**🛰️ Shodan – Ultimate Cheat Sheet**

**🔹 1. Basics**

Shodan = "Search Engine for Hackers"  
It indexes devices & services connected to the internet.

**CLI Syntax**

shodan [command] [options]

**Authentication (first time only)**

shodan init YOUR\_API\_KEY

**🔹 2. Core Commands**

| **Command** | **Example** | **Description** |
| --- | --- | --- |
| shodan init | shodan init APIKEY | Authenticate with API key |
| shodan info | shodan info | Show account info & API stats |
| shodan search | shodan search apache | Search devices/services |
| shodan count | shodan count nginx | Count results without details |
| shodan host | shodan host 8.8.8.8 | Get info about an IP |
| shodan domain | shodan domain example.com | Get domain info |
| shodan myip | shodan myip | Show your public IP |
| shodan stats | shodan stats nginx --facets country | Statistics breakdown |

**🔹 3. Search Filters**

**Common Filters**

| **Filter** | **Example** | **Description** |
| --- | --- | --- |
| ip: | ip:8.8.8.8 | Search by IP |
| net: | net:192.168.1.0/24 | Search by subnet |
| port: | port:22 | Search by port |
| org: | org:Google | Filter by organization |
| hostname: | hostname:example.com | Search by hostname |
| country: | country:IN | Filter by country |
| city: | city:Mumbai | Filter by city |
| before/after: | before:2025-01-01 | Filter by crawl date |
| os: | os:Windows | Filter by operating system |
| product: | product:nginx | Filter by software |

**🔹 4. Examples**

**Find Apache servers in India**

shodan search "apache country:IN"

**Find devices on port 22 (SSH)**

shodan search "port:22"

**Find MySQL databases exposed**

shodan search "port:3306 product:mysql"

**Find webcams**

shodan search "webcam"

**Count nginx servers in US**

shodan count "nginx country:US"

**🔹 5. Host Information**

**Get details about an IP**

shodan host 8.8.8.8

Shows:

* Open ports
* Services running
* Organization
* Location

**🔹 6. Stats & Facets**

Facets = breakdown by category.

**Example: Breakdown of Apache servers by country**

shodan stats apache --facets country

**Example: Breakdown of MySQL servers by port**

shodan stats "product:mysql" --facets port

**🔹 7. Downloading Data**

**Save results to file**

shodan download apache\_results apache

**Read results**

shodan parse apache\_results.json.gz

**🔹 8. Alerts & Monitoring**

**Create alert for network monitoring**

shodan alert create "My Home" 192.168.1.0/24

**List alerts**

shodan alert list

**Delete alert**

shodan alert delete ALERT\_ID

**🔹 9. Advanced Search Strings**

| **Query** | **Finds** |
| --- | --- |
| port:21 Anonymous user logged in | FTP servers with anonymous login |
| port:23 "Welcome to" | Telnet banners |
| ssl:"Google" | Certificates mentioning "Google" |
| http.title:"WebcamXP" | Webcam interfaces |
| default password | Devices with default credentials in banners |
| port:3389 has\_screenshot:true | RDP servers with screenshots |

**🔹 10. Tips & Notes**

* Always start with **shodan info** to check API credits left.
* Use **filters** (port:, org:, country:) to narrow down results.
* Combine filters for laser-focused searches:
* shodan search "apache port:80 country:US"
* Shodan has **rate limits** – use downloads for bulk analysis.
* Great for **OSINT, pentesting, red team recon**.

⚡ With this cheat sheet, you can leverage Shodan for **IP/port/device discovery, banner analysis, monitoring networks, and OSINT research** like a professional hacker.