# ZABBIX 7.0

## UPGRADE TO 7.0 LTS

7.0 Upgrade workshop

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## Go to Administration > Proxies and add two proxies to your Zabbix instance:

Proxy Tokyo in active mode

Proxy	Encryption	
	* Proxy name	Proxy Tokyo
	Proxy mode	Active Passive
	Proxy address	
	Description	
		Add Cancel

Proxy Porto Alegre in passive mode

Proxy	Encryption					
	,	Proxy name	Proxy Porto Alegre			
		Proxy mode	Active Passive			
		* Interface	IP address	DNS name	Connect to Po	ort
			192.168.0.1		IP DNS 1	0071
		Description	Add Cancel		<i>i</i>	



Make sure proxies are available:

- Look at the 'Last seen (age) column'
- Ask for assistance if it says 'never'

Proxies								Create proxy
								Filter 🍸
			Name	Мос	de Any Active P	assive		
				Apply	set			
Name ▲	Mode	Encryption	Compression	Last seen (age)	Host count	Item count	Required performance (vps)	Hosts
Proxy Porto Alegre	Passive	None	On	3s	0	0	0	
Proxy Tokyo	Active	None	On	2s	0	0	0	
								Displaying 2 of 2 found
0 selected Enable hosts Dis	sable hosts	elete						

## Create a host to monitor proxy Tokyo:

- Host name Zabbix proxy Tokyo
- Templates: Zabbix proxy health
- Groups: Zabbix proxies
- Monitored by: Proxy Tokyo

New host								
Host IP	PMI Tags	Macros	Inventory	Encryption	Value mappir	ng		
* H	lost name	Zabbix prox	y Tokyo					
Vis	ible name	Zabbix prox	y Tokyo					
1	Templates	Zabbix prox	y health 🗙					Select
	* Groups	Zabbix prox type here to	ies (new) ×					Select
	Interfaces	No interfaces	are defined.					
D	escription						11	
Monitored	d by proxy	Proxy Tokyo	~					
	Enabled	✓						

## Create a host to monitor proxy Porto Alegre:

- Host name Zabbix proxy Porto Alegre
- Templates: Zabbix proxy health
- Groups: Zabbix proxies
- Monitored by: Proxy Porto Alegre

0		
New host		
Host IPMI Tags	Macros Inventory Encryption Value mapping	
* Host name	Zabbix proxy Porto Alegre	
Visible name	Zabbix proxy Porto Alegre	
Templates	Zabbix proxy health × type here to search	Select
* Groups	Zabbix proxies × type here to search	Select
Interfaces	No interfaces are defined.	
	Add	
Description	4	
Monitored by proxy	Proxy Porto Alegre V	
Enabled		

## Check that proxy hosts receive data:

Use the Monitoring > Hosts > Latest data for this

Host	Name 🔺	Last check	Last value	Change	Tags		Info
Zabbix proxy Tokyo	Zabbix proxy: Configuration cache, % used	33s	1.4324 %		component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: History index cache, % used	27s	0.2253 %		component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: History write cache, % used	28s	0 %		component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: Number of processed character values p	23s	0 vps		component: nvps component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: Number of processed log values per sec	25s	0 vps		component: nvps component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: Number of processed not supported valu	24s	0.0999 vps	-0.00001489	component: nvps component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: Number of processed numeric (float) valu	26s	0.4662 vps	+0.1165 vps	component: nvps component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: Number of processed numeric (unsigned)	21s	0.08325 vps	-0.00001321	component: nvps component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: Number of processed text values per sec	22s	0 vps		component: nvps component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: Number of processed values per second	20s	0.5495 vps	+0.01655 vps	component: nvps component: system	Graph	
Zabbix proxy Tokyo	Zabbix proxy: Preprocessing queue	1m	0		component: system	Graph	

## Check the current status of your Zabbix instance:

## Check the reports section in the front-end

System information

Parameter	Value	Details
Zabbix server is running	Yes	localhost:10051
Number of hosts (enabled/disabled)	1	1/0
Number of templates	371	
Number of items (enabled/disabled/not supported)	139	129 / <mark>0</mark> / 10
Number of triggers (enabled/disabled [problem/ok])	70	70 / 0 [0 / 70]
Number of users (online)	2	1
Required server performance, new values per second	1.96	
Database history tables use primary key	No	
High availability cluster	Disabled	

## Check the Zabbix server log file

# systemctl restart zabbix-server

#### # tail -100 /var/log/zabbix/zabbix\_server.log

10699:20241003:095042.397 required mandatory version: 06000000 10699:20241003:095042.402 database could be upgraded to use primary keys in history tables 10699:20241003:095042.404 database is not upgraded to use double precision values 10700:20241003:095042.405 starting HA manager

## DB upgrade patches are mandatory for Zabbix 7.0

## Find required scripts

# cd /usr/share/zabbix-sql-scripts/mysql

#### # ls -la

drwxr-xr-x.	2	root	root	92	0ct	3	08:20	
drwxr-xr-x.	5	root	root	52	0ct	3	08:20	
-rw-rr	1	root	root	282	Sep	27	13:15	double.sql
-rw-rr	1	root	root	1527	Sep	27	13:15	<pre>history_pk_prepare.sql</pre>
-rw-rr	1	root	root	166646	Sep	27	13:15	proxy.sql
-rw-rr	1	root	root	4384784	Sep	27	13:15	server.sql.gz

### Look inside the scripts

#### # cat history\_pk\_prepare.sql

```
RENAME TABLE history TO history_old;
CREATE TABLE `history` (
    `itemid` bigint unsigned NOT NULL,
    `clock` integer DEFAULT '0' NOT NULL,
    `value` DOUBLE PRECISION DEFAULT '0.0000' NOT NULL,
    `ns` integer DEFAULT '0' NOT NULL,
    PRIMARY KEY (itemid,clock,ns)
) ENGINE=InnoDB;
```



## Upgrade the database with patches

Stop Zabbix server first

# systemctl stop zabbix-server

Run the upgrade patches

# mysql -uroot zabbix < /usr/share/zabbix-sql-scripts/mysql/history\_pk\_prepare.sql</pre>

Open the MySQL console

#### mysql

#### mysql> use zabbix

mysql> SET @@max\_execution\_time=0; mysql> INSERT IGNORE INTO history SELECT \* FROM history\_old; mysql> INSERT IGNORE INTO history\_uint SELECT \* FROM history\_uint\_old; mysql> INSERT IGNORE INTO history\_str SELECT \* FROM history\_str\_old; mysql> INSERT IGNORE INTO history\_log SELECT \* FROM history\_log\_old; mysql> INSERT IGNORE INTO history text SELECT \* FROM history text old;

## Exit MySQL console

#### mysql> quit

## Start Zabbix server

#### # systemctl start zabbix-server

Install Zabbix 7.0 official repository

# dnf install -y https://repo.zabbix.com/zabbix/7.0/rhel/9/x86\_64/zabbix-release-latest.el9.noarch.rpm

Update all zabbix-\* packages

#### # dnf update zabbix-\*

Package	Architecture	Version
======================================		
zabbix-apache-conf	noarch	7.0.3-rel
zabbix-server-mysql	x86_64	7.0.3-rel
zabbix-web	noarch	7.0.3-rel
zabbix-web-deps	noarch	7.0.3-rel
zabbix-web-mysql	noarch	7.0.3-rel

## Take a look at the Zabbix server log file (press CTRL+C to exit)

#### # tail -f /var/log/zabbix/zabbix\_server.log

66821:20241003:123214.001 using configuration file: /etc/zabbix/zabbix\_server.conf 66821:20241003:123214.016 current database version (mandatory/optional): 06010048/06010048 66821:20241003:123214.016 required mandatory version: 0700000 66821:20241003:123214.016 mandatory patches were found 66821:20241003:123214.019 [Z3005] query failed: [1419] You do not have the SUPER privilege and binary logging is enabled (you \*might\* want to use the less safe log\_bin\_trust\_function\_creators variable) [create trigger hosts\_insert after insert on hosts for each row insert into changelog (object,objectid,operation,clock) values (1,new.hostid,1,unix\_timestamp())] 66821:20241003:123214.019 database upgrade failed on patch 06010049, exiting in 10 seconds

## Open MySQL console and enable required parameter

#### # mysql

mysql> set global log\_bin\_trust\_function\_creators = 1;

mysql> quit



## Take a look at the Zabbix server log file (press CTRL+C to exit)

#### # tail -f /var/log/zabbix/zabbix\_server.log

#### • • • • • •

68773:20241003:123747.859 completed 93% of database upgrade 68773:20241003:123748.151 completed 94% of database upgrade 68773:20241003:123748.294 completed 95% of database upgrade 68773:20241003:123748.421 completed 96% of database upgrade 68773:20241003:123748.453 completed 97% of database upgrade 68773:20241003:123748.491 completed 98% of database upgrade 68773:20241003:123748.518 completed 99% of database upgrade 68773:20241003:123748.584 completed 100% of database upgrade 68773:20241003:123748.919 database upgrade fully completed 69146:20241003:123748.935 starting HA manager 69146:20241003:123748.943 HA manager started in active mode 68773:20241003:123748.945 server #0 started [main process] 69147:20241003:123748.946 server #1 started [service manager #1] 69148:20241003:123748.947 server #2 started [configuration syncer #1] 69160:20241003:123750.212 server #6 started [alerter #3] 69159:20241003:123750.216 server #5 started [alerter #2] 69158:20241003:123750.217 server #4 started [alerter #1] 69161:20241003:123750.219 server #7 started [preprocessing manager #1] 69157:20241003:123750.220 server #3 started [alert manager #1]

•••••



New configuration files are created with the .rpmnew extension after upgrade:

Compare old and new files and transfer your configuration to the new format

# vim -d /etc/zabbix/zabbix\_server.conf.rpmnew /etc/zabbix/zabbix\_server.conf

DBHost=localhost	DBHost=localhost
DBUser=zabbix	DBUser=zabbix
# DBPassword=	DBPassword=BlueSky67Fox!

- Save the changes
- Overwrite existing Zabbix configuration file

# mv /etc/zabbix/zabbix\_server.conf.rpmnew /etc/zabbix/zabbix\_server.conf

Restart Zabbix server and make sure everything is working

# systemctl restart zabbix-server



Go to Administration > Proxies and check status of the proxies:

- All proxies now report the version
- Proxies with version 6.0.x are marked as outdated

Proxies								?	Create proxy
									<b>V</b> Filter
		Name		Mode	Any Active Passive	Version Any	Current Outdated		
					Apply Reset				
Name ▲	Mode	Encryption	State	Version	Last seen (age)	Item count	Required vps	Hosts	
Proxy Porto Alegre	Passive	None	Online	6.0.26 <i>i</i>	2s	41	0.68	1 Zabbix proxy Porto Alegre	
Proxy Tokyo	Active	None	Online	6.0.30 <mark>i</mark>	10	41	0.68	1 Zabbiy provy Tokyo	~
					Proxy version is outdated, o	nly data collection	and remote execution	is available with server versi	on 7.0.4. found
0 selected Refresh configuration	Enable hosts	Disable hosts	Delete						

## Check that proxy hosts still receive data:

Use the Monitoring > Hosts > Latest data for this

Host	Name 🔺	Last check	Last value	Change	Tags	Info
Zabbix proxy Tokyo	Zabbix proxy: Configuration cache, % used	41s	1.4324 %		component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: History index cache, % used 🔎	35s	0.2253 %		component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: History write cache, % used 🔎	36s	0 %		component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Number of processed character values	31s	0 vps		component: nvps component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Number of processed log values per s	33s	0 vps		component: nvps component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Number of processed not supported va	32s	0.0999 vps	-0.0000031	component: nvps component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Number of processed numeric (float) v	34s	0.4662 vps	-0.0000133	component: nvps component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Number of processed numeric (unsign	29s	0.08325 vps	-0.0000049	component: nvps component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Number of processed text values per s…	30s	0 vps		component: nvps component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Number of processed values per second	28s	0.5494 vps	-0.0000291	component: nvps component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Preprocessing queue 2	8s	0		component: system	Graph
Zabbix proxy Tokyo	Zabbix proxy: Queue	42s	0		component: system	Graph



The proxies are running as podman containers.

Edit container files to upgrade proxies to latest release (start with the Tokyo proxy)

# cd /usr/share/containers/systemd

# nano zabbix-proxy-tokyo.container

[Unit] Description=Zabbix Proxy Tokyo

[Container] ContainerName=zabbix-proxy-tokyo Image=docker.io/zabbix/zabbix-proxy-sqlite3:alpine-7.0.4 Network=training.network PublishPort=10061:10051 Environment=ZBX\_HOSTNAME='Proxy Tokyo' Environment=ZBX\_BERVER\_HOST=host.containers.internal Environment=ZBX\_SERVER\_HOST=host.containers.internal Environment=ZBX\_DATASENDERFREQUENCY=10 Environment=ZBX\_STARTPOLLERS=1 Environment=ZBX\_PROXYMODE=0

## Edit configuration file for the Porto Alegre proxy

# nano zabbix-proxy-porto-alegre.container

[Unit] Description=Zabbix Proxy Porto Alegre

[Container] ContainerName=zabbix-proxy-porto-alegre Image=docker.io/zabbix/zabbix-proxy-sqlite3:alpine-7.0.4 Network=training.network PublishPort=10071:10051 Environment=ZBX\_HOSTNAME='Proxy Porto Alegre' Environment=ZBX\_SERVER\_HOST=192.168.0.1/24 Environment=ZBX\_DATASENDERFREQUENCY=1 Environment=ZBX\_STARTPOLLERS=1 Environment=ZBX\_PROXYMODE=1



## Reload the systemd unit files

# systemctl daemon-reload

Restart proxies

# systemctl restart zabbix-proxy-tokyo

# systemctl restart zabbix-proxy-porto-alegre

Check proxy version on the Proxies page

Proxies								?	Create proxy
									<b>Filter</b>
	Name	;		Mode Ar	y Active Passive	Version An	y Current Outdate	d	
				l	Apply Reset				
Name ▲	Mode	Encryption	State	Version	Last seen (age)	Item count	Required vps	Hosts	
Proxy Porto Alegre	Passive	None	Online	7.0.4	5s	41	0.68	1 Zabbix proxy Porto Alegre	
Proxy Tokyo	Active	None	Online	7.0.4	3s	41	0.68	1 Zabbix proxy Tokyo	
								Displayi	ng 2 of 2 found
0 selected Refresh configuration	Enable ho	Disable ho	sts Delet	e					



## Go to Data collection > Templates and find all Zabbix health templates:

The templates do not have version - this means they are pre-7.0

Templates																? 0	Create template	e Import
																		<b>Filter</b>
Template groups	type he	ere to sear	ch		S	elect	Tag	A	nd/Or	Or								
Linked templates	type he	ere to sear	ch		S	elect		tag			C	ontains		✓ value			Remove	
Name	health							Add										
Vendor																		
Version																		
							Apply	R	eset									
Name 🔺	Hosts	Items	Triggers	Graphs	Dashboard	ds	Discovery	Web	Vendor	Version	Linked	emplates	Linked to	o templates	Tags			
Remote Zabbix proxy health	Hosts	Items 41	Triggers 31	Graphs 13	Dashboar	ds 1	Discovery	Web							class: so	oftware t	arget: proxy ta	arget: zabbix
Remote Zabbix server health	Hosts	Items 57	Triggers 43	Graphs 16	Dashboar	ds 1	Discovery 1	Web							class: so	oftware t	arget: server [1	target: zabbix
Zabbix proxy health	Hosts 2	Items 41	Triggers 30	Graphs 14	Dashboar	ds 1	Discovery	Web							class: so	oftware [ t	arget: proxy [ta	arget: zabbix
Zabbix server health	Hosts 1	Items 57	Triggers 42	Graphs 16	Dashboar	ds 1	Discovery 1	Web							class: so	oftware [t	arget: server [1	target: zabbix
																	Displaying	g 4 of 4 found
0 selected Export V Mas	s update	Dele	te Dele	te and clear														



## Go to the Zabbix git repository:

https://git.zabbix.com/projects/ZBX/repos/zabbix/browse/templates/app

Choose the release/7.0 branch

Zabbix / Zabbix
Source
𝘵 master ➤
Branches Tags
Enter a branch name
🚱 feature/ZBXNEXT-9459-7.1
<b>39</b> feature/ZBX-24633-6.0
<b>89</b> feature/DEV-1908-7.1
😵 master
₿ release/7.0
😵 feature/ZBXNEXT-6726-7.1
😵 feature/ZBXNEXT-7689-7.1
<b>8</b> release/6.0
<b>39</b> feature/ZBX-25223-7.0
feature/DEV_3898_7.1

## Find the zabbix\_proxy template and click on it

🖿 wild	lfly_server_jmx			
🖿 zabł	bix_agent			
<b>b</b> <u>zab</u> ł	<u>bix proxy</u>			
🖿 zabł	bix_proxy_remote			
	Zabbix / Zabbix <b>Source</b>			Watch
ZC	<b>没</b> release/7.0 ➤	Zabbix / templates / a	Br	owse Filter
	Source	Descripti	tion Size	Last Modified
	README.md	T [Z	ZBXNEXT-8657] updated Zabbix health templates with new items and visualization 19.16 KB	02 Jul 2024
	template_app_zabbix_	_proxy.yamlT [Z	ZBX-24930] updated all templates     79.08 KB	08 Aug 2024



- Click on the template\_app\_zabbix\_proxy.yaml
- Right click on the Raw\_file link and download it

Zabbix / Zabbix	
Source	
😵 release/7.0 🗸 🚥 Zabbix / templates / app / zabbix_proxy / template_app_zabbix_proxy.yaml 🐨 Alexander Bakaldin au	Ithored 654bac3b468 08 Aug 2024
Source view Diff to previous History ~ 79.08 KB Contributors ~	Blame Raw file
<pre>1 zabbix_export: 2 version: '7.0' 3 template_groups: 4 - uuid: a571c0d144b14fd4a87a9d9b2aa9fcd6 5 name: Templates/Applications</pre>	Open link in new tab Open link in new window Open link in incognito window
	Save link as Copy link address
	Inspect

## Import the downloaded file:

Templates									?	Create template	Import
	Import						? ×				<b>Filter</b>
Template grou	* Import file	Choose File template_a	app_zabbix_proxy	yaml							
Linked templat	Advanced options						-	✓ value		Remove	
Nan	Rules		Update existing	g Create new	Delete missing						
Vend		All	~	~	$\checkmark$						
Versi						Import	Cancel				
				Apply	Reset						

## Confirm the changelog

#### Templates

▼ Removed	description: 'Default maximum threshold for percentage utilization triggers (use macro context for specification).' - macro: '{SZABBIX.PROXY.UTIL.MIN}'
▼ Items	value: '65' description: 'Default minimum threshold for percentage utilization triggers (use macro context for specification).'
Zabbix proxy: Utilization of discov	+ vendor: + name: Zabbix
Zabbix proxy: Utilization of heartb	+ version: 7.0-0
Zabbix proxy: Utilization of history	+ name: 'Discovery queue'
<ul> <li>Triggers</li> </ul>	+ type: INTERNAL + key: 'zabbix[discovery_queue X
Zabbix proxy: Utilization of discov	<pre>+ description: 'The count of v + tags:</pre>
Zabbix proxy: Utilization of heartb	+ - tag: component Any existing template entities not present in the import file will be deleted. Click OK to proceed.
Zabbix proxy: Utilization of history	+ name: 'Utilization of agent ] OK Cancel
<ul> <li>Graphs</li> </ul>	+ type: INTERNAL + key: 'zabbix[process,agent poller,avg,busy]'
Zabbix proxy: Cache usage, in %	+ value_type: FLOAT + units: '%'
Zabbix proxy: Internal queues	+ description: 'The average percentage of the time during which the agent poller processes have been busy for the last minute.' + tags:
Zahkiy arouny Campon a of among a	+ - tag: component

24

X

## The proxy template now displays the version number

Templates															?	Create template	Import
Imported suc	ccessfully																×
																	Y Filter
	Template groups	type here	to search			Select	Tags	And/	Or (	Or							
	Linked templates	type here	to search			Select		tag			Contains	~	value		Remove		
	Name	health						Add									
	Vendor																
	Version																
	version																
							Apply	Rese	et								
Name ▲	Hosts	Items	Triggers	Graphs	Dashboards	s Disco	very	Web Ve	endor	Version	Linked templates	Linked	to templates	Tags			
Remote Zabbix proxy	health Hosts	Items 41	Triggers 31	Graphs 13	Dashboards	a 1 Disco	very	Web						class: soft	ware targe	t: proxy target: z	abbix
Remote Zabbix server	r health Hosts	Items 57	Triggers 43	Graphs 16	Dashboards	s 1 Disco	very 1	Web						class: soft	ware targe	t: server target: :	zabbix
Zabbix proxy health	Hosts	2 Items 49	Triggers 35	Graphs	Dashboards	s 1 Disco	very	Web Za	abbix	7.0-0				class: soft	ware targe	t: proxy target: z	abbix
Zabbix server health	Hosts	I Items 57	Triggers 42	Graphs 16	Dashboards	s 1 Disco	very 1	Web						class: soft	ware [targe	t: server target: :	zabbix
																Displaying 4	4 of 4 found
0 selected Export V	Mass update	Delete	Delete and	d clear													

## Repeat the same for the Zabbix server health template:

zabbix_age	nt			
zabbix_pro>	ку			
<b>zabbix_pro</b>	ky_remote			
<b>a</b> <u>zabbix serv</u>	<u>er</u>			
<b>z</b> abbix_serv	er_remote			
<b>z</b> ookeeper	Zabbix / Zabbix			<ul> <li>Watch</li> </ul>
· · ·	Source			
	𝔅 release/7.0 ➤Zabbix /	/ templates / app / <b>zabbix_server</b> /	Br	owse Filter
	Source	Description	Size	Last Modified
	C README.md	T [ZBXNEXT-9245] added proxy group discovery in Zabbix server health template	40.72 KB	23 Aug 2024
	<b>C</b> <u>template app zabbix server.yan</u>	nlT [ZBXNEXT-9245] added proxy group discovery in Zabbix server health template	145.74 KB	23 Aug 2024

## Both Zabbix health templates should have a Version 7.0

Templates														? Create te	mplate Import
Imported successfully	/														×
															<b>V</b> Filter
Templa	te groups	type here	to search			Select	Tags	And/Or	Or						
Linked	templates	type here	to search			Select	t	ag		Contains	~	value		Remove	
	Name	health					A	dd							
	Vendor														
	Version														
						Ap	oply	Reset							
Name ▲	Hosts	Items	Triggers	Graphs	Dashboard	ds Discovery	We	b Vendor	Version	Linked templates	Linked	to templates	Tags		
Remote Zabbix proxy health	Hosts	Items 41	Triggers 31	Graphs 13	Dashboard	ds 1 Discovery	We	b					class: soft	ware target: proxy	target: zabbix
Remote Zabbix server health	Hosts	Items 57	Triggers 43	Graphs 16	Dashboard	ds 1 Discovery	1 We	þ					class: soft	ware target: server	target: zabbix
Zabbix proxy health	Hosts 2	Items 49	Triggers 35	Graphs	Dashboard	ds 1 Discovery	We	b Zabbix	7.0-0				class: soft	ware target: proxy	target: zabbix
Zabbix server health	Hosts 1	Items 72	Triggers 52	Graphs	Dashboard	ds 1 Discovery	3 We	b Zabbix	7.0-0				class: soft	ware target: server	target: zabbix
														Dis	playing 4 of 4 found



## Zabbix server template now has a discovery rule for proxies:

- Go to Data collection > Hosts
- Click on Discovery for the Zabbix server host

Name 🔺	Items	Triggers	Graphs	Discovery	Web Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
Zabbix proxy Porto Alegre	Items 49	Triggers 35	Graphs	Discovery	Web	Proxy Porto Alegre	Zabbix proxy health	Enabled		None		
Zabbix proxy Tokyo	Items 49	Triggers 35	Graphs	Discovery	Web	Proxy Tokyo	Zabbix proxy health	Enabled		None		
Zabbix server	Items 191	Triggers 96	Graphs 19	Discovery 6	Web 127.0.0.1:10050		Linux by Zabbix agent, Zabbix server health	Enabled	ZBX	None		

Displaying 3 of 3 found

## Select and Execute the proxy and proxy group discovery rules

Host	Name 🛦	Items	Triggers	Graphs	Hosts	Кеу	Interval	Туре	Status	Info
Zabbiz server	Linux by Zabbix agent: Block devices discovery	Item prototypes 9	Trigger prototypes 1	Graph prototypes 3	Host prototypes	vfs.dev.discovery	1h	Zabbix agent	Enabled	
Zabbiz	Zabbix server health: Zabbix stats cluster: High availability cluster node discovery	Item prototypes 5	Trigger prototypes 1	Graph prototypes	Host prototypes	zabbix.nodes.discovery		Dependent item	Enabled	
Zabbiz	Linux by Zabbix agent: Mounted filesystem discovery	Item prototypes 4	Trigger prototypes 4	Graph prototypes 1	Host prototypes	vfs.fs.discovery	1h	Zabbix agent	Enabled	
Zabbiz	Linux by Zabbix agent: Network interface discovery	Item prototypes 9	Trigger prototypes 4	Graph prototypes 1	Host prototypes	net.if.discovery	1h	Zabbix agent	Enabled	
Zabbiz server	Zabbix server health: Zabbix proxies stats: Zabbix proxy discovery	Item prototypes 12	Trigger prototypes 4	Graph prototypes	Host prototypes	zabbix.proxy.discovery		Dependent item	Enabled	
Zabbiz server	Zabbix server health: Zabbix proxy groups stats: Zabbix proxy groups discovery	Item prototypes 7	Trigger prototypes 6	Graph prototypes	Host prototypes	zabbix.proxy.groups.discov ery		Dependent item	Enabled	
								Displayir	ng 6 of 6 fou	Ind
2 selected	Enable Disable Execute now Delete									

## Go to Monitoring hosts and check Latest data for the Zabbix server host:

Use the "proxy" tag value as a subfilter to see only proxy related metrics

Subfilter affects only filtered data						
HOSTS Zabbix server 24						
TAGS component 24 proxy-name 24	4					
TAG VALUEs         component:       application +1 cpu +17 environment +1 gathering-process +16 internal-process +27 memory +7 network +27 nvps +8 os +3 proxy 24 raw +5 security +1 storage +27 system +38         disk:       vda +8 vdb +8         filesystem:       /+4 /var/lib/containers/storage/overlay +4         interface:       eth0 +9 eth1 +9 podman1 +9						
DATA With data Without data						
Host	Name 🔺	Last check	Last value	Change	Tags	Info
Zabbix server	Proxy [Proxy Porto Alegre]: Certificate 🙎	5m 12s	Off (0)		component: proxy proxy-name: Proxy P	Graph
Zabbix server	Proxy [Proxy Porto Alegre]: Compatibility 2	5m 12s	Current (1)		component: proxy proxy-name: Proxy P	Graph
Zabbix server	Proxy [Proxy Porto Alegre]: Compression 2	5m 12s	On (1)		component: proxy proxy-name: Proxy P	Graph
Zabbix server	Proxy [Proxy Porto Alegre]: Host count	5m 12s	1		component: proxy proxy-name: Proxy P	Graph
Zabbix server	Proxy [Proxy Porto Alegre]: Item count	5m 12s	49		component: proxy proxy-name: Proxy P	Graph
Zabbix server	Proxy [Proxy Porto Alegre]: Last seen, in seconds	12s	1		component: proxy proxy-name: Proxy P	Graph
Zabbix server	Proxy [Proxy Porto Alegre]: Mode	5m 12s	Passive (1)		component: proxy proxy-name: Proxy P	Graph
Zabbix server	Proxy [Proxy Porto Alegre]: PSK 🗾	5m 12s	Off (0)		component: proxy proxy-name: Proxy P	Graph

## Go to Dashboards > All dashboards

Open the Zabbix server health dashboard

ZABBIX « 🔊	Dashboards				?	Create dashboard		
zbxtr-workshop-student-01						<b>Filter</b>		
B Dashboards			Name	Show All Created by me				
المعلم Monitoring ۲	Apply Reset							
Good Services ~	Name ▲							
🕎 Inventory -	Global view							
	Zabbix server	Values processed per second		Utilization of data collectors	Utilization of internal processes	My		
	Zabbix server health					My Shared		
Data collection						isplaying 3 of 3 found		
Most wid	gets are broken	0		0	- 0	•		
		Cache usage	M 10-04 06:29 AM 10-04 06:41 AM	10-04-07-34 лл 10-04-06-07 лл 10-04-06-17 лл 10-04-06-29 лл 10-04-06-41 лл Value cache effectiveness	10-04 0/ 34 AM 10-04 06:06 AM 10-04 06:17 AM 10-04 06:29 AM 10-04 06:41 AM Queue size			
		100 %		1	1			
		80 %						
		40 %						
		20 %						
		0 %		0	• 0	*		
		10-04 07:52 AM 10-04 08:05 AM 10-04 08:17	AM 10-04 08:29 AM 10-04 08:41 AM	10-04 07:54 AM 10-04 08:06 AM 10-04 08:17 AM 10-04 08:29 AM 10-04 08:41 AM	10-04 07:54 AM 10-04 08:06 AM 10-04 08:17 AM 10-04 08:29 AM 10-04 08:41 AM			



## Edit the dashboard:

- Modify the Utilization of data collectors widget
- Replace Item patterns with Utilization of \* data collector \*



Data set 1 Displaying optic	ons Time period Axes   Legend   Problems	Overrides	
Data set #1 🔨	Zabbix server × host patterns	Select Utilization of * da item patterns	ta collector * × Select ×
	Draw Line Points Staircas	e Bar Y-a	xis Left Right
	Stacked	Time s	nift none
	Width	Aggregation funct	on not used 🗸
	Point size	Aggregation inter	val 1h
	Transnaranev	0	Each item Data set

## Fix other widgets:

- Utilization of internal processes
  - \*: Utilization of \* internal \*
- Values processed per second
  - \*: Number of processed \*values per second
- Value cache effectiveness
  - Zabbix server: Value cache hits
  - Zabbix server: Value cache misses
- Queue size
  - Zabbix server: Queue
  - Zabbix server: Queue over 10 minutes
  - Zabbix server: Preprocessing queue
  - Zabbix server: LLD queue
  - -
  - •

Utilization of \* internal \*

Number of processed \* values per second

Value cache hits Value cache misses

Queue Queue over 10 minutes Preprocessing queue LLD queue Connector queue Discovery queue



## ZABBIX 7.0 End of workshop

7.0 Upgrade workshop

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