**📄 Heartbeat Installation and Configuration Guide**

**📘 Overview**

Heartbeat is a lightweight shipper designed to monitor the availability of services by pinging them at regular intervals and shipping the results to Elastic search. It's commonly used with the ELK Stack for uptime monitoring and alerting.

**🔧 Prerequisites**

* Elastic search and Kibana must be up and running.
* A Linux or Windows system to install Heartbeat.
* Internet access (for downloading packages).
* Sufficient privileges (sudo or admin access).

**🛠️ Installation Steps**

**✅ On Debian/Ubuntu:**

wget https://artifacts.elastic.co/downloads/beats/heartbeat/heartbeat-8.12.0-amd64.deb

sudo dpkg -i heartbeat-8.12.0-amd64.deb

**✅ On RHEL/CentOS:**

curl -L -O https://artifacts.elastic.co/downloads/beats/heartbeat/heartbeat-8.12.0-x86\_64.rpm

sudo rpm -vi heartbeat-8.12.0-x86\_64.rpm

**✅ On Windows:**

1. Download the ZIP from [Elastic Downloads](https://www.elastic.co/downloads/beats/heartbeat).
2. Extract the ZIP file.
3. Open PowerShell as Administrator and navigate to the extracted directory.

**⚙️ Configuration**

**🔍 Main config file: heartbeat.yml**

Located at:

* Linux: /etc/heartbeat/heartbeat.yml
* Windows: <extracted-folder>\heartbeat.yml

**📝 Sample Configuration**

heartbeat.monitors:

- type: http

id: my-web-check

name: My Web Check

schedule: '@every 10s'

hosts: ["https://example.com"]

check.response.status: 200

- type: tcp

id: my-tcp-check

name: My TCP Check

schedule: '@every 30s'

hosts: ["example.com:22"]

output.elasticsearch:

hosts: ["http://localhost:9200"]

setup.kibana:

host: "http://localhost:5601"

✅ You can use type: icmp, tcp, or http depending on your use case.

**🚀 Start Heartbeat**

**On Linux:**

sudo systemctl enable heartbeat

sudo systemctl start heartbeat

**On Windows:**

.\install-service-heartbeat.ps1

Start-Service heartbeat

**📊 Visualize in Kibana**

1. Navigate to **Kibana → Uptime**.
2. You should see your service checks listed.
3. Use filters, search, and tags to monitor specific checks.

**🔔 Alerting (Optional)**

To enable alerting:

1. Go to **Kibana → Uptime → Alerts**.
2. Create alert rules like "when monitor is down for more than X time".

**📌 Tips**

* Use heartbeat test config to verify config syntax.
* Use heartbeat test output to check connection to Elasticsearch.
* Use journalctl -u heartbeat or heartbeat -e for logs and troubleshooting.