



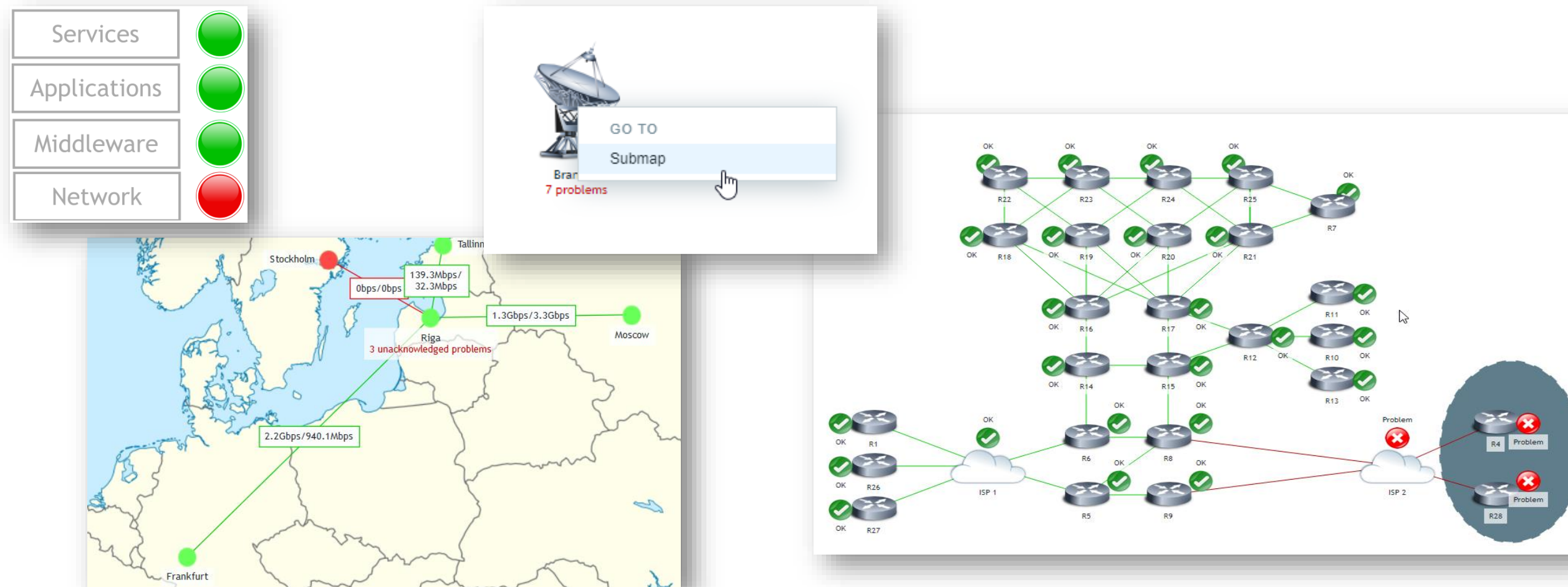
ZABBIX MAPS

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TECHNICAL SUPPORT ENGINEER



MAPS?

- Graphical representation of real-time data (e.g. load, bandwidth, connectivity, etc.) – grasp the data status at once



- If an event occurs, icon status or link color on the map is changed automatically
- Access to scripts, as well as links to other pages
- Possible to create multi-level hierarchy

MAPS CREATION

Network maps

Map [Sharing](#)

* Owner [Select](#)

* Name

* Width

* Height

Background image [No image](#)

Automatic icon mapping [show icon mappings](#)

Icon highlight ☐

Mark elements on trigger status change ☐

Display problems

Advanced labels ☐

Map element label type

Map element label location

Problem display

Minimum severity

Show suppressed problems ☐

URLs

Name	URL	Element	Action
<input type="text"/>	<input type="text"/>	Host	Remove

[Add](#)

Monitoring – Maps – Create map

- Specify required (*) fields
- Think about background image (no scaling!)
- Problems? Display them!
- Do you want advanced labels?

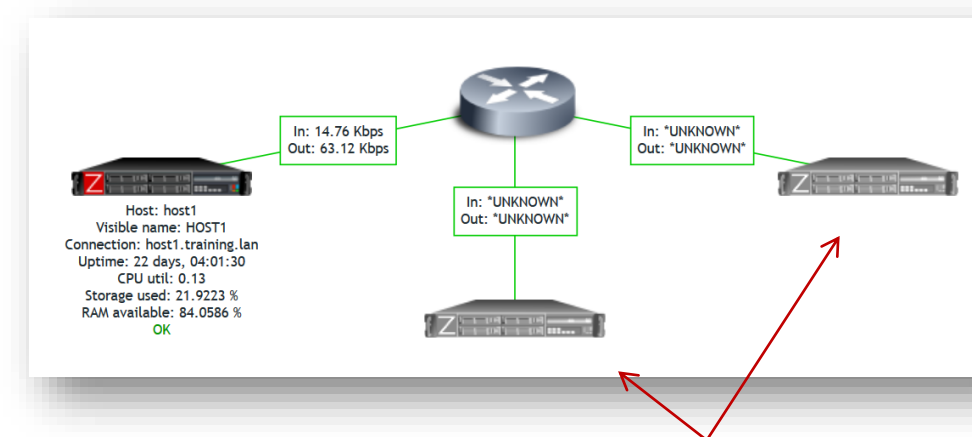
MAPS PERMISSIONS

- All users are open to create their maps in Zabbix
- Owner – a user who created them
- Maps are either public or private:
 - **PUBLIC** maps are visible to all. They respect general Zabbix permissions (access to at least one map element is required). Can be edited in case user or user group has rights
 - **PRIVATE** maps are visible only to their owner and the users/user groups the map is shared with

The screenshot shows the 'Map' tab with a 'Sharing' sub-tab. It features two sections for managing permissions:

- List of user group shares:** A table with columns 'User groups', 'Permissions', and 'Action'. It shows a group named 'Production (Read)' with 'Read-only' permissions selected. Below the table is an 'Add' button.
- List of user shares:** A table with columns 'Users', 'Permissions', and 'Action'. It shows a user named 'meggy.wilson (Meggy Wilson)' with 'Read-write' permissions selected. Below the table is an 'Add' button.

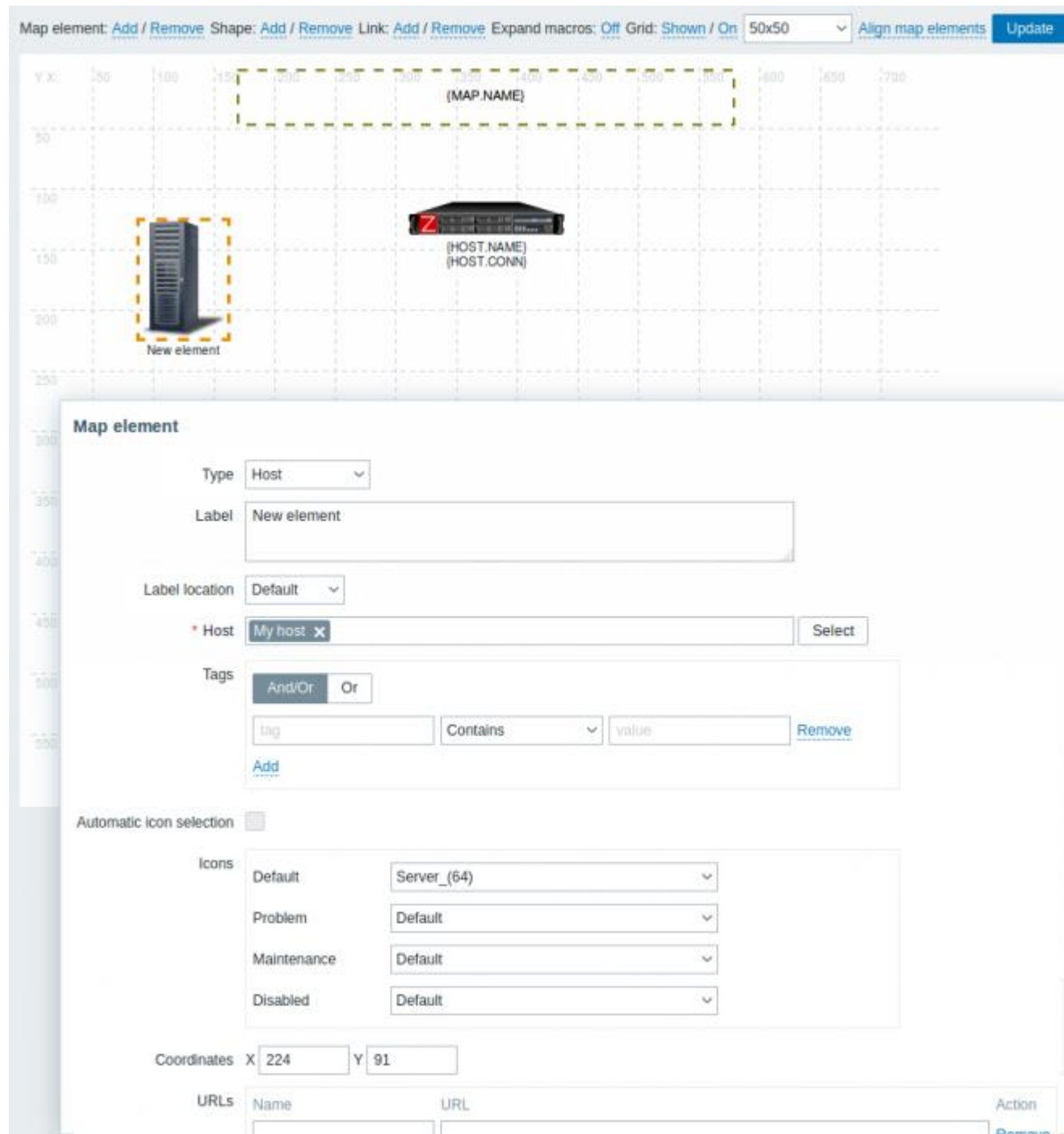
At the bottom of the interface are buttons for 'Update', 'Clone', 'Full clone', 'Delete', and 'Cancel'. Red text annotations are present: 'User group permissions' points to the first table, and 'Individual user permissions' points to the second table.



Lack of Zabbix permissions for user

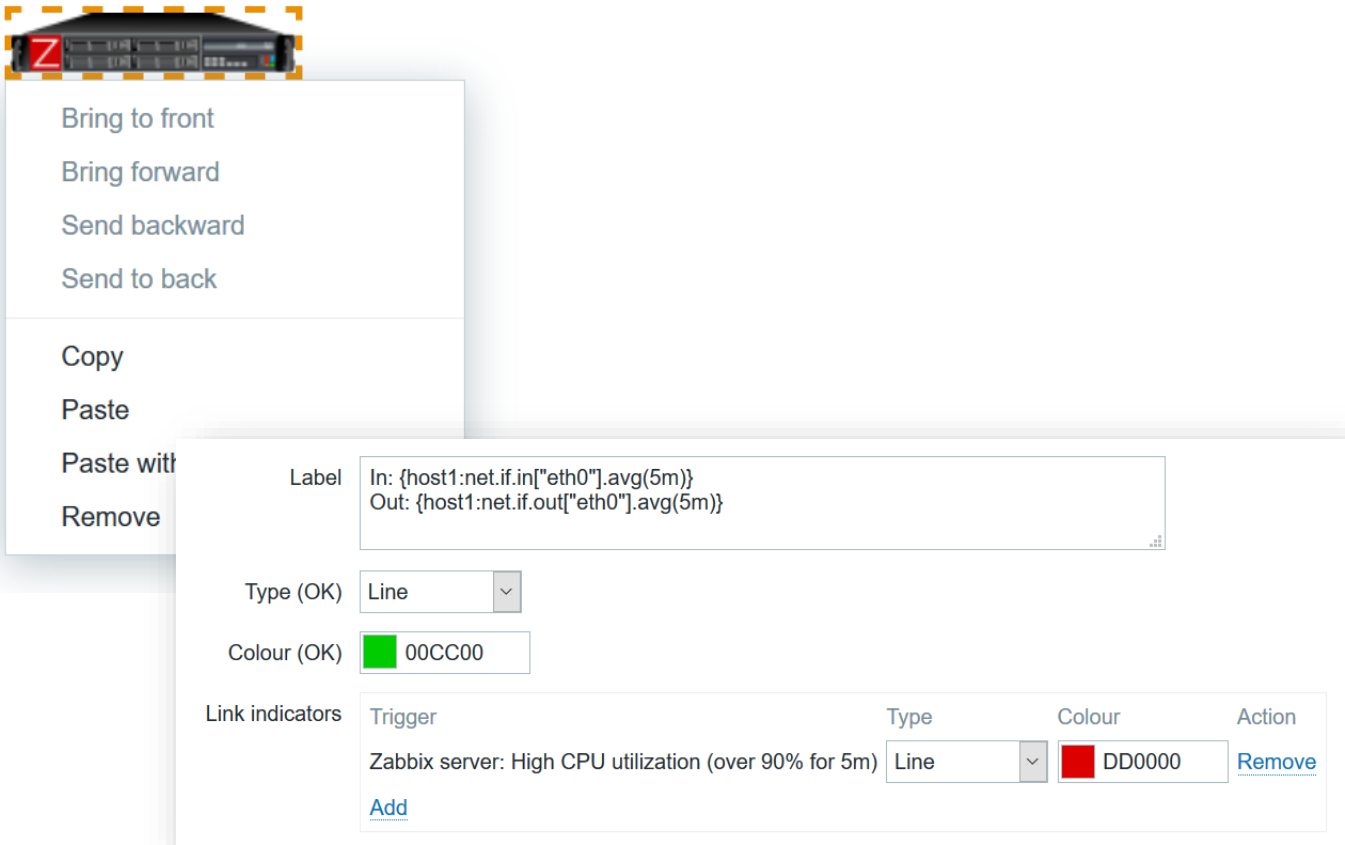
Greyed out icon and hidden textual information.
Trigger label is visible even if the user has no permissions to the trigger.

ADDING ELEMENTS



- Add or remove
 - **Elements** (host, host group, images, maps, triggers)
 - Each with its own set of properties
 - **Shapes** (rectangle, ellipse, line)
 - Customize border or background, look, layout, size and etc.
 - **Links**
 - Customize the look and the label
 - Can use triggers to change its color
- Use Icon mapping to simplify setup

Mouse right click opens a menu
You can select multiple elements (also with CTRL key)



ADDING VISUAL EFFECTS


Maps

Minimum severityNot classified (default)Edit map


All maps / Training map: Main

Shape1 heading using macro to display maps name:
Training map: Main


Shape2: Map elements




Map - Link to another map
OK




Just an image



Host with macros:
Zabbix server
127.0.0.1
21 days, 23:47:17
0.14
High swap space usage (less than 50% free)



Host group
Training/Servers
CPU Load is very high on Training-VM-XX
2 problems



Trigger:
All triggers for Zabbix Server
High swap space usage (less than 50% free)

Can link to another map

Can use {MACRO} in the label to show real-time data

Can show the state of the host group

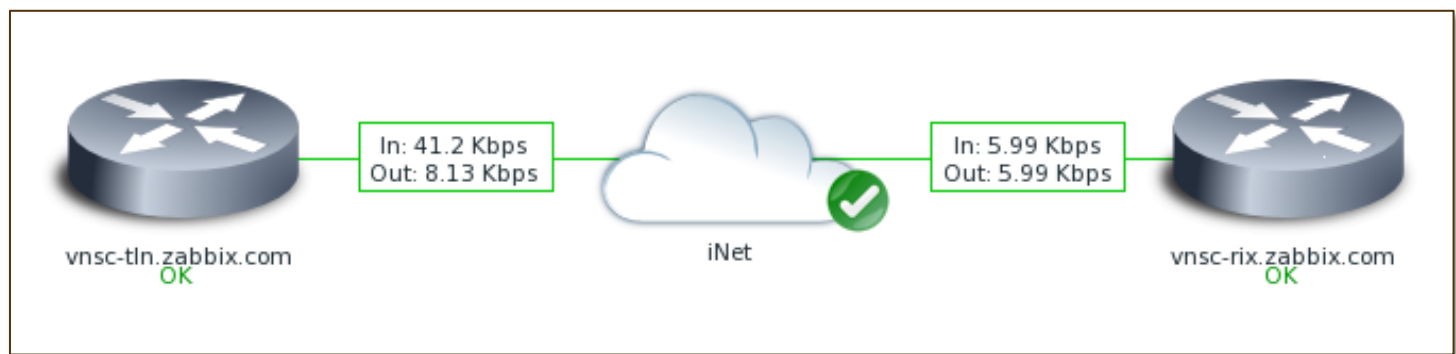
Can show the state of the trigger

2020-05-07 17:00:46

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ADDING CONNECTIONS AND LINKS



- You may create a link between two elements, specify its attributes (labels, colors, coordinates, etc.)
- The `{host:key.func(param)}` macro is supported in this field, but only with **avg**, **last**, **min** and **max** trigger functions, with *seconds* as parameter.


Map element

Type: Host

Label:

```
Host: {HOST.HOST}
Visible name: {HOST.NAME}
Connection: {HOST.CONN}
Uptime: {host1:system.uptime.last()}
CPU util: {{HOST.HOST}:system.cpu.load[all,avg5].last()}
Net in/out: {{HOST.HOST}:net.if.in["eth0"].last()} / {{HOST.HOST}:net.if.out["eth0"].last()}
Storage used: {{HOST.HOST}:vfs.fs.size[/,pused].last()}
RAM available: {{HOST.HOST}:vm.memory.size[pavailable].last()}
```

Display values from items for an element (link, host, etc.)



Host: host1
Visible name: HOST1
Connection: 127.0.0.1
Uptime: 22 days, 03:24:30
CPU util: 0.11
Net in/out: 9.74 Kbps / 9.31 Kbps
Storage used: 21.9214 %
RAM available: 85.0515 %

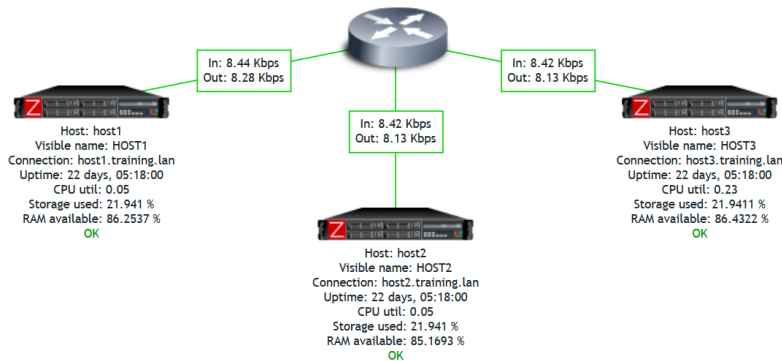
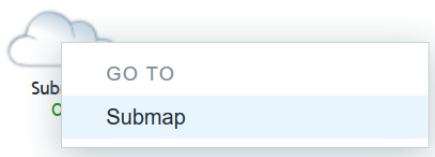
Use a Map element or custom URL to link an icon to another map

Type: Map

Label: Submap

Label location: Default

* Map: Training map: 5 Three hosts with links

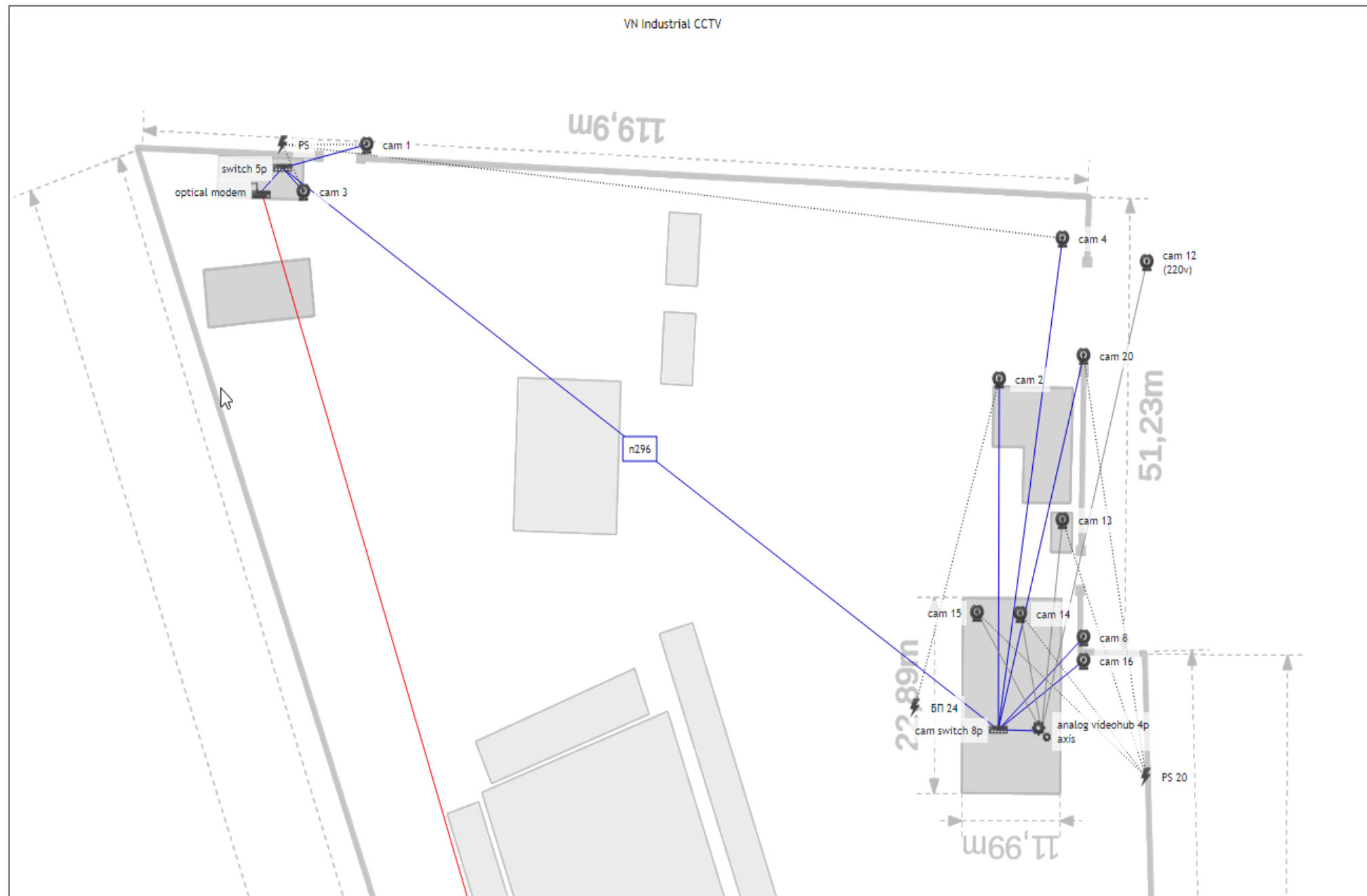


1. Add "Map element"

2. Click on element in map view

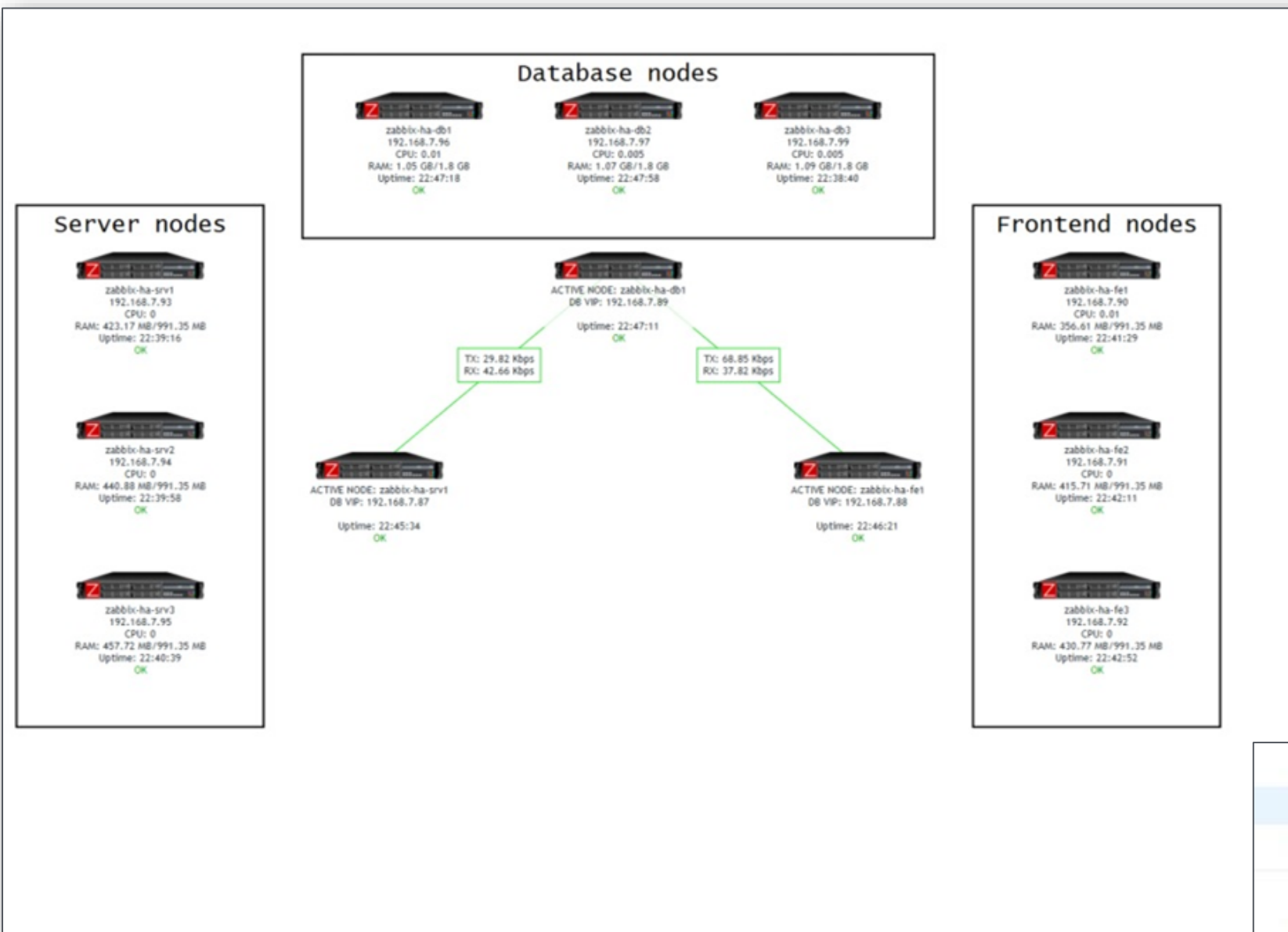
3. Result

EXAMPLE - LOCAL AREA CCTV

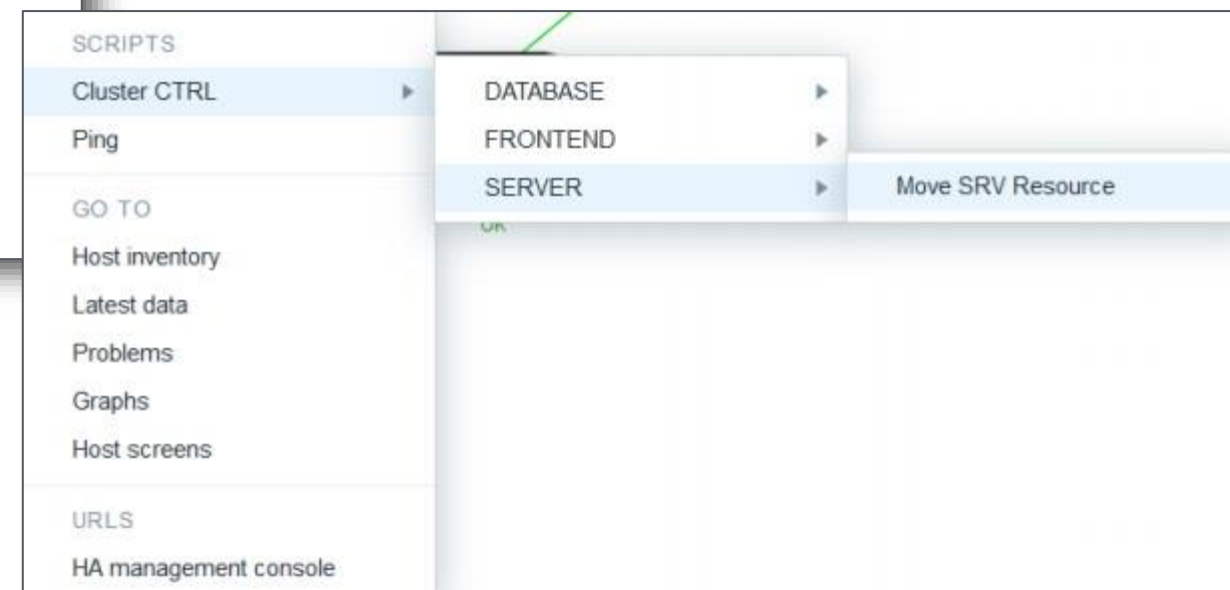


- CCTV big area plan
- Different colors for links
- Custom images for devices
- Buildings, storage, root points

EXAMPLE – HA WITH MENU



- Menu support for map items
- Instant command execution with script support
- Different scripts for Zabbix server, proxy and agent
- No need to switch interface – kiosk mode



EXAMPLE – PROBLEM ICON VIEWS

Select how problems are displayed with a map element:

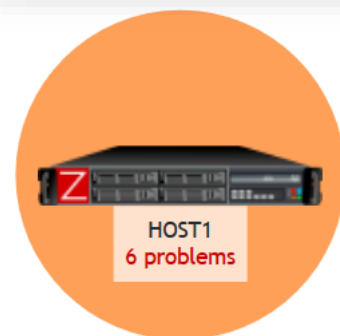
- **Expand single problem** - if there is only one problem, the problem name is displayed. Otherwise, the total number of problems is displayed.
- **Number of problems** - the total number of problems is displayed
- **Number of problems and expand most critical one** - the name of the most critical problem and the total number of problems is displayed.

Display problems

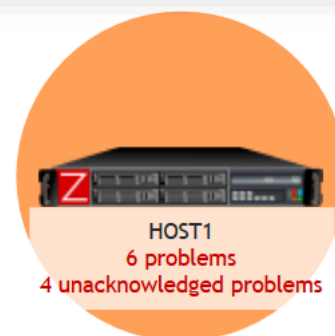
Expand single problem	Number of problems	Number of problems and expand most critical one
-----------------------	--------------------	---

Problem display

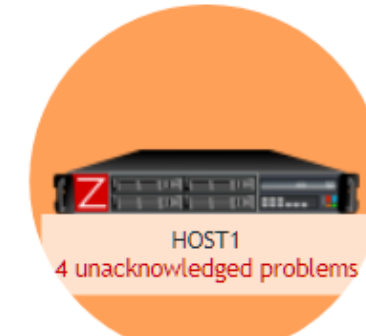
All
All
Separated
Unacknowledged only



All



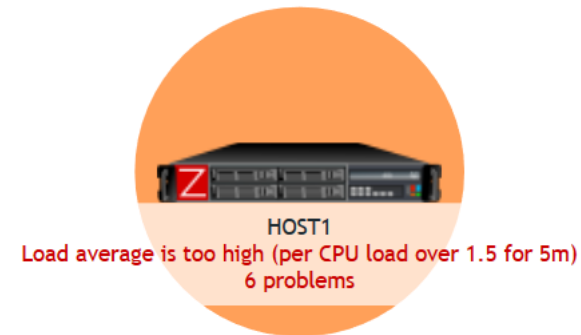
Separated



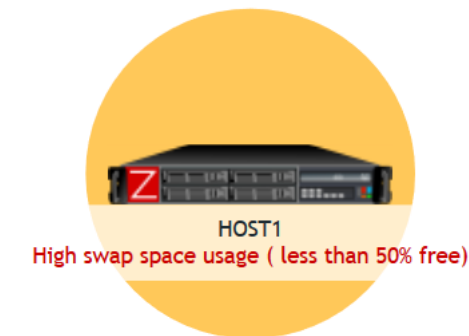
Unacknowledged only



Single problem +
number of
problems



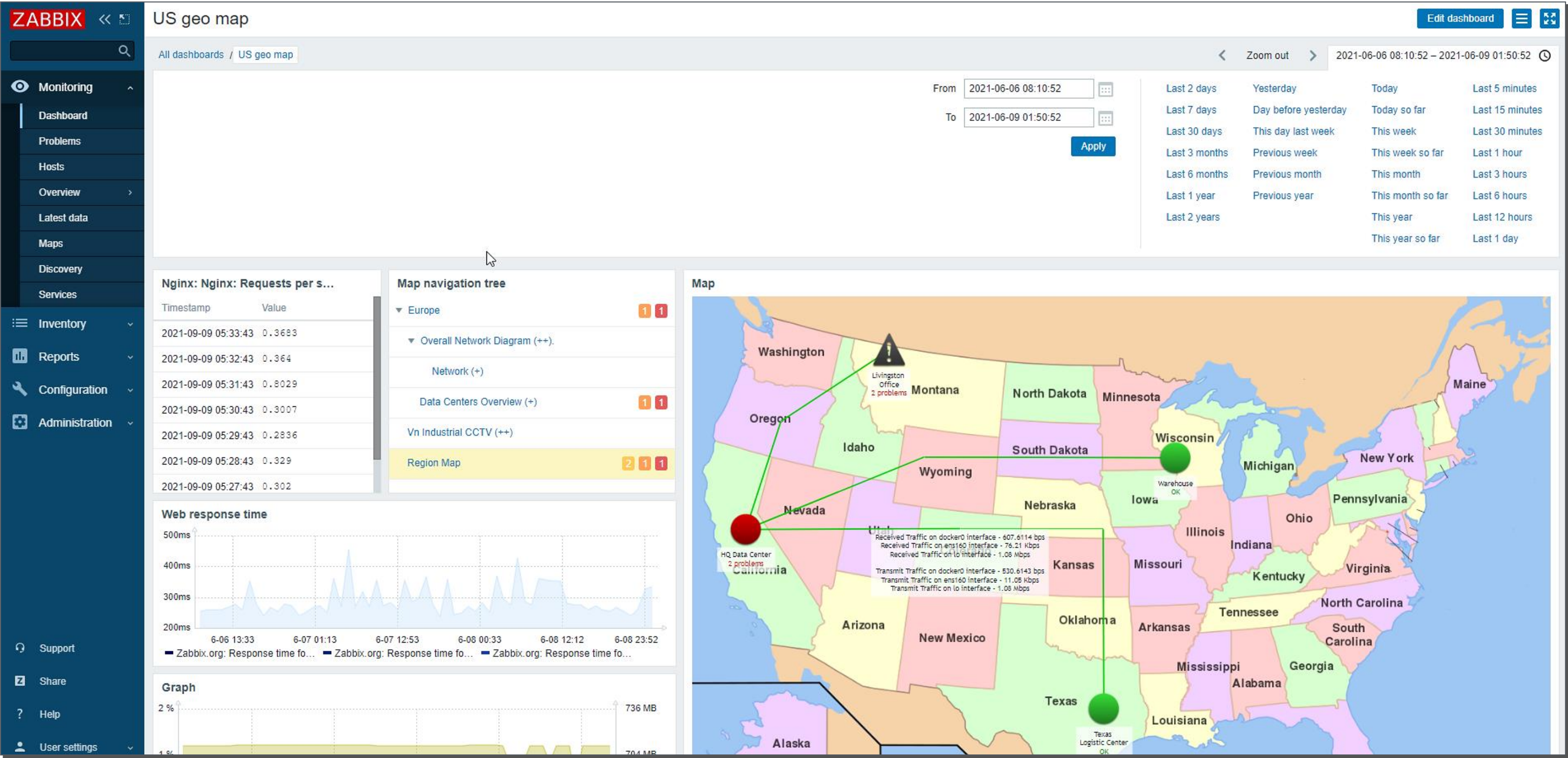
Expand critical
one



Expand single
problem

MAPS AND DASHBOARDS

Maps are easy to integrate into Zabbix dashboards and provide an integral visual experience for your team:



MAPS INTEGRATIONS

You may create, modify, delete and get a number of maps via RESTful Zabbix API calls

Please refer to API documentation for complete description.

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Zabbix Documentation 5.4

5.4 (current)

English

Recent Changes

Zabbix documentation

map.create

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Zabbix Manual

1. Introduction

2. Definitions

3. Zabbix processes

4. Installation

5. Quickstart

6. Zabbix appliance

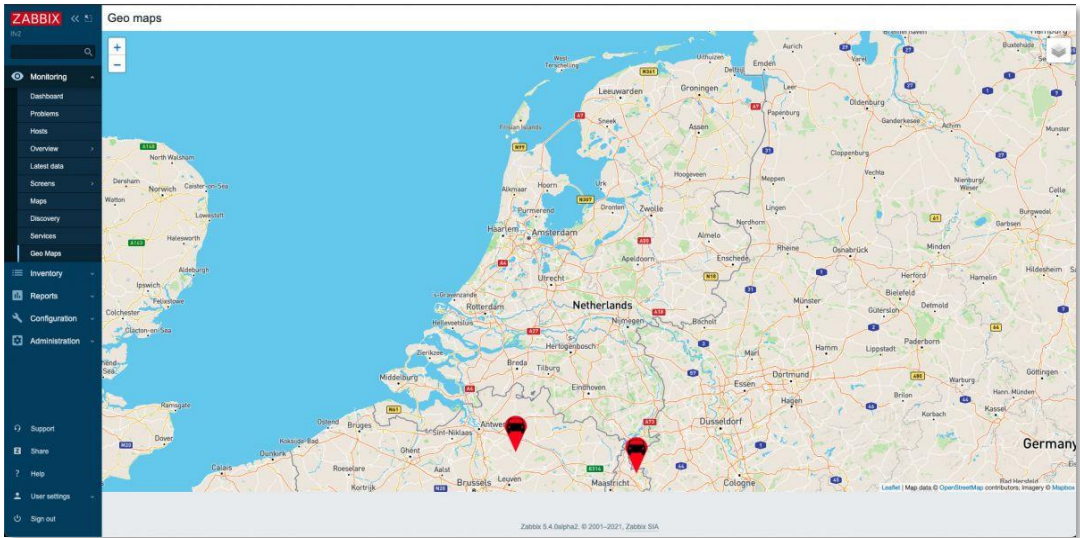
Description

`object map.create(object/array maps)`

This method allows to create new maps.

Note: This method is available to users of any type. Permissions to call the method are checked for the user.

You may find some additional resources (icons, examples, integrations in Zabbix Share website (share.zabbix.com))



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QUESTIONS?

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THANK YOU!