

ENTERPRISE-CLASS MONITORING SOLUTION FOR EVERYONE

ALL-IN-ONE

OPEN-SOURCE

DISTRIBUTED MONITORING

Qu'est-ce que **ZABBIX** ?

ZABBIX

C'est quoi ?

- Solution totalement Open Source sortie en 2001
- Intérêt de la communauté française grandissant
- Supportée par un éditeur
- GPL (v2)

ZABBIX

Une solution intelligente

- Enregistrement automatique des serveurs
- Découverte réseau
- Découverte de bas niveau (LLD)
- API (automatisation)

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La collecte



La collecte

- L'utilisation CPU d'un serveur
- Le statut d'une base de données
- La température d'un centre de données
- Le nombre d'utilisateur en ligne pour mon application
- ...

Les types de collecte

Zabbix Agent

Server polls

Zabbix Agent (Active)

Processed by Zabbix agent

Simple check

Executed by Zabbix server

SNMP agent

All SNMP versions are supported

Trapper

Used with Zabbix sender

Log files

Internal

Zabbix health

Aggregate

Average/min/max for host group

External check

script[parameters]

SSH

Password and key authentication supported

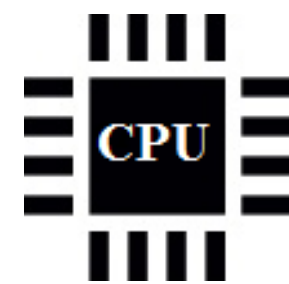
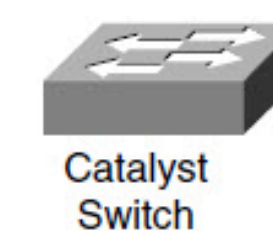
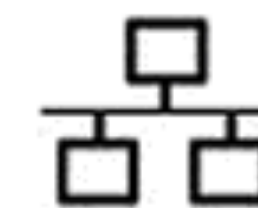
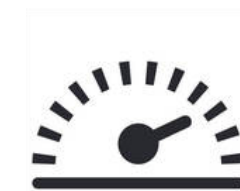
Telnet

Calculated

From existing data

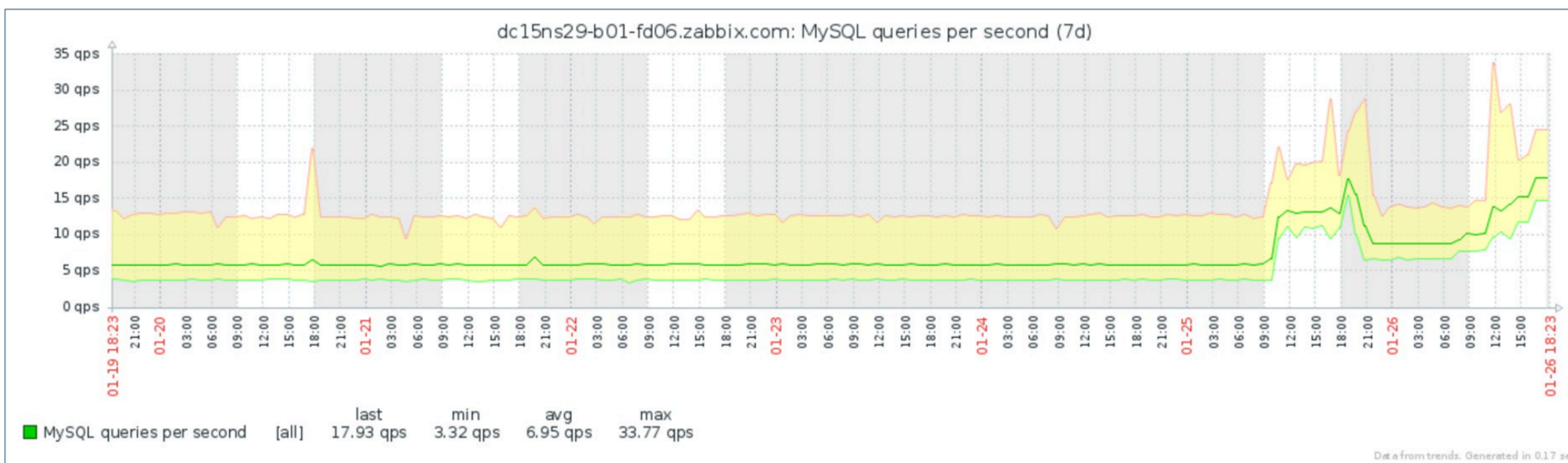
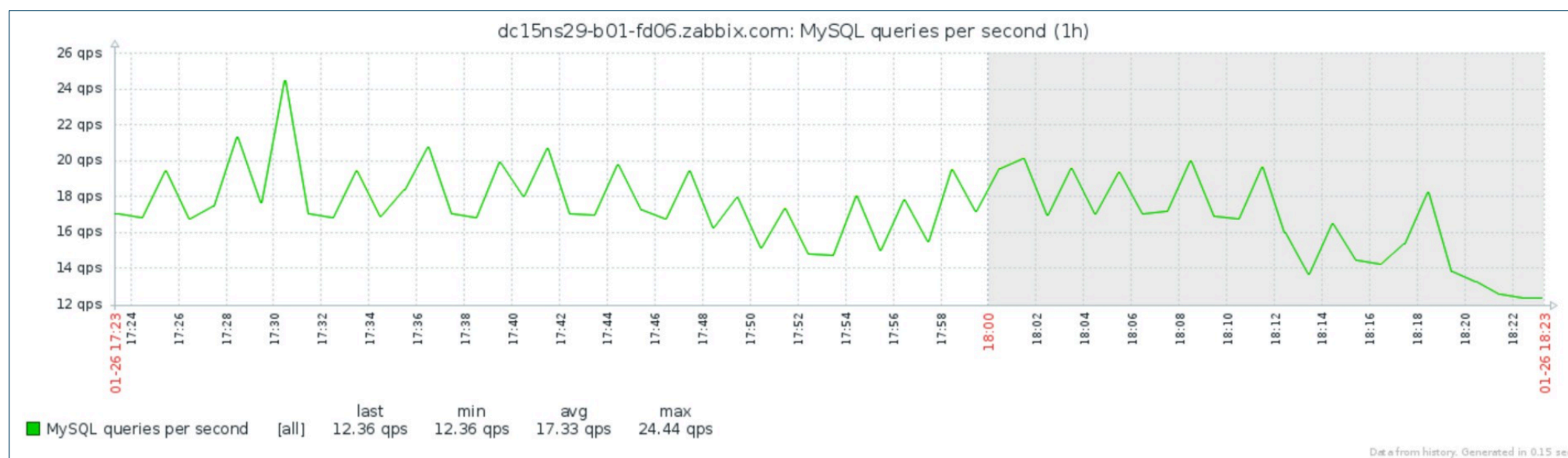
IPMI

ODBC



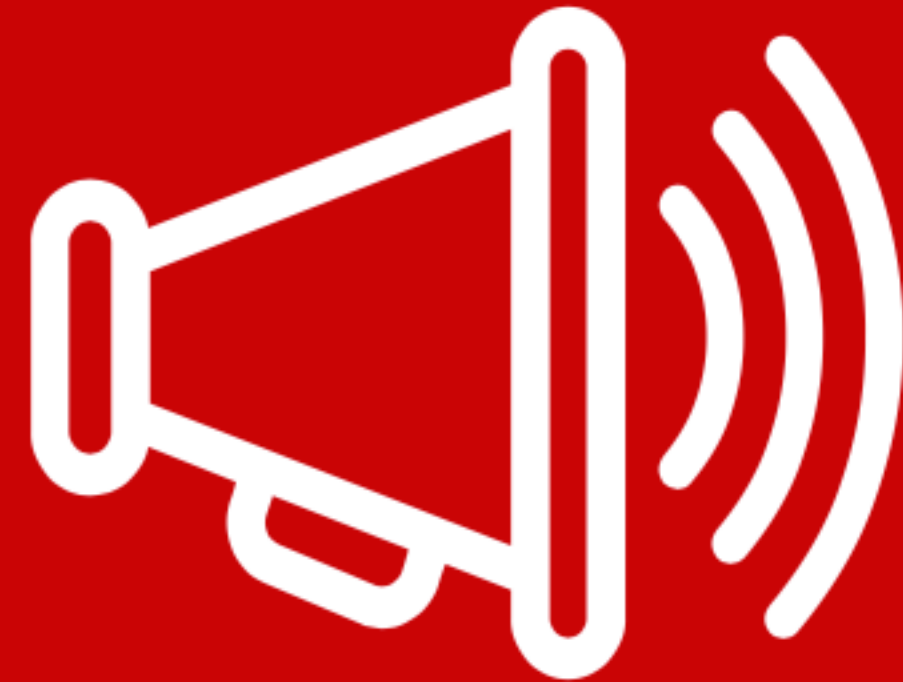
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Le résultat



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Comment sont gérées mes alertes ?



Mes déclencheurs

Le déclencheur est la définition d'un problème

Mes déclencheurs

Syntaxe

`{host:key.function(param)}=0`

`{zabbix:system.cpu.load.avg(600)}>5`

Opérateurs et fonctions

Non limité à un seul hôte ou un seul élément

`{host1:item1}=1 and {host2:item2}>3 or
{host3:item3}<0`

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Mes déclencheurs

- L'utilisation CPU est trop importante
`system.cpu.load.avg(600)>5`
- Mon serveur est injoignable
`agent.ping.last(600)=0`
- Mon application ne fonctionne pas
- Ma base de données ne répond plus
- ...

Les tags



Les Tags

**donnent la capacité de basculer la
supervision d'une vue centrée sur l'hôte
à une vue centrée sur **le service****

ZABBIX

Les Tags

Mais ce n'est pas seulement limité aux **services mais applicable à différentes dimensions**

Service : Oracle

Environment : Production

Environment : Staging

Datacenter : NY2

User impact : None

User impact : Critical

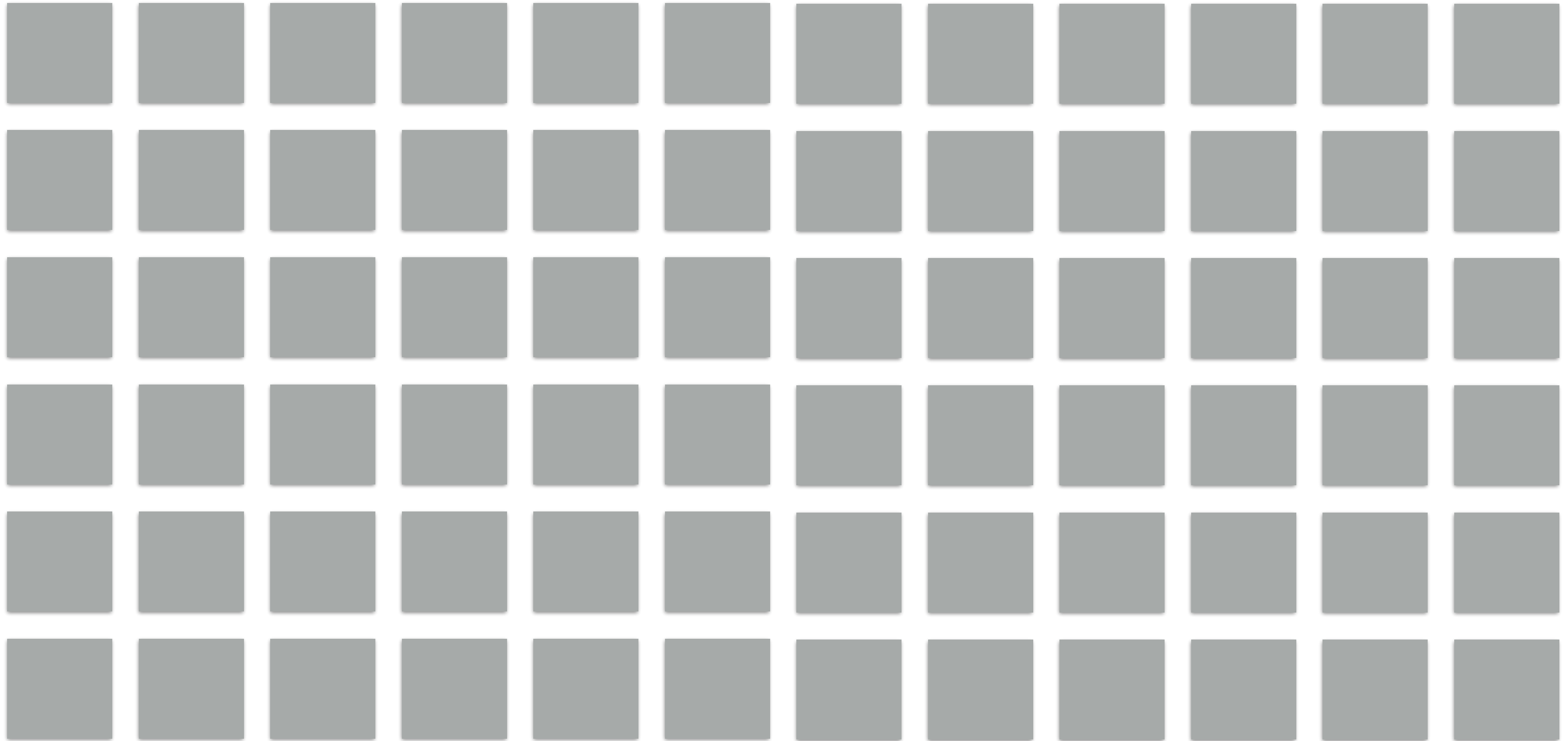
Area : Performance

Area : Availability

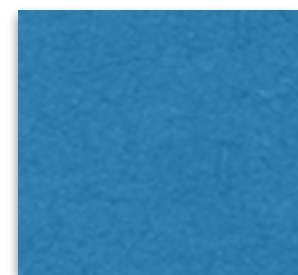
Area : Security

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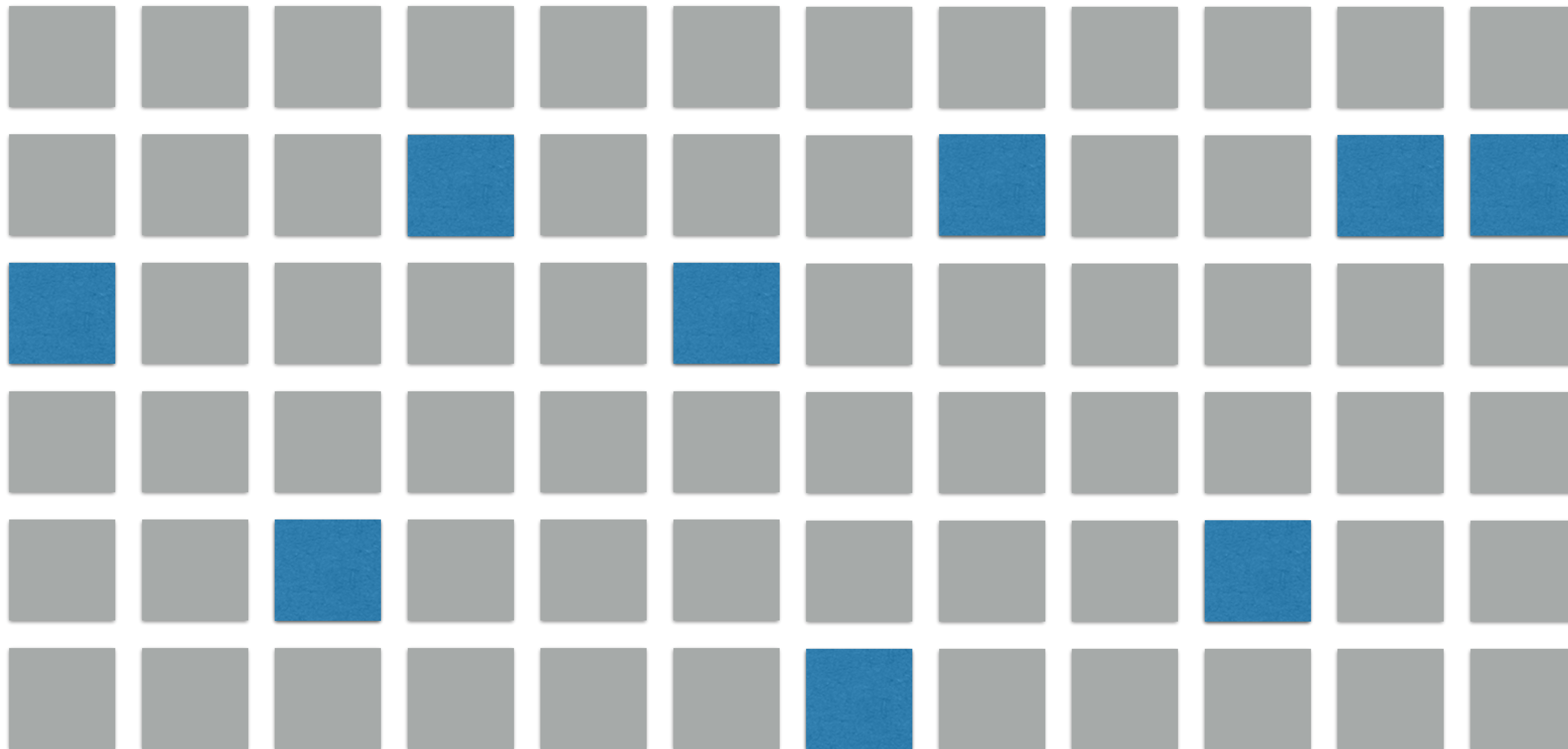
Détection de plusieurs problèmes



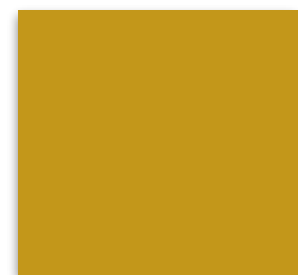
ZABBIX



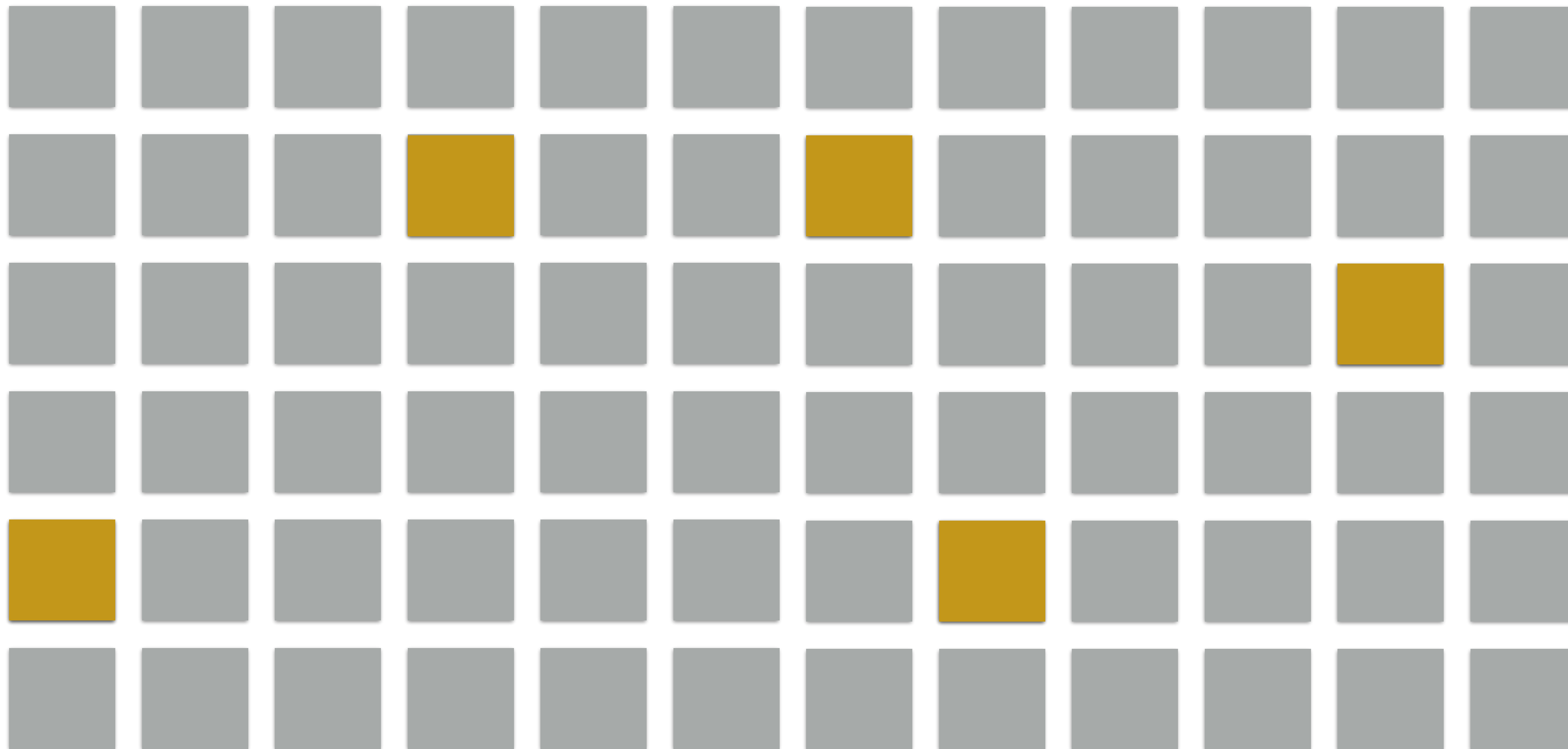
Par environnement : **Production**



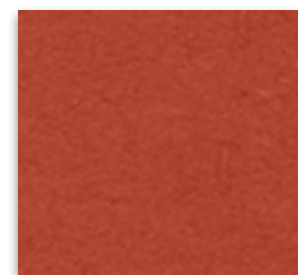
ZABBIX



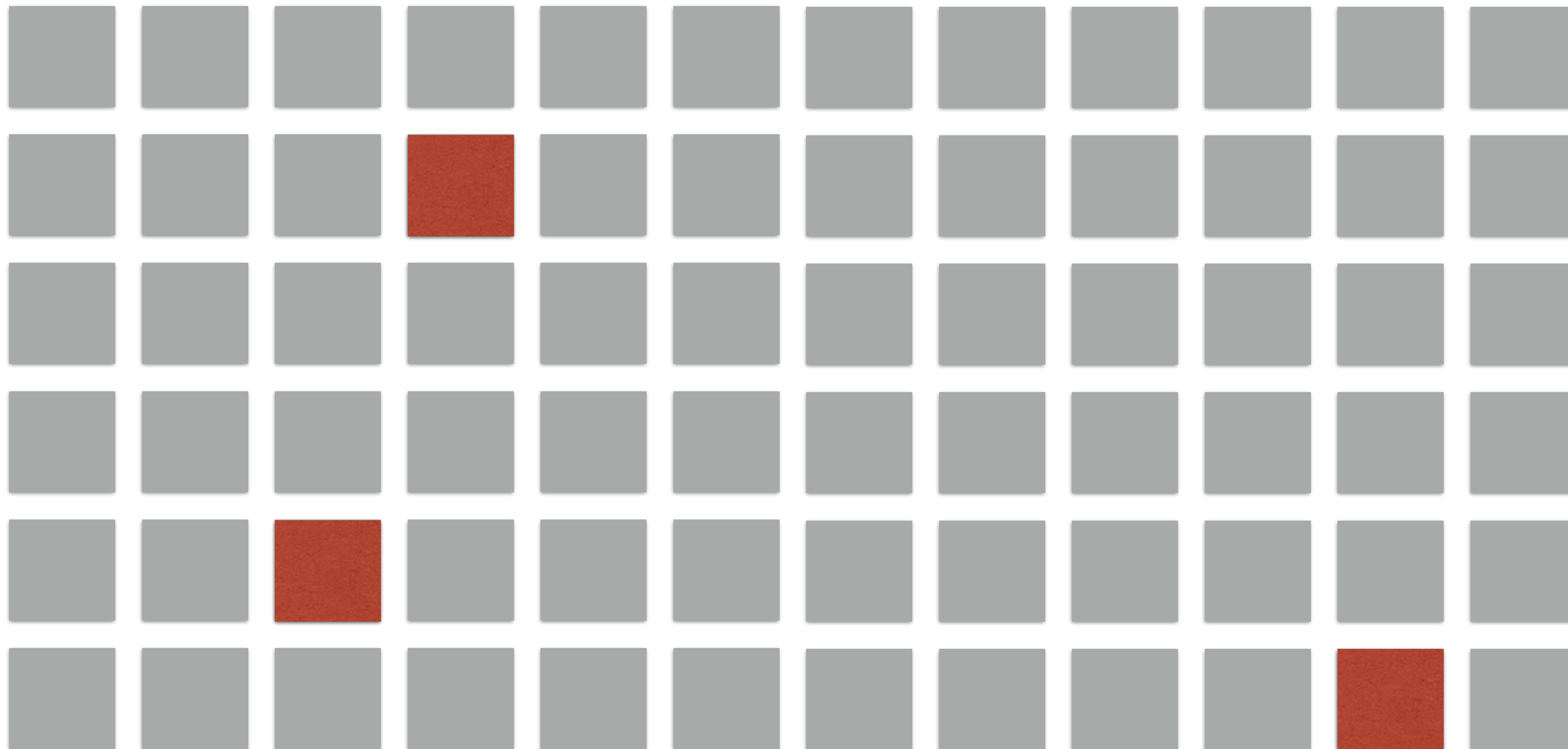
Par centre de données : **NY2**



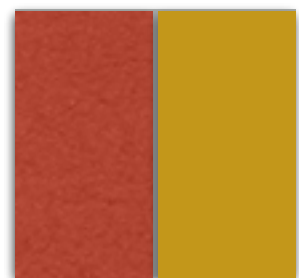
ZABBIX



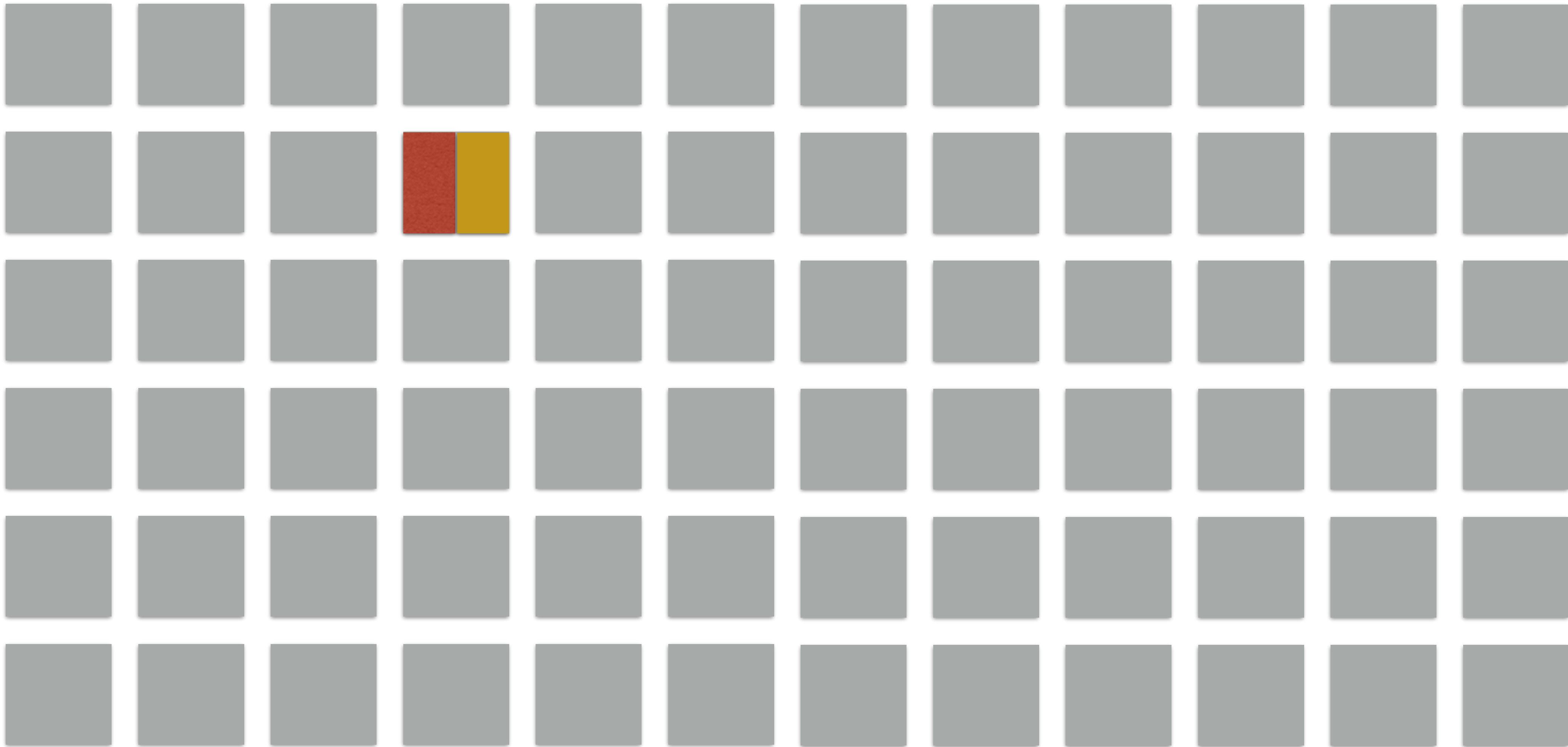
Par impact : Critique



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Par impact **Critique** ET à **NY2**



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Comment je visualise ?



Dashboard



Favourite maps

[Local network](#)

[Maps](#)

Favourite graphs

[New host: CPU load](#)

[Graphs](#)

Favourite screens

[Zabbix server](#)

[Screens](#) [Slide shows](#)

Last 20 issues

HOST	ISSUE	LAST CHANGE	AGE	INFO	ACK	ACTIONS
New host	CPU load too high on 'New host' for two minutes	2016-02-12 08:50:19	22s		No	1
New host	New host has just been restarted	2016-02-12 08:47:59	2m 42s		No	1
Zabbix server 1	Zabbix server 1 has just been restarted	2016-02-12 08:46:31	4m 10s		No	1
Zabbix server 1	Lack of free swap space on Zabbix server 1	2015-08-11 23:29:28	6m 4d 10h		Yes	4

4 of 4 issues are shown Updated: 08:50:41

System status

HOST GROUP	DISASTER	HIGH	AVERAGE	WARNING	INFORMATION	NOT CLASSIFIED
Clouds	0	0	0	0	0	0
Database servers	0	0	0	0	0	0
Discovered hosts	0	0	0	1	1	0
JB applications	0	0	0	0	0	0
Linux servers	0	1	0	0	1	0
Network devices	0	0	0	0	0	0
SNMP hosts	0	0	0	0	0	0
Virtual machines	0	0	0	0	0	0
Web servers	0	0	0	0	0	0
Windows servers	0	0	0	0	0	0
Zabbix servers	0	0	0	1	1	0

Updated: 08:50:40

Host status

Status of Zabbix

PARAMETER	VALUE	DETAILS
Zabbix server is running	Yes	localhost:10051
Number of hosts (enabled/disabled /templates)	54	10 / 1 / 43
Number of items (enabled/disabled/not supported)	356	350 / 0 / 6
Number of triggers (enabled/disabled [problem/ok])	95	94 / 1 [4 / 90]
Number of users (online)	3	2
Required server performance, new values per second	4.79	

Updated: 08:50:40

Discovery status

DISCOVERY RULE	UP	DOWN
Local network2	19	1

Updated: 08:50:39

Web monitoring

HOST GROUP	OK	FAILED	UNKNOWN
Discovered hosts	1	0	0
Zabbix servers	1	0	0

Updated: 08:50:40

Problems

Export to CSV



Filter

Time	☐	Severity	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
11:59:31 AM	☐	Average		PROBLEM		Linux900	Too many queries per second	1m 23s	Yes 1	Done 1	Datacenter: NY1 Env: Production Service: HTTP balancer
11:58:55 AM	☐	Average		PROBLEM		Linux902	Too many transactions per second	1m 59s	No	Done 1	Datacenter: FR2 Env: Staging Service: Oracle
11:00											
10:13:32 AM	☐	High		PROBLEM		Linux009	Service RestAPI stopped	1h 47m 22s	Yes 1		Datacenter: FR2 Env: Staging Service: RestAPI
10:11:06 AM	☐	High		PROBLEM		Linux005	Service Redis stopped	1h 49m 48s	Yes 1		Datacenter: FR2 Env: Staging Service: Redis
Today											
09/13/2016 11:01:08 PM	☐	Information		PROBLEM		Linux007	Slow query execution time	12h 59m 46s	No		Datacenter: NY1 Env: Production Service: AWS Dynam...
09/13/2016 10:48:24 PM	☐	Average		PROBLEM		Linux903	Too many transactions per second	13h 12m 30s	No		Datacenter: FR2 Env: Staging Service: Oracle
09/13/2016 10:47:27 PM	☐	Average	11:59:19 AM	RESOLVED		Linux900	Too many queries per second	13h 11m 52s	Yes 2		Datacenter: NY1 Env: Production Service: HTTP balancer
09/13/2016 10:47:04 PM	☐	Average		PROBLEM		Linux009	Too many queries per second	13h 13m 50s	No		Datacenter: NY1 Env: Production Service: HTTP balancer
Yesterday											
09/07/2016 05:09:38 PM	☐	Information		PROBLEM		Linux008	Low CPU utilization on host machines	6d 18h 51m	Yes 1		Datacenter: FR2 Service: Kubernetes
09/07/2016 09:58:08 AM	☐	Average		PROBLEM		Linux001	Too many transactions per second	7d 2h 2m	Yes 1	Failures 1	Datacenter: FR2 Service: Oracle

Displaying 10 of 10 found

0 selected

Bulk acknowledge

Maps

Minimum severity

Average



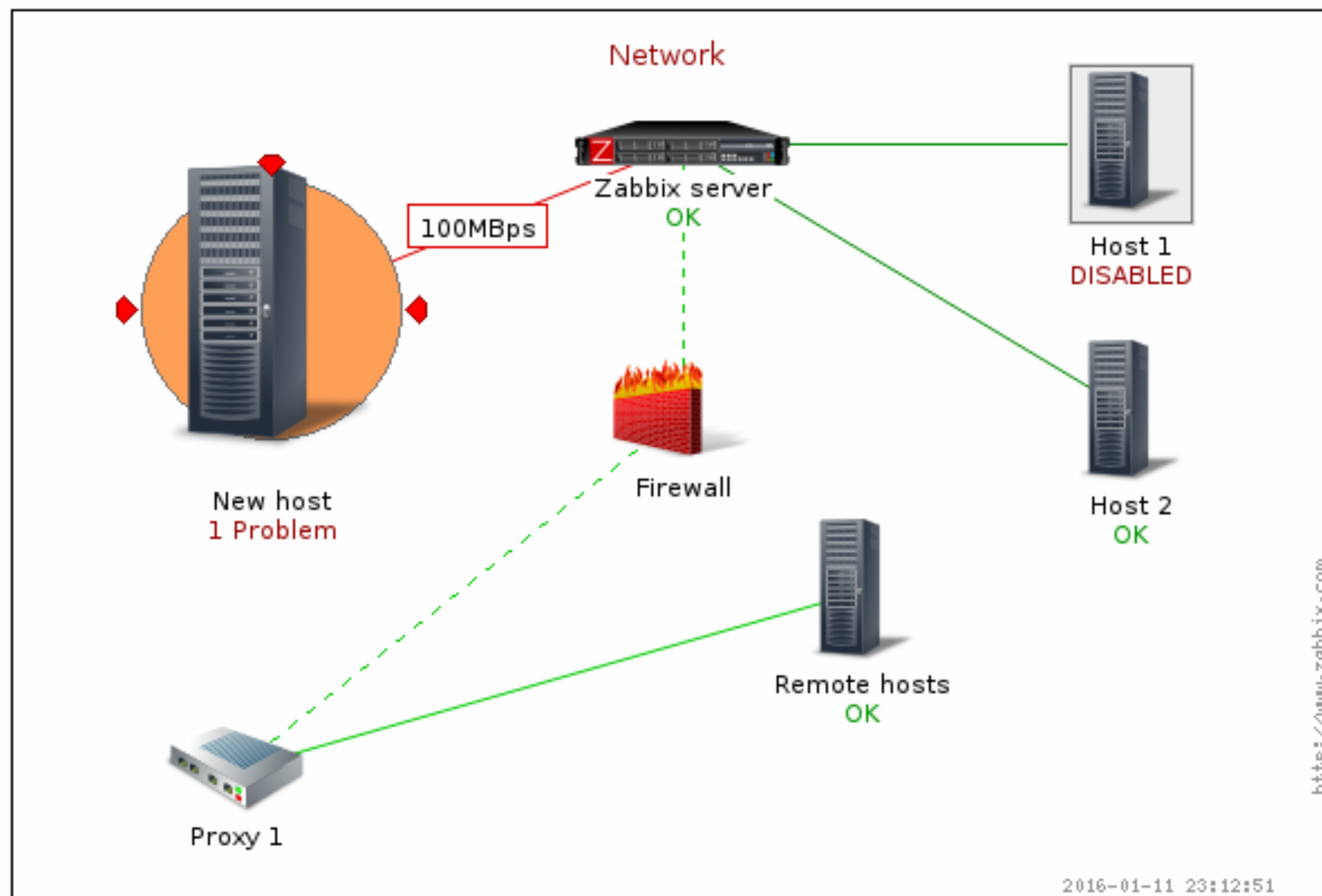
All maps / Network



Problem on New host

Zabbix agent on New host is unreachable
for 5 minutes

2016-01-11 23:12:00



Private cloud #24

Edit dashboard

All dashboards / Private cloud #24

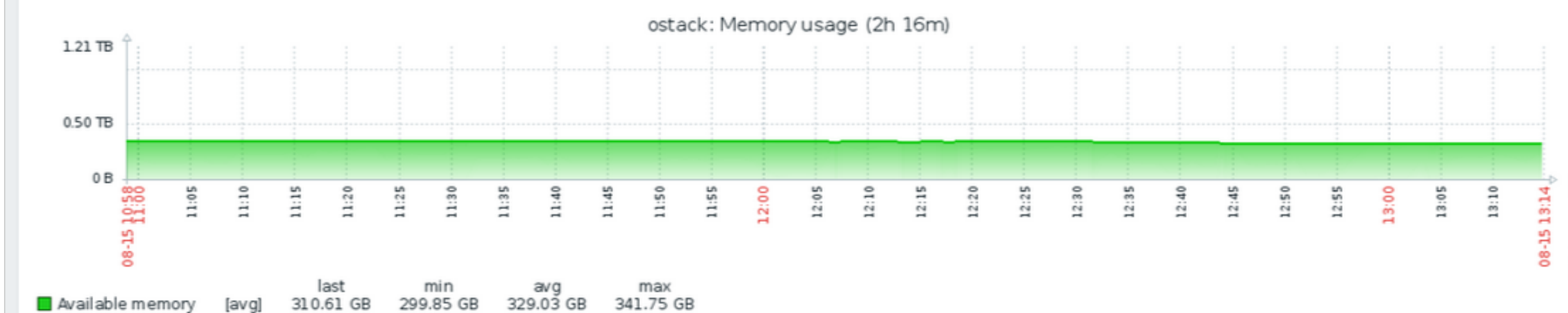
Filter

Problems

Time	Recovery time	Status	Info	Host	Problem • Severity	Duration	Ack	Actions
2017-08-15 13:12:29		PROBLEM		ctrl-01	nova.api.openstack.extensions [req-48052bfe-d299-40d8-bf00-ff7ba66c4f7b jo admin] Unexpected exception in API method	1h 1m 52s	No	Done 2
2017-08-15 12:59:28	13:13:39	RESOLVED		ctrl-01	oslo_messaging.rpc.server [req-9763e632-a536-49d4-8393-702b8de759b4 admin admin] Exception during message handling	14m 11s	Yes	Done 2
2017-08-15 12:49:25		PROBLEM		compute-04	Failed to spawn container "instance-0000004"	24m 56s	Yes	Done 2
2017-08-15 12:49:25		PROBLEM		instance-0000004	Instance failed to spawn	24m 56s	Yes	Done 2
2017-08-15 10:38:11	12:27:53	RESOLVED		ctrl-01	nova.api.openstack.extensions [req-aae9f648-55ac-4b7d-a07a-0e013aca41d7 admin admin] Unexpected exception in API method	1h 49m 42s	Yes	Done 2
2017-08-15 10:13:00	12:25:12	RESOLVED		ctrl-01	Migration of instance 444d8e8a-d238-46d9-adc2-242d18173d62 to host compute-07 unexpectedly failed	2h 12m 12s	Yes	Done 2
2017-08-15 09:55:54	10:46:37	RESOLVED		ctrl-01	neutron.agent.ovsdb.impl_vscf [req-0c62a340-d78e-49fb-a813-6b7060967368 None None] Unable to execute: constraint violation	50m 43s	Yes	Done 2
2017-08-15 09:55:05	10:43:41	RESOLVED		ctrl-01	nova.api.openstack.extensions [req-40cbda84-960e-425c-868e-c315552a90b2 admin admin] Unexpected exception in API method	48m 36s	Yes	Done 2

6 of 162 problems are shown Updated: 13:14:21

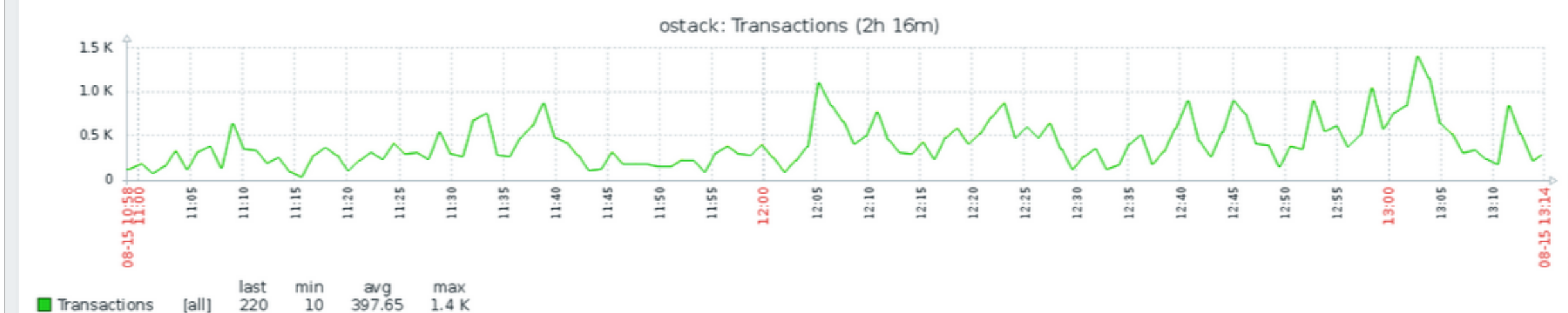
Server memory usage



Data from history. Generated in 0.04 sec.

Updated: 13:14:21

Transactions per second

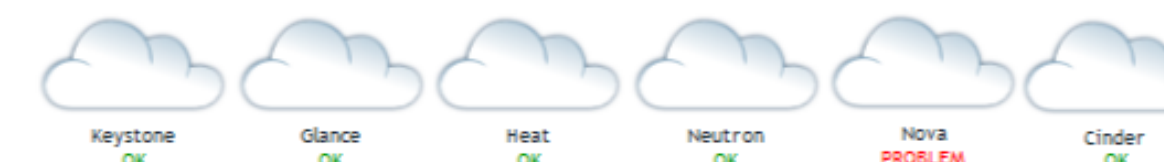


Data from history. Generated in 0.07 sec.

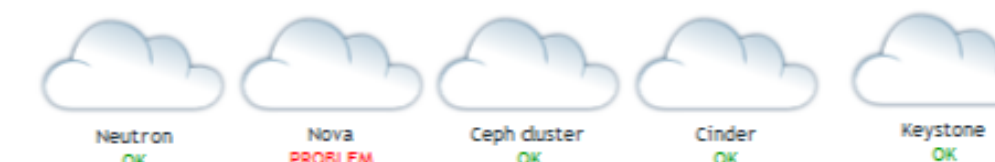
Updated: 13:14:21

Open Stack Private Cloud #24

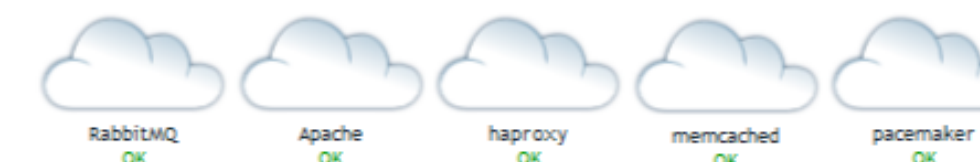
OpenStack Control Plane



OpenStack Data Plane

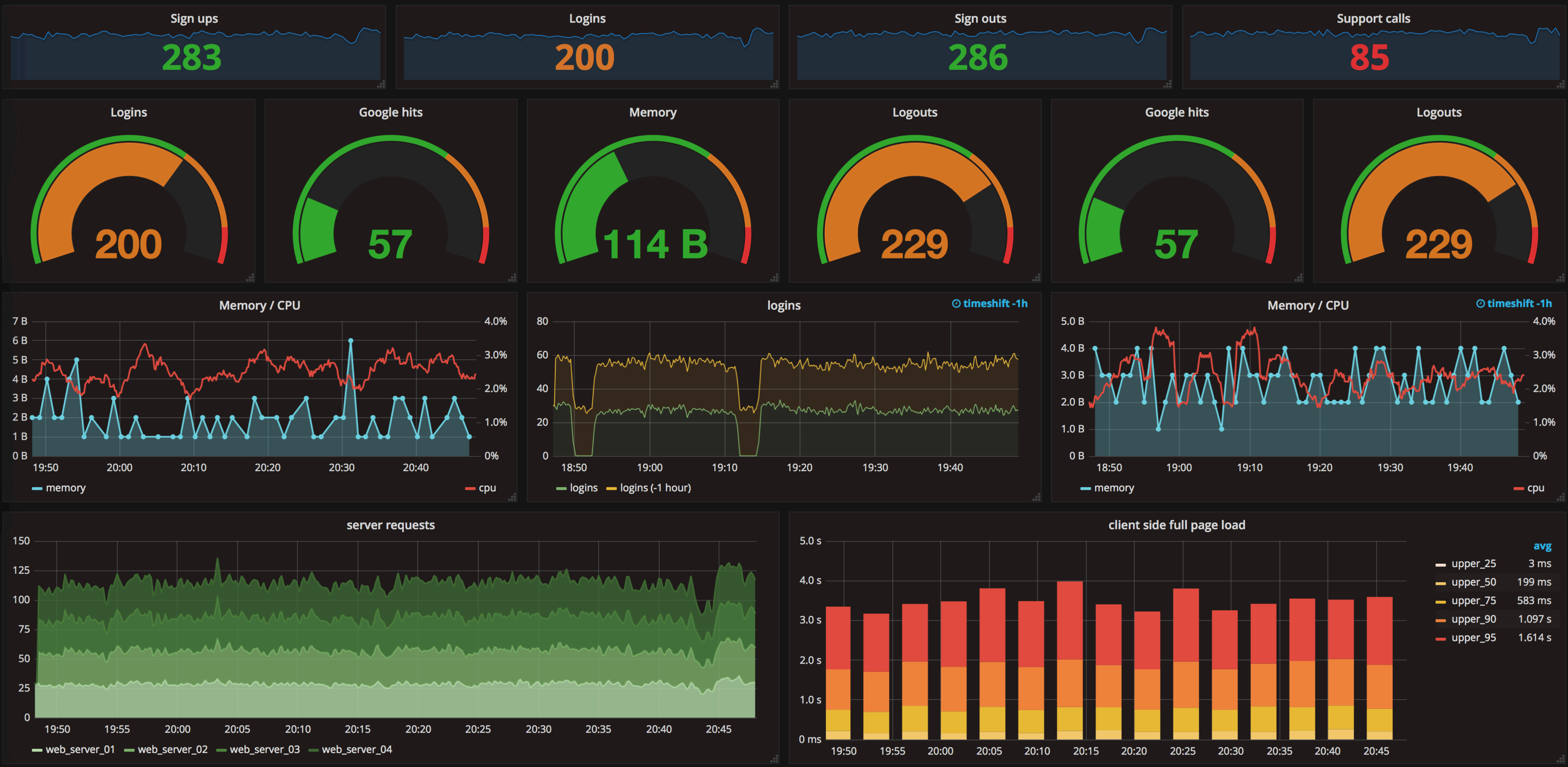


Middleware



2017-08-15 13:14:21

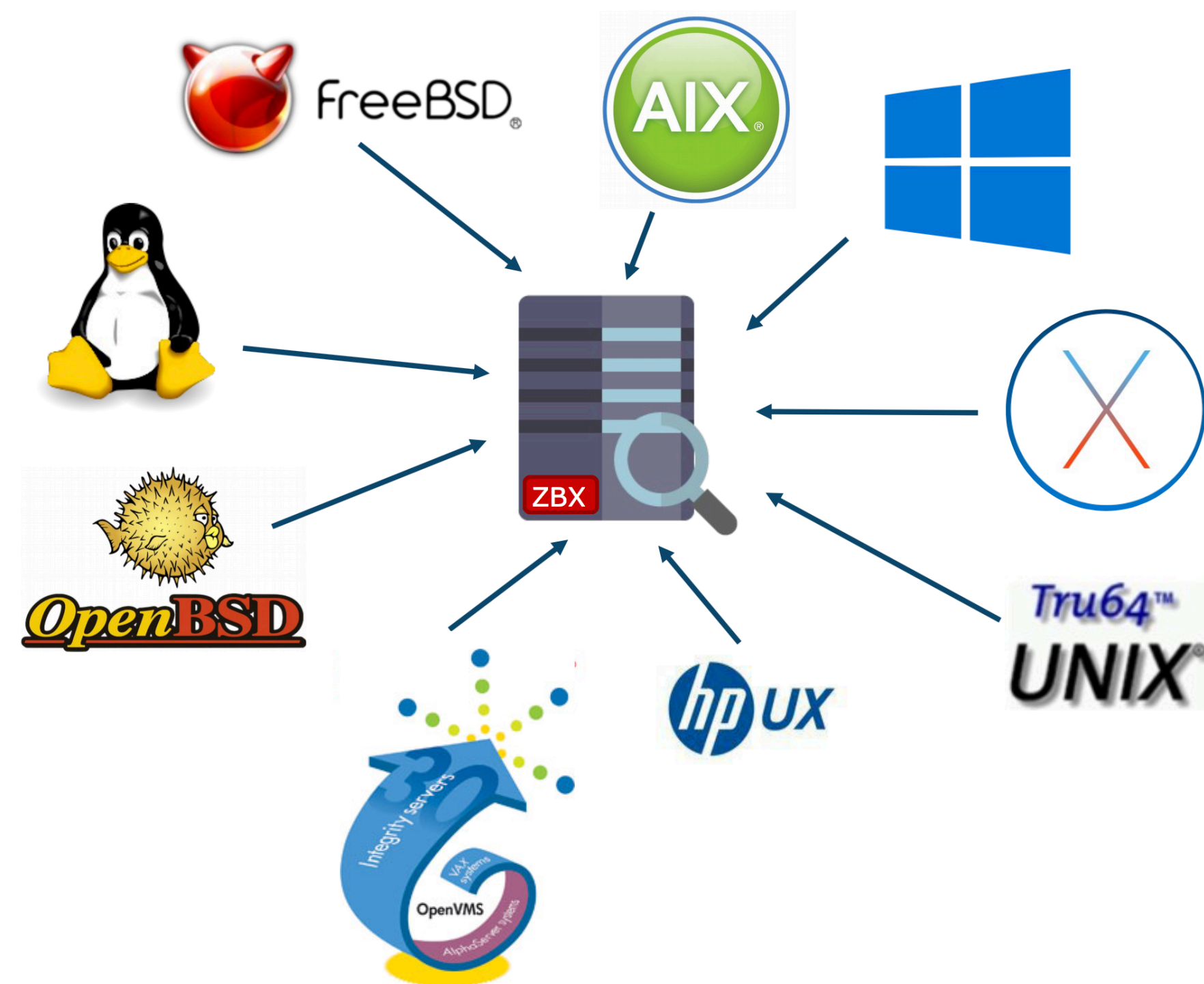
Updated: 13:14:21



Comment ?



Via un agent



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Questions ?

Merci !

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