

Application Programming Interface (API)

- API is a way for two or more computer programs to communicate with each other.
- It is a type of software interface, offering a service to other pieces of software.
- **Security:** API security is very critical when developing a public facing API. Common threats include SQL injection, Denial-of-service attack (DoS), broken authentication, and exposing sensitive data.
- You need an API Key or Token to be able to communicate with the API.

REST

- REST = REpresentational State Transfer
- Is an architectural style that defines how applications communicate over the Hypertext Transfer Protocol (HTTP).
- Often associated with exchanging JSON or XML documents between a client and a server.

Postman

Postman is an Application Programming Interface (API) testing tool.

Installation

Free (max 3 collaborating users).

Just download it from:

Window, Mac och Linux:

<https://www.postman.com/downloads/>

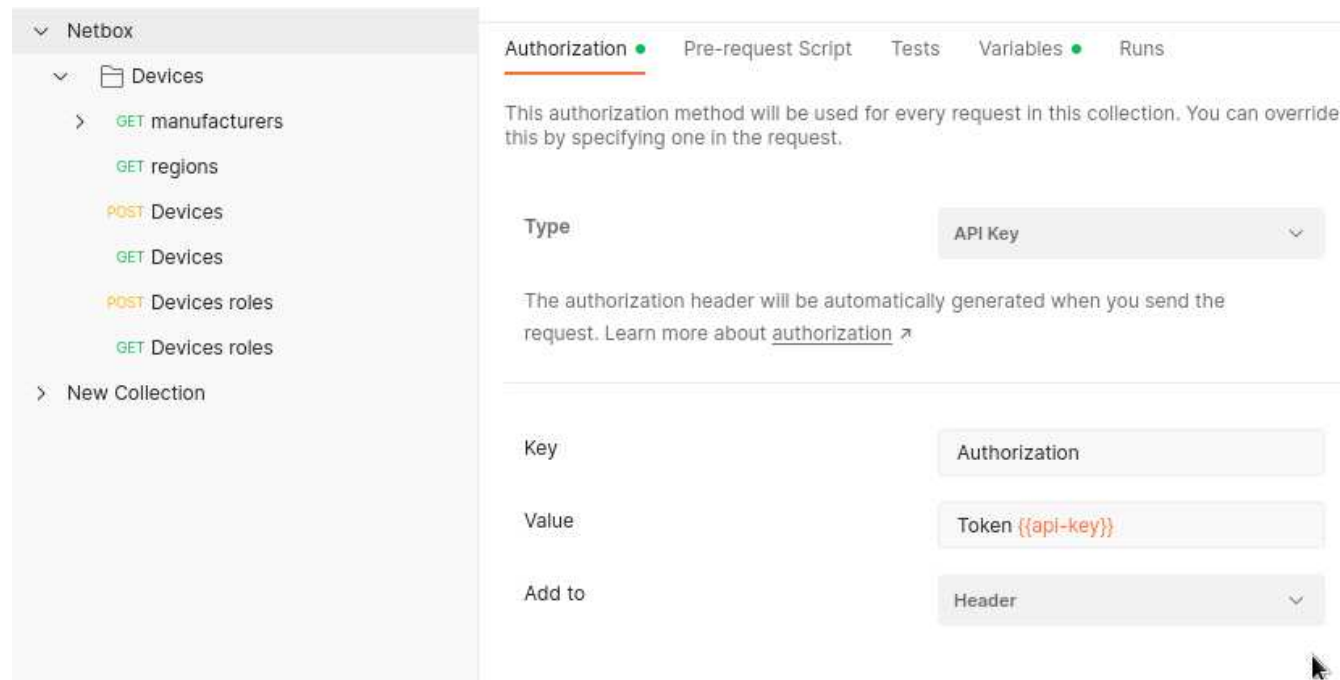
Authorization Types

There are several authorization types:

- Bearer Token using a token
- Basic Authentication using username and password
- No Authentication using only the header request

The screenshot shows the Netbox API client interface. On the left is a sidebar with a tree view containing 'Netbox' (expanded), 'Devices' (expanded), and 'New Collection'. Under 'Devices', there are several endpoints: 'GET manufacturers', 'GET regions', 'POST Devices', 'GET Devices', 'POST Devices roles', and 'GET Devices roles'. The main panel is titled 'Netbox' and has tabs for 'Authorization', 'Pre-request Script', 'Tests', 'Variables' (selected), and 'Runs'. Below the tabs, a text block states: 'These variables are specific to this collection and its requests. Learn more about [collection variables](#)'. A search bar labeled 'Filter variables' is present. Below it is a table of variables.

	VARIABLE	INITIAL VA... ①	CURRET ②	Persist All	Reset All
<input type="checkbox"/>	port	8000	8000		
<input type="checkbox"/>	host	0.0.0.0	0.0.0.0		
<input type="checkbox"/>	protocol	http	http		
<input checked="" type="checkbox"/>	api-token	75a7f20140bf...	75a7f20140bf245ede32645644f6bfe...		
<input type="checkbox"/>	X-CSRFToken	vAqaU9QbGR...	vAqaU9QbGRBG3Yv6dFnSc4MhuO7B...		
<input checked="" type="checkbox"/>	api-key	2933bcbab8f...	2933bcbab8f47f2905cb6b0...		
Add a new va...					



The screenshot displays the Postman interface with a collection named 'Netbox' expanded. The left sidebar shows a tree view with 'Devices' as a folder, containing several endpoints: 'GET manufacturers', 'GET regions', 'POST Devices', 'GET Devices', 'POST Devices roles', and 'GET Devices roles'. Below this is a 'New Collection' button. The main panel is set to the 'Authorization' tab, which is highlighted with a red underline. It contains a description: 'This authorization method will be used for every request in this collection. You can override this by specifying one in the request.' Below the description, the 'Type' is set to 'API Key'. A note states: 'The authorization header will be automatically generated when you send the request. Learn more about [authorization](#) ↗'. At the bottom, there are three fields: 'Key' with the value 'Authorization', 'Value' with the value 'Token {{api-key}}', and 'Add to' with the value 'Header'.

Netbox

- Devices
 - GET manufacturers
 - GET regions
 - POST Devices
 - GET Devices
 - POST Devices roles
 - GET Devices roles
- New Collection

Authorization • Pre-request Script Tests Variables • Runs

This authorization method will be used for every request in this collection. You can override this by specifying one in the request.

Type API Key

The authorization header will be automatically generated when you send the request. Learn more about [authorization](#) ↗

Key Authorization

Value Token {{api-key}}

Add to Header

For each request you need to select Authorozation -> API key as follow:

Netbox

- Devices
 - GET manufacturers
 - GET regions
 - POST Devices
 - GET Devices
 - POST Devices roles
 - GET Devices roles
- New Collection

GET http://0.0.0.0:8000/api/dcim/manufacturers Send

Params Authorization Headers (12) Body Pre-request Script Tests Settings Cookies

Type API Key

The authorization header will be automatically generated when you send the request. Learn more about [authorization](#)

Key	Value	Add to
Authorization	Token {{api-token}}	Header

GEP, POST, DELETE

References

<https://www.tutorialspoint.com/postman/index.htm>