



### Activity File: Using curl

In this activity, you will continue in your role as a web application security engineer.

- You are tasked with writing various `curl` commands to interact with an HTTP web server.
- You will use various `curl` options, request methods, and request headers to return specific responses.

Use the [curl Reference Sheet](#) as a reference for your activity.

#### Instructions

Use `curl` commands to send HTTP requests to the site `httpbin.org`.

After constructing and testing each `curl` command, answer the questions that follow.

1. Send a GET request.
  - Run a GET request to `httpbin.org/anything`.  
`curl https://httpbin.org/anything`
  - What is returned by this request? Is there anything that identifies the requester?

```

sysadmin@ip-10-0-1-222:~$ curl httpbin.org/anything
{
  "args": {},
  "data": "",
  "files": {},
  "form": {},
  "headers": {
    "Accept": "*/*",
    "Host": "httpbin.org",
    "User-Agent": "curl/7.68.0",
    "X-Amzn-Trace-Id": "Root=1-67db69ac-5ddfb6ab2958df6f6a75336a"
  },
  "json": null,
  "method": "GET",
  "origin": "98.81.100.210",
  "url": "http://httpbin.org/anything"
}

```

## 2. Retrieve response headers.

- Run a GET request to <https://httpbin.org/> with an added `curl` argument to display response headers.  
`curl https://httpbin.org/ --head`
- What is the content type for this page?  
The type is html

## 3. Retrieve new response headers.

- Run a GET request to [httpbin.org/anything](https://httpbin.org/anything) with an added `curl` argument to display response headers.  
`curl https://httpbin.org/anything --head`
- What is the content type for this page?  
The type is json

## 4. Send a POST request.

- Run a POST request that enters `'{"Developer": "Andrew"}'` for the data argument. `curl -X POST "https://httpbin.org/anything" -d '{"Developer": "Andrew"}'`
- Under what JSON object does the posted data appear? It appears under `"form": {`

## 5. Set parameters.

- Run a POST request with the added parameters  
`?EmployeeDirectory=frontend. curl -X POST "https://httpbin.org/anything?EmployeeDirectory=frontend"`

- After the parameters go through, where do they appear in the JSON response body? **Under args**

## 6. Set headers.

- Run the same POST from Step 4 with an added header: **-H "Content-Type: application/json"**.  
**curl -X POST "https://httpbin.org/anything?EmployeeDirectory=frontend"**  
**-H "Content-Type: application/json"**
- Where does the request body data end up? **It appears under json.**