

Welcome to the Internet SIG



Browser Cookies



I'm assuming that
everyone knows there
are two types of
cookies!

Good Cookies



Bad Cookies



Discussion Topics

- What are Browser Cookies
- Types of Cookies
- Good & Bad Cookie Uses
- The General Data Protection Regulation
- Cookie Management
- Final Thoughts

Cookies Defined

An HTTP cookie (also called web cookie, Internet cookie, browser cookie, or simply cookie) is a small piece of data stored on the user's computer by the web browser while browsing a website.

Each time a user visits a new website, cookies are created by the Internet browser and saved onto the user's computer.

These cookies are text files. Most browsers place a 4096-byte limit on the size of a cookie. Support for 8192-byte cookies is becoming more common in newer browser versions.

When the user returns to the website, the cookies help it to remember things.

Cookies are domain specific. A domain cannot read or write to a cookie created by another domain.

Cookies are browser specific. Each browser stores the cookies in a different location.

Some browsers limit the number of cookies stored by each domain.

Cookie names are case-sensitive. For example: UserName is different than username.

Types of Cookies

- 1st Party
- 3rd Party
- Session Cookies
- Secure Cookies
- Super Cookies
- ISP Cookies

1st Party Cookies

- Are Installed by the site you're visiting
- Are mostly harmless
- Allowed by default on most browsers
- Also known as persistent cookies, permanent cookies or stored cookies
- Can only be read by the website installing the cookie
- Usually help deliver a good user experience

3rd Party Cookies

- Also known as Tracking Cookies
- Don't provide any benefits of 1st Party Cookies
- Can track data across different domains
- Almost always placed by advertisers
- Often used by Social Networks

How 3rd Party Cookies Work

If a user visits [bestbuy.com](https://www.bestbuy.com) and clicks on a product, third-party trackers will collect and analyze the information about that user and their activity on [bestbuy.com](https://www.bestbuy.com). If that user leaves [bestbuy.com](https://www.bestbuy.com) and accesses a different website, the user would be shown an advertisement for that exact same product, or something similar.

Session Cookies

A session cookie contains information that is stored in a temporary memory location and then subsequently deleted after the session is completed or the web browser is closed. This cookie stores information that the user has inputted and tracks the movements of the user within the website.

A common example of a session cookie in action is in the shopping cart feature found on most online shopping websites.

Secure Cookies

A secure cookie can only be transmitted over an encrypted connection. Usually, that means HTTPS.

As long as the cookie's "Secure" attribute is active, the browser will not transmit the cookie over an unencrypted channel. Without the Secure flag, a cookie is sent in clear text and can be intercepted by unauthorized third-parties.

Super Cookies

- Sometimes called Flash or Zombie Cookies
- Perform same functions as regular cookies
- Only difference is they can't be easily deleted. The cookie or a backup of the cookie is usually stored online and are easily restored
- Many Anti-Virus and Malware programs can remove them
- Tech Sites often give instructions on removing individual Super Cookies

Super Cookies



They aren't Super Heroes

Unique Identifier Headers (UIDH)

These Super Cookies are from Internet Service Providers. Unlike other cookies they are associated with the devices you use to connect to the web with a tracking file created by the ISP.

These Super Cookies house your device's browsing information, are stored on the ISP's servers and contain Unique Identifier Headers (UIDH) that help the ISP recognize each device and what each device is doing online.

As you browse the web or use your device over the network, the ISP inserts information onto the data packets that let it track your activity without ever having to install anything onto your computer.

You can't delete ISP UIDH Super Cookies.

With no file saved on your computer to delete, you're left with few options to stop any ISP intent on tracking, recording, and selling data on your online activities.

One of the best uses of a VPN.

(good?) Uses of Cookies

- Log-in Authentication
 - Form Field Information
 - Remember Personal Preferences
- 1) Website Settings
 - 2) Display Language
 - 3) Currency
 - 4) Shopping Cart Items
 - 5) Wish Lists
 - 6) Other Website Settings

(bad?) Uses of Cookies

- Advertisers can track browsers across sites
- Cookies aren't secure. A hacker could get lots of information from your cookies.
- Reread the top two again. These are the cookies that track you across the internet.

GDPR

- The General Data Protection Regulation (GDPR) is the toughest privacy and security law in the world.
- It was drafted and passed by the European Union (EU). It imposes obligations onto organizations anywhere, so long as they target or collect data related to people in the EU.
- The regulation was put into effect on May 25, 2018. The GDPR will levy harsh fines against those who violate its privacy and security standards, with penalties reaching into the tens of millions of euros.

GDPR applies to any organization operating within the EU, as well as any organizations outside of the EU which offer goods or services to customers or businesses in the EU.


Ultimately, this means that almost every major corporation in the world needs a GDPR compliance strategy.

In a nutshell, the GDPR was created to give the citizens of the EU control over their personal data and also amend how organizations use that data.

Users must confirm that their personal data can be collected and a clear privacy policy must be made available that shows what personal data is going to be stored and how that data will be used.

Also required is the ability to provide the user at their request, the ability to withdraw the authorization they may have given previously and have that information deleted.

That's why we get so many warnings



THIS WEBSITE USES COOKIES

We use cookies to personalise content and ads, to provide social media features and to analyse our traffic. We also share information about your use of our site with our social media, advertising and analytics partners who may combine it with other information that you've provided to them or that they've collected from your use of their services

Use only necessary cookies **Allow selection** **Allow all cookies**

Necessary Preferences Statistics Marketing Show details ▾

Notice ×

This website or its third-party tools process personal data (e.g. browsing data or IP addresses) and use cookies or other identifiers, which are necessary for its functioning and required to achieve the purposes illustrated in the [cookie policy](#). To learn more, please refer to the [cookie policy](#).

You accept the use of cookies or other identifiers by closing or dismissing this notice, by clicking a link or button or by continuing to browse otherwise.

Accept

Websites are complying with

The GDPR Law

And there is a lot of it!

Managing Cookies

- Most browsers block Third Party Cookies by default. If not, go to settings and block them.
- You can disable First Party Cookies, but many websites won't work correctly.
- Consider clearing cookies when you exit your browser.
- There are many browser extensions and add-ons to manage cookies.

Final Thoughts

- Sorry that I talked so long. I didn't realize this would be such a long subject



THANKS FOR LISTENING 😊

Next Week

Are You Safe on the Internet?

Unless somebody wants to discuss
something else

What's The Next SIG Topic



Have you got a topic idea? Want to learn about something special?
Tell me anytime you see me or contact me online.

clickers@tinys-bs.com

Clickers - General Discussion Google Group

All Presentations Available for Download

PDF Format

toxitman.com