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1. AGENT OVERVIEW

The agent is deployed on a monitoring target to actively monitor local resources and applications (hard drives, memory, processor statistics, performance metrics etc).

The agent gathers operational information locally and reports data to local proxy. Then, the local proxy sends the compressed data from all local agents to the central server for further processing.

In case of failures (such as a hard disk running full or a crashed service process), the central server can actively alert the administrators of the particular machine that reported the failure.

The agents are extremely efficient because of use of native system calls for gathering statistical information.

Passive and Active Checks

The agents can perform **passive** and **active** checks.

In **Passive check** mode the agent responds to a data request. The local proxy asks for data, for example, CPU load, and the agent sends back the result.

Active checks require more complex processing. The agent must first retrieve a list of items from the local proxy for independent processing. Then it will periodically send new values to the local proxy server.

Whether to perform passive or active checks is configured by selecting the respective monitoring mode type in the agent configuration. (see respective section in this guide for details)

Supported Platforms

The current agent is supported for the following OS:

Windows: all desktop and server versions since XP

Linux: 2.4, 2.6, 2.6.23, 3.0

IBM AIX: 4.3, 5.1, 5.1.09, 5.2, 5.3, 6.1, 6.1.04, 7.1, 7.2

FreeBSD: 4.2, 5.4, 6.0, 6.2, 7.0, 7.1, 8.2, 11, 11.1 11.2

NetBSD: 5.0

OpenBSD: 3.8, 3.9, 4.3, 4.6, 4.7, 5.4, 5.6, 5.7, 5.9, 6, 6.1, 6.3

HP-UX: 11.11,

Mac OS X: Any

Solaris: 9, 10, 11

2. DOWNLOAD THE AGENT

Depending on the OS distribution of the device we want to monitor, the agent can be downloaded from this repository site: https://www.zabbix.com/download_agents

Download and install pre-compiled Zabbix agents

OS DISTRIBUTION	OS VERSION	HARDWARE	ZABBIX VERSION	ENCRYPTION	PACKAGING
Windows	Any	amd64	5.2	OpenSSL	MSI
Linux		i386	5.0 LTS	No encryption	Archive
macOS			4.4		
AIX			4.2		
FreeBSD			4.0 LTS		
HPUX			3.0 LTS		
NetBSD					
OpenBSD					
SLES					
Solaris					
Tru64					

After we have selected the required OS distribution and Zabbix version (should be the latest: 5.2) we download the corresponding Agent 2 at the bottom of the page:

Zabbix agent 2 v5.2.5 [Read manual](#)

Packaging: MSI
 Encryption: OpenSSL
 Linkage: Dynamic

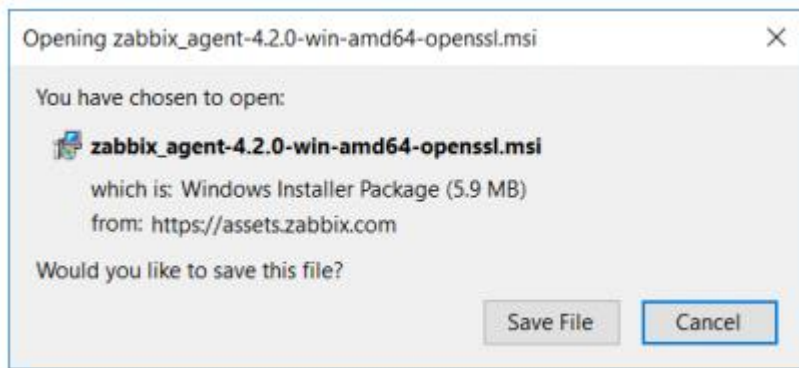
Checksum: sha256: 68b3777d5fa5ec28c89a5bd719362f04022be112014fb4ef3b9374f25d2a843
 sha1: 76915fd693be193b4987cfab63e0180d68d47591
 md5: f7136b832ae95392ebd7ec826454af56

DOWNLOAD
https://cdn.zabbix.com/zabbix/binaries/stable/5.2/5.2.5/zabbix_agent2-5.2.5-windows-amd64-openssl.msi

3. INSTALLING THE AGENT

Windows Agent Installation From MSI

The Windows agent can be installed from Windows MSI installer packages (32-bit or 64-bit) available from https://www.zabbix.com/download_agents

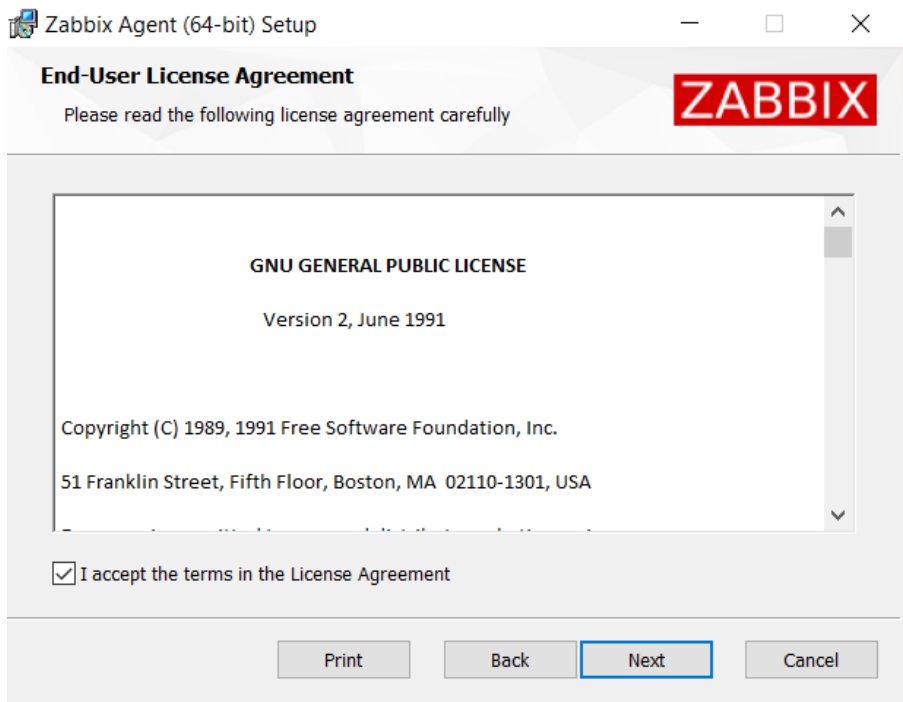
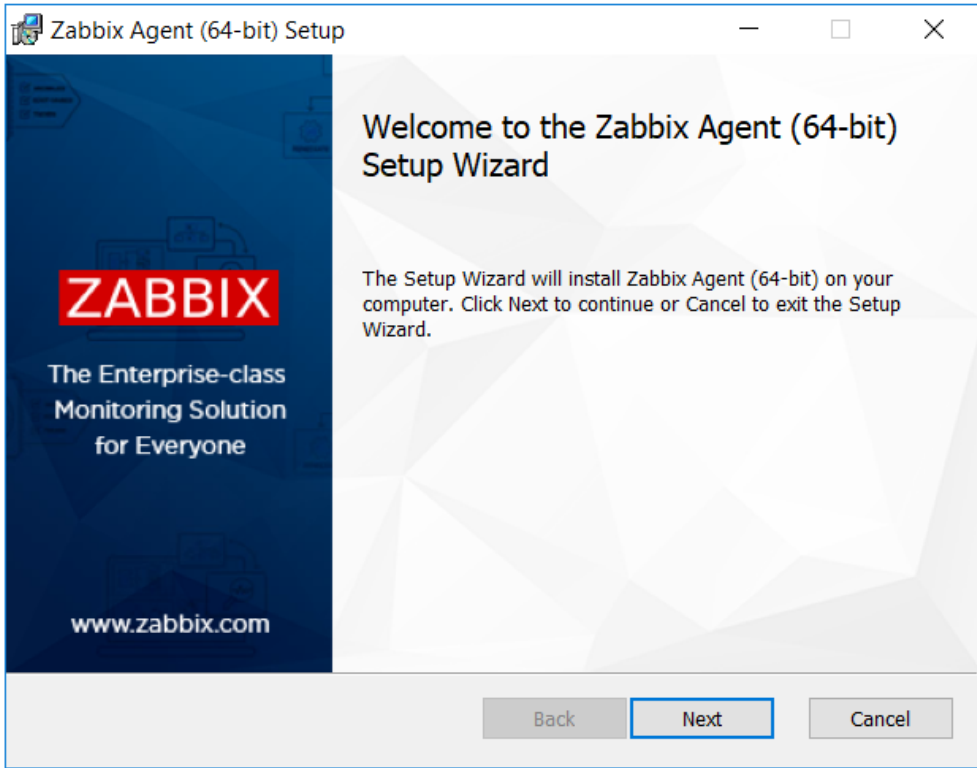


The 32-bit package cannot be installed on a 64-bit Windows.

All packages come with TLS support, however, configuring TLS is optional.

Both UI and command-line based installation is supported.

To install, double-click the downloaded MSI file:



Accept the license to proceed to the next step:

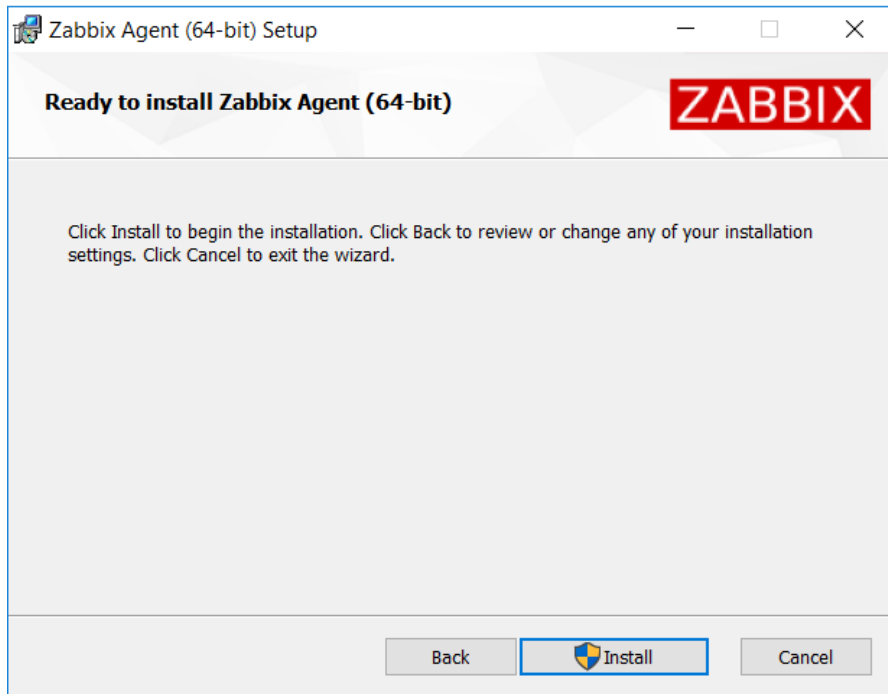
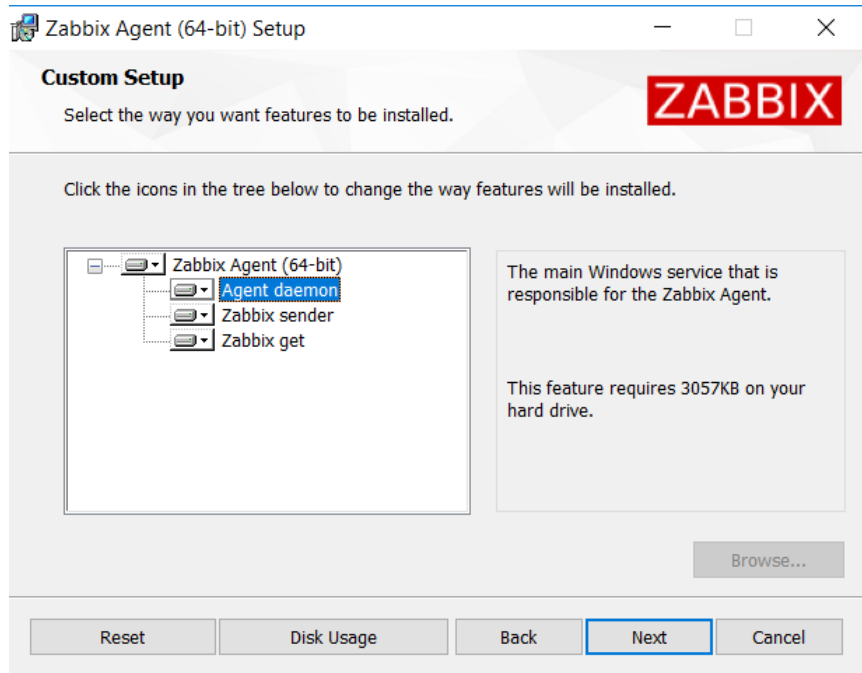
Specify the following parameters:

Parameter	Description
<i>Host name</i>	Specify the host name.
<i>Zabbix server IP/DNS</i>	Specify the IP address of the local proxy.
<i>Agent listen port</i>	Specify agent listen port (10050 by default). You can leave the default.
<i>Server or Proxy for active checks</i>	Specify the IP address of local proxy for active agent checks.
<i>Remote commands</i>	Mark the checkbox to enable remote commands.
<i>Enable PSK</i>	Mark the checkbox to enable TLS support via pre-shared keys.

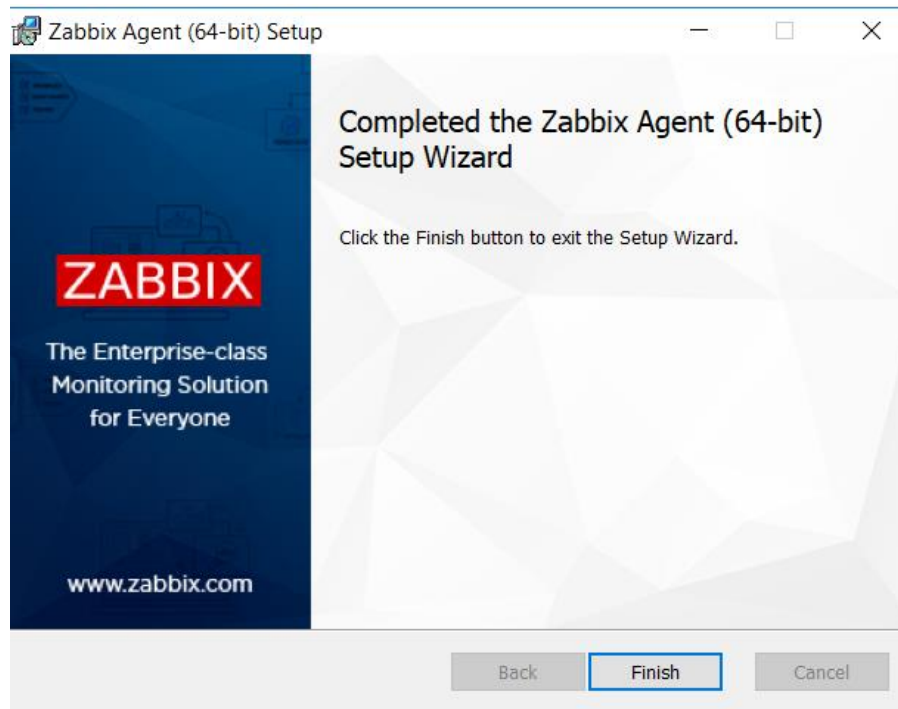
Parameter	Description
<i>Add agent location to the PATH</i>	Add agent location to the PATH variable.

Enter pre-shared key identity and value. This step is only available if you checked Enable PSK in the previous step.

Click Next to install all agent components:



The agent components along with the configuration file will be installed in a Zabbix Agent folder in Program Files. zabbix_agentd.exe will be set up as Windows service with automatic startup.



In order to start/Stop/Restart the Agent, you can find the Zabbix Agent Service under Services and run the corresponding commands there.

Red Hat Ent. Linux/CentOS Agent Installation

Step 1 - Add Required Repository

First, we need to download and install the repository on the server:

RHEL/Centos 8

```
rpm -Uvh https://repo.zabbix.com/zabbix/5.2/rhel/8/x86\_64/zabbix-release-5.2-1.el8.noarch.rpm
```

```
dnf clean all
```

Step 2 - Install Agent

Then, we proceed to install the agent:

```
dnf install zabbix-agent
```

Step 3 – Configure Agent

Edit parameters for Server, ServerActive and Hostname and save:

```
sudo nano /etc/zabbix/zabbix_agentd.conf or sudo vi /etc/zabbix/zabbix_agentd.conf
```

Step 4 – Running Agent

Start/Restart the Agent:

```
sudo systemctl start zabbix-agent.service
```

```
sudo systemctl restart zabbix-agent.service
```

Check the Status of the Agent:

```
sudo systemctl status zabbix-agent.service
```

Stop the Agent:

```
sudo systemctl stop zabbix-agent.service
```

Step 5 - Setup Internal Firewall

We need to allow TCP connections to port 10050

```
firewall-cmd --permanent --add-port=10050/tcp
```

```
firewall-cmd --reload
```

```
firewall-cmd --list-ports
```

Step 6 – Check Agent Logs

```
tail -f /var/log/zabbix/zabbix_agentd.log
```

RHEL/Centos 7

Step 1 - Add Required Repository

```
rpm -Uvh https://repo.zabbix.com/zabbix/5.2/rhel/7/x86_64/zabbix-release-5.2-1.el7.noarch.rpm
```

```
yum clean all
```

Step 2 - Install Agent

```
yum install zabbix-agent
```

Step 3 – Configure Agent

Edit parameters for Server, ServerActive and Hostname and save:

```
sudo nano /etc/zabbix/zabbix_agentd.conf or sudo vi /etc/zabbix/zabbix_agentd.conf
```

Step 4 – Running Agent

Start/Restart the Agent:

```
sudo systemctl start zabbix-agent.service
sudo systemctl restart zabbix-agent.service
```

Check the Status of the Agent:

```
sudo systemctl status zabbix-agent.service
```

Stop the Agent:

```
sudo systemctl stop zabbix-agent.service
```

Step 5 - Setup Internal Firewall

We need to allow TCP connections to port 10050

```
firewall-cmd --permanent --add-port=10050/tcp
firewall-cmd --reload
firewall-cmd --list-ports
```

Step 6 – Check Agent Logs

```
tail -f /var/log/zabbix/zabbix_agentd.log
```

Ubuntu 20.04

Step 1 - Add Required Repository

```
wget https://repo.zabbix.com/zabbix/5.2/ubuntu/pool/main/z/zabbix-release/zabbix-release_5.2-1+ubuntu20.04_all.deb
dpkg -i zabbix-release_5.2-1+ubuntu20.04_all.deb
apt update
```

Step 2 - Install Agent

```
sudo apt install zabbix-agent
```

Step 3 – Configure Agent

Edit parameters for Server, ServerActive and Hostname and save:

```
sudo nano /etc/zabbix/zabbix_agentd.conf or sudo vi /etc/zabbix/zabbix_agentd.conf
```

Step 4 – Running Agent

Start the Agent:

```
service zabbix-agent start
```

Check the Status of the Agent:

```
service zabbix-agent status
```

Stop the Agent:

```
service zabbix-agent stop
```

MAC OS Agent Installation

Zabbix Mac OS agent can be installed from PKG installer packages available for download from:
https://www.zabbix.com/download_agents

Versions with or without encryption are available.

Step 1 - INSTALLING AGENT

The agent can be installed using the graphical user interface or from the command line, for example:

```
sudo installer -pkg zabbix_agent-5.2.0-macos-amd64-openssl.pkg -target /
```

Make sure to use the correct Zabbix package version in the command. It must match the name of the downloaded package.

Step 2 - RUNNING AGENT

The agent will start automatically after installation or restart.

You may edit the configuration file at `/usr/local/etc/zabbix/zabbix_agentd.conf` if necessary.

To start the agent manually, you may run:

```
sudo launchctl start com.zabbix.zabbix_agentd
```

To stop the agent manually:

```
sudo launchctl stop com.zabbix.zabbix_agentd
```

During upgrade, the existing configuration file is not overwritten. Instead a new zabbix_agentd.conf.NEW file is created to be used for reviewing and updating the existing configuration file, if necessary.

Remember to restart the agent after manual changes to the configuration file.

Step 3 - TROUBLESHOOTING AND REMOVING AGENT

This section lists some useful commands that can be used for troubleshooting and removing Zabbix agent installation.

See if Zabbix agent is running:

```
ps aux | grep zabbix_agentd
```

Stop Zabbix agent if it was launched with launchctl:

```
sudo launchctl unload /Library/LaunchDaemons/com.zabbix.zabbix_agentd.plist
```

Remove files (including configuration and logs) that were installed with installer package:

```
sudo rm -f /Library/LaunchDaemons/com.zabbix.zabbix_agentd.plist
```

```
sudo rm -f /usr/local/sbin/zabbix_agentd
```

```
sudo rm -f /usr/local/bin/zabbix_get
```

```
sudo rm -f /usr/local/bin/zabbix_sender
```

```
sudo rm -rf /usr/local/etc/zabbix
```

```
sudo rm -rf /var/logs/zabbix
```