

# Configuració Zabbix

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## 9. Monitoratge Centralitzat amb Zabbix

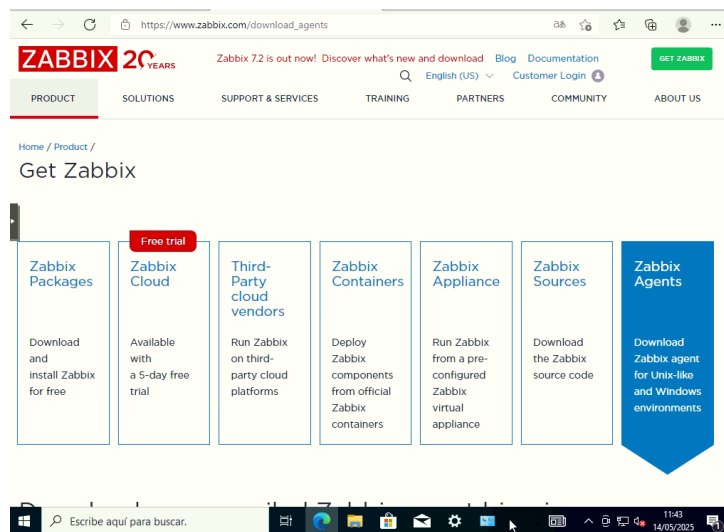
- 9.1 Què és Zabbix i funcionalitats principals
- 9.2 Justificació de l'elecció de Zabbix front altres solucions (Nagios, Prometheus, Netdata...)
- 9.3 Integració amb la infraestructura virtualitzada de Proxmox VE
- 9.4 Desplegament en Alta Disponibilitat (HA) per garantir la continuïtat del servei
- 9.5 Procés d'instal·lació del servidor Zabbix
- 9.6 Afegeix un host al monitoratge Zabbix

## 9.6 Incorporació d'un *host* al sistema de monitoratge amb Zabbix

### 1. Afegir un host Windows

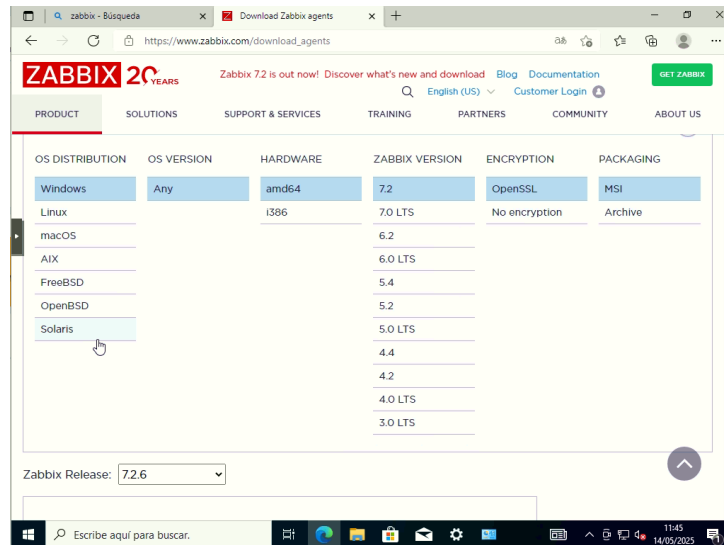
Per integrar un sistema Windows al monitoratge mitjançant **Zabbix**, cal seguir els següents passos:

1. Accedir a la pàgina oficial de Zabbix i descarregar el **paquet de l'agent Zabbix** corresponent al sistema operatiu:

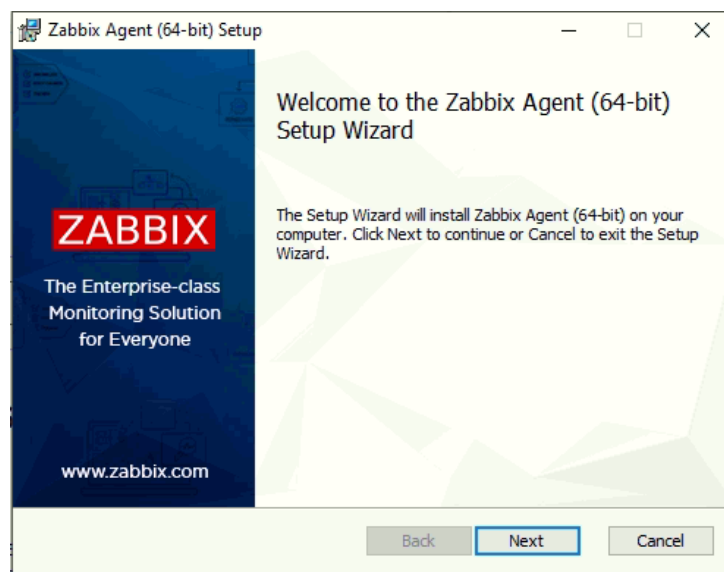


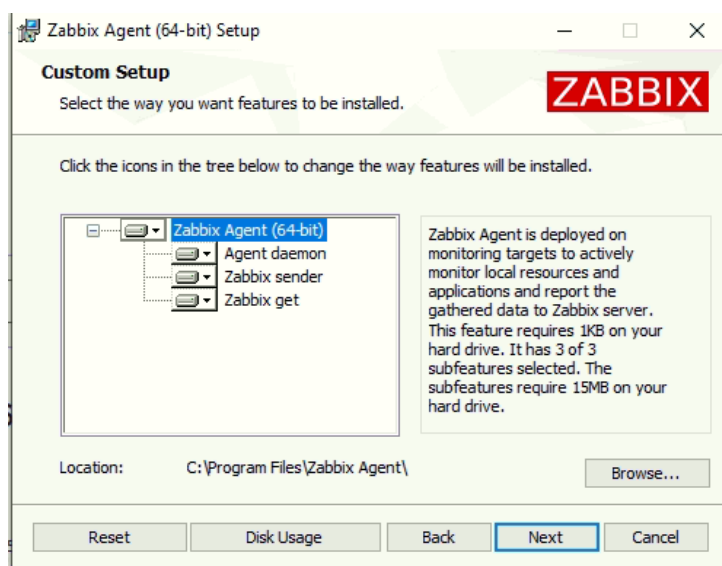
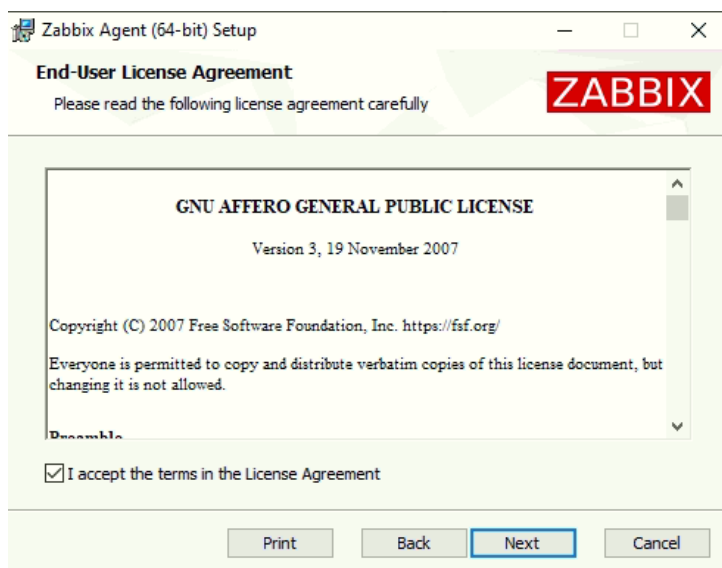
1. Seleccionar:
  - Sistema operatiu (*Windows*)
  - Versió del servidor Zabbix
  - Tipus de xifrat (si és necessari)
  - Format del paquet

## Configuració Zabbix

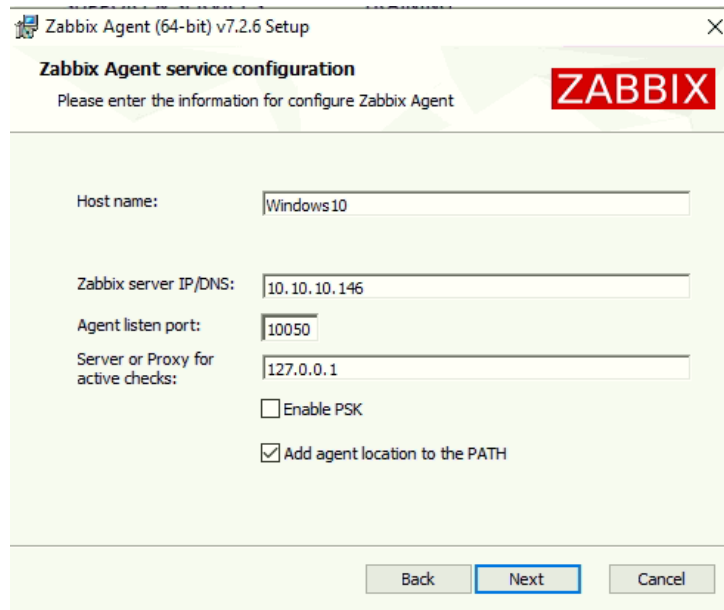


1. Un cop descarregat l'instal·lador, executar-lo i seguir l'assistent d'instal·lació:





## Configuració Zabbix



**Zabbix Agent service configuration**  
Please enter the information for configure Zabbix Agent

Host name: Windows10

Zabbix server IP/DNS: 10.10.10.146

Agent listen port: 10050

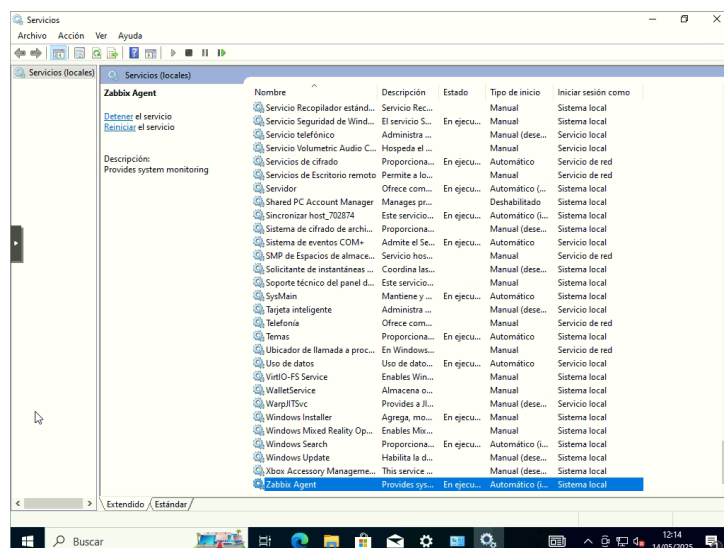
Server or Proxy for active checks: 127.0.0.1

☐ Enable PSK

☒ Add agent location to the PATH

Back Next Cancel

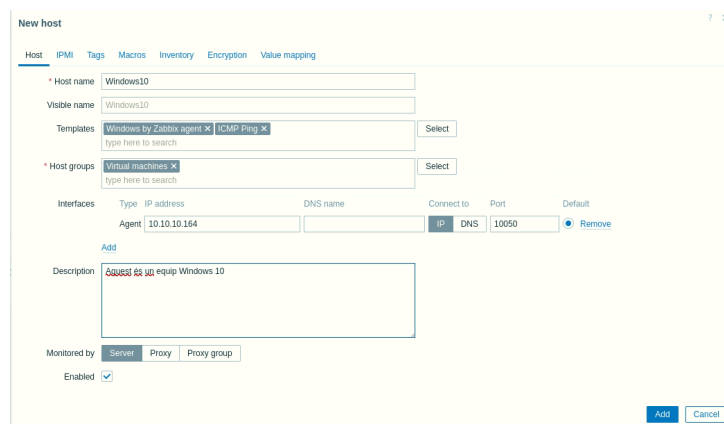
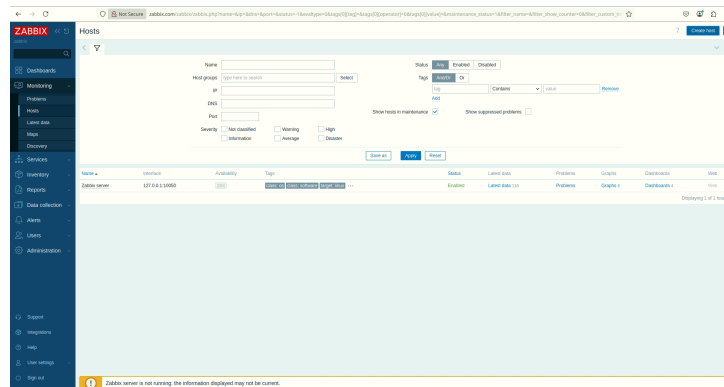
1. Verificar que el **servei de l'agent Zabbix** s'ha iniciat correctament:



1. Finalment, accedir a la interfície web de Zabbix i crear el nou host:

- Menú: **Monitoring → Hosts → Create Host**

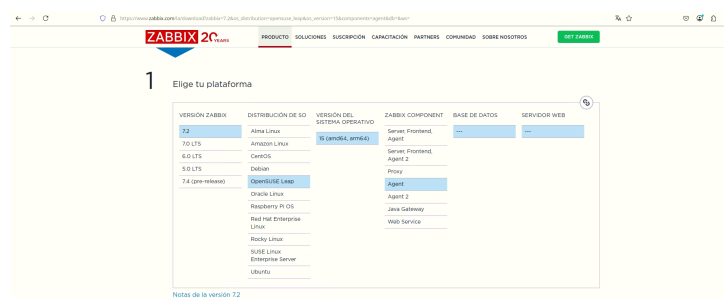
## Configuració Zabbix



## 2. Afegir un host Linux

Per monitoritzar un sistema Linux, cal seguir aquests passos:

1. Accedir a la web de Zabbix i seleccionar l'agent corresponent al sistema (en aquest cas, per a **SUSE Linux Enterprise Server - SLES**).



1. Seguir les instruccions per instal·lar l'agent:

### a. Afegir el repositori oficial de Zabbix:

```
rpm -Uvh --nosignature https://repo.zabbix.com/zabbix/7.2/release/sles-  
→ s/15/noarch/zabbix-release-latest-7.2.sles15.noarch.rpm  
zypper --gpg-auto-import-keys refresh 'Zabbix Official Repository'
```

```
opensuse:/home/opensuse # rpm -Uvh --nosignature https://repo.zabbix.com/zabbix/7.2/release/sles/15/noarch/zabbix-release-latest-7.2.s  
les15.noarch.rpm  
Retrieving https://repo.zabbix.com/zabbix/7.2/release/sles/15/noarch/zabbix-release-latest-7.2.sles15.noarch.rpm  
Preparing...  
Updating / installing...  
1:zabbix-release-7.2-1.sles15 ..... [100%]  
opensuse:/home/opensuse # zypper --gpg-auto-import-keys refresh 'Zabbix Official Repository'  
Automatically importing the following key:  
  
Repository:      Zabbix Official Repository  
Key Fingerprint: 4C3D 6F2C C75F 5146 754F C374 D913 219A B533 3005  
Key Name:        Zabbix LLC (Apr 2024) <packager@zabbix.com>  
Key Algorithm:   RSA 4096  
Key Created:     Tue Apr 30 06:15:35 2024  
Key Expires:     Fri Apr 28 06:15:35 2034  
Subkey:          94205F987AC46E0 2024-04-30 [expires: 2034-04-28]  
Rpm Name:        gpg-pubkey-b5333005-66388c27  
  
Note: A GPG pubkey is clearly identified by its fingerprint. Do not rely on the key's name. If  
you are not sure whether the presented key is authentic, ask the repository provider or check  
their web site. Many providers maintain a web page showing the fingerprints of the GPG keys they  
are using.  
Retrieving repository 'Zabbix Official Repository' metadata ..... [done]  
Building repository 'Zabbix Official Repository' cache ..... [done]  
Specified repositories have been refreshed.  
opensuse:/home/opensuse #
```

### b. Instal·lar el paquet de l'agent:

```
zypper in zabbix-agent
```

```
opensuse:/home/opensuse # zypper in zabbix-agent  
Loading repository data..  
Reading installed packages..  
Resolving package dependencies..  
  
The following 3 NEW packages are going to be installed:  
  libopenssl1_1 logrotate zabbix-agent  
  
3 new packages to install.  
Package download size:      2.1 MiB  
  
Package install size change:  
6.6 MiB | - 6.6 MiB required by to be installed packages  
0 B      | - 0 B   released by to be removed packages  
  
Backend: classic_rpmtrans  
Continue? [y/n/v/...? shows all options] (y):
```

### c. Configurar el fitxer de configuració de l'agent:

Modificar el fitxer `/etc/zabbix/zabbix_agentd.conf` per definir:

- Server= IP del servidor Zabbix
- Hostname= nom del dispositiu



## Configuració Zabbix

```
GNU nano 7.2 /etc/zabbix/zabbix_agentd.conf Modified
## Option: AllowKey
# Allow execution of item keys matching pattern.
# Multiple keys matching rules may be defined in combination with DenyKey.
# Key pattern is wildcard expression, which support '*' character to match any number of any characters in certain position. If
# Parameters are processed one by one according their appearance order.
# If no AllowKey or DenyKey rules defined, all keys are allowed.
#
# Mandatory: no
#
## Option: DenyKey
# Deny execution of items keys matching pattern.
# Multiple keys matching rules may be defined in combination with AllowKey.
# Key pattern is wildcard expression, which support '*' character to match any number of any characters in certain position. If
# Parameters are processed one by one according their appearance order.
# If no AllowKey or DenyKey rules defined, all keys are allowed.
# Unless another system.run[*] rule is specified DenyKey=system.run[*] is added by default.
#
# Mandatory: no
# Default:
# DenyKey=system.run[*]
## Option: EnableRemoteCommands - Deprecated, use AllowKey=system.run[*] or DenyKey=system.run[*] instead
# Internal alias for AllowKey/DenyKey parameters depending on value:
# 0 - DenyKey=system.run[*]
# 1 - AllowKey=system.run[*]
#
# Mandatory: no
## Option: LogRemoteCommands
# Enable logging of executed shell commands as warnings.
# 0 - disabled
# 1 - enabled
#
# Mandatory: no
# Default:
# LogRemoteCommands=0
#### Passive checks related
## Option: Server
# List of comma delimited IP addresses, optionally in CIDR notation, or DNS names of Zabbix servers and Zabbix proxies.
# 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' are treated equally
# 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=10.10.10.146
## Option: ListenPort
# Agent will listen on this port for connections from the server.
#
# Mandatory: no
# Range: 1024-32767
# Default:
# ListenPort=10050
## Option: ListenIP
# List of comma delimited IP addresses that the agent should listen on.
# First IP address is sent to Zabbix server if connecting to it to retrieve list of active checks.
#
# Mandatory: no
# Default:
# ListenIP=0.0.0.0
## Option: StartAgents
# Number of pre-forked instances of zabbix_agentd that process passive checks.
# If set to 0, disables passive checks and the agent will not listen on any TCP port.
#
# Mandatory: no
# Range: 0-100
# Default:
# StartAgents=10
#### Active checks related
## Option: ServerActive
# Zabbix server/proxy address or cluster configuration to get active checks from.
# Server/proxy address is IP address or DNS name and optional port separated by colon.
# Cluster configuration is one or more server addresses separated by semicolon.
# Multiple Zabbix servers/clusters and Zabbix proxies can be specified, separated by comma.
# More than one Zabbix proxy should not be specified from each Zabbix server/cluster.
# If Zabbix proxy is specified then Zabbix server/cluster for that proxy should not be specified.
# Multiple comma-delimited addresses can be provided to use several independent Zabbix servers in parallel. Spaces are allowed.
# If port is not specified, default port is used.
# IPv6 addresses must be enclosed in square brackets if port for that host is specified.
# If port is not specified, square brackets for IPv6 addresses are optional.
# If this parameter is not specified, active checks are disabled.
# Example for Zabbix proxy:
# ServerActive=127.0.0.1:10051
# Example for multiple servers:
# ServerActive=127.0.0.1:20051,zabbix.domain,[::1]:30051,[::1]:12fc::1
# Example for high availability:
# ServerActive=zabbix.cluster.node1;zabbix.cluster.node2;20051;zabbix.cluster.node3
# Example for high availability with two clusters and one server:
# ServerActive=zabbix.cluster.node1;zabbix.cluster.node2;20051;zabbix.cluster2.node1;zabbix.cluster2.node2;zabbix.domain
#
# Mandatory: no
# Default:
# ServerActive=
ServerActive=10.10.10.146
## Option: Hostname
```

```
GNU nano 7.2 /etc/zabbix/zabbix_agentd.conf Modified
# Mandatory: yes, if StartAgents is not explicitly set to 0
# Default:
# Server=
Server=10.10.10.146
## Option: ListenPort
# Agent will listen on this port for connections from the server.
#
# Mandatory: no
# Range: 1024-32767
# Default:
# ListenPort=10050
## Option: ListenIP
# List of comma delimited IP addresses that the agent should listen on.
# First IP address is sent to Zabbix server if connecting to it to retrieve list of active checks.
#
# Mandatory: no
# Default:
# ListenIP=0.0.0.0
## Option: StartAgents
# Number of pre-forked instances of zabbix_agentd that process passive checks.
# If set to 0, disables passive checks and the agent will not listen on any TCP port.
#
# Mandatory: no
# Range: 0-100
# Default:
# StartAgents=10
#### Active checks related
## Option: ServerActive
# Zabbix server/proxy address or cluster configuration to get active checks from.
# Server/proxy address is IP address or DNS name and optional port separated by colon.
# Cluster configuration is one or more server addresses separated by semicolon.
# Multiple Zabbix servers/clusters and Zabbix proxies can be specified, separated by comma.
# More than one Zabbix proxy should not be specified from each Zabbix server/cluster.
# If Zabbix proxy is specified then Zabbix server/cluster for that proxy should not be specified.
# Multiple comma-delimited addresses can be provided to use several independent Zabbix servers in parallel. Spaces are allowed.
# If port is not specified, default port is used.
# IPv6 addresses must be enclosed in square brackets if port for that host is specified.
# If port is not specified, square brackets for IPv6 addresses are optional.
# If this parameter is not specified, active checks are disabled.
# Example for Zabbix proxy:
# ServerActive=127.0.0.1:10051
# Example for multiple servers:
# ServerActive=127.0.0.1:20051,zabbix.domain,[::1]:30051,[::1]:12fc::1
# Example for high availability:
# ServerActive=zabbix.cluster.node1;zabbix.cluster.node2;20051;zabbix.cluster.node3
# Example for high availability with two clusters and one server:
# ServerActive=zabbix.cluster.node1;zabbix.cluster.node2;20051;zabbix.cluster2.node1;zabbix.cluster2.node2;zabbix.domain
#
# Mandatory: no
# Default:
# ServerActive=
ServerActive=10.10.10.146
## Option: Hostname
```

## Configuració Zabbix

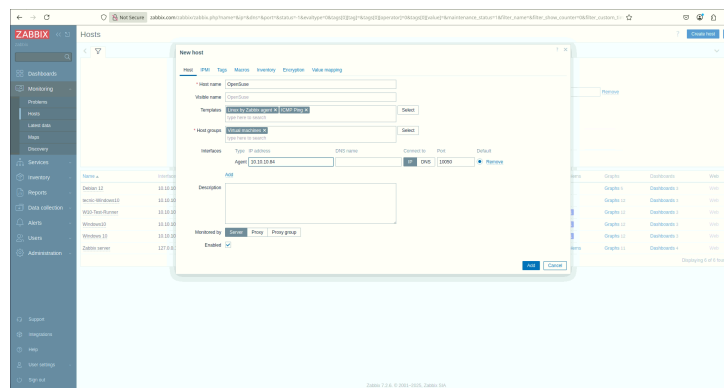
### d. Iniciar i habilitar el servei de l'agent:

```
systemctl restart zabbix-agent
systemctl enable zabbix-agent
```

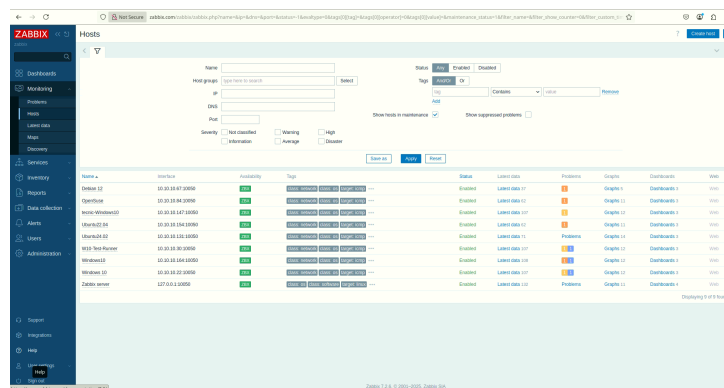
```
openseuse:/home/openseuse # systemctl restart zabbix-agent
openseuse:/home/openseuse # systemctl enable zabbix-agent
Created symlink /etc/systemd/system/multi-user.target.wants/zabbix-agent.service - /usr/lib/systemd/system/zabbix-agent.service.
openseuse:/home/openseuse # systemctl status zabbix-agent
● zabbix-agent.service - Zabbix Agent
   Loaded: loaded (/usr/lib/systemd/system/zabbix-agent.service; enabled; preset: disabled)
   Active: active (running) since Thu 2025-05-15 07:09:27 UTC; 13s ago
     Main PID: 2481 (zabbix_agentd)
        Tasks: 12 (limit: 38435)
           CPU: 28ms
   CGroup: /system.slice/zabbix-agent.service
           └─2481 /usr/sbin/zabbix_agentd -c /etc/zabbix/zabbix_agentd.conf
             └─2482 /usr/sbin/zabbix_agentd: collector [idle 1 sec]
               └─2483 /usr/sbin/zabbix_agentd: listener #1 [waiting for connection]
                 └─2484 /usr/sbin/zabbix_agentd: listener #2 [waiting for connection]
                   └─2485 /usr/sbin/zabbix_agentd: listener #3 [waiting for connection]
                     └─2486 /usr/sbin/zabbix_agentd: listener #4 [waiting for connection]
                       └─2487 /usr/sbin/zabbix_agentd: listener #5 [waiting for connection]
                         └─2488 /usr/sbin/zabbix_agentd: listener #6 [waiting for connection]
                           └─2489 /usr/sbin/zabbix_agentd: listener #7 [waiting for connection]
                             └─2490 /usr/sbin/zabbix_agentd: listener #8 [waiting for connection]
                               └─2491 /usr/sbin/zabbix_agentd: listener #9 [waiting for connection]
                                 └─2492 /usr/sbin/zabbix_agentd: listener #10 [waiting for connection]
                                   └─2493 /usr/sbin/zabbix_agentd: active checks #1 [idle 1 sec]

May 15 07:09:27 openseuse systemd[1]: Starting Zabbix Agent...
May 15 07:09:27 openseuse systemd[1]: Started Zabbix Agent.
openseuse:/home/openseuse #
```

### 1. Afegir el nou host des de la interfície web del servidor Zabbix:



Un cop afegits els sistemes, apareixeran llistats a l'apartat de *Hosts*:



🔍 Amb aquest procés, tant equips Windows com Linux poden ser incorporats al sistema de monitoratge, permetent la supervisió de mètriques com consum de CPU, ús de memòria, estat dels serveis i molt més, tot centralitzat des del panell de control de Zabbix.