The **Sensu backend** gives you flexible, automated workflows to route metrics and alerts. Sensu backends require persistent storage for their embedded database, disk space for local asset caching, and three exposed ports:

* 3000 - Sensu [web UI](https://docs.sensu.io/sensu-go/5.14/dashboard/overview)
* 8080 - Sensu [API](https://docs.sensu.io/sensu-go/5.14/api/overview) used by sensuctl, some plugins, and any of your custom tooling
* 8081 - WebSocket API used by Sensu agents

**Sensu agents** are lightweight clients that run on the infrastructure components you want to monitor.

**Install the Sensu backend in Ubuntu.**

# Add the Sensu repository

curl -s https://packagecloud.io/install/repositories/sensu/stable/script.deb.sh | sudo bash

# Install the sensu-go-backend package

sudo apt-get install sensu-go-backend

# Copy the config template from the docs

sudo curl -L https://docs.sensu.io/sensu-go/latest/files/backend.yml -o /etc/sensu/backend.yml

# Start sensu-backend using a service manager

sudo service sensu-backend start

# Verify that the backend is running

service sensu-backend status

open the web UI by visiting <http://localhost:3000>. You may need to replace localhost with the hostname or IP address where the Sensu backend is running

use user name: admin and password: P@ssw0rd!

To make sure the backend is up and running, we’ll check the health of the backend using the Sensu API. You should see a response that includes "Healthy": true.

curl http://127.0.0.1:8080/health

### Install sensuctl in Ubuntu

### Sensuctl is a command line tool for managing resources within Sensu. It works by calling Sensu’s HTTP API to create, read, update, and delete resources, events, and entities.

# Add the Sensu repository

curl -s https://packagecloud.io/install/repositories/sensu/stable/script.deb.sh | sudo bash

# Install the sensu-go-cli package

sudo apt-get install sensu-go-cli

### To start using sensuctl, run sensuctl configure and log in with your user credentials, namespace, and [Sensu backend](https://docs.sensu.io/sensu-go/5.14/installation/install-sensu/#install-the-sensu-backend) URL. To configure sensuctl using defaults:

sensuctl configure -n \

--username 'admin' \

--password 'P@ssw0rd!' \

--namespace default \

--url 'http://127.0.0.1:8080'

Run sensuctl config view to see your user profile.

### Install Sensu agents In Ubuntu.

# Add the Sensu repository

curl -s https://packagecloud.io/install/repositories/sensu/stable/script.deb.sh | sudo bash

# Install the sensu-go-agent package

sudo apt-get install sensu-go-agent

config and start sensu-agent

# Copy the config template from the docs

sudo curl -L https://docs.sensu.io/sensu-go/latest/files/agent.yml -o /etc/sensu/agent.yml

for other agents need to config URL of the Sensu backend server.

# /etc/sensu/agent.yml example

backend-url:

- "ws://0.0.0.0:8081"

- "ws://0.0.0.0:8082"

# Start sensu-agent using a service manager

service sensu-agent start

### Sensu keepalives are the heartbeat mechanism used to ensure that all registered agents are operational and able to reach the Sensu backend.

### To see the list of events run sensuctl entity list

## Using checks to monitor a service

### by configuring a check named check-cpu with a **subscription** named system, in order to target all **entities** subscribed to the system subscription.

### Registering assets

To power the check, we’ll use the [Sensu CPU checks asset](https://bonsai.sensu.io/assets/sensu-plugins/sensu-plugins-cpu-checks) and the [Sensu Ruby runtime asset](https://bonsai.sensu.io/assets/sensu/sensu-ruby-runtime) you will get this asset from https://bonsai.sensu.io/assets/

sensuctl asset create sensu-plugins-cpu-checks --url "[Sensu CPU checks asset](https://bonsai.sensu.io/assets/sensu-plugins/sensu-plugins-cpu-checks)" --sha512 "ssh-key"

Then use the following sensuctl example to register the sensu-ruby-runtime asset

sensuctl asset create sensu-plugins-cpu-checks --url "[Sensu Ruby runtime asset](https://bonsai.sensu.io/assets/sensu/sensu-ruby-runtime)" --sha512 "ssh-key"

You can use sensuctl to confirm that both the sensu-plugins-cpu-checks and sensu-ruby-runtime assets are ready to use.

sensuctl asset list

### Creating the check

sensuctl check create check-cpu \

--command 'check-cpu.rb -w 75 -c 90' \

--interval 60 \

--subscriptions system \

--runtime-assets sensu-plugins-cpu-checks,sensu-ruby-runtime

### Configuring the subscription

To run the check, we’ll need a Sensu agent with the subscription system. After [installing an agent](https://docs.sensu.io/sensu-go/5.14/installation/install-sensu/#install-sensu-agents), open /etc/sensu/agent.yml and add the system subscription so the subscription configuration looks like:

subscriptions:

- system

Then restart the agent.

sudo service sensu-agent restart

sensuctl event list

Swap-check

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sensuctl check create check-swap \

--command 'check-swap-percent.rb -w 70 -c 80' \

--interval 60 \

--subscriptions system \

--runtime-assets sensu-plugins-memory-checks,sensu-ruby-runtime

Slack Handler:-

------------------------------------------------------------------------------

sensuctl handler create slack \

--type pipe \

--env-vars "SLACK\_WEBHOOK\_URL=https://hooks.slack.com/services/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" \

--command "sensu-slack-handler --channel '#monitoring-sensu'" \

--runtime-assets sensu-slack-handler

Email handler:--

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sensuctl handler create email-handler --type pipe --command "sensu-email-handler --fromEmail gantasagarreddy467@gmail.com --toEmail g.sagar.reddy614@gmail.com --smtpHost 'smtp.gmail.com' --smtpUsername 'gantasagarreddy467@gmail.com' --smtpPassword 'Password'" --timeout 10 --runtime-assets sensu-email-handler

**Need to install all ruby require mints**

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apt install ruby-dev libffi-dev build-essential

gem install text-table & gem install sensu-plugin

sudo apt-get install ruby-full

sudo apt-get install rubygems build-essential

sudo apt-get install rubygems

**Configure the own load check**

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sensuctl check create check-load --command '/home/ubuntu/check-load.rb -c 4,100,100 -w 3,3,3' --interval 60 --subscriptions system --runtime-assets sensu-ruby-runtime