

# Chapter 1: Nmap Fundamentals

## RainmapLite

Enter email address and target, select a scanning profile and scan!

**Target(s)**

**Profile** **Email**

Fast scan

Custom Nmap arguments

Disable DNS resolution

Skip host discovery

**SCAN**

NMAPER

## Nmaper

Enter email address and target, select a scanning profile and scan!

**Target(s)**

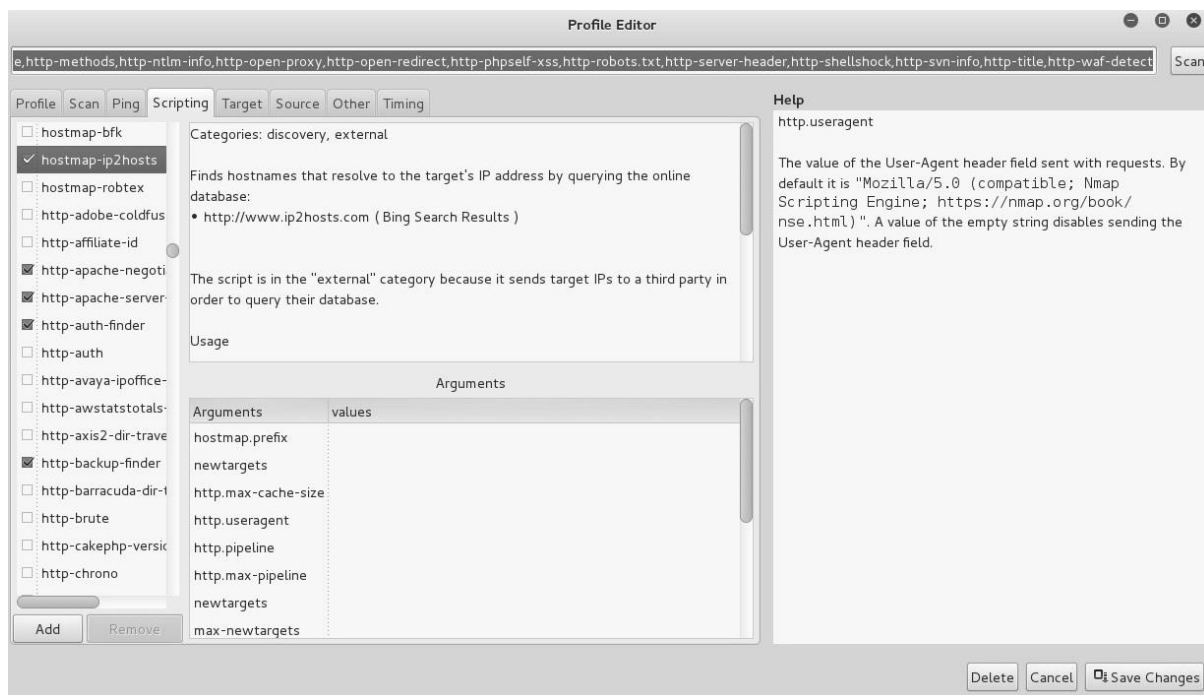
**Profile** **Email**

Fast scan

Custom Nmap arguments

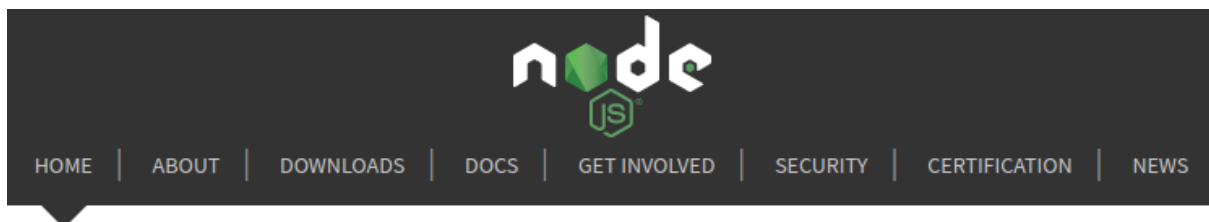
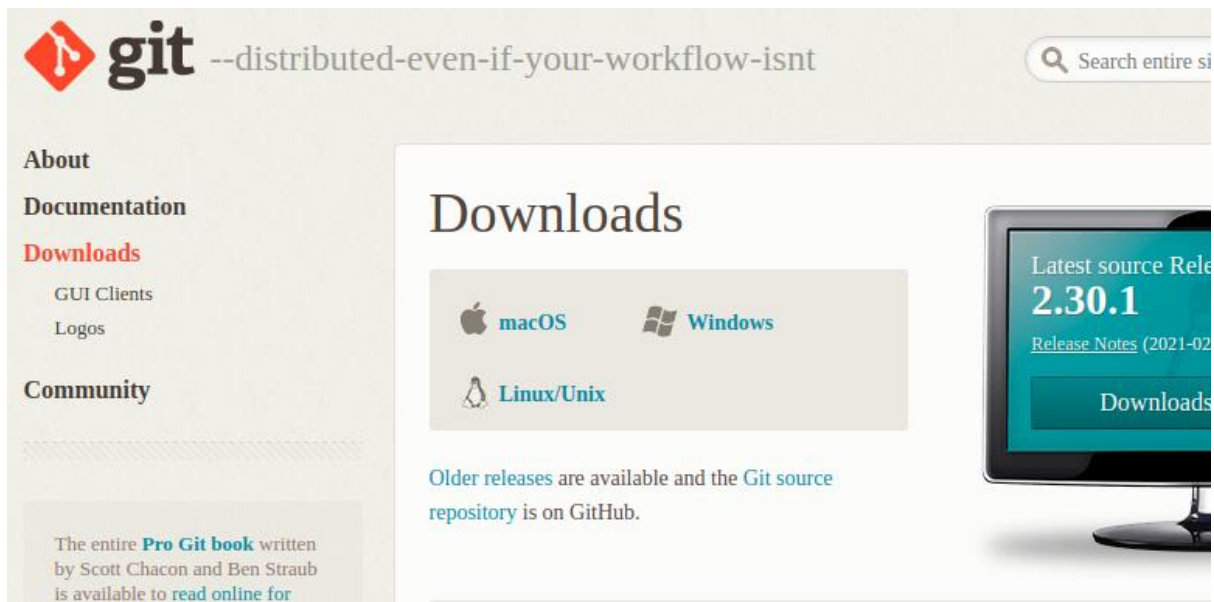
**SCAN**

## Chapter 2: Getting Familiar with Nmap's Family



```
sh-3.2# cat client.txt
0000  0a                                .
0000  0a                                .
0000  0d 0a 0d 0a                       ....
0000  00 1e 00 06 01 00 00 01 00 00 00 00 07 76 .....v
0010  65 72 73 69 6f 6e 04 62 69 6e 64 00 00 10 00 03 ersion.bind.....
0000  00 00 00 a4 ff 53 4d 42 72 00 00 00 00 08 01 40 .....SMBr.....@
0010  00 00 00 00 00 00 00 00 00 00 00 00 40 06 .....@.
0020  00 00 01 00 00 81 00 02 50 43 20 4e 45 54 57 4f .....PC.NETWO
0030  52 4b 20 50 52 4f 47 52 41 4d 20 31 2e 30 00 02 RK.PROGRAM.1.0..
0040  4d 49 43 52 4f 53 4f 46 54 20 4e 45 54 57 4f 52 MICROSOFT.NETWOR
0050  4b 53 20 31 2e 30 33 00 02 4d 49 43 52 4f 53 4f KS.1.03..MICROSO
0060  46 54 20 4e 45 54 57 4f 52 4b 53 20 33 2e 30 00 FT.NETWORKS.3.0.
0070  02 4c 41 4e 4d 41 4e 31 2e 30 00 02 4c 4d 31 2e .LANMAN1.0..LM1.
0080  32 58 30 30 32 00 02 53 61 6d 62 61 00 02 4e 54 2X002..Samba..NT
0090  20 4c 41 4e 4d 41 4e 20 31 2e 30 00 02 4e 54 20 .LANMAN.1.0..NT.
00a0  4c 4d 20 30 2e 31 32 00 LM.0.12.
0000  43 4e 58 4e 00 00 00 01 00 10 00 00 07 00 00 00 CNXN.....
0010  32 02 00 00 bc b1 a7 b1 68 6f 73 74 3a 3a 00 2.....host:..
0000  47 45 54 20 2f 20 48 54 54 50 2f 31 2e 30 0d 0a GET./..HTTP/1.0..
0010  0d 0a                               ..
0000  4f 50 54 49 4f 4e 53 20 2f 20 48 54 54 50 2f 31 OPTIONS./..HTTP/1
0010  2e 30 0d 0a 0d 0a                   .0....
0000  4f 50 54 49 4f 4e 53 20 2f 20 52 54 53 50 2f 31 OPTIONS./..RTSP/1
0010  2e 30 0d 0a 0d 0a                   .0....
0000  80 00 00 28 72 fe 1d 13 00 00 00 00 00 00 02 ... (r.....
0010  00 01 86 a0 00 01 97 7c 00 00 00 00 00 00 00 .....|.....
```

## Chapter 3: Network Scanning



Node.js® is a JavaScript runtime built on [Chrome's V8 JavaScript engine](#).

#BlackLivesMatter

Download for Linux (x64)

14.15.5 LTS

Recommended For Most Users

15.8.0 Current

Latest Features

[Other Downloads](#) | [Changelog](#) | [API Docs](#)   [Other Downloads](#) | [Changelog](#) | [API Docs](#)

Or have a look at the [Long Term Support \(LTS\) schedule](#).

Visual Studio Code Docs Updates Blog API Extensions FAQ Learn

Version 1.53 is now available! Read about the new features and fixes

# Code editing. Redefined.

Free. Built on open source. Runs everywhere.

↓ .deb

Debian, Ubuntu...

↓ .rpm

Red Hat, Fedora...

↓

[Other platforms and Insiders Edition](#)

By using VS Code, you agree to its [license and privacy statement](#).

EXTENSIONS: MARKETPLACE

@sort:installs

- Python** 2019.6.24221 55.9M ★ 4.5  
 Linting, Debugging (multi-threaded,...  
 Microsoft Install
- GitLens — Git sup...** 9.5.2 25.3M ★ 5  
 Supercharge the Git capabilities buil...  
 Eric Amodio Install
- C/C++** 0.24.1 24.2M ★ 3.5  
 C/C++ IntelliSense, debugging, and C...  
 Microsoft Install
- ESLint** 1.9.0 22.1M ★ 4.5  
 Integrates ESLint JavaScript into VS ...  
 Dirk Baeumer Install
- Debugger for Chr...** 4.11.7 21.4M ★ 4  
 Debug your JavaScript code in the C...  
 Microsoft Install
- Language Supp...** 0.47.0 19.3M ★ 4.5  
 Java Linting, IntelliSense, formatin...  
 Red Hat Install
- vscode-icons** 9.2.0 18.6M ★ 5  
 Icons for Visual Studio Code  
 VSCode Icons Team Install
- Vetur** 0.21.1 17.2M ★ 4.5  
 Vue tooling for VS Code  
 Pine Wu Install

## Tekton Pipelines

Red Hat | 2,959 | ★★★★★ | [Repository](#) | [License](#)

Tekton Pipelines extension by Red Hat

Install

⚙️

Install this extension in all your synced Visual Studio Code instances

[Details](#)

[Feature Contributions](#)

[Changelog](#)

[Dependencies](#)

# Tekton Pipelines Extension

System	Status
Build ( <a href="#">master</a> branch)	<span style="font-size: 1.2em; margin-right: 5px;">🔄</span> CI <span style="background-color: #28a745; color: white; padding: 2px 5px;">passing</span> <span style="font-size: 1.2em; margin-right: 5px;">📊</span> codecov <span style="background-color: #dc3545; color: white; padding: 2px 5px;">67%</span> <span style="font-size: 1.2em; margin-right: 5px;">📄</span> license <span style="background-color: #28a745; color: white; padding: 2px 5px;">MIT</span>

# Get Started with Docker

We have a complete container solution for you - no matter who you are and where you are on your containerization journey.



## Docker Desktop

Developer productivity tools and a local Kubernetes environment.

[Download for Linux](#)



## Docker Hub

Cloud-based application registry and development team collaboration services.

[Signup](#)



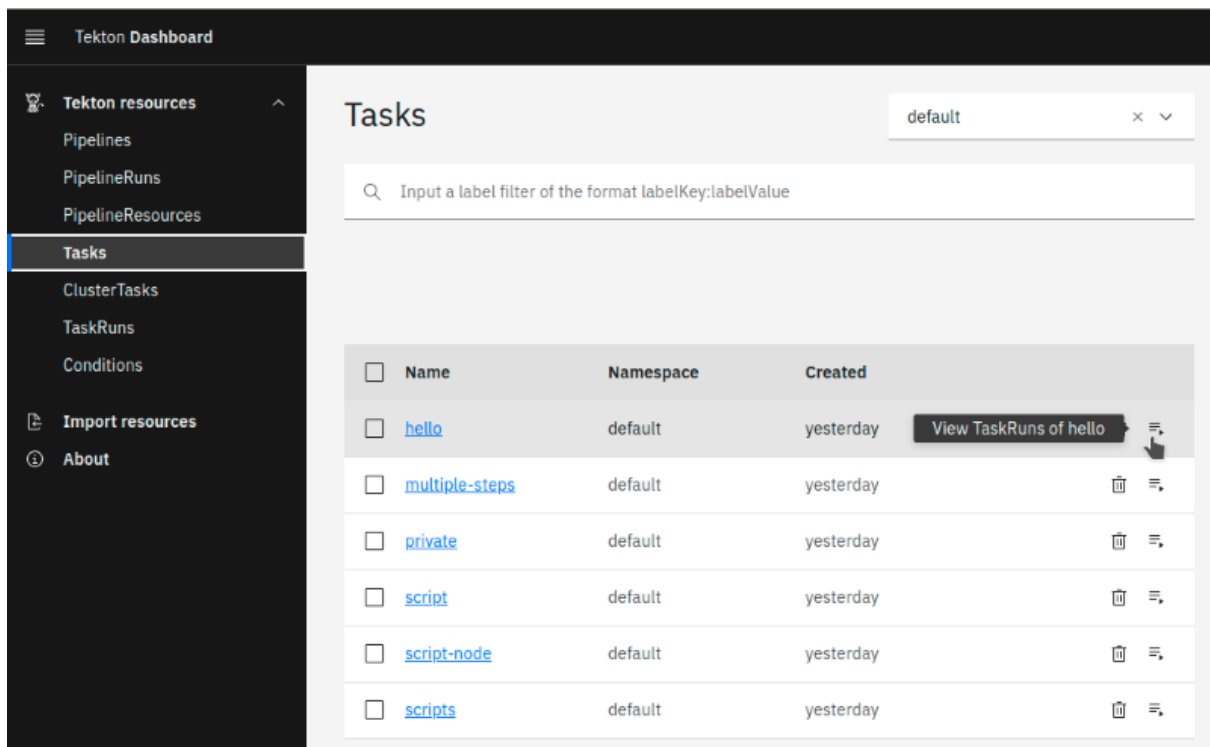
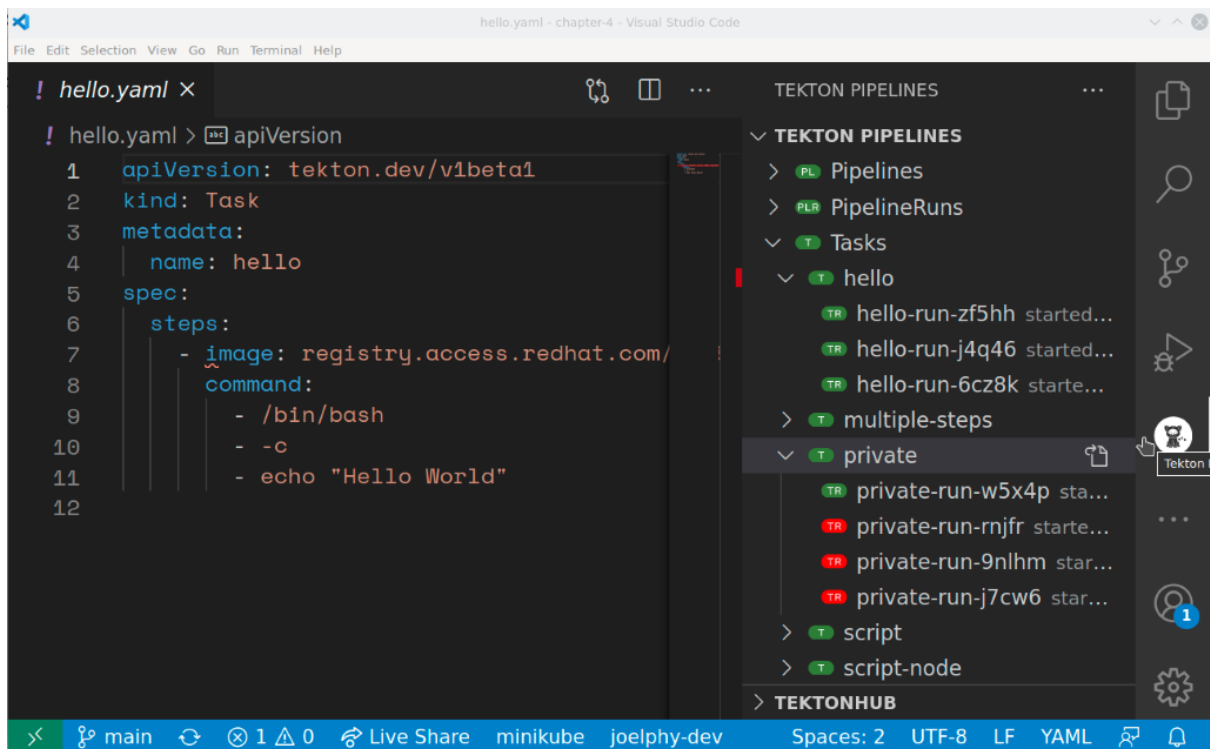
## Play with Docker

Cloud-based docker environment to try out docker and learn the ropes.

[Play with Docker](#)

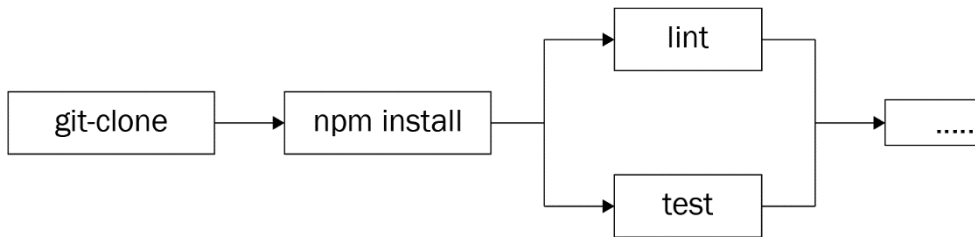
The screenshot shows the Tekton Dashboard interface. On the left is a dark sidebar with a menu containing: Tekton Dashboard, Tekton resources (with a sub-menu: Pipelines, PipelineRuns, PipelineResources, Tasks, ClusterTasks, TaskRuns, Conditions), Import resources, and About. The main content area is titled "PipelineRuns" and includes a search bar with the placeholder "Input a label filter of the format labelKey:labelValue". Below the search bar is a "Status: All" dropdown menu and a "Create +" button. A table header is visible with columns: Status, Name, Pipeline, Namespace, Created, and Duration. The table body is currently empty, displaying the message "No matching PipelineRuns found".

# Chapter 4: Reconnaissance Tasks

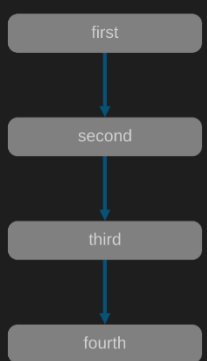


# Chapter 5: Scanning Web Servers

```
! ordered-tasks-pipeline.yaml > {} spec > [ ] tasks
15 - name: second
16   params:
17     - name: task-name
18       value: B
19   taskRef:
20     name: sleep-and-log
21 - name: third
22   params:
23     - name: task-name
24       value: C
25     - name: time
26       value: "3"
27   taskRef:
28     name: sleep-and-log
29 - name: fourth
30   params:
31     - name: task-name
32       value: D
33   taskRef:
34     name: sleep-and-log
35
```



```
! ordered-tasks-pipeline.yaml > apiVersion
1  apiVersion: tekton.dev/v1beta
2  kind: Pipeline
3  metadata:
4    name: ordered-tasks
5  spec:
6    tasks:
7      - name: first
8        params:
9          - name: task-name
10            value: A
11          - name: time
12            value: "2"
13        taskRef:
14          name: sleep-and-log
15      - name: second
16        params:
17          - name: task-name
18            value: B
19        taskRef:
20          name: sleep-and-log
21        runAfter:
22          - first
23      - name: third
24
```



The screenshot shows a Visual Studio Code editor with a file named `ordered-tasks-pipeline.yaml`. The file contains a Tekton Pipeline definition:

```

1 apiVersion: tekton.dev/v1beta1
2 kind: Pipeline
3 metadata:
4   name: ordered-tasks
5 spec:
6   tasks:
7     - name: first
8       params:
9         - name: task-name
10          value: A
11         - name: time
12          value: "2"
13       taskRef:
14         name: sleep-and-log
15     - name: second
16       params:
17         - name: task-name
18          value: B
19       taskRef:
20         name: sleep-and-log
21       runAfter:
22         - first
23     - name: third
  
```

To the right of the editor, a DAG (Directed Acyclic Graph) diagram visualizes the pipeline. It shows three nodes: 'first', 'second', and 'third'. 'first' is at the top, with arrows pointing down to 'second' and 'third'. 'second' and 'third' are side-by-side, with arrows pointing down to a single 'fourth' node at the bottom.

The screenshot shows the Tekton Dashboard interface. The main view displays the details of a pipeline run named `results-run-k4qc7`, which was completed 15 minutes ago. The status is 'Succeeded' with 3 tasks completed and 0 failed, cancelled, or skipped.

The task list shows:

- `intro` (Completed)
- `results-run-k4qc7-roll-nss45` (Succeeded, Duration: 6 seconds)
- `roll` (Completed)
- `generate-random-number` (Completed)
- `result` (Completed)

The 'Status' tab for the `results-run-k4qc7-roll-nss45` task shows the following details:

```

completionTime: '2021-03-14T12:43:13Z'
conditions:
  lastTransitionTime: '2021-03-14T12:43:13Z'
  message: 'All Steps have completed executing'
  reason: Succeeded
  status: 'True'
  type: Succeeded
podName: results-run-k4qc7-roll-nss45-pod-lmzng
startTime: '2021-03-14T12:43:07Z'
steps:
  - container: stop-generate-random-number
    stepID: 0
    docker-pullable: //node@sha256:1b1d1f5033d07e097742a55ce415f377383194bac4e55134fa51156ac0d6
    name: generate-random-number
    terminated:
      containerID: c1c8b083f793386786954561f4db1f85480c6e1c87be724b777c3540a276a17
  
```

The screenshot shows Visual Studio Code with a file named `results-run-k4qc7-b237b3f5.yaml`. The main view displays a DAG diagram for a pipeline with three sequential tasks:

```

graph TD
  A[intro (1/1) 6 s] --> B[roll (1/1) 6 s]
  B --> C[result (1/1) 6 s]
  
```

On the right side, the 'TEKTON PIPELINES' explorer is open, showing a list of pipeline runs. The selected pipeline run is `results-run-k4qc7`, which has a status of 'Succeeded'. Below this, a list of other pipeline runs is visible, including `results-run-sb0ik`, `results-run-lvfm4`, and `level-selector-run-ljlqh`.



## Chapter 6: Scanning Databases

*No Images*

## Chapter 7: Scanning Mail Servers

*No Images*

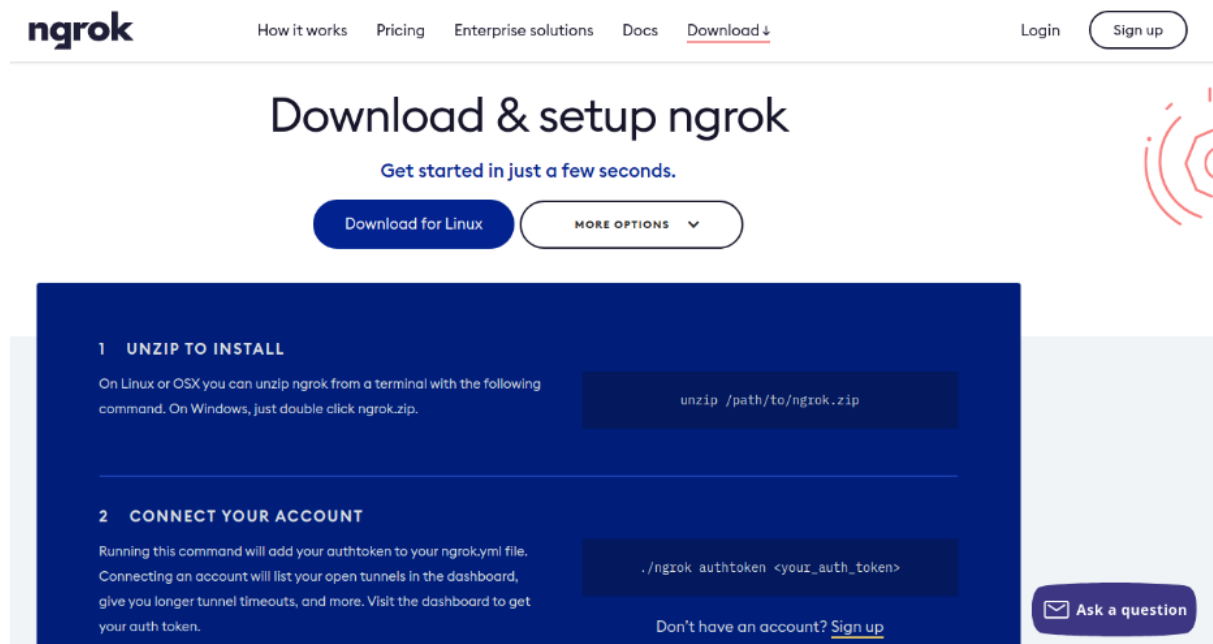
## Chapter 8: Scanning Windows Systems

*No Images*

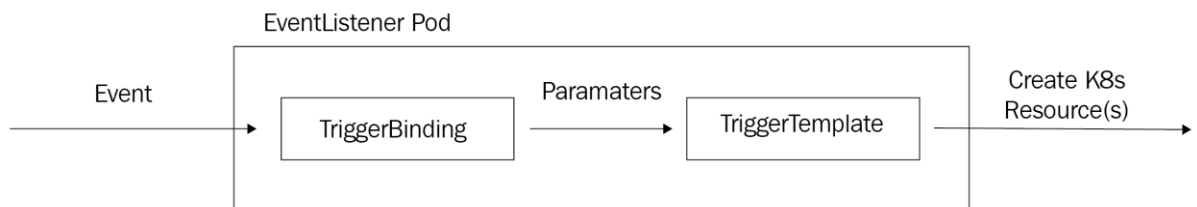
## Chapter 9: Scanning ICS/SCADA Systems

*No Images*

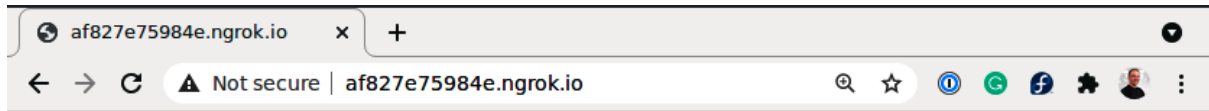
# Chapter 10: Scanning Mainframes



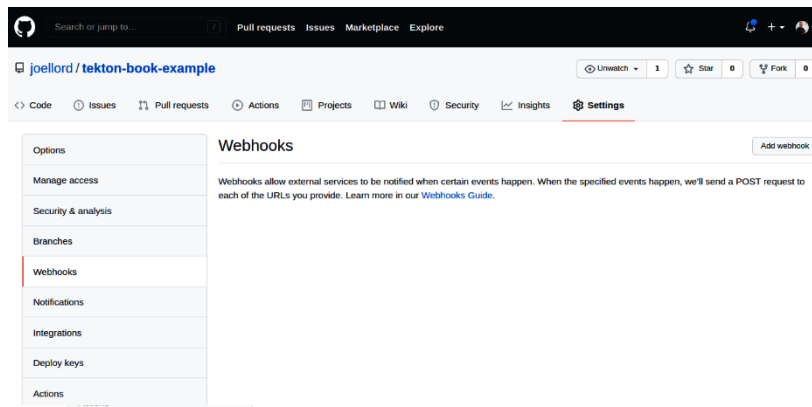
The screenshot shows the ngrok website's download and setup page. At the top, there is a navigation bar with the ngrok logo and links for 'How it works', 'Pricing', 'Enterprise solutions', 'Docs', and 'Download'. A 'Login' button and a 'Sign up' button are also present. The main heading is 'Download & setup ngrok', followed by the sub-heading 'Get started in just a few seconds.' Below this, there are two buttons: 'Download for Linux' and 'MORE OPTIONS'. The page is divided into two main sections: '1 UNZIP TO INSTALL' and '2 CONNECT YOUR ACCOUNT'. Section 1 provides instructions for Linux/OSX users to unzip the ngrok file and shows the terminal command: `unzip /path/to/ngrok.zip`. Section 2 provides instructions for connecting an account, showing the terminal command: `./ngrok authtoken <your_auth_token>`. A 'Don't have an account? Sign up' link is provided at the bottom of section 2. An 'Ask a question' button is located in the bottom right corner.



# Chapter 11: Optimizing Scans



```
{"eventListener":"listener","namespace":"default","errorMessage":"Invalid event body format format: unexpected end of JSON input"}
```



**Webhooks / Add webhook**

We'll send a POST request to the URL below with details of any subscribed events. You can also specify which data format you'd like to receive (JSON, x-www-form-urlencoded, etc). More information can be found in our [developer documentation](#).

**Payload URL \***

**Content type**

**Secret**

**Which events would you like to trigger this webhook?**

Just the push event.

Send me **everything**.

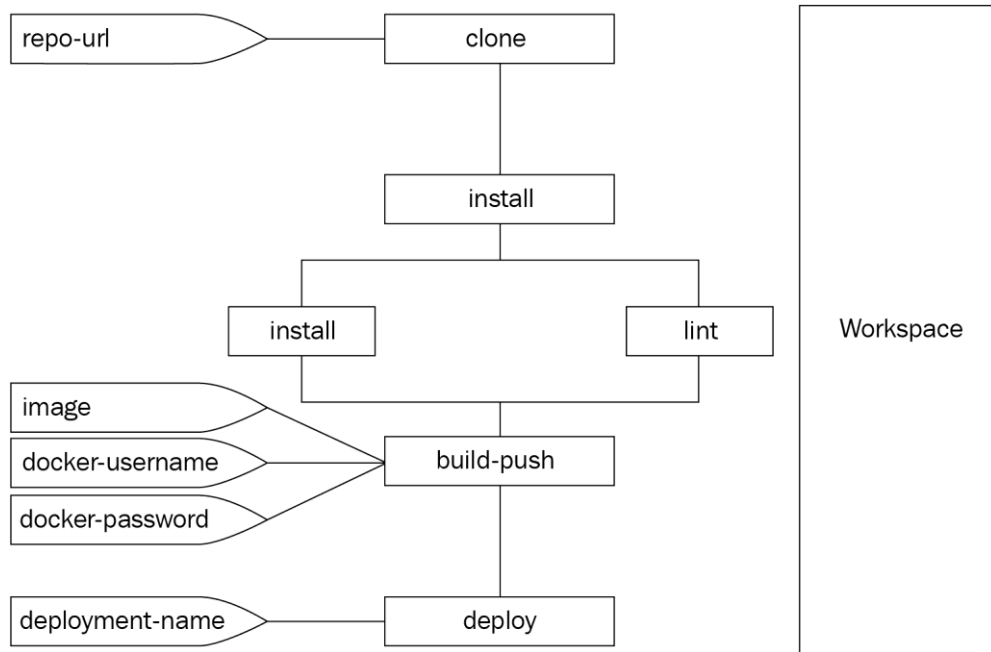
Let me select individual events.

**Active**  
We will deliver event details when this hook is triggered.

## Chapter 12: Generating Scan Reports

*No Images*

## Chapter 13: Developing for the Nmap Scripting Engine





# Chapter 14: Exploiting Vulnerabilities with the Nmap Scripting Engine

*No Images*