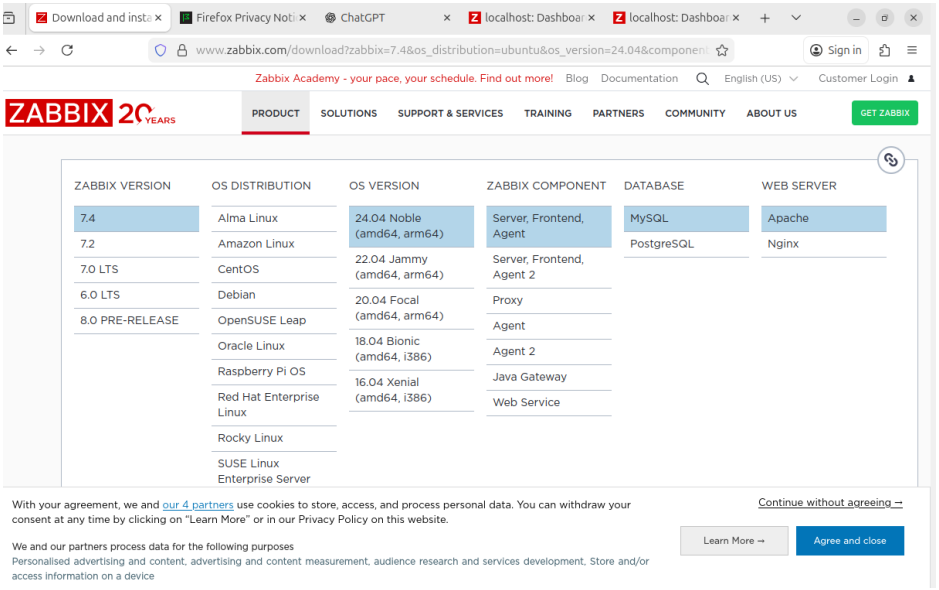
Zabbix installation:

Prerequestites:**virtual box,ubuntu**

Open the zabbix.com in browser and select the options based on the below screenshot




Step-1:Updating the ubuntu by using the command :sudo apt update

Step-2:Become root privilege by using command sudo-s

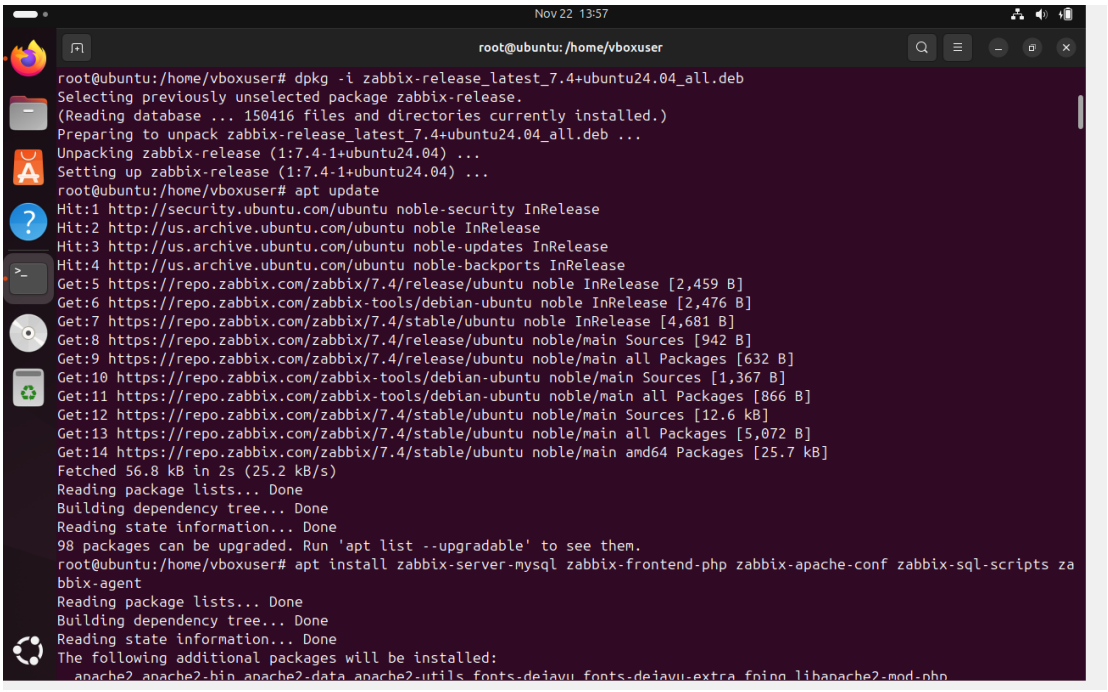
Step-3:install zabbix repositories using the following commands

**# wget https://repo.zabbix.com/zabbix/7.4/release/ubuntu/pool/main/z/zabbix-release/zabbix-release_latest_7.4+ubuntu24.04_all.deb**
**# dpkg -i zabbix-release_latest_7.4+ubuntu24.04_all.deb**
**# apt update**

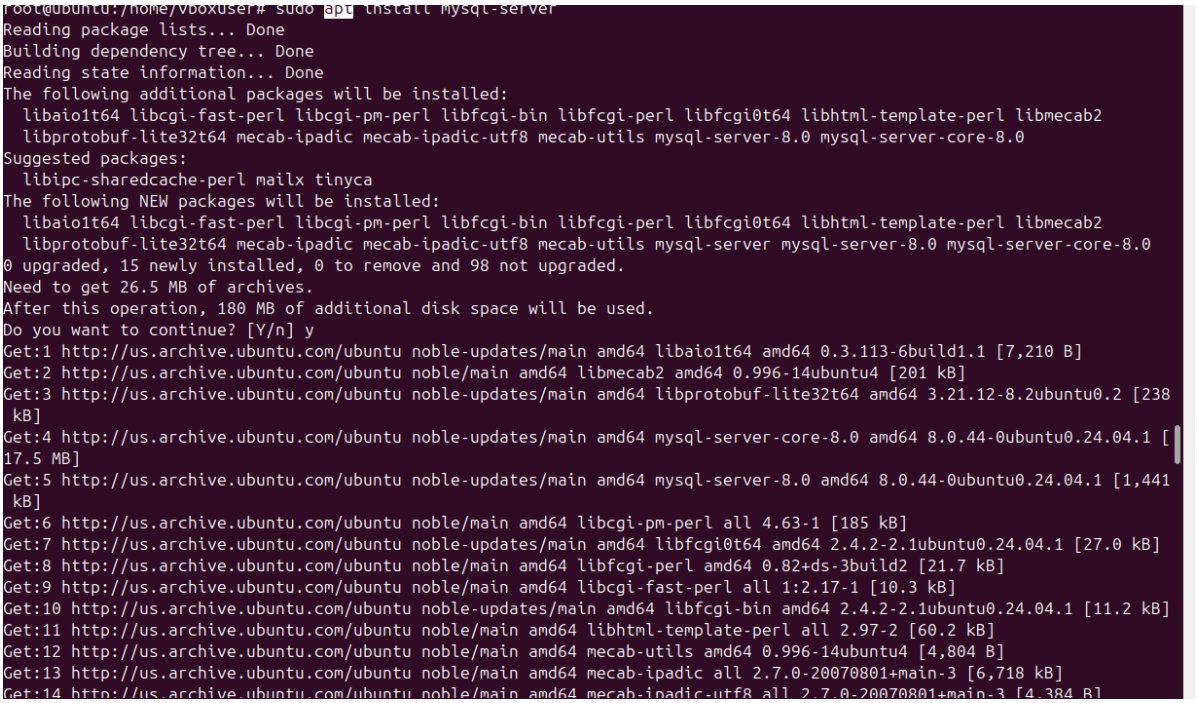
```
See "man sudo_root" for details.

vboxuser@ubuntu:~$ sudo apt update
[sudo] password for vboxuser:
Hit:1 http://us.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Hit:3 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:4 http://us.archive.ubuntu.com/ubuntu noble-backports InRelease
Get:5 http://us.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1,620 kB]
Fetched 1,746 kB in 2s (969 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
98 packages can be upgraded. Run 'apt list --upgradable' to see them.
vboxuser@ubuntu:~$ sudo -s
root@ubuntu:/home/vboxuser# ubuntu
ubuntu: command not found
root@ubuntu:/home/vboxuser# wget https://repo.zabbix.com/zabbix/7.4/release/ubuntu/pool/main/z/zabbix-release/zabbix-rel
ease_latest_7.4+ubuntu24.04_all.deb
--2025-11-22 12:46:08--  https://repo.zabbix.com/zabbix/7.4/release/ubuntu/pool/main/z/zabbix-release/zabbix-release_lat
est_7.4+ubuntu24.04_all.deb
Resolving repo.zabbix.com (repo.zabbix.com)... 178.128.6.101, 2604:a880:2:d0::2062:d001
Connecting to repo.zabbix.com (repo.zabbix.com)|178.128.6.101|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 7144 (7.0K) [application/octet-stream]
Saving to: 'zabbix-release_latest_7.4+ubuntu24.04_all.deb'

zabbix-release_latest_7.4+ubu 100%[=================================================>]   6.98K  --.-KB/s    in 0s

2025-11-22 12:46:09 (413 MB/s) - 'zabbix-release_latest_7.4+ubuntu24.04_all.deb' saved [7144/7144]

root@ubuntu:/home/vboxuser# dpkg -i zabbix-release_latest_7.4+ubuntu24.04_all.deb
```

Step-4:Install Zabbix server, frontend, agent by running the following command

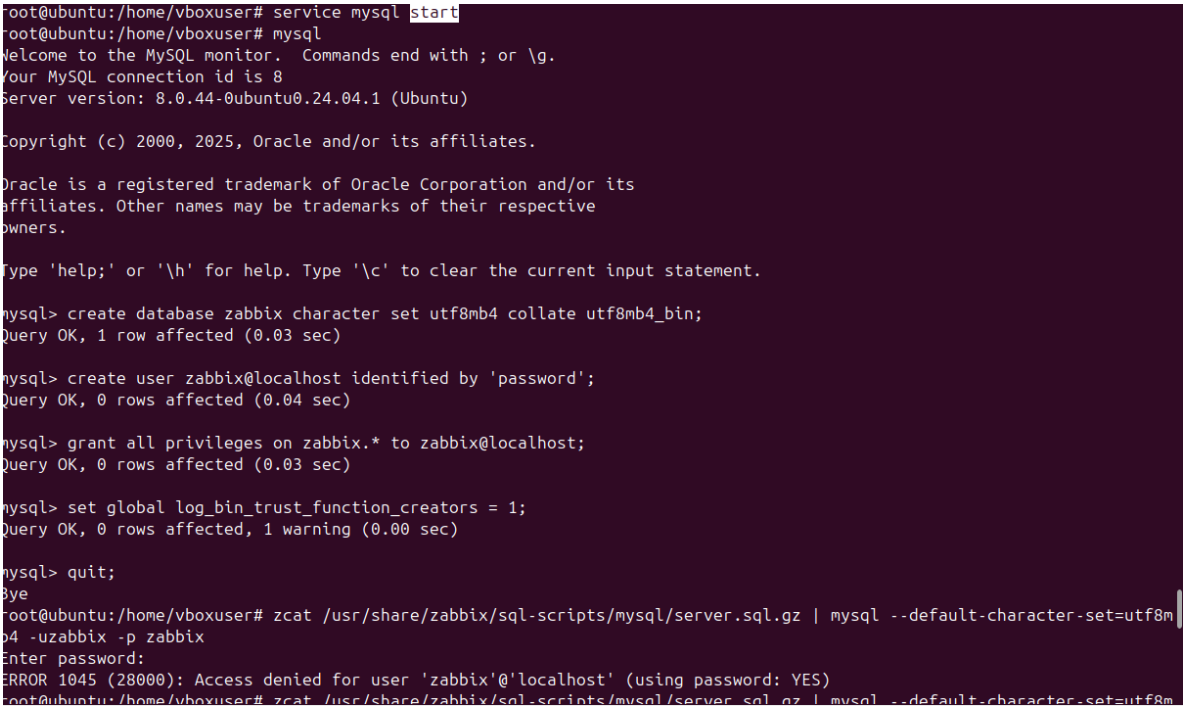
# apt install zabbix-server-mysql zabbix-frontend-php zabbix-apache-conf zabbix-sql-scripts zabbix-agent



Step-5:Installing mysql by using the command sudo apt install mysql-server



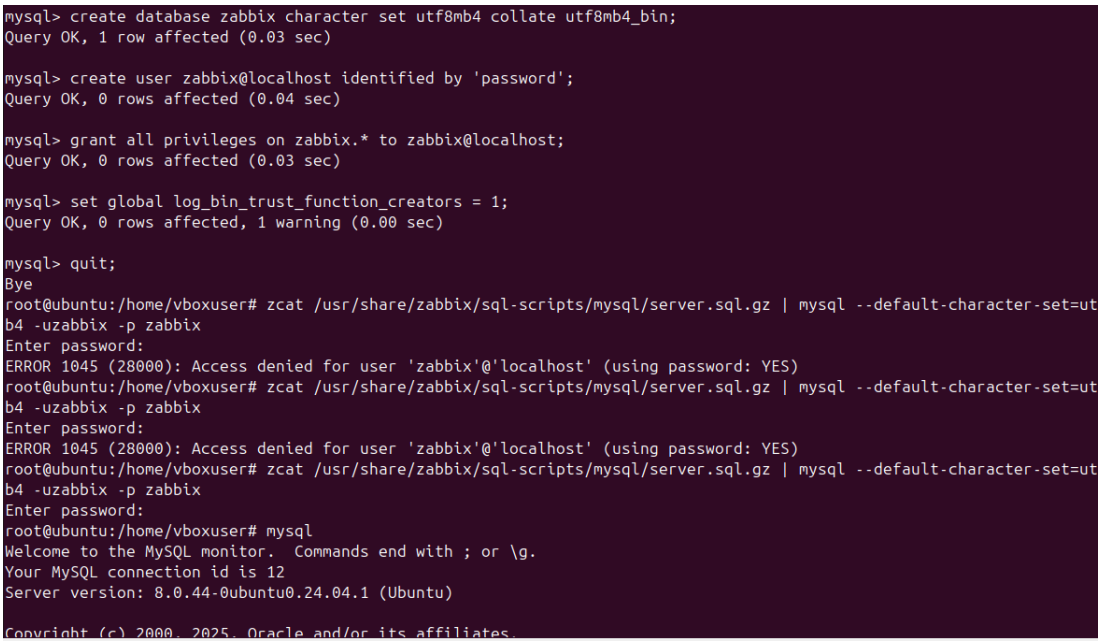

Step-6:starting the mysql service using the command :service mysql start



Step-7:Create initial database
mysql> create database zabbix character set utf8mb4 collate utf8mb4_bin;
mysql> create user zabbix@localhost identified by 'password';
mysql> grant all privileges on zabbix.* to zabbix@localhost;
mysql> set global log_bin_trust_function_creators = 1;
mysql> quit;

Step-8: On Zabbix server host import initial schema and data. You will be prompted to enter your newly created password.(password=password)

# zcat /usr/share/zabbix/sql-scripts/mysql/server.sql.gz | mysql --default-character-set=utf8mb4 -uzabbix -p zabbix




Step-9:Edit file /etc/zabbix/zabbix_server.conf using the command sudo nano /etc/zabbix/zabbix _server.conf

Change password=password as shown in below screenshot

Step-10:

Start Zabbix server and agent processes

Start Zabbix server and agent processes and make it start at system boot.

# systemctl restart zabbix-server zabbix-agent apache2
# systemctl enable zabbix-server zabbix-agent apache2

```
root@ubuntu:/home/vboxuser# sudo nano /etc/zabbix/zabbix_server.conf
root@ubuntu:/home/vboxuser# systemctl restart zabbix-server zabbix-agent apache2
root@ubuntu:/home/vboxuser# systemctl enable zabbix-server zabbix-agent apache2
Synchronizing state of zabbix-server.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable zabbix-server
Synchronizing state of zabbix-agent.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable zabbix-agent
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
Created symlink /etc/systemd/system/multi-user.target.wants/zabbix-server.service → /usr/lib/systemd/system/zabbix-serve
r.service.
root@ubuntu:/home/vboxuser# sudo systemctl status zabbix-server.service
● zabbix-server.service - Zabbix Server
     Loaded: loaded (/usr/lib/systemd/system/zabbix-server.service; enabled; preset: enabled)
     Active: active (running) since Sat 2025-11-22 13:41:49 UTC; 2min 25s ago
   Main PID: 23673 (zabbix_server)
      Tasks: 77 (limit: 6901)
     Memory: 62.3M (peak: 62.8M)
        CPU: 1.476s
     CGroup: /system.slice/zabbix-server.service
             ├─23673 /usr/sbin/zabbix_server -c /etc/zabbix/zabbix_server.conf
```

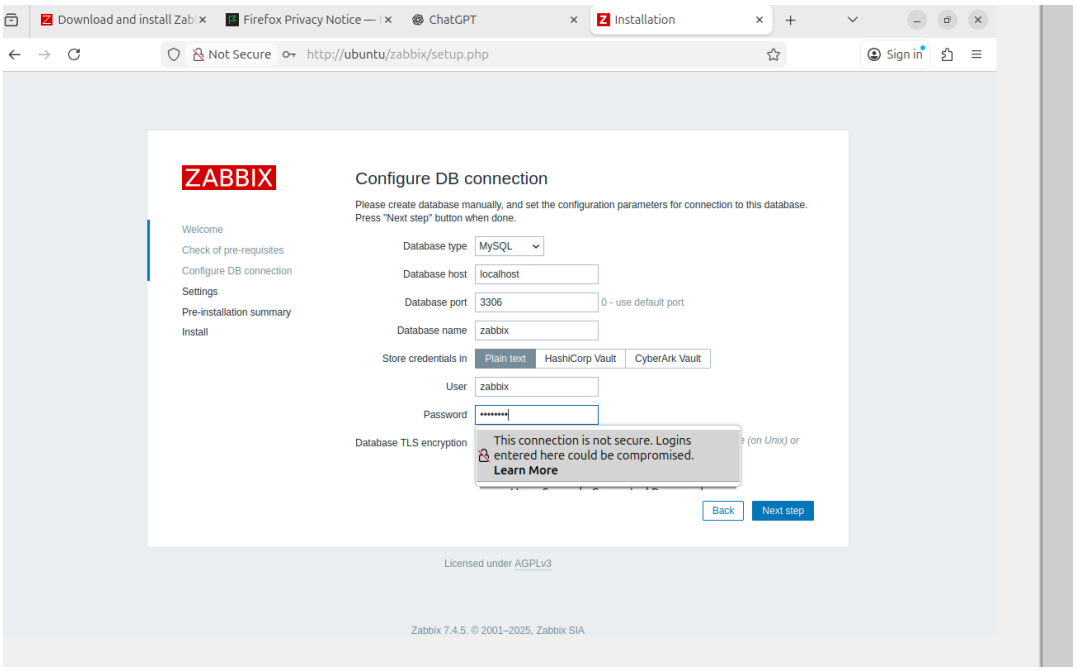
```
# Mandatory: no
# Default:C
DBPassword=password
### Option: DBSocket
#       Path to MySQL socket.
#
# Mandatory: no
# Default:
# DBSocket=

### Option: DBPort
#       Database port when not using local socket.
#
# Mandatory: no
# Range: 1024-65535
# Default for MySQL: 3306
# Default for PostgreSQL: 5432
# DBPort=

### Option: AllowUnsupportedDBVersions
#       Allow server to work with unsupported database versions.
#       0 - do not allow
#       1 - allow
#
# Mandatory: no
# Default:
# AllowUnsupportedDBVersions=0

^G Help      ^O Write Out  ^W Where Is  ^K Cut       ^T Execute   ^C Location  M-U Undo    M-A Set Mark
^X Exit      ^R Read File  ^\ Replace   ^U Paste     ^J Justify   ^/ Go To Line M-E Redo    M-6 Copy
```

```
root@ubuntu:/home/vboxuser# hostname
ubuntu
root@ubuntu:/home/vboxuser# hostname
```

Step-11:

Open Zabbix UI web page

The default URL for Zabbix UI when using Apache web server is http://host/zabbix


Download and install Zab
Firefox Privacy Notice —
ChatGPT
Installation
Not Secure
http://ubuntu/zabbix/setup.php
Sign in
ZABBIX
Configure DB connection
Please create database manually, and set the configuration parameters for connection to this database.
Press "Next step" button when done.
Welcome
Check of pre-requisites
Configure DB connection
Settings
Pre-installation summary
Install
Database type
MySQL
Database host
localhost
Database port
3306
0 - use default port
Database name
zabbix
Store credentials in
Plain text
HashiCorp Vault
CyberArk Vault
User
zabbix
Password
Database TLS encryption
This connection is not secure. Logins entered here could be compromised.
Learn More
Back
Next step
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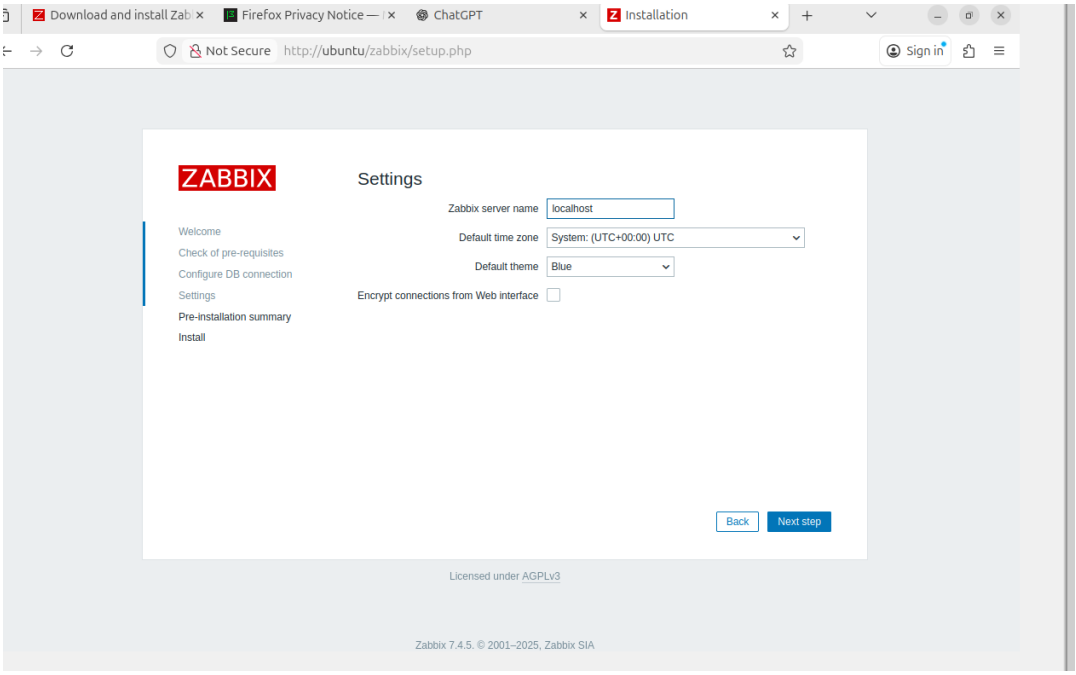
Zabbix 7.4.5. © 2001–2025, Zabbix SIA


Download and install Zab
Firefox Privacy Notice —
ChatGPT
Installation
Not Secure
http://ubuntu/zabbix/setup.php
Sign in
ZABBIX
Settings
Welcome
Check of pre-requisites
Configure DB connection
Settings
Pre-installation summary
Install
Zabbix server name
localhost
Default time zone
System: (UTC+00:00) UTC
Default theme
Blue
Encrypt connections from Web interface
Back
Next step
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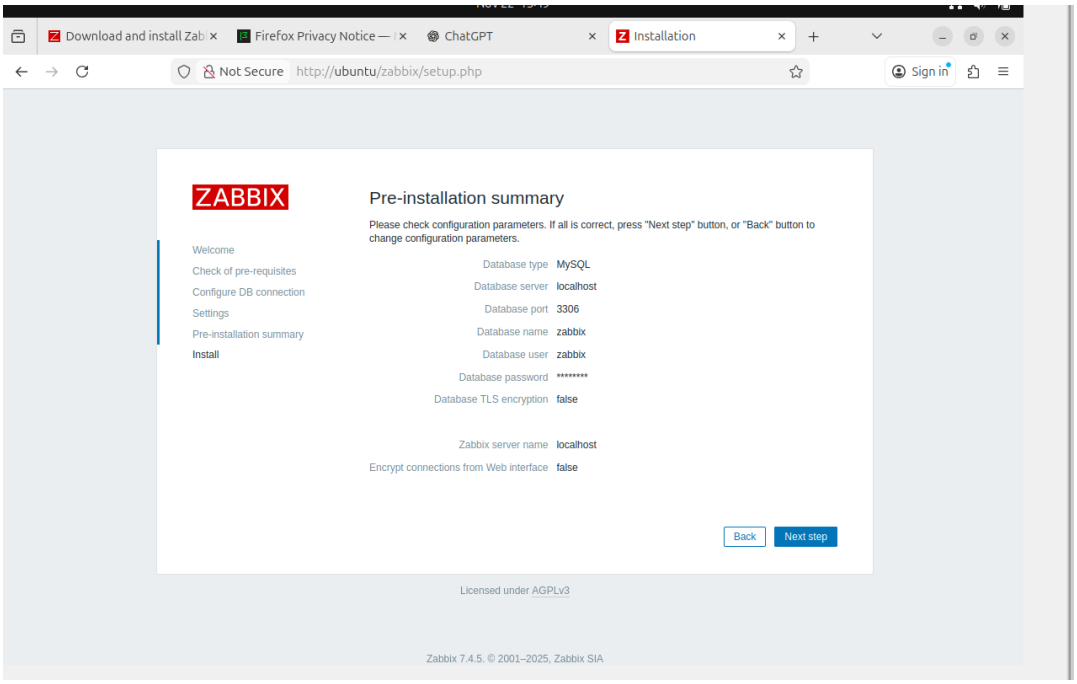
Download and install Zab
Firefox Privacy Notice —
ChatGPT
Installation
Not Secure
http://ubuntu/zabbix/setup.php
Sign in
ZABBIX
Pre-installation summary
Please check configuration parameters. If all is correct, press "Next step" button, or "Back" button to change configuration parameters.
Welcome
Check of pre-requisites
Configure DB connection
Settings
Pre-installation summary
Install
Database type MySQL
Database server localhost
Database port 3306
Database name zabbix
Database user zabbix
Database password ********
Database TLS encryption false
Zabbix server name localhost
Encrypt connections from Web interface false
Back
Next step
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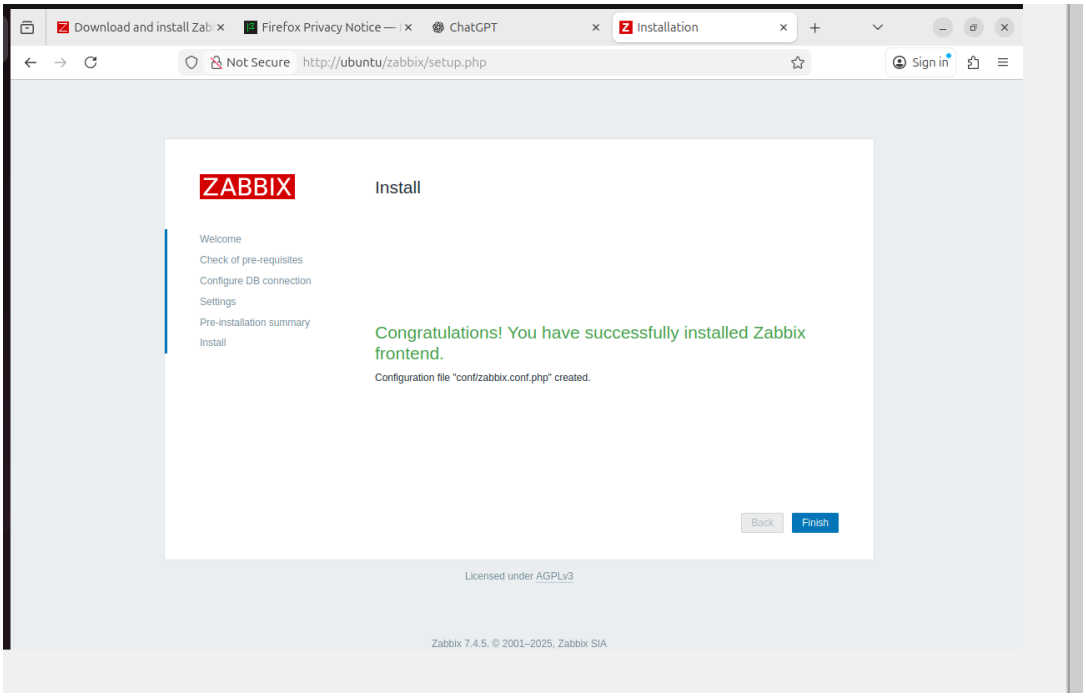
Download and install Zab
Firefox Privacy Notice —
ChatGPT
Installation
Not Secure
http://ubuntu/zabbix/setup.php
Sign in
ZABBIX
Install
Welcome
Check of pre-requisites
Configure DB connection
Settings
Pre-installation summary
Install
Congratulations! You have successfully installed Zabbix frontend.
Configuration file "conf/zabbix.conf.php" created.
Back
Finish
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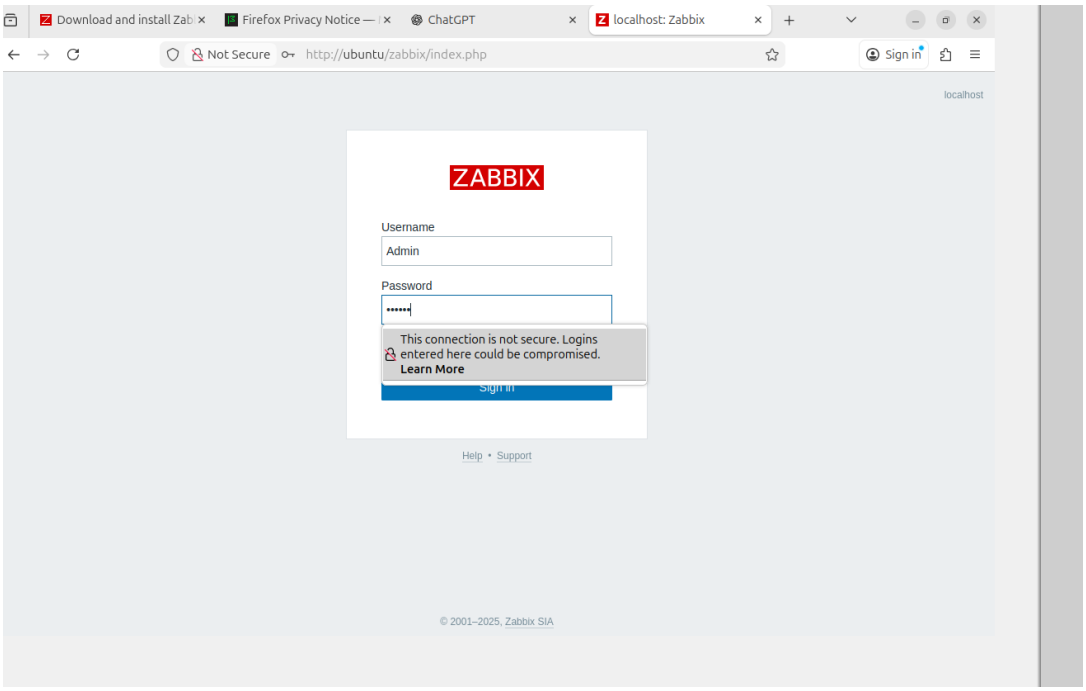
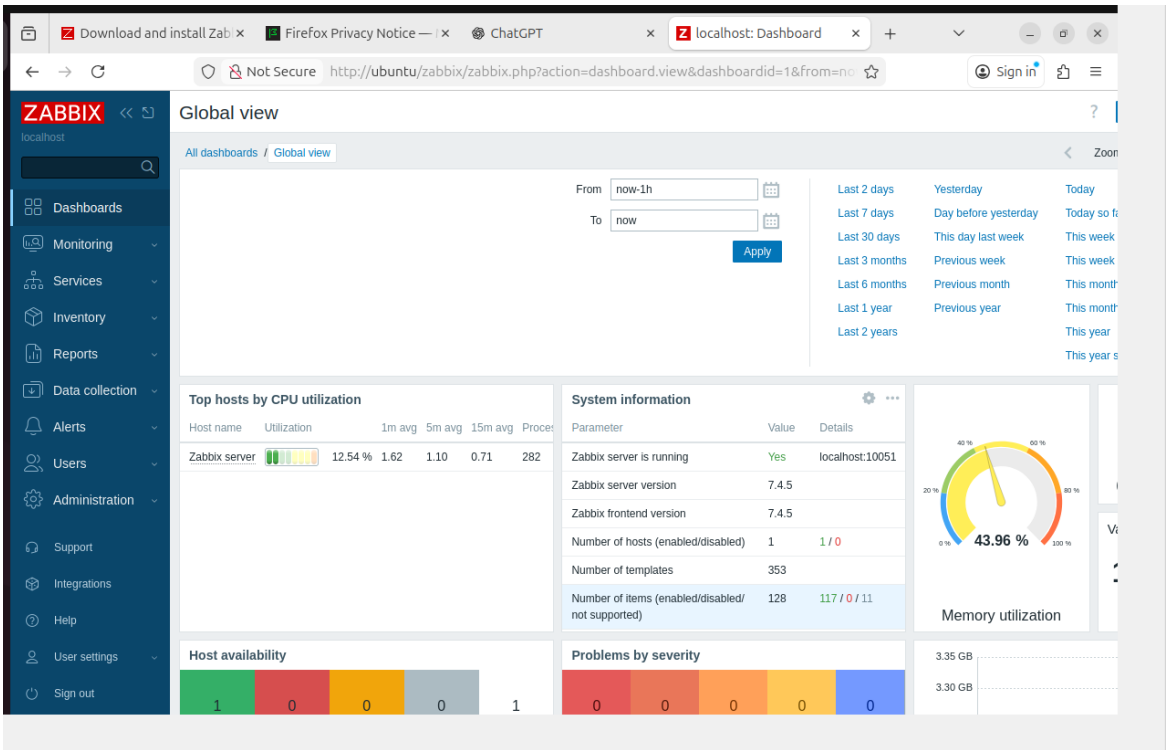
Zabbix 7.4.5. © 2001–2025, Zabbix SIA

Login to Zabbix using

Username:Admin

Password:password



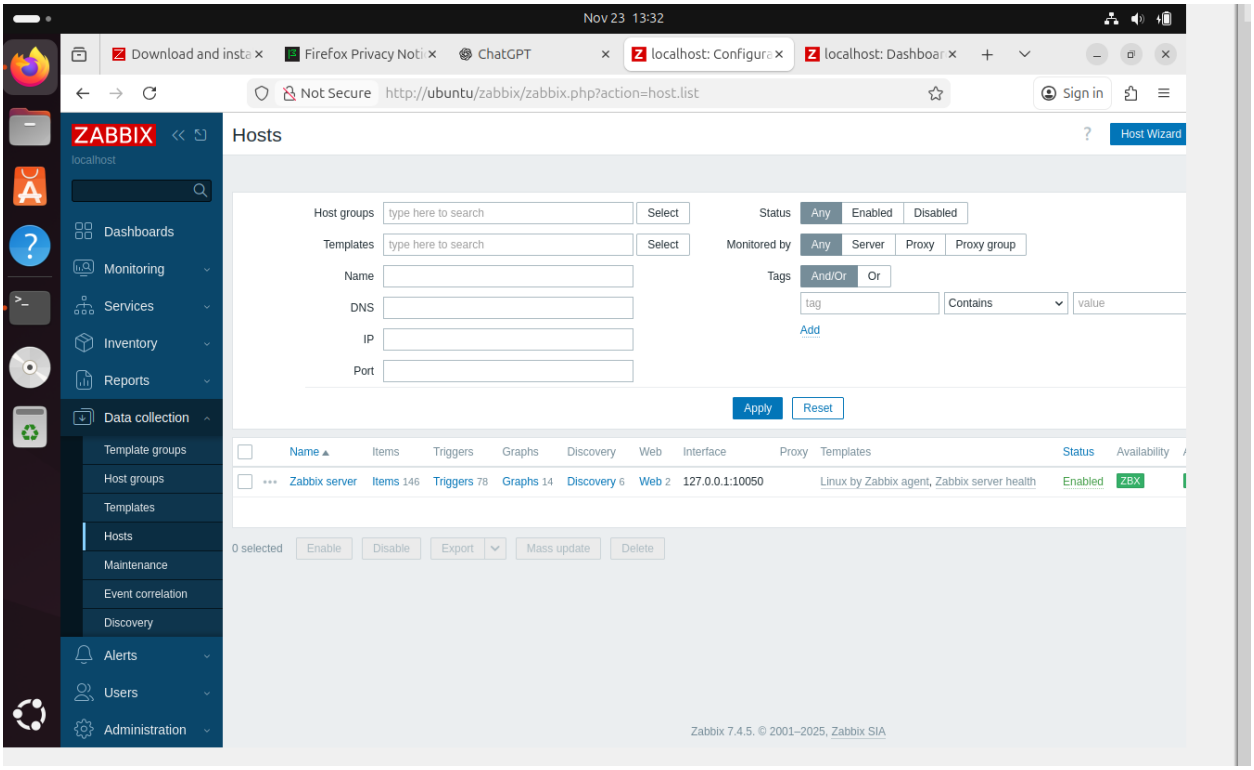



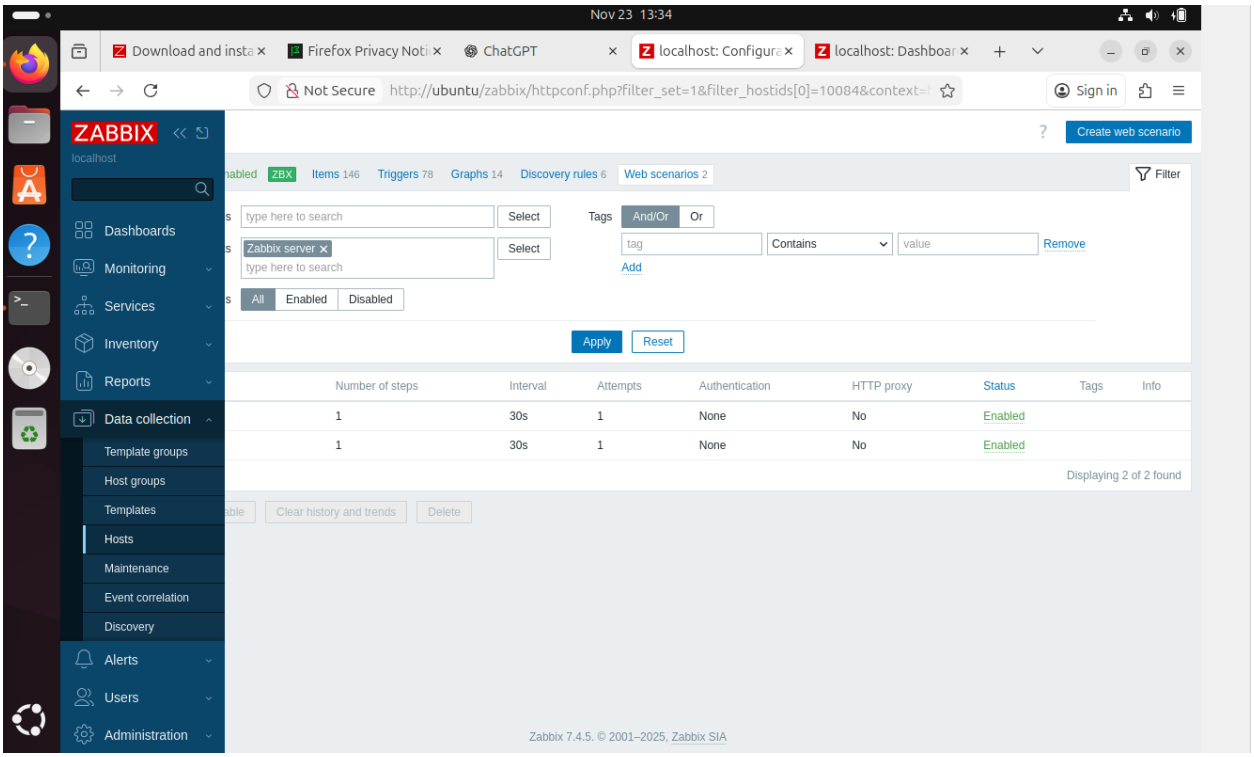
Monitoring web using Zabbix:

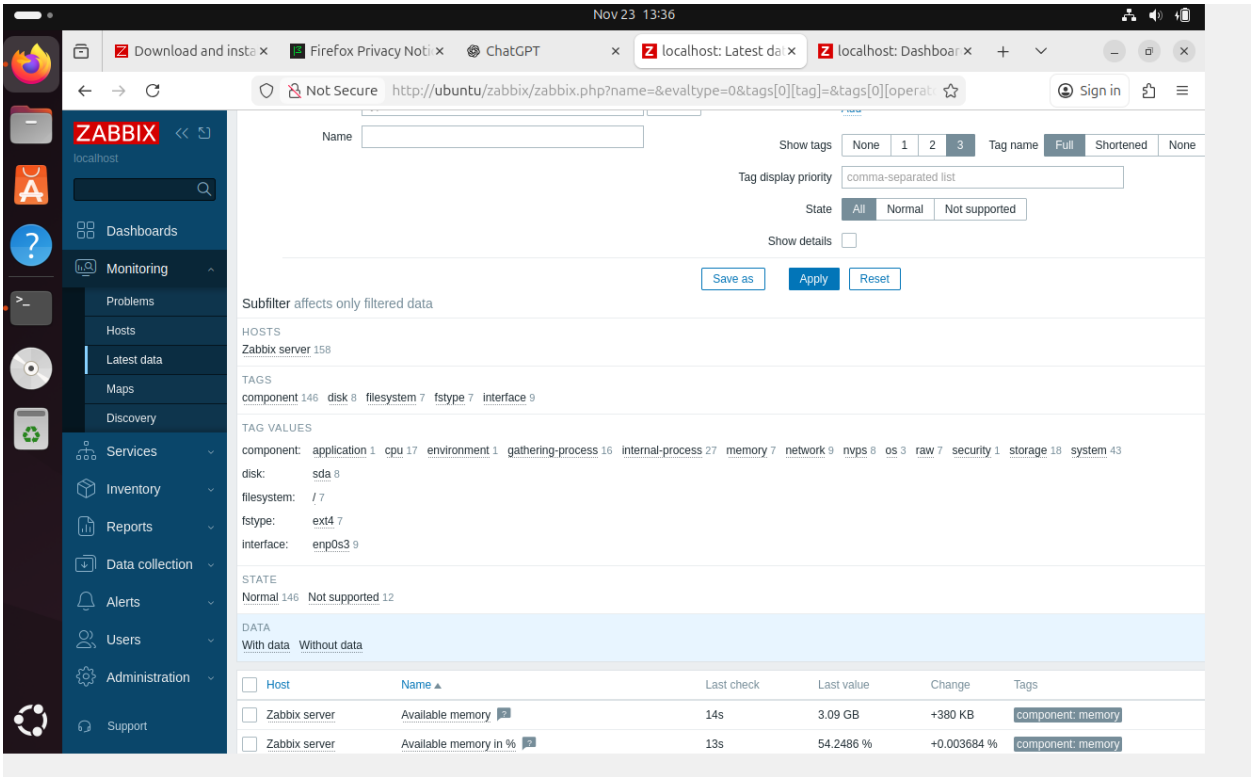
Step-1:Adding website to monitor

Select Data Collection=>Hosts=>web=>select create web scenario and add the websites wants to monitor

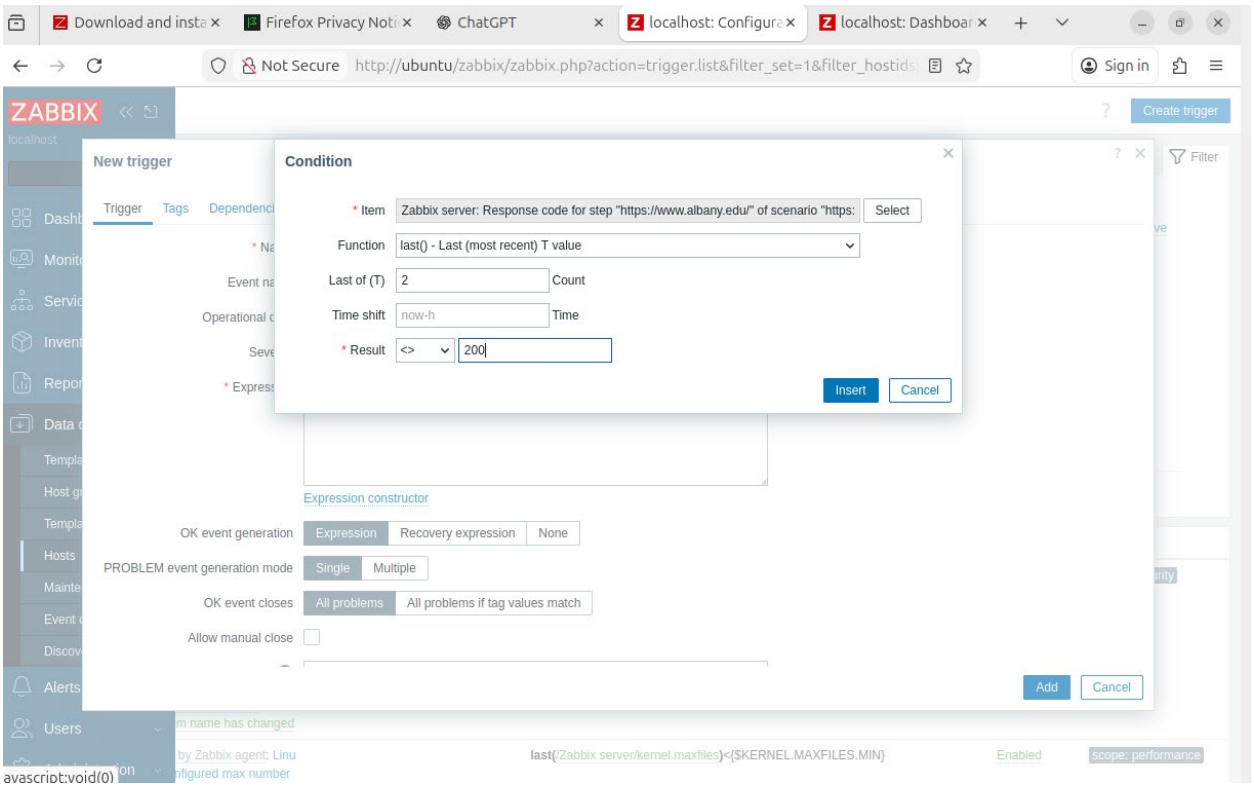
Step-2:select monitoring=>latest data=>select host Zabbix-server=>where you can observe the response code(200)

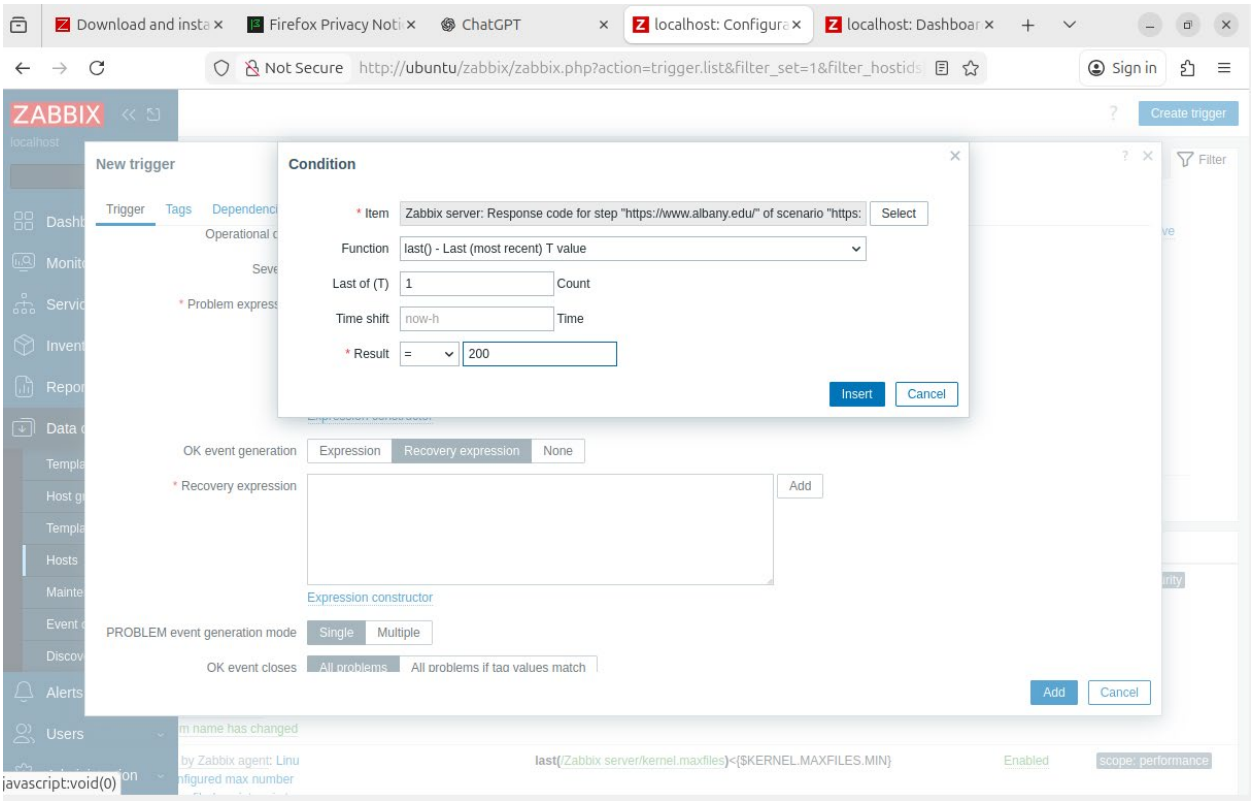


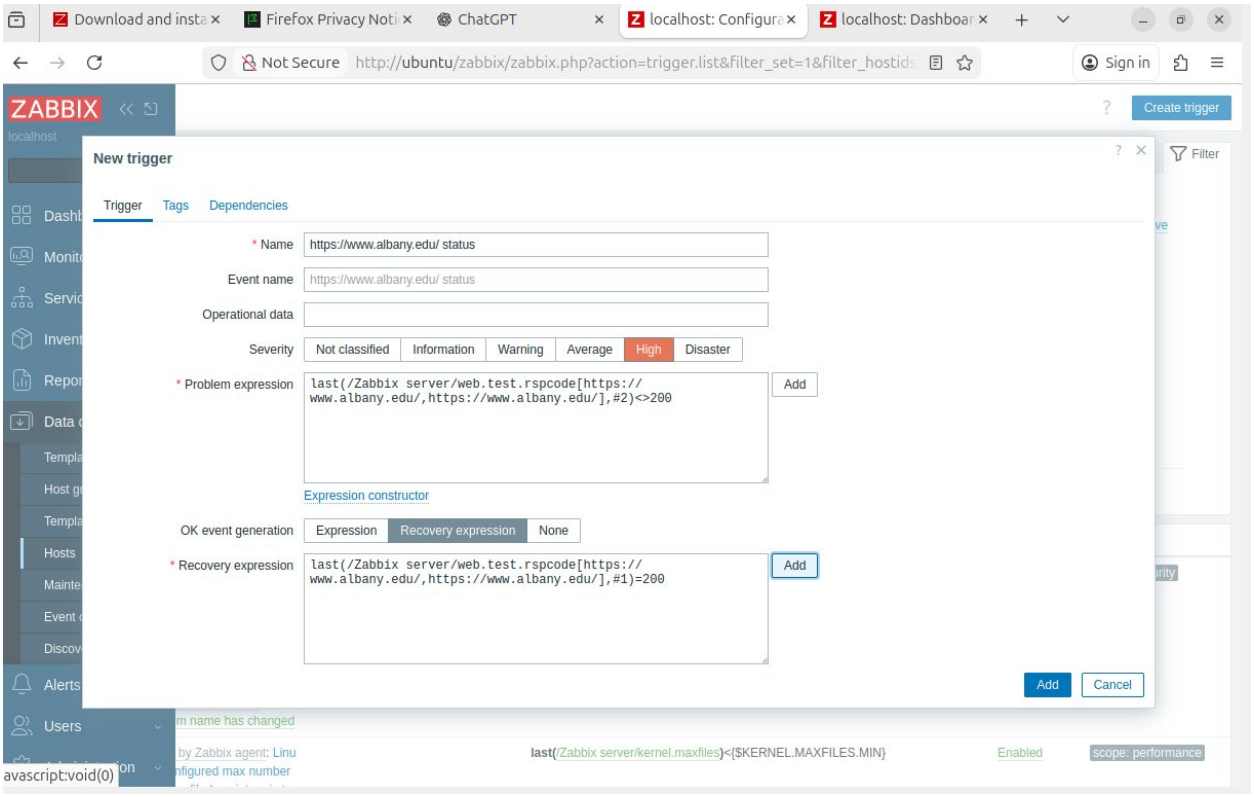


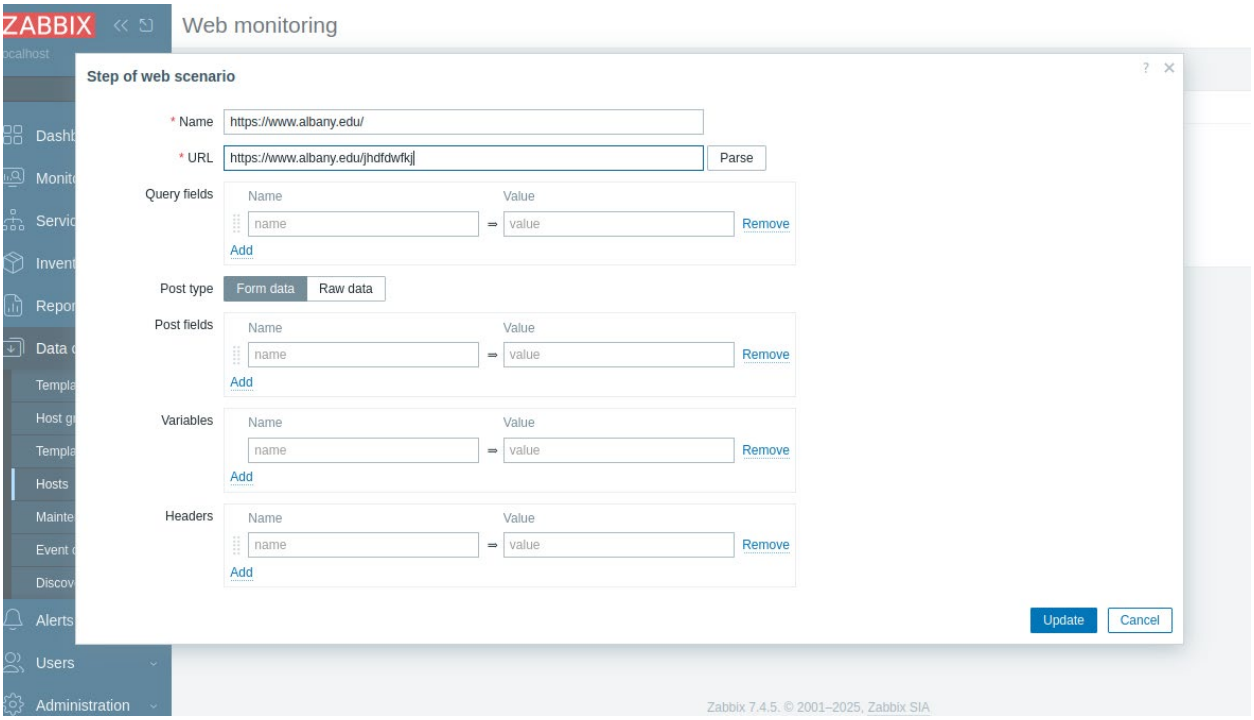



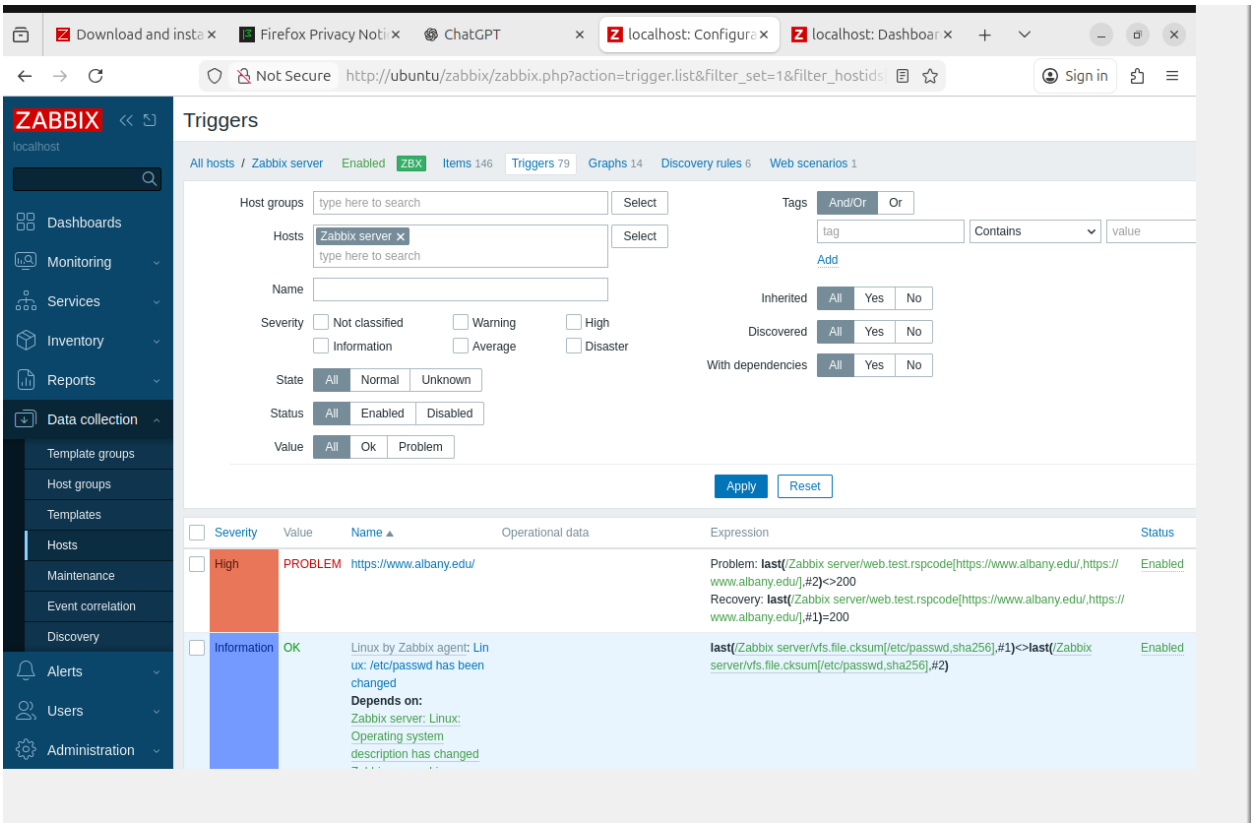

| | | | | |
|---|---|---|---|---|
| Zabbix server | Queue | 7s | 0 | component: system |
| Zabbix server | Queue over 10 minutes | 8s | 0 | component: system |
| Zabbix server | Response code for step "Google.com" of scenario "Goo… | 27s | 200 | |
| Zabbix server | Response code for step "https://www.albany.edu/" of sce… | 28s | 200 | |

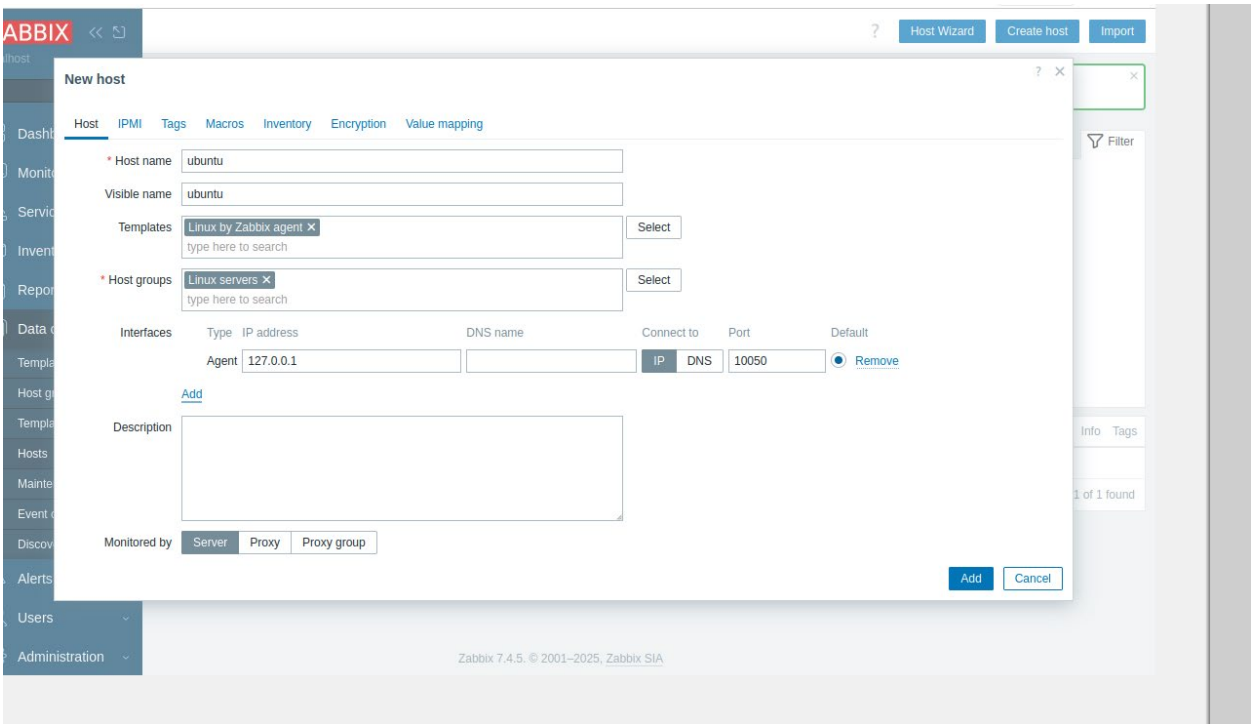

Download and insta
Firefox Privacy Noti
ChatGPT
localhost: Configura
localhost: Dashboar
Not Secure
http://ubuntu/zabbix/zabbix.php?action=trigger.list&filter_set=1&filter_hostids
Sign in
ZABBIX
Create trigger
New trigger
Trigger
Tags
Condition
* Item
Zabbix server: Response code for step "https://www.albany.edu/" of scenario "https:
Select
Function
last() - Last (most recent) T value
Last of (T)
2
Count
Time shift
now-h
Time
* Result
<>
200
Insert
Cancel
Filter
Expression constructor
OK event generation
Expression
Recovery expression
None
PROBLEM event generation mode
Single
Multiple
OK event closes
All problems
All problems if tag values match
Allow manual close
Add
Cancel
Alerts
Users
last(/Zabbix server/kernel.maxfiles)<{$KERNEL.MAXFILES.MIN}
Enabled
scope: performance
javascript:void(0)

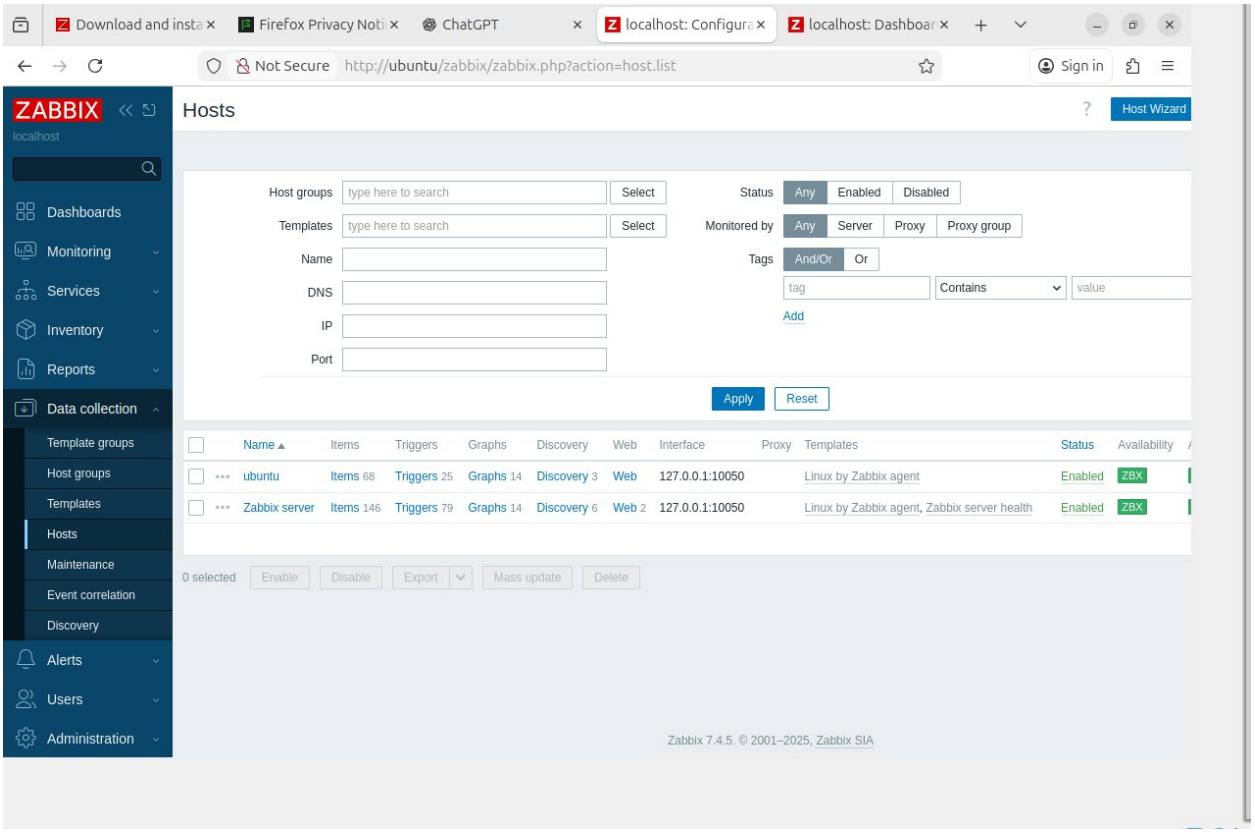

Download and insta
Firefox Privacy Noti
ChatGPT
localhost: Configura
localhost: Dashboar
Not Secure
http://ubuntu/zabbix/zabbix.php?action=trigger.list&filter_set=1&filter_hostids
Sign in
ZABBIX
Create trigger
New trigger
Trigger
Tags
Condition
* Item
Zabbix server: Response code for step "https://www.albany.edu/" of scenario "https:
Select
Function
last() - Last (most recent) T value
Last of (T)
1
Count
Time shift
now-h
Time
* Result
=
200
Insert
Cancel
Filter
OK event generation
Expression
Recovery expression
None
* Recovery expression
Add
Expression constructor
PROBLEM event generation mode
Single
Multiple
OK event closes
All problems
All problems if tag values match
Add
Cancel
Alerts
Users
last(/Zabbix server/kernel.maxfiles)<{$KERNEL.MAXFILES.MIN}
Enabled
scope: performance
javascript:void(0)

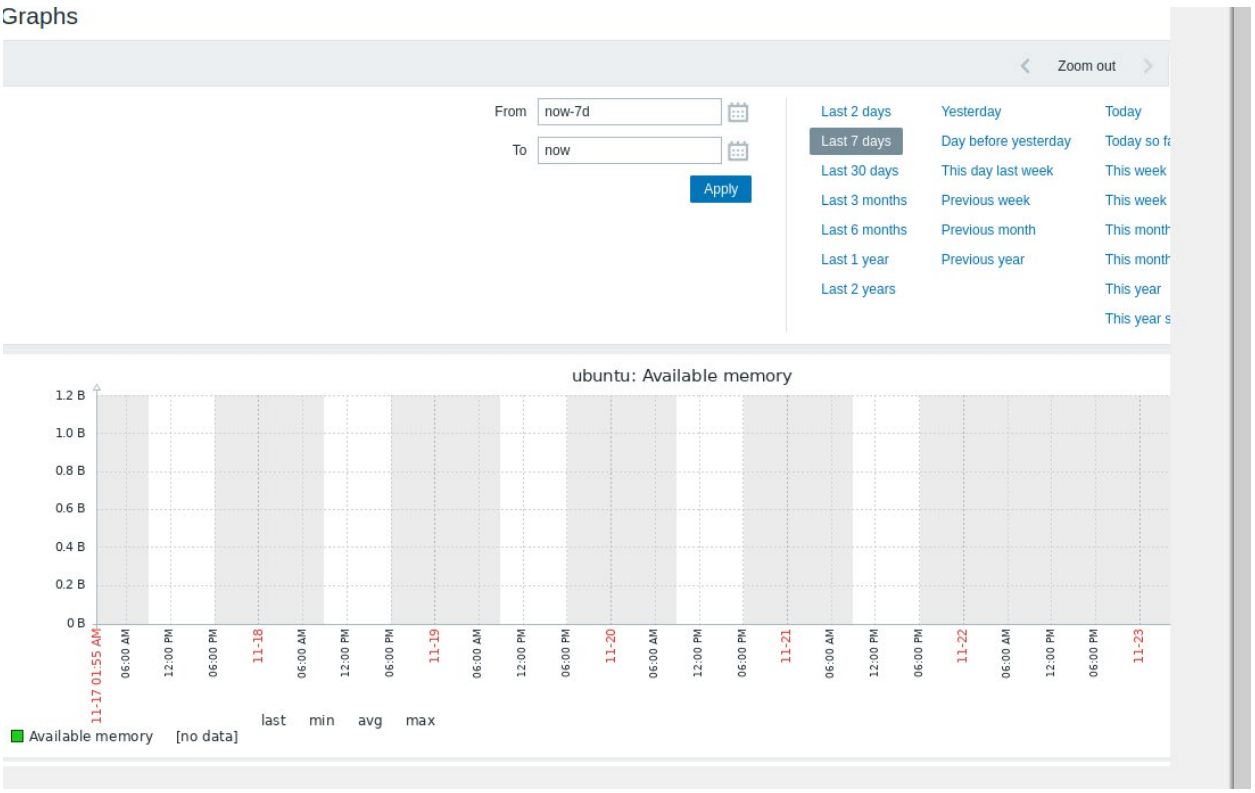

Download and insta
Firefox Privacy Noti
ChatGPT
localhost: Configura
localhost: Dashboar
Not Secure
http://ubuntu/zabbix/zabbix.php?action=trigger.list&filter_set=1&filter_hostids
Sign in
ZABBIX
Create trigger
Filter
New trigger
Trigger
Tags
Dependencies
* Name
https://www.albany.edu/ status
Event name
https://www.albany.edu/ status
Operational data
Severity
Not classified
Information
Warning
Average
High
Disaster
* Problem expression
last(/Zabbix server/web.test.rspcode[https://
www.albany.edu/,https://www.albany.edu/],#2)<>200
Add
Expression constructor
OK event generation
Expression
Recovery expression
None
* Recovery expression
last(/Zabbix server/web.test.rspcode[https://
www.albany.edu/,https://www.albany.edu/],#1)=200
Add
Add
Cancel
Alerts
Users
Administration
avascript:void(0)
last(/Zabbix server/kernel.maxfiles)<{$KERNEL.MAXFILES.MIN}
Enabled
scope: performance


ZABBIX
Web monitoring
Step of web scenario
* Name
https://www.albany.edu/
* URL
https://www.albany.edu/jhdfdwfkj
Parse
Query fields
Name
Value
name
value
Remove
Add
Post type
Form data
Raw data
Post fields
Variables
Headers
Update
Cancel
Alerts
Users
Administration
Zabbix 7.4.5. © 2001–2025, Zabbix SIA

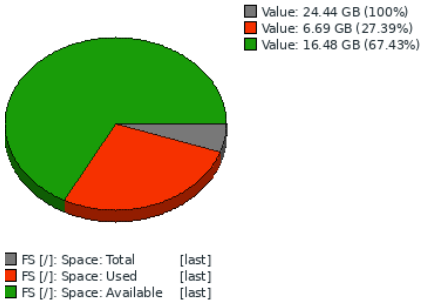

Download and insta
Firefox Privacy Noti
ChatGPT
localhost: Configura
localhost: Dashboar
Not Secure
http://ubuntu/zabbix/zabbix.php?action=trigger.list&filter_set=1&filter_hostids
Sign in
ZABBIX
localhost
Triggers
Dashboards
Monitoring
Services
Inventory
Reports
Data collection
Template groups
Host groups
Templates
Hosts
Maintenance
Event correlation
Discovery
Alerts
Users
Administration
All hosts / Zabbix server Enabled ZBX Items 146 Triggers 79 Graphs 14 Discovery rules 6 Web scenarios 1
Host groups type here to search Select
Hosts Zabbix server type here to search Select
Name
Severity Not classified Warning High Information Average Disaster
State All Normal Unknown
Status All Enabled Disabled
Value All Ok Problem
Tags And/Or Or
tag Contains value
Add
Inherited All Yes No
Discovered All Yes No
With dependencies All Yes No
Apply Reset
Severity Value Name Operational data Expression Status
High PROBLEM https://www.albany.edu/ Problem: last(/Zabbix server/web.test.rspcode[https://www.albany.edu/,https://www.albany.edu/],#2)<>200
Recovery: last(/Zabbix server/web.test.rspcode[https://www.albany.edu/,https://www.albany.edu/],#1)=200 Enabled
Information OK Linux by Zabbix agent: Linux: /etc/passwd has been changed
Depends on:
Zabbix server: Linux: Operating system description has changed
last(/Zabbix server/vfs.file.cksum[/etc/passwd,sha256],#1)<>last(/Zabbix server/vfs.file.cksum[/etc/passwd,sha256],#2) Enabled


Host Wizard
Create host
Import
New host
Host IPMI Tags Macros Inventory Encryption Value mapping
* Host name ubuntu
Visible name ubuntu
Templates Linux by Zabbix agent Select
* Host groups Linux servers Select
Interfaces Type IP address DNS name Connect to Port Default
Agent 127.0.0.1 IP DNS 10050 Remove
Add
Description
Monitored by Server Proxy Proxy group
Add Cancel
Filter
Zabbix 7.4.5. © 2001–2025, Zabbix SIA


Download and insta
Firefox Privacy Noti
ChatGPT
localhost: Configura
localhost: Dashboar
Not Secure
http://ubuntu/zabbix/zabbix.php?action=host.list
Sign in
ZABBIX
localhost
Hosts
Host Wizard
Dashboards
Monitoring
Services
Inventory
Reports
Data collection
Template groups
Host groups
Templates
Hosts
Maintenance
Event correlation
Discovery
Alerts
Users
Administration
Host groups
type here to search
Select
Templates
type here to search
Select
Name
DNS
IP
Port
Status
Any
Enabled
Disabled
Monitored by
Any
Server
Proxy
Proxy group
Tags
And/Or
Or
tag
Contains
value
Add
Apply
Reset
Name
Items
Triggers
Graphs
Discovery
Web
Interface
Proxy
Templates
Status
Availability
ubuntu
Items 68
Triggers 25
Graphs 14
Discovery 3
Web
127.0.0.1:10050
Linux by Zabbix agent
Enabled
ZBX
Zabbix server
Items 146
Triggers 79
Graphs 14
Discovery 6
Web 2
127.0.0.1:10050
Linux by Zabbix agent, Zabbix server health
Enabled
ZBX
0 selected
Enable
Disable
Export
Mass update
Delete
Zabbix 7.4.5. © 2001–2025, Zabbix SIA

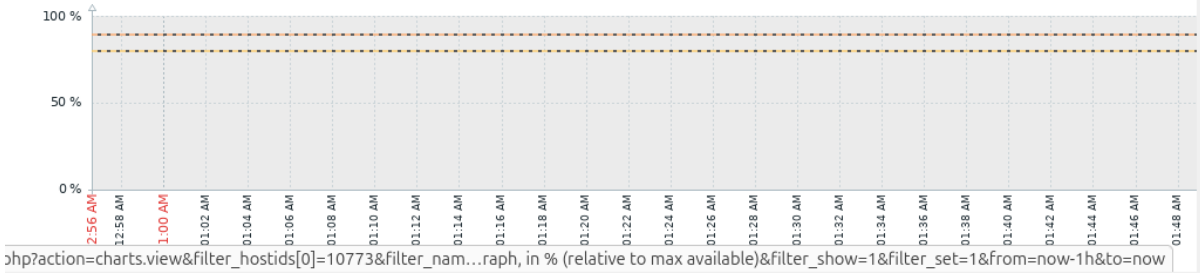

Graphs
Zoom out
From
now-7d
To
now
Apply
Last 2 days
Last 7 days
Last 30 days
Last 3 months
Last 6 months
Last 1 year
Last 2 years
Yesterday
Day before yesterday
This day last week
Previous week
Previous month
Previous year
Today
Today so fa
This week
This week
This month
This month
This year
This year s
ubuntu: Available memory
1.2 B
1.0 B
0.8 B
0.6 B
0.4 B
0.2 B
0 B
11-17 01:55 AM
06:00 AM
12:00 PM
06:00 PM
11-18
11-19
11-20
11-21
11-22
11-23
last
min
avg
max
Available memory
[no data]

FS [ext4(/)]: Space utilization chart (relative to total)




FS [{#FSTYPE}({#FSNAME})]: Space usage graph, in % (relative to max available)

FS [ext4(/)]: Space usage graph, in % (relative to max available)




php?action=charts.view&filter_hostids[0]=10773&filter_nam…raph, in % (relative to max available)&filter_show=1&filter_set=1&from=now-1h&to=now