

# Identify Website Tech

Identifying what technologies a website is built with is an essential step in web reconnaissance, penetration testing, competitive research, and general web analysis. The goal is to understand what frameworks, CMS, analytics tools, plugins, server details, and programming languages are used.

## 1. Browser Extensions for Technology Detection

### 1.1 Wappalyzer

The screenshot shows the Wappalyzer homepage with a purple header. The main heading is "Identify technologies on websites". Below it, a sub-headline says "Find out the technology stack of any website. Create lists of websites that use certain technologies, with company and contact details. Use our tools for lead generation, market analysis and competitor research." A search bar is present. The main content area is titled "Empower your sales and marketing teams" and lists various features with icons:

- Website profiling: Find out what websites are built with.
- Lead generation: Find prospects by the technologies they use.
- Market research: Compare market themes and technology trends.
- Competitor analysis: Discover who uses competitor's software.
- Data enrichment: Technologies, company and contact information.
- Custom reports: Create lists of websites and contacts.
- Website monitoring: Monitor website technology changes.
- Browser extension: Discover technologies on websites you visit.
- CRM integration: Sync technologies of your leads.
- Email verification: Verify email addresses and mailing list quality.
- API access: Integrate with real-time technology footprints.
- Security recon: Identify security technologies and version numbers.

The screenshot shows the Microsoft Black Friday deals page. At the top, there's a banner with the text "Save big this Black Friday" and "Start the season with great deals on select Surface, Xbox, accessories, and more." A "Shop deals" button is visible. Below the banner, there are five categories with icons and links: "Black Friday deals: Surface", "Black Friday deals: Xbox", "Black Friday deals: Accessories", "Shop Business deals", and "Choose your Microsoft 365". The main content area features four product images: a laptop, a tablet, a smartphone, and a game console. Each has a "Save up to \$700.00" button. To the right, there's a "Can we help you?" chat box with "Chat now" and "No thanks" buttons, and a small profile picture. The bottom navigation bar includes links for Microsoft 365, Teams, Copilot, Windows, Surface, Xbox, Black Friday deals, Small Business, and Support.

Wappalyzer is a browser extension that automatically analyzes websites and identifies:

The screenshot shows the Microsoft Black Friday deals page on the left and the Wappalyzer extension interface on the right. The Microsoft page features a purple banner with the text 'Save big this Black Friday' and a 'Shop deals' button. Below the banner are links for Surface, Xbox, Accessories, and Business deals. The Wappalyzer interface lists various technologies used in the page, categorized into CMS, Analytics, Tag managers, and JavaScript libraries.

Category	Technology	Description
CMS	Adobe Experience Manager	
	Azure Monitor	
Analytics	ClickTale	
	Google Analytics	
Tag managers	Microsoft Clarity	
	LazySizes	
JavaScript libraries	jQuery	3.5.1
	core.js	3.27.2
Security	Lodash	4.17.21
	lit-element	4.0.4
	lit-html	3.12

- CMS platforms ( Adobe Experience Manager)
- Analytics tools (Google Analytics, Microsoft Clarity, Azure Monitor)
- JavaScript libraries (jQuery, Lodash, lit-element, core-js)
- Tag managers (Google Tag Manager, Adobe Launch)
- Security features (HSTS headers)
- Frameworks / Web servers

## Why this is useful

- Helps attackers understand potential vulnerabilities in used components.
- Helps analysts understand architectural structures.
- Saves time vs manual enumeration.

## 1.2 BuiltWith

BuiltWith performs a deeper server-side scan than browser extensions and is useful for:

- Full technology profiles
- Historical technology changes
- Traffic analytics
- E-commerce platform detection
- Hosting providers
- Email services

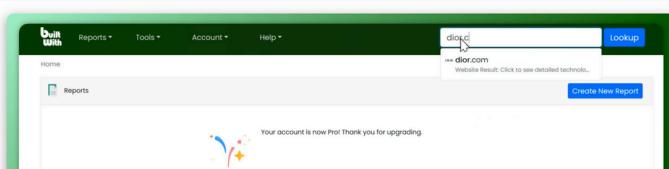
**builtWith**

Log In · Signup for Free Tools · Features · Plans · Customers · Resources ·

Website, Tech, Keyword · Lookup

## Find out what websites are Built With

Enter a website address, a technology name, a product name or a keyword · Lookup



Your account is now Pro! Thank you for upgrading.

**YOUTUBE.COM**

Technology Profile · Detailed · Meta · Products · Performance · Relationship · Redirect · Recommendations · Company

Analytics and Tracking · Global Trends

Elqua · Eloqua Usage Statistics - Download List of All Websites using Eloqua · Marketing automation provider.

Facebook Domain Insights · Facebook Domain Insights Usage Statistics - Download List of All Websites using Facebook Domain Insights · This website contains tracking information that allows admins to see Facebook insights out of Facebook to this domain. · Social Management.

Google Font API · Google Font API Usage Statistics - Download List of All Websites using Google Font API · The Google Font API helps you add web fonts to any web page. · Fonts.

Widgets · Global Trends

Mobile · Global Trends

Android Alternatives

Profile Details · Change Page Layout

Detailed Profile · Detailed Profile

Browser Extension · Add to Firefox

Notifications

## 2. Command-Line Tools for Technology Detection

WhatWeb is a CLI tool used mainly in Linux/Kali for web reconnaissance. It identifies:

- Server type
- Country/Hosting origin
- IP addresses
- Redirect chains
- Security headers (Strict-Transport-Security)
- Response status (403 Forbidden, 301 Moved Permanently)

```
—(kali㉿kali)-[~]
$ whatweb ndtv.com
http://ndtv.com [301 Moved Permanently] Country[SINGAPORE][SG], IP[118.214.142.217], RedirectLocation[https://ndtv.com/], UncommonHeaders[server-timing]
https://ndtv.com/ [301 Moved Permanently] Country[SINGAPORE][SG], IP[118.214.142.217], RedirectLocation[https://www.ndtv.com/], Strict-Transport-Security[max-age=15768000 ; includeSubDomains], UncommonHeaders[server-timing]
https://www.ndtv.com/ [403 Forbidden] Country[UNITED STATES][US], IP[23.50.253.91], Strict-Transport-Security[max-age=15768000 ; includeSubDomains], Title[Access Denied], UncommonHeaders[server-timing]
—(kali㉿kali)-[~]
$
```

whatweb ndtv.com

http://ndtv.com Country: Singapore (SG)

IP: 118.214.142.217

Redirects to https://www.ndtv.com

Final Status: 403 Forbidden

Country: United States (US)

IP: 23.50.253.91

Security: Strict-Transport-Security enabled

**MORE:**

## **General Methodology for Technology Enumeration**

Step 1 – Use Browser Tools

- Wappalyzer or BuiltWith extension
- Quick detection of frameworks/analytics/CMS

Step 2 – Use Online Scanners

- BuiltWith website
- Netcraft
- DNSdumpster

Step 3 – Use Terminal-Based Tools

- `whatweb`
- `wafw00f` (for firewall detection)
- `curl -I <website>` (to analyze headers manually)

#### Step 4 – Manually Inspect the Website

- Check page source (`Ctrl + U`)
- Look at response headers in Developer Tools
- Identify JS/CSS files that reveal frameworks