**Topic 1**

**curl (Client URL) -> Syntax: [option] [URL]**

**You can use curl to download the file to your local system:**

**Syntax:** curl [url] > [local-file]

**Multiple URLs that differ in one part are written together using braces:**

http://example.{first,second,third}.com

**Alphanumeric series are written with brackets:**

ftp://ftp.url.com/file[1-100].txt

**While nested sequences are not supported, multiple sequences are allowed:**

http://url.com/archive[2010-2020]/vol[1-4]/part{a,b,c}.html

**curl Protocols:**

**DICT** -> A dictionary network protocol for querying dictionary servers about the meanings of words.

**FILE ->** A URL scheme for obtaining a file from the local file system using curl.

**FTP, FTPS ->** File Transfer Protocol, used for file transfers between clients and servers. FTPS is the version of the same protocol with an added SSL/TLS security layer.

**HTTP, HTTPS ->** Hypertext Transfer Protocol, used for web and internet data transfer. HTTPS is the version of the same protocol with an added SSL/TLS security layer.

**IMAP, IMAPS ->** Internet Message Access Protocol, used for email access and management. IMAPS is the version of the same protocol with an added SSL/TLS security layer.

**RTMP ->** Real-Time Messaging Protocol - a streaming protocol for audio, video, and other data.

**RTSP ->** Real Time Streaming Protocol, used for streaming media servers’ management.

**SCP ->** Secure Copy - a protocol for copying files to and from an SSH server.

**curl Command Options:**

* **Options start with one or two dashes.**

**-a, --append ->** Append to the target file.

**Example:  
curl --upload-file local --append ftp://example.com/**

**--basic** -> Use HTTP basic authentication.

**Example:**  
**curl -u name:password --basic https://example.com**

**--ciphers <list of ciphers> ->** Provide ciphers to be used in the connection.  
**Example:  
curl --ciphers ECDHE-ECDSA-AES256-CCM8 https://example.com**

**-# -> If you like a progress bar instead of a meter, you can use the -# option**

**--silent -> if you want to disable it completely.**

**Examples:**

**curl -# -O ftp://ftp.example.com/file.zip**

**curl --silent ftp://ftp.example.com/file.zip**

**Handling HTTP Requests Using curl Command -> GET, POST, PUT, DELETE, etc.**

**GET request:**

**Example:**

**curl -X GET https://api.example.com/resource**

**POST request:**

**Example:**

**curl -X POST -d "key1=value1&key2=value2" https://api.example.com/resource**

**-d -> flag is used to specify data to be sent with the request.**

**Downloading Files Using curl Command:**

**Syntax: curl -o [file\_name] [URL]**

**-o -> saves the downloaded file on the local machine with the name provided in the parameters.**

**Example:**

**curl -o hello.zip ftp://speedtest.tele2.net/1MB.zip**

**-O -> This option downloads the file and saves it with the same name as in the URL.**

**Uploading Files:**

**Example:**

**curl -T uploadfile.txt ftp://example.com/upload/**

**Description: In this example, `-T uploadfile.txt` specifies the file to be uploaded (`uploadfile.txt`). The `-T` flag is used to upload a file with FTP. `curl` then sends the specified file to the FTP server located at `ftp://example.com/upload/`. This is useful for automating file uploads or transferring files via FTP from the command line.**

**-T -> This option helps to upload a file to the FTP server.**

**Handling Authentication:**

**Example:**

**curl -u username:password https://example.com/api**

**Description: The -u flag is used to specify authentication credentials (`username:password`)**

**Examples of Curl Command:**

**-C -> resumes download which has been stopped due to some reason**

**Syntax: curl -C - [URL...]**

**Example: curl -C - -O** [**ftp://speedtest.tele2.net/1MB.zip**](ftp://speedtest.tele2.net/1MB.zip)

**--limit-rate -> This option limits the upper bound of the rate of data transfer and keeps it around the given value in bytes.**

**Syntax: curl --limit-rate [value] [URL]**

**Example:** **curl --limit-rate 1000K -O ftp://speedtest.tele2.net/1MB.zip**

**SOURCE:** [**https://www.geeksforgeeks.org/curl-command-in-linux-with-examples/**](https://www.geeksforgeeks.org/curl-command-in-linux-with-examples/)

**SOURCE: https://phoenixnap.com/kb/curl-command**