



# Templates

Template is a set of entities that can be applied to multiple hosts

Create an entity on a template and then apply it to as many hosts as needed:

- ⚡ Changing something on the template level will propagate the change to all the linked hosts.
- ⚡ Allows to easily set up and manage monitoring of hundreds or thousands of hosts

Templates are **linked** to each individual host **directly** (and not to a host group)

Templates  
linked to  
the host



Host

Host IPMI Tags Macros Inventory Encryption Value mapping

\* Host name Production server

Visible name Production server

Templates Linux by Zabbix agent X HTTPS Service X SMART by Zabbix agent 2 X Select  
type here to search

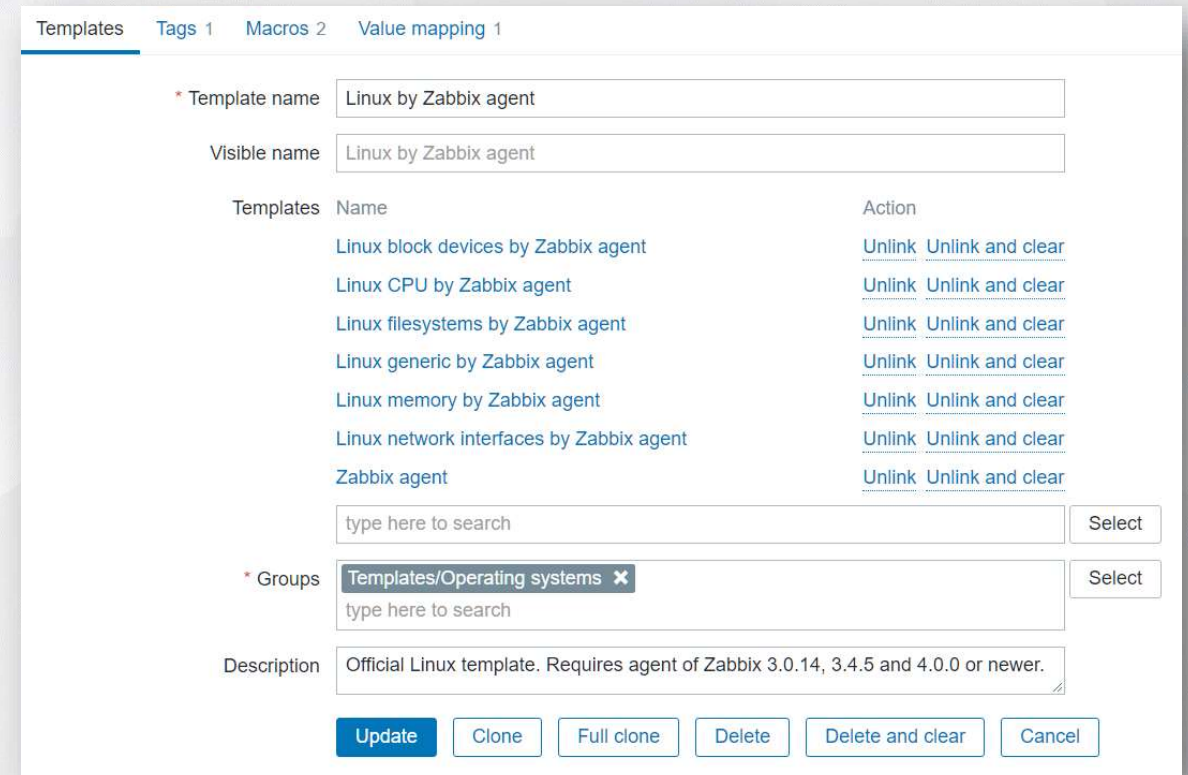
\* Groups Linux servers X Select  
type here to search

Templates can be accessed in the Configuration > Templates frontend section

⚡ The section works similarly to the Configuration > Hosts

Template has similar properties to a host:

- ⚡ Name and visible name
- ⚡ Groups
- ⚡ Description
- ⚡ Linked templates
- ⚡ Tags, user macros and value maps
- ⚡ Value maps
- ⚡ They do not have any interfaces defined



The screenshot shows the Zabbix 'Templates' configuration page. At the top, there are tabs for 'Templates', 'Tags 1', 'Macros 2', and 'Value mapping 1'. The 'Template name' field is set to 'Linux by Zabbix agent', and the 'Visible name' field is also 'Linux by Zabbix agent'. Below these is a table of linked templates:

Templates	Name	Action
	Linux block devices by Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	Linux CPU by Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	Linux filesystems by Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	Linux generic by Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	Linux memory by Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	Linux network interfaces by Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>

Below the table is a search bar with the text 'type here to search' and a 'Select' button. The 'Groups' field is set to 'Templates/Operating systems' with a dropdown arrow and a 'Select' button. Below this is another search bar with the text 'type here to search'. The 'Description' field contains the text 'Official Linux template. Requires agent of Zabbix 3.0.14, 3.4.5 and 4.0.0 or newer.' At the bottom, there are buttons for 'Update', 'Clone', 'Full clone', 'Delete', 'Delete and clear', and 'Cancel'.



Templates must belong to at least one host group, it is used for logical grouping



Templates can be **linked** to hosts using:

- ⚡ Automatic lookup field start typing a name and all matching templates will be offered
- ⚡ List selector select templates from a template group using list

**Host**

Host IPMI Tags Macros Inventory Encryption Value mapping

\* Host name

Visible name

Templates	Name	Action
	Linux by Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	HTTPS Service	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	SMART by Zabbix agent 2	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>

\* Groups

Interfaces

Apache

Apache Tomcat JMX

Apache by Zabbix agent

Apache by HTTP

Apache ActiveMQ by JMX

Apache Kafka by JMX

Apache Cassandra by JMX

Select

Select

Connected

IP

Automatic lookup field



**Templates**

Host group

☐ Name

☐ AIX

☐ Alcatel Timetra TIMOS SNMP

☐ Apache ActiveMQ by JMX

☒ Apache by HTTP

☐ Apache by Zabbix agent

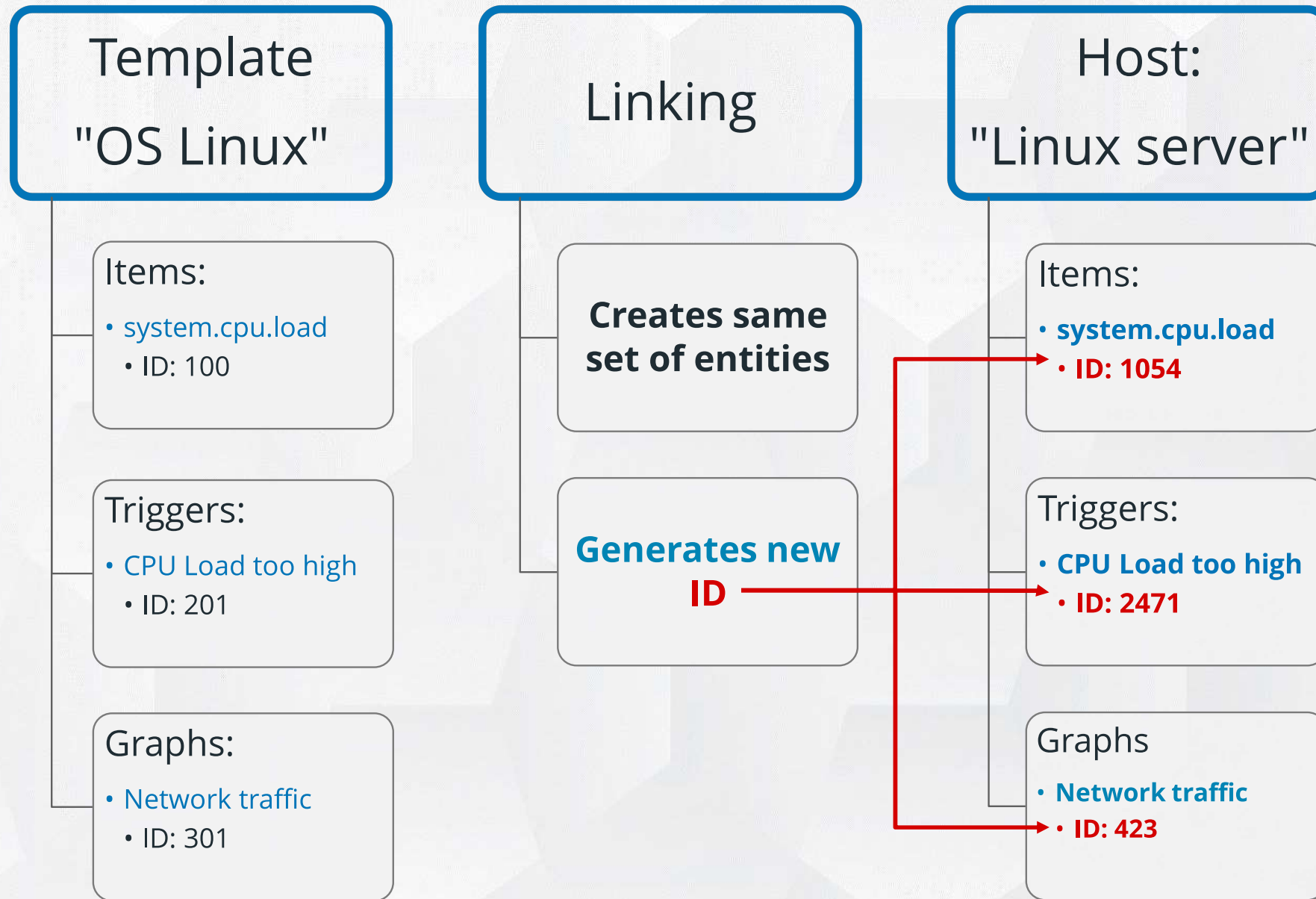
☐ Apache Cassandra by JMX

☐ Apache Kafka by JMX

☐ Apache Tomcat JMX

☐ APC Smart-UPS 2200 RM SNMP

☐ APC Smart-UPS 3000 XLM SNMP



If an entity exists on a host, linking will reuse and change it



When a template is linked to a host:

- ⚡ All items from the template are copied to the host
- ⚡ Linkage is created from the template items to host items

Items created  
on template

All templates / Zabbix agent

Items 4

Triggers 1

Graphs

Dashboards

Discovery rules

Web scenarios

<input type="checkbox"/>	Wizard	Name ▲	Triggers	Key	Interval	History	Trends	Type
<input type="checkbox"/>	...	Host name of Zabbix agent running		agent.hostname	1h	7d		Zabbix agent
<input type="checkbox"/>	...	Version of Zabbix agent running		agent.version	1h	7d		Zabbix agent
<input type="checkbox"/>	...	Zabbix agent availability	Triggers 1	zabbix[host,agent,available]	1m	7d	365d	Zabbix internal
<input type="checkbox"/>	...	Zabbix agent ping		agent.ping	1m	7d	365d	Zabbix agent

Items linked  
from template  
to host

All hosts / Production server

Enabled

ZBX

Items 4

Triggers 1

Graphs

Discovery rules

Web scenarios

Wizard

Name ▲

...

Zabbix agent: Host name of Zabbix agent running

...

Zabbix agent: Version of Zabbix agent running

...

Zabbix agent: Zabbix agent availability

...

Zabbix agent: Zabbix agent ping

Triggers

Key

Interval

History

Trends

Type

agent.hostname

1h

7d

Zabbix agent

agent.version

1h

7d

Zabbix agent

Triggers 1

zabbix[host,agent,available]

1m

7d

365d

Zabbix internal

agent.ping

1m

7d

365d

Zabbix agent

Unlinking a template will:

- Remove the linkage between the items and the template
- Leave the items on the host

Template will be unlinked, but all items will remain on the host

- A new template can be linked to existing host items, if the key from a host and a template match

Templates	Name	Action
	Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	NTP Service	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>



This item now belongs to the host only



<input type="checkbox"/>	Wizard	Name ▲	Triggers	Key	Interval	History	Trends	Type
<input type="checkbox"/>	...	<a href="#">Zabbix agent: Host name of Zabbix agent running</a>		agent.hostname	1h	7d		Zabbix agent
<input type="checkbox"/>	...	<a href="#">NTP service is running</a>	<a href="#">Triggers 1</a>	net.udp.service[ntp]	1m	1w	365d	Simple check
<input type="checkbox"/>	...	<a href="#">Zabbix agent: Version of Zabbix agent running</a>		agent.version	1h	7d		Zabbix agent
<input type="checkbox"/>	...	<a href="#">Zabbix agent: Zabbix agent availability</a>	<a href="#">Triggers 1</a>	zabbix[host,agent,available]	1m	7d	365d	Zabbix internal
<input type="checkbox"/>	...	<a href="#">Zabbix agent: Zabbix agent ping</a>		agent.ping	1m	7d	365d	Zabbix agent



## Unlink and clear will:

- ⚡ Remove the linkage between the items and the template
- ⚡ Delete the items from the host

Template will be unlinked, and all items linked from this template deleted from the host

All items from the template are removed



Templates	Name	Action
	Zabbix agent	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>
	NTP Service	<a href="#">Unlink</a> <a href="#">Unlink and clear</a>



<input type="checkbox"/>	Wizard	Name ▲	Triggers	Key	Interval	History	Trends	Type
<input type="checkbox"/>	...	<a href="#">Zabbix agent: Host name of Zabbix agent running</a>		agent.hostname	1h	7d		Zabbix agent
<input type="checkbox"/>	...	<a href="#">Zabbix agent: Version of Zabbix agent running</a>		agent.version	1h	7d		Zabbix agent
<input type="checkbox"/>	...	<a href="#">Zabbix agent: Zabbix agent availability</a>	<a href="#">Triggers 1</a>	zabbix[host,agent,available]	1m	7d	365d	Zabbix internal
<input type="checkbox"/>	...	<a href="#">Zabbix agent: Zabbix agent ping</a>		agent.ping	1m	7d	365d	Zabbix agent



# PRACTICAL SETUP

- 1) Create a new Template:
  - ✓ Name: Template basic
  - ✓ Host group: Training/Templates
- 2) Copy all items and triggers from Training-VM-XX host to "Template Basic"
- 3) Link "Template Basic" to Training-VM-XX host
- 4) Create few additional hosts for your neighbor training machines
  - ✓ Name them Training-VM-\* using student numbers
- 5) Link Templates
  - ✓ Link "Template basic" to all "Training-VM-\*" hosts
  - ✓ Make sure passive checks are working for all hosts