3.

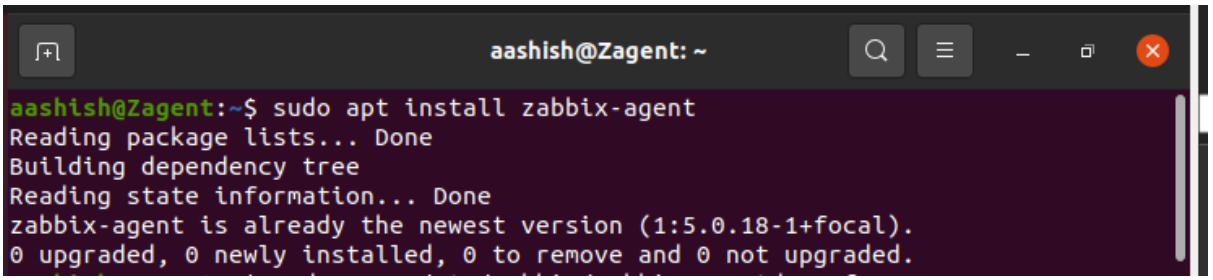
Install Latest Zabbix Agent on VM or host machine or server itself to fetch logs, steps include:

- **Run as active check agent**
- **Add a logging item to the same template for fetching /var/log/syslog(Ubuntu) or /var/log/messages (CentOS)**
- **Fetch those logs from the host (Make sure required permissions are set for zabbix-agent to pull logs)**
- **Provide agent configuration file & screenshots for target machine graph & logs**

Answer:

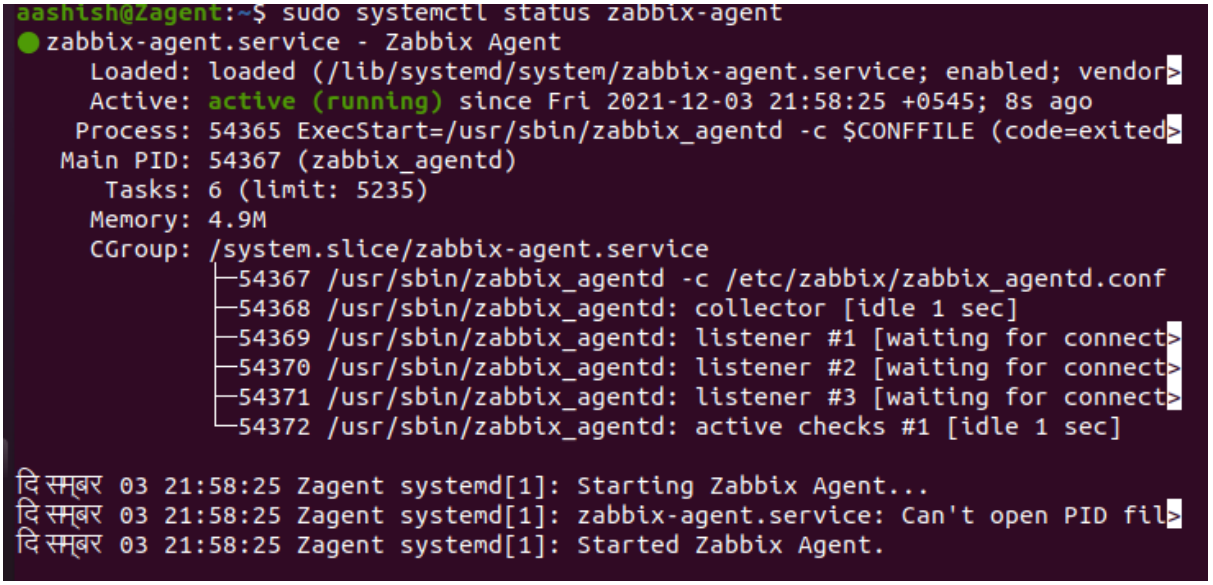
To install the zabbix-agent on same VM, we use following command;

- **sudo apt-get install zabbix-agent**



To check the zabbix-agent status, we use following command;

- **sudo systemctl status zabbix-agent**



I have created a zabbix-agent using Auto registration action check. For that we edit zabbix-agentd.conf file in /etc/zabbix as follows;

- **sudo nano /etc/zabbix/zabbix-agentd.conf**
- **Server=127.0.0.1**

```
aashish@Zagent: ~        aashish@Zagent: ~        aashish@Zagent: ~
  GNU nano 4.8                    /etc/zabbix/zabbix_agentd.conf
#       List of comma delimited IP addresses, optionally in CIDR notation, or DNS name>
#       Incoming connections will be accepted only from the hosts listed here.
#       If IPv6 support is enabled then '127.0.0.1', '::127.0.0.1', '::ffff:127.0.0.1'>
#       and '::/0' will allow any IPv4 or IPv6 address.
#       '0.0.0.0/0' can be used to allow any IPv4 address.
#       Example: Server=127.0.0.1,192.168.1.0/24,::1,2001:db8::/32,zabbix.example.com
#
# Mandatory: yes, if StartAgents is not explicitly set to 0
# Default:
# Server=

Server=127.0.0.1
```

Next, we add following lines;

- **ServerActive=127.0.0.1**
- **Hostname=Zagent**

```
aashish@Zagent: ~        aashish@Zagent: ~        aashish@Zagent: ~
  GNU nano 4.8                    /etc/zabbix/zabbix_agentd.conf
#       If this parameter is not specified, active checks are disabled.
#       Example: ServerActive=127.0.0.1:20051,zabbix.domain,[::1]:30051,::1,[12fc::1]
#
# Mandatory: no
# Default:
# ServerActive=

ServerActive=127.0.0.1

### Option: Hostname
#       Unique, case sensitive hostname.
#       Required for active checks and must match hostname as configured on the server.
#       Value is acquired from HostnameItem if undefined.
#
# Mandatory: no
# Default:
# Hostname=

Hostname=Zagent

### Option: HostnameItem
```

Again, we add **HostMetadataItem** and **HostMetadata** as follows;

```
aashish@Zagent: ~        aashish@Zagent: ~        aashish@Zagent: ~
  GNU nano 4.8                    /etc/zabbix/zabbix_agentd.conf
#
# Mandatory: no
# Range: 0-255 characters
# Default:
# HostMetadata=

HostMetadata=Linux 21df83bf21bf0be663090bb8d4128558ab9b95fba66a6dbf834f8b91ae5e08ae

### Option: HostMetadataItem
#       Optional parameter that defines an item used for getting host metadata.
#       Host metadata is used at host auto-registration process.
#       During an auto-registration request an agent will log a warning message if
#       the value returned by specified item is over limit of 255 characters.
#       This option is only used when HostMetadata is not defined.
#
# Mandatory: no
# Default:
# HostMetadataItem=

HostMetadataItem=release
```

Next, we add **UserParameter** also defining the OS release.

```
aashish@Zagent: ~        aashish@Zagent: ~        aashish@Zagent: ~
  GNU nano 4.8                    /etc/zabbix/zabbix_agentd.conf
### Option: UserParameter
#       User-defined parameter to monitor. There can be several user-defined parameters
#       Format: UserParameter=<key>,<shell command>
#       See 'zabbix_agentd' directory for examples.
#
# Mandatory: no
# Default:
# UserParameter=
UserParameter=release,cat /etc/lsb-release
####### LOADABLE MODULES #######
```

We can check OS release of Ubuntu as follows;

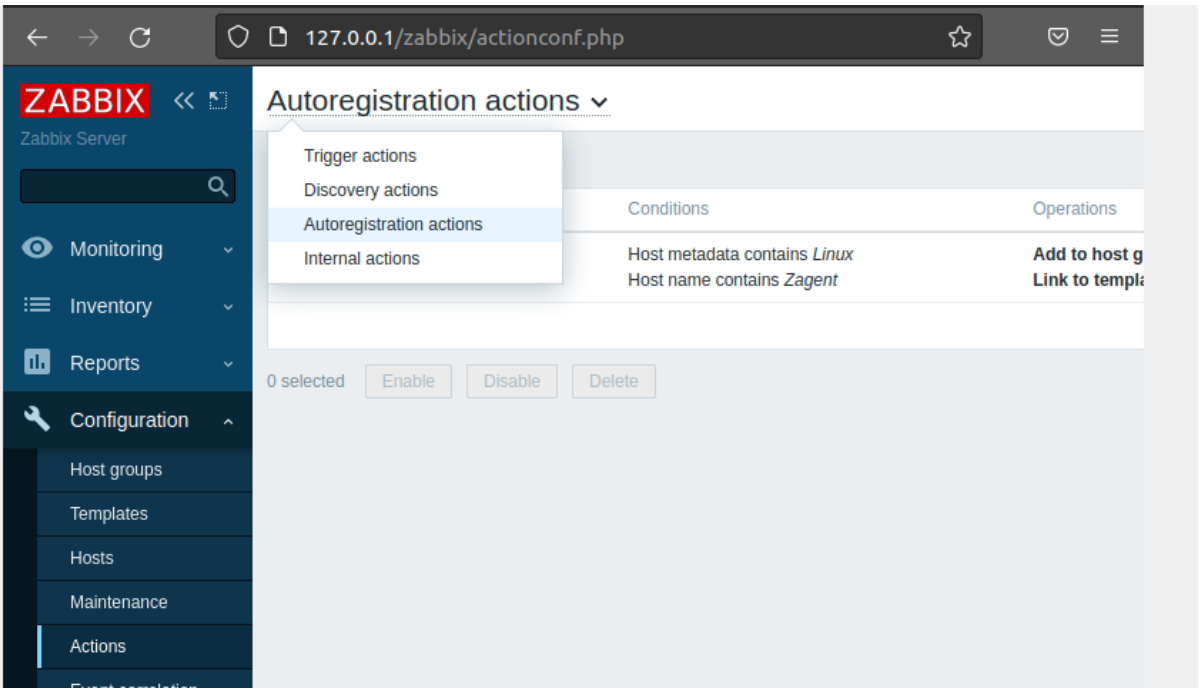
```
aashish@Zagent: ~        aashish@Zagent: ~        aashish@Zagent: ~
aashish@Zagent:~$ cat /etc/lsb-release
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=20.04
DISTRIB_CODENAME=focal
DISTRIB_DESCRIPTION="Ubuntu 20.04.3 LTS"
```

Next, we reload the zabbix-server config cache using the following command;

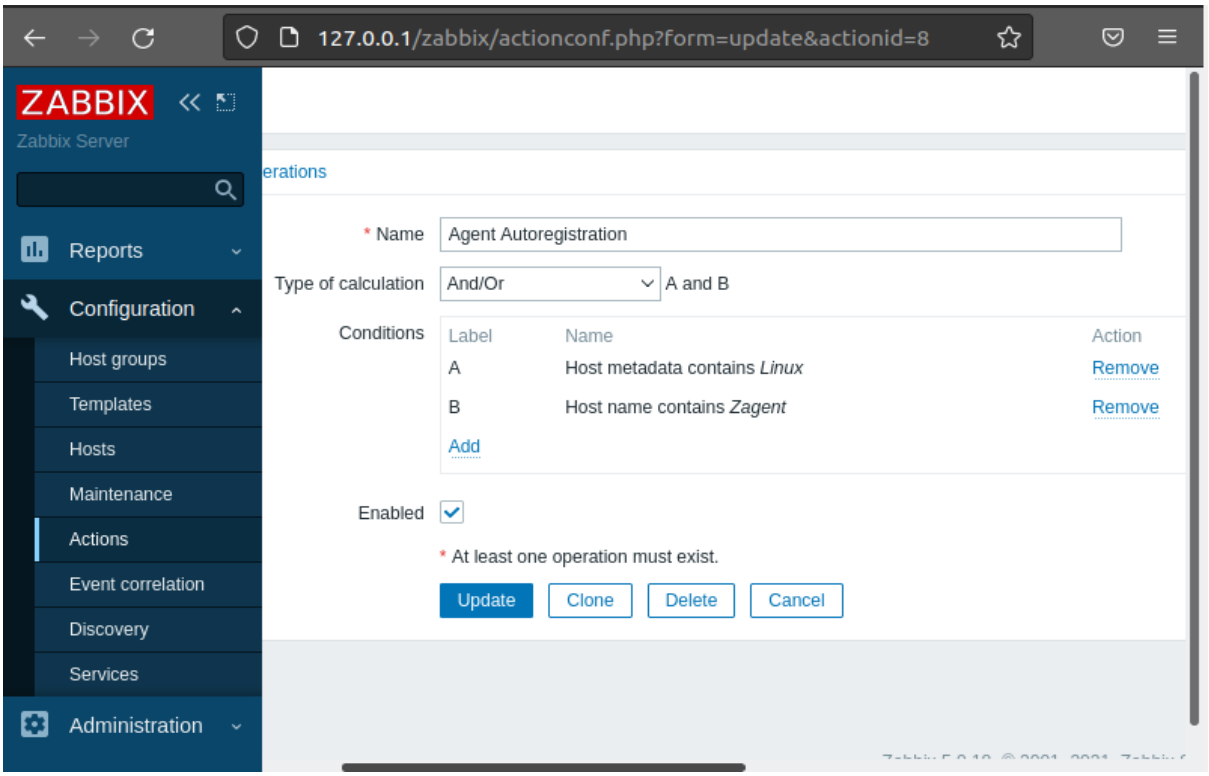
- **sudo zabbix_server -R config_cache_reload**

```
aashish@Zagent:~$ sudo zabbix_server -R config_cache_reload
zabbix_server [10115]: command sent successfully
```

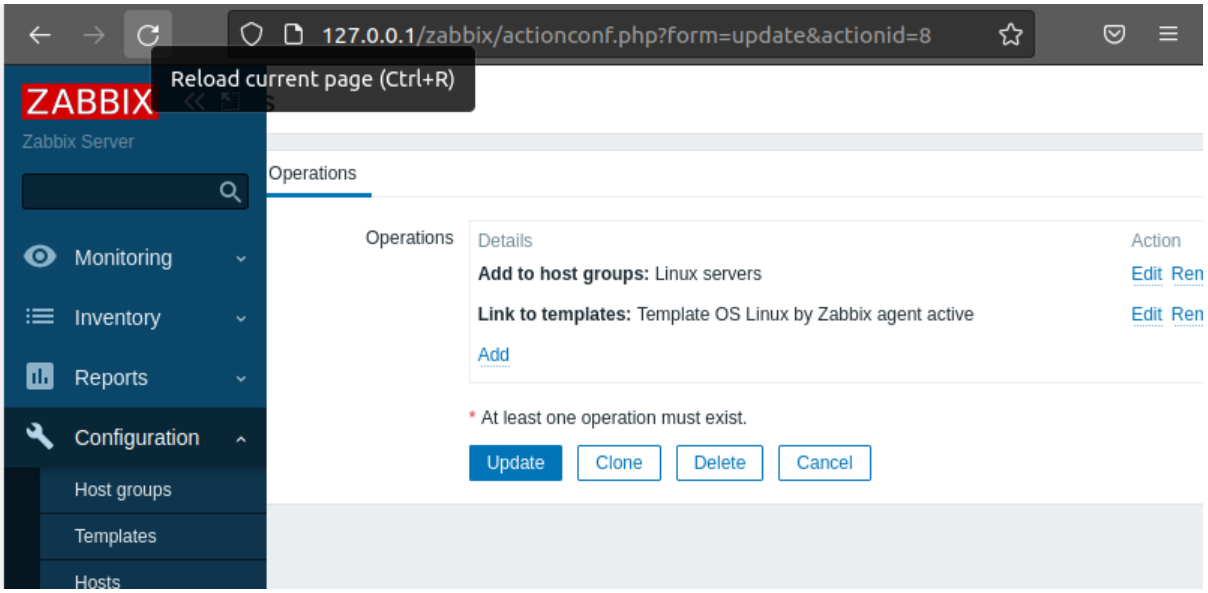
Then, we move to the zabbix frontend part to setup auto registration action as follows;
We click on the **configuration -> actions -> Autoregistration actions**



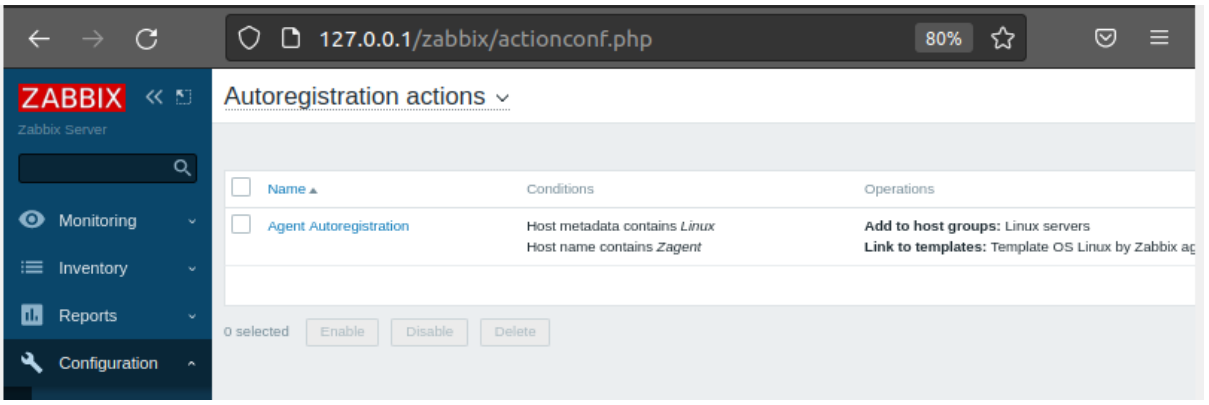
Next, we create an action named **Agent Autoregistration** with the conditions shown in figure below;

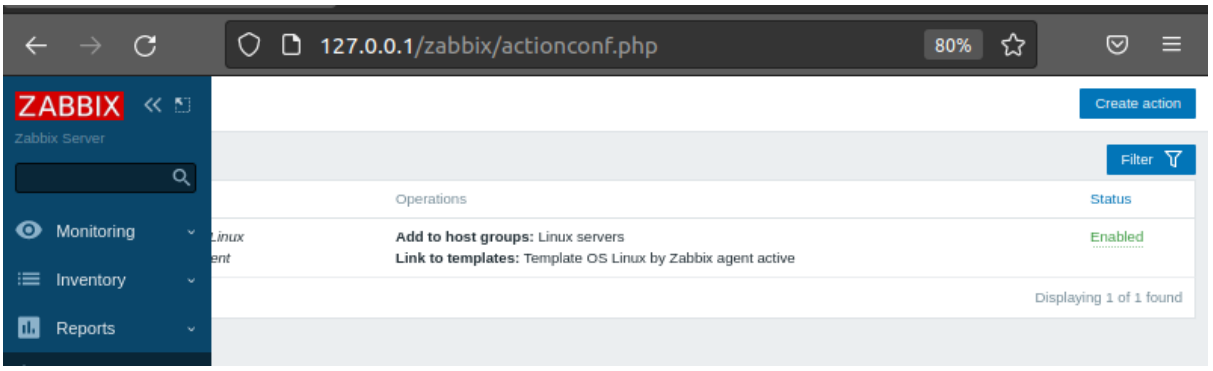


Then, we save and add the operations as follows;

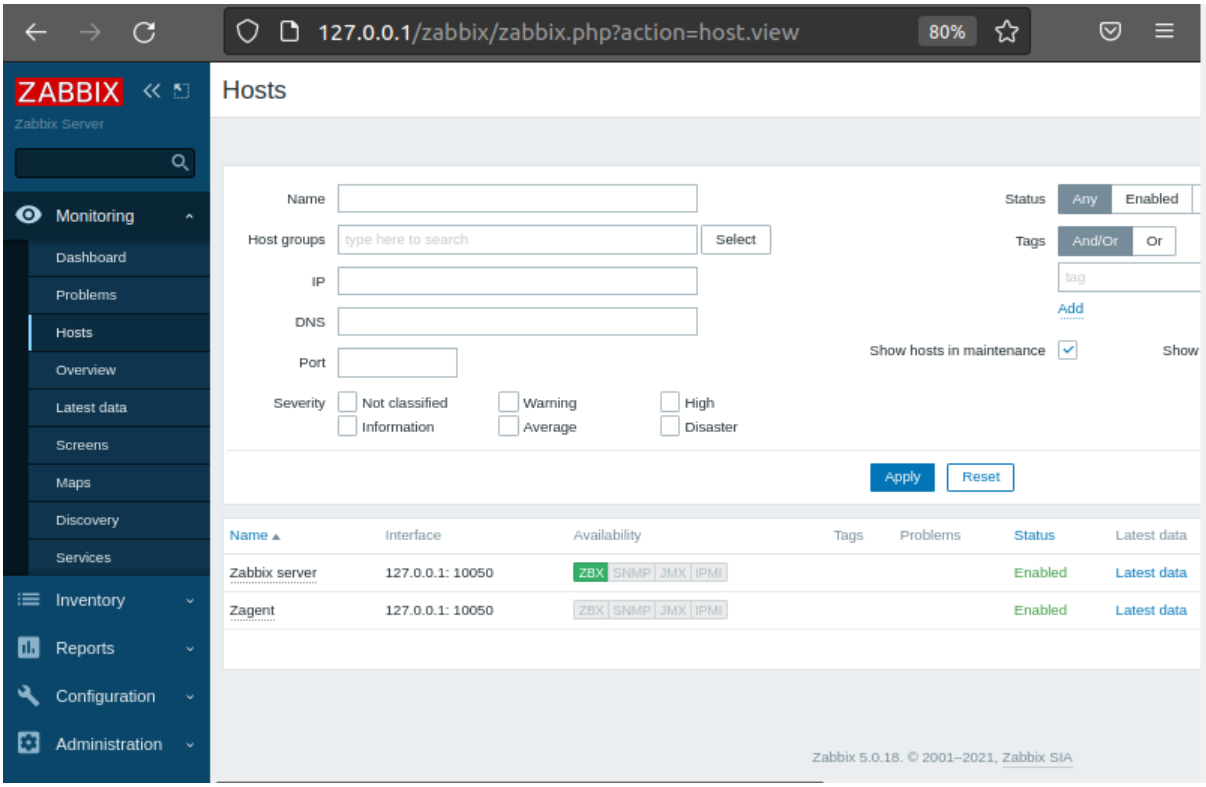


We save the operations and check the action created. Here, Agent Autoregistration action has been added successfully and its status is verified enabled.



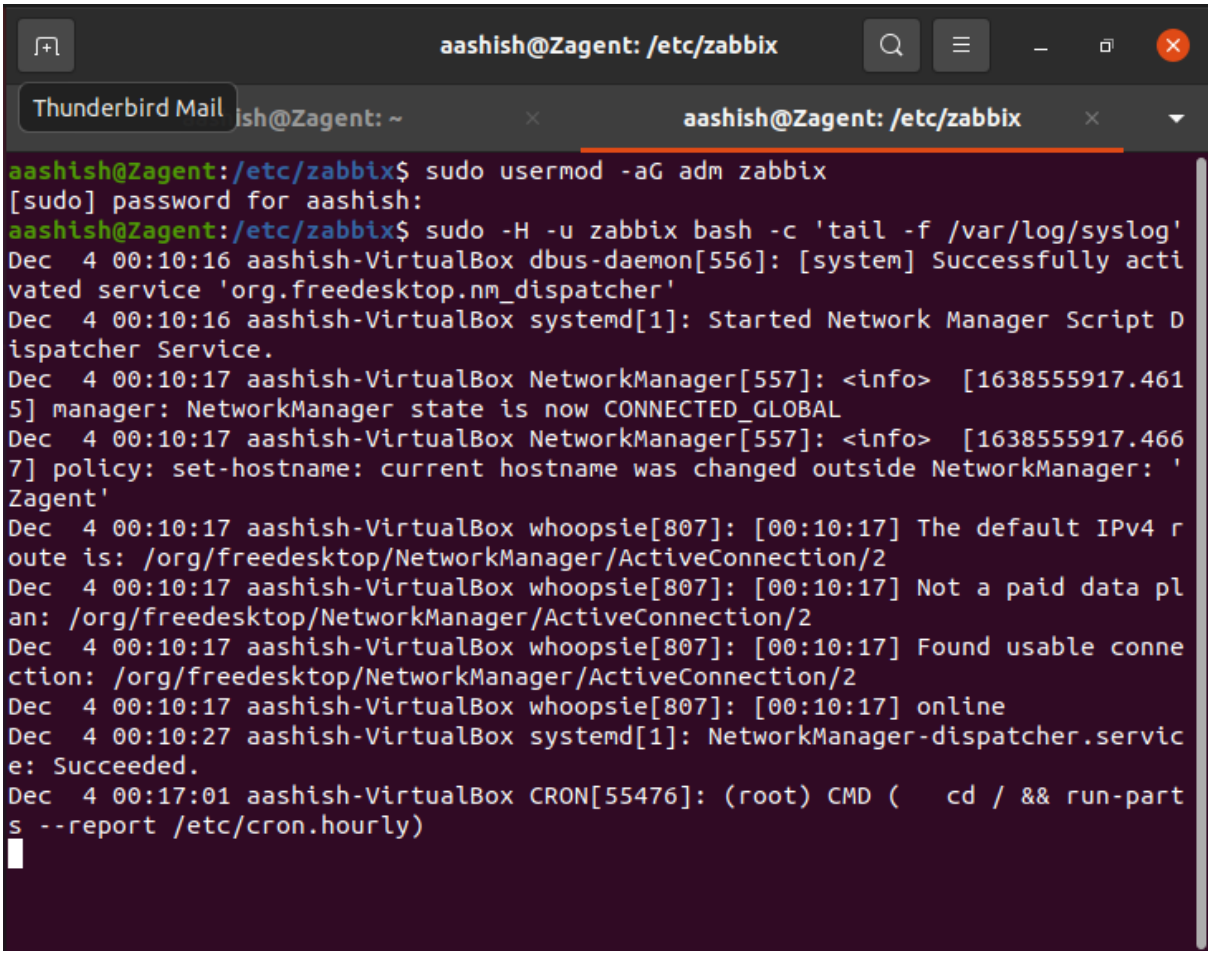


Next, we check the hosts from the monitoring option, we can see that the host named agent has been created using the auto registration action with enabled status.

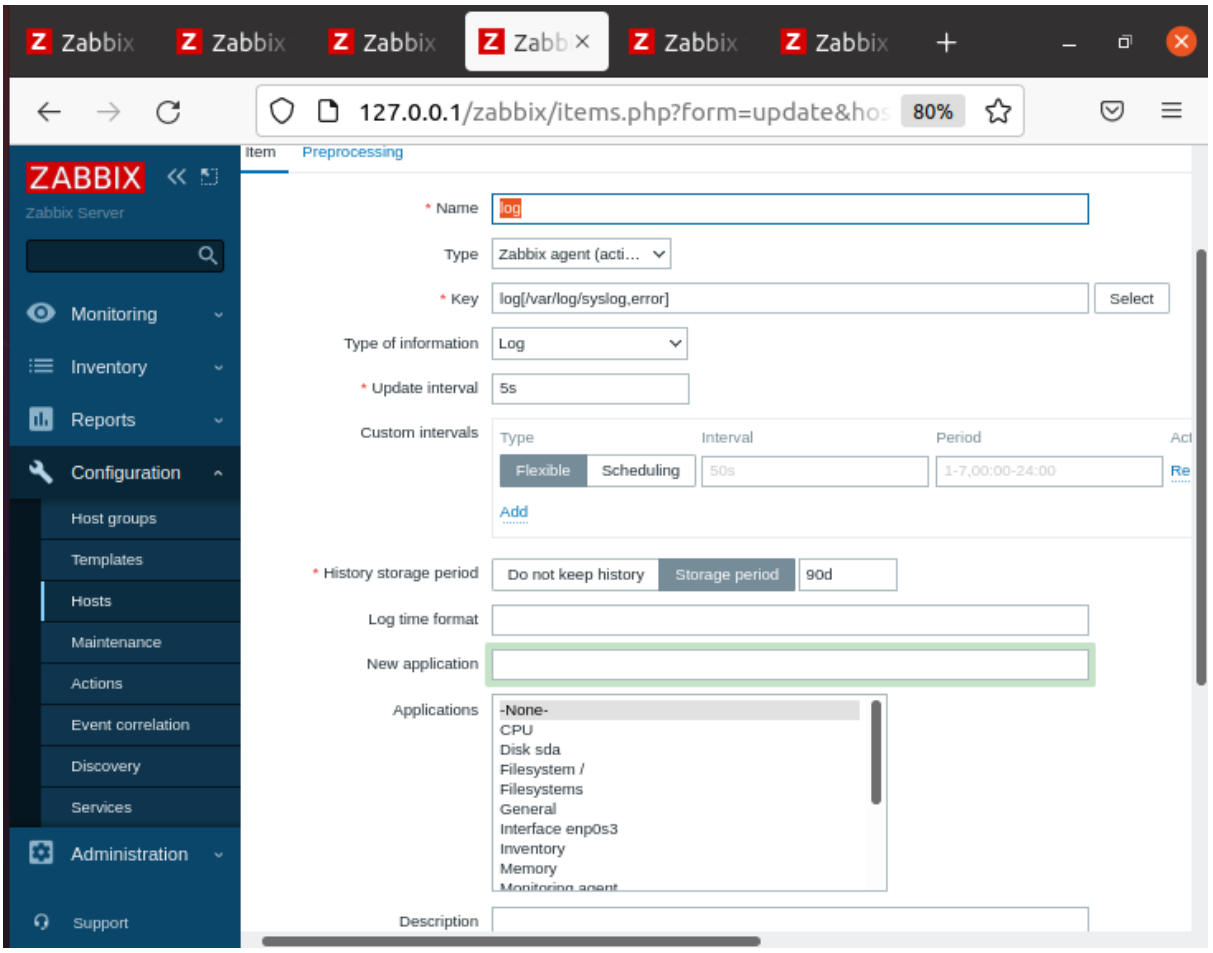


Since, the host was created automatically using agent auto registration action. We give required privilege to zabbix user to fetch the logs via /var/log/syslog as follows;

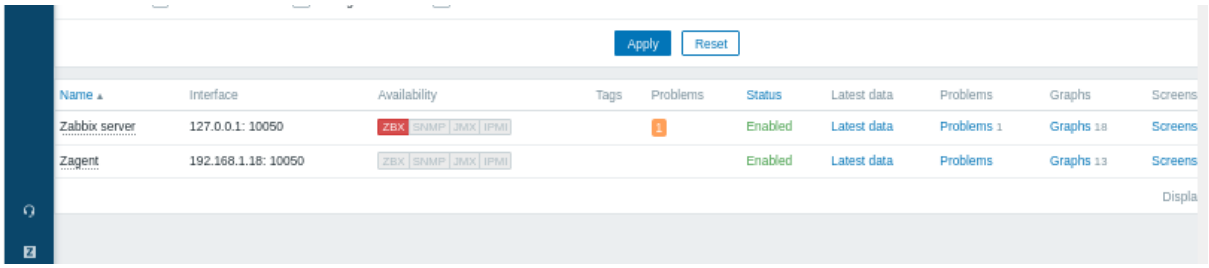
- **sudo usermod -aG adm zabbix**
- **sudo -H -u zabbix bash -c 'tail -f /var/log/syslog'**



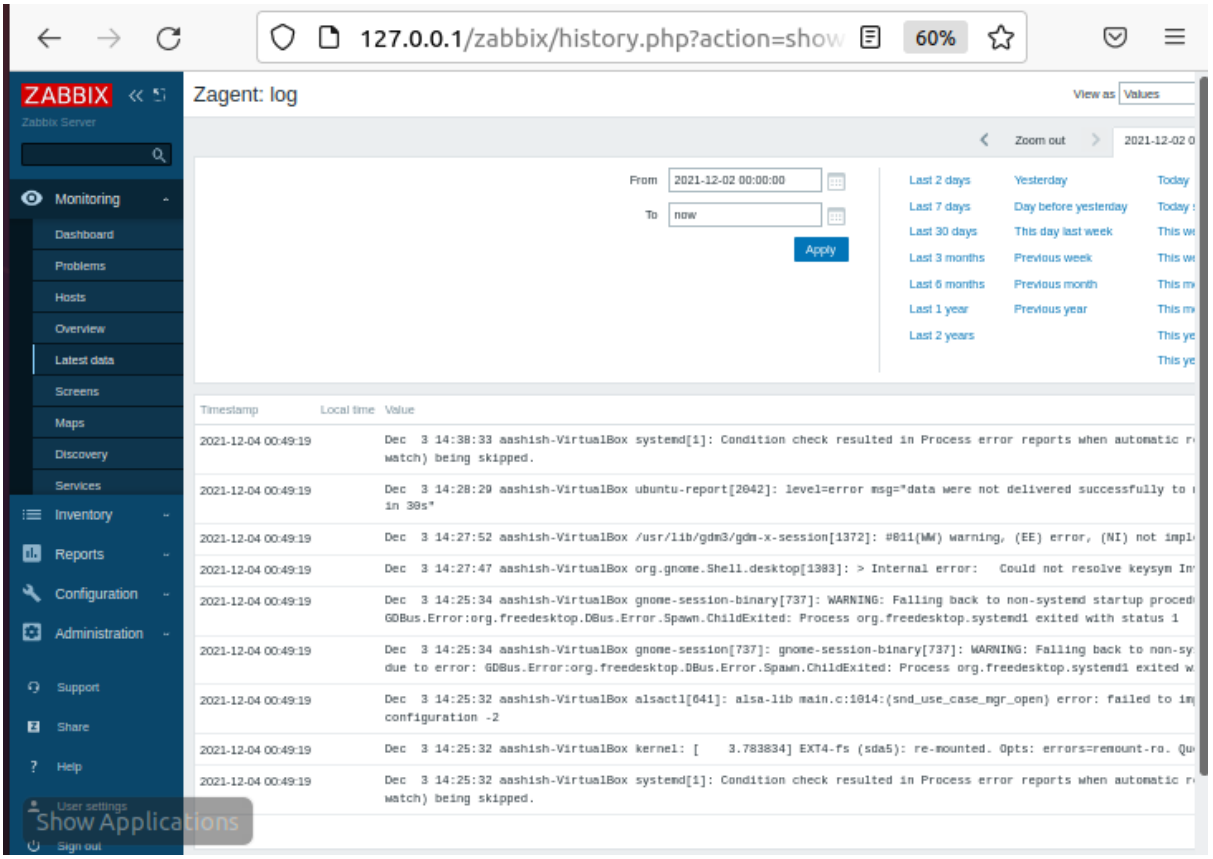
To fetch the logs, we click on the configuration -> item -> create item from the created host as follows;



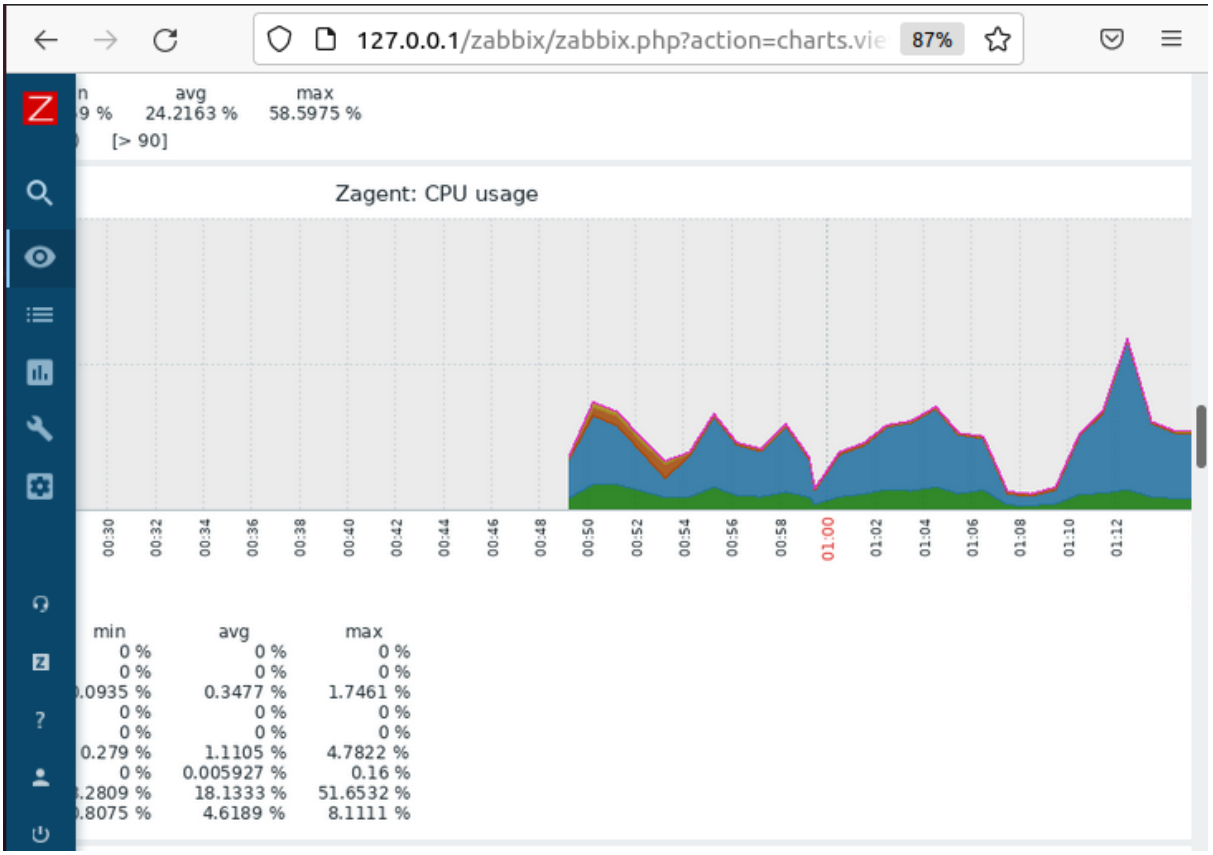
Then we check the log data from monitoring -> Latest data -> log or syslog as follows;

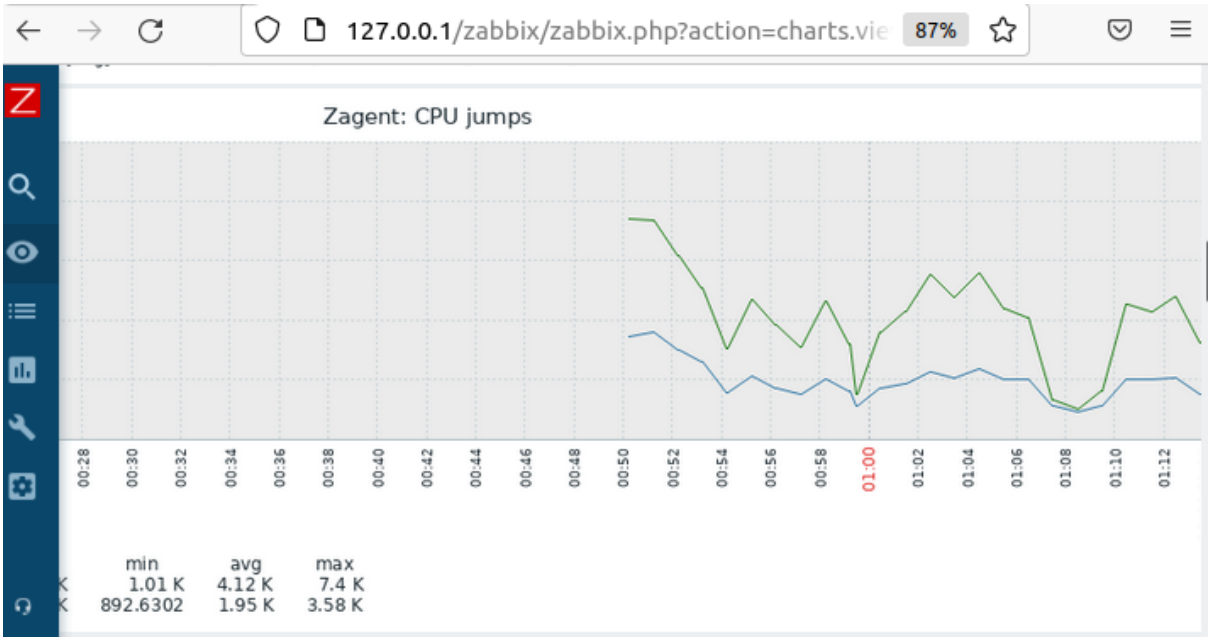


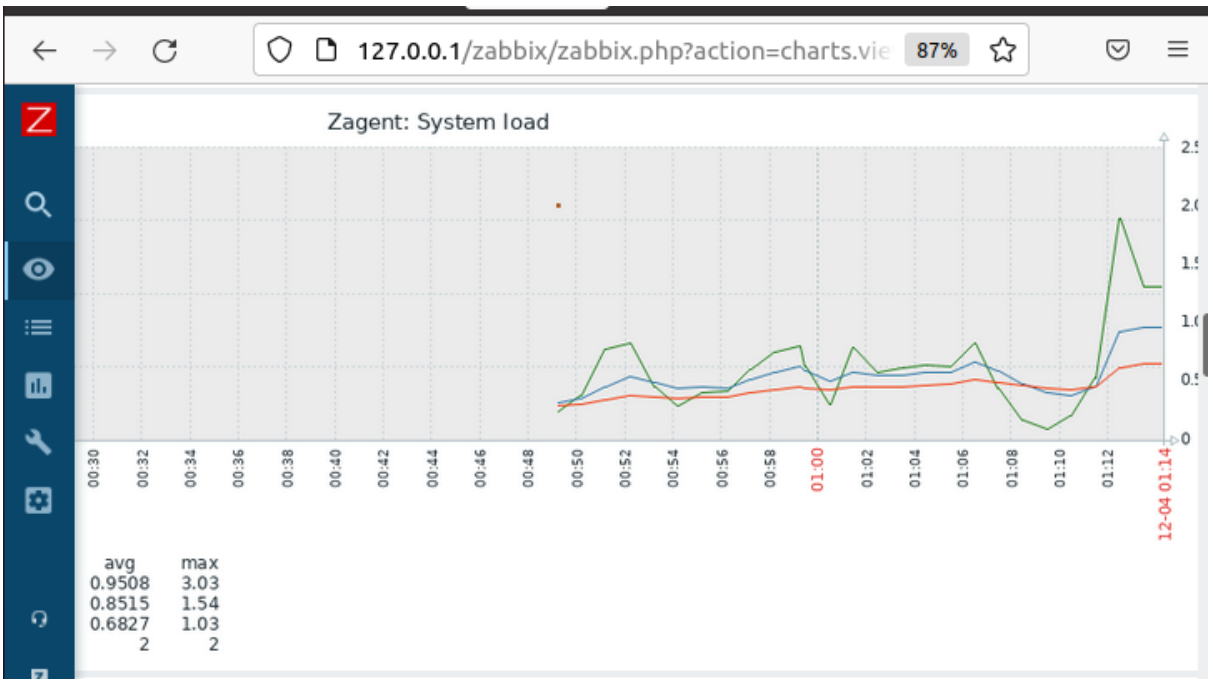
Next, we click on the history to check the errors and alerts of syslog as follows;

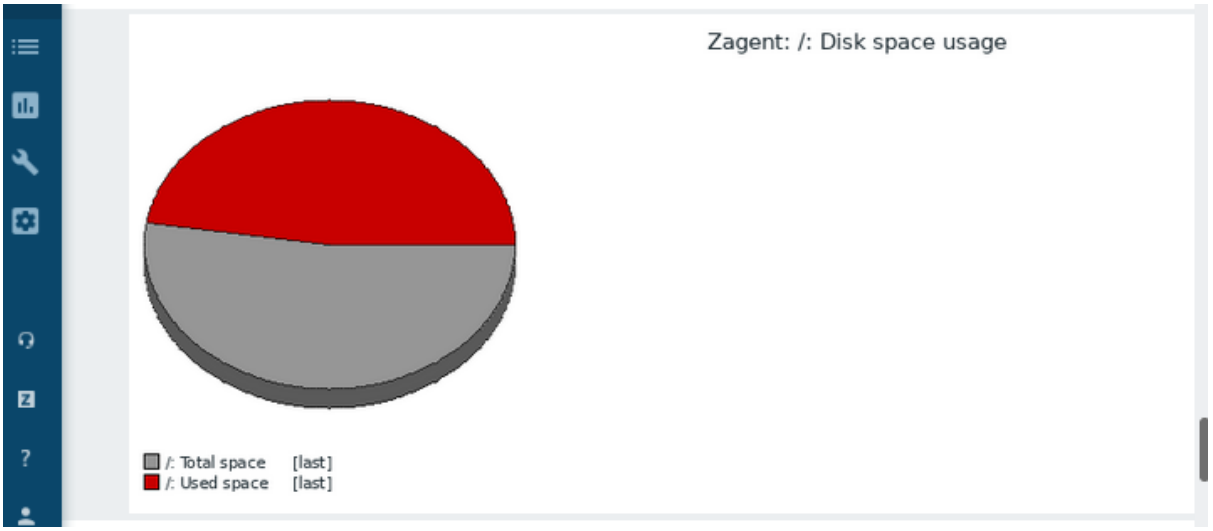


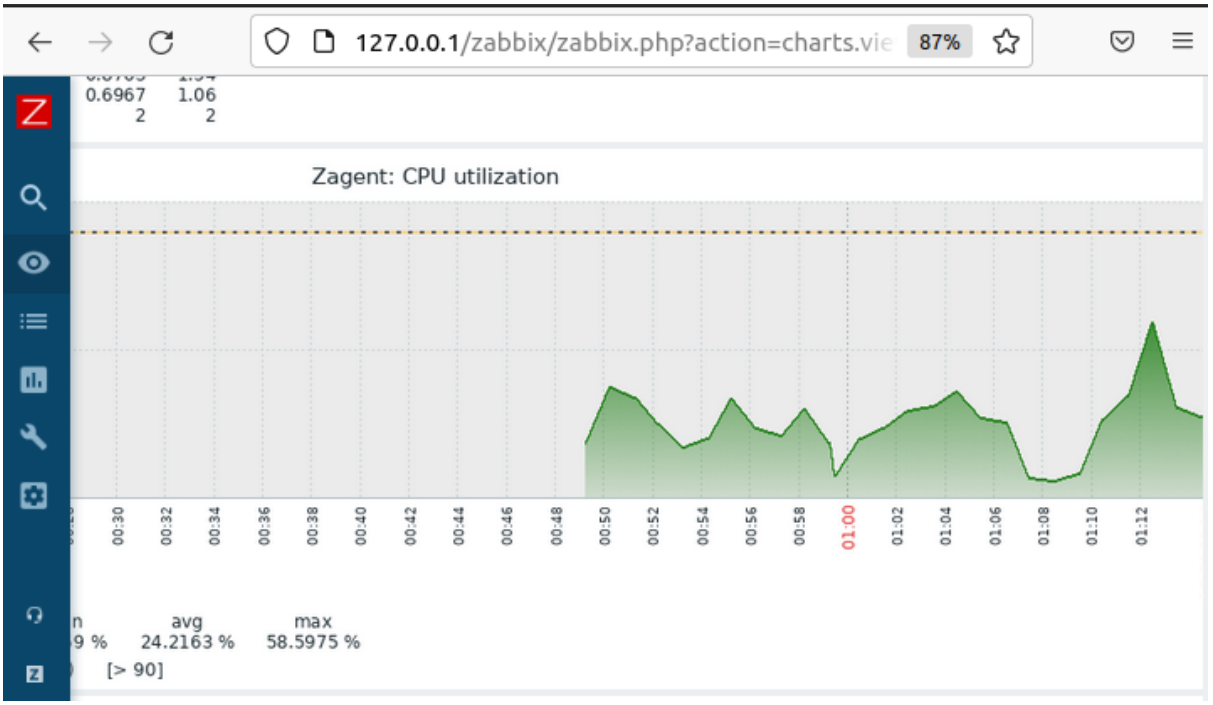
To check the graphs, we can simply click on graph as see the graphs as follows;

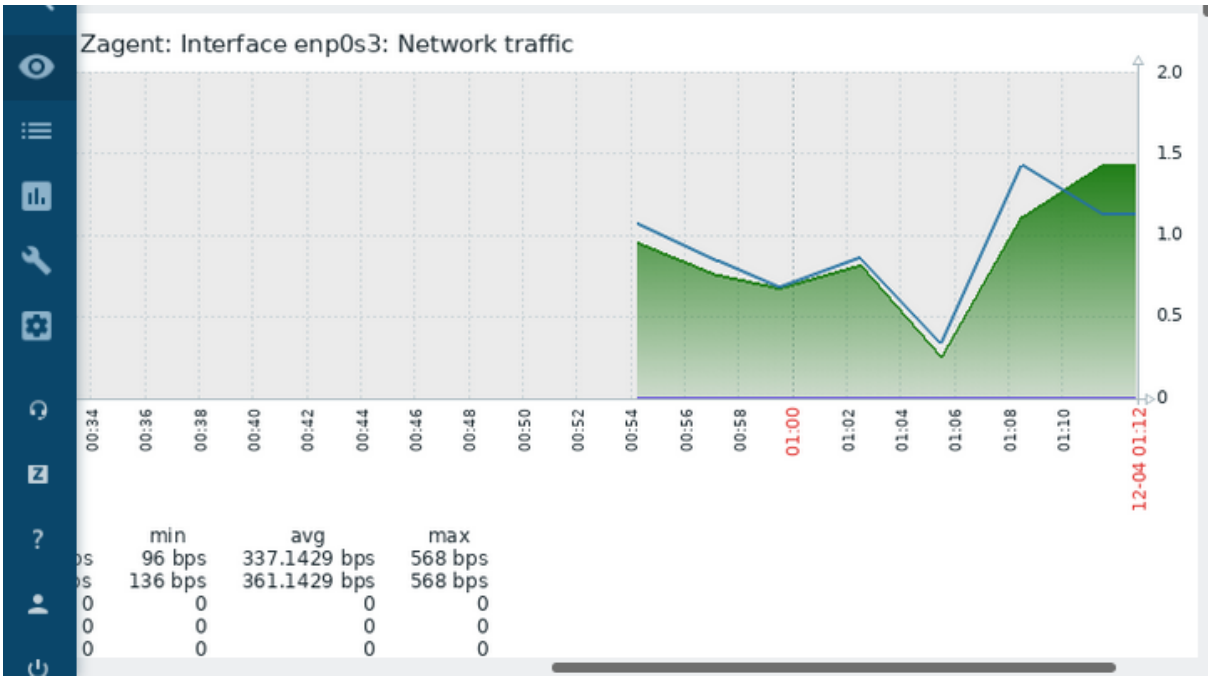

127.0.0.1/zabbix/zabbix.php?action=charts.vie
87%
avg
max
24.2163 %
58.5975 %
[> 90]
Zagent: CPU usage
00:30
00:32
00:34
00:36
00:38
00:40
00:42
00:44
00:46
00:48
00:50
00:52
00:54
00:56
00:58
01:00
01:02
01:04
01:06
01:08
01:10
01:12
min
avg
max
0 %
0 %
0 %
0.0935 %
0.3477 %
1.7461 %
0 %
0 %
0 %
0 %
0 %
0 %
0.279 %
1.1105 %
4.7822 %
0 %
0.005927 %
0.16 %
.2809 %
18.1333 %
51.6532 %
.8075 %
4.6189 %
8.1111 %


127.0.0.1/zabbix/zabbix.php?action=charts.vie
87%
Zagent: CPU jumps
00:28
00:30
00:32
00:34
00:36
00:38
00:40
00:42
00:44
00:46
00:48
00:50
00:52
00:54
00:56
00:58
01:00
01:02
01:04
01:06
01:08
01:10
01:12
min
avg
max
1.01 K
4.12 K
7.4 K
892.6302
1.95 K
3.58 K


127.0.0.1/zabbix/zabbix.php?action=charts.vie
87%
Zagent: System load
00:30
00:32
00:34
00:36
00:38
00:40
00:42
00:44
00:46
00:48
00:50
00:52
00:54
00:56
00:58
01:00
01:02
01:04
01:06
01:08
01:10
01:12
12-04 01:14
avg
0.9508
0.8515
0.6827
2
max
3.03
1.54
1.03
2


Zagent: /: Disk space usage
/: Total space [last]
/: Used space [last]


127.0.0.1/zabbix/zabbix.php?action=charts.vie
87%
0.6967
1.06
2
2
Zagent: CPU utilization
00:30
00:32
00:34
00:36
00:38
00:40
00:42
00:44
00:46
00:48
00:50
00:52
00:54
00:56
00:58
01:00
01:02
01:04
01:06
01:08
01:10
01:12
avg
max
24.2163 %
58.5975 %
[> 90]


Zagent: Interface enp0s3: Network traffic
2.0
1.5
1.0
0.5
0
00:34
00:36
00:38
00:40
00:42
00:44
00:46
00:48
00:50
00:52
00:54
00:56
00:58
01:00
01:02
01:04
01:06
01:08
01:10
12-04 01:12
min
avg
max
96 bps
337.1429 bps
568 bps
136 bps
361.1429 bps
568 bps