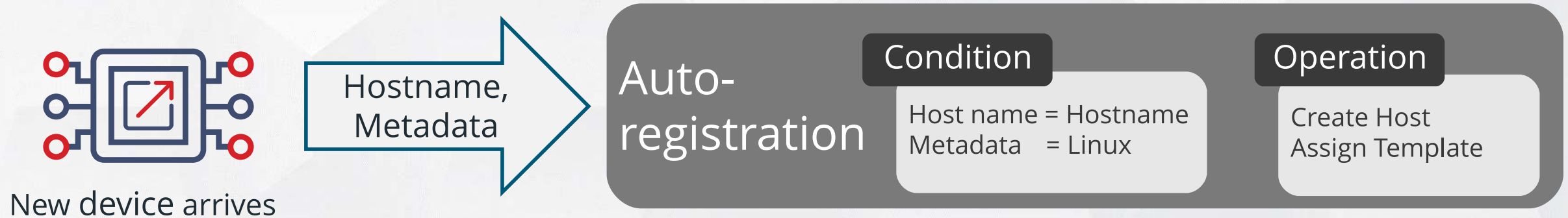




Autoregistration

New **active agent** hosts can be added without configuring them manually

- ⚡ Useful for cloud-like and dynamic environments
- ⚡ Hosts are created automatically based on both
 - ✓ Data received from host
 - ✓ Action configuration
- ⚡ *Autoregistration* is supported by Zabbix Server and Proxies
- ⚡ *Autoregistration* can be encrypted



Host's **metadata** can be used to send information from Zabbix agent

- ⚡ OS, installed software, location, etc.
- ⚡ Host's metadata is configured in the agent configuration file
- ⚡ Two ways of specifying host metadata:
 - ✓ **HostMetadata** and **HostMetadataItem**
 - ✓ HostMetadataItem is only used when HostMetadata is not defined

Examples:

- ⚡ HostMetadata=**Linux, Apache, MySQL**
 - ✓ Result: Linux, Apache, MySQL
- ⚡ HostMetadataItem=**system.uname**
 - ✓ Result: Linux server1.zabbix.com 3.10.0-514.10.2.el7.x86_64 ...
- ⚡ HostMetadataItem=**system.run[uname]**
 - ✓ Result: Linux

HostInterface parameter can be used to specify custom value for the host interface

- ⚡ If the host should be autoregistered with a DNS name rather than its IP address,
 - ✓ the DNS name should be specified or returned as the value
- ⚡ If the value of one of the two parameters changes, the interface of *autoregistered* host is updated
- ⚡ Useful for monitoring of added hosts with passive checks

Two ways to specify host's *metadata*:

- ⚡ **HostInterface** and **HostInterfaceItem**
- ⚡ HostInterfaceItem is only used when HostInterface is not defined

Examples:

- ⚡ HostInterface=dbserver1.zabbix.lan
- ⚡ HostInterfaceItem=system.hostname

An attempt happens every time when active agent updates configuration:

- ⚡ Configuration request on startup
- ⚡ Configuration update every 2 minutes by default

At least one autoregistration action must be enabled:

- ⚡ Event source for an action must be “Autoregistration”
- ⚡ Action conditions must match to the received metadata

Auto *de-registration* actions can also be created

- ⚡ Based on received metadata, a host can be removed

The lost hosts are not removed automatically

- ⚡ They can be deleted manually or by using API scripts

Autoregistration is executed only:

- ⚡ When a **previously unknown** active agent asks for a configuration
 - ✓ New Zabbix agent is installed and started
 - ✓ Hostname has been changed in the existing agent configuration
- ⚡ If the **host metadata information changes**:
 - ✓ **HostMetadata** was changed and the agent has been restarted
 - ✓ Value returned by **HostMetadataItem** is changed
- ⚡ If *autoregistration* attempt for an existing host comes from a **different Zabbix proxy**:
 - ✓ ServerActive configuration parameter has been changed in the agent configuration
 - ✓ If a host was manually moved to another proxy in Zabbix frontend, it would be registered back



If action operations are changed - auto-registration action must be triggered again

Action conditions

- ⚡ Host name / Metadata
 - ✓ Match / does not match
 - ✓ Contains / does not contain
- ⚡ Proxy
 - ✓ Equals / does not equal

Type of calculation

- ⚡ And
- ⚡ Or
- ⚡ And / Or
- ⚡ Custom

New condition ✕

Type

Operator

Value

Actions

Action Operations

* Name

Type of calculation

Conditions	Label	Name	Action
A		Host metadata contains <i>Linux</i>	Remove
B		Proxy equals <i>Frankfurt proxy</i>	Remove
	Add		

Enabled ☒

* At least one operation must exist.

Flexible operations during registration

- ⚡ Add / Remove host
- ⚡ Assign / Unassign host group
- ⚡ Link / Unlink templates
- ⚡ Send message
 - ✓ To user
 - ✓ To user group
- ⚡ Remote command
 - ✓ On Zabbix server, agent or proxy
 - ✓ On current or another host
- ⚡ Enable / Disable host
- ⚡ Set host inventory mode
 - ✓ Automatic, manual or disabled
 - ✓ This overrides global inventory mode

Operation details

Operation type	<div>Send message ▾</div> <div><div>Send message</div><div>Remote command</div><div>Add host</div><div>Remove host</div><div>Add to host group</div><div>Remove from host group</div><div>Link to template</div><div>Unlink from template</div><div>Enable host</div><div>Disable host</div><div>Set host inventory mode</div></div>	Group must be selected.
Send to User groups		Action
Send to Users		Action
Send only to	<div>- All - ▾</div>	
Custom message	<input type="checkbox"/>	

⚠ No option to control step execution order

Create Autoregistration action:

- ⚡ Define matching action conditions
- ⚡ Define operations (create host, link template etc.):
 - ✓ "Add to host group" operation will create new host automatically
 - ✓ In this case, operation "Add host" can be omitted

Set up Zabbix Agent in active mode:

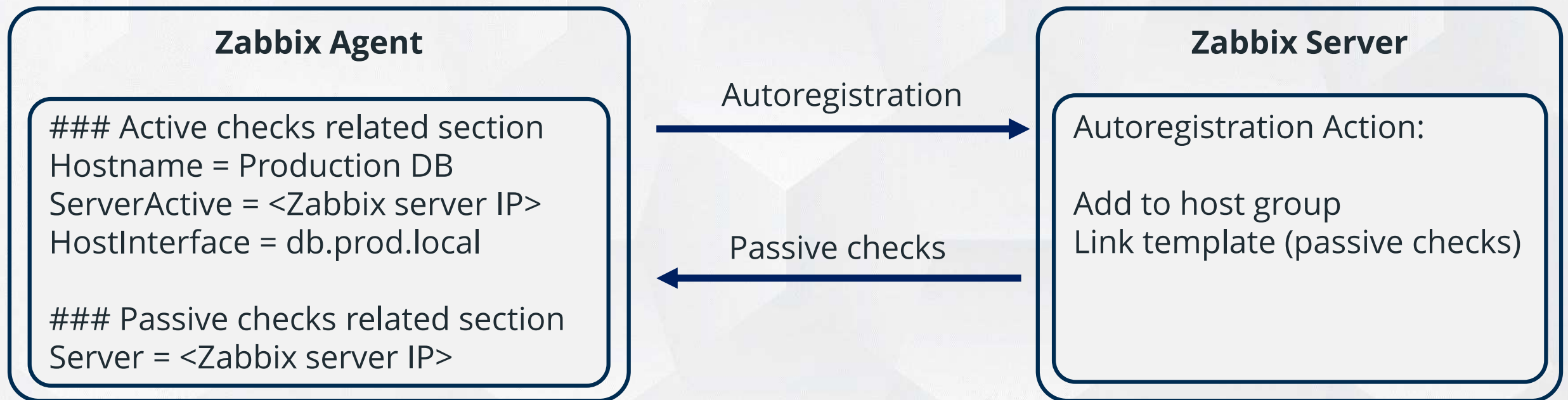
- ⚡ Install Zabbix agent
- ⚡ Configure agent parameters (ServerActive, Hostname)
- ⚡ Optionally specify additional parameters
 - ✓ HostMetadata or HostMetadataItem
 - ✓ HostInterface or HostInterfaceItem

Start the agent:

- ⚡ *Autoregistration* events are generated on Zabbix Server
- ⚡ Action reacts to these events and executes operations

AUTOREGISTRATION OF PASSIVE CHECKS

- ⚡ Active agent autoregistration also supports registering the hosts with passive checks.
- ⚡ Agent sends the following configuration parameters
 - ✓ ListenIP (If not specified, then, IP of incoming connection is used)
 - ✓ ListenPort (10050 by default)
 - ✓ HostInterface or HostInterfaceItem
- ⚡ Template with Zabbix Agent passive checks can be linked by action
- ⚡ Host is autoregistered, but monitoring is performed using passive checks



Add to host group operation includes Add host

A secure autoregistration is possible by configuring PSK-based authentication.

- ⚡ Initial registration request is already encrypted
- ⚡ Authentication by PSK is verified by Zabbix server before adding a host

Autoregistration settings can be defined to accept requests using:

- ⚡ No encryption
- ⚡ PSK authentication only
- ⚡ Both modes

Autoregistration ▾

Encryption level

☐ No encryption
 ☒ PSK

* PSK identity

Zabbix training

* PSK

86ea933b29209898b08fd87e2409ec3a27ccd1fc517c77c2be0102ffc9b2694

Update

If successful:

- ⚡ The host is added
- ⚡ Connections from/to the host are set to 'PSK'
- ⚡ The identity/pre-shared key is the same as in the global autoregistration setting



If a host is registered through Zabbix Proxy, Server-Proxy connection should also be secured