ZABBIX SETUP

Setup servers in zabbix frontend.

* Go to zabbix console, <http://zabbix-server-ip:80>
* Login as Administrator.
* Go to configuration from side menu -> Hosts -> create new host.
* Paste same Hostname from the /etc/zabbix/zabbix\_agentd.conf file in server to Host name field.
* Choose any group from the selection.
* Add agent in interface, fill the Ip or dns name of server and choose appropriate option for connect to button.
* Choose (no proxy) for connecting servers directly to zabbix server or choose name of the proxy to connect with. (when opting a proxy, ensure ip or dns name of the proxy server is added in the agent conf file in the server.)
* Click add and ensure the server is connected using /var/log/zabbix/zabbix\_agentd.conf file or checking the availability status of zabbix agent in frontend.

Setup zabbix proxy server

* Server: Ubuntu:22.04
* Zabbix proxy version: 5.0 LTS
* Database: MySQL
* Install zabbix proxy using instruction from [Download and install Zabbix.](https://www.zabbix.com/download)
  + ZABBIX VERSION: 5.0 LTS
  + OS DISTRIBUTION: Ubuntu
  + OS Version: 22.04 (Jammy)
  + ZABBIX COMPONENT: Proxy
  + Database: MySQL
* Additionally set up a MySQL database server for zabbix proxy and add the set from [Download and install Zabbix.](https://www.zabbix.com/download) Page.
  + Note: in case couldn’t find the /usr/share/doc/zabbix-proxy-mysql\*/schema.sql.gz file install zabbix proxy in ubuntu 24 with same configuration for others and import the file from there.
* Add details in /etc/zabbix/zabbix\_proxy.conf
  + Server= The IP or hostname of our Zabbix server.
  + Hostname= The name of the proxy as defined in the Zabbix server GUI.
  + DBName= Name of the Zabbix Proxy database (e.g., zabbix\_proxy).
  + DBUser= The user with access to the Zabbix Proxy database (e.g., zabbix).
  + DBPassword= The password for the database user.
  + DBHost=localhost or ip of the MySQL server for proxy.
* Restart the zabbix proxy, systemctl restart zabbix-proxy.service
* Go to zabbix frontend and add proxy,
  + Go to: Administration → Proxies
  + Click on Create proxy
  + Add the same name for Proxy name from /etc/zabbix/zabbix\_proxy.conf
  + Select proxy mode as Active.
  + Click Add.
* Check /var/log/zabbix/zabbix\_proxy.log for the setup is correct.
* Choose a host from configuration -> Hosts. Choose the name of the proxy from Monitored by proxy drop down.
* Also ensure the ip of the proxy server is added to Server and ServerActice parameters in /etc/zabbix/zabbix\_agentd.conf in the host.

Setting data items for monitoring the server

* In zabbix frontend, got configurations -> Hosts. We can add templates with items provided by various providers from the template tab.
* Or we can add Custome items.
  + Got items tab -> create item
  + Configure the item and add it.
  + In zabbix agent conf file in server, add item as UserParameter=key,command format.
  + Got to monitor -> hosts -> latest data. And analyse the items.
* Example for adding an Item, disk usage.
  + In /etc/zabbix/zabbix\_agent.conf in monitored server. Add items like
    - UserParameter=DiskUsed,df / -out=pcent | tail -n+2 | tr -d " %"
  + Click new item from items tab. Create items with details
    - Name: DiskUsed
    - Type: zabbix Agent
    - Key: DiskUsed
    - Host Interface: ip-of-monitored-sever:zabbix-agent-port (eg:172.100.0.6:10050)
    - Type of information: Numeric(unsigned)
    - Units: %
    - Update interval: 1m
    - New Application: DISK
* Click test and test the data is fetching properly
* Go to latest data and analyse the graph

Adding triggers

* Go to: *Data collection* → *Hosts*
* Click on *Triggers* in the row of the host
* Click on *Create trigger* to the right (or on the trigger name to edit an existing trigger)
* Enter parameters of the trigger in the form
* Use expression constructor for creating an expression and add it for trigger.
* Add trigger and check in zabbix frontend.

Setting psk encryption

* Add key in /home/zabbix/zabbix\_agentd.psk file.
* Edit /etc/zabbix/zabbix\_agentd.conf file like,
* TLSConnect=psk
* TLSAccept=psk
* TLSPSKFile=/home/zabbix/zabbix\_agentd.psk
* TLSPSKIdentity=PSK 001
* In zabbix frontend,
  + Go to: Configuration → Hosts
  + Select host and click on Encryption tab
  + Mark connection to host and connection from host as psk.
  + Add PSK 001 to psk identity
  + Paste psk key in PSK field.
* Setting up encryption in proxy sever, add following to zabbix\_proxy.conf
  + TLSConnect=psk
  + TLSPSKFile=/home/zabbix/zabbix\_proxy.psk
  + TLSPSKIdentity=PSK 002
* For Configure PSK for this proxy in Zabbix frontend. Go to Administration→Proxies, select the proxy, go to "Encryption" tab. In "Connections from proxy" mark PSK. Paste into "PSK identity" field "PSK 002" and "pak-key" into "PSK" field. Click "Update".