BISHOP FOX

CYBERSECURITY STYLE GUIDE

VERSION 1.1
JUNE 27, 2018

BISHOP FOX.

TABLE OF CONTENTS

WELCOME!

We are Bishop Fox, a global information security consulting firm based in the United States. Welcome to our cybersecurity style guide. We compiled this guide to keep ourselves technically accurate and up to date in our reports, presentations, and social media interactions. Now we want to share our current standards with you.

This guide is designed for security researchers. It provides advice on which terms to use in reports, how they should look in the middle of a sentence, and how to pronounce them out loud. Since the terms are listed alphabetically, you'll find serious usage advice right next to playful entries about internet culture.

Each term in the guide earned its place by being unintuitive in some way:
- It may look like a non-technical word (execute, pickling, shell),
- It may be uniquely written (BeEF, LaTeX, RESTful),
- It may not follow a clear pattern (web page vs. website),
- It may have a very specific technical distinction (invalidated vs. unvalidated),
- Or its meaning may change depending on the context (crypto, PoC, red teaming).

Language is always evolving, and those changes are especially visible in an innovative field like information security. This guide aspires to record those changes in vocabulary and encourage researchers to use language intentionally as the digital lexicon continues to grow. Learn more about what guides our style choices in Appendix A.

This is a work in progress. We intend to revise this list in the future and share subsequent versions with the public. Please contact `style@bishopfox.com` with ideas about new entries or improvements to existing entries.

NOTE

This guide is a starting point for further research into technical terms; it is not a comprehensive dictionary. We provide usage notes about capitalization, fonts, and pronunciation where needed, but not every term here is defined. You can find detailed technical definitions in the external resources listed in Appendix B.

Advice on Technical Formatting

We use two fonts. Most of our text appears in Open Sans (this sans serif font). We refer to Open Sans in the style guide as the **normal font**. The secondary font is Source Code Pro, a monospace (fixed-width) font that we refer to throughout this guide as the **tech font**.

The tech font makes technical terms stand out to the reader when they appear in and out of quoted code. We use the tech font for several reasons in several ways. Even with the chart below, we're still finding gray areas. Here is an overview of how we use these fonts:

Normal Font	Tech Font
Titles of documents and file types Bishop Fox Security Style Guide, a PDF file	Full names of documents and files `Security_Style_Guide.pdf`
Error messages and security questions "Please enter a valid user ID."	File paths `server/web/directory/`
Names of organizations, companies, and teams DEF CON, .NET, Tor, assessment team	Email addresses `style@bishopfox.com`
Names of products and their versions Ethernet, Steam, Ubuntu 17.04	Usernames and passwords `@bishopfox`, `admin:admin`, `password`
URIs, URNs, and URLs as clickable links https://www.bishopfox.com/news/	References to URIs, URNs, and URLs `data:`, `www.bishopfox.com/`**`[variable]`**
Line numbers and ports by themselves "On line 42 of the code…", port 80, port 443	IP addresses (with or without ports) `192.168.1.1`, `192.168.1.1:80`
Types of fields, headers, parameters, etc. data element, content-type header	Names of fields, headers, parameters, etc. `C:` drive, `Secure` flag, `url` parameter
Types of requests GET request, pull request, PUT request	Quoted code "Block [?] characters", "missing `userID=42`"

Reference numbers, standards, and vuln IDs
CVE-2014-6271, MS15-034, RFC 1918
	Code excerpts
	`<b>Hello World!</b>`
	`3.  Go to 1`

Terms that use the tech font appear in that style everywhere in reports outside of headings (including bullet points and figure captions).

Bold Text

When writing about clickable buttons in reports, we follow the Microsoft Manual of Style (see Appendix B). We bold button names that the reader is meant to click. When writing about a feature with the same name as a button, capitalize it if applicable, but don't bold it.

- Click **Track Changes** to show all your future changes in Word.
- The Track Changes feature allows users to track their edits.
- After hitting the **OK** button, the user was redirected to the Home tab.

Within the style guide word list, **bolding** indicates terms that have their own entries.

What to Expect in the Guide

This style guide was compiled primarily to assist security researchers who write formal reports. Therefore, we mark terms that you might hear at a hacker conference (but should not use in a formal report) as Informal, and we mark cliché business terms as Corporate jargon.

Each term appears in its proper font (as explained in the Technical Formatting section above) and is capitalized as it would appear in the middle of a sentence. For example:

denial of service (n.), **denial-of-service** (adj.) **(DoS)**
> A denial of service is caused by denial-of-service attacks. Spell out on first use. DoS is pronounced as "doss" or spoken as the whole phrase, not the acronym.
> Related: **DDoS**

Some entry headings clarify parts of speech: (adj.) for adjective, (n.) for noun, (v.) for verb, (adv.) for adverb.

Many security terms have disputed pronunciations because they were typed first and spoken aloud later. Pronunciation is provided for select terms in the guide. Be aware that some acronyms look similar but are pronounced differently:

> CIO is pronounced as letters, but CISO is pronounced as "seeso."
> UI is pronounced as letters, but GUI is pronounced as "gooey."
> PoC is pronounced as letters, but T-POC is pronounced as "tee-pock."

By combining the use of two fonts, button bolding, and the big word list below, we strive to be accurate, consistent, and understandable to our clients. It's been helping us internally and we hope it helps you now, too.

THE CYBERSECURITY STYLE GUIDE

A-Z

!
> The exclamation point or bang.

@
> The at sign.
> Related: **email**, **handle**, **usernames**

#
> The pound sign or hashtag. Only called hashtag when tagging something. This character and [♯] are sometimes used interchangeably and are pronounced as "sharp" in programming language names.
> Related: **C♯**, **characters**, **numbers**, **tweet**

/
> Slash. Avoid using the slash to compare two things outside of set phrases like 24/7, and/or, client/server, h/t, and TCP/IP.
> Related: **mm/dd/yyyy**, **s/o**, **SSL/TLS**

****
> Backslash.
> Related: **carriage return character**, **\n**

'
> The tic character. Not an apostrophe.

0-day (n. or adj.)
> A "zero-day" or "oh-day" finding. In formal writing, it's better to use zero-day finding, previously undisclosed vulnerability, or publicly undisclosed vulnerability.

1Password
> Password management software.

2FA or **TFA**
> Two-factor authentication.
> Related: **MFA**, **OTP**

3DES
> Triple DES. A symmetric key block cipher. DES is pronounced as letters or "dezz."

3D printing (n.)

3G, **4G** (adj. or n.)
> Third- and fourth-generation communications technology. Cell phone network options. Do not spell out.
> Related: **CDMA**

3Scale
> An API management platform.

4chan
> A website for trolls and memes that birthed Anonymous and rickrolling.
> Related: **dox**, **message board**, **NSFW**, **troll**

7-Zip
> An open source file archiver.

8.3 filename (n.)
> Related: **short-name**

8-bit (adj.)

1080i, **1080p**

Abbreviations for HD video modes that describe the frame resolution and scan type (interlaced or progressive scan, respectively). Pronounced "ten-eighty." Do not spell out.
Related: **HDTV**, **numbers**

2600

A hacker magazine founded in 1984. Also a series of local clubs. https://www.2600.com/

A

a vs. **an**

Use "an" when the next word begins with a vowel sound when spoken, regardless of spelling. A hybrid test. A unified problem. A Xerox machine. An HTTP issue. An SSH tunnel. An underlying cause. An XSS attack.

a11y (n.)

Accessibility, often in relation to technology. 11 represents the 11 letters removed from the middle of the word "accessibility."
Related: **i18n**, **k8s**, **L10n**

abort (v.)

Avoid using this verb unless it's in quoted code. Try force quit or interrupt instead.

abuse (n.)

This noun is acceptable in common industry phrases like "application abuse." Avoid using it on its own if possible. Try "malicious use" instead.

abuse (v.)

This verb is OK in set phrases but do not use it on its own. Try alter, automate, compromise, deface, exhaust, exploit, force, impersonate, intentionally misuse, manipulate, reuse indefinitely, take advantage of, or a context-specific verb.

-accessible (adj.)

Always hyphenate.

access point (AP) (n.)

Spell out on first use.

ACE

Arbitrary code execution. Spell out on first use.

ACL, **ACLs**

Access control list. Spell out on first use.

AD (n.)

Active directory. Spell out on first use.

adb or **adb**

Android Debug Bridge. adb is both a technology and a command. When writing about the command, use the tech font.

ad blocking (n.), **ad-blocking** (adj.)

add on (v.), **add-on** (n.)

address bar (n.)

ad hoc (adj.)

This describes immature security infrastructure. In networks (especially wireless ones), ad hoc means decentralized.

admin or `admin` (n.)

Short for administrator. Write in the normal font if referring to the role or admin privileges. If referring to the username `admin`, use the tech font.

adversary (n.)

Do not use this term in formal writing; use attacker or malicious user instead.
In cryptography, "adversary" has a mathematical meaning, as in GPA: global passive adversary.

AES

Advanced Encryption Standard. Do not spell out; briefly define on first use.

Agile process (n.)

Related: **scrum**, **sprint**

agnostic (adj.)

Describes an entity that does not have a preference for any particular product, as in platform agnostic. Corporate jargon; use sparingly.

AI (n.)

Artificial intelligence, often used as jargon to refer to a computer program. AI can also mean Amnesty International.
Related: **Deep Blue**, **GLaDOS**, **HAL 9000**, **machine learning**, **replicants**, **The Three Laws of Robotics**, **Turing test**, **Watson**, **WOPR**

Airbnb

Aircrack-ng

A suite of tools for testing Wi-Fi network security .

air-gapped (adj.)

Air-gapped systems are disconnected from insecure networks and the internet.

Akana

An API management provider.

alert box (n.)

Alexa

Amazon AI.
Related: **Cortana**, **Google Assistant**, **Siri**

algorithm (n.)

Alibaba

An online retailer based in China.

alphanumeric (adj.)

Describes strings that contain letters and numbers, not special characters, punctuation, or spaces.

a.m.

Put a space after the number, as in "4 a.m. GMT." Include the time zone if referring to a testing window or specific event.

AMA

Ask me anything. A crowdsourced style of Q&A popularized by Reddit.

Amazon Prime

Amazon Web Services (AWS)

After first use, you can refer to the services by name without "Amazon."
Ex: Amazon EC2, Amazon ECR, Amazon RDS
Related: **EBS**, **S3 buckets**

analog hole or **analog loophole** (n.)

and/or
Use sparingly in formal writing.

Android
Google's mobile operating system.

android (n.)

angle brackets (n.)
The [<] and [>] characters.
Related: **characters**

AngularJS
A JavaScript framework.

Animoji
Animated emoji created by Apple.

anonymization (n.)

Anonymous
An international group of 4chan hacktivists with a Guy Fawkes mask symbol.

Ansible
A stateful configuration management suite for Linux systems.

ansible (n.)
A fictional instantaneous hyperspace communication device named by Ursula K. Le Guin.

anti-malware (adj. or n.)

antivirus (AV) (adj. or n.)

AP (n.)
Access point. Spell out on first use.

Apache Server

Aperture Science
A fictional research company from the Portal series of video games.

API, **APIs**
Application programming interface. How software interacts with other software. Do not spell out.

app vs. **application**
Smart devices like phones and tablets have apps, computers have applications. App can also be a shortened form of application. To the security industry, they are all computer programs.

Apple
Related: **FaceTime**, **FairPlay**, **iOS**, **iPhone**, **Lightning cables**, **Mac OS X**, **macOS-based**, **PowerBook**, **Siri**, **WWDC**

applet (n.)

Apple TV

application security (n.)
Alternate term for information security.

APT (n.)
Application penetration testing. Also stands for advanced persistent threat or advanced packaging tool. Spell out on first use in public-facing documents.
Related: **criticality**, **EPT**, **IPT**, **pen testing**

AR (n. or adj.)
Augmented reality.
Related: **IoT**, **VR**, **Vuforia**

arbitrary (adj.)

Of the attacker's choosing, as in "the user would be redirected to an arbitrary URL."

Archer

An animated spy TV show that inspired the name of the Bishop Fox Danger Drone. It's also the name of an RSA security product.

Arduino (n.)

Pronounced "ar-dweeno."

ARM

This refers to either the Architecture Reference Manual or to RISC architecture used in microprocessors. Define briefly on first use to clarify your intended meaning.

ARPANET

Advanced Research Projects Agency Network; the original internet. Do not spell out.

artificial intelligence (AI) (n.)

ASCII

Pronounced "ask-ee."

ASLR

Address space layout randomization. Spell out on first use.

ASN.1

Abstract Syntax Notation One.
Related: **BER**, **X.509**

ASP.NET

asset (n.)

Assets are systems, software, applications, libraries, personnel, equipment, or anything else that clients value and want to protect.

ASV

Approved scanning vendors. Spell out on first use.
Related: **PCI**

ATM

Short for automated teller machine or "at the moment." "ATM machine" is redundant.
Related: **PIN**, **SSN**

at-rest (adj.), **at rest**

At-rest encryption. Data at rest.

attack chain (n.)

Related: **elevation of privileges**

attacker-controlled (adj.)

attacker-owned (adj.)

attack surface (n.)

attributes (n.)

A specification of a value. If it's a type of attribute, use the normal font. If it's a specific attribute, use the tech font, as in "a username attribute."

audio conferencing (n. or adj.)

Related: **videoconferencing**

audit trails (n.)

AUP

Acceptable Use Policy. Spell out on first use.

auth (n.)

Short for authentication or authorization. Sometimes written as AuthN and AuthZ to clarify which word is abbreviated. Spell out on first use to avoid confusion.

authentication (n.)

authorization bypass (n.)

autocomplete (n. or v.)

A generic term for an application feature that predicts the rest of the word or phrase as a user types.

autocorrect (n. or v.)

A generic term for an application feature that fixes identified mistakes in typed words.

autofill (v.)

automation (n.)

The automatic operation of required processes.

autopilot (n.)

auto-renew (v.)

avatar (n.)

AWS

Amazon Web Services.

B

backdoor (n. or v.)

back end (n.), **back-end** (adj.)

backported (adj.), **backporting** (n. or v.)

backslash or ****

backtrace (n. or v.)

Related: **traceback**

back up (v.), **backup** (n. or adj.)

backwards compatibility (n.)

backwards compatible (adj.)

badput (n.)

Related: **goodput**, **throughput**

Balloon

A password-hashing algorithm.

bandwidth (n.)

The speed or capacity of a data network measured in volume over units of time, as in 50 Mbps. "Never underestimate the bandwidth of a station wagon full of tapes hurtling down the highway." – Andrew Tanenbaum

bank drops (n.)

Related: **black market**

barcode (n.)

bar mitzvah attack (n.)

An SSL vulnerability. So named because its security implications were realized 13 years after it first appeared in the codebase.

Base64-encoded (adj.),
Base64 encoding (n.)

-based (adj.)

Always hyphenate.
Ex: host-based, logic-based, role-based

baseline (n.)

Bash

BASIC

A programming language.

bastion host (n.)

A host often used as a gateway to pivot into other hosts. It should be specially hardened.

BBS

Bulletin board system.

BCC, **BCC'd**, **BCCing**

Blind carbon copy. Do not spell out.
Related: **CC**, **email**

BCP

Business continuity plan. Spell out on first use.

bcrypt

Pronounced "bee-crypt." A password hashing function.

BEC

Business email compromise. Spell out on first use.
Related: **phishing**

BeEF, **BeEF hooking**

Browser Exploitation Framework.

BER

Bit error rate. It can also stand for "Basic Encoding Rules," so spell out on first use.

best practices (n.)

Practices that align with compliance guidelines or industry standards. Corporate jargon; use sparingly.
Related: **CIS 20**, **compliance framework**

beta (n. or adj.)

BF

An informal name for Bishop Fox. Used very sparingly in places where space is limited.

BGP

Border Gateway Protocol. Spell out on first use.

Big Brother

The symbol of totalitarian surveillance from the novel Nineteen Eighty-Four. Big Brother is watching you.

big data (n.)

big-endian (adj.)

BIG-IP

A load balancer. Pronounced "big-eye-pee."

billion laughs attack (n.)

Related: **DoS**

binary (n. or adj.)

Base-2 number system. 0 or 1. Can also refer to binary executable files.
Related: **big-endian**, **little-endian**

BIND
A DNS server.

birds of a feather (BoF) (n.)
An informal discussion group.

birth date (n.)
Related: **DOB**, **PII**

Bishop Fox
Our company.
Related: **BF**, **Danger Drone**, **DeepHack**,
-Diggity, **foxes**, **Lucius Fox**, **Martin Bishop**,
Rickmote Controller, **SmashBot**,
SpellCheck, **SpoofCheck**, **Tastic RFID Thief**

bit (n.), **-bit** (adj.)
As in "a key length of at least 2048 bits" or
"a 2048-bit RSA key." When abbreviated, use
lowercase b for bits, uppercase B for bytes.

Bitbucket
An Atlassian product for Git and Mercurial.

bitcoin or **Bitcoin** (n.)
Digital cryptocurrency.
Related: **coins** vs. **tokens**, **cold wallet**,
crypto mining, **hot wallet**

bit-flipped (adj.), **bit-flipping** (adj.)

BitLocker
Microsoft Windows disk encryption
software.

bitmap (n.)

bitrate (n.)

bitsquatting (n.)

bitstream (n.)

BitTorrent

BlackBerry

black box (n.), **black-box testing** (n.)
Related: **gray-box testing**, **white-box
testing**

Black Hat
A series of annual security conferences that
happen in the USA, Europe, and Asia.
https://www.blackhat.com/

black hat (n.)
An attacker or malicious user. Informal.
Related: **gray hat**, **white hat**

blacklist, **blacklisting** (v. or n.)
Related: **blocklist**, **whitelist**

black market (n.)
We prefer to use this term in formal reports
to describe unindexed illegal online activity
hubs. Tor and I2P are colloquially known as
"dark web" browsers.
Related: **bank drops**, **cash-out guide**,
dark net, **fullz**, **I2P**, **Silk Road**, **Tor**

bleeding edge (n. or adj.)

blind (adj.)
During a blind attack, the attacker is unable
to view the outcome of an action.

bloatware (n.)

BLOB or **blob** (n.)
Binary large object.

blockchain, **block chaining** (n. or v.)
Related: **CBC**, **cryptocurrency**

blocklist, **blocklisting** (n. or v.)
A proposed alternative term for blacklisting.
Not yet widespread.
Related: **safelist**

blog, **blogroll** (n.)

Bloodhound
A tool used during security assessments.

Blowfish
An encryption algorithm.

blue screen (v.)
Informal.

Blue Screen of Death (BSOD) (n.)
Informal.

blue team, **blue teaming** (v.)
Blue teams run scenarios to defend a target
or environment from potential attackers.
They reduce the attack surface, employ
hardening strategies, and use honeypots.
Related: **purple team**, **red team**

Bluetooth
A unifying wireless system named after
Harald Bluetooth, a Norwegian king.

Blu-ray

BMO
A sentient video game console-shaped
cartoon robot friend from Adventure Time.
Pronounced "bee-mo."

BMP file, `.bmp file`
The bitmap image format.

Bomgar
An IT support portal.

Boolean operators
Useful AND precise.

boot chain (n.)
Related: **start up**

boot time (n.)

the Borg
A fictional cyborg alien group in Star Trek.

Boston Dynamics

bot (n.)
An automated program like a chatbot or
Twitterbot.

botnet (n.)
A network of bots sometimes used in
ransomware attacks.

Brainfuck
An esoteric programming language.

branch (v. or n.)
Related: **fork**, **GitHub**, **repository**

breadcrumbs, **breadcrumb trail** (n.)

breakpoint (n. or v.)

brick (n. or v.)
An old heavy cell phone or a dead device.
A bricked device is unrecoverably broken.
Informal.

brick-and-mortar (adj.)
Describes IRL places of business.

browsable (adj.)

browser fingerprinting (n.)

browser hijacking (n.)

brute-force (v. or n.), **brute-forcing** (n.)

BSD
Berkeley Software Distribution.
A Unix-derived operating system.

BSides
A global series of security events.
http://www.securitybsides.com/

buckets (n.)
When discussing a type of bucket, use the normal font. When discussing a specific bucket by name, use the tech font for the name, as in "an `oz-provision` bucket."

buffer overflow (BOF) (n.)

bug bounty (n.)
Related: **Bugcrowd**, **HackerOne**

Bugcrowd
A crowdsourced bug bounty security company.

built-in (adj.)

bulleted (adj.)

bullet point (n.)

bullet time (n.)

Burp Suite, **Burp Collaborator**
A web application proxy.

business impact analysis (BIA) (n.)
Spell out on first use.

BuzzFeed

BYOD
Bring your own device. It describes companies that allow employees to use their own computers and phones for work. BYOD is pronounced as letters or spoken as the whole phrase.

bypass (v. or n.)

byproduct (n.)

bytecode (n.)

bytes (n.)
Kilobytes, megabytes, gigabytes, terabytes, petabytes. KB, MB, GB, TB, PB. No space between number and unit, as in 64TB. Use uppercase B for bytes, lowercase b for bits.
Related: **MiB**, **units of measurement**

C

C ♯
A programming language. Pronounced as "C sharp."
Related: **#**, **hashtag**

C-3PO
A fictional protocol droid from Star Wars.

CA
> Certificate or certification authority. Spell out on first use.
> Related: **CEH**, **CISSP**

cache (n. or v.)

cache busting (n.)

cache poisoning (n.)

CactusCon
> An annual security conference in Arizona.
> http://www.cactuscon.com/

callback (adj. or n.)
> As in "a crafted callback parameter."

callback hell (n.)
> A programming mistake that ends in an infinite callback loop.

CAM
> Computer-aided manufacturing. Spell out on first use.
> Related: **LMS**

canary account (n.)
> Related: **honeypot**

canonicalization (n.), **canonicalize** (v.)

CAPTCHA, **CAPTCHAs**
> The Completely Automated Public Turing test to tell Computers and Humans Apart. A challenge-response test.
> Related: **computer vision**, **reCAPTCHA**

carriage return character or **\r**
> An invisible character that makes the text go back to the beginning of the line. It's a skeuomorph that refers to the way typewriters need to "return" a carriage to its original position.

case-by-case (adj.)

case-sensitive (adj.), **case sensitivity** (n.)

cash-out guide (n.)
> Related: **black market**

catch (v.)
> Related: **throw**

The Cathedral and the Bazaar (CatB)

CBC
> Cipher block chaining. Do not spell out; briefly define on first use.

CC, **CC'd**, **CCing**
> Carbon copy. Do not spell out.
> Related: **BCC**, **email**

CCC or **C3**
> Chaos Communication Congress. An annual security conference in Germany.

CCTV
> Closed circuit television. Do not spell out.

CD, **CD-R**, **CD-ROM**, **CD-RW** (n.)

CDMA
> Code division multiple access. Spell out or briefly define on first use.

CDN

Content delivery network. Spell out on first use.

CDP

Clean desk policy. Spell out on first use.

CEH

Certified Ethical Hacker.

cell phone (n.)

CentOS

A Linux distribution. Pronounced as "sent-O-S" or "sent-oss."

CERT

Computer Emergency Readiness Team or Cyber Emergency Response Team.

certificate or **cert** (n.)

Related: **CA**

CFAA

The Computer Fraud and Abuse Act.

CFO

Chief Financial Officer.

CGI

Short for computer-generated images or, less frequently, Common Gateway Interface. Define briefly on first use to clarify your intended meaning.

challenge-response mechanisms (n.)

Robot-filtering tests like CAPTCHA.
Related: **Turing test**

changelog (n.)

characters (n.)

When calling out specific characters (keystrokes) that affect the meaning of a code sequence, write them in the tech font with a space on either side, surrounded by square brackets in the normal font. If the character's name is also its symbol, write it in the tech font. If the font difference is not visible, use quotation marks.
Ex: a single quote ['], the @ symbol, 30,000 "A" characters
Related: **metacharacters**, **wildcards**

chatroom (n.)

chattr

Short for change attribute. Pronounced as "chatter."
Related: **chmod**, **chroot**

checkbox (n.)

checkmark (n.)

check out (v.), **checkout** (adj. or n.)

checksum, **checksums** (n.)

child abuse material (n.)

This is a more accurate term for child pornography. If you discover child abuse material in the context of your work, report it to a manager immediately. If you find it online outside of work, quickly contact NCMEC—The National Center for Missing and Exploited Children.

chmod

Short for change mode. Pronounced as "change mod," "C-H-mod," or "chuh-mod." Related: **chattr**, **chroot**

Chrome

A Google web browser.

Chromecast (n. or v.)

chroot

Short for change root. A Unix operation that simulates a directory on a filesystem as if it were the root of the filesystem. Pronounced as "C-H-root" or "chuh-root." Related: **chattr**, **chmod**

chroot directory or **ChrootDirectory**

An SSH directory.

chroot jail (n.)

A way to isolate a process from the rest of the system.

CIA

Short for the Central Intelligence Agency or the triad of information security concerns: confidentiality, integrity, and availability.

CIO

Chief information officer. Related: **CFO**, **CISO**

cipher (n.)

Don't use "cypher." Write the names of ciphers in the normal font, as in Blowfish. Related: **RSA**, **SHA-1**

cipher suite (n.)

ciphertext (n.)

CIS 20

The Center for Internet Security has a list of 20 guidelines for securing organizations. https://www.cisecurity.org/controls/

Cisco

CIS CSC

CIS Critical Security Controls. Related: **CIS 20**

CISO

Chief Information Security Officer. Pronounced "seeso."

CISSP

A security certification. Certified Information Systems Security Professional.

class, **classes** (n.)

When discussing a specific class by name, use the tech font, as in "a `Time` class."

cleartext vs. **plaintext**

In common usage, these terms are used interchangeably. In our reports, cleartext means unencrypted content. Plaintext is a more technical term that describes the input to a cryptographic system (which itself may already be encrypted or hashed). Related: **CPA**, **plaintext**

clear web or **Clear Web** (n.)

This is used in contrast to the "dark web" or "dark net" parts of the internet. It refers vaguely to publicly accessible sites that've been indexed by search engines. Informal.

CLI
> Short for command-line interface or command language interpreter. Spell out on first use.

clickbait (n.)

clickjacking (n.)
> In formal writing, we refer to this finding as "user interface (UI) redress." It's also called "cross-frame scripting."

click through (v.), **clickthrough** (adj. or n.)

client-side (adj.)

clip art (n.)

Clippy
> The discontinued anthropomorphic paper clip assistant in Microsoft Office.

closed caption (n.), **closed-caption** (adj.)

the cloud (n.)
> Corporate jargon; "the cloud" is just servers.

cloud computing (n.)

CloudFront
> An AWS content delivery network (CDN).

CloudTrail
> An AWS logging and monitoring service.

cluster (n.)
> As in "provision a cluster on each account."

CMDB
> Content management database. Spell out on first use.

CMS
> Content management system. Spell out on first use.

co-creator (n.)

code (n. or v.)

codebase (n.)
> Related: **user base**

codec
> Short for code/decode. A device or program that can compress and decompress data. Do not spell out.

Codecademy

code path (n.)

code shrinking (n.)

coins vs. **tokens**
> These are units of worth in virtual currencies. These terms are sometimes used interchangeably and sometimes used very differently. Define briefly on first use to clarify your intended meaning.
> Related: **bitcoin**, **cryptocurrency**

cold-call (v.) **cold call** (n.)
> A social engineering strategy.

cold storage (n.)

cold wallet (n.)
> Offline bitcoin storage.
> Related: **hot wallet**

command and control (C2) machine (n.)

command line (n.), **command-line** (adj.)

commercial-free (adj.)

commodity hardware (n.)
Over-the-counter hacking tools that anyone could get and use.

company-wide (adj.)

compensating controls (n.)

compile (v.)

compliance framework (n.)

computational linguistics (n.)
Related: **AI**, **NLP**

computer vision (n.)

config (n. or v.)
Short for a configuration or to configure.

configuration drift (n.)

connect-back shell (n.)

constants (n.)
Pre-defined, immutable variables that are referenced in later code.

containerization (n.)

content injection (n.)

content spoofing (n.)

content type, **Content-Type header** (n.)

-controlled (adj.)
Always hyphenate.
Ex: attacker-controlled, user-controlled

cookie (n.)

cookie poisoning, **cookie security** (n.)

cooperate (v.)

coordinate (v.)

copycat (adj. or v.)
Related: **spoof**

corporate espionage (n.)

corrupted (adj.)

CORS
Cross-origin resource sharing. Spell out on first use.

Cortana
Microsoft AI.
Related: **Alexa**, **Google Assistant**, **Siri**

countermeasure (n.)

coworking space (n.)

CPA
Chosen-plaintext attack. Spell out on first use.

CPU
Central processing unit. Do not spell out.

crack (v.)
Related: **passwords**

crawl (v.)

    Related: **spider**, **website**

credential reuse (n.)

credentials (n.)

    The information necessary to pass a
    security check (e.g., a username and
    password set, or an RFID badge).

critical (adj.)

    Describes a non-negotiable business
    function or a vulnerability with catastrophic
    consequences that is easily exploitable.

criticality (n.)

    A measure of the degree to which an
    organization depends on the information or
    information system for the success of a
    mission or of a business function.

CRM

    Customer relations management.

CRO

    Chief revenue officer.

cron

    Cron is a utility.

cron job (n.)

cross-platform (adj.)

cross-site scripting (XSS) (n.)

    There are three kinds of XSS:
    reflected, stored, and DOM-based. If
    spoken, pronounce the letters or say the
    whole phrase.

Crowbar

    A password-cracking tool.

crowdfund (v.)

crowdsource (v.), **crowdsourcing** (n.)

CRUD

    Create, read, update, destroy.

cryptanalysis (n.), **cryptanalytic** (adj.)

crypto (n. or adj.)

    Historically, this was short for cryptography.
    Now, it can also mean cryptocurrency. Spell
    out on first use to clarify your intended
    meaning.

cryptocurrency (n.)

    Virtual currency.
    Related: **bitcoin**, **blockchain**, **coins** vs.
    tokens, **off-chain**, **salami slicing attack**,
    securities

cryptographically (adv.)

crypto mining (n.)

CryptoParty

    A global series of events that educate
    communities about security and
    technology. https://www.cryptoparty.in/
    Ex: @CryptoHarlem on Twitter
    Related: **keysigning party**

CSP

    Content Security Policy. Spell out on first
    use.

CSPRNG

Cryptographically Secure Pseudo-Random Number Generator. A secure way of generating random numbers. Spell out or briefly define on first use.

CSRF

Cross-site request forgery. A common vulnerability. Pronounced as letters or "C-surf." Spell out on first use.

CSS

The HTML cascading style sheets feature. Do not spell out.

C-suite (adj. or n.)

An informal term for high-level executives like CEOs and CIOs. Also called "C-levels."

CSV file, `.csv file`

Comma-separated value(s).

CSWSH

The cross-site WebSocket hijacking vuln. Spell out on first use.

CTF

Capture the flag. Spell out on first use in public-facing documents.

CTO

Chief Technology Officer.

CTR

Short for clickthrough rate or Counter Mode. Spell out on first use.

the Cupertino effect (n.)

An error in early Apple dictionaries that corrected "cooperation" to "Cupertino" because of their limited word list.
Related: **the Scunthorpe problem**

cURL

Pronounced "curl."
Related: **Wget**

currency (n.)

Our reports rarely include specific values but we default to USD, as in $1.50. Follow AP style for mixed currency situations.

cursor (n.)

custom-written (adj.)

cutting edge (n.), **cutting-edge** (adj.)

Related: **bleeding edge**

CVE

Common Vulnerabilities and Exposures. A system that catalogs publicly known vulnerabilities and exposures. CVE references are written in the normal font.
Ex: CVE-2014-6271
Related: **CWE**, **Microsoft Security Bulletin numbers**

CVSS

Common Vulnerability Scoring System. Spell out on first use.
Related: **DREAD**, **PASTA**

CW

Content warning.

CWE

Common Weakness Enumeration. Write weaknesses in the normal font.
Ex: CWE-565.
Related: **CVE**, **Microsoft Security Bulletin numbers**

CYA

Cover your ass. Informal.
Related: **IANAL**

cyber-

Industry professionals don't use this prefix, but it's helpful when informing the public, as in the title of this document. For many users, "cyber" on its own invokes cybersex, not hacking. Use sparingly.
https://willusingtheprefixcybermakemelook
likeanidiot.com/
Related: **cybersecurity**

cyberpunk (n. or adj.)

A subgenre of science fiction.
Related: **AI**, **Ghost in the Shell**, **Neuromancer**, **sci-fi**

cybersecurity (n.)

Defense contractors and government officials use this term or "infosec." Industry professionals do not prefer this term, but it is used for clarity with the public, as in the title of this document. We prefer the term information security.
Related: **cyber-**, **infosec**

cyborg (n.)

A hybrid organic being. Coined in 1960 to mean cybernetic organism.

Cycript

A reverse engineering tool for iOS devices.

Cydia

An app found on jailbroken iOS devices.

Cylons (n.)

Fictional cyborgs in Battlestar Galactica.

D

daemon (n.)

Pronounced as "demon" or "day-mun." Describes a background system process on a computer.

daisy chain (n.), **daisy-chain** (v.)

An electrical engineering wiring scheme. Informal.
Related: **kludge**

Danger Drone

A Bishop Fox creation. It's a Raspberry Pi on a drone that can access tall buildings inconspicuously as a flying hacker laptop.

DAO

Short for decentralized autonomous organization or Data Access Object.
Spell out on first use.

dark net or **Dark Net** (n.)

This nebulous term, along with "dark web" and "deep web," are written and used inconsistently to refer to online black markets. Better to call it the black market or specify the site or service in formal writing.
Related: **I2P**, **Tor**

Dark Reading

A security industry publication.

DARPA

Defense Advanced Research Projects Agency.

data (n.)

Always write data in the singular as in "the data was recovered."

data://

Use the tech font for data URIs.

database (n.)

data center (n.)

data files (n.)

data handling (adj. and n.)

data-only (adj.)

data set (n.)

data type (n.)

dates (n.)

Be aware of possible day/month confusion with global audiences.
Related: **mm/dd/yyyy**

datetime (n.)

day-to-day (adj.)

As in "day-to-day activities."

DB

Database. Spell out on first use unless it's part of a term, as in MongoDB or IMDb.

dba

Short for "doing business as" or "database administrator." Spell out on first use in public-facing documents.

DDE

Dynamic Data Exchange. Spell out on first use.

DDoS

Distributed denial of service. Pronounced "D-doss" or as letters. Spell out on first use. Related: **denial of service**, **DoS**

dead code (n.)

OK in formal writing.

dead drops (n.)

Debian

A Linux distribution. Pronounced "debb-ean."

debuggable (adj.)

decap (v.), **decapped** (adj.)

declare (v.)

To tell a program that a function exists before the function has been defined.

decommed (adj. or v.)

Short for "decommissioned." Informal.

decompile (v.), **decompilation** (n.)

Deep Blue

Famous IBM chess-playing AI. The name was inspired by Deep Thought, the fictional supercomputer in The Hitchhiker's Guide to the Galaxy books.

deep dive (n.), **deep-dive** (v.)

deepfake, **deepfakes** (n. or adj.)
AI-fabricated video, originally used in pornography.

DeepHack
2017 Bishop Fox machine-learning AI that can perform SQL injection attacks.

deep learning (n.)
Related: **machine learning (ML)**

deface (v.)

DEF CON
An annual security conference in Las Vegas.
https://www.defcon.org/
Related: **Black Hat**, **SomaFM**

DEFCON system
A military alert scale that is set at DEFCON 5 during peacetime and elevates to DEFCON 4 and above during threatening situations.

defense in depth (n.),
defense-in-depth (adj.)
If you are interested in defense in depth, employ a defense-in-depth strategy,

DELETE request (n.)
Related: **requests**

denial of service (n.),
denial-of-service (adj.) **(DoS)**
A denial of service is caused by denial-of-service attacks. Spell out on first use. DoS is pronounced as "doss" or spoken as the whole phrase, not the acronym.
Related: **DDoS**

deny any any
A rule.

dependency hell (n.)
Frustration from software malfunctions caused by errors in third-party software. Informal.

deprecate (v.), **deprecated** (adj.)
In technical documents, this is used when hardware or software is considered retired, but left in for backwards compatibility; included but unofficial and unsupported.

DES
Data Encryption Standard. A symmetric-key encryption cipher. DES is pronounced as letters or "dezz." Do not spell out; briefly define on first use.
Related: **3DES**

deserialization (n.)

deus ex machina
Latin for "god from the machine." A plot device in which an unresolvable problem is conveniently fixed by an unlikely solution.
Related: **Ex Machina**

dev
The name for a system in development, as opposed to a production (`prod`) system. Informal.

DevOps
Corporate jargon. Development operations.
Related: **toolchain**

DevSecOps

DH
> Diffie-Hellman key exchange.

DHS
> Department of Homeland Security.

DHTML
> Dynamic HTML. Do not spell out.

dialog box (n.)

dial up (v.), **dial-up** (n. or adj.)

dictionary-based attack (n.)
> An automated password-guessing attack. Also called a "dictionary attack."

diff (n. or v.)
> A tool that finds the differences between two texts.

Diffie-Hellman (DH) key exchange (n.)
> A secure method for exchanging secret information.

-Diggity
> A common suffix for tools created by Bishop Fox's own Fran Brown.
> Ex: GoogleDiggity, SearchDiggity, ZipDiggity

digital certificate (n.)

dingbat (n.)

directives (n.)
> If it's a type of directive, use the normal font. If it's a named directive, use the tech font, as in "`SetCookies` directive" or "`unsafe-inline`."

directories (n.)
> If it's a type of directory, use the normal font. If it's a named directory, use the tech font, as in "`Moss` directory."

directory traversal (n.)
> In formal writing, refer to this finding as "path traversal."

Dirty COW
> Dirty copy-on-write; the CVE-2016-5195 vulnerability.

disclosed, **disclosure** (n.)

discrepancy (n.)

disrupt (v.)
> Corporate jargon; use sparingly.

disseminate (v.)

DKIM
> DomainKeys Identified Mail allows messages that originate from a protected domain to be cryptographically signed. Pronounced "D-kim."
> Related: **DMARC**, **email**, **SpoofCheck**

DLL file, **`.dll` file**
> Dynamic-link library.

DLP
> Data loss prevention.

DM (n. or v.)
> Direct message on Twitter. Also a dungeon master in Dungeons and Dragons. Informal.

DMA

Direct memory access. An exploitable
hardware feature.

DMARC

Domain-based Message Authentication,
Reporting and Conformance allows an
organization to inform other mail servers of
what should be done when fraudulent mail
from the protected domain is received.
Pronounced "D-mark."
Related: **DKIM**, **SpoofCheck**

DMZ

Demilitarized zone. Also known as a
perimeter network. It refers to a
less-secured portion of a network between
external firewalls and the WAN connection.

DN

Short for Distinguished Name in the LDAP
API. Spell out on first use.

DNS name (n.)

Domain name system. Types of records
stored in the DNS database include IP
addresses, nameservers, SMTP mail
exchangers, and Start of Authority (SOA).

DOB

Date of birth.

Docker

A platform that makes and manages
containers.
Related: **k8s**, **Kubernetes**

D0CTYPE

DoD

Department of Defense.
Related: **DARPA**

DOE

Department of Education.
Related: **FERPA**

doge (n.)

Shiba inu dog meme. Much pronunciation
dispute. Wow.
Related: **lolcat**, **meme**

DOJ

Department of Justice.

DOM

Document Object Model. Pronounced
"dahm."

domain, **domain name** (n.)

Related: **FQDN**, **TLD**

domain-joined (adj.)

domain squatting (n.)

Related: **typosquatting**

DOM-based (adj.)

dongle (n.)

An object that interfaces with a port and
sticks out from it, sometimes hanging down
a bit (e.g., USB drive or Bluetooth adapter).

the Doomsday Clock (n.)

DOS

Disk Operating System. This is unlikely to
come up in our formal writing, but readers
may confuse DoS with this.

DoS

Denial of service; a common vulnerability. Spell out on first use.

Related: **DDoS**, **denial of service**, **LOIC**

dot-com bubble (n.)

dot-file (n.)

double-click (v. or n.)

downgrade attack (n.)

The POODLE attack is a downgrade attack.

downtime (n.)

downvote (v.)

dox, **doxed** (v.), **doxing** (v. or n.)

The gathering of PII to maliciously target an individual online and IRL.

DPAPI

The data protection API, used in some Microsoft products. Pronounced as letters.

dpi

Dots per inch, as in "300 dpi."

Related: **units of measurement**

DRAC

Dell Remote Access Control. Spell out on first use.

drag-and-drop (adj.), **drag and drop** (v.)

DREAD

Short for damage, reproducibility, exploitability, affected users, and discoverability: five categories of security threats. A risk assessment model.

Related: **CVSS**, **PASTA**, **threats**

drive, **drives** (n.)

If it's a type of drive, use the normal font. If discussing a drive by name, use the tech font, as in "the C: drive."

-driven (adj.)

Always hyphenate, as in "server-driven."

DRM

Digital rights management. Spell out on first use.

Dropbox

A file-hosting service.

drop down (v.), **drop-down** (n. or adj.)

DROWN attack

Short for Decrypting RSA with Obsolete and Weakened eNcryption attack. A TLS bug.

Drupal

DTD

Document type definition. Spell out on first use.

Related: `DOCTYPE`

DuckDuckGo

A search engine that doesn't record search histories.

dump (v. or n.)

Informal. Try download, exfiltrate, extract, gather, remove, retrieve, take, or view instead.

dump files (n.)

Files from memory dumps, core dumps, stack dumps, hex dumps, heap dumps, etc.

dust management (n.)

DVD, **DVR** (n.)

Dvorak

An alternate keyboard setup that is efficient but uncommon. Pronounced "duh-vor-ack." Don't confuse it with the classical composer Antonin Dvořák.
Related: **keyboard keys**, **QWERTY**

E

E3

The Electronic Entertainment Expo. An annual video game industry convention.

eavesdrop (v.)

eBay

EBS

Amazon Elastic Block Store. Do not use for AWS Elastic Beanstalk. Spell out on first use.
Related: **Amazon Web Services**, **AWS**

echo request (n.)
Related: **ping**

e-commerce (n.)

edge case (n.)

EFF

Electronic Frontier Foundation. A nonprofit digital rights advocacy group. eff.org
Related: **Fifth Amendment**, **net neutrality**

e.g.

Means "for example" in Latin. Always followed by a comma. i.e. means "in other words." Choose wisely.

egress filtering, **egress testing** (n.)

EICAR test file (n.)

An antivirus test file that is intended to be found as a virus (though it's not actually malicious). Pronounced "eye-car."

EIGRP

Enhanced Interior Gateway Routing Protocol.

Elasticfox

A tool used during security assessments.

Elasticsearch

A search engine.

Elastic Stack

electric, **electrical** (adj.)

electronic (adj.), **electronics** (n.)

elements (n.)

If it's a type of element, use the normal font. If it's a named element, use the tech font, as in "a `customErrors` element."

elevation of privileges (n.)

> A common strategy for attackers: start as a low-privilege user and find flaws in permissions to gain admin credentials. Also called "escalation of privileges."

ELF, **ELFs**

> Executable and linkable format.

email (n.)

> Related: **BCC**, **CC**, **daemon**, **DKIM**, **DMARC**, **Gmail**, **inbox**, **listserv**, **mailbomb**, **outbox**, **phishing**, **spam**, **spoof**, **SpoofCheck**

email addresses (n.)

> Use the tech font, as in style@bishopfox.com.

email spoofing (n.)

embarrassingly parallel (adj.)

> Also called "pleasingly parallel."

embedded devices (n.)

> Related: **IIoT**, **IoT**

EMF

> Electromagnetic frequency. Related: **EMR**

emoji, **emojis** (n.)

> We prefer to pluralize as "emojis," but "emoji" can be the plural, too. Related: **Animoji**, **IM**, **tikzpeople**, **Unicode Consortium** Ex: 🦊 😊 🔥

emoticon, **emoticons** (n.)

> Typography-based pictographs that pre-date emoji. Ex: :-) XD :/

EMR

> Electromagnetic radiation. Related: **EMF**

-enabled (adj.)

> Always hyphenate. Ex: Wi-Fi-enabled

-encoded (adj.)

> Always hyphenate. Ex: URL-encoded

-encrypted (adj.)

> Always hyphenate. Ex: SSL-encrypted

encrypter or **encryptor** (n.)

encryption (n.)

end-of-life (EOL) (adj.)

endpoint (n.)

end-to-end secure boot chains (n.)

end user (n.), **end-user** (adj.)

Engadget

enterprise security (ES)

> Related: **asset**, **IR plan**, **risk**, **security controls**, **severity**, **threat modeling**

entity encoding (n.)

enumerate (v.), **enumeration** (n.)
Related: **tilde enumeration**

environment (n.)
The scope of an engagement that is more than a single application, site, or network.

EOL
End-of-life product lines are no longer supported. Spell out on first use.

ePHI
Electronic personal health information. Pronounced as letters.
Related: **PHI**

EPT
External penetration testing. Spell out on first use in formal writing.
Related: **APT**, **IPT**

ePub

error messages (n.)
Use the normal font with quotation marks around system messages, as in "The username or password is incorrect."

escape (v.)
Certain characters are used to specify formatting or code. "Escaping" those characters means that they are interpreted literally and not used for their special function.
Related: **metacharacters**

-established (adj.)
Always hyphenate.
Ex: well-established

EternalBlue
The MS17-010 vulnerability.
Related: **NSA**

Ethernet (n. or adj.)
It's capitalized because it's a trademark.

EULA
End-user license agreement. Spell out on first use. Pronounced "you-la."

Everyone
A fictional Anonymous-style hacker collective from the TV show Elementary.

evil twin attack (ETA)
Spell out on first use.

exabytes (EB) (n.)
Related: **units of measurement**

Excel cells
Use the normal font for the names of columns and rows, as in A2 and B15.

Excel formulas
Use the tech font for the content of Excel cells, as in =HYPERLINK and =1+1.

except, **exception** (n.)

excerpt (n.)
A bit of quoted code.

executable (n. or adj.)
As in "malware-infected executable."

execute (v.)

exercise (v.)
To interact with, as in "exercise an API."

exfiltrate, **exfiltrated**, **exfiltrating** (v.)

Ex Machina
A 2014 movie about an AI named Ava who undergoes a Turing test. Also a comic book series about a superhero who can communicate with and control machines. Related: **deus ex machina**

explicit (adj.)

exploit (v. or n.)

exploit chain (n.)

exploit video (n.)

exposed (adj.)
Describes applications or functions that are available to the public internet (not only to a private or internal network) and are therefore vulnerable to attack.

eye-tracking (adj.)

EyeWitness
A tool used during security assessments.

F

Facebook

facepalm (n. or v.)
Informal.
Related: **headdesk**

FaceTime
An Apple videoconferencing product.

-facing (adj.)
Always hyphenate.
Ex: client-facing, internet-facing

failover (n.)

FairPlay
Apple DRM technology.

false flag (n.)
A piece of evidence (e.g., an old digital certificate) planted by hackers to deliberately mislead investigators about their identity.

false positive (n. or adj.)

FAQ
Frequently asked questions. Pronounced as letters or "fack." Write "an FAQ" in reports.
Related: **a** vs. **an**

fat-finger (v.), **fat-fingered** (adj.)
To make a typo on a mobile device by pressing a nearby button. Informal.

FBI
The Federal Bureau of Investigation.
Related: **CIA**, **DHS**, **FOIA**, **Interpol**

FCC
The Federal Communications Commission.

FDA
The Federal Drug Administration.

FDE
Full disk encryption. It's the same as whole disk encryption. Spell out on first use.

FERPA

The Family Educational Rights and Privacy Act of 1974 protects the privacy of student education records. Spell out in first use.
Related: **PII**

fetch (v.)

FFEIC

The Federal Financial Institutions Examination Council. Spell out in first use.

FFmpeg

fields (n.)

If writing about a type of field, use the normal font. If it's a named field, use the tech font, as in "`address` field."

the Fifth Amendment

Among other things, it protects US individuals from self-incrimination.
Related: **EFF**, **encryption**, **Security Without Borders**

file extensions (n.)

Capitalize the filename type if writing about the type, lowercase in the tech font with a dot if writing the exact name, e.g., "the XML file" or "the `PoC.xml` file" or "`PoC.xml`."

filename (n.)

file paths (n.)

Use the tech font to show file paths, as in `C:\Users\Fox\Downloads\fox.gif`.

file share (n.)

file size (n.)

file stores (n.)

filesystem (n.)

file type (n.)

filter (v. or n.)

FinFisher, **FinSpy**

Related: **spyware**

fingerprint, **fingerprinted** (v.)

fingerprints (n.)

Unique public key identifiers. Use the tech font, as in `SubjectPublicKeyInfo` fingerprints.

FIPS tests

Federal Information Processing Standard tests.
Related: **NIST**

Fire TV

An Amazon media player.

firewall (n.)

FireWire

Fitbit

fixed-width (adj.)

flags (n.)

Use the tech font, as in "the `HttpOnly` flag."

flame war (n.)

Flash, **Flash Player**

An Adobe media player.

flash memory (n.)

flat files (n.)

flatscreen (adj. or n.)

flow chart (n.)

flow logs, **flow logging** (n.)

FOIA
The Freedom of Information Act.

follow up (v.), **follow-up** (n. or adj.)

footprinting (n.)

force-browse (v.)

forceful browsing (n.)

forensic watermark (n.)

forge, **forging** (v.)

fork (v. or n.)
Related: **branch**, **GitHub**, **repository**

formula, **formulas** (n.)

four-way handshake (n.)
A network authentication protocol.
Related: **WPA**, **WPA2**

foxes (n.)
Bishop Fox employees.

FPS
First-person shooter video game.

fps
Frames per second. Put a space between the number and the unit, as in "60 fps."
Related: **units of measurement**

FQDN
Fully qualified domain name. Spell out on first use.

frameable (adj.)
Related: **clickjacking**

frame busting (n.)

frame rate (n.)

framework (n.)
Write frameworks in the normal font, as in AngularJS, React, and MVC-based framework.

free-form (adj.)

Free Software Foundation (FSF)
A nonprofit organization.
Related: **EFF**, **open source**

front door (n. or adj.)
Related: **backdoor**

front end (n.), **front-end** (adj.)

FSM
The Flying Spaghetti Monster; supreme deity in the facetious religion of Pastafarianism, which was founded in 2005.

fsociety
A fictional Anonymous-type organization from the USA TV show Mr. Robot.

FTC

The Federal Trade Commission.

FTL

"Faster than light" warp drives in the TV show Battlestar Galactica and other sci-fi.

FTP

File Transfer Protocol.

FUD

Fear, uncertainty, and doubt. Pronounced "fudd."

fullz (n.)

A package of PII that can be bought on the black market. It usually includes SSN, DOB, and full name.

function (n.)

Capitalize the name of a function as in "the Forgot Password function."

functionality (n.)

Corporate jargon. Better to describe specific functions or features.

function keys (n.)

Use the normal font, as in F1 and F8.

future-proof (v. or adj.)

fuzz (n. or v), **fuzzer** (n.), **fuzzing** (n. or v.)

A fuzzer generates or mutates input for consumption by the target program with the intention of finding bugs.

fuzz testing harness (n.)

A framework that handles the crashes that result from a fuzzer.

fuzzy logic (n.)

FXL

Feature extraction language.

G

Game Boy

GameCube

game jam (n.)

A video game hackathon.

Game of Life

A programmable simulation created by mathematician John Conway that featured patterns like pulsars and gliders.

Gamergate

-gapped (adj.)

Always hyphenate.
Ex: air-gapped

gateway (n.)

GaymerX

LGBTQIA-focused gaming conventions in California, New York, and Australia.

GB

Gigabytes. No space between the number and unit, as in "75GB." Do not pluralize GB.

GBps vs. **Gbps**

Capitalization matters. GBps is gigabytes per second. Gbps is gigabits per second.
Related: **units of measurement**

GC

Garbage collection. Automatic memory management. Spell out on first use.

GDPR

General Data Protection Regulation.

gems (n.)

Related: **Ruby**

geocache, **geocaching** (n. or v.)

geolocation (n.)

getID3()

A PHP media file parser. ID3 tags refer to media metadata.

GET request (n.), **GETBULK request** (n.)

Related: **requests**

Ghost in the Shell

A cyberpunk manga.

GHz

Gigahertz. Put a space between the number and the unit, as in "2.4 GHz."
Related: **units of measurement**

GIF file, **`.gif` file**

Pronounced "giff" or "jiff." ¯_(ツ)_/¯
Related: **file extensions**

GIGO

Garbage in, garbage out. Say the whole phrase out loud or "gee-go."

Girls Who Code

A nonprofit organization that runs clubs and programs to train girls to code.
https://girlswhocode.com/

GitHub

A repository of code repositories. Our account is https://github.com/bishopfox.

GitLab

Git repository, **`.git` repository**

A Linux version control system.

GLaDOS

A fictional AI who appears in the Portal series of video games.
Related: **Aperture Science**

GLBA compliance

The Gramm-Leach-Bliley Act of 1999 is a standard of security for financial institutions. Do not spell out.
Related: **PCI compliance**

glob, **globbing** (n. or v.)

Filename or file path identification through pattern matching using wildcards.
Ex: `*.txt`

Gmail, **`example@gmail.com`**

Related: **email address**

GNU

Short for "GNU's Not Unix!" An operating system. GNU is a recursive acronym. Pronounced "guh-noo."

Go
> A programming language.
> Related: **Golang**

Godwin's Law
> This law of the internet states that all arguments eventually devolve into someone comparing someone to Hitler.
> Related: **message board**, **Rule 34**, **troll**

Golang
> This term is used when researching the programming language Go, which is a difficult keyword to search on its own.

golden master (n.)
> Related: **beta**

gold image (n.)
> Another term for base image or configuration baseline.

goodput (n.)
> Related: **badput**, **throughput**

Google
> Related: **Android**, **Chrome**, **Gchat**, **Gmail**

google (v.)

Google Assistant
> Google Home AI.
> Related: **Alexa**, **Cortana**, **Siri**

Google Drive

Google Search
> The query engine that googles things. It responds with Google Search results.

GoPro

GPG
> Gnu Privacy Guard. Also written as GnuPG. Spell out on first use.

GPO
> Group Policy Object. Spell out on first use.

GPS
> Global positioning system. Spell out on first use.

GPU
> Graphics processing unit.

Gradle
> An open source build tool.

grandfather clause (n.)

gray-box testing (n. or v.)
> Related: **black box**, **white box**

gray goo or **grey goo** (n.)
> An end-of-the-world scenario caused by the proliferation of self-replicating robots who eat the environment so all that is left is grey goo. Also refers to mushy bits of poorly written code. Informal.
> Related: **kluge**

gray hat (n. or adj.)
> Informal.
> Related: **black hat**, **white hat**

grayed out (adj.)

grep (n. or v.)

"Get regular expression." Can refer to the GNU tool of the same name or to mean "search" as in "I grepped for `secret` and found a password in source code."
Related: **regex**

greylisting (n.)

Even though American English uses gray-box and gray hat, greylisting is written with an "-ey" regardless of location.

grok (v.)

To fully understand, to get.

groupthink (n.)

Grumpy Cat

I had a definition once. It was terrible.
Related: **lolcat**, **meme**

Guccifer, **Guccifer 2.0**

Hackers who claimed to be behind the 2016 DNC hacks. Pronounced as "goo-chee-fer" or "goo-see-fer."

GUI

Graphical user interface. GUI is pronounced "gooey" or as letters.

GUID

Globally unique identifier. Pronounced "goo-widd." Spell out on first use.

GWT

Google Web Toolkit. Spell out on first use.

H

H-1B visa (n.)

A U.S. work visa for specialty occupations.

H.264 (n.), **H.264-encoded** (adj.)

hack (n. or v.)

Do not use in formal writing. Try exploit, gain access, steal, or a more context-specific verb.
Related: **cyber-**

hackathon (n.)

hacker (n.)

Do not use in formal writing. Use attacker, external threat, malicious user, consultant, security researcher, data scientist, or their job title, depending on the context.
Related: **Halt and Catch Fire**, **Mr. Robot**, **Silicon Valley**, **Sneakers**, **WarGames**

Hacker Dojo

A Bay Area tech community.

HackerOne

A vulnerability coordination and bug bounty platform.

Hackers

A 1995 movie about hacking the Gibson and the planet.

hacktivist (n.)

Hadoop

An Apache framework.

HAL 9000
>A fictional AI from 2001: A Space Odyssey.

Halt and Catch Fire
>AMC TV show about hacking, set in the 1980s.

hamburger button (n.)
>An icon with three horizontal lines that shows hidden menu options when clicked.

ham radio (n.)

handheld (adj.)

handle (n.)
>Related: **avatar**, **IRC**, **usernames**

hang (v.)
>When a server or computer hangs, it is non-responsive. If the requesting computer gives up waiting for a response, it times out.

haptic feedback (n.)

hardcode (v.), **hard-coded** (adj.)

hard copy (n.), **hard-copy** (adj.)

hard drive (n.)

harden (v.)
>To configure applications, systems, or services in a more secure manner, often using common guidelines.
>Related: **best practices**

-hardening (n. or adj.)
>Always hyphenate.
>Ex: host-hardening, system-hardening

hardware (n.)

hashcat
>A tool used during security assessments.

hash collision attack (n.)

hashed (adj.)
>Related: **passwords**, **salt**

hash functions (n.)

hashtag or **#**
>Only pronounce as hashtag when categorizing, not just any use of the [#] character, e.g., #octothorpe #poundsign
>Related: **C ♯**

HAZOP
>A hazard and operability study.

H-Browser
>A web browser.

HCI
>Human-computer interaction. Spell out on first use.

HDTV
>High-definition television. Do not spell out.
>Related: **flatscreen**, **on-demand**, **ratios**

headdesk or **/headdesk** or ***headdesk***
>An act of frustration and defeat. Informal.
>Related: **facepalm**

headers (n.)
>If it's a type of header, use the normal font. if it's a named header, use the tech font, as in "an `Origin` header."

headless browser (n.)

HEAD request (n.)
Related: **requests**

healthcare (n.)
Related: **ePHI**, **HIPAA**, **PHI**, **PHR**

heap-based buffer overflow (n.)

Heartbleed
An OpenSSL bug.

hex (n.), **hex-encoded** (adj.)

HID
Human interface device. The USB Rubber Ducky is a keyboard HID. Spell out on first use.

highest-severity (adj.)

high-impact (adj.)

high-performance (adj.)

high-speed (adj.)

high-value (adj.)

hijack, **hijacking** (n. or v.)
An umbrella term for attacks that take over controls or assume the role of a user and compromise the system. Avoid the verb when possible in formal reports. Try take over or take advantage of instead.
Related: **browser hijacking**, **juice jacking**, **page-hijacking**

HIPAA
The Health Insurance Portability and Accountability Act. Pronounced "hippa."
Related: **ePHI**, **PHI**

HLS
HTTP Live Streaming. Spell out on first use.

HMAC
Hash-based message authentication code. Pronounced "H-mack." Do not spell out; briefly define on first use.

homepage (n.)

HomePod
Apple smart speaker.
Related: **Internet of Things**

homescreen (n.)

honey accounts (n.)
Related: **canary account**

honeybot (n.)
A Twitterbot troll.

honeypot (n.)

honeytokens (n.)

hook (v.), **hooked** (adj.), **hooking** (n.)

Hopper
A reverse engineering tool.

-hosted (adj.)
Always hyphenate.
Ex: self-hosted

host-hardening (adj.)
Related: **harden**

hostname (n.)

hosts (n.)
Use the tech font, as in `10.0.7.180`.
Related: `localhost`, **URI**

hotfix, **hotfixes** (n.)

hotlink, **hotlinking** (n.)

hotspot (n.)

hot-swap (v.)

hot wallet (n.)
Online bitcoin storage.
Related: **cold wallet**

hotwire (v.)

hover (v.)

how-to (n. or adj.) **how to** (v.)
We published a how-to. This is how to do it.

Hping
A security tool. Pronounced "H-ping."

HPP
HTTP Parameter Pollution. Spell out on first use.

HSTS
HTTP Strict Transport Security. Spell out on first use.

h/t or **H/T**
Hat tip. A way of thanking someone online for being or providing a source. Informal.

HTML, **HTML5**
Hypertext Markup Language. Do not spell out.

`http://`, `https://`
No need to include these in URIs unless the presence or lack of secure HTTP is relevant to the narrative.

HTTP/2

HTTP methods or **HTTP verbs**
Ex: GET, POST, PUT
Related: **HTTP statuses**, **requests**

HttpOnly integrate

HTTPoxy

HTTP response splitting (n.)

HTTP statuses (n.)
Capitalize HTTP statuses in the normal font as if they were titles. Use quotation marks if they might be confused with nearby text.
Ex: 200 OK, 404 Page Not Found, HTTP 413 Request Entity Too Large, 500 Internal Server Error
Related: **error messages**, **requests**, **titles of published works**

`HTTP.sys`
A kernel mode driver.

humblebrag (n. or v.)

A disingenuous public complaint that slyly boasts about an enviable life.

hyperspace (n.)

hypertext (n.)

The "HT" in HTML and HTTP.

hyperthreading (HT)

Spell out on first use.

I

I2P

Invisible Internet Project. An anonymous communication network. Do not spell out.

i18n

Internationalization. 18 represents the 18 letters removed from the middle of the word "internationalization."
Related: **a11y**, **k8s**, **l10n**

IaaS

Infrastructure as a service. If spoken, say the whole phrase, not the acronym. Spell out on first use.
Related: **KMaas**, **PaaS**, **SaaS**

IAM

AWS Identity and Access Management. Spell out on first use.

IANAL

"I am not a lawyer." Informal.

ICE

Short for Intrusion Countermeasures Electronics or Immigration and Customs Enforcement. Spell out on first use to clarify your intended meaning.

ICMP

Internet Control Message Protocol. Spell out on first use.

ICO

Initial coin offering.
Related: **cryptocurrency**

ID, **IDs**

Identification.

IDE, **IDEs**

Integrated development environment. Spell out on first use.
Related: **line numbers**, **source code**

idempotence (n.), **idempotent** (adj.)

An idempotent operation produces a result that is not affected by repetition.
Ex: HTTP GET request

IDOR

Insecure direct object references. Spell out on first use.

iDRAC

Integrated Dell Remote Access Control.
Related: **DRAC**

IDS

Intrusion detection system. Spell out on first use.

i.e.
Means "that is to say" in Latin. Always followed by a comma. e.g. means "for example." Choose wisely.

iframe or `iframe tag` (n.)
Inline frame. IFrame and iFrame also appear in texts, but we prefer to lowercase.

IFTTT
Short for If This Then That. A service where users can create conditional statement chains called recipes. Pronounced as "ift."

IIoT
Industrial Internet of Things.
Related: **IoT**

IIRC
If I recall correctly. Informal.

IIS, **IIS Express**
Microsoft Internet Information Services software.

IKE, **IKEv1**, **IKE v2**
Internet Key Exchange.

iLO
HP Integrated Lights Out.

ILSpy
An open source .NET assembly browser and decompiler..

IM (n. or v.)
Instant message. Spell out in formal writing.
Related: **Gchat**, **IRC**, **Signal**, **WhatsApp**

Imgur
A photo-hosting website company with a giraffe mascot. Pronounced "imager."

implementable (adj.)

implicit (adj.)

improper MIME type (n.)

improperly scoped cookies (n.)

in-band (adj.)
As in "in-band reflection of file contents."
Related: **out-of-band**

inbound (adj.)

inbox (n.)

incident response (IR) plan (n.)
Use lowercase when writing about the concept of the plan. Capitalize it if referring to the name of a specific document.
Related: **IR plan**, **SIR plan**

index, **indexes** (n.)

infiltrate (v.)

infosec or **info sec** or **info-sec** (n. or adj.)
Intelligence communities use this term to describe the information security industry. Informal.

information security (n.)
This industry is also called infosec, cybersecurity, and internet security.

information superhighway (n.)
Don't use this to describe the internet.

in-game (adj.)

in-house (adj.)

init script
Boot script for Unix.

injection (n.)

inline (adj.)
Code that is in line with other code. The CSP rule is called `unsafe-inline`.

input (v. or n.)

in-scope (adj.)

insecure vs. **not secure**
These are sometimes used interchangeably and sometimes they mean very different things. Define briefly on first use to clarify your intended meaning.

insecure cookie transmission (n.)

insourcing (n.)
The opposite of outsourcing.

Instagram

instance count (n.)
The number of unique locations in a codebase, system, or network that require modification to remediate a finding.

interface (n. or v.)
As in "exposed administrative interface."

internet (n.)

The Internet Archive
A nonprofit library and archive of historical web pages. https://archive.org/
Related: **net neutrality**

Internet Explorer (IE)
A web browser.

Internet of Things (IoT)
Consumer-grade embedded devices.
Related: **app** vs. **application**, **Fitbit**, **IIoT**, **motion-activated**, **smart-**, **teledildonics**, **Wi-Fi**

Interpol
The international police organization.

invalidated vs. **unvalidated**
Invalidated data has been checked and deemed invalid. Unvalidated data has not been checked at all.

iOS
Apple mobile platform. Because of the lowercase "I," avoid beginning sentences with this term if possible.

IoT
Internet of Things. Pronounced as letters or spoken as the whole phrase.
Related: **IIoT**

IP
Short for Internet Protocol or intellectual property, depending on context. For clarity, spell out "intellectual property" on first use in technical writing.
Related: **IP address**

iPad, **iPod**

IP addresses (n.)

Use the tech font, as in `10.40.131.22`.
Related: **port numbers**, **URL**

iPhone 5s, **iPhone 6 Plus**, **iPhone X**

Apple smartphones.

IPMI

Intelligent platform management interfaces. Spell out on first use.

IPO

Initial Public Offering.

IPP

Internet Printing Protocol.

IPS

Intrusion prevention system. Spell out on first use.

IPsec

Internet Protocol Security. Spell out on first use.
Related: **infosec**, **OPSEC**, **PERSEC**

IPT

Internal penetration testing. Spell out on first use.
Related: **APT**, **EPT**

`iptables`

Related: **Linux**

IRC

Internet Relay Chat. A messaging system.
Related: **handle**, **UGT**

IRL

In real life.

IR plan (n.)

Short for Incident Response plan. Spell out on first use.

ISAC

Information Sharing and Analysis Center. Pronounced "eye-sack." Spell out on first use.

ISO/IEC 27001

A common information security framework that determines international standards for many types of technology and equipment. ISO is pronounced "eye-so."

ISP, **ISPs**

Internet service provider. Spell out on first use in public-facing documents.

IT

Information technology.
Related: **OT**

The IT Crowd

A British sitcom about a tech support department.

J

jack (n.)

As in "Ethernet jack." Better to use "port" in formal writing.

jailbreak (v.)

To modify a mobile device (e.g., a smartphone) past the limits set by the manufacturer to gain privileged access.
Related: **sandbox escape**

jailbroken (adj.)
Describes a user-modified mobile device.

Java EE
Java Enterprise Edition. Do not abbreviate as JEE.

JavaScript (JS)
A programming language.

JBoss
A Java application server.

JCE
Java Cryptography Extension.

Jenkins

Jira
A workflow and issue tracking product. Not an acronym. Pronounced "jeera."

JMX
Java Management Extensions. Spell out on first use.

JPEG file, `.jpeg file`, **JPG file**, `.jpg file`
Pronounced "jay-peg." JPEG and JPG are interchangeable.
Related: **file extensions**

jQuery

JSON, **JSONP**
Short for JavaScript Object Notation. JSONP is short for "JSON with padding." JSON is pronounced as J-sahn or Jason.

JSP file, `.jsp file`
Related: **file extensions**

juice jacking (n.)
An attack in which a power cord steals data from a device while it's charging.

Julia
A programming language.

jumpbox (n.)
Better to use "proxy" or "attacker's server" in formal writing. Also called a jump host or jump server.

jump drive (n.)
Informal. Use USB drive, flash drive, or thumb drive instead, depending on the context.
Related: **USB drive**

junk mail (n.)
Related: **spam**

JVM
Java virtual machine. Spell out on first use.

JWT
JSON Web Tokens. Pronounced "jot." Do not spell out.

K

k8s
Kubernetes. 8 represents the eight letters removed from the middle of the word "Kubernetes." Write this term out in formal reports and pronounce it "coober-nettees."

Kali Linux

Kaspersky Labs
An international security firm headquartered in Russia.

KB
Kilobytes. No space between the number and unit, as in "50KB." Do not pluralize KB.
Related: **units of measurement**

keepalive, **keepalives (KA)** (n.)
Keepalive packets.

KeePass
Password management software.

kernel, **kernel panic** (n.)

keyboard keys (n.)
Capitalize keys, as in Enter and Caps Lock. Use plus signs to show Windows or Linux system combinations, as in Ctrl+Alt+Delete. Mac shortcuts use hyphens, as in Option-N.
Related: **Dvorak**, **function keys**, **punctuation**, **QWERTY**, **spacebar**, **wildcards**

keychain (n.)

keygen, **keygens** (n.)
Key generators.

keylogger, **keylogging** (n.)

key pair (n.)

keysigning party or **key signing party** (n.)
An event where people share their public keys in person to expand the web of trust.
Related: **PKI**

keyspace (n.)

keystore (n.)

keystroke (n.)

Keywhiz
Secret management software.

keyword (n.)

kHz
Kilohertz, as in "535 kHz." Do not pluralize kHz.
Related: **units of measurement**

KiB
Kibibytes. In Base 2, 1 kibibyte is 1,024 bytes. Kilobytes (KB) are in Base 10.
Related: **bytes**, **KB**

Kickstarter
Related: **crowdfund**, **signal-boost**

kill chain (KC) (n.)

kill switch (n.)

kluge or **kludge** (n.)
Bad code.

KMaaS
Key management as a service. If spoken, say the whole phrase, not the acronym. Spell out on first use.
Related: **IaaS**, **PaaS**, **SaaS**

KMS
Key management service. Spell out on first use.

knowledge base (n.)

KRACK

A Wi-Fi-based vulnerability.

Kubernetes or **k8s**

Pronounced "coober-nettees."
Related: **Docker**

L

L10n (n.)

Localization. 10 represents the 10 letters
removed from the middle of the word
"localization."
Related: **a11y**, **i18n**, **k8s**

LAMP

Short for Linux, Apache, MySQL, and PHP,
which were its original four components.
A software bundle. Do not spell out.
Related: **WAMP**

LAN

Local area network.

LanMan hash

Short for LAN Manager hash. We prefer to
write it out or abbreviate to LM hash.

LAN Turtle

A tool used during security assessments to
get shells.

LARP, **larping** (n. or v.)

A live action role-playing game.

LastPass

Password management software.

LaTeX

A document preparation system.
Pronounced "lay teck."
Related: **tikzpeople**

Layer 3 firewall rules (n.)

LCD, **LCDs**

Liquid crystal display monitors. Do not spell
out.

LDAP

Lightweight Directory Access Protocol.
Pronounced "ell-dap." Spell out on first use.

LDAP Admin

A tool used during security assessments.

leak, **leaked**, **leaking** (v. or n.)

LED, **LEDs**

Light-emitting diode. Do not spell out.

Leet or **1337** or **Leetspeak** or **l33tsp34k**

A coded form of online writing featuring
codified typos and a combination of
numbers and punctuation.
Ex: H4X0R, n00b, pr0n, pwn, teh

Let's Encrypt

-level

Always hyphenate in adjectives.
Ex: lower-level

leverage (v.), **leveraged** (adj.)

LFI

A local file inclusion vulnerability. Spell out
on first use.

LGBTQIA

Lesbian, gay, bisexual, transgender, queer, intersex, asexual. For more guidance on inclusive language, please consult http://consciousstyleguide.com/.

lifecycle management (n.)

Related: **SDLC**

life hack (n.)

Informal.

lifespan (n.)

Lightning cables (n.)

"like" (v.)

A verb of approval on social media sites like Facebook and Twitter.

Like button (n.)

A social media feature popularized on Facebook, as in "this post has 10 Likes."

likelihood (n.)

limit (v.)

To control the scope, impact, or types of attacks. Also try filter, narrow, or omit.

linefeed characters (n.)

line numbers (n.)

Use the normal font, as in "line 1337 of the code." Don't use commas in line numbers.

LinkedIn

Linux

An open source OS. Thanks, Linus Torvalds! Related: **Debian**, **init script**, **RedHat**, **Unix**

listicle (n.)

An article in the form of a list.

listserv (n.)

The company is called LISTSERV. The generic term is "listserv" or "email list."

little-endian (adj.)

livestream (v.), **livestreaming** (n.)

live-tweet (v.)

LLMNR

A modern Windows protocol. Link-Local Multicast Name Resolution.

LM hash (n.)

LAN Manager hash.
Related: **NTLM hash**

LMS

Learning management system. Spell out on first use.
Related: **CAM**

load-balance (v.), **load balancing** (n.)

`localhost`

A hostname that always refers to the computer you're using. The `localhost` IP address is `127.0.0.1`.

`localStorage`

lockout policy (n.)

lock picking (n.)

The skill of picking locks.
Related: **smart lock**

lock screen (n.)

log files (n.)

logged-in (adj.)
As in "a logged-in user."

log in (v.), **login** (n.)

login page (n.)

log out (v.), **logout** (n.)

LOIC
Low Orbit Ion Cannon. An old-school way to crowdsource a DoS attack. Pronounced "low-ick."

lolcat
I can has internet language?
Related: **doge**, **Grumpy Cat**, **meme**

lookahead parameter (n.)

look up (v.), **lookup** (n.)

lossy compression (n.)

lowercase (adj.)

LSASS
Local Security Authority Subsystem Service. Pronounced "ell-sass."

LTE
Long Term Evolution. A high-speed wireless communication standard. Do not spell out.
Related: **3G**, **4G**

LTS
Long-term support. Versions of software that are intended to last longer than normal. Spell out on first use.

Lucius Fox
A character from the Batman canon, played by Morgan Freeman in Christopher Nolan's trilogy. Lucius Fox is an inventor and runs WayneCorp. Because of his defensive hacking skills, we use his name in our company name.
Related: **Martin Bishop**

Lucky Thirteen attack (n.)

M

M.2
An expansion port and SSD.

MAC
Message authentication code. Spell out on first use.
Related: **HMAC**

MAC address
Short for media access control address. A unique identifier on a network-enabled device. One level below IP address.

MacBook

machine learning (ML) (n.)

macOS (n.), **macOS-based** (adj.)

Mac OS X, **OS X 10.11**
> The name of versions of macOS released between 2012 and 2015.

macro (n.)
> OK in formal writing if relevant, but use "automation" for the general technique.

mailbomb (n. or v.)
> Related: **dox**, **email**, **phishing**, **spam**

MailChimp

mainframe (n.)

Maker Faire
> A global series of DIY community events that started in the Bay Area.
> http://makerfaire.com/
> Related: **3D printing**, **Arduino**, **how-to**, **life hack**, **Raspberry Pi**, **servo**

Malbolge
> An esoteric programming language.

malformed (adj.)
> A syntactically improper bit of data or code.

malicious actor (n.)
> This represents a wide range of potential attackers from individuals to nation-states. When writing about individual threats, use attacker or malicious user.

malicious code (n.)

malware (n.)
> Malicious software. A catch-all term for anything that could be called malicious including CryptoLockers, spyware, viruses, worms, trojans, and backdoors.

malware-infected executable (n.)

Man-in-the-Browser attack (MitB)
> When written as MitB, precede with "an." If spoken, say the whole phrase, not the acronym.

Man in the Middle (n.),
Man-in-the-Middle (adj.) **(MitM)**
> When written as MitM, precede with "an." If spoken, say the whole phrase, not the acronym.
> Related: **a** vs. **an**

mapping (n.)

MariaDB
> An open-source clone of MySQL.

Markdown (n.)

marketplace (n.)

markup language (n.)
> Related: **HTML**, **Markdown**, **XML**

Martin Bishop
> A character (played by Robert Redford) who leads a security consulting team in the 1992 movie Sneakers. Because of his offensive hacking skills, we use his name in our company name.
> Related: **Lucius Fox**

mass assignment (n.)

master/slave
> We prefer to use "primary/replica."
> Related: **Appendix A**

The Matrix
> A 1999 movie about a hacker named Neo.
> Related: **bullet time**

matrix, **matrices** (n.)

MB
> Megabyte. No space between the number and unit, as in "75MB." Do not pluralize MB.
> Related: **MiB**, **units of measurement**

MBps vs. **Mbps**
> Capitalization matters. MBps is megabytes per second. Mbps is megabits per second. No space between the number and unit, as in "500Mbps."
> Related: **units of measurement**

meatspace (n.)
> An informal term for the analog world.

mechanism (n.)
> Write the name in the tech font, as in "`protect_from_forgery` mechanism."

media (n.)
> Related: **Blu-ray**, **CD**, **GoPro**, **MP3**

Meltdown
> A flaw that affects Intel, AMD, and ARM chipsets. It was publicly disclosed in January 2018.
> Related: **Spectre**

Memcache, **Memcached**
> A memory caching server.

meme (n.)
> Pronounced "meem."
> Related: **4chan**, **doge**, **Grumpy Cat**, **lolcat**, **milkshake duck**, **rickrolling**

message board (n.)
> Related: **ATM**, **handle**, **headdesk**, **IANAL**, **IIRC**, **NSFL**, **NSFW**, **tl;dr**, **PEBKAC**, **RTFM**

metacharacters (n.)
> A character with a special meaning in a programming language or regex. It must be set apart (escaped) with another character to use its literal meaning, as in "*" vs. *.
> Related: **\n**

metadata (n.)

Metasploit
> A tool used during security assessments.

Meterpreter
> A tool used during security assessments.

MFA
> Multi-factor authentication. Spell out on first use in public-facing docs to avoid confusion with a Master of Fine Arts degree.
> Related: **2FA**, **OTP**

MHz
> Megahertz, as in "100 MHz."
> Related: **units of measurement**

MiB

In Base 2, 1 mebibyte (MiB) is 1,024 kibibytes (KiB). 1 kibibyte is 1,024 bytes. Megabytes (MB) are in Base 10.
Related: **bytes**, **MB**

microblogging (n.)

microsegmentation (n.)

microservice (n.)

Microsoft

Related: **Cortana**, **MS SQL**, **Windows**

Microsoft Security Bulletin numbers

Write the names of specific vulnerabilities in the normal font.
Ex: MS15-034
Related: **CVE**, **CWE**

MIDI

Musical instrument digital interface. Do not spell out. Pronounced "midd-ee."

military-grade encryption (n.)

May refer to AES-256 encryption. Do not use this term; refer to the type of encryption by name instead.

milkshake duck (n.)

A hypothetical wholesome new public figure who is quickly revealed to be vile.
Related: **Godwin's Law**, **meme**

millennial (n. or adj.)

Corporate jargon. When broadly used, this includes people born between 1980 and 2010. It's better to use other demographic markers (such as age ranges).

MIME

Multipurpose internet mail extensions. Do not spell out. Pronounced "mime."

Mimikatz

A tool used during security assessments.

MINIX

Mini-Unix.

mirroring (n.)

mirror site (n.)

mission-critical (adj.)

mitigate (v.)

To lessen the impact of potential future attacks. Not interchangeable with "reduce."

mitigation (n.)

The application of compensating controls to decrease the impact of identified vulnerabilities while not fully remediating those vulnerabilities.

MitM

Man-in-the-Middle. When written as MitM, precede with "an." If spoken, say the whole phrase, not the acronym. In cryptography, this can also refer to the Meet-in-the-Middle attack.
Related: **a** vs. **an**

mm/dd/yyyy

When recommending limitations on allowable characters in date fields, write the month/day/year format in the tech font.
Related: **dates**, **years**

mobile devices (n.)

Smartphones and tablets.

mod (v. or n.)

To modify. Informal.

model numbers (n.)

Use the normal font for software version numbers, product model numbers, serial numbers, and builds.

moonshot (n.)

Corporate jargon; use sparingly.

Moore's Law

About every 18 months since 1965, the number of transistors per square inch on integrated circuits has doubled. Observed by Intel co-founder Gordon Moore.

MOTD

Message of the day banner.

motherboard jumpers (n.)

motion-activated (adj.)

motion capture, **mo-cap** (n. or adj.)

mouseover (adj. or n.), **mouse over** (v.)

mousepad (n.)

Mozilla Firefox

MP3, `.mp3 file`, **MP4**, `.mp4 file`

Audio and video file types.
Related: **file extensions**, **MIDI**

Mr. Robot

TV show about a paranoid hacker that sometimes uses Bishop Fox exploits.
Related: **fsociety**, **Kali Linux**, **Raspberry Pi**, **Tastic RFID Thief**

MS

Microsoft. Use sparingly in reports.
Ex: MS SQL, MS Word
Related: **Microsoft**, **Office 365**, **Windows**

ms

Milliseconds. Put a space between the number and the unit, as in "250 ms."
Related: **units of measurement**

MSA

Master service agreement. Spell out on first use.
Related: **SOW**

MSDE

Microsoft SQL Server Data Engine. Spell out on first use.

MSFvenom

A tool used during security assessments.

MSI file, `.msi file`

A Windows installer package file format.

MS SQL

Microsoft SQL server.

multi-factor authentication (MFA) (n.)

Spell out on first use in public-facing docs to avoid confusion with a Master of Fine Arts degree.
Related: **2FA**

Mustache

An HTML template system.

MVC

The Model-View-Controller architectural pattern. Spell out on first use.
Related: **ASP.NET**

MySQL

A type of database. Pronounced "my sequel."

N

\n

The newline character is an invisible special character that moves the text to the next vertical line down.
Related: **carriage return character**

NAC

Network access control. Pronounced "nack." Spell out on first use.

nameserver (n.)

An internet server that resolves domain name queries. Part of DNS.

NAND gate (n.)

Short for negative-AND gate. A logic gate that produces a false output only if all of its inputs are true.

nanotechnology (n.)

Nasdaq or **NASDAQ**

nation state (n.)

NBNS

A modern Windows protocol. NetBIOS Name Service.

NDA

Non-disclosure agreement. Spell out on first use in public-facing documents.

need to know (v.), **need-to-know** (adj.)

The user does not need to know this. Intel is given on a need-to-know basis.

NetBIOS

Network basic input/output system.

netblock (n.)

A range of IP addresses.

Netcat or **nc**

A utility that reads from and writes to network connections with TCP or UDP.

Netflix

.NET Framework

A Microsoft software framework. If possible, don't begin sentences with this term. Pronounced "dot-net."

Netgear or **NETGEAR**

net neutrality (n.)

Related: **EFF**, **FCC**, **Free Software Foundation**, **The Internet Archive**, **ISP**

net risk (n.)

Overall risk.

network security (n.)

Alternate term for information security.

network segmentation (n.)

Neuromancer
The titular fictional AI in a cyberpunk novel by William Gibson.

next generation or **next-gen** (adj.)
Corporate jargon; use sparingly.
Related: **bleeding edge**, **cutting edge**

NFS
Network File System.

NfSpy
A tool used during security assessments.

Nginx
Web server software. Pronounced "engine X."

ngrep
Network grep. Pronounced "N-grep."
Related: **tgrep**

Nintendo Switch

NIST
National Institute of Standards Technology. Pronounced "nist."

NIST CSF controls (n.)

NLA
Network Level Authentication.

NLP
Natural language processing.
Related: **computational linguistics**

Nmap, **Nmap scan**
Short for Network Mapper. A pen testing tool used to scan ports and map networks.

NOC
Network operations center. Pronounced as "nock."

node (n.)

Node.js
An open source JavaScript runtime environment.

nonce, **nonces** (n. or adj.)

non-disclosure agreement (NDA) (n.)

nonprofit (n. or adj.)

`nosniff`

NotPetya

NSA
The U.S. National Security Agency.

NSFL
Not safe for life/lunch. Informal.

NSFW
Not safe for work. Informal.
Related: **CW**, **TW**

NTLM hash
NTLM protocol uses two hashed password values: the LM hash and the NT hash.

NTLMv2
Short for NT LAN Manager. A suite of Windows security protocols.

null byte character (n.)

null byte injection (n.)

NULL session (n.)

numbers
Per AP style, write out numbers below ten, except in set phrases. Write numbers plainly, without superscript. Plural years like "in the 1990s" do not take an apostrophe. Non-year numbers have a comma every 3 digits, as in "525,600 minutes."
Related: **1080i**, **dates**, **IP addresses**, **mm/dd/yyyy**, **model numbers**, **phase**, **pixel**, **ports**, **ratios**, **units of measurement**, **version numbers**, **years**

NVD
National Vulnerability Database.
https://nvd.nist.gov/
Related: **CVE**

O

OAuth
An authentication protocol. Pronounced "oh-auth."

obfuscation (n.)
Related: **security through obscurity**

Objective-C
A programming language.

oclHashcat
A tool used during security assessments.

OCR
Optical character recognition. Spell out on first use.
Related: **computer vision**, **PDF**

Oculus Rift

OData
OData is a RESTful means of exposing access to a data store.

OEM
Original equipment manufacturer. Spell out on first use.
Related: **software piracy**

offboarding (n.)
The opposite of onboarding.

off-by-one error (OBOE) (n.)

off-chain (adj.)
Off-the-block cryptocurrency transactions.
Related: **bitcoin**, **coins** vs. **tokens**

Office 365
A suite of software from Microsoft.

offline (adj.)

offscreen (adj.)

off-site (adj.)
As in "off-site redirect."
Related: **on-site**

OGNL
Object-graph navigation language. An open source language. Vulnerable to injection attacks. Pronounced "ogg-null."

OK

> Informal. Do not use in formal reports outside of quoted code and tables.

…omitted for brevity…

> This phrase indicates that irrelevant parts of the quoted code have not been included.
> Related: **[REDACTED]**

on-air (adj.)

onboarding (n.)

on-demand (adj.), **on demand**

> On-demand services. Services on demand.

one-liner (n.)

> A command line script on one line.

one-time (adj.)

ongoing (adj.)

The Onion

> A satirical news site.

.onion sites

> Hidden services on Tor.

online (adj. or n.), **on line**

> Wikipedia is an online encyclopedia.
> A functioning system is on line.

onscreen (adj.)

on-site (n. or adj.), **on site**

> It was an on-site. It was an on-site engagement. The team was on site.

OOB

> Out-of-band. Spell out on first use.

OOP

> Object-oriented programming. Spell out on first use.

open access (n. or adj.)

OpenID

> An authentication protocol.

open source (adj.)

> Software with its source code made available to encourage modifications.
> Related: **The Cathedral and the Bazaar**

OpenVPN

> Open source VPN software.

operating system (OS) (n.)

OpManager Decrypter

> A tool used during security assessments.

OPSEC

> Operations security.

opt in (v.), **opt-in** (adj.)

opt out (v.), **opt-out** (adj.)

OS (n.)

> Operating system. To pluralize, spell it out as "operating systems" instead of "OS's" or "OSes."
> Related: **Linux**, **macOS**, **Windows**

OSCP

> Offensive Security Certified Professional.

OSGi

Open Services Gateway Initiative. A Java framework for developing and deploying modular applications.

OSINT

Open Source Intelligence. Pronounced as "O-S-int" or "oh-sint."

OT

Operational technology.
Related: **IT**

OTA

Over-the-air (programming). Spell out on first use.
Related: **livestreaming**, **on-air**

OTP

Short for "one-time password" in security or "one true pairing" in online fandom communities. Spell out on first use.

outbound (adj.)

outbox (n.)

outbrief (n.)

outdated (adj.)

outgoing (adj.)

out-of-band (adj.), **OOB**

Spell out on first use.

out-of-date (adj.)

out-of-scope (adj.), **out of scope**

It was an out-of-scope server. The service was out of scope.

outsource, **outsourcing** (n. or v.)

OWA

Outlook Web Access.

OWASP

Every few years, the Open Web Application Security Project curates a list of the top 10 threats in information security. Pronounced "oh-wasp." https://www.owasp.org/

OWASP Zed Attack Proxy

A web vulnerability proxy and scanner.

-owned (adj.)

Always hyphenate.
Ex: client-owned

P

PaaS

Platform as a service. If spoken, say the whole phrase or "pass." Spell out on first use.
Related: **IaaS**, **KMaaS**, **SaaS**

page-hijacking attacks (n.)

pages (n.)

If it's a specifically titled web page, capitalize as in "the Forgot Password page."

page view (n.)

pain points (n.)

Corporate jargon; OK if used sparingly.

PAN

Short for primary account number or personal area network.
Related: **LAN**, **WAN**

PAN truncation (n.)

A credit card number display that only shows the last 4 digits, as in "*********1234."
Related: **PCI compliance**

parameterized queries (n.)

Also known as "prepared statements."

parameters (n.)

If writing about a type of parameter, use the normal font. If it's a named parameter, use the tech font, as in "`siteCode` parameter."

parse (v.), **parser** (n.)

passphrase (n.)

Related: **passwords**

pass-the-hash attack (n.)

password-protected (adj.)

passwords (n.)

Use the tech font for password examples, as in `letmein` and `123456`.
Related: **crack**, **credentials**, **dictionary-based attack**, **KeePass**, **Keywhiz**, **LastPass**, **Rockyou**, **salt**

PASTA

Process for Attack Simulation and Threat Analysis. A risk-based threat methodology.
Related: **CVSS**, **DREAD**, **threats**

Pastebin

A text storage site.

pastebin (n. or v.)

This either refers to a text storage site or to the act of publishing something anonymously (like credit card numbers) somewhere on the internet, not necessarily on Pastebin. The verb is informal.

patch (n. or v.)

An update to existing software that adds or enhances features, fixes bugs, or both.

patch cycle (n.)

PATCH request (n.)

Related: **requests**

path traversal (n.)

Also known as directory traversal.

PAX

Penny Arcade Expo. A series of gaming conventions. Pronounced "packs."

payload (n.)

PayPal

A mobile payment service.
Related: **Square Cash**, **Venmo**

paywall (n. or v.)

Avoid using this as a verb in formal writing. Try "blocked by paywall" or "requires a login" instead.

PBKDF2
A password-based key derivation function. Generally used interchangeably with cryptographic hash functions, although there are technical distinctions.
Related: **Balloon**, `bcrypt`, `scrypt`

PCB (n.)
Printed circuit board. Spell out on first use.

PCI
Short for the Payment Card Industry or Peripheral Component Interconnect. Briefly define on first use to clarify your intended meaning.

PCI compliance (n.)
Related: **GBLA compliance**, **PAN truncation**

PCI DSS
Payment Card Industry Data Security Standard(s).
Related: **PAN truncation**, **PIN**

PCIe
A serial expansion bus standard. Peripheral Component Interconnect Express.

PCRE
Perl-compatible regular expressions. Spell out on first use.

PDB file, **`.pdb` file**
Program database file.

PDF, **`.pdf` file**

PDQ Deploy
An admin tool.

PEBKAC
Problem exists between keyboard and chair. Pronounced "peb-cack." Informal.

peer-to-peer (adj.)

penetration testing, **pen testing** (n.)
Security testing in which evaluators mimic real-world attacks to identify ways to circumvent the security features of an application, system, or network. Pen testers look for chains of vulnerabilities that can be used together to gain more privileged or overall access.
Related: **APT**, **bug bounty**, **red teaming**

percussive maintenance (n.)
Fixing things by hitting them. Informal.

peripherals (n.)
Auxiliary devices, equipment, and accessories.
Related: **IIoT**, **IoT**

Perl
Practical Extraction and Report Language. A programming language. Do not spell out.

permissions (n.)
If writing about a type, use the normal font. If naming a specific permission, use the tech font, as in "SET_ALARM permissions."

PERSEC
Personal security. Used in military contexts.
Related: **InfoSec**, **OPSEC**

persistence (n.), **persistent** (adj.)

Persistent access means an attacker continues to access a system or application over a long period of time.
Related: **session fixation**, **shell**

Petya

A ransomware attack that hit in June 2017.
Related: **NotPetya**

pfSense

An open source firewall.

PGP

Pretty Good Privacy. An encryption program. Do not spell out.

phase, **Phase 1**

If writing about phases generically, lowercase. If dividing a project into sections, capitalize individual phases, as in "Phase 2."

PHI

Protected health information. Pronounced as letters. Spell out on first use.
Related: **ePHI**, **PHR**, **PII**

phishing (n.)

Also known as email phishing.
Related: **credentials**, **mirror site**, **social engineering**, **spear-phishing**

photobomb (n. or v.)

Photoshop

An Adobe graphics editor.

photoshop (v.), **photoshopped** (adj.)

PHP

Short for PHP: Hypertext Preprocessor. A programming language. Do not spell out.

PHP magic methods (n.)

Certain PHP methods including `_construct`, `_get`, and `_set`.

PHR

Personal health record.

phreaking (n.)

Informal.
Related: **hacker**, **social engineering**

`pickle`

A Python object serialization protocol.

pickled (adj.), **pickling** (n.)

Python object hierarchy converted into a byte stream (and therefore serialized).
Related: **unpickling**

PID

Process identifier. Pronounced as letters or "pidd." Spell out on first use.

PII

Short for personally identifiable information (e.g., full name, DOB, home address, phone number, or email address). Pronounced as letters. Spell out on first use.
Related: **DOB**, **fullz**, **PAN truncation**, **passwords**, **PIN**, **SSN**, **usernames**

PIN

Personal identification number. "PIN number" is redundant.

ping (v., n., or adj.)

> To initiate contact and wait for a response. Sometimes specifically refers to using the `ping` utility.

pirate (n. or v.), **pirated** (adj.)

> Informal.

The Pirate Bay (TPB)

pivot point (n.)

> A foothold that an attacker can use to gain further access into a system.

Piwik

> An open source analytics program.

pixel (px) (n.)

> When describing the dimensions of an image, list width then height with an "x" between, as in "100x100 px image." Put a space between the number and unit. No commas.
> Related: **numbers**, **units of measurement**

PKI

> Public key infrastructure. Spell out on first use.

plaintext or **plain text**

> Can refer to either unencrypted text (like cleartext), the input to a cryptographic system, or simple, unformatted text (not rich text). In our reports, it is not a synonym with cleartext. Define briefly on first use to clarify your intended meaning.
> Related: **cleartext**, **CPA**

playbook (n.)

playlist (n.)

PlayStation

> Related: **PS2**

PLD (n.)

> Payload; informal. Spell out on first use.

PL/SQL

> A programming language used by Oracle.

plug in (v.)

plugins (n.)

> Use the normal font, as in "the `wpgform` WordPress plugin."

p.m.

> Put a space after the number, as in "2 p.m. PST." Include the time zone if referring to a testing window or specific event.

PO (n.)

> Purchase order. Corporate jargon. Spell out on first use.

PoC (n.)

> Could refer to a "proof of concept" or a "point of contact" within the client company. Pronounced as letters or "pock." Spell out on first use for clarity.
> Related: **proof of concept**, **T-POC**

podcasts (n.)

> Capitalize podcast names and use the normal font, as in Security Conversations.
> Related: **titles of published works**

PoE

> Power over Ethernet.

POODLE attack (n.)

The Padding Oracle on Downgraded Legacy Encryption attack. A Man-in-the-Middle attack.

POP

Procedure-oriented programming. Can also mean point of presence or Post Office Protocol. Spell out on first use.

pop up (v.), **pop-up** (adj. or n.)

Pornhub

Related: **deepfakes**, **RedTube**, **Rule 34**

portal (n.)

An entranceway, e.g., an employee login page.

port numbers (n.)

Write without commas in the normal font (port 3389) unless it appears at the end of an IP address (`54.243.128.77`:`3389`). Related: **numbers**

ports (n.)

As in "USB port." Use this term in formal writing, but "jack" is fine elsewhere.

port scan (n.)

post (v. or n.)

post-apocalyptic (adj.)

Related: **grey goo**, **sci-fi**, **Skynet**

post-exploitation (adj. or n.)

Postgres or **PostgreSQL**

A type of database.

POST request (n.)

Related: **requests**

PowerBook

power cycle (v.)

PowerPoint

Related: **outbrief**, **segue**, **slideshow**

power user (n.)

preflight (n.)

In CORS, the browser sends an OPTIONS request before the actual request to check that the server's response headers allow the user-agent to send the request. The request is dropped if the server response does not allow the request.

preimage (n.)

An algorithm input, as in "cryptographic preimage attacks."

prepared statements (n.)

Same as parameterized queries.

preset (n., v., or adj.)

pretexting (n.)

Related: **social engineering**

Pretty Theft module

A BeEF module.

principle of least privilege (n.)

The concept that users should have only enough permissions as necessary for their role in a system, not more. Related: **need-to-know**

print out (v.), **printout** (n.)

prioritize (v.)
> To rank vulnerabilities by severity level in the environment.

privacy protection (n.)

privesc or **privilege escalation** (n.)
> Related: **elevation of privileges**

PRNGs (n.)
> Pseudo-random number generators. Equivalent to RNGs. (Pseudo refers to the fact that computers cannot make true random numbers; it is not a judgment about their security or quality.) Pronounced as letters. Spell out or briefly define on first use.
> Related: **CSPRNG**

ProcDump
> A tool used during security assessments.

Procmon
> Short for Process Monitor. A Windows monitoring tool.

prod
> The name for a system in production, as opposed to a development (dev) system. Informal.

program (n. or v.)

programming languages (n.)
> Related: **BASIC**, **Brainfuck**, **C♯FXL**, **Golang**, **JavaScript**, **Julia**, **Malbolge**, **Objective-C**, **OGNL**, **Perl**, **PHP**, **PL/SQL**, **Python**, **R**, **Ruby**, **SAML**, **Scala**, **VBScript**, **XML**, **YAML**

proof of concept (n.),
proof-of-concept (adj.) **(PoC)**
> The team created a proof of concept. It was a proof-of-concept payload.

protocol (n.)
> How computers talk to each other.

ProtonMail

provision (v.)
> As in "to provision one cluster on each account."

proxy, **proxying** (n. or v.)
> Moving data through an intermediate, usually so that it's easier to modify before sending it through. Proxy can refer to the intermediate or the act of moving the data.

PS2, **PS3**, **PS4**

PSK
> Pre-shared key. Spell out on first use.

PSR
> PHP Shared Recommendation. PSR-0 to PSR-3.

public address spaces (n.)

public-facing (adj.)

public key, **public key encryption** (n.)
    A public key is a type of cryptographic key.

publicly known (adj.)

PubNub

punctuation (n.)
    Related: **characters**, **metacharacters**

purple team (n. or v.)
    A security team that blends together aspects of red teaming and blue teaming.
    Related: **blue team**, **red team**

PUT request (n.)
    Related: **requests**

PuTTY
    A Windows SSH and Telnet client. Pronounced "putty."

pwdump
    A tool used during security assessments.

pwn (v. or n.)
    To defeat, to own. Pwn rhymes with own. Informal.

The Pwnie Awards
    An annual awards ceremony for hackers that takes place during Black Hat.

Python
    A programming language. Monty Python references in tool names are encouraged.
    Related: **spam**, **unpickling**

Q

QA
    Quality Assurance.
    Everyone needs an editor. :)

QLess
    A queue management platform.

QR code (n.)
    Quick response code. Do not spell out.

QSA
    Quality Security Assessor. Spell out on first use.
    Related: **PCI**

query string (n.)

queue (n.)

QuickTime

QWERTY
    A common keyboard layout originally designed for typewriters.
    Related: **Dvorak**, **keyboard keys**

R

R
    A programming language.

R2-D2
    A fictional astromech droid in Star Wars.

race condition (n.)

rainbow table (n.)
 Related: **decryption**, **encryption**, **hash**

RAM (n.)
 Random access memory. Do not spell out.

RankBrain
 A Google AI algorithm that helps to sort
 search results.

ransomware (n.)
 Malware that threatens to publish or delete
 data unless a ransom is paid.

RAR file, **.rar file**
 Related: **file extensions**

Raspberry Pi
 A single-board computer. Versions include
 Raspberry Pi 3 model B and Raspberry Pi
 Zero W.
 Related: **Danger Drone**

RAT (n.)
 Remote access trojan. Pronounced as "rat."
 Spell out on first use.

rate-limit (v.), **rate limiting** (n.)

ratios (n.)
 Write with a colon and no space, as in 32:9.
 Related: **numbers**, **pixel**

RBA (n.)
 Risk-based assessment. Spell out on first
 use.

RC4 NOMORE
 An attack that affects the RC4 cipher. RC4 is
 pronounced as letters or "ark-four."

RCE (n.)
 Remote code execution. Spell out on first
 use.

rcp
 Remote copy. Allows the transfer of files to
 and from another system over the network.

RCPT
 Short for receipt. A verb in SMTP.

RDP
 Remote Desktop Protocol. Spell out on first
 use in public-facing documents.

RDS
 Relational Database Service. Spell out on
 first use.

read access (n.)

readme file or **README file** (n.)

read-only (adj.)

read/write (adj.)
 As in "read/write privileges."

real-time (adj.), **in real time** (n.)

reCAPTCHA, **reCAPTCHAs** (n.)
 Google's proprietary CAPTCHA system.

[REDACTED]
Indicates a censored section of code, often passwords or PII. Use the tech font if it's part of a code snippet. Redact your images by drawing black boxes in image editing software outside of Word.

Reddit, **redditor** (n.)
Related: **AMA**, **subreddit**, **upvote**

Red Hat
Linux operating system.

Redis
An open source in-memory key value store.

RedLock
A Cloud DevOps vendor.

RedSnarf
A tool used during security assessments.

red team, **red teaming** (n.)
Red teaming is a type of offensive engagement. Define briefly on first use to clarify your intended meaning.

RedTube
Related: **Pornhub**, **Rule 34**, **YouTube Red**

reduce (v.)
To lower the likelihood of an attack. Not synonymous with "mitigate," which lessens the severity of an attack.

Referer
The famously misspelled HTTP referrer header.

reflect (v.), **reflected** (adj.)
An attack pattern in which a payload is copied verbatim onto a victim's context.

regex
Regular expression. Pronounced "redge-X" or "regg-X."

registry hive (n.)

remediation (n.), **remediated** (adj.)
The process of improving a system to a known good state in which elements of a vulnerability or impact have been eliminated.
Related: **unremediated**

remote access (n.)

remote desktop (v.)

replay attacks (n.)

replicants (n.)
Fictional androids in 1982's Blade Runner.

reportlet, **reportlets** (n.)

report names (n.)
If referring to a title or a report in general, capitalize it in the normal font, as in "the July 2017 APT Report." If referring to the specific filename or path, use the tech font.

repository or **repo** (n.)

reproducible (adj.)

requests (n.)
> Use the normal font for all types of requests.
> Ex: GET request, pull request

response-splitting (n.)

REST, **RESTful**
> Representational State Transfer.
> Web services.

restart (v.)

retcon (v. or n.)
> To retroactively change the continuity of a story in a "do-over." Informal.

retest (v. or n.)
> As in "this finding was not retested."

retweet (v. or n.)
> Related: **hashtag**, **RT**, **Twitter**

reuse (v. or n.)

reverse-engineer (v.)

reverse engineering (n.)

reverse proxy (n.)

reverser (n.)
> A reverse engineer. Informal.

rexec
> Short for remote execute. Pronounced "R-exec."

RFB
> The Remote Frame Buffer protocol.

RFC 1149
> A Standard for the Transmission of IP Datagrams on Avian Carriers: "Avian carriers can provide high delay, low throughput, and low altitude service."

RFC 1918
> The Request for Comment 1918 memorandum assigns private IP addresses.

RFID card (n.)
> Radio frequency identification card.

RFP
> A request for proposal. Spell out on first use in public-facing documents.

Rickmote Controller
> A rickrolling remote control created by BF's own Dan "AltF4" Petro in 2014.
> Related: **Chromecast**

rickroll (v.), **rickrolling** (n.)
> Related: **4chan**, **meme**

ride-share, **ride-sharing** (n., v., or adj.)

right-click (v.)
> Related: **double-click**

ringtone (n.)

RISC
> Reduced instruction set computing.
> Architecture used in some microprocessors.

risk (n.)

    The perceived threat of a security weakness based on the business impact, likelihood of exploitation, and cost to mitigate or reduce the threat.

RMI

    Remote method invocation.
    Spell out on first use.
    Related: **JMX**, **JVM**

RNGs

    Random number generators.

roadblock (n.)

roadmap (n.)

ROBOT attack (n.)

    Return of Bleichenbacher's Oracle Threat.

Rockyou, **Rockyou.text**

    A large password-cracking dictionary.

rogue access point (n.)

    Related: **Stingray**

rogue cell tower (n.)

    Also called a "cell-site simulator."

rollback (adj. or n.), **roll back** (v.)

root (v.)

    To gain root-level access, to jailbreak. Informal.

root or `root` (n.)

    Use the tech font when referring to a specific `root` account or user. Use regular font when referring to a more general instance, such as the root of an XML document or a web root.

rootkit (n.)

Root the Box

    An annual CTF competition and its supporting software infrastructure.
    Related: **war gaming**

ROP

    Return-oriented programming. Spell out on first use.

RoR

    The Ruby on Rails web application framework. Spell out or briefly define on first use.

RPC

    Remote procedure call.

RPG (n.)

    Role-playing game.

RSA

    This refers to a tech company, an annual San Francisco security convention, and an encryption algorithm. RSA stands for the last names of the 3 co-founders. Pronounced as letters. Do not spell out.
    https://www.rsaconference.com/

rsh

Short for remote shell. Allows the execution of non-interactive programs on another system.

RSS feed

Rich Site Summary. Do not spell out.

RT, **RT'd**, **RTs**

Retweets on Twitter. Informal.

RTF, `.rtf file`

Rich Text Format. A document file format.
Related: **file extensions**

RTFM

Read the fucking manual. Informal.
Related: **tl;dr**

Rubber Ducky

Related: **USB Rubber Ducky**

Ruby

A programming language.
Related: **RoR**

Rule 34

If it exists, there is porn of it. Informal.
Related: **Pornhub**, **RedTube**, **teledildonics**

rulesets (n.)

runas

A command to execute a program by "running as" another user.

runtime (n.), **run-time** (adj.)

The common language runtime. The runtime of Blade Runner. A run-time function or analytic. Run-time errors.

S

S3, **S3 buckets** (n.)

Simple Storage Service. An Amazon service.

SaaS

Software as a service. Pronounced "sass." Spell out on first use.
Related: **IaaS**, **KMaaS**, **PaaS**

safelist, **safelisting** (n. or v.)

A proposed alternative term to whitelisting. Not yet widespread.
Related: **blocklist**

salami slicing attack (n.)

Repeatedly stealing money in very small quantities.
Related: **bitcoin**, **cryptocurrency**

Salesforce

salt (v. or n.), **salted** (adj.)

In encryption, salted code has random values sprinkled in it to make it more difficult to decode. If two users have the same password, salting ensures that their hashes won't be the same.

same-origin policy (SOP) (n.)

Spell out on first use.

SAM file (n.)

Sequence alignment format file.

SAML

Security assertion markup language.
A programming language.
SAML rhymes with "camel."
Related: **a** vs. **an**

sandbox environment (n.)

sandbox escape (n.)

Modifying privileges in a system past the
manufacturer's intention in order to gain
root access. More generic than "jailbreak."

sandboxing (n. or v.)

sanitized (adj.)

SANS

The SysAdmin Audit Network Security
Institute. Pronounced "sans."

SASL

Simple Authentication and Security Layer.
Pronounced "sassle."

SCADA

Supervisory Control and Data Acquisition.

Scala

Programming language meant to address
criticisms of Java.

scannability (n.), **scannable** (adj.)

SCCM

System center configuration manager. Spell
out on first use.

Schannel

Short for Secure Channel. A Windows SSP.
Pronounced "ess-channel."

science fiction or **sci-fi** (n.)

Related: **AI**, **android**, **ansible**, **Aperture
Science**, **the Borg**, **bullet time**, **C-3PO**,
cyberpunk, **Cylons**, **deus ex machina**, **FTL**,
grey goo, **hyperspace**, **The Matrix**,
nanotechnology, **R2-D2**, **Skynet**,
spacetime, **TARDIS**, **The Three Laws of
Robotics**, **uncanny valley**

scope (n.)

The list of applications and environments
that a pen testing team tests for
vulnerabilities during an engagement.

scope creep (n.)

Informal.

</scorpion> or **Scorpion**

An inaccurate CBS TV show about hacking
that ran from 2014-2017.

scrape (v.), **scraping** (n.)

A script can retrieve (scrape) all of the data
from a web page in lieu of an API retrieving
the specifically desired information.

screencap, **screenshot** (n.)

Don't use these terms in formal writing
unless the method of capture is relevant to
the narrative. We recommend calling them
figures or using terms that are related to
the content, as in "the login page below."

screen-capture (v.)

screensaver (n.)

screen time (n.)

script, **scripting** (n.)

script code (n.)

scroll bar (n.)

scrum (n. or v.)
An Agile framework. Also the name of
meetings within that system.
Related: **Agile**, **sprint**

`scrypt`
A password hashing (not encryption)
algorithm. Pronounced "ess-crypt."

SCSI
Small Computer System Interface.
A parallel interface. Pronounced "skuzzy."

the Scunthorpe problem
Non-obscene words are sometimes blocked
because they contain a banned string of
letters, such as "sex" in "Sussex."
Related: **the Cupertino effect**

SDK
Software development kit. Spell out on first
use.

SDLC
Software development lifecycle. Sometimes
written as SDL. Spell out on first use.

SDN
Software-defined networking. Spell out on
first use.

sealioning (n.)
A type of trolling that involves persistently
asking questions in bad faith. Informal.

second-order (adj.)
As in "second-order SQL injection."

secure boot (n.)

security breach (n.)

security controls (n.)
Code and other tools (as opposed to policy)
that enforce repeatable security. There are
preventative (or preventive) controls,
detective controls, and corrective controls.

Security Conversations
A Bishop Fox podcast.

security key (n.)

Security Monkey
A Netflix tool for AWS configuration
monitoring.

security questions (n.)
Use the normal font with quotation marks
for prompts, as in "What was the name of
your favorite unpaid internship?"
Related: **error messages**

security through obscurity (n.)
The rightly maligned practice of making a
system extremely complex in the hope that
it will prevent anyone from figuring out how
to hack it.
Related: **principle of least privilege**

Security Without Borders
A collective of industry volunteers who help
others solve cybersecurity issues.
https://securitywithoutborders.org/

seed, **seeding** (n. or v.)

segmentation (n.)

segregate (v.), **segregation** (n.)
>Do not use. When referring to splitting up network parts, use "segment" or "separate."

segue (n.)

Segway

SegWit
>Cryptocurrency term. Segregated Witness.
>Related: **network segmentation**

self-driving vehicle (n.)

self-generated (adj.)

selfie stick (n.)

Semantic Versioning
>Also written as SemVer and semver.
>Related: **dependency hell**, **GitHub**

SEO
>Search engine optimization. Spell out on first use.
>Related: **algorithm**

serialization (n.)

servers (n.)
>Write the names and types of servers in the normal font, as in "SMTP server."

server-side (adj.)

`ServerSignature`

`ServerTokens`

service provider (n.)

servlet, **servlets** (n.)

servo, **servos** (n.)

session fixation (n.)

set up (v.), **setup** (n. or adj.)

SHA-1, **SHA-256**
>Secure Hash Algorithm. SHA is a series of cryptographic hash functions. In informal writing, these are often written lowercase and without hyphens, as in "sha256."

SharePoint
>A Microsoft product.

sharing economy (n.)
>Related: **Airbnb**, **Kickstarter**, **ride-share**

shell (n.)
>You can gain, get, pop, spawn, or drop a shell. Use "persistent remote access" in formal writing to explain the threat of shells to clients.
>Related: **shell script**

shell script (n.)
>Related: **reverse shell**, **root shell**, **webshell**

Shellshock
>A GNU Bash vulnerability. Also known as Bashdoor.

shelve (v.)
To discontinue the use of. Corporate jargon; use sparingly.
Related: **sunset**

Shodan

short-name (n.)
A shortened filename. Also called an 8.3 filename.

short-term (adj.)

shoulder surfing (n.)
Standing behind someone to steal their password, etc. Informal.

-side
Always hyphenate in adjectives.
Ex: client-side, server-side

SIEM
Security information and event management. Pronounced "sim." Spell out on first use.

Signal
A private messaging app.
Related: **WhatsApp**

signal-boost (v.)

signal-to-noise ratio (SNR) (n.)

signature (n. or v.)
Avoid as a verb if possible. Try "identify" instead.

signed long (n.)
A long, signed integer type of data.

sign in (v.), **sign-in** (n.)

sign out (v.), **sign-out** (n.)

sign up (v.), **signup** (n.)

Silicon Valley
A generic term for the tech industry based in the greater San Francisco Bay Area. Also the name of an HBO TV show about a startup company called Pied Piper.

Silk Road
A black market website that was operational between 2011 and 2014.

silo, **siloed** (v.)

silo, **silos** (n.)

SIM card (n.)

the singularity (n.)
Related: **AI**, **grey goo**, **Moore's Law**

sinkholing (n.)
Traffic redirection.

sink-to-source analysis (n.)

SIP
Session Initiation Protocol. If spoken, say the whole phrase, not the acronym. Spell out on first use.

Siri
Apple AI.
Related: **Alexa**, **Cortana**, **Google Assistant**

SIR Plan
Security incident response plan. Spell out on first use.

Sitecore

site map (n.)

Six Sigma

skeuomorph (n.)
A modern feature that is styled to look like an older, physical version. For example: the floppy disk Save button or the shopping cart icon used by online retailers.

skill set (n.)
Related: **soft skills**

Skynet
The fictional AI tech by Cyberdyne Systems that led to the creation of the Terminator.
Related: **AI**, **sci-fi**

SLA, **SLAs** (n.)
Service-level agreement. Spell out on first use.

SLAAC attack (n.)
Stateless Address Autoconfiguration.

Slack
A group messaging system.
Related: **IRC**

slash or **/**
Related: **characters**

slideshow (n.)

SLO (n.)
Service-level objective.

slug (n.)
A user-friendly URL. Informal.

smartglasses (n.)

smart lock (n.)
A generic term for an IoT lock.

smartphone (n.)
An internet-enabled cell phone.

smart safe (n.)

smartwatch (n.)

SmashBot
An unbeatable Nintendo Super Smash Bros. AI created by BF's own Dan "AltF4" Petro.

SMB
Server Message Block. Spell out on first use.

SMEs
Subject matter experts. Spell out on first use.

S/MIME
A public encryption key standard for MIME data.

SMS
Short message service.

SMTP server
Simple Mail Transfer Protocol.

Snapchat

sniff (v.)

To monitor and capture data packets that pass through a network.

snippet (n.)

An amount of quoted code. In formal writing, we use "a code excerpt" instead.

SNMP

Simple network management protocol.

SNMPwalk

A network monitoring tool.

Snyk

An open source security tools company. Pronounced "sneak" or "snick."

S/O or **s/o**

Shout out. A way to publicly thank someone online. Informal.

SOA

Short for Start of Authority or service-oriented architecture. Spell out on first use.

SOAP

Simple object access protocol. Spell out on first use.

SoC

System on chip. Spell out on first use.

social engineering (n.)

Related: **cold-call**, **phishing**, **pretexting**, **RFID card**, **spoof**, **tailgating**, **trick**

social media (n.)

Related: **emoji**, **Facebook**, **Instagram**, **Like**, **Reddit**, **Snapchat**, **Twitter**, **upvote**, **Web 2.0**, **Weibo**

Social Security number (SSN) (n.)

sockets (n.)

For types of socket, use the normal font. For a specific socket, put the socket type in the tech font, as in `jmxrxi` socket.

SOCKS

Socket Secure protocol.

Sofacy

A hacking group also known as APT28 or Fancy Bear.

soft skills (n.)

In contrast to hard programming skills, these are communication skills like listening, presenting, and personal networking.

soft token (n.)

software (n.)

Related: **-ware**

software piracy (n.)

solid state (adj.)

SSD is short for solid state drive.

SomaFM

DEF CON radio. https://somafm.com/

SOP (n.)

Same-origin policy. Spell out on first use.

source code (n.)

sources
> Write the names of sources in the tech font, as in "`script-src`."

SOW (n.)
> Statement of Work. Spell out on first use.

spacebar (n.)

spacetime (n.)

SpaceX

spam (v. or n.)

spear-phishing (n. or v.)
> Tailored phishing attacks that are aimed at a specific target.

-specific (adj.)
> Always hyphenate.
> Ex: client-specific, task-specific

Spectre
> A flaw that affects Intel, AMD, and ARM chipsets. It was publicly disclosed in January 2018. The James Bond supervillain organization is SPECTRE.
> Related: **Meltdown**

speedrun, **speedrunning** (n.)

SpEL
> Spring Expression Language.

SpellCheck
> A spelling bee competition for hackers that uses this style guide as the word list.

spellcheck (v.), **spell check** (n.)
> Related: **Cupertino effect**

SPF
> Sender Policy Framework. Spell out on first use.

sphere of control (n.)

spider (v.)
> Define on first use in public-facing reports.
> Related: **crawl**, **website**

splash page (n.)

split tunneling (n.)
> Related: **LAN**, **VPN**

Splunk
> A security tool, a SIEM.

spoof (v. or n.), **spoofing** (n.)
> To create a fraudulent, attacker-controlled replica of legitimate data like a website.
> Related: **phishing**

SpoofCheck
> A Bishop Fox tool by Alex DeFreese that determines if an email or domain has either DMARC or DKIM email protections.
> http://spoofcheck.bishopfox.com/

Spring Framework
> A Java application framework.

sprint (n.)
> Related: **Agile**, **scrum**

spyware (n.)

SQL

A programming language. Precede with "a," assuming that the reader pronounces it as "sequel." Sometimes pronounced as letters. Related: **a** vs. **an**

SQLi

The SQL injection application vulnerability. Pronounce the phrase or "sequel-eye."

sqlmap

A tool that finds and exploits SQL injections.

Square Cash

A mobile payment service. Related: **PayPal**, **Venmo**

Squarespace

Squid

A web proxy.

SSD

Solid state drive. A drive with no moving parts. Spell out on first use.

SSDLC

Secure software development lifecycle. Spell out on first use.

SSHD

Solid state hybrid drive. Spell out on first use.

SSH port (n.)

The Secure Shell protocol.

SSI

Server Side Includes.

SSID

Service Set Identifier. The human-readable name of a Wi-Fi network. Spell out on first use.

SSL Labs

SSL/TLS

Security protocols. Secure Sockets Layer/Transport Layer Security.

SSN

Social Security number. Don't capitalize "number." Spell out on first use. Related: **ATM**, **PIN**

SSO

Single sign-on. Spell out on first use.

SSP

Security support provider. Spell out on first use.

SSRF

Server-side request forgery. Related: **CSRF**

stack canaries (n.)

stack trace (n.)

staff augmentation (n.)

stageless (adj.)

As in "stageless Meterpreter payload."

stakeholder (n.)

start up (v.), **startup** (adj. or n.)

Start up the laptop. A startup company.

stateful (adj.)
>FTP is a stateful protocol.

stateless (adj.)
>HTTP is a stateless protocol.

status, **statuses** (n.)
>Related: **HTTP statuses**

STEAM
>Science, technology, engineering, arts, and math.
>Related: **STEM**

Steam
>A video game distribution platform.

steganography (n.)
>A strategy of hiding information to avoid its capture rather than openly disguising it through cryptography.

STEM
>Science, technology, engineering, and math.

sticky cookie (n.)

Stingray
>A surveillance tool that appears as a Wi-Fi network but actually takes information from the devices that connect to it.
>Related: **rogue tower**

STIX
>Structured Threat Information Expression.

stockholder (n.)

STP
>Spanning Tree Protocol.

stream, **streaming** (n. or v.)
>Related: **livestreaming**, **OTA**

The Streisand Effect
>The effect states that requesting the internet to not do something will cause the internet to deliberately do that thing more.

string extraction (n.)

string literal (n.)
>A string of characters written directly into the code.

Stuxnet
>A worm that sabotaged Iranian uranium enrichment in 2010.

su
>Short for superuser. Use the tech font, as in "su command."
>Related: **sudo**

subdirectory (n.)

subdomain (n.)

subkey (n.)

subnet (n.)

subreddit (n.)

subsection (n.)

subsystems (n.)

subtweet (n. or v.)
>Informal.

subvert (v.)

sudo
> Superuser do.
> Related: **su**

sudoer (n.)
> Someone who has sudo privileges. In formal writing, try "user with sudo privileges" if it's not part of a set expression.

sunset (v.)
> Corporate jargon for planned phasing out. OK to use sparingly in the infinitive. Also try "no longer support" or "decommission."

super admin or **superadmin**
> Related: **admin**

superclasses (n.)
> If writing about a type of superclass, use the normal font. If it's the name of a superclass, use the tech font, as in `Throwable`.
> Related: **classes**

SuperHappyDevHouse (SHDH)
> A type of hackathon party.

superuser (n.)

surveillance software (n.)
> Related: **Big Brother**, **CCTV**

SVN
> Apache Subversion.

Swagger
> Open source software framework and tools to build, design, and document APIs.

sweepstakes (n.)

Sweet32 attack (n.)

SWF file, `.swf file`
> Pronounced "swiff."
> Related: **file extensions**

Symfony
> A PHP framework.

sync (n. or v.), **syncing** (v. or adj.)

`sysadmin user` (n.)

syslog server (n.)

systems (n.)
> If writing about a specific system, use the tech font, as in "`dev_test` system." Otherwise, use the normal font.

systematically (adv.)

systemic (adj.), **systemically** (adv.)

system on chip (SoC) (n.)
> Spell out on first use.

T

table-top modeling (n.)
> Related: **blue teaming**, **threat modeling**

tag stripping (n.)
> Related: **metadata**

tailgating (n.)
> Entering a secure area by tagging along with someone who has proper credentials.

tail of the file (n.)

The last 10 lines of a file. It can be requested through the command `tail`.

tailor (v.)

Also "hone" or "refine."

take over (v.), **takeover** (n.)

An attacker could take over the system. It was a complete system takeover.

TARDIS

Time And Relative Dimension In Space. The fictional police box-shaped spacecraft and time machine used in Doctor Who. It's bigger on the inside.

target, **target system** (n.)

Related: **red teaming**, **trophy**

tarpitting (n.)

The deliberate slowdown of a network to contain or deter an attack.

Tastic RFID Thief (n.)

A Bishop Fox tool that can copy RFID credentials up to three feet away.

TCP/IP

Transmission control protocol/internet protocol. Wired Style calls it "the mother tongue of the internet."
Related: **UDP**

tech-savvy (adj.)

Tectia SSH

TED Talks and **TEDx[city]**

Short for technology, entertainment, and design. Global nerd conferences. Do not spell out.

TEE model (n.)

Short for Trusted Execution Environment. A co-processor on ARM (found on Android).

teledildonics (n.)

Telemetry API

telephony pen testing (n.)

Related: **social engineering**

teleprompter (n.)

Telnet

A remote login protocol.

terminate (v.)

To end or close, as in a program.

test bed (n.)

text box (n.)

text message (n.)

tgrep

Pronounced t-grep.
Related: **grep**, **ngrep**

they

Use singular they. As with all language, be mindful of possible clarity issues.

thick client (n.)

A computer that provides rich functionality independent of the server. Also called a fat client; don't use "fat client" in formal writing.

thin client (n.)

The opposite of a thick client.

third party (n.), **third-party** (adj.)

An external party like a vendor that exists outside of the company-user relationship.

threats (n.)

Security threat categories include competitor, hacktivist, insider, dealer, nation state, and third-party integrator.
Related: **corporate espionage**

threat hunting (n.)

Defensive security.
Related: **blue team**

threat modeling (n.)

Exercises that run through risk assessment procedures or incident response (IR) plans. Also called table-top modeling.

The Three Laws of Robotics

Written by Isaac Asimov. "1: A robot may not injure a human being or, through inaction, allow a human being to come to harm. 2: A robot must obey orders given to it by human beings except where such orders would conflict with the First Law. 3: A robot must protect its own existence as long as such protection does not conflict with the First or Second Law."
Related: **AI**, **Boston Dynamics**, **CAPTCHA**, **challenge response mechanism**, **cyborg**, **reCAPTCHA**, **Turing test**

throughout

throughput (n.)

The total amount of data transmitted over a link per unit of time.
Related: **badput**, **goodput**

throw, **threw** (v.), **thrown** (adj.)

When the code throws an error, it announces that something is wrong that the code cannot fix. Thrown errors can be "caught" by other portions of code.

`Throwable`

tikzpeople (n.)

LaTeX emoji.

tilde (n.)

Tilde is the [~] character used in coding and in the Spanish letter ñ.

tilde enumeration (n.)

time-boxed (adj.)

Describes engagements that are limited by scoped hours.

timeframe (n.)

time-lapse (adj.)

timeline (n.)

timeout (n.), **time out** (v.)

timestamp (n.)

time zone (n.)

titles of published works

Titles of books, movies, podcasts, TV shows, and video games do not often appear in our formal writing. When they do, we write them in title case, as in Snow Crash. If the title does not stand out on its own, add quotation marks, as in the dystopian novel "We" or the video game "E.T."

TKIP

Temporal Key Integrity Protocol.
An encryption protocol. Do not spell out.

TLAs (n.)

Three-letter agencies. Refers to government agencies like the CIA, FBI, and NSA. Informal.

TLD, **TLDs** (n.)

Top-level domain. Spell out on first use.

tl;dr or **TL;DR**

"Too long; didn't read." Informal.
Related: **RTFM**

TLS

Transport Layer Security. The replacement for Secure Sockets Layer (SSL).

TOCTOU bug

Short for "time of check to time of use."
A software issue that occurs between checking a condition and using the results of the check. Pronounced "tock-too."
Related: **race condition**

tokens (n.)

When discussing a type of token, use the normal style, as in "OAuth bearer token." If it's a specific token, use the tech font for the name only, unless it is linked to the word "token" as in "`oauth_token`."

tokenization (n.)

toolbar (n.)

toolchain (n.)

Tor

Short for The Onion Router. A privacy-focused web browser. Don't write as TOR.
Related: **I2P**, **`.onion sites`**

torrent (n.)

Torx

A hexalobular screwdriver head shape.

TOTP

Time-based One-time Password.
An algorithm. Spell out on first use.
Related: **HMAC**

touchpad (n.)

touchscreen (n. or adj.)

tower defense (n.)

A genre of games in which the player builds defenses to survive wave after wave of enemy attackers.

T-POC

Technical point of contact. Pronounced "tee-pock." Spell out on first use.
Related: **PoC**

traceback (adj. or n.)

Transmetropolitan
A comic book series that follows the journalist Spider Jerusalem through a dystopian future city.

trapdoor (n.)

trend line (n.)

triage (n. or v.)

trick (v.)
OK in social engineering engagements. Also consider coerce, force, or prompt.

trigger (v.)

trim range, **trim value** (n.)
Related: **denial of service**

trivial (adj.)
If describing an easy-to-bypass security measure, choose a more descriptive word like insignificant, unsophisticated, or easily overcome. OK in the phrase "Although non-trivial to implement…"
Related: **commodity hardware**

trojan (n.)
Malware that masquerades as something legitimate.

troll (n. or v.), **trolling** (n.)
Hateful or intentionally ignorant behavior that intends to cause strong reactions and waste time. Don't feed the trolls.
Related: **4chan**, **dox**, **flame war**, **Gamergate**, **sealioning**, **The Streisand Effect**

trophy (n.)
A prized target within an environment. OK in formal writing if trophies have been established with the client.
Related: **red teaming**, **target**

troubleshoot (v.)

TrueCrypt

trust boundary (n.)

try-catch block (n.)
An exception-handling strategy.

T-SQL
A programming language used by MS SQL Server.

TTD
Time to detection. Spell out on first use.

TTP, **TTPs**
Tactics, techniques, and procedures. Used during threat modeling exercises. Spell out on first use.

Tumblr

TunnelBear VPN

Turing test
Are you a robot? Let's find out.

Turla

A hacking group also known as Snake or Uroburos.

tvOS

TW

Trigger warning. Spell out on first use.

tweet (v. or n.)

Twitter

A microblogging website. Our account is @bishopfox.
Related: **hashtag**, **RT**, **subtweet**, **tweet**

Twitterstorm

two-factor authentication (2FA) or **(TFA)**
Related: **MFA**

typosquatting (n.)

Also called URL hijacking.
Related: **domain squatting**, **URL**

U

UDP

User Datagram Protocol. A faster, more lossy alternative to TCP. I was going to tell you a UDP joke, but I'm afraid you might not get it.

UGT

Universal Greeting Time. On IRC, it's always morning when you log on and always night when you log off. Informal.

UI (n.)

User Interface.

uncanny valley (n.)

The disturbing nightmare gap between semi-realistic artificial faces and actual living humans. Informal.

uncredentialed (adj.)

Unicode Consortium

A nonprofit that decides internet standards for emoji and Unicode.

unicorn (n.)

Corporate jargon for a successful startup. Informal.
Related: **BYOD**, **coworking space**, **crowdfund**, **sharing economy**, **startup**

Unicron

A fictional, planet-eating robot from the Transformers universe.

units of measurement

Pay attention to unit capitalization (GB, Gb, GiB). Don't pluralize units, as in "500TB." Don't put a space between the number and the unit for things like MB and GHz. Do use a space for some units like dpi, fps, and ms. Use the International System of Units (SI) for further guidance.
Related: **bps**, **bytes**, **dpi**, **GBps** vs. **Gbps**, **KB**, **kHz**, **MB**, **MBps** vs **Mbps**, **ms**, **numbers**, **pixel**, **p.m.**

Unix or **UNIX**

An operating system. Not an acronym. Pronounced "you-nicks."
Related: **MINIX**

unpickling (n.)
> In Python, the process of taking something out of serialization.

The Unreal Engine

unremediated (adj.)
> We prefer to write that "the issue was not remediated" to avoid implying that the problem was solved and then unsolved.
> Related: **remediated**

unsanitized (adj.)
> Means that security checks have not been performed. Typically pertains to user-supplied data. "Sanitized" data should be safe for an application to ingest, whereas unsanitized data may not be.

unserialize (v.), **unserialized** (adj.)

Untwister
> A tool that predicts random numbers from insecure algorithms.

unvalidated vs. **invalidated**
> Invalidated data has been checked and deemed invalid. Unvalidated data has not been checked at all.

upload (v. or n.)
> The opposite of download.

uppercase (adj. or v.)
> Better to write "put in uppercase" but if needed, "uppercased" is OK.

UPS
> Uninterruptible power supply. Spell out on first use.

uptime (n.)
> The opposite of downtime.

up-to-date (adj.)

upvote (v. or n.)
> Term used to approve stories on Reddit. Analogous to a Facebook "like."

URI, **URIs**
> Uniform/Universal Resource Identifier. Both URLs and URNs are subsets of URIs. Use the tech font. Pronounced as letters.
> Related: `data:`

URL, **URLs**
> Uniform/Universal Resource Locator. Use the tech font for URLs (including IPv6). Avoid starting sentences with URLs. Write variable segments in bold color, as in `http://zombo.com/`**`[variable]`**. If the URLs are meant to be clickable links, underline in the normal font and color in blue. URL is pronounced letter by letter or, more rarely, as "earl."
> Related: **.NET Framework**

URL-encoded (adj.), **URL encoding** (n.)
> A specific kind of encoding used by browsers for characters outside the ASCII set and certain other characters (e.g., spaces and ampersands).

UrlScan
> A Microsoft application.

URL shortener, **URL-shortening** (n.)

URN, **URNs**

Uniform/Universal Resource Name.
Pronounced as letters.
Related: **URI**

USB drive (n.)

A storage device that connects via USB.
A small, form-factor USB drive is a thumb
drive. A flash drive is any drive with flash
memory (solid state/NAND or USB).

USB Rubber Ducky

A keyboard HID that automates keystrokes.
Rubber Ducky is OK on second use.

USDZ, `.usdz file`

Universal Scene Description Optimized.
A file format for AR.

use after free (n.), **use-after-free** (adj.)

A vulnerability.

Usenet

A bulletin board system that preceded the
modern internet and still exists.

user base (n.)

usernames (n.)

Write usernames in the tech font, as in
`admin` or `Zero Cool`.

user-supplied (adj.)

UTF-8

A Unicode character encoding. (Don't
pronounce the dash).

UX

User experience. Spell out on first use.

V

values (n.)

If writing about a type of value, use the
normal font. If it's a specific value, use the
tech font, as in "`licenseID` value."

Vault

Software for secret management.

VBScript

A Microsoft programming language.

VDI

Virtual desktop infrastructure. Spell out on
first use.

vendor (n.)

A third-party business that provides a
service to a client.

Venmo

A mobile payment service.
Related: **PayPal**, **Square Cash**

VeraCrypt

Disk encryption software.

verbose (adj.)

Verbose logs, banners, and error messages
reveal more information about underlying
structures to users than is necessary.

verb tunneling (n.)

version numbers (n.)

Use the normal font for software version numbers, product model numbers, serial numbers, and builds.

VGA

Video graphics array.

via

victim (n.)

Better to say user, patient, customer, or consumer, but this is OK sparingly.

videoconferencing (n. or adj.)

Related: **audio conference**

video games (n.)

Capitalize video game titles in the normal font, as in Myst and Grim Fandango.
Related: **8-bit**, **BMO**, **E3**, **FPS**, **Game Boy**, **GameCube**, **game jam**, **GaymerX**, **motion capture**, **Nintendo Switch**, **PAX**, **PlayStation**, **PS4**, **RPG**, **SmashBot**, **speedrun**, **Steam**, **titles of published works**, **tower defense**, **Wii**, **Xbox**

Vim

A text editor.

Vimeo

A video-sharing company.

viral (adj.)

Rapidly popular, especially online.
Related: **meme**

virus (n.)

Related: **malware**

virtual reality (VR) (n.)

VLAN

Virtual local area network. Pronounced "vee-lan."

VLCM

Vulnerability Lifecycle Management. Spell out on first use.

vlog (n. or v.)

VM

Virtual machine. Spell out on first use in public-facing documents.

VMware

VNC

Virtual Network Computing. Spell out on first use.

voicemail (n.)

VoIP

Voice over Internet Protocol. Pronounced "voyp."

VPC

Virtual private cloud. Spell out on first use.

VPN

Virtual private network. Spell out on first use.

VR

Virtual reality.
Related: **AR**, **Oculus Rift**

VSA

Vendor security assessment. Spell out on first use.

Vuforia

An AR platform.

vulnerability or **vuln** (n.)

Any condition, configuration, or state that increases an asset's logical, informational, or physical exposure to loss of availability, integrity, or confidentiality. Vuln is informal.

vulnerability scan (n.)

An assessment of a target using vulnerability-scanning tools to detect security weaknesses.

vulnerability scanner (n.)

An automated application or system designed to assess computers, computer systems, networks, or applications for weaknesses.

vulnerable (adj.)

W

WAF, **WAFs**

Web application firewall. Pronounced as "waff." Spell out on first use.

WAMP

Short for Windows, Apache, MySQL, and PHP (its original four components). A software bundle. Do not spell out. Related: **LAMP**

WampServer

WAN

Wide area network. Related: **LAN**

WannaCry

A ransomware attack that hit in May 2017.

war-dialing (n.)

war-driving (n.)

-ware (n.)

Always close -ware compounds. Ex: bloatware, freeware, malware, middleware, vaporware, VMware, WarioWare

WarGames

A 1983 movie about a NORAD AI that wants to play a game of thermonuclear war. Related: **WOPR**

war gaming (n.)

Also known as threat modeling or table-top gaming, e.g., capture the flag (CTF) at a security conference.

wasm

WebAssembly. Pronounced "wass-im."

watch list (n.)

watermark (n. or v.)

Watson

An IBM productized question-answering AI, famous for winning Jeopardy!

the web (n.)

Web 2.0

web app (n.)

web application (n.)

web-based (adj.)

web browser or **browser** (n.)
Related: **Chrome**, **H-Browser**, **IE**, **Mozilla Firefox**, **Tor**

webcam (n.)

webcomic (n.)

web console (n.)

WebDAV
Web Distributed Authoring and Versioning.

web directory (n.)

web forum (n.)

webhooks (n.)
User-defined HTTP callbacks.

webinar (n.)

web page (n.)

web proxy (n.)

web root (n.)

web server (n.)

webshell (n.)

website or **site** (n.)
Related: **homepage**, **portal**, **splash page**, **Squarespace**, **TLD**, **WordPress**

WebSocket, **WebSocket Protocol**

WebSphere
An IBM product.

webtree or **web tree** (n.)
Use "directory structure" instead.

WebView
An Android system component.

WeChat
A popular Chinese chat app also known as Weixin (微信).

weeklong (adj.)

Weibo
A Chinese microblogging site.
Related: **WeChat**

well-formed (adj.)

WEP
Wired Equivalent Privacy. A wireless network encryption protocol. Do not spell out.

Wget
A GNU tool. Pronounced "W-get."

WhatsApp
A messaging app.

white-box testing (n.)

WhiteHat
> A company that makes a vulnerability scanner and supporting services.

white hat (n.)

whitelist (v.) **white list** (n.)
> Related: **safelist**

whitepaper (n.)
> A formal technical report.

white space (n.)

whoami
> A command to identify the user.

whois command, **WHOIS database** (n.)
> A query protocol.

whole disk encryption (n.)

-wide (adj.)
> Always hyphenate.
> Ex: company-wide, system-wide

widescreen (n. or adj.)

widgets (n.)
> If it's the name of a specific widget, write it in the tech font, as in `Video` widget.

WIDS
> Wireless intrusion detection system. Spell out on first use.

Wi-Fi
> According to the Wi-Fi Alliance, Wi-Fi does not stand for wireless fidelity. Do not write as WiFi or wifi.

WiFi Pineapple

Wii

wiki (n.)
> A collaborative, editable blog.

WikiLeaks

Wikipedia
> A user-curated online encyclopedia. Sometimes the findings we disclose are so new that the best resources on the topic are Wikipedia articles.
> Related: **Appendix B**

wildcards (n.)
> Wildcard characters like [`*`] and [`%3f`] can either stand in for a single character or a string of characters.
> Related: **metacharacters**

Windows
> Microsoft OS.

Windows Registry

Wine
> "Wine Is Not an Emulator." Software that emulates Windows for macOS or Linux systems. Wine is a recursive acronym.

WinSCP
> Short for Windows Secure Copy. A Windows SFTP and FTP client.

wireless signal bleed (n.)

Wireshark
> A listening tool.

wiretap (n. or v.)

woot or w00t
A joyous internet exclamation.
Related: **leet**, **pwn**

WOPR
The fictional NORAD AI featured in the 1983 movie WarGames. Pronounced "wopper."

WordPress

word processor (n.)

workflow (n.)

word list (n.)

work stream (n.)

world-readable (adj.)
Describes files or directories that any user could read.

world-writable (adj.)
Describes files or directories that any user could write to.

WPA, **WPA2**
Wi-Fi Protected Access. Wireless network security protocols. Do not spell out.

write-only (adj.)

write out (v.)

WSDL file, **`.wsdl file`**
Pronounced "wazz-dull."

WWDC
Worldwide Developers Conference. An annual Apple conference in the Bay Area.

`www`
The World Wide Web.
Related: **`http://`**

WYSIWYG
Short for "what you see is what you get." Pronounced "wizzy-wig." Informal.

X

X.509
Certificates used in internet protocols like SSL/TLS.

x86

Xbox

xDedic
An RDP tool.

XHR
XMLHttpRequest. An API. Spell out on first use.

XLSX file, **`.xlsx file`**
An XML-based spreadsheet file.

XML file, **`.xml file`**
XML is short for extensible markup language. Use "an" before "XML file."
Related: **a** vs. **an**, **file extensions**

XOR encryption (n.)

Short for exclusive or. Pronounced "exor."

Xpp3

An XML parser.

XSS

XSS is short for cross-site scripting. Pronounced as letters or spoken as the whole phrase. Write as "an XSS." Spell out on first use.

XXE

An XML external entity. XXE is pronounced as letters or spoken as the whole phrase. Write as "an XXE." Spell out on first use.

Y

YA...

Short for "Yet Another." Yahoo! is YACC: Yet Another Compiler Compiler.

YAML

Short for "YAML Ain't Markup Language." A human-readable serialization language. YAML is a recursive acronym.

YAWAST

A tool used during security assessments.

years (n.)

Use the normal font. No apostrophes for plural years, as in "from the 1980s." Use apostrophes for events from that year, as in "1999's song of the summer." Use a comma between day and year, as in "July 4, 2000."

Yemen Cyber Army

A hacking group that may be Iranian.
Related: **false flag**

YML file, `.yml file`

Related: **file extensions**

YouTube, **YouTube Red**

YubiKey

A hardware authentication device. Pronounced "you-bee-key."

YUM

A Linux software update mechanism. Yellowdog Updater Modified.

Z

zero-day (n. or adj.)

A vulnerability that has been publicly known for zero days, as in "zero-day attacks." In formal settings, use publicly undisclosed vulnerability or previously undisclosed vulnerability.
Related: **0-day**

zero growth model (n.)

ZIP archive (n.)

zip bomb (n.)

ZIP code (n.)

ZIP file, `.zip file`

Related: **file extensions**

APPENDIX A: DECISION-MAKING NOTES

How We Choose Our Terms

Three guiding principles help us decide which terms to use and how to write them:

1. We need to be accurate.

- Our readers need to understand the findings in our reports so that they can implement our recommendations. We live and breathe information security, so we can deviate from non-industry authorities (like AP style) if their advice is outdated or too broad for our audience. Our terms should reflect the way that real attackers perceive and exploit systems.

2. We want to be consistent.

- Many hands touch every report. We want each finding to have the same voice, even if a team of seven collaborated on it. We engage with the same clients through multiple assessments, so we use terminology consistently to help give our reports a logical narrative that non-technical readers can follow as well.

3. We'd like to look good at the same time.

- Beautiful documents are inviting and easier to read. We amplify the quality of our technical work through the look and feel of our reports. We use structural clarity and white space to give our dense technical information some room to breathe.

These principles are listed in order of priority. Sometimes we deliver reports that are accurate and internally consistent that do not line up with previous reports. We aspire to align our vocabulary with the most current and sustainable standards, but deadlines and custom engagements require us to find a balance between speed and perfection.

This prioritization also means that when punctuation and spacing are crucial to the technical understanding of a certain code snippet or URL, we choose to make things look accurate rather than stylish.

EXAMPLE: THE NONBREAKING HYPHEN

An editor might suggest using the nonbreaking hyphen to condense a long URL down from four lines to two. However, clients may directly copy our report text into Terminal or a text editor where the standard hyphen [–] and the nonbreaking hyphen [–] are two separate Unicode characters. Replacing one with the other would alter the sequence and make the finding unreproducible, so we keep the URL as is. It's not as pretty, but it is functional.

How to Codify Your Own Terms

Security vocabulary is rapidly changing and expanding, so it's likely that you'll need to tame new tech terms on your own, in between versions of this style guide. To codify a term for your own use, determine the following:

- Which type of font should be used?
    - fixed-width (`monospace`) or variable width font
- How is the term capitalized by its creators and its users?
    - Ex: BeEF, iPhone, JavaScript, Metasploit, PuTTY, QWERTY
- If it's an acronym, how is it pronounced by its creators and its users?
    - Ex: SQL, ngrep, Hping, NAND
- If it's an acronym, should its components be written out on first use or never?
    - Ex: 3G, APT, IP, RSA
- Can it be confused with another term? If so, how to consistently distinguish?
    - Ex: crypto, fingerprints, MFA, shell
- If it's a compound, how it is written as a noun vs. as an adjective?
    - Do spacing/hyphens change the meaning, or is it a personal preference? If it's a personal preference, decide a company-wide preference.

Capitalization, spacing, and punctuation all matter—often for different reasons when writing code and writing reports. Be sure to consider all three when determining how to incorporate new terms in your documents and presentations.

In the likely event that you find a term that is written or pronounced inconsistently, contact the creators and follow their preference. If that's not possible, check their most recent documentation. Ultimately, make a choice, write it down, and use it consistently, but be willing to revise your answer in the future.

How to Write Terms That Don't Follow Your Style

If a client writes terms differently from your style, make a choice depending on the situation:

1. If it's in a quoted code excerpt (including typos), leave it as is.
2. If directly referring to a product name or heading in their environment, spell and capitalize it their way, as in E-mail Address. Sometimes we also put the term inside quotation marks to separate its specific meaning from the generic term.
3. If we are referring to the generic term, we spell it our preferred way, as in email address. If examples in your code snippets or figures use the client's spelling, check to see if the spelling difference might confuse the reader or change the meaning. If you foresee a problem, talk to your editor.

If you prefer using more progressive or less common terms, mention the older variant on your first use so that your reader can connect to previous documentation on that topic. Ex: Implement it through a primary/replica model (previously known as "master/slave").

APPENDIX B: EXTERNAL RESOURCES

These resources can level up your security knowledge and technical writing skills. The sections below are divided into the following categories: our reference materials, technical definitions, internet-savvy style guides, writing advice, introductory hacking resources, security organizations and publications, and additional resources.

Our Reference Materials

Associated Press. *The Associated Press Stylebook 2018 and Briefing on Media Law.* Revised, Updated Edition. New York: Basic Books, 2018. https://www.apstylebook.com/

Editors of Webster's New World College Dictionaries. *Webster's New World College Dictionary,* Fifth Edition. New York: Houghton Mifflin Harcourt, 2016.

Microsoft Corporation. "User interface elements." In *Microsoft Manual of Style,* 93–98. Redmond: Microsoft Press, 2012.

Technical Definitions and Explanations

"AWS in Plain English." ExpeditedSSL. Accessed June 21, 2018. https://www.expeditedssl.com/aws-in-plain-english

Begum, Farzana. "Becoming Acquainted with Bitcoin and Cryptocurrency Lingo." *BTCManager.com.* November 12, 2017. Accessed June 21, 2018. https://btcmanager.com/becoming-acquainted-bitcoin-cryptocurrency-lingo/

"CVE List Home." *Common Vulnerabilities and Exposures.* Accessed June 21, 2018. http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2017-12149

"Glossary." OWASP. Updated February 11, 2017. Accessed June 21, 2018. https://www.owasp.org/index.php/Category:Glossary

"Glossary." Symantec. Accessed June 21, 2018. https://www.symantec.com/security_response/glossary/

"Glossary of Key Information Security Terms." Edited by Richard Kissel. NIST, May 2013. Accessed June 21, 2018. http://nvlpubs.nist.gov/nistpubs/ir/2013/NIST.IR.7298r2.pdf

"Glossary of Security Terms." SANS. Accessed June 21, 2018. https://www.sans.org/security-resources/glossary-of-terms/

Newton, Harry with Steven Shoen. *Newton's Telecom Dictionary*; 30th Updated, Expanded Anniversary Edition. Telecom Publishing, February 2016.

"PCMag Encyclopedia." PCMag. Accessed June 21, 2018.
https://www.pcmag.com/encyclopedia/index/a

"researchtls and ssl cipher suites." *The Sprawl.* Accessed June 21, 2018.
https://www.thesprawl.org/research/tls-and-ssl-cipher-suites/

"RFC 9494 – Internet Security Glossary, Version 2." The IEFT Trust. August 2007. Accessed June 21,
2018. https://tools.ietf.org/html/rfc4949

"Threatsaurus: The A-Z of computer and data security threats." SOPHOS in collaboration with the
Center for Internet Security, 2013. Accessed June 21, 2018.
https://www.sophos.com/en-us/medialibrary/PDFs/other/sophosthreatsaurusaz.pdf

Internet-savvy Style Guides and Advice

Apple Style Guide. July 2017 Apple, Inc. February 1, 2017. iBook.

Favilla, Emmy and Megan Paolone. *Buzzfeed Style Guide.* BuzzFeed, Inc. Accessed June 21, 2018.
https://www.buzzfeed.com/emmyf/buzzfeed-style-guide

"Google Developer Documentation Style Guide." Google Developers. Updated June 8, 2017. Accessed
June 21, 2018. https://developers.google.com/style/

Hacker Dictionary. Accessed June 21, 2018. http://www.hacker-dictionary.com/terms

Hale, Constance and Jessie Scanlon. *Wired Style: Principle of English Usage in the Digital Age.* New
York: Broadway, 1997.

Hughes, Brianne. "Chaos in the Machine: Why Security Needs a Style Guide." Presented at
CactusCon, Phoenix, AZ, September 29, 2017. Accessed June 21, 2018. https://youtu.be/Yl-
4BWKpC28

"The Jargon File." Version 4.4.7. Accessed June 21, 2018. http://www.catb.org/jargon/html/

Kopp, Rachel and Ganz, Steven. *Valley Speak: Deciphering the Jargon of Silicon Valley,* 2016. Genetius
Publishing. May 17, 2016. http://www.siliconvalleyspeak.com/

"MailChimp Content Style Guide." MailChimp. 2017. Accessed June 21, 2018.
https://styleguide.mailchimp.com/

PenzeyMoog, Caitlin and Laura M. Browning. "There are two e's in "Wookiee," damn it: A message
from the A.V. Club copy desk." The A/V Club. Updated December 18, 2015.
http://news.avclub.com/there-are-two-e-s-in-wookiee-damn-it-a-message-from-1798287457

Sideways Dictionary. Accessed June 21, 2018. https://sidewaysdictionary.com/#/

soulaklabs. "Bitoduc.fr: termes informatiques en français." Accessed June 21, 2018. bitoduc.fr
- A French and English hacker dictionary.

The tidyverse style guide. Accessed June 21, 2018. http://style.tidyverse.org/index.html

Wikipedia Manual of Style. Updated January 15, 2018. Accessed June 21, 2018.
https://en.wikipedia.org/wiki/Wikipedia:Manual_of_Style

Yahoo Style Guide: The Ultimate Sourcebook for Writing, Editing, and Creating Content for the Digital World. Edited by Chris Barr and the senior editors of Yahoo!. New York: St Martin's Griffin, 2010.

Yin, Karen. Conscious Style Guide. Accessed June 21, 2018. http://consciousstyleguide.com/

Writing Advice
"Accessibility evaluation for web writers." *4 Syllables.* Accessed June 21, 2018.
http://4syllables.com.au/articles/writers-accessibility-evaluation/

Casagrande, June. *It Was The Best of Sentences, It Was the Worst of Sentences: A Writer's Guide to Crafting Killer Sentences.* New York: Ten Speed Press, 2010.

Clark, Roy Peter. *Writing Tools: 55 Essential Strategies for Every Writer.* New York: Little, Brown, 2013.

Favilla, Emmy. *A World Without Whom: The Essential Guide to Language in the BuzzFeed Age.* New York: Bloomsbury, 2017.

Introductory Hacking Resources
Clark, Ben. *RTFM: Red Team Field Manual.* 1.0 edition. CreateSpace Independent Publishing Platform, 2014.

Hak5. YouTube Channel. Accessed June 21, 2018. http://www.youtube.com/hak5

LiveOverflow. YouTube Channel. Accessed June 21, 2018. https://liveoverflow.com/

Paar, Cristof. "Introduction to Cryptography Lecture Series." YouTube Channel. 2010. Accessed June 21, 2018. https://www.youtube.com/channel/UC1usFRN4LCMcfIV7UjHNuQg/videos

Stuttard, Dafydd and Marcus Pinto. *The Web Application Hacker's Handbook: Finding and Exploiting Security Flaws.* Indianapolis: John Wiley & Sons, 2011.

Sullivan, Bryan and Vincent Liu. *Web Application Security, A Beginners Guide.* McGraw-Hill, 2001.

Yaworski, Peter. *Web Hacking 101: How to Make Money Hacking Ethically.* https://leanpub.com/web-hacking-101

Security Organizations and Publications

"Blog." Bishop Fox. Accessed June 21, 2018. https://www.bishopfox.com/blog/

Dark Reading. Accessed June 21, 2018. http://www.darkreading.com/

Electronic Frontier Foundation. Accessed June 21, 2018. https://www.eff.org/

fdiskyou. "hacking Zines mirror for the lulz and nostalgy." Accessed June 21, 2018.
　　　https://github.com/fdiskyou/Zines
- A collection of historical hacking zines on GitHub.

Goldstein, Emmanuel. *The Best of 2600: A Hacker Odyssey.* Indianapolis: Wiley, 2008.

Phrack Magazine. Accessed June 21, 2018. http://www.phrack.org/issues/69/1.html

Threatpost. Accessed June 21, 2018. https://threatpost.com/

We Live Security. Accessed June 21, 2018. https://www.welivesecurity.com/

Additional Resources

Bryan, Jenny. "How to name files." 2015. Accessed June 21, 2018.
　　　https://speakerdeck.com/jennybc/how-to-name-files

Hardikar, Aman. "Penetration Testing Practice Lab – Vulnerable Apps/Systems." Accessed June 21,
　　　2018. http://www.amanhardikar.com/mindmaps/Practice.html
- A collection of pen testing resources.

InfoSec Conferences. Accessed June 21, 2018. https://infosec-conferences.com/

Kali Tools List. Accessed June 21, 2018. http://tools.kali.org/tools-listing
- A list of pen testing tools.

Know Your Meme. Literally Media. Accessed June 21, 2018. knowyourmeme.com

"List of computer security certifications." *Wikipedia*. Updated January 6, 2018. Accessed June 21,
　　　2018. https://en.wikipedia.org/wiki/List_of_computer_security_certifications

Malware Unicorn Conference Search. Accessed June 21, 2018.
　　　https://securedorg.github.io/community/search.html

EPILOGUE

Muphry's Law

Murphy's Law says that anything that can go wrong will go wrong. Muphry's Law is an intentional misspelling of Murphy's Law that applies this buttered-side-down pessimism to writing and editing. Part of the law states that "any book devoted to editing or style will be internally inconsistent." If you find errors in this guide, or if you have ideas to improve the next version, please email **style@bishopfox.com**.

Version 1   February 15, 2018   1,775 entries
Version 1.1   June 27, 2018   1,989 entries