuspecting target in order to extract something of value. But knowing about the hugely diverse set of today's phishing tactics can help ordinary people, home and business internet users alike, to be more prepared for the inevitable instance when they become the target.

Here are 11 common phishing tactics you should know...

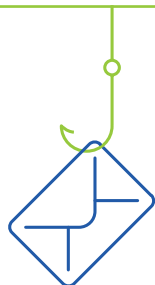


1

STANDARD PHISHING

Casting a Wide Net

At its most basic, standard phishing is the attempt to steal confidential information by pretending to be an authorized person or organization. It is not a targeted attack and can be conducted *en masse*.



Most sources credit the first description of a phishing attack to a paper by the International HP Users Group, Interex in 1987.

Do you know how to tell if an email's legit?

Here are five ways to spot a phishing email.

An Example of Standard Phishing

This tactic has, in the past, been more about quantity versus quality. The audience was broad and emails were riddled with noticeable errors. As phishing has developed, it's become more sophisticated and harder to spot. Can you spot the red flags in the phishing email?



2

MALWARE PHISHING *Beware the Macros*

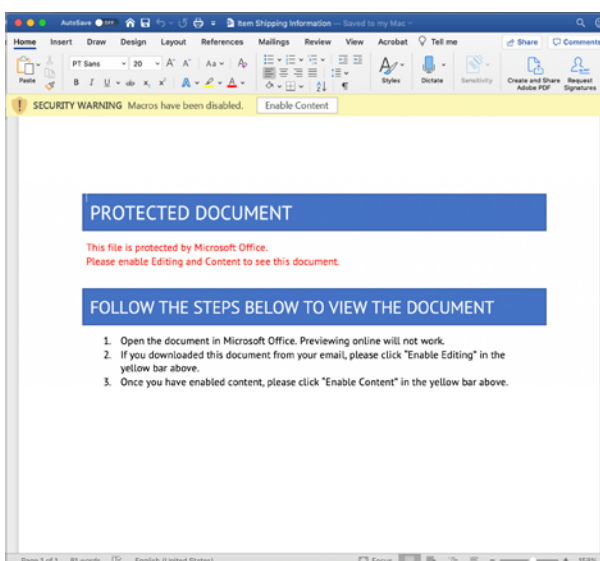
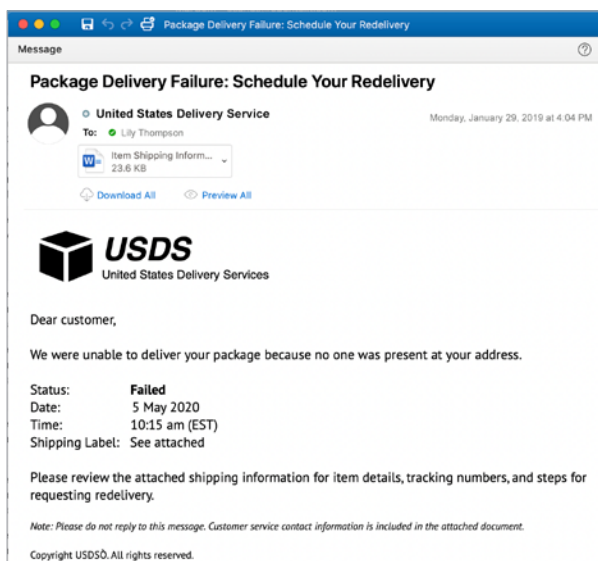
Using the same techniques, this type of phishing introduces nasty bugs by convincing a user to click a link or download an attachment so malware can be installed on a machine. It is currently the most widely used form of phishing attack.



Received an unsolicited email from an unknown sender? Beware of downloading anything sent along with it. Many are malicious attachments known as 'macros'.

How to Spot Malware Phishing

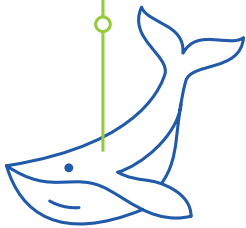
One hallmark of malware phishing is the attachment of a blank document requiring you to enable macros to view its contents, as in the common "package delivery failure" example below. **This is a major red flag.**



3

SPEAR PHISHING *Catching the Big One*

Where most phishing attacks cast a wide net, hoping to entice as many users as possible to take the bait, spear phishing involves heavy research of a predefined, high-dollar target—like a CEO, founder, or public persona—often relying on publicly available information for a more convincing ruse.



When the target is sizeable enough, spear phishing is sometimes called 'whaling'.

A \$24M Catch

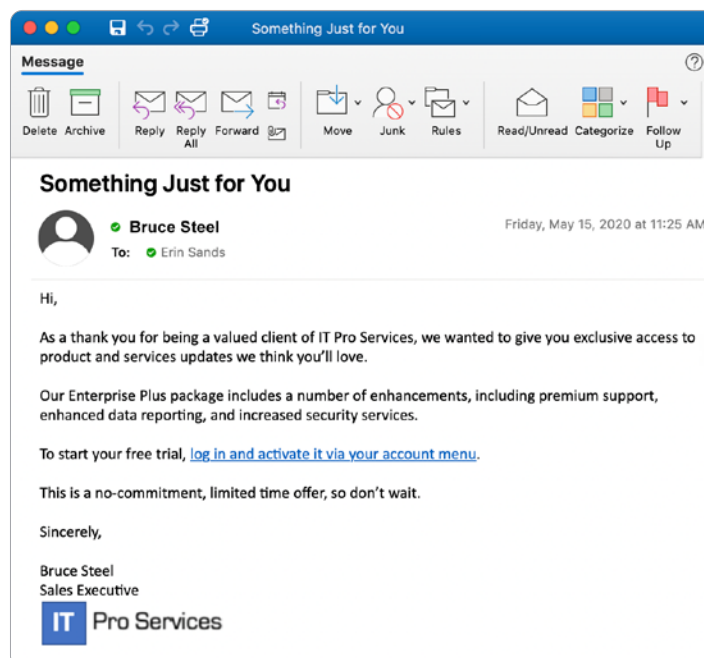
SIM swapping is a type of spear phishing where attackers phish a target's phone carrier, pretending to be the target to replace the SIM card with one of their own. One such case resulted in \$24 million of lost cryptocurrency.

Want to share and receive tips about ongoing scams with other cybersecurity-minded individuals?

Join the Webroot Community.

An Example of Spear Phishing

Below is a recreation of a real spear phishing attempt targeted at an MSP client.



4

SMS + PHISHING = SMISHING *Just Don't Click*

SMS-enabled phishing uses text messaging as a method for delivering malicious links, often in the form of short codes, to ensnare smartphone users in their scams.



DID YOU KNOW?

SMS open rates hover around 98%. Compare that to around 20% for email, and it's clear why cyber criminals like smishing

Learn all you need to know about smishing and how to avoid it in this [blog post](#).

Spotting a Smishing Attack

Be on the lookout. Smishing attacks often start something like:

Your User ID and password are about to expire. [Click here](#) to reset your credentials before being locked out of your account.

CBD has been proven to cause pain relief! [Find out more](#).

Changes were recently made to your Verizon account. [Log in](#) to configure your settings.

You've won a \$100 gift card!!!
[Click the link](#) to redeem.

5

SEARCH ENGINE PHISHING *Careful What You Choose*

In this type of attack, cyber criminals wait for you to come to them. Search engine phishing injects fraudulent sites, often in the form of paid ads, into results for popular search terms.



Search engine phishing sites often promise amazing deals, career advancement opportunities, or low interest rates for loans. Remember, if it seems too good to be true, it probably is.

Detecting a Search Engine Phishing Scam

Often, the only difference between the scam result and the one you're looking for is a .com that should be a .org. Scrutinize the URL, meta title, and meta description before clicking. For an additional layer of security use a tool such as the Webroot Filtering Extension to flag potential threats, as in the image below.

Google search results for "file taxes online". The search bar shows "file taxes online" with a search icon and a microphone icon. The results are:

- cxuk.doinc.it** › turbotax-free-2019 ▼
⚠ Turbotax Free 2019
Exclusive Turbo tax discount to **file taxes online**. launching TurboTax Free Edition on its. Add to Compare Compare. We'll assign a TurboTax Expert who will ...
- ac.immobiliaretommaso.it** › tax-overages ▼
⚠ Tax overages - immobiliareto
TurboTax® is the #1 best-selling tax preparation software to **file taxes online**. However, the law does not allow the issuing of the check prior to 90 days following ...
- cp.suitedream.it** › ax-total-beaxst ▼
⚠ Ax total beaxst - suitedream.it
TurboTax® is the #1 best-selling tax preparation software to **file taxes online**. This value can also be found on Totals form, which can be accessed through: ...

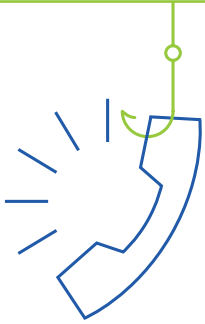
6

VISHING

Keeping You On the Line

Vishing involves a fraudulent actor calling a victim pretending to be from a reputable organization and trying to extract personal information, such as banking or credit card information.

Most often, the “caller” on the other line obviously sounds like a robot, but as technology advances, this tactic has become more difficult to identify.



Riiiiing riiiiing riiiiing ... Hello, I'm with Windows Technical Support. I'm calling because your computer has been infected by a virus.

Being Vished? Here's What to Do.

Each tax season, vishing makes the IRS's “Dirty Dozen” list of scams targeting Americans. It asks that these be reported to phishing@irs.gov.

How to Avoid Vishing Scams

- 1 Be skeptical when answering calls from unknown numbers.
- 2 If they ask for personal information, don't provide it over the phone.
- 3 Use a caller ID app, but don't trust it completely.
- 4 Search for the caller's phone number online to see if it's a known scam.
- 5 If the call is about a product or service you use, go to the vendor's website or call the vendor directly to confirm.



PHARMING

Poisoning the Waterhole

Also known as DNS poisoning, pharming is a technically sophisticated form of phishing involving the internet's domain name system (DNS). Pharming reroutes legitimate web traffic to a spoofed page without the user's knowledge, often to steal valuable information.

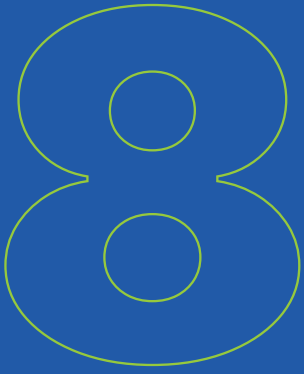


DNS acts as the phonebook of the internet, taking a long string of numbers—the IP address—and translating it to the URLs we all know, like [amazon.com](https://www.amazon.com). When cybercriminals interfere with this communication, it's known as DNS poisoning.

Operation Sea Turtle

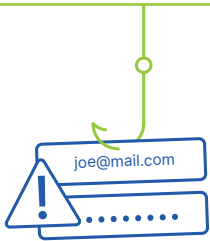
Given the level of technical sophistication it requires, DNS poisoning is often carried out by state-backed hackers. In one of the most famous examples, a group known by the code name "Sea Turtle" used the technique to spy on governmental intelligence agencies across the Middle East and North Africa. The attack was announced by the private intelligence group Cisco Talos in 2019.





CLONE PHISHING

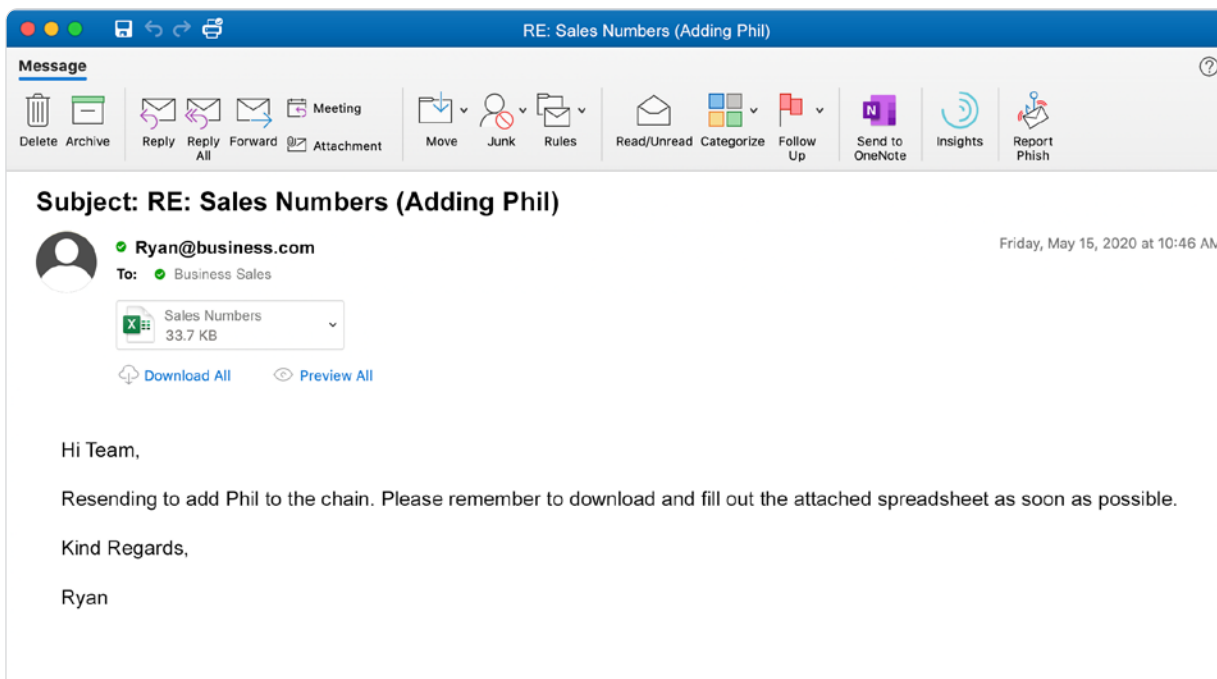
In this type of attack, a shady actor makes changes to an existing email, resulting in a nearly identical (cloned) email but with a legitimate link, attachment, or other element swapped for a malicious one. These attacks can't get off the ground without an attacker first compromising an email account, so a good defense is using strong, unique passwords paired with two-factor authentication.



Outlook, Gmail, and other email providers enable you to check the locations from which people have accessed your account. If you find your email has been compromised, [follow these steps](#).

What Clone Phishing Looks Like

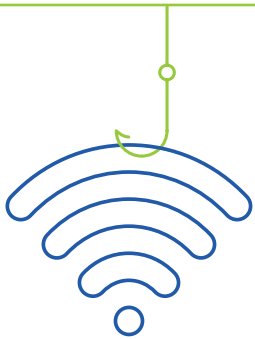
Below is an example of just how tricky clone phishing can be to spot. By exploiting social trust, the hacker increases the chances of spreading the infection.



9

MAN-IN-THE-MIDDLE *The Public WiFi Phisherman*

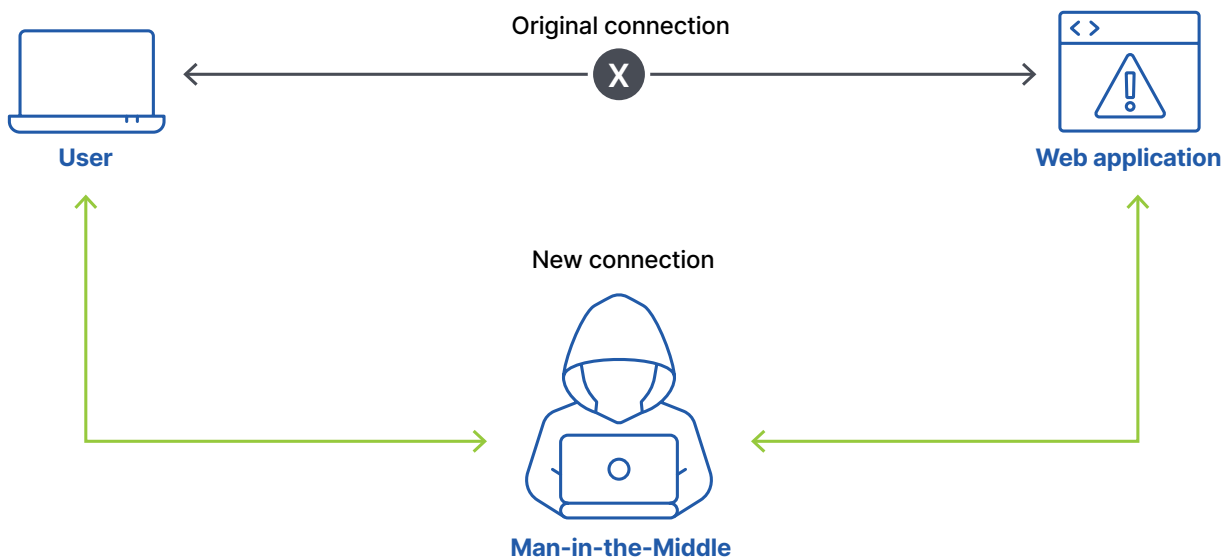
A man-in-the-middle attack involves an eavesdropper monitoring correspondence between two unsuspecting parties. When this is done to steal credentials or other sensitive information, it becomes a man-in-the-middle phishing attack. These attacks are often carried out by creating phony public WiFi networks at coffee shops, shopping malls, and other public locations. Once joined, the man in the middle can phish for info or push malware onto devices.



On most personal computers, especially those running on Windows operating systems, local file sharing is turned on by default. To prevent malware from being pushed to your device, toggle this setting to off when on unfamiliar networks.

How MIM Phishing Works

A victim trying to log into his bank account, for example, unknowingly sends his credentials to the attacker. The attacker then logs the victim in to the account so no suspicions arise.



10

BUSINESS EMAIL COMPROMISE (BEC):

Don't Make the Payment

One of the most expensive threats facing businesses today is business email compromise. This involves a phony email usually claiming to be an urgent request for a payment or purchase from someone within or associated with a target's company.

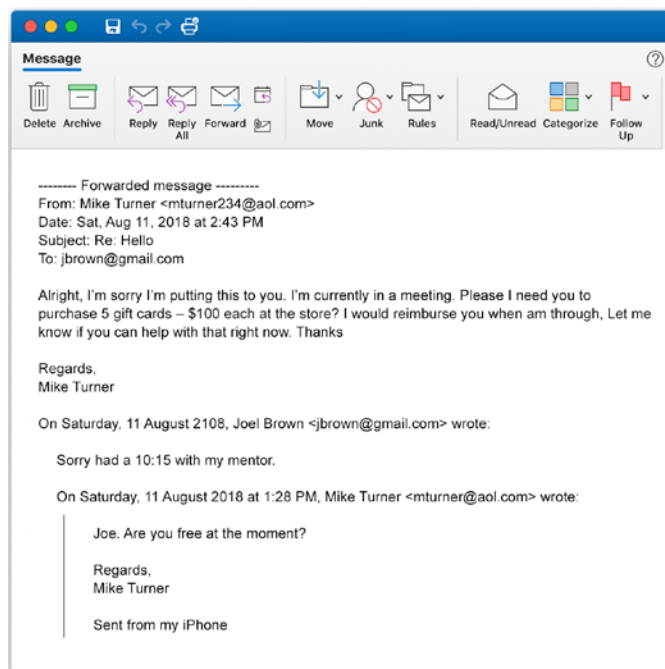
The Classic BEC Scheme

One of the most famous templates for achieving business email compromise is a frantic request by a supposed superior for gift cards. Often supported by publicly available information like a recently closed business deal, these common attacks ask for a rush delivery of gift cards from a large retailer be delivered to an address controlled by the malicious actor.

Look familiar?

"As a thank you to X client, I need you to mail \$3,000 in Target gift cards to their head of procurement ASAP!"

Of the \$3.5 billion the FBI estimates businesses lost to cybercrime in 2019, nearly half (\$1.7 billion) was blamed on business email compromise.



11

MALVERTISING

That Ad Isn't What You Think It Is

This type of phishing takes advantage of exploits within advertising or animation software to steal information from targeted users. Malvertising is usually embedded in otherwise normal-looking ads—and placed on legitimate websites like Yahoo.com—but with malicious code implanted within.



The RIG exploit kit, one of the most successful malvertising tools to hit the internet, takes the split seconds it takes for an ad to redirect to its intended location to inject malware into a browser commanding it to begin encrypting files that can then be held for ransom.

A Nasty Surprise

The Angler exploit kit (shown below) famously delivered CryptXXX, a previously ubiquitous ransomware that generated \$3 million per month for its creators.

GooNky Malvertising
Domain Shadow - https - informational disclosure bug in use



URL	Body	Content-Type	Comments
/ads/www/delivery/spcjs.php?id=35924&target=_blank&ct0={clickurl_enc}&cid={publisher_id}	5 212	application/x-javascript	GooNky Malvertising
/ads/www/images/8567ac6b4fd1c23d02a62cebda27d6d8/300x250.jpg	141 844	image/peg	GooNky Malvertising
/ads/www/delivery/spcjs.php?id=35924&target=_blank&ct0={clickurl_enc}&cid={publisher_id}&_0&_=http%3A%2F%2Fvmedia.adk2x.com%2Ful_cb%2F...	53	image/gif	GooNky Malvertising
/cm?forward=http://becolle-hypoglossia.appliancerepair-service.com/questions/55958361/MzIDQAQ-GWNSTF-NDXN-otdXFr-OmzvGgU-	0		Abused r/rhub https open redirector
/questions/55958361/MzIDQAQ-GWNSTF-NDXN-otdXFr-OmzvGgU-	79 158	text/html	Angler EK : Landing
/7a=Pjkwtf&v=&b=0doeavlkw&rp=Ec0&n=2nIRk9yG&o=7jtnr0XyOf&t=iPPvJ5&g=kO7zw	41 047	application/x-shockwave...	Angler EK : Flash Exploit
/7a=&o=7Vagn6U&m=f1CnfgUd&u=BZAt&j=EHC81uxwa&d=6VnnIqhqT_zn2saP6bl	256 125	application/x-shockwave...	Angler EK Payload : CryptXXX
/m=12PN&g=&y=FMBJS&a=8z2eSka&st=bETJdna4&e=GG7YUJh=H4FKez5n7&u=30n6ZLPrxe	16	text/html	Angler EK : Silverlight disabled on that three
/7r=&n=eEP45Uu&o=8Wlw2d41e&i=&h=B4M&d=Lk-IIvHvqHwKotdHhYzAzoLJd7Ks	256 125	application/x-shockwave...	Angler EK Payload : CryptXXX

Angler EK

CryptXXX 1.001



HOW TO PROTECT YOURSELF FROM PHISHING ATTACKS

Protecting yourself from phishing attacks starts with knowing what's out there. In fact, according to Webroot research, ongoing security awareness training can help reduce breaches by nearly 70%.

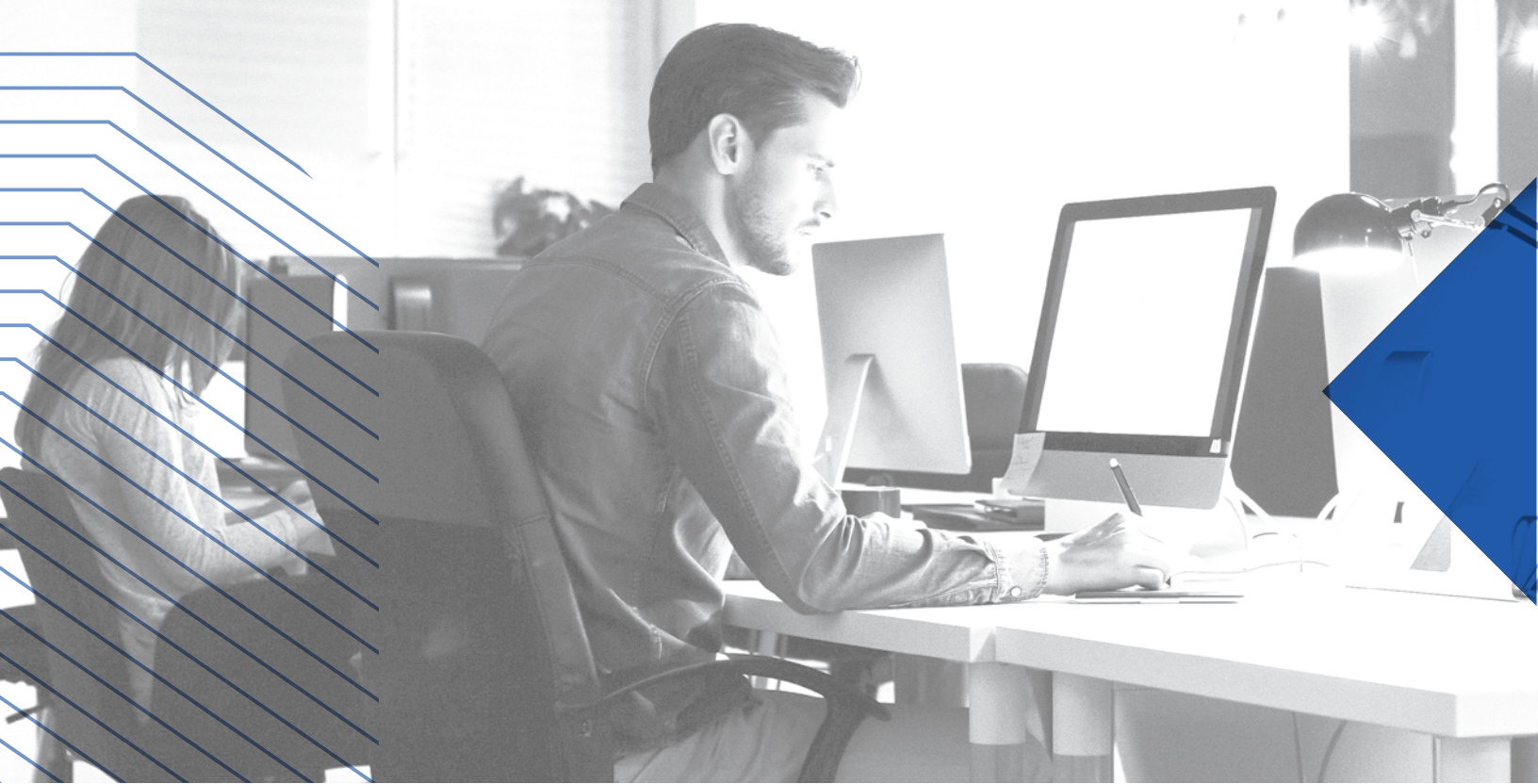
Here are a few tips to keep in mind to avoid getting phished:

- 1 Never click on links from unknown senders or if any detail about the exchange has aroused suspicion.
- 2 Whenever possible, hover over a link to ensure the destination matches your expectations. Note this will not work on mobile or if short codes are used, so be extra wary on mobile devices.
- 3 If you suspect an email is a phishing attempt, double check the sender name, specificity of the salutation, and a footer for a physical address and unsubscribe button. When in doubt, delete.
- 4 If you're unsure if a communication is legitimate, try contacting the brand or service via another channel (their website or by calling a customer service line, for instance).
- 5 Avoid entering personally identifiable information unless you are extremely confident in the identity of the party you are communicating with.

Closing All Your Security Gaps

While staying vigilant will keep most attackers at bay, no one can be 100% secure on their own. After all, phishing only exists today because it works. This is why it's important to combine security awareness training with quality business endpoint protection—with AI-enhanced threat intelligence, cloud-based updates, and real-time anti-phishing—DNS protection, and reliable data backup.

By implementing one, two, or all five of the above solutions, you can rest easier that your business is more resilient against this growing threat.



**Protect your business.
Protect your livelihood.**

BECOME CYBER RESILIENT.

Webroot and Carbonite together offer best-in-class endpoint security and enterprise-grade backup and recovery in a comprehensive suite built for businesses like yours. Start with our award-winning endpoint protection.

GET STARTED

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