curl

`curl` is a command-line tool in Unix and Unix-like operating systems that is used for making network requests, primarily to retrieve data from or send data to various types of servers. It supports multiple protocols, including **HTTP, HTTPS, FTP, SCP,** and more. Here are some common `curl` commands and their explanations:

1. *HTTP GET Request:*

  - `curl URL`: Perform an HTTP GET request to the specified URL and display the response in the terminal.

2. *HTTP POST Request:*

  - `curl -X POST -d 'data' URL`: Send an HTTP POST request to the URL with the specified data (`-d` flag) in the request body.

3. *HTTP Headers:*

  - `curl -H 'HeaderName: HeaderValue' URL`: Include custom HTTP headers in the request.

4. *HTTP Authentication:*

  - `curl -u username:password URL`: Perform HTTP Basic Authentication by providing a username and password.

5. *Follow Redirects:*

  - `curl -L URL`: Follow HTTP redirects if the requested URL redirects to another location.

6. *Save Output to a File:*

  - `curl -o outputfile URL`: Save the response content to the specified output file.

7. *Download Files:*

- `curl -O URL`: Download a file from the URL and save it with the same name as the remote file.

8. *Limit Download Speed:*

- `curl --limit-rate 100k URL`: Limit the download speed to 100 kilobytes per second.

9. *Specify Output Format:*

- `curl -w 'Response Code: %{http_code}' URL`: Specify a custom output format using the `-w` flag.

10. *Upload Files (HTTP POST):*

- `curl -F 'file=@localfile' URL`: Upload a local file as part of a multipart/form-data POST request.

11. *Set Timeout:*

- `curl --max-time 10 URL`: Set a maximum time for the request (e.g., 10 seconds).

12. *Send Data from a File (HTTP POST):*

- `curl -X POST --data-binary @datafile URL`: Send data from a local file in a POST request.

13. *Insecure SSL/TLS:*

- `curl -k URL`: Allow connections to SSL/TLS sites without certificates (not recommended for production).

14. *List Available HTTP Methods:*

- `curl -I -X OPTIONS URL`: Send an HTTP OPTIONS request to list available methods.

15. *Follow Links (Spider):*

   - `curl -I --recursive URL`: Follow links on a webpage recursively (spidering).

16. *Set User Agent:*

   - `curl -A 'UserAgentString' URL`: Set a custom User-Agent header.

These are some common `curl` commands, but `curl` is a versatile tool that can be used for a wide range of network-related tasks. It's particularly useful for scripting and automation when interacting with web services and APIs from the command line.