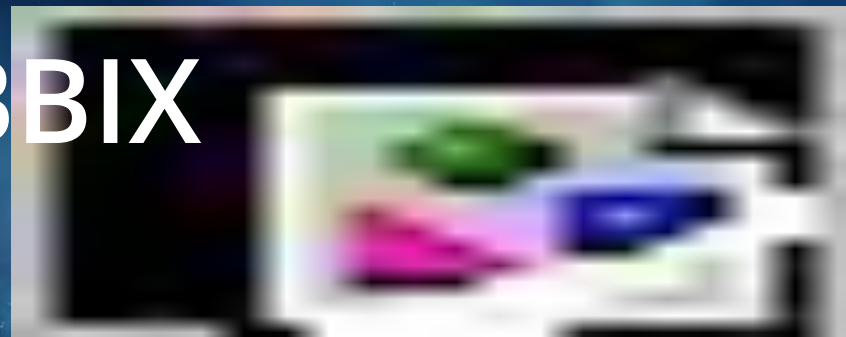


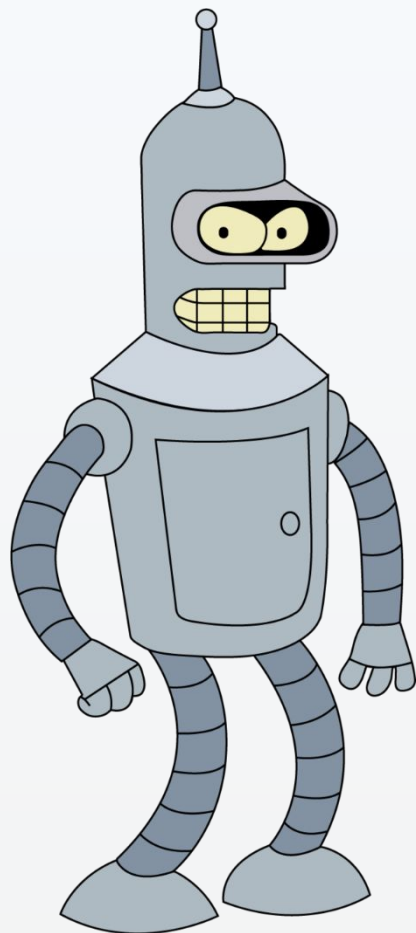
Visualize it! Getting the most out of Zabbix UI

Aleksejs Petrovs, ZABBIX



Presentation slide title

- Presentation slide text



Meet **Bender!**
He loves blackjack,
good people and
Zabbix 😊

1.

Unit conversion

Brīva vieta jūsu reklāmai

Raw values

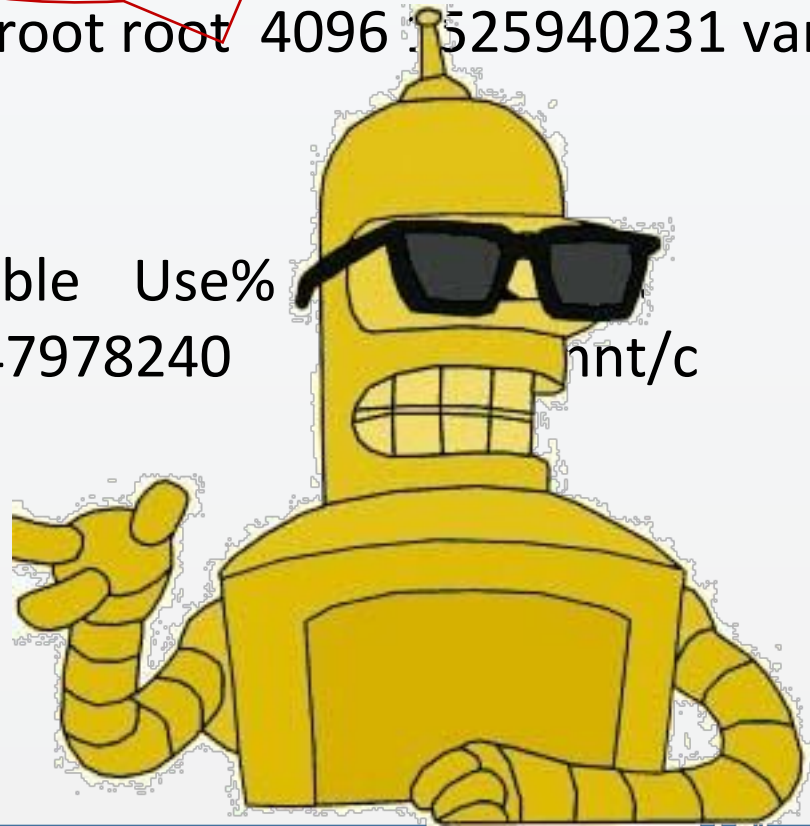
Pfff... Easy! And

drwxr-xr-x 1 root root 4096 1534101142

home

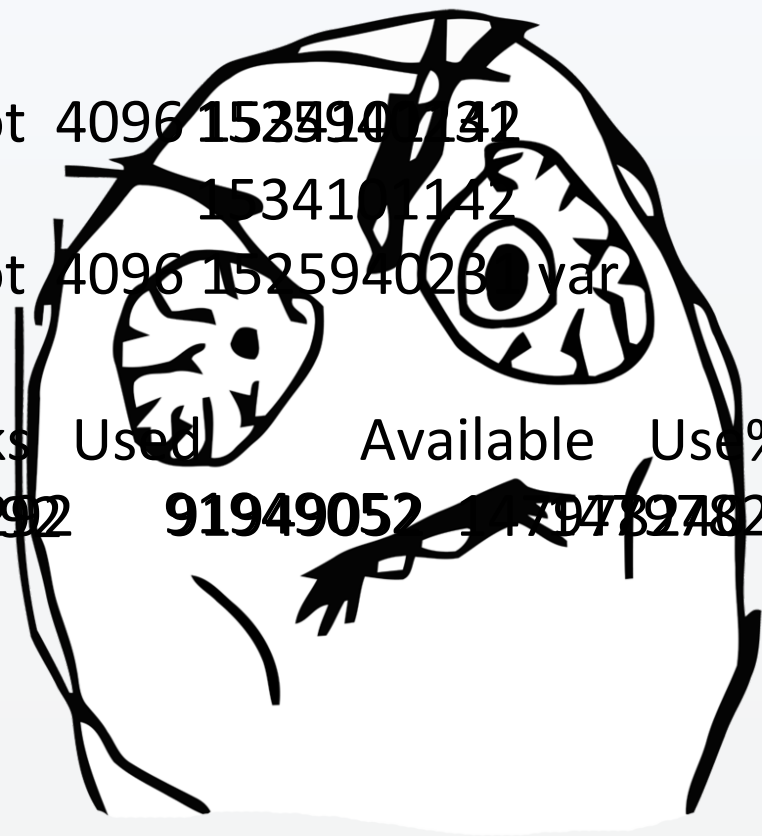
drwxr-xr-x 1 root root 4096 525940231 var

1K-blocks	Used	Available	Use%
239927292	91949052	147978240	hnt/c



```
drwxr-xr-x 1 root root 4096 1534107141  
home  
drwxr-xr-x 1 root root 4096 1525940230 var
```

```
1K-blocks Used Available Use% Mounted on  
239927292 91949052 17978278 24039% /mnt/c
```



We have a solution:

Units

* Name

Type

* Key

* Host interface

Type of information

Units



unixtime

Name ▲	Last check	Last value
File monitoring (1 Item)		
/etc/zabbix/zabbix_agentd.conf was modified	2018-09-23 15:04:06	2018-09-19 10:33:52

Underground rocks?

Some units are unlikely to be converted, i.e. **RPM** or **%**

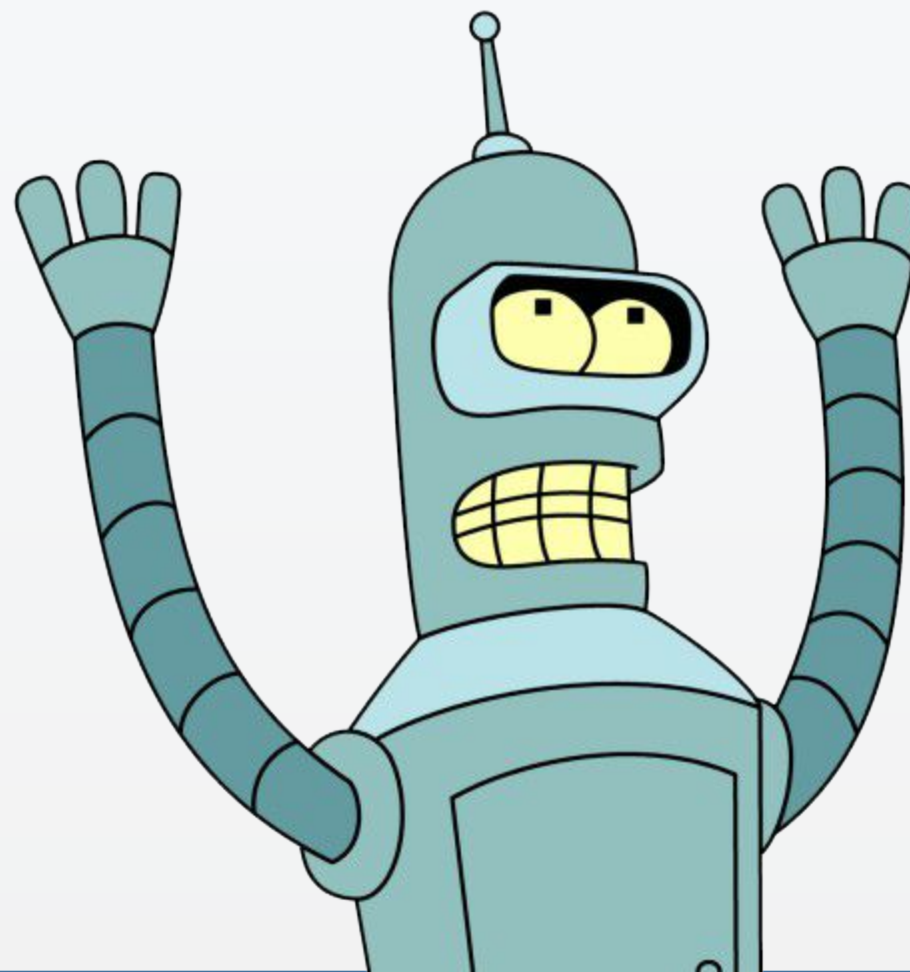
Some of the units require specific conversion, i.e **unixtime**, **B** or **Bps**

Want something **custom**?

B or Bps	b or bps
1024 = 1KB	1000 = 1Kb
1024 = 1KBps	1000 = 1Kbps

B or Bps	b or bps
90000 = 1d 1h	90000 = 1 day, 01:00:00

**I will create my own
custom Units!**



Free form string in **Units** field

* Name

Type

* Key

Name ▲	Last check	Last value
Bender (1 item)		
Clones count	2018-09-28 13:15:44	1 KClones

Place ! before custom units



	* Name	<input type="text" value="Clones count"/>	
	Type	<input type="text" value="Zabbix trapper"/>	
	* Key	<input type="text" value="bender.clones"/>	<input type="button" value="Select"/>
Name	Type of information	<input type="text" value="Numeric (unsigned)"/>	st value
Bend			
Clone	Units	<input type="text" value="!Clones"/>	00 Clones

2.

Show values

From meaningless
numbers to meaningful
words

Those awkward numbers...

HOST-RESOURCES-MIB::hrDiskStorageAccess.393232 = INTEGER: **readWrite(1)**
HOST-RESOURCES-MIB::hrDiskStorageAccess.393280 = INTEGER: **readWrite(1)**
HOST-RESOURCES-MIB::hrDiskStorageAccess.393296 = INTEGER: **readWrite(1)**

Without Value mapping

	Last value		
393232 Access	1	2018-09-27 14:11:35	1
393280 Access	1	2018-09-27 14:11:35	1
393296 Access	1	2018-09-27 14:11:35	1
Is 393232 removable status	1	2018-09-27 14:11:35	2
Is 393280 removable status	2	2018-09-27 14:11:35	2
Is 393296 removable status	2	2018-09-27 14:11:35	2
	2		





Item prototype updated



Item prototypes

[Create item prototype](#)[All hosts](#) / [serv02.johndoe.inc](#)

Enabled

ZBX **SNMP**[JMX](#) [IPMI](#)[Discovery list](#) / [DiskStorage Info](#)**Item prototypes 2**[Trigger prototypes](#)[Graph prototypes](#)[Host prototypes](#)

<input type="checkbox"/>	Wizard	Name ▲	Key	Interval	History	Trends	Type	Applications	Create enabled
<input type="checkbox"/>	...	Is {#SNMPINDEX} removable status	hrDiskStorageRemovable[{#SNMPINDEX}]	30s	90d	365d	SNMPv2 agent	DiskStore	Yes
<input type="checkbox"/>	...	{#SNMPINDEX} Access	hrDiskStorageAccess[{#SNMPINDEX}]	30s	90d	365d	SNMPv2 agent	DiskStore	Yes

Displaying 2 of 2 found

0 selected

[Create enabled](#)[Create disabled](#)[Delete](#)

Name ▲	Last check	Last value
DiskStore (6 Items)		
393232 Access	2018-10-05 05:52:54	readOnly (1)
393280 Access	2018-10-05 05:52:54	readOnly (1)
393296 Access	2018-10-05 05:52:54	readOnly (1)

A lot of predefined sets

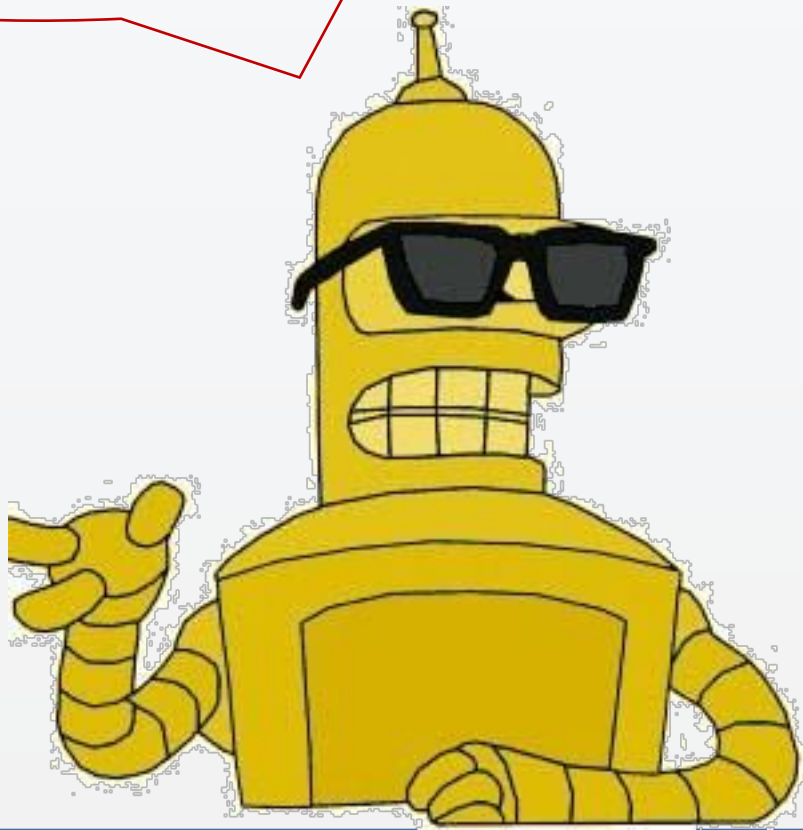
<input type="checkbox"/> ICS-CHASSIS-MIB::icsChassisPowerSupplyOperStatus	<ul style="list-style-type: none"> 1 ⇒ unknown 2 ⇒ disabled 3 ⇒ failed 4 ⇒ warning 5 ⇒ standby 6 ⇒ engaged 7 ⇒ redundant 8 ⇒ notPresent
<input type="checkbox"/> ICS-CHASSIS-MIB::icsChassisSensorSlotOperStatus	<ul style="list-style-type: none"> 1 ⇒ invalid 2 ⇒ bad 3 ⇒ warning 4 ⇒ good 5 ⇒ disabled
<input type="checkbox"/> ICS-CHASSIS-MIB::icsChassisTemperatureStatus	<ul style="list-style-type: none"> 1 ⇒ normal 2 ⇒ high 3 ⇒ excessivelyHigh 4 ⇒ low 5 ⇒ excessivelyLow 6 ⇒ noSensor 7 ⇒ unknown
<input type="checkbox"/> IF-MIB::ifOperStatus	<ul style="list-style-type: none"> 1 ⇒ up 2 ⇒ down 3 ⇒ testing 4 ⇒ unknown 5 ⇒ dormant 6 ⇒ notPresent 7 ⇒ lowerLayerDown

Comes with **58** predefined sets, but **not limited** to that

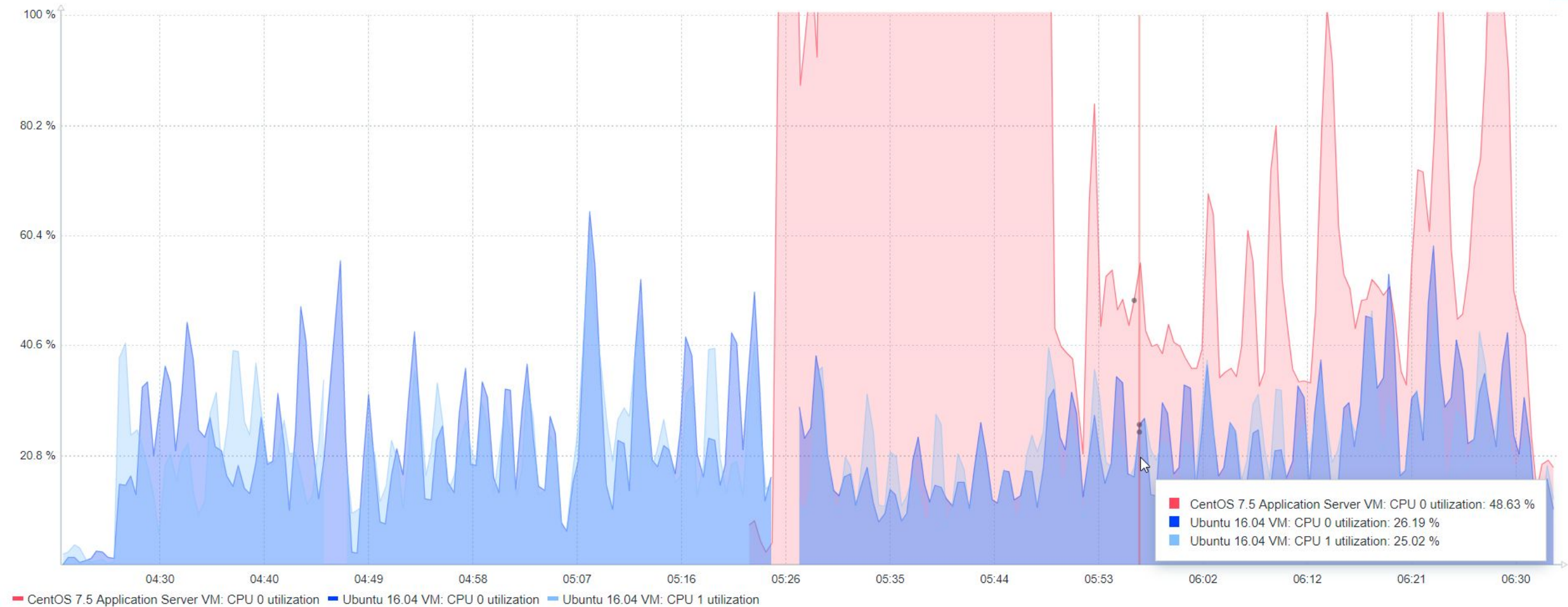
3.

Graphs

We've redesigned the way how you will use graphs! The world of graphs will never be the same again!



Brand New Graph Widget



CentOS 7.5 Application Server VM: CPU 0 utilization Ubuntu 16.04 VM: CPU 0 utilization Ubuntu 16.04 VM: CPU 1 utilization

Graph widget dash

[+ Add widget](#)[Save changes](#)[Cancel](#)[All dashboards](#)

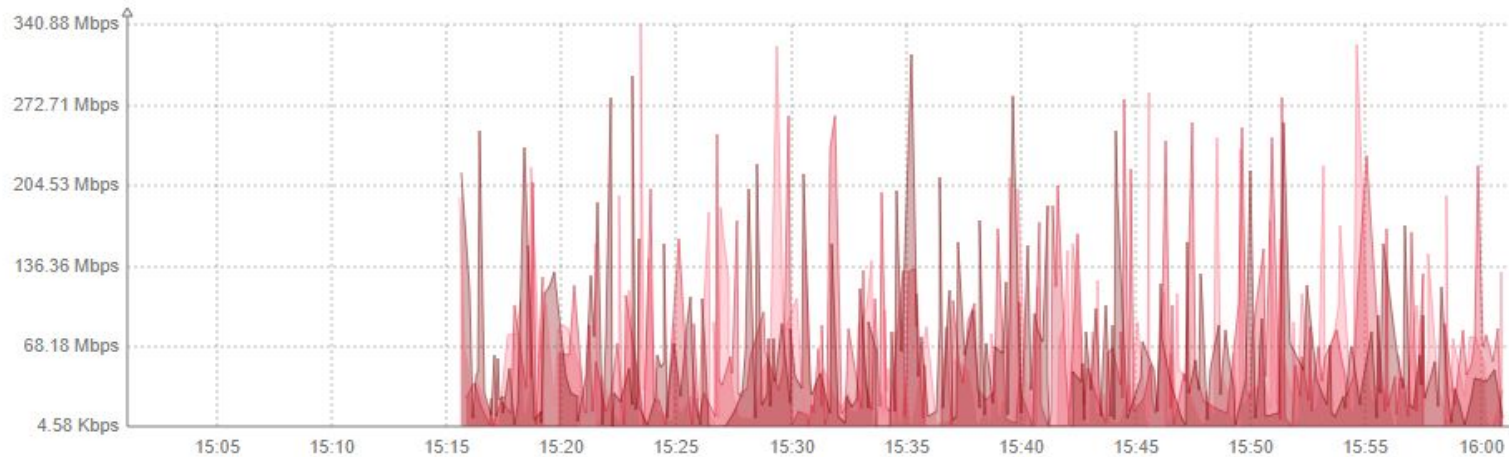
Add a new widget



Type

Name

Refresh interval



wap3.johndoe.inc: Total traffic in bps wap2.johndoe.inc: Total traffic in bps wap1.johndoe.inc: Total traffic in bps

Data set Display options Time period Axes Legend Problems Overrides

Base color

Missing data

Draw

Y-axis

Width

Point size

Transparency

Fill

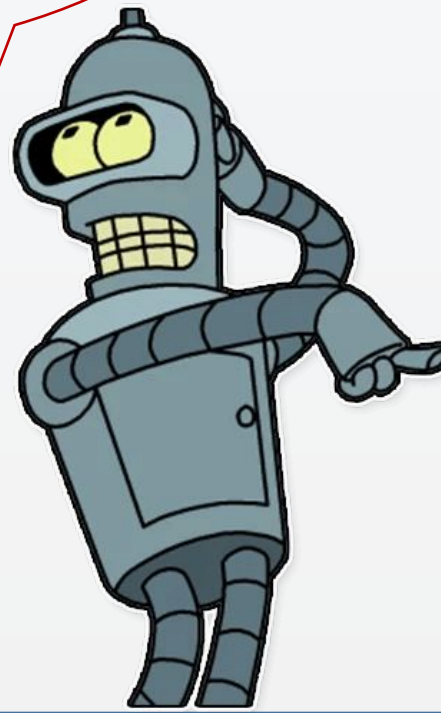
+ Add new data set

4.

Problems

Brīva vieta jūsu reklāmai

The **problem view** is so cool
that I don't mind to have
problems!!!!



Monitoring - Problems

Problem	Duration	Ack	Actions	Tags
Someone is heavily using the wap1.johndoe.inc Access Point	2m 45s	No		Location: Riga
Someone is heavily using the wap2.johndoe.inc Access Point	2m 49s	No		Location: Riga
Someone is heavily using the wap3.johndoe.inc Access Point	2m 57s	No		Location: Riga
Version of zabbix_agent(d) was changed on Zabbix server	9m 36s	No		
The used disk space is 18.77 %	10m 44s	No		Location: Riga
The used disk space is 3.19 GB	10m 44s	No		Location: Riga
PostgreSQL service not running on ubnt-rix-pgsql.johndoe.inc	27m 8s	No		Datacenter: HQ Software: PostgreSQL
The wap2.johndoe.inc availability = Down (0)	9d 21h 57m	No		Datacenter: HQ Type: Wireless Access...
Too much Benders has been created!	23d 7h 9m	No		At: Bender

2018-09-17 22:40:00



High

PROBLEM

[wap2.johndoe.inc](#)

2018-09-04 13:27:48



Warning

PROBLEM

[Tracking the Bender](#)

Time	<input type="checkbox"/>	S	Problem	Duration	Ack	Actions	Tags
2018-09-27 20:27:00	<input type="checkbox"/>	D	The used disk space is 3.19 GB	6d 9h 4m	No		Location: Riga
05:31:03	<input type="checkbox"/>	H	The snmpd daemon is down	41s	No		Host: Ubuntu 16.04 VM Location: Riga Software: SNMPD
05:26:02	<input type="checkbox"/>	H	The snmpd daemon is down	5m 42s	No		Host: CentOS 7.5 App... Location: Riga Software: SNMPD
2018-09-17 22:40:00	<input type="checkbox"/>	H	The wap2.johndoe.inc availability = Down (0)	16d 6h 51m	No		Datacenter: HQ Type: Wireless Access...
05:28:42	<input type="checkbox"/>	A	CPU 1 is utilized for 35.7 %	1m	No		CPU: 1 Device: ubnt-rix-16.joh...
05:28:11	<input type="checkbox"/>	A	CPU 0 is utilized for 25.67 %	1m 30s	No		CPU: 0 Device: ubnt-rix-16.joh...
05:27:11	<input type="checkbox"/>	A	CPU 0 is utilized for 29.42 %	30s	No		CPU: 0 Device: ubnt-rix-16.joh...
05:26:15	<input type="checkbox"/>	A	CPU 0 is utilized for 268.54 %	5m 29s	No		CPU: 0 Device: cos-rix-07.joh...
00:24:03	<input type="checkbox"/>	A	Tomcat Java is not reachable	5h 7m 41s	No		
2018-09-28 08:52:29	<input type="checkbox"/>	A	Someone is heavily using the wap1.johndoe.inc Access Point	5d 20h 39m	No		Location: Riga
2018-09-28 08:52:17	<input type="checkbox"/>	A	Someone is heavily using the wap3.johndoe.inc Access Point	5d 20h 39m	No		Location: Riga
2018-09-27 20:34:55	<input type="checkbox"/>	A	Someone is heavily using the wap2.johndoe.inc Access Point	6d 8h 56m	No		Location: Riga
2018-09-04 13:27:48	<input type="checkbox"/>	V	Too much Benders has been created!	29d 16h 3m	No		AI: Bender
05:28:59	<input type="checkbox"/>	I	CentOS 7.5 Application Server VM has just been restarted	2m 45s	No		
05:28:33	<input type="checkbox"/>	I	Zabbix server has just been restarted	3m 11s	No		
05:17:26	<input type="checkbox"/>	I	Ubuntu 16.04 VM has just been restarted	14m 18s	No		
2018-09-27 20:27:00	<input type="checkbox"/>	I	The used disk space is 18.77 %	6d 9h 4m	No		Location: Riga

Show **Recent problems** Problems History

Host groups

Hosts

Application

Triggers

Problem

Minimum severity

Age less than days

Host inventory

[Add](#)

Tags **And/Or** Or

Contains Equals

[Add](#)

Show tags Tag name Shortened None

Tag display priority

Show suppressed problems Show unacknowledged only

Compact view Show timeline

Show details Highlight whole row

Time	<input type="checkbox"/> Severity ▼	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
2018-09-27 20:27:00	<input checked="" type="checkbox"/> Disaster		PROBLEM		serv01.johndoeinc	The used disk space is 3.19 GB	6d 9h 3m	No		Location: Riga
05:26:02	<input checked="" type="checkbox"/> High		PROBLEM		CentOS 7.5 Application Ser...	The snmpd daemon is down	4m 2s	No		Host: CentOS 7... Location: Riga Software: SNMPD
2018-09-17 22:40:00	<input checked="" type="checkbox"/> High		PROBLEM		wap2.johndoe.inc	The wap2.johndoe.inc availability = Dow...	16d 6h 50m	No		Datcenter: HQ Type: Wireless ...
05:28:42	<input type="checkbox"/> Average	05:29:42	RESOLVED		Ubuntu 16.04 VM	CPU 1 is utilized for 35.7 %	1m	No		CPU: 1 Device: ubnt-rix-...
05:28:11	<input type="checkbox"/> Average	05:29:41	RESOLVED		Ubuntu 16.04 VM	CPU 0 is utilized for 25.67 %	1m 30s	No		CPU: 0 Device: ubnt-rix-...
05:27:11	<input type="checkbox"/> Average	05:27:41	RESOLVED		Ubuntu 16.04 VM	CPU 0 is utilized for 29.42 %	30s	No		CPU: 0 Device: ubnt-rix-...
05:26:15	<input checked="" type="checkbox"/> Average		PROBLEM		CentOS 7.5 Application Ser...	CPU 0 is utilized for 268.54 %	3m 49s	No		CPU: 0 Device: cos-rix-0...
00:24:03	<input checked="" type="checkbox"/> Average		PROBLEM		Tomcat Java	Tomcat Java is not reachable	5h 6m 1s	No		
2018-09-28 08:52:29	<input checked="" type="checkbox"/> Average		PROBLEM		wap1.johndoe.inc	Someone is heavily using the wap1 joh...	5d 20h 37m	No		Location: Riga
2018-09-28 08:52:17	<input checked="" type="checkbox"/> Average		PROBLEM		wap3.johndoe.inc	Someone is heavily using the wap3 joh...	5d 20h 37m	No		Location: Riga
2018-09-27 20:34:55	<input checked="" type="checkbox"/> Average		PROBLEM		wap2.johndoe.inc	Someone is heavily using the wap2 joh...	6d 8h 55m	No		Location: Riga
2018-09-04 13:27:48	<input checked="" type="checkbox"/> Warning		PROBLEM		Tracking the Bender	Too much Benders has been created!	29d 16h 2m	No		AI: Bender
05:28:59	<input checked="" type="checkbox"/> Information		PROBLEM		CentOS 7.5 Application Ser...	CentOS 7.5 Application Server VM has j...	1m 5s	No		
05:28:33	<input checked="" type="checkbox"/> Information		PROBLEM		Zabbix server	Zabbix server has just been restarted	1m 31s	No		
05:17:26	<input checked="" type="checkbox"/> Information		PROBLEM		Ubuntu 16.04 VM	Ubuntu 16.04 VM has just been restarted	12m 38s	No		
2018-09-27 20:27:00	<input checked="" type="checkbox"/> Information		PROBLEM		serv01.johndoeinc	The used disk space is 18.77 %	6d 9h 3m	No		Location: Riga

Time	<input type="checkbox"/>	Severity ▼	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
2018-09-27 20:27:00	<input type="checkbox"/>	Disaster		PROBLEM		serv01.johndoeinc	The used disk space is 3.19 GB	6d 9h 4m	No		Location: Riga
05:31:03	<input type="checkbox"/>	High		PROBLEM		Ubuntu 16.04 VM	The snmpd daemon is down	10s	No		Host: Ubuntu 16.04 VM Location: Riga Software: SNMPD

Time	<input type="checkbox"/>	Severity ▼	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
2018-09-27 20:27:00	<input type="checkbox"/>	Disaster		PROBLEM		serv01.johndoeinc	The used disk space is 3.19 GB	6d 9h 5m	No		Location: Riga
05:31:03	<input type="checkbox"/>	High				Ubuntu 16.04 VM	The snmpd daemon is down	1m 54s	No		Host: Ubuntu 16... Location: Riga Software: SNMPD
05:26:02	<input type="checkbox"/>	High		PROBLEM		CentOS 7.5 Application Ser...	The snmpd daemon is down	6m 55s	No		Host: CentOS 7... Location: Riga Software: SNMPD
2018-09-17 22:40:00	<input type="checkbox"/>	High		PROBLEM		wap2.johndoe.inc	The wap2.johndoe.inc availability = Dow...	16d 6h 52m	No		Datacenter: HQ Type: Wireless ...
05:28:42	<input type="checkbox"/>	Average	05:29:42	RESOLVED		Ubuntu 16.04 VM	CPU 1 is utilized for 35.7 %	1m	No		CPU: 1 Device: ubnt-rix-...
05:28:11	<input type="checkbox"/>	Average	05:29:41	RESOLVED		Ubuntu 16.04 VM	CPU 0 is utilized for 25.67 %	1m 30s	No		CPU: 0 Device: ubnt-rix-...
05:26:15	<input type="checkbox"/>	Average		PROBLEM		CentOS 7.5 Application Ser...	CPU 0 is utilized for 268.54 %	6m 42s	No		CPU: 0 Device: cos-rix-0...
00:24:03	<input type="checkbox"/>	Average		PROBLEM		Tomcat Java	Tomcat Java is not reachable	5h 8m 54s	No		
2018-09-28 08:52:29	<input type="checkbox"/>	Average		PROBLEM		wap1.johndoe.inc	Someone is heavily using the wap1.joh...	5d 20h 40m	No		Location: Riga
2018-09-28 08:52:17	<input type="checkbox"/>	Average		PROBLEM		wap3.johndoe.inc	Someone is heavily using the wap3.joh...	5d 20h 40m	No		Location: Riga
2018-09-27 20:34:55	<input type="checkbox"/>	Average		PROBLEM		wap2.johndoe.inc	Someone is heavily using the wap2.joh...	6d 8h 58m	No		Location: Riga
2018-09-04 13:27:48	<input type="checkbox"/>	Warning		PROBLEM		Tracking the Bender	Too much Benders has been created!	29d 16h 5m	No		AI: Bender
05:28:59	<input type="checkbox"/>	Information		PROBLEM		CentOS 7.5 Application Ser...	CentOS 7.5 Application Server VM has j...	3m 59s	No		
05:28:33	<input type="checkbox"/>	Information		PROBLEM		Zabbix server	Zabbix server has just been restarted	4m 25s	No		
05:17:26	<input type="checkbox"/>	Information		PROBLEM		Ubuntu 16.04 VM	Ubuntu 16.04 VM has just been restarted	15m 32s	No		
2018-09-27 20:27:00	<input type="checkbox"/>	Information		PROBLEM		serv01.johndoeinc	The used disk space is 18.77 %	6d 9h 5m	No		Location: Riga

Displaying 16 of 16 found

2018-09-27 20:27:00	<input type="checkbox"/>	Information		PROBLEM		serv01.johndoeinc	The used disk space is 18.77 %	6d 9h 4m	No		Location: Riga
---------------------	--------------------------	-------------	--	---------	--	-------------------	--------------------------------	----------	----	--	----------------

Displaying 17 of 17 found

Host inventory [Remove](#)

[Add](#)

Tags

<input type="text" value="Location"/>	<input checked="" type="button" value="Contains"/>	<input type="button" value="Equals"/>	<input type="text" value="Riga"/>	Remove
<input type="text" value="Type"/>	<input checked="" type="button" value="Contains"/>	<input type="button" value="Equals"/>	<input type="text" value="Wireless"/>	Remove

[Add](#)

Show tags Tag name

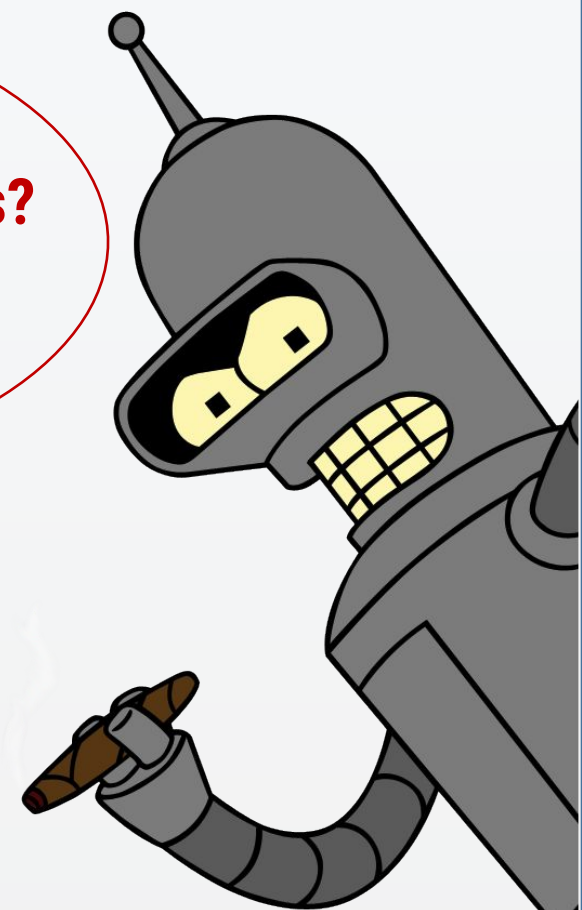
Tag display priority

- | | |
|--|---|
| Show suppressed problems <input checked="" type="checkbox"/> | Show unacknowledged only <input type="checkbox"/> |
| Compact view <input checked="" type="checkbox"/> | Show timeline <input type="checkbox"/> |
| Show details <input type="checkbox"/> | Highlight whole row <input checked="" type="checkbox"/> |

5.

Maps

Psss... Hey you! **Got maps?**



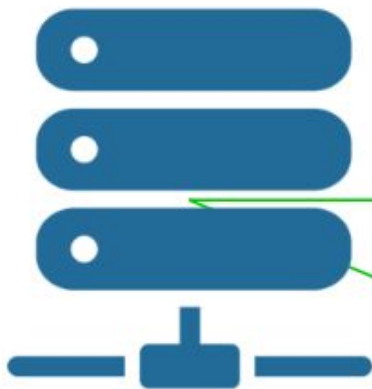
Custom maps

Place hosts, host groups, triggers or any image on map

Create linkage between them to represent the connectivity state

Custom labels to show meaningful information

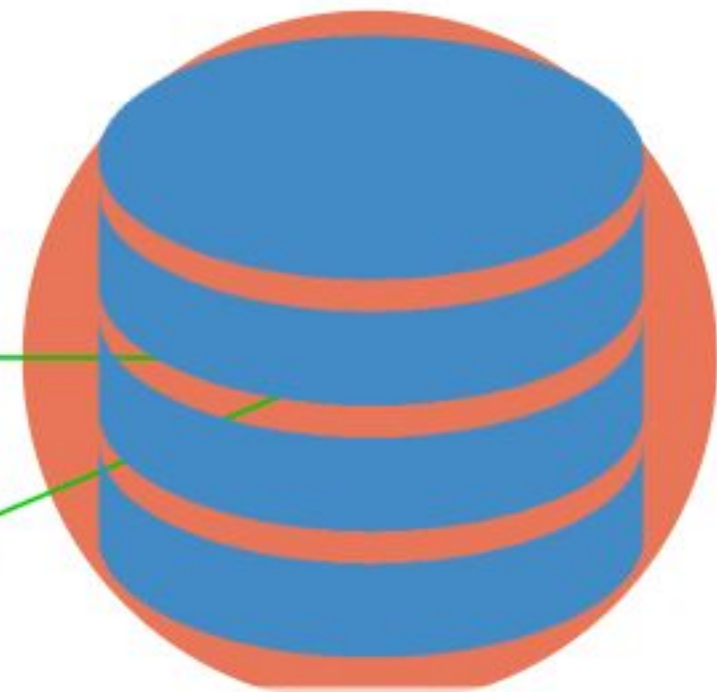
Set the icons **automatically** based on the **Inventory**



Apache2 service status
OK

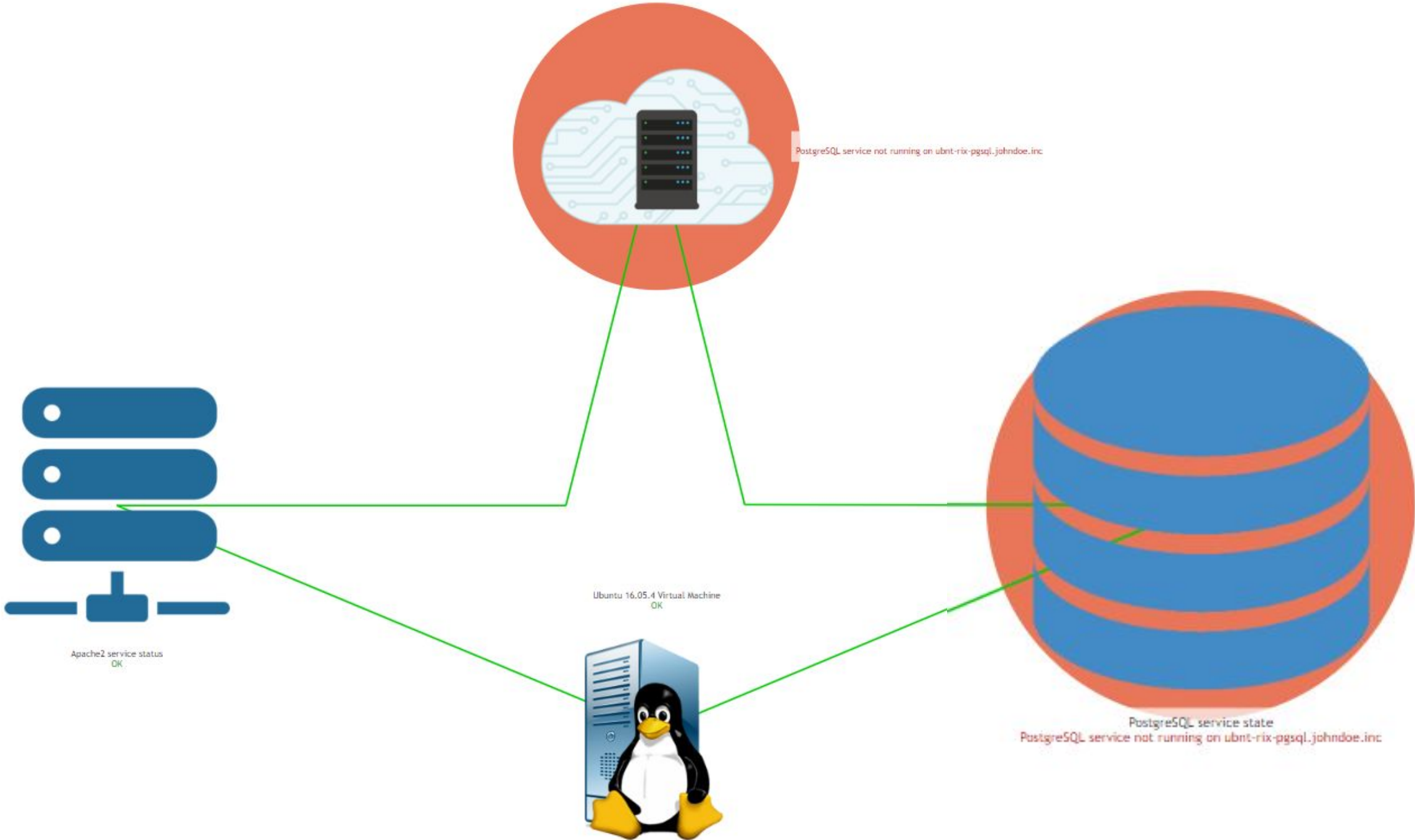


PostgreSQL service not running on ubnt-rix-pgsql.johndoe.inc



PostgreSQL service state
PostgreSQL service not running on ubnt-rix-pgsql.johndoe.inc

Ubuntu 16.05.4 Virtual Machine
OK



To share or not to share, that is the question!

Map Sharing

Type Private Public

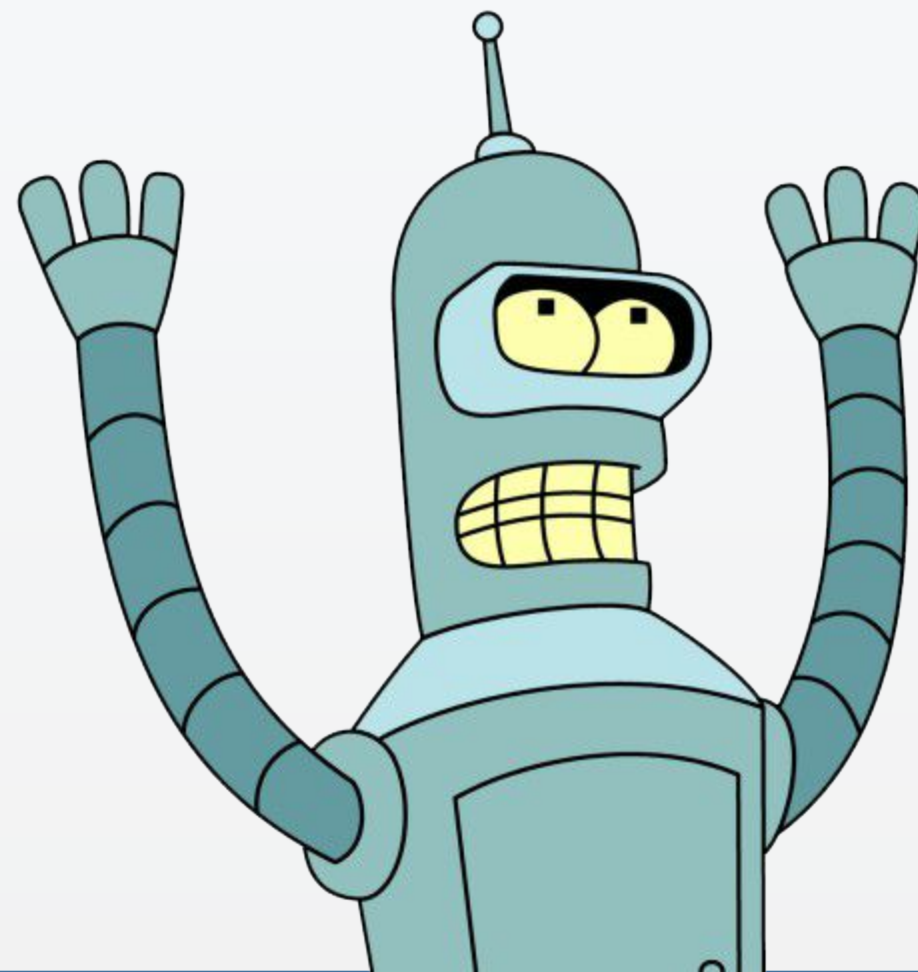
List of user group shares

User groups	Permissions	Action
Add		

List of user shares

Users	Permissions	Action
Add		

**I will create my own
custom maps with
blackjack and hosts!**



Dashboard

[Edit dashboard](#)

All dashboards / [Dashboard](#)

Problems

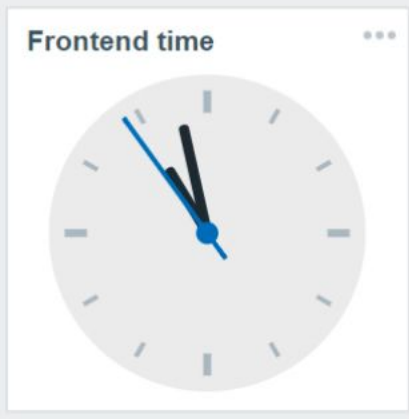
Time	Recovery time	Status	Info	Host	Problem • Severity	Duration
05:51:12	05:51:42			Ubuntu 16.04 VM	CPU 1 is utilized for 27.02 %	30s
05:51:11	05:52:11			Ubuntu 16.04 VM	CPU 0 is utilized for 32.12 %	1m
05:49:12	05:50:12	RESOLVED		Ubuntu 16.04 VM	CPU 1 is utilized for 40.12 %	1m
05:49:11	05:50:11	RESOLVED		Ubuntu 16.04 VM	CPU 0 is utilized for 30.89 %	1m
05:31:03		PROBLEM		Ubuntu 16.04 VM	The snmpd daemon is down	21m 19s
05:26:15	05:52:15			CentOS 7.5 Application Server VM	CPU 0 is utilized for 268.54 %	26m

Problem hosts

Host group	Without problems	With problems	Total
AI		1	1
Bender	1		1
Database servers	3		3
DC/Java		1	1
dummy		1	1
File Servers	1		1

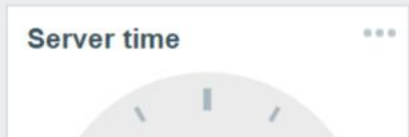
Problems by severity

Host group	Disaster	High	Average	Warning	Information	Not classified
AI				1		
Bender						



System information

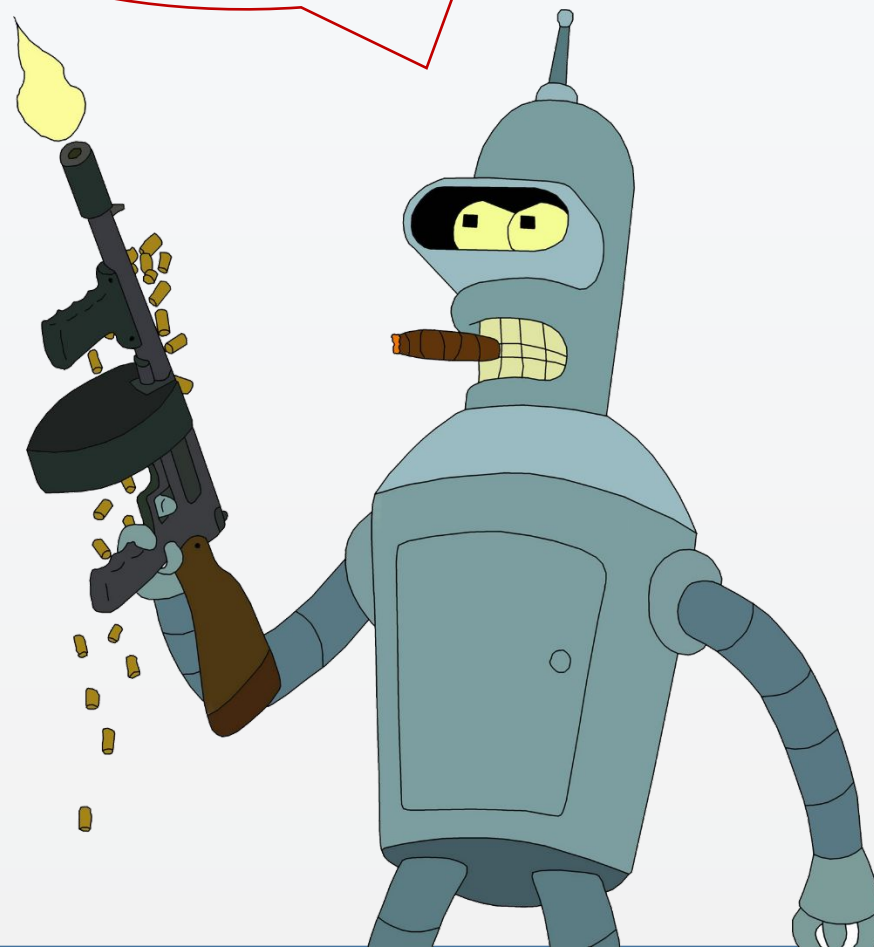
Parameter	Value	Details
Zabbix server is running	Yes	localhost:10051
Number of hosts (enabled/disabled/templates)	102	18 / 0 / 84
Number of items (enabled/disabled/not supported)	372	280 / 0 / 92
Number of triggers (enabled/disabled [problem/ok])	145	145 / 0 [10 / 135]
Number of users (online)	3	1
Required server performance, new values per	5.03	



6.

Dashboards

Get dashboarded, **NOW!**



Get Dashboarded!

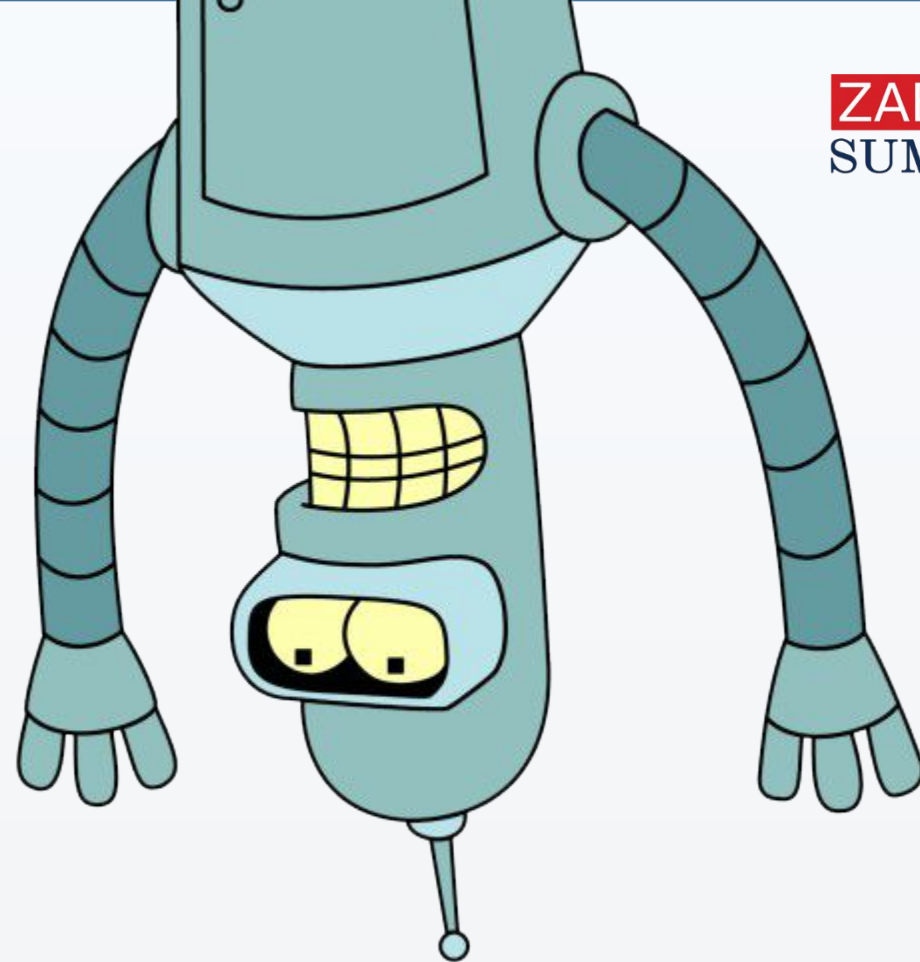
Custom widgets – place the information you really care

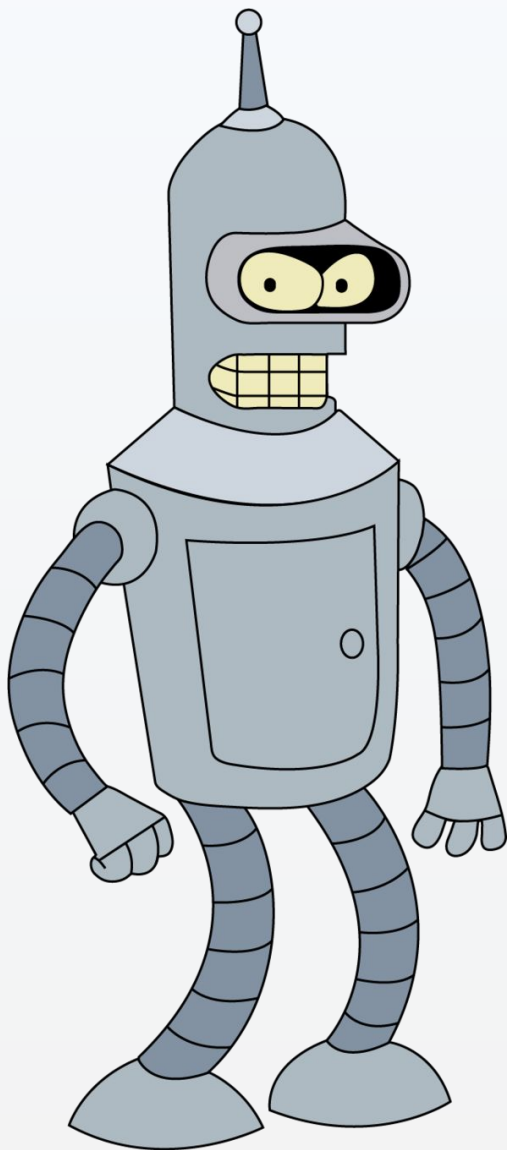
Filtering based on **Severity** or **Tags** and much more

Create their **own custom dashboards**

Sharing and **access control**

Yeah, you know why I'm here! Moooooore custom dashboards with blackjack, graphs and problems!!!





**Now applause to me,
because I've done all the
presentation, not Alex!**

