

01

Cookies



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What are Cookies ?

- Cookies are small pieces of data that websites store on a user's web browser. They are used to remember information about the user or their preferences. When you visit a website, it may send a cookie to your browser, which is then stored on your computer. The next time you visit that website, your browser sends the cookie back to the website, allowing it to recognize you and provide a personalized experience.



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What Are Cookies ATTRIBUTES



Cookies Attributes ?

- Attributes, in the context of cookies, are additional settings or properties that can be assigned to a cookie to provide instructions and control its behavior. These attributes help define how the cookie should be handled by the browser and the website that created it.



Here are some cookies attributes :

- **Secure** : The "Secure" attribute specifies that the cookie should only be transmitted over a secure (HTTPS) connection. This attribute ensures that the cookie is encrypted and protected from being intercepted by attackers on insecure networks.
- **HttpOnly**: This used to restrict access to the cookie from client-side scripts, such as JavaScript. When this attribute is set, the cookie cannot be accessed or modified by scripts, Prevents (XSS)



What Are Cookies Attributes

- **Expires or Max-Age :** Specifies the lifespan of the cookie. It determines the date and time when the cookie will expire and be automatically deleted by the browser. Once expired, the cookie is no longer sent to the server with subsequent requests.
- **Domain:** The "Domain" attribute specifies the domain or subdomain(s) to which the cookie applies. By default, a cookie is only sent to the domain that created it. However, by setting the "Domain" attribute, the cookie can be shared with other subdomains or parent domains, enabling a broader scope of cookie access.



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Cookies Attributes ATTACKS



Most Common Attacks :

- **Session Hijacking :** Attackers may intercept network traffic or exploit vulnerabilities to steal a user's session cookie. By obtaining the session cookie, they can impersonate the user and gain unauthorized access to their account.
- **Cookie Tampering :** Attackers may modify the values of cookies to deceive the server or gain unauthorized privileges. For instance, they could change a cookie value from "user" to "admin," granting themselves administrative access.

Most Common Attacks :

- **Cross-Site Scripting (XSS)** : Attackers inject malicious scripts into vulnerable websites, allowing them to steal cookies or perform actions on behalf of the user. They may manipulate cookie attributes to make them accessible to client-side scripts or bypass security measures.
- **Cookie Poisoning** : Attackers manipulate cookie attributes to modify the expiration time, domain, or path of a cookie. This can lead to session fixation attacks, where an attacker fixes a session ID on a victim's browser, enabling them to hijack the session later.

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ITS TIME TO
Demo Attack





Thank You

Presented by Abdelrahman Ashraf