

## URL Encoding

URL encoding is a method of character encoding that allows characters to be safely transmitted over the internet. Special characters are replaced with their corresponding escape sequences when URLs are encoded. The space character, for example, is replaced with the plus sign (+), and the ampersand (&) character is replaced with the percent sign (%) followed by the character's ASCII code. Because some characters, such as the space character, have special meanings in the HTTP protocol, URL encoding is required. For example, the space character is used to separate words in a URL, so if it is not encoded, it is interpreted as a separator rather than a part of the word. URL encoding is also used to protect URLs from malicious users injecting code. If a URL contains a JavaScript code snippet, for example, the code could be executed when the URL is loaded. The code is made safe and cannot be executed by encoding it.