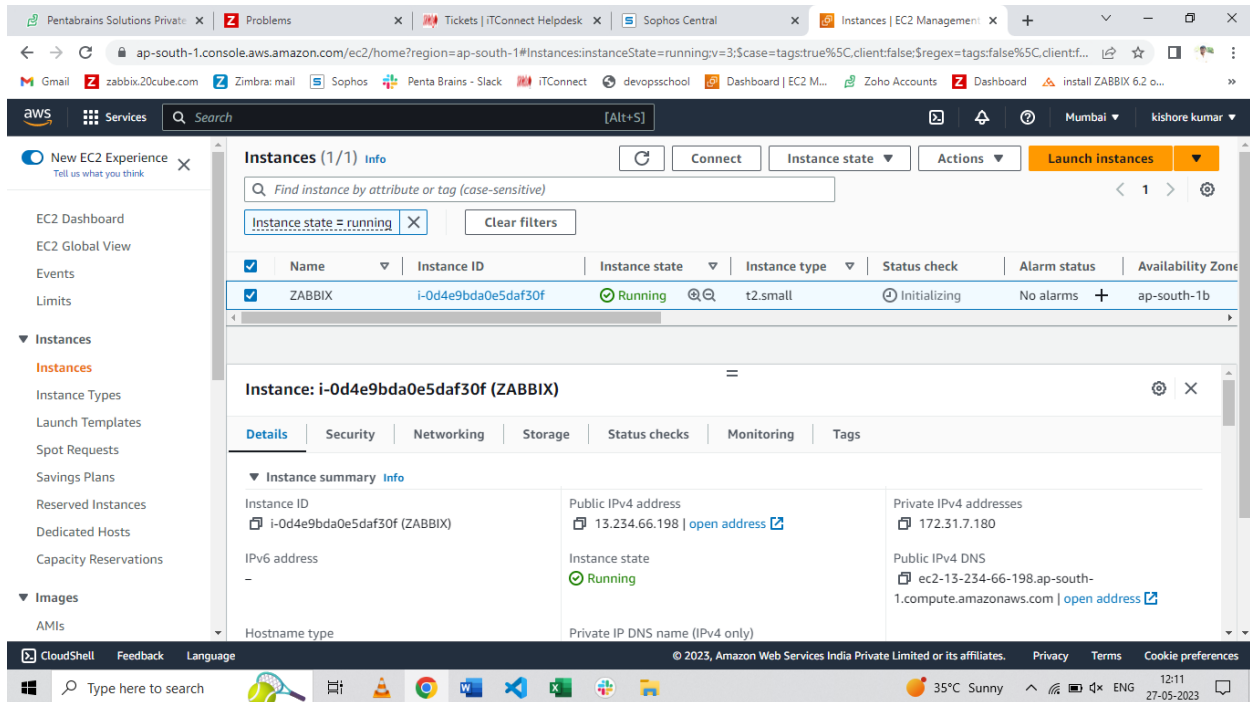


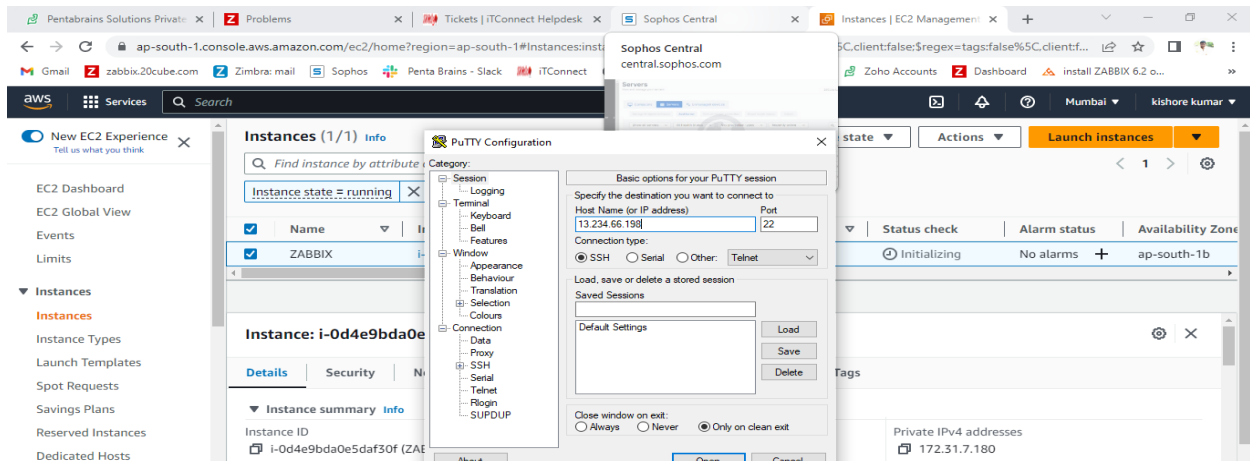
Configuration of Zabbix Server in Linux & Ubuntu

Step 1:

- We need to create a Linux/Ubuntu server. (Now I Have Done This with ubuntu 22.04 with t2small) t2small Just For More Speed Other Then You Can Use t2Micro.



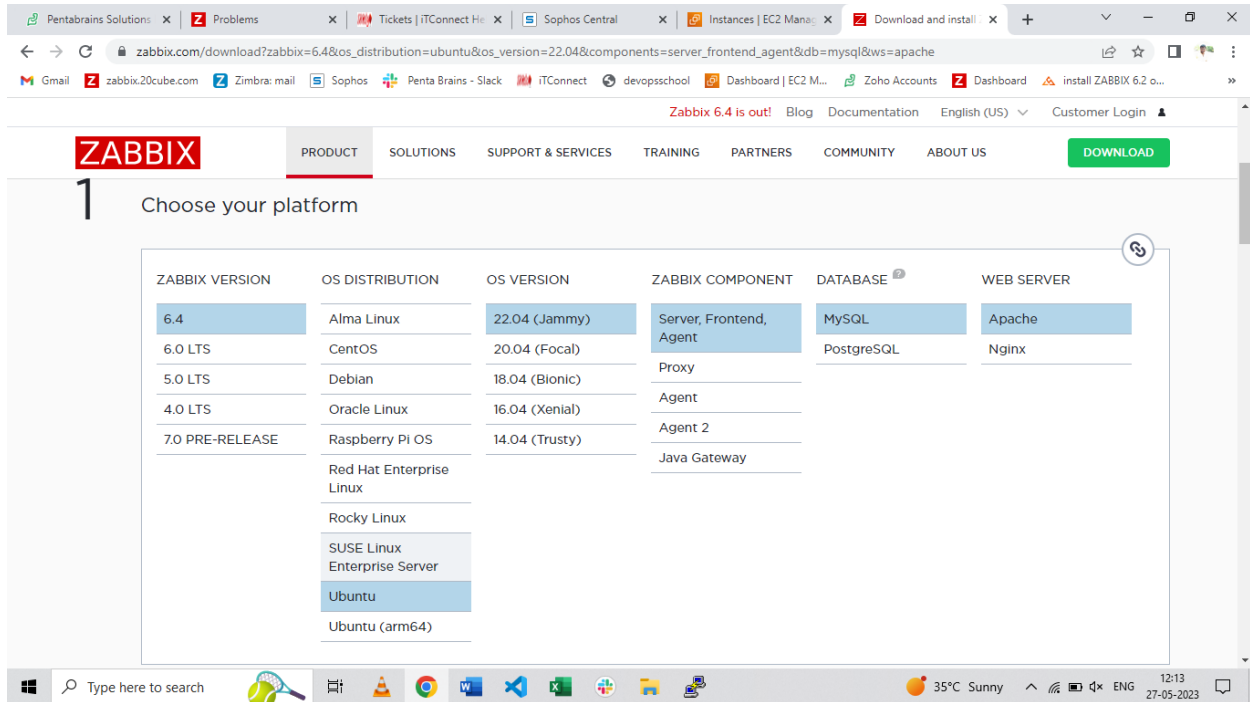
We need to check the Linux/Ubuntu server is login into putty.



Configuration of Zabbix Server in Linux & Ubuntu

Step 2: Choose your platform

- Official Zabbix 6.4 packages for Debian, Ubuntu, and Raspberry Pi OS (Raspbian) are available. Packages are available with either MySQL/PostgreSQL database and Apache/Nginx web server support.



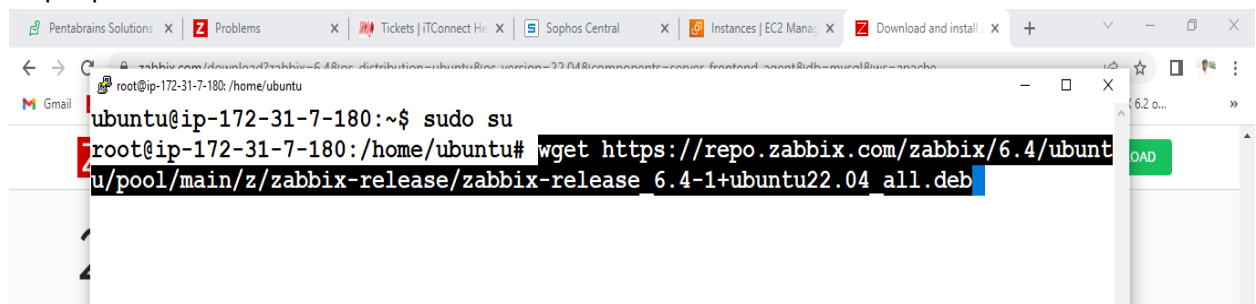
Notes on installation:

1. Install and configure Zabbix for your platform

Install Zabbix repository

- `# wget https://repo.zabbix.com/zabbix/6.4/ubuntu/pool/main/z/zabbix-release/zabbix-release_6.4-1+ubuntu22.04_all.deb`
- `# dpkg -i zabbix-release_6.4-1+ubuntu22.04_all.deb`

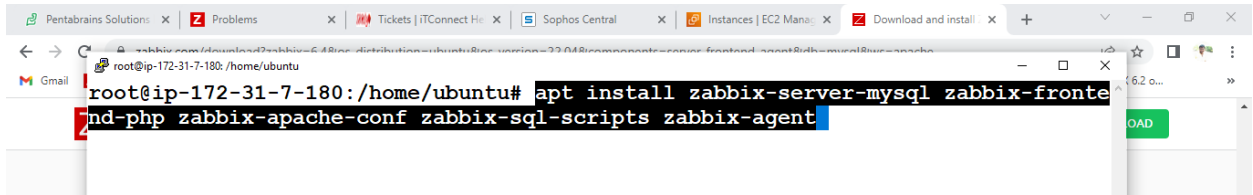
apt update



Configuration of Zabbix Server in Linux & Ubuntu

Install Zabbix server, frontend, agent

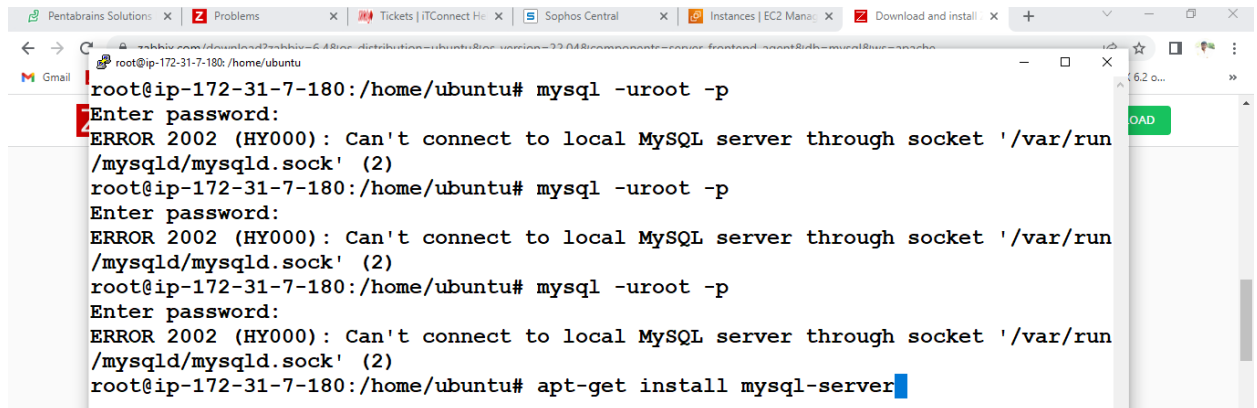
- # apt install zabbix-server-mysql zabbix-frontend-php zabbix-apache-conf zabbix-sql-scripts zabbix-agent



```
root@ip-172-31-7-180:/home/ubuntu# apt install zabbix-server-mysql zabbix-frontend-php zabbix-apache-conf zabbix-sql-scripts zabbix-agent
```

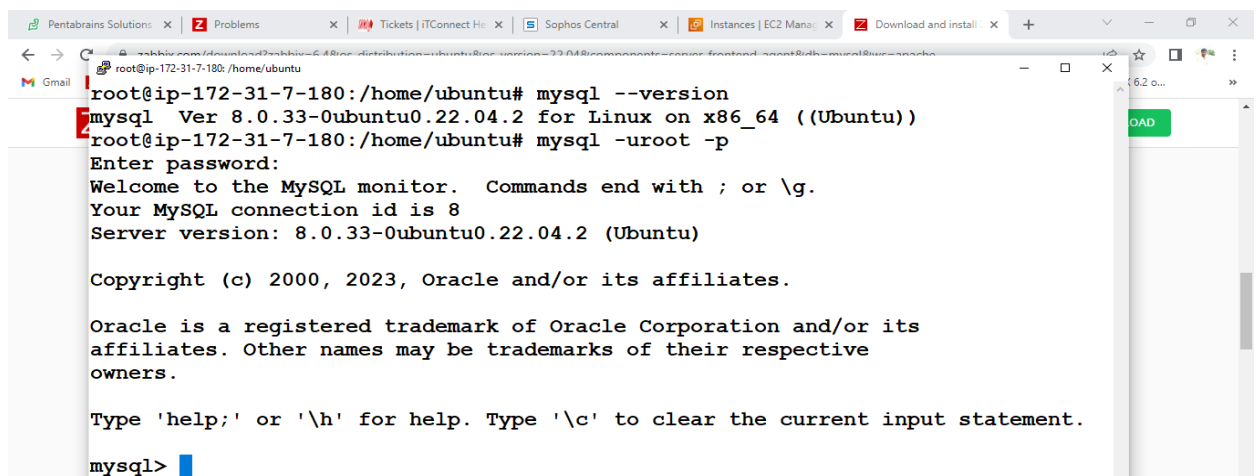
Create initial database

- apt-get install mysql-server(ubuntu)/yum install mysql-server (Linux)
- # mysql -uroot -p
- password-create a password for mysql server EX(Cloud@123)



```
root@ip-172-31-7-180:/home/ubuntu# mysql -uroot -p
Enter password:
ERROR 2002 (HY000): Can't connect to local MySQL server through socket '/var/run/mysqld/mysqld.sock' (2)
root@ip-172-31-7-180:/home/ubuntu# mysql -uroot -p
Enter password:
ERROR 2002 (HY000): Can't connect to local MySQL server through socket '/var/run/mysqld/mysqld.sock' (2)
root@ip-172-31-7-180:/home/ubuntu# mysql -uroot -p
Enter password:
ERROR 2002 (HY000): Can't connect to local MySQL server through socket '/var/run/mysqld/mysqld.sock' (2)
root@ip-172-31-7-180:/home/ubuntu# apt-get install mysql-server
```

Create initial database Query



```
root@ip-172-31-7-180:/home/ubuntu# mysql --version
mysql Ver 8.0.33-0ubuntu0.22.04.2 for Linux on x86_64 ((Ubuntu))
root@ip-172-31-7-180:/home/ubuntu# mysql -uroot -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.33-0ubuntu0.22.04.2 (Ubuntu)

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

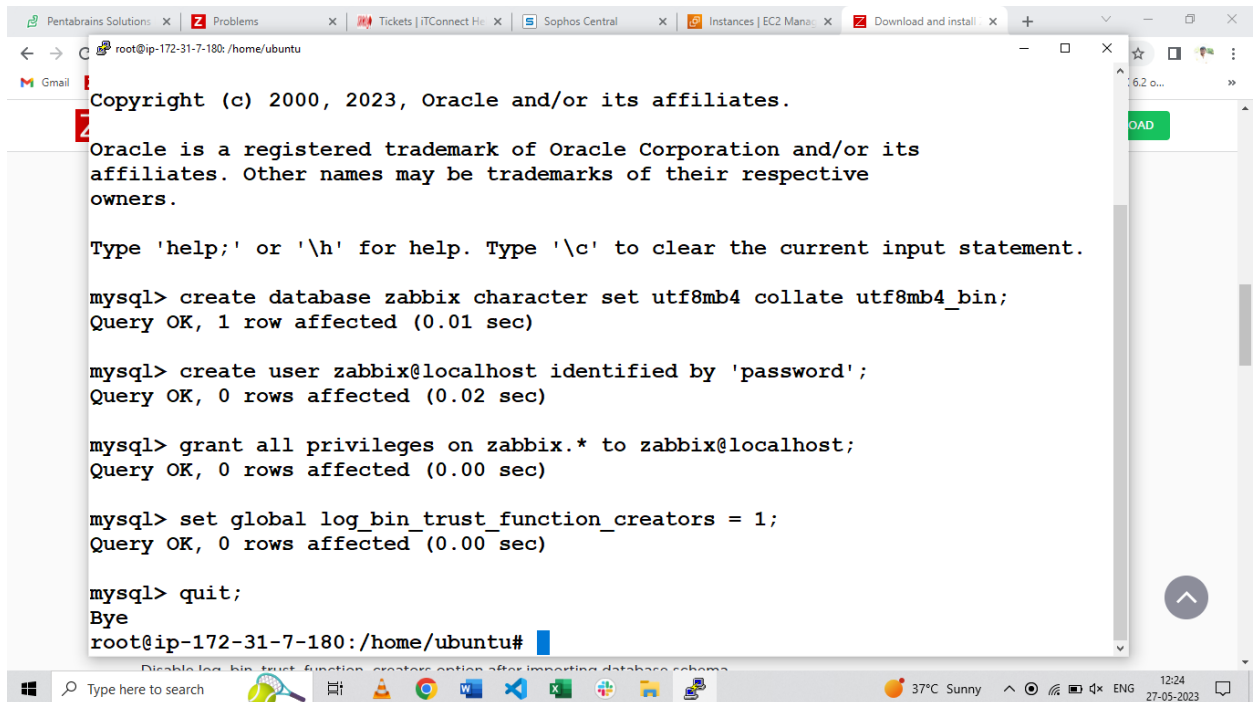
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

Configuration of Zabbix Server in Linux & Ubuntu

- mysql> create database zabbix character set utf8mb4 collate utf8mb4_bin;
- mysql> create user zabbix@localhost identified by 'password';(this password for zabbix, rename the password in comment with Limited@123)
- mysql> grant all privileges on zabbix.* to zabbix@localhost;
- mysql> set global log_bin_trust_function_creators = 1;
- mysql> quit;



```
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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database zabbix character set utf8mb4 collate utf8mb4_bin;
Query OK, 1 row affected (0.01 sec)

mysql> create user zabbix@localhost identified by 'password';
Query OK, 0 rows affected (0.02 sec)

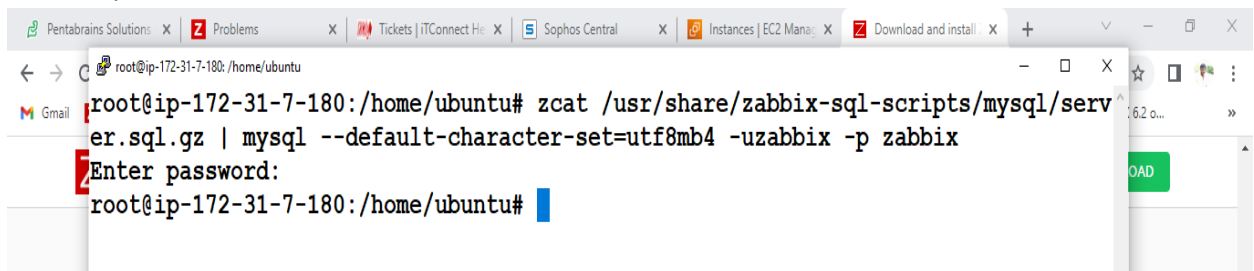
mysql> grant all privileges on zabbix.* to zabbix@localhost;
Query OK, 0 rows affected (0.00 sec)

mysql> set global log_bin_trust_function_creators = 1;
Query OK, 0 rows affected (0.00 sec)

mysql> quit;
Bye
root@ip-172-31-7-180:/home/ubuntu#
```

On Zabbix server host import initial schema and data. You will be prompted to enter your newly created password.

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



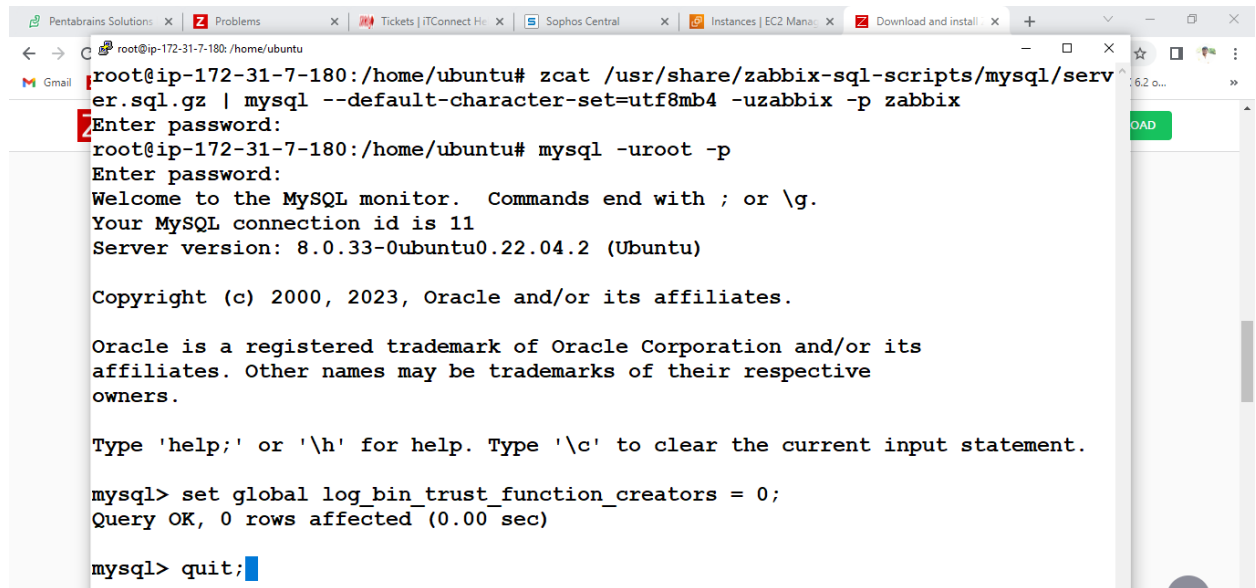
```
root@ip-172-31-7-180:/home/ubuntu# zcat /usr/share/zabbix-sql-scripts/mysql/server.sql.gz | mysql --default-character-set=utf8mb4 -uzabbix -p zabbix
Enter password:
root@ip-172-31-7-180:/home/ubuntu#
```

Configuration of Zabbix Server in Linux & Ubuntu

Disable `log_bin_trust_function_creators` option after importing database schema.

- `# mysql -uroot -p`
Password(enter password)
- `mysql> set global log_bin_trust_function_creators = 0;`

`mysql> quit;`



```
root@ip-172-31-7-180:/home/ubuntu# zcat /usr/share/zabbix-sql-scripts/mysql/server.sql.gz | mysql --default-character-set=utf8mb4 -uzabbix -p zabbix
Enter password:
root@ip-172-31-7-180:/home/ubuntu# mysql -uroot -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 11
Server version: 8.0.33-0ubuntu0.22.04.2 (Ubuntu)

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owners.

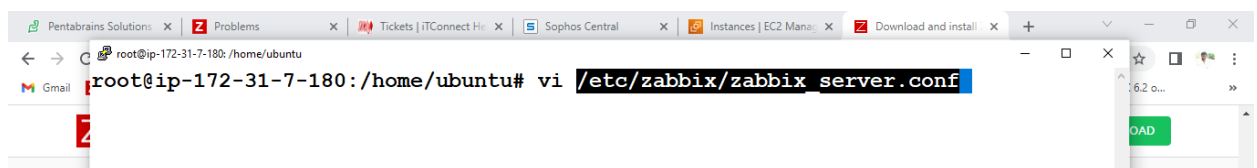
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> set global log_bin_trust_function_creators = 0;
Query OK, 0 rows affected (0.00 sec)

mysql> quit;
```

Configure the database for Zabbix server

- Edit file `vi /etc/zabbix/zabbix_server.conf`



```
root@ip-172-31-7-180:/home/ubuntu# vi /etc/zabbix/zabbix_server.conf
```

Configuration of Zabbix Server in Linux & Ubuntu

DBPassword=password (uncomment and write same password which already given before the mysql data).

```
DBUser=zabbix

### Option: DBPassword
# Database password.
# Comment this line if no password is used.
#
# Mandatory: no
# Default:
# DBPassword=

### Option: DBSocket
# Path to MySQL socket.
#
# Mandatory: no
-- INSERT --
```

After that Press ESC And :wq! To Save It.

```
DBUser=zabbix

### Option: DBPassword
# Database password.
# Comment this line if no password is used.
#
# Mandatory: no
# Default:
DBPassword=password

### Option: DBSocket
# Path to MySQL socket.
#
# Mandatory: no
:wq!
```

Start Zabbix server and agent processes

- # systemctl restart zabbix-server zabbix-agent apache2

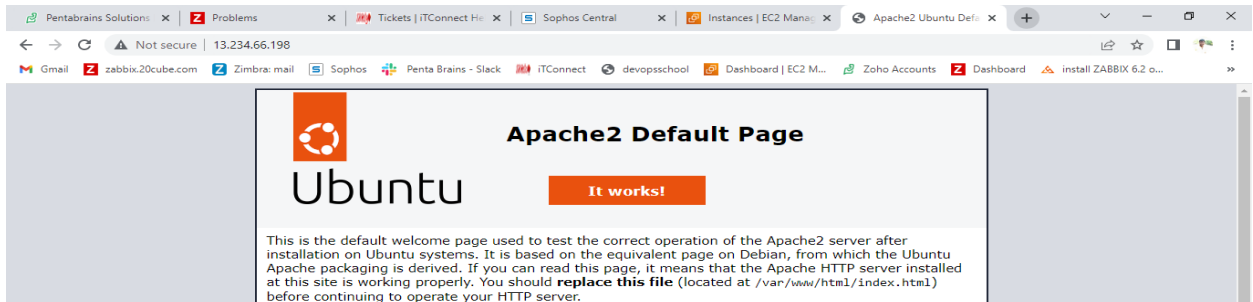
systemctl enable zabbix-server zabbix-agent apache2

```
root@ip-172-31-7-180:/home/ubuntu# vi /etc/zabbix/zabbix_server.conf
root@ip-172-31-7-180:/home/ubuntu# systemctl restart zabbix-server zabbix-agent
apache2
root@ip-172-31-7-180:/home/ubuntu# systemctl enable zabbix-server zabbix-agent a
apache2
Synchronizing state of zabbix-server.service with SysV service script with /lib/
systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable zabbix-server
Synchronizing state of zabbix-agent.service with SysV service script with /lib/s
ystemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable zabbix-agent
Synchronizing state of apache2.service with SysV service script with /lib/system
d/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
Created symlink /etc/systemd/system/multi-user.target.wants/zabbix-server.servic
e -> /lib/systemd/system/zabbix-server.service.
root@ip-172-31-7-180:/home/ubuntu#
```

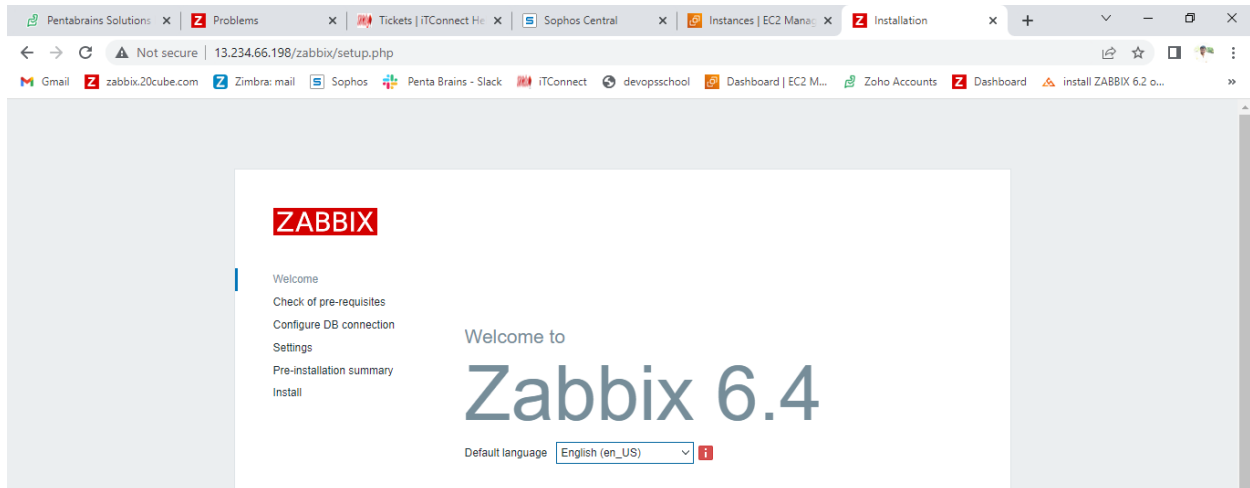
Configuration of Zabbix Server in Linux & Ubuntu

After that edit the security group in aws console, In server enabled to security group ports: zabbix server

- Http – port No – 80
- Http – port No – 443
- Ssh-port No-22
- Zabbix port No – 10050
- In Ip address select the “what is my Ip” and add that Ip in source



Open Zabbix UI web page the default URL for Zabbix UI when using Apache web server is (public Ip/zabbix) hit



1. We need to enter the user's name(zabbix) and password (Limited@123) while created on the server.

Configuration of Zabbix Server in Linux & Ubuntu

ZABBIX

Welcome
Check of pre-requisites
Configure DB connection
Settings
Pre-installation summary
Install

Check of pre-requisites

	Current value	Required	
PHP version	8.1.2-1ubuntu2.11	7.4.0	OK
PHP option "memory_limit"	128M	128M	OK
PHP option "post_max_size"	16M	16M	OK
PHP option "upload_max_filesize"	2M	2M	OK
PHP option "max_execution_time"	300	300	OK
PHP option "max_input_time"	300	300	OK
PHP databases support	MySQL		OK
PHP bcmath	on		OK
PHP mbstring	on		OK
PHP option "mbstring.func_overload"	off	off	OK

BackNext step

ZABBIX

Welcome
Check of pre-requisites
Configure DB connection
Settings
Pre-installation summary
Install

Configure DB connection

Please create database manually, and set the configuration parameters for connection to this database. Press "Next step" button when done.

Database typeMySQL

Database hostlocalhost

Database port00 - use default port

Database namezabbix

Store credentials inPlain textHashiCorp VaultCyberArk Vault

Userzabbix

Password*****

Database TLS encryptionConnection will not be encrypted because it uses a socket file (on Unix) or shared memory (Windows).

BackNext step

We need to set the Zabbix server name and time zone (Asia kolkatta5.30).

ZABBIX

Welcome
Check of pre-requisites
Configure DB connection
Settings
Pre-installation summary

Settings

Zabbix server nameZabbix-kishore

Default time zone(UTC+05:30) Asia/Kolkata

Default themeBlue

SUCCESSFULLY INSTALLED ZABBIX FRONTEND.

ZABBIX

Welcome
Check of pre-requisites
Configure DB connection
Settings
Pre-installation summary
Install

Install

Congratulations! You have successfully installed Zabbix frontend.

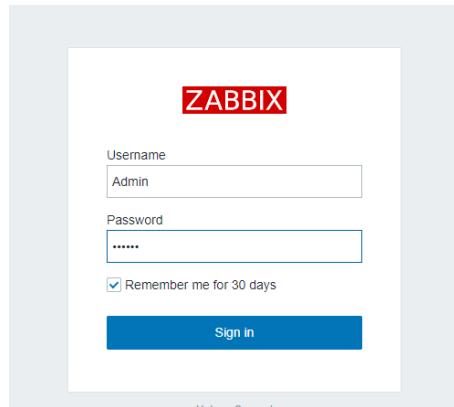
Configuration file "conf/zabbix.conf.php" created.

BackFinish

Kishore Zabbix Configuration Documentation

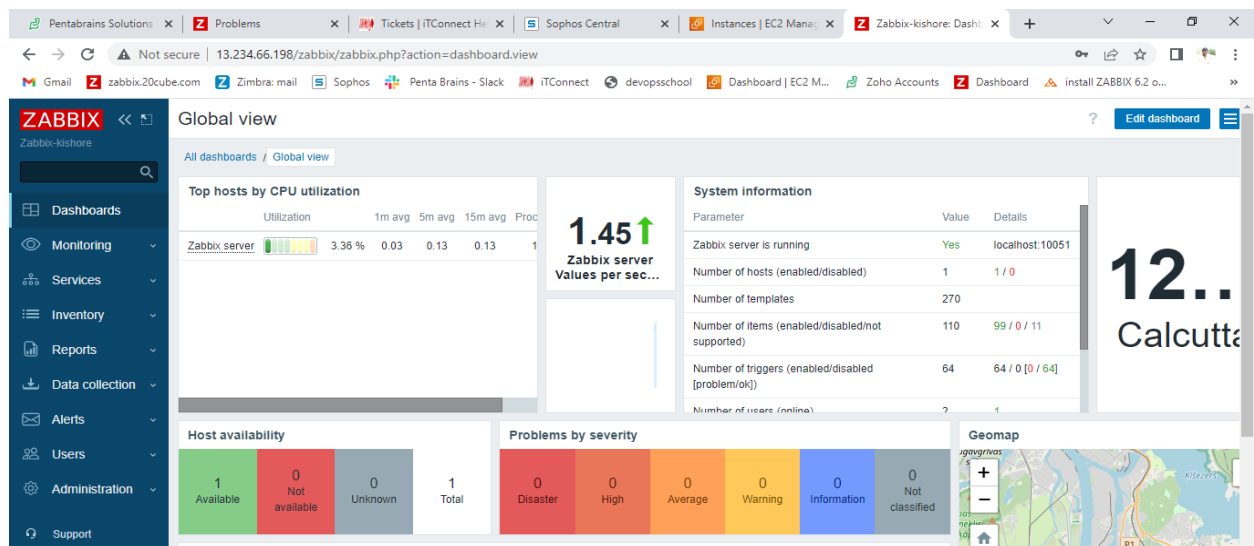
Configuration of Zabbix Server in Linux & Ubuntu

installing completed status after that USERNAME Admin & password zabbix (default).



The image shows the Zabbix login page. At the top, there is a red 'ZABBIX' logo. Below it, there are two input fields: 'Username' with 'Admin' entered and 'Password' with '*****' entered. A checkbox labeled 'Remember me for 30 days' is checked. At the bottom, there is a blue 'Sign in' button.

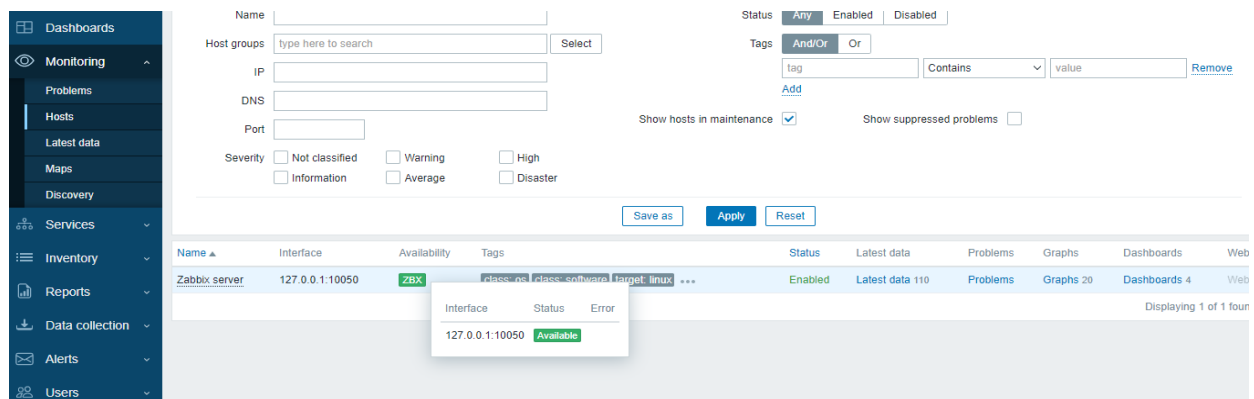
ZABBIX CONSOLE WITH GLOBAL VIEW DASHBOARD



The image shows the Zabbix Global View Dashboard. The left sidebar contains a navigation menu with options: Dashboards, Monitoring, Services, Inventory, Reports, Data collection, Alerts, Users, Administration, and Support. The main content area is titled 'Global view' and includes several widgets: 'Top hosts by CPU utilization' showing a bar chart for 'Zabbix server' with a value of 1.45; 'System information' table; 'Host availability' bar chart; 'Problems by severity' bar chart; and a 'Geomap' showing a map of India. The 'System information' table is as follows:

Parameter	Value	Details
Zabbix server is running	Yes	localhost:10051
Number of hosts (enabled/disabled)	1	1 / 0
Number of templates	270	
Number of items (enabled/disabled/not supported)	110	99 / 0 / 11
Number of triggers (enabled/disabled [problem/ok])	64	64 / 0 [0 / 64]
Number of users (online)	2	1

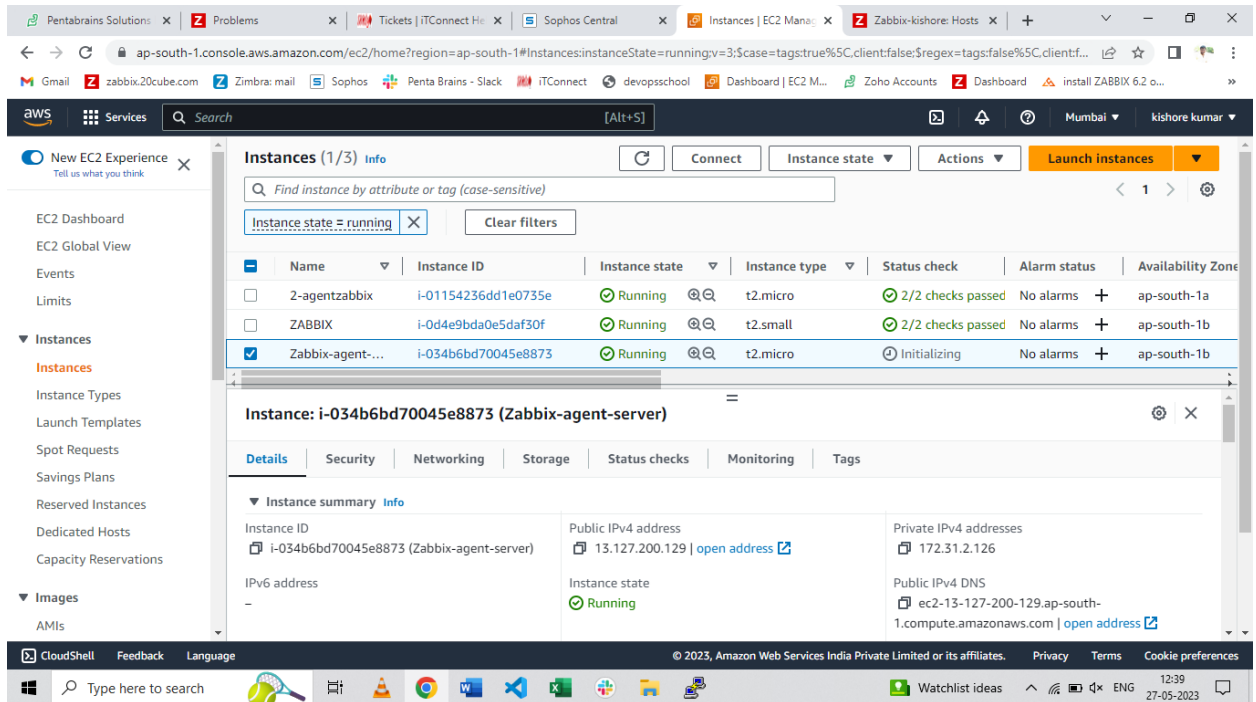
GO TO MONITORING → HOSTS → CHECK WHETHER ZABBIX SERVER IS AVAILABLE STATUS.



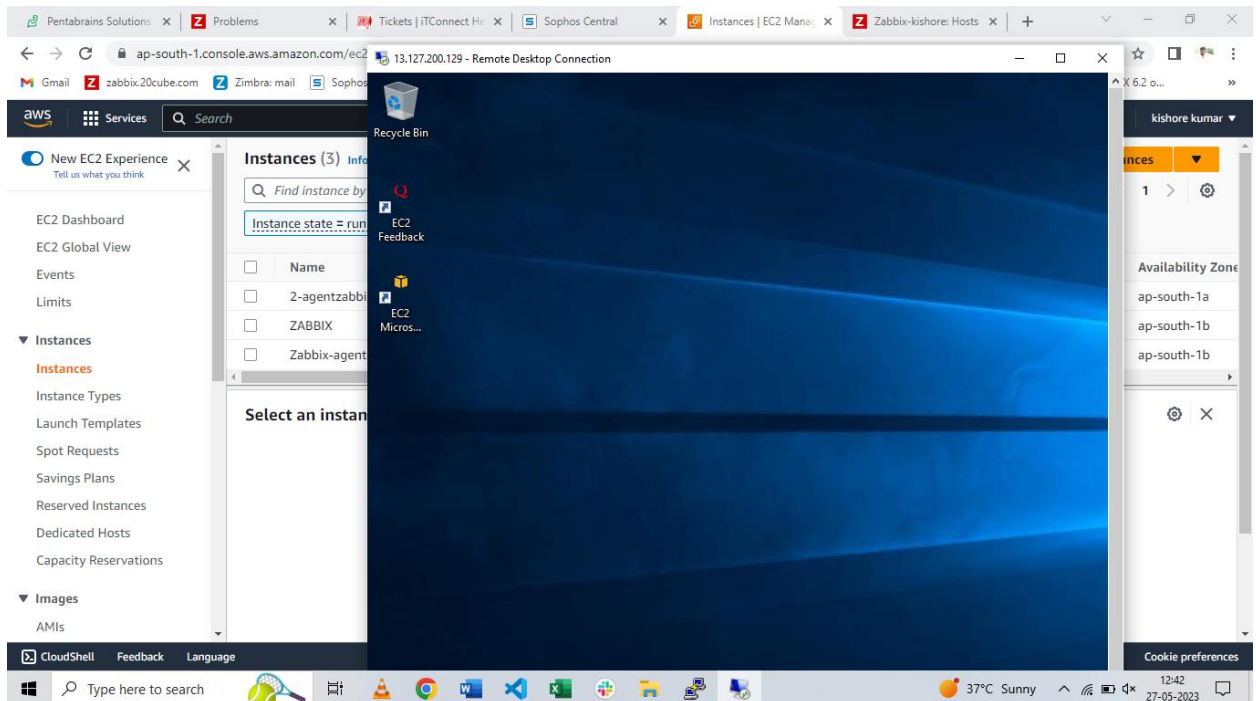
The image shows the Zabbix Hosts page. The left sidebar contains a navigation menu with options: Dashboards, Monitoring, Problems, Hosts, Latest data, Maps, Discovery, Services, Inventory, Reports, Data collection, Alerts, and Users. The main content area is titled 'Hosts' and includes a search form with fields for Name, Host groups, IP, DNS, Port, and Severity. There are also filters for Status, Tags, and Show hosts in maintenance. Below the search form, there is a table of hosts. The table has columns: Name, Interface, Availability, Tags, Status, Latest data, Problems, Graphs, Dashboards, and Web. The first row is for 'Zabbix server' with interface '127.0.0.1:10050', status 'Enabled', and latest data '110'. A tooltip is visible over the 'Availability' column, showing 'Interface: 127.0.0.1:10050' and 'Status: Available'.

Configuration of Zabbix Server in Linux & Ubuntu

Configure window server for agent in zabbix so create new window ec2 machine.

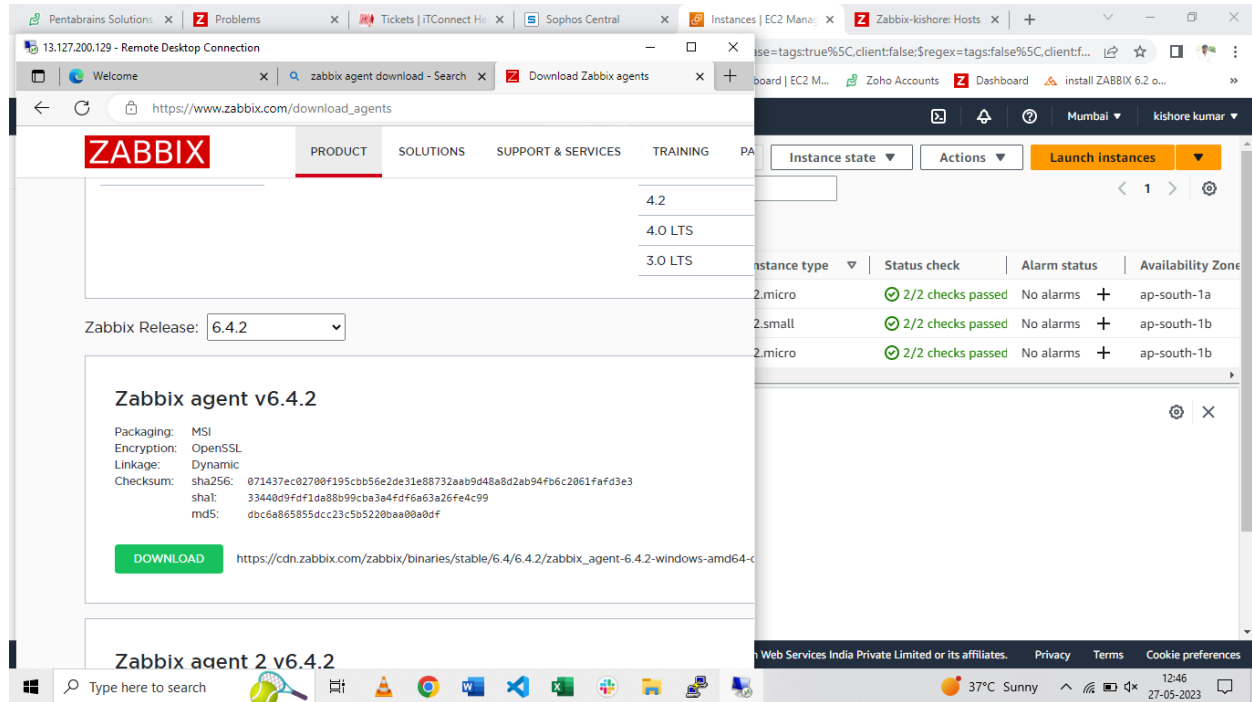


LOGIN USING RDP WITH PUBLIC IP

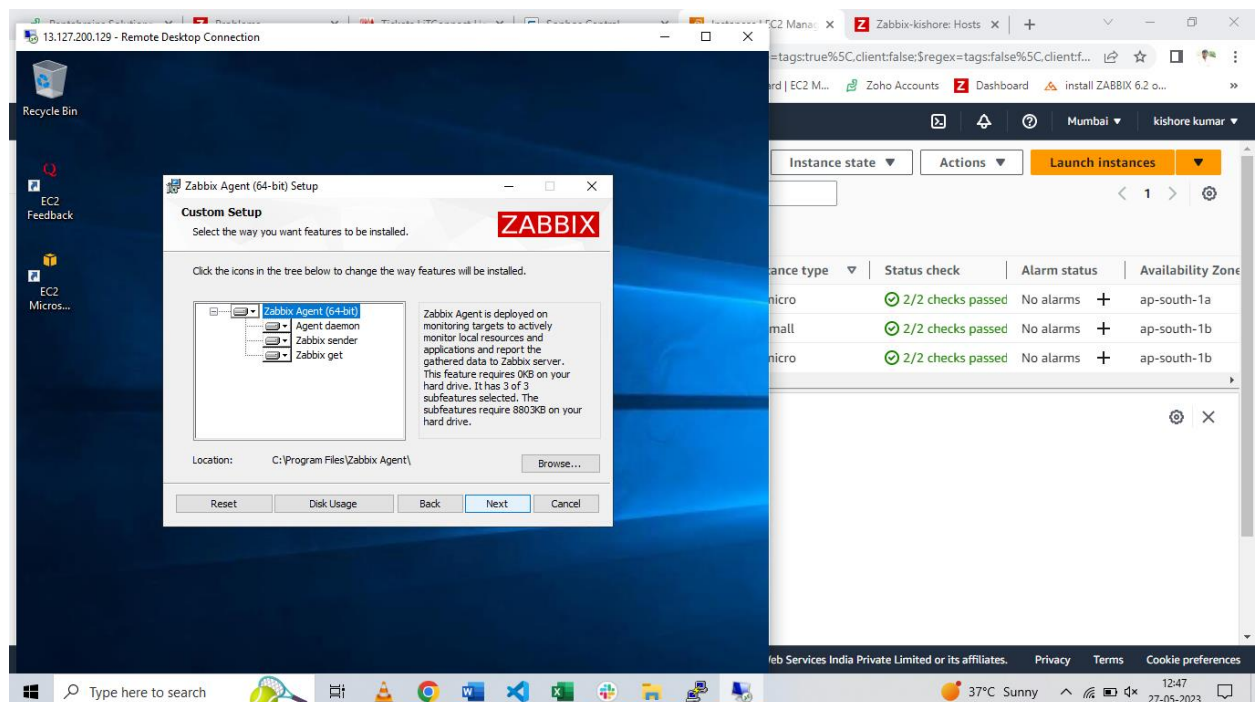


Configuration of Zabbix Server in Linux & Ubuntu

Installing Zabbix agent in server by browse the zabbix agent download in internet and install in window server.

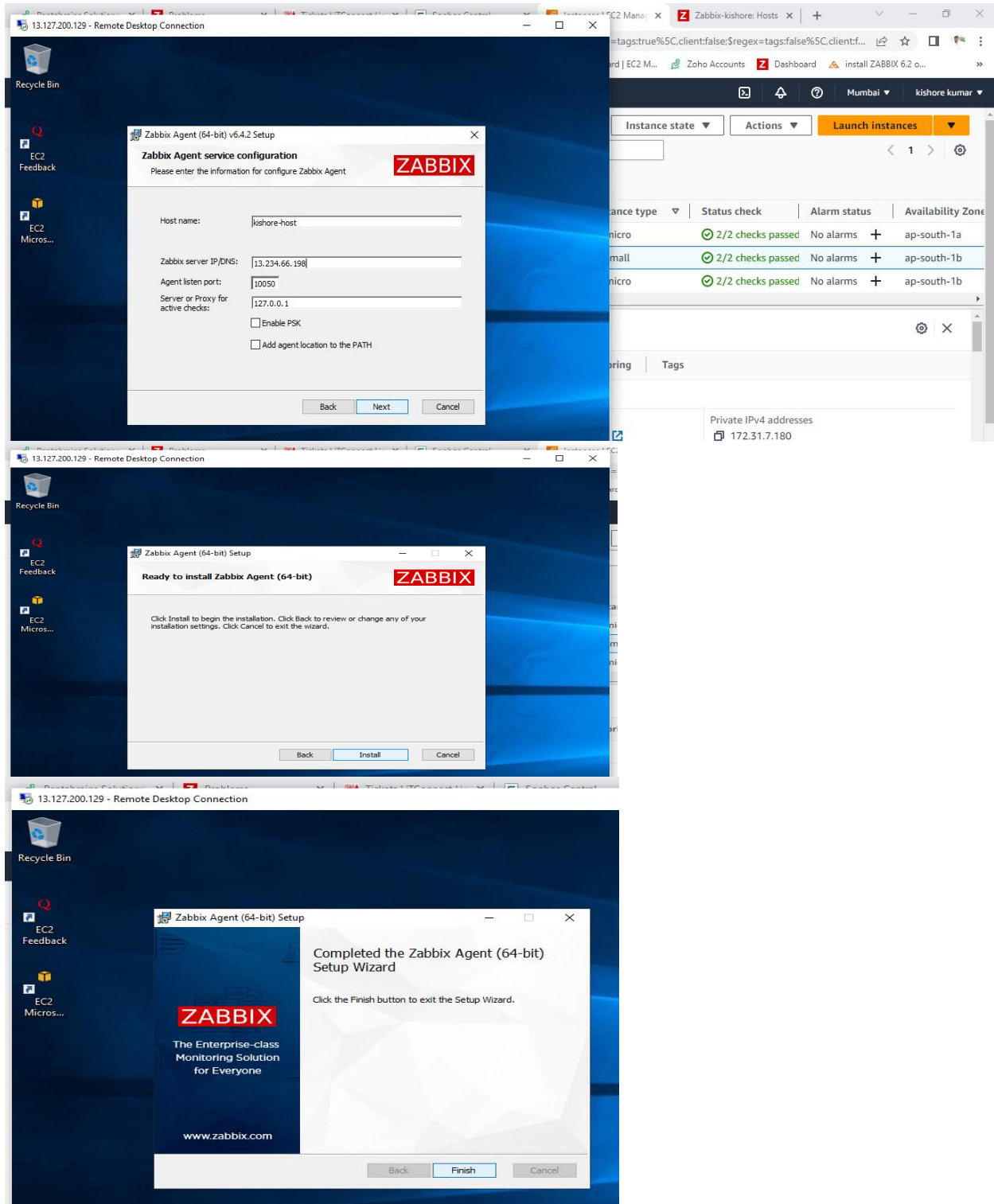


INSTALL



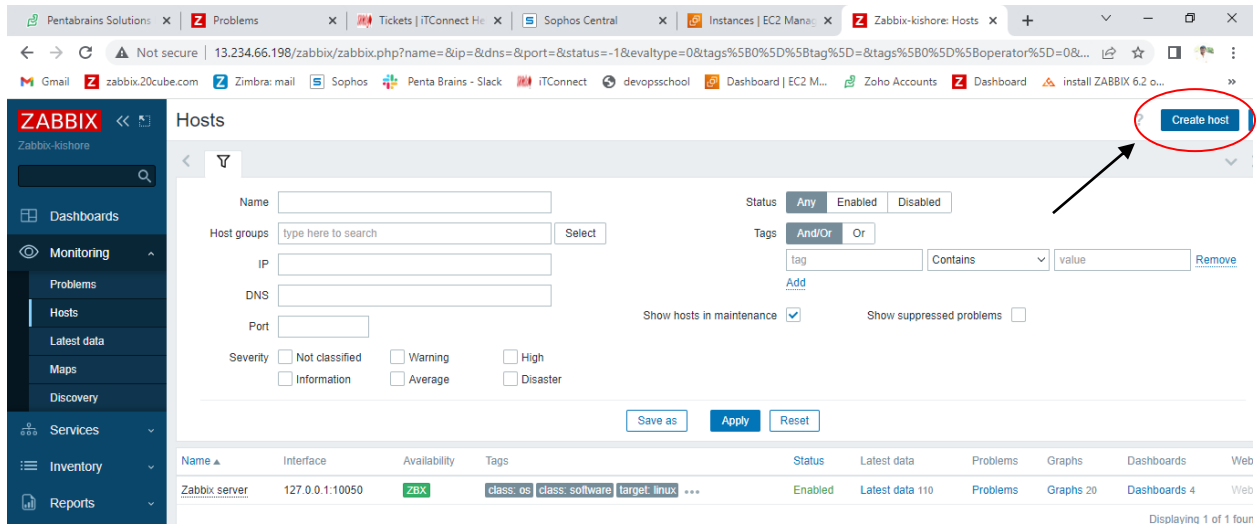
Configuration of Zabbix Server in Linux & Ubuntu

During installing hostname default and Zabbix server Ip should be main public Ip of zabbix server. After completed Restart the zabbix agent and host in zabbix server.



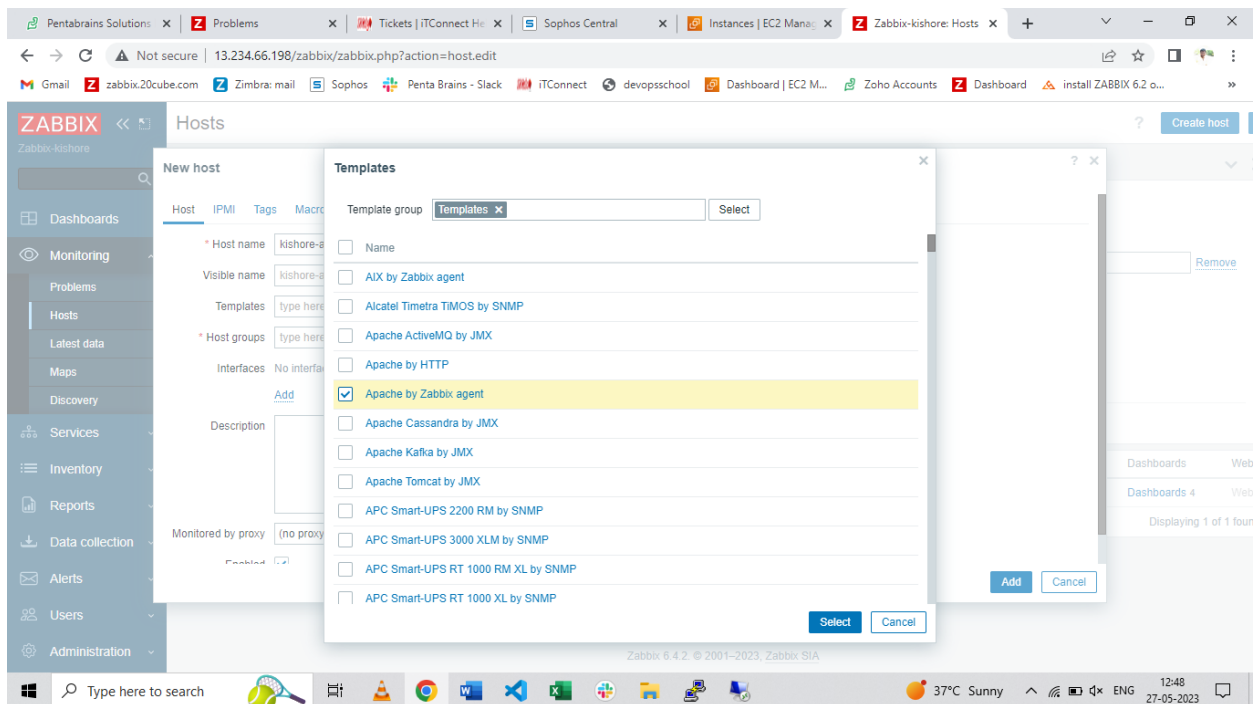
Configuration of Zabbix Server in Linux & Ubuntu

CREATE NEW HOSTS



The screenshot shows the Zabbix web interface with the 'Hosts' page selected. The 'Create host' button is highlighted with a red circle and an arrow. The interface includes a sidebar with navigation options like Dashboards, Monitoring, Problems, Hosts, Latest data, Maps, Discovery, Services, Inventory, and Reports. The main content area shows the 'Create host' form with fields for Name, Host groups, IP, DNS, Port, Status, Tags, and Severity. A table below the form lists existing hosts, including 'Zabbix server'.

ENTER HOST NAME (WHICH GIVEN IN TIME OF INSTALLING) AFTER THAT SELECT TEMPLATE →APACHE BY ZABBIX AGENT



The screenshot shows the Zabbix web interface with the 'New host' form. The 'Apache by Zabbix agent' template is selected from the 'Templates' dropdown menu. The form includes fields for Host name, Visible name, Host groups, Interfaces, and Description. The 'Apache by Zabbix agent' template is highlighted in yellow. The interface also shows a sidebar with navigation options and a table of existing hosts.

Configuration of Zabbix Server in Linux & Ubuntu

SELECT HOST GROUPS → ZABBIX SERVERS & GO TO ADD OPTION → AGENT

Not secure | 13.234.66.198/zabbix/zabbix.php?action=host.edit

zabbix.20cube.com | Zimbra: mail | Sophos | Penta Brains - Slack | ITConnect | devopsschool | Dashboard | EC2 M... | Zoho Accounts

ZABBIX << Hosts

New host

Host IPMI Tags Macros Inventory Encryption Value mapping

* Host name: kishore-agent

Visible name: kishore-agent

Templates: Apache by Zabbix agent x type here to search Select

* Host groups: Zabbix servers x type here to search Select

Interfaces: No interfaces are defined. Add

Description: Agent, SNMP, JMX, IPMI

NOW ENTER WINDOW ZABBIX AGENT INSTALLED SERVER PUBLIC IP

New host

Host IPMI Tags Macros Inventory Encryption Value mapping

* Host name: kishore-agent

Visible name: kishore-agent

Templates: Apache by Zabbix agent x type here to search Select

* Host groups: Zabbix servers x type here to search Select

Interfaces	Type	IP address	DNS name	Connect to	Port	Default
Agent		13.127.200.129		IP DNS	10050	<input checked="" type="radio"/> Remove

Add

Description:

Add Cancel

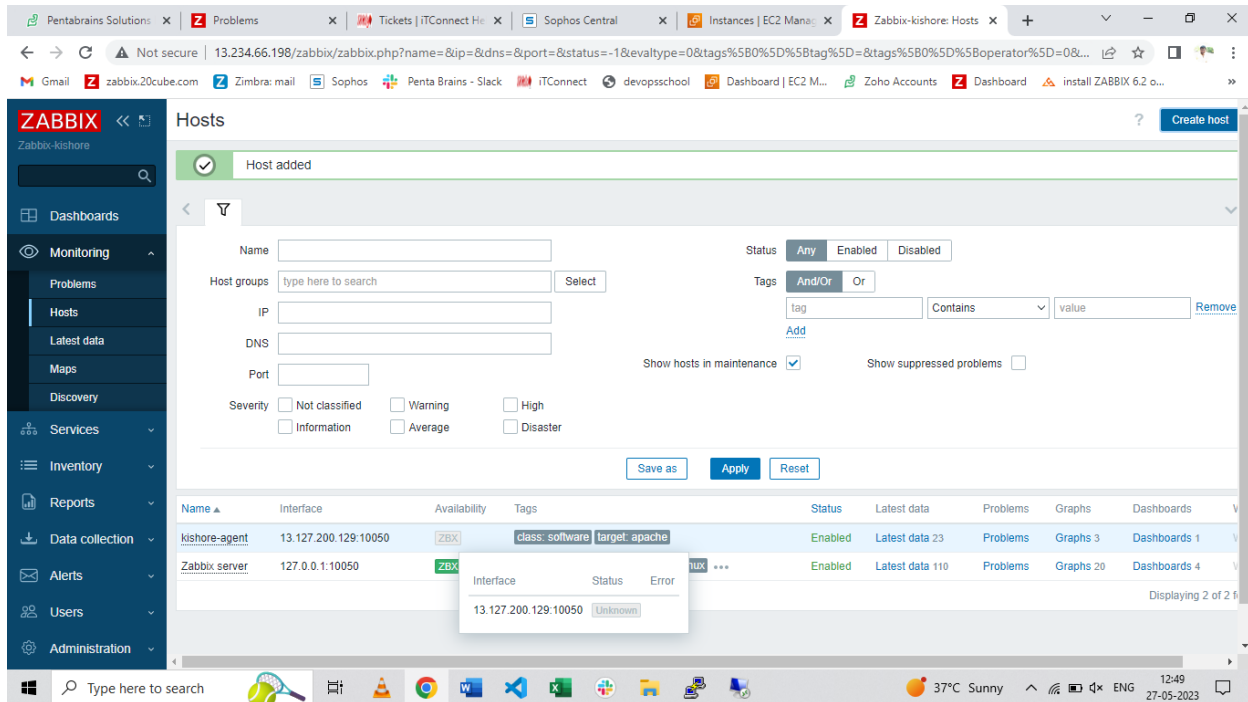
Dashboards Wet

Dashboards 4 Wet

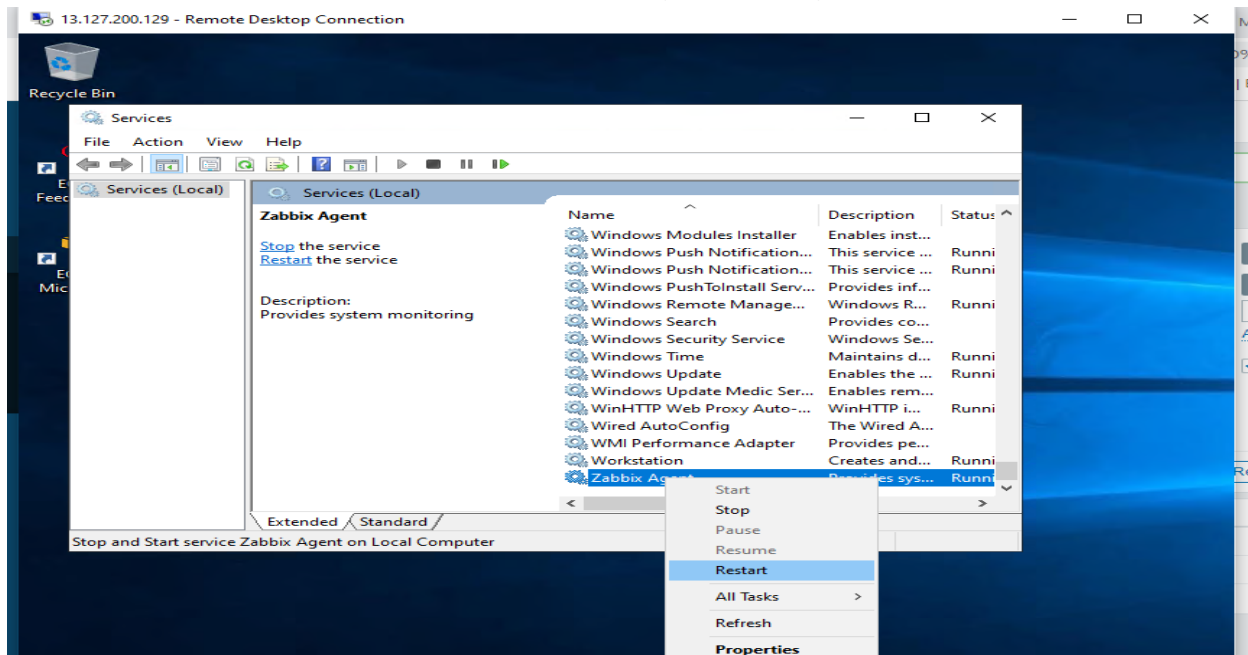
Displaying 1 of 1 four

Configuration of Zabbix Server in Linux & Ubuntu

AFTER THIS HOST ADDED REFRESH PAGE BUT SERVER IS ON UNKNOWN(UNAVAILABLE)SO RESTART AGENT.



GO→WINDOW →SEARCH→SERVICES→ZABBIX AGENT(RIGHT CLICK)→RESTART



Configuration of Zabbix Server in Linux & Ubuntu

NOW REFRESH THE PAGE SERVER WILL BE ON GREEN COLOUR (WHICH MEAN SERVER LINKED WITH ZABBIX SERVER AND SENDING DATA TO IT) LIKE THIS NEW CAN CREATE MORE SERVER TO MONITORING WITH AGENT BY CREATING THE HOSTS

ZABBIX Hosts

Name: Status: Any Enabled Disabled

Host groups: Select

IP: Tags: And/Or Or

DNS: tag: Contains value: Remove

Port: Add

Show hosts in maintenance: ☒ Show suppressed problems: ☐

Severity: ☐ Not classified ☐ Warning ☐ High ☐ Information ☐ Average ☐ Disaster

Name	Interface	Availability	Tags	Status	Latest data	Problems	Graphs	Dashboards
kishore	13.232.245.146:10050	ZBX	class: software target: apache	Enabled	Latest data 23	Problems	Graphs 3	Dashboards 1
kishore2	13.127.200.129:10050	ZBX	class: software target: apache	Enabled	Latest data 23	Problems	Graphs 3	Dashboards 1
kishore3	13.127.200.129:10050	ZBX	class: software target: apache	Enabled	Latest data 23	Problems	Graphs 3	Dashboards 1
Zabbix server	127.0.0.1:10050	ZBX	class: os class: software target: linux	Enabled	Latest data 110	Problems	Graphs 20	Dashboards 4

Displaying 4 of 4

WE CAN MONITOR GRAPHS OF CPU, MEMORY, SERVER USAGE ETC.,

ZABBIX Graphs

All hosts / Zabbix server Enabled ZBX Items 110 Triggers 64 Graphs 20 Discovery rules 5 Web scenarios

Graph Preview

CPU usage

100 %
50 %
0 %

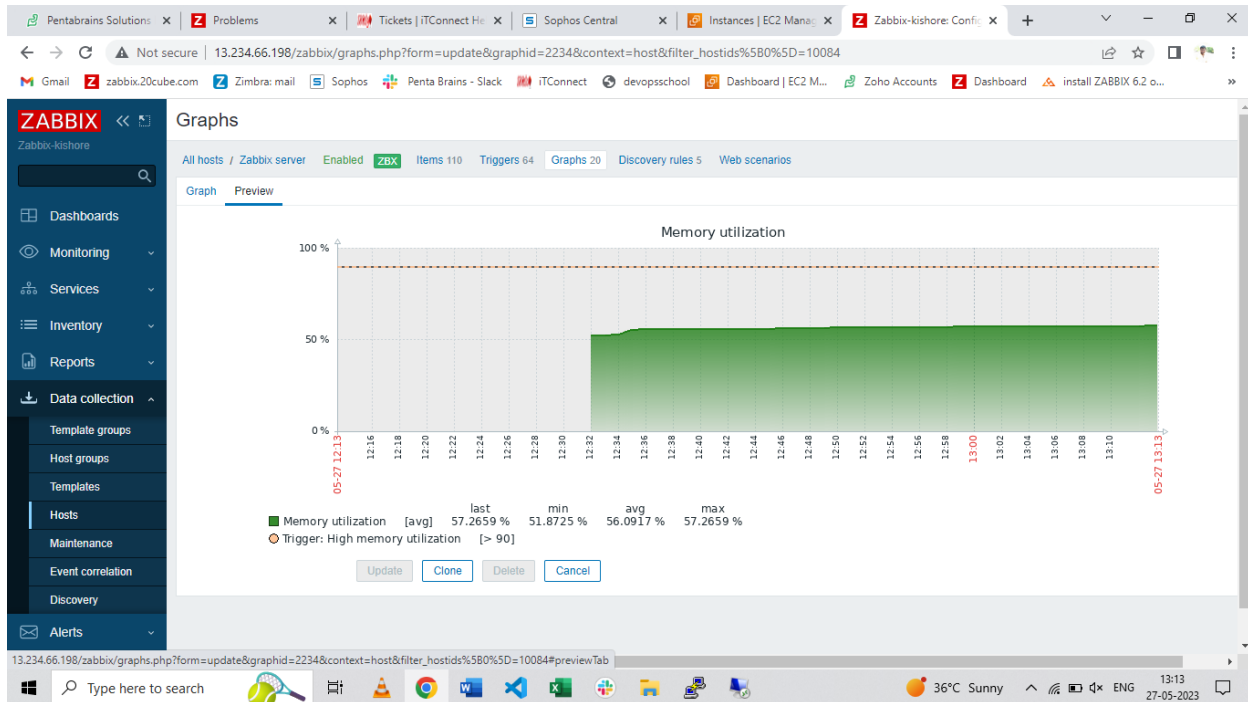
05-27 12:13 12:14 12:16 12:18 12:20 12:22 12:24 12:26 12:28 12:30 12:32 12:34 12:36 12:38 12:40 12:42 12:44 12:46 12:48 12:50 12:52 12:54 12:56 12:58 13:00 13:02 13:04 13:06 13:08 13:10 13:12 05-27 13:13

		last	min	avg	max
CPU guest nice time	[avg]	0 %	0 %	0 %	0 %
CPU guest time	[avg]	0 %	0 %	0 %	0 %
CPU softirq time	[avg]	0.03368 %	0 %	0.02622 %	0.0841 %
CPU interrupt time	[avg]	0 %	0 %	0 %	0 %
CPU steal time	[avg]	0.101 %	0.08408 %	0.09926 %	0.1302 %
CPU iowait time	[avg]	1.5667 %	1.1779 %	1.4553 %	2.0643 %
CPU nice time	[avg]	0 %	0 %	0 %	0 %
CPU user time	[avg]	1.6509 %	0.8745 %	1.5562 %	12.9032 %
CPU system time	[avg]	0.4043 %	0.2189 %	0.4918 %	6.3355 %

13.234.66.198/zabbix/graphs.php?form=update&graphid=2231&context=host&filter_hostids%5B0%5D=10084#previewTab

Configuration of Zabbix Server in Linux & Ubuntu

AND WE TRIGGERS WENT CPU USAGE IS HIGH BY ALERTING MESSAGE



THIS IS NETWORK MAP BY THIS WE CAN CONNECT SERVER

