ZABBIX 5.0

(MY PERSONAL...) KEY FEATURES IN DETAIL

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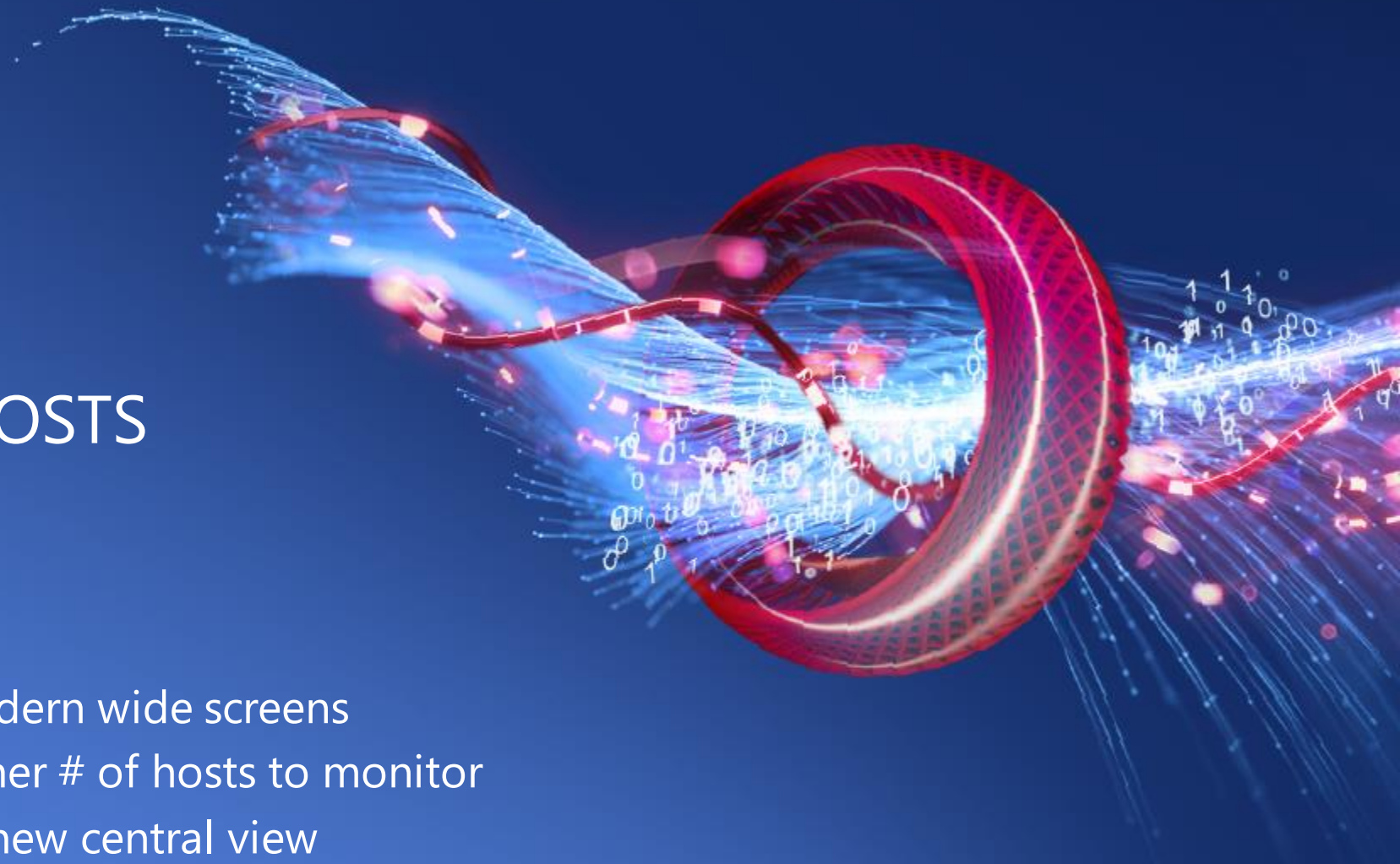
01

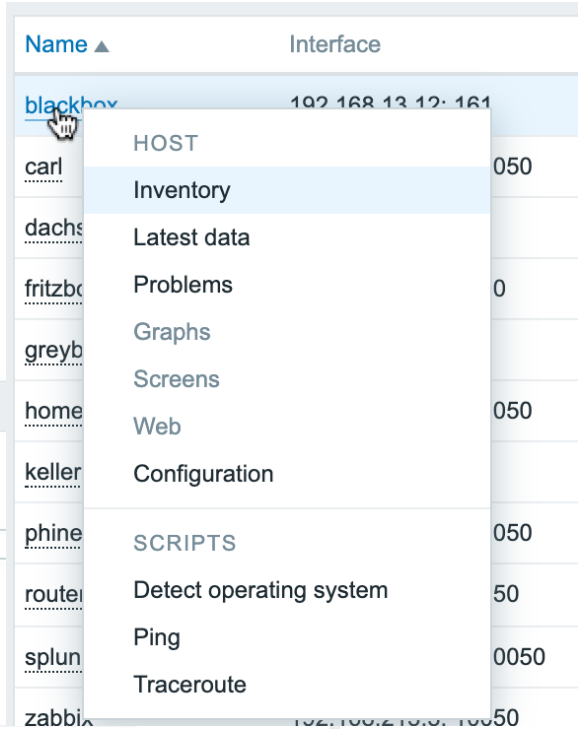


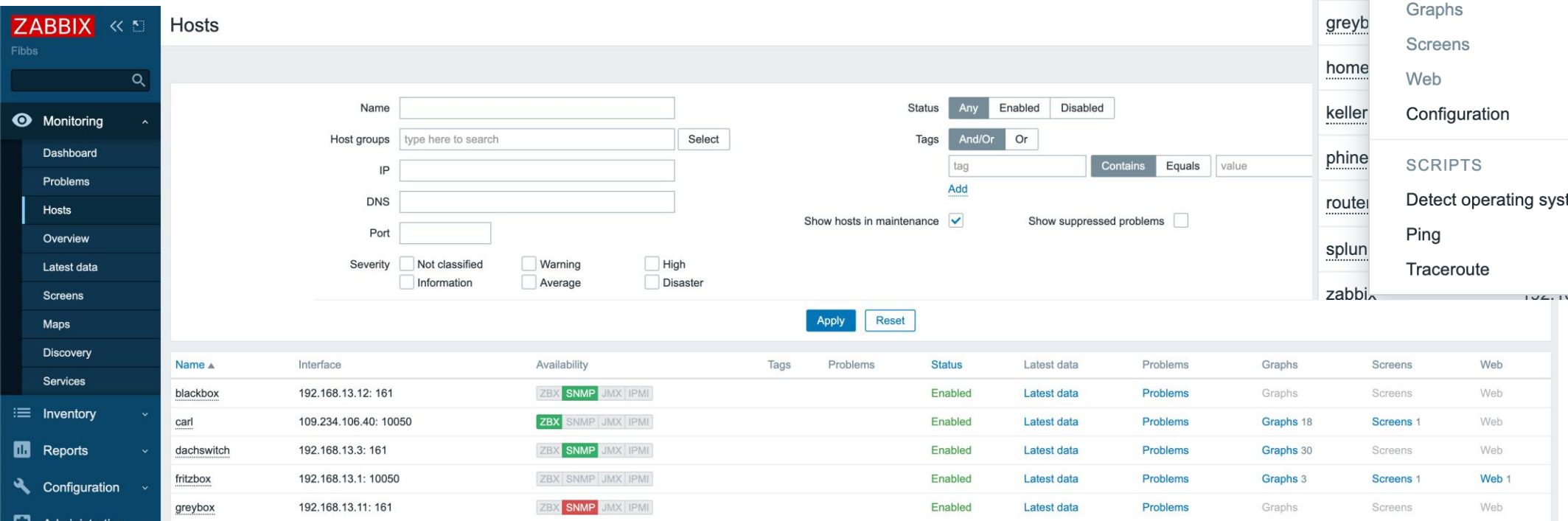
MONITORING → HOSTS AND THE NEW GUI

- New menu respecting modern wide screens
- Changes for handling higher # of hosts to monitor
- Monitoring → Hosts as a new central view
- Minor improvements

LIST OF MONITORED DEVICES
WHERE AM I AND WHAT IS THERE TO SEE?

- Long desired feature
- Overview of non-admins / visibility of Host Availability
- For admins: easier to get from viewing to setting things up and back





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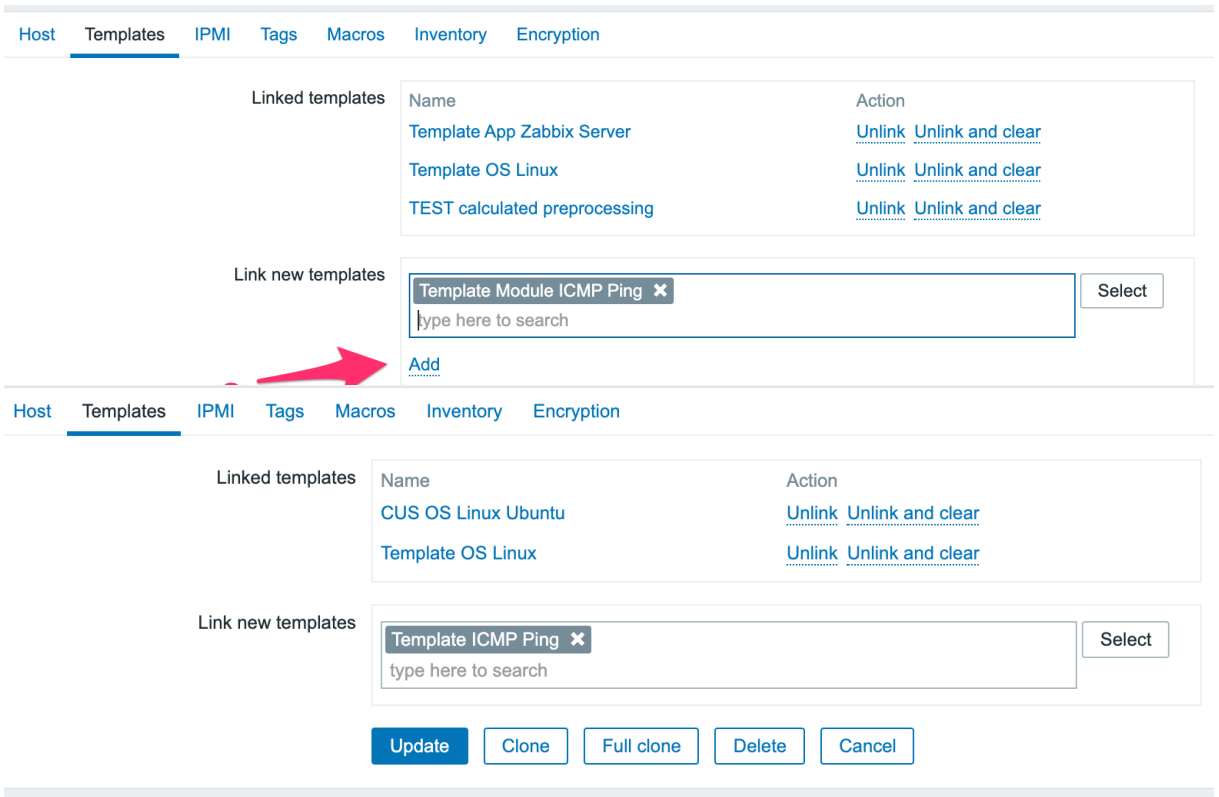
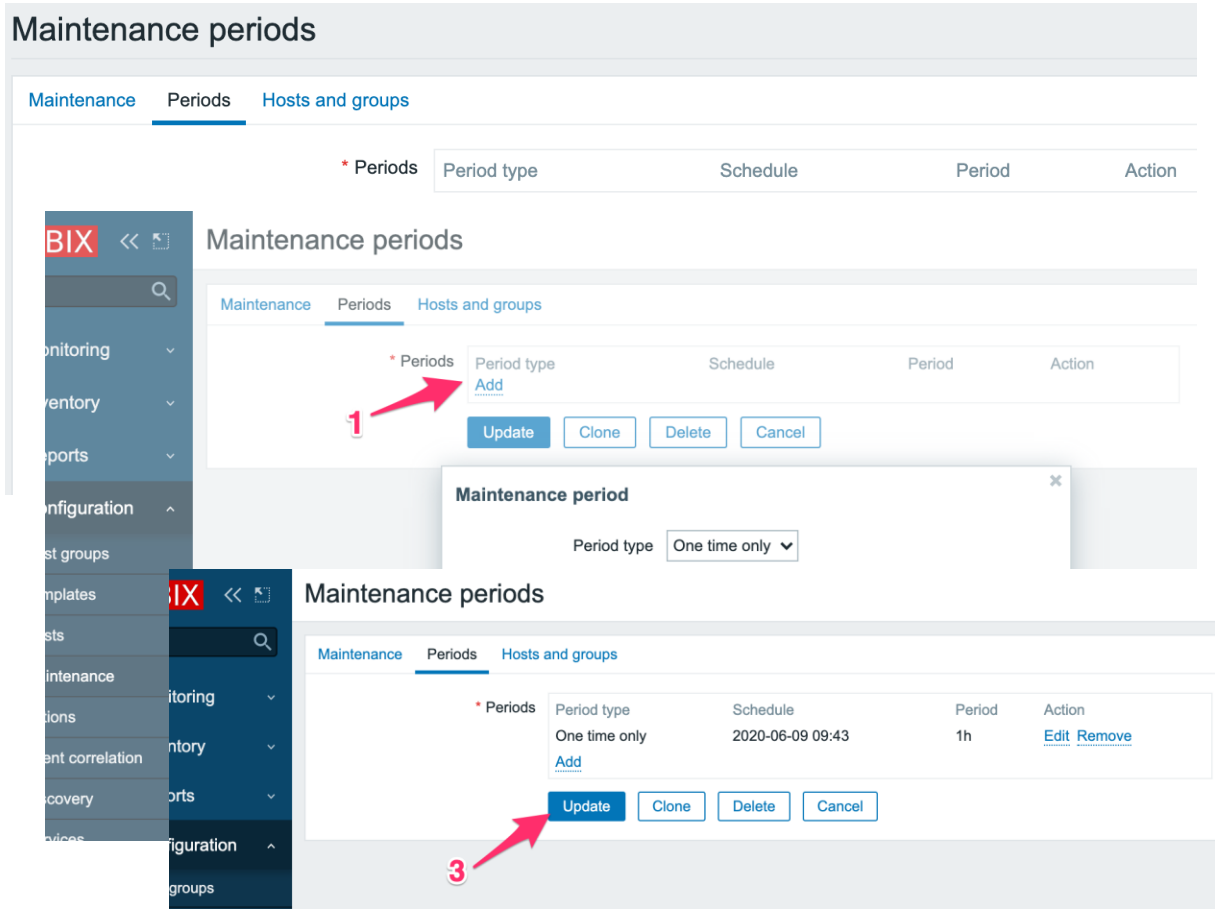
BETTER ADDING OF ELEMENTS TO OBJECTS
NO MORE «ADD, ADD, UPDATE»...





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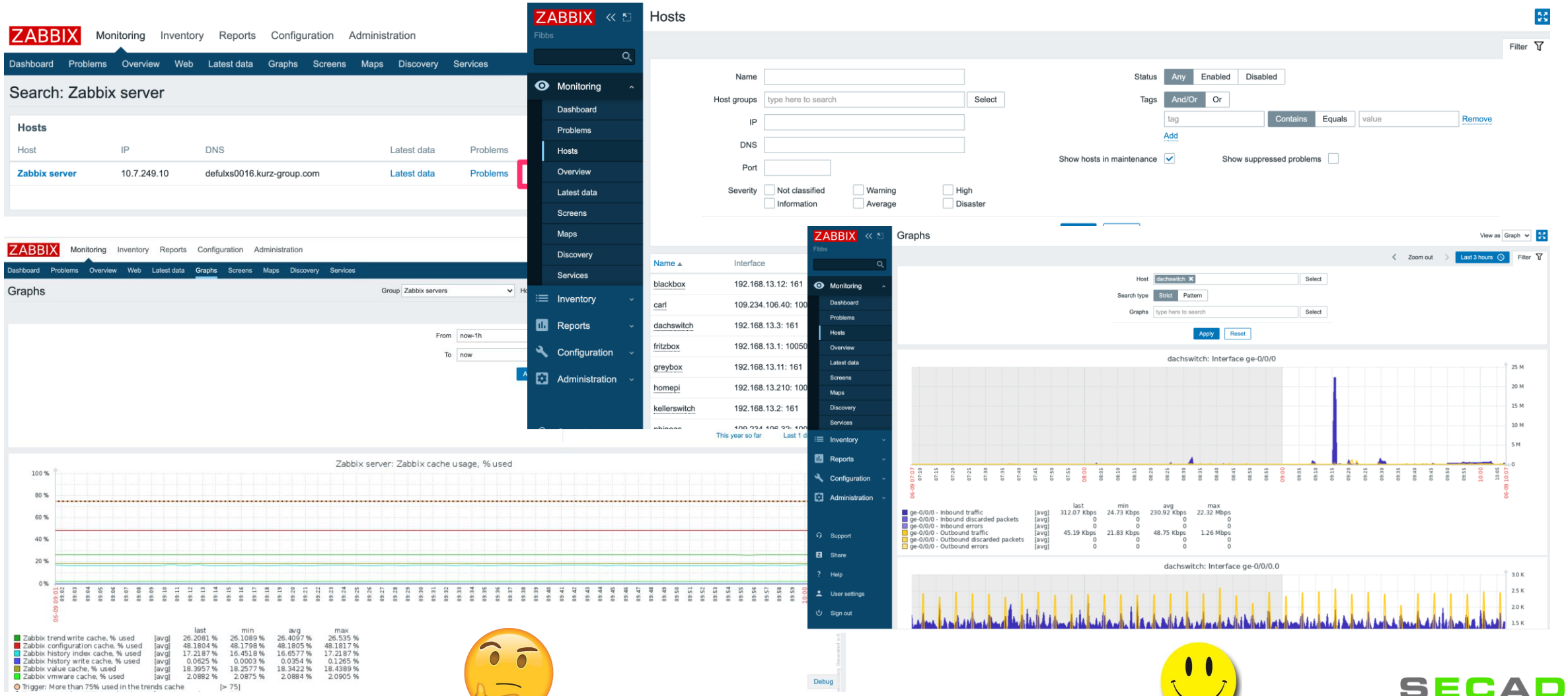
MONITORING → HOSTS → GRAPHS
DIRECT ACCESS TO ALL GRAPHS FOR ONE HOST



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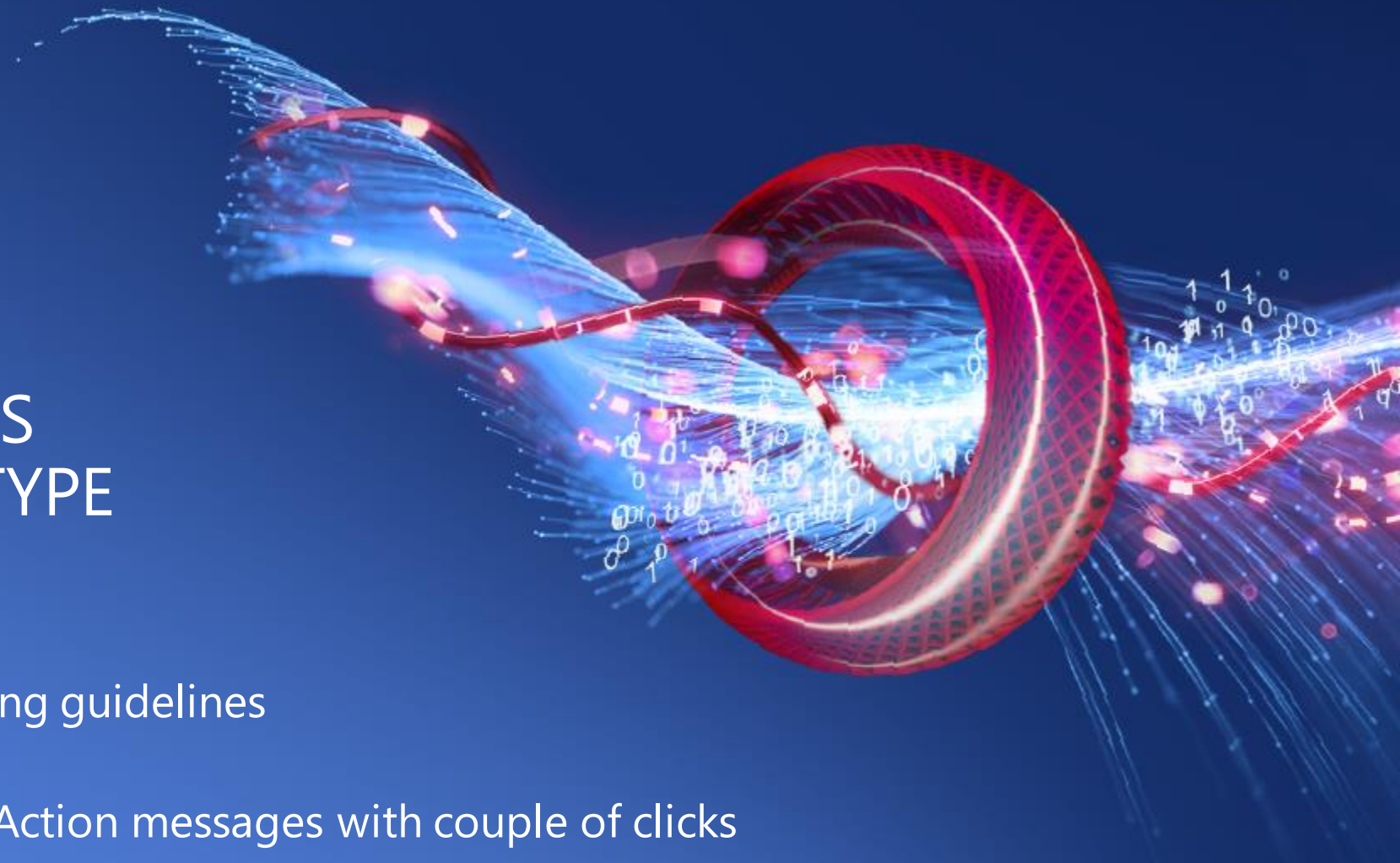
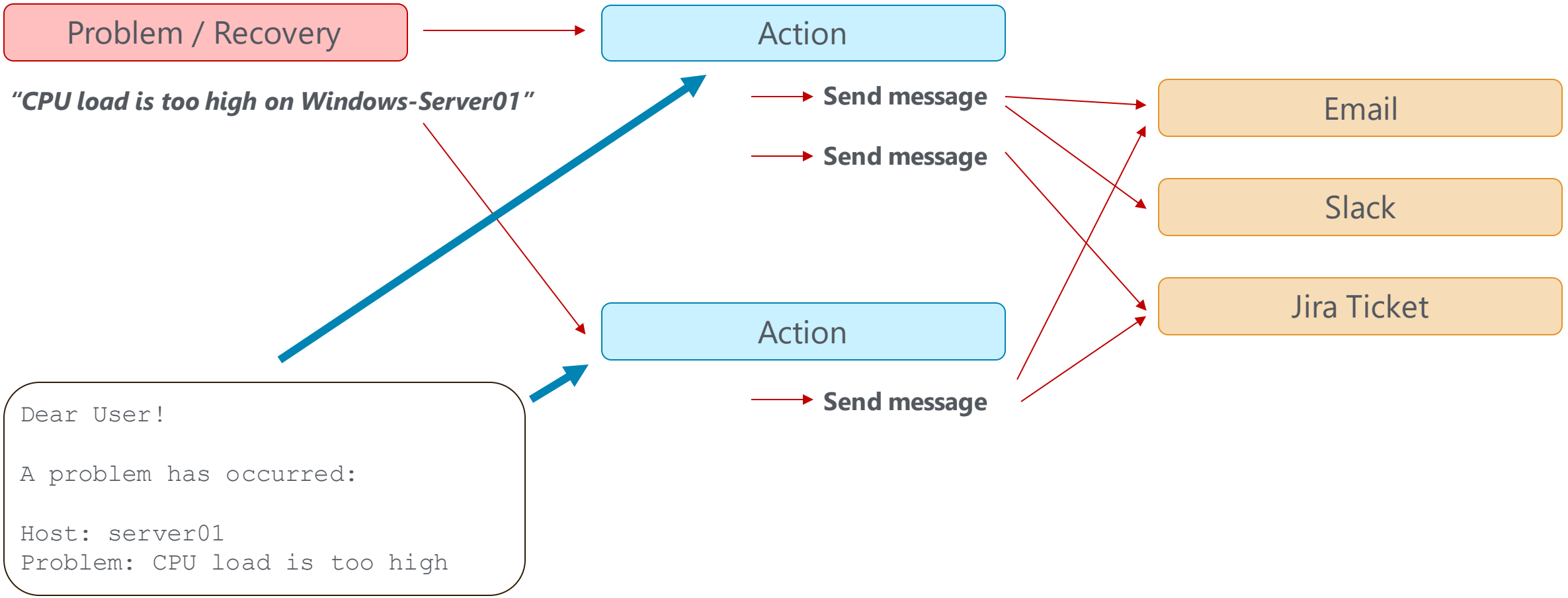
02

DEFAULT MESSAGES FOR EACH MEDIA TYPE



- Easier to manage messaging guidelines
- Perform mass changes in Action messages with couple of clicks
- Simplify configuration of Actions

ACTION WORKFLOW
HOW DO YOU GET YOUR NOTIFICATION?



ACTION WORKFLOW
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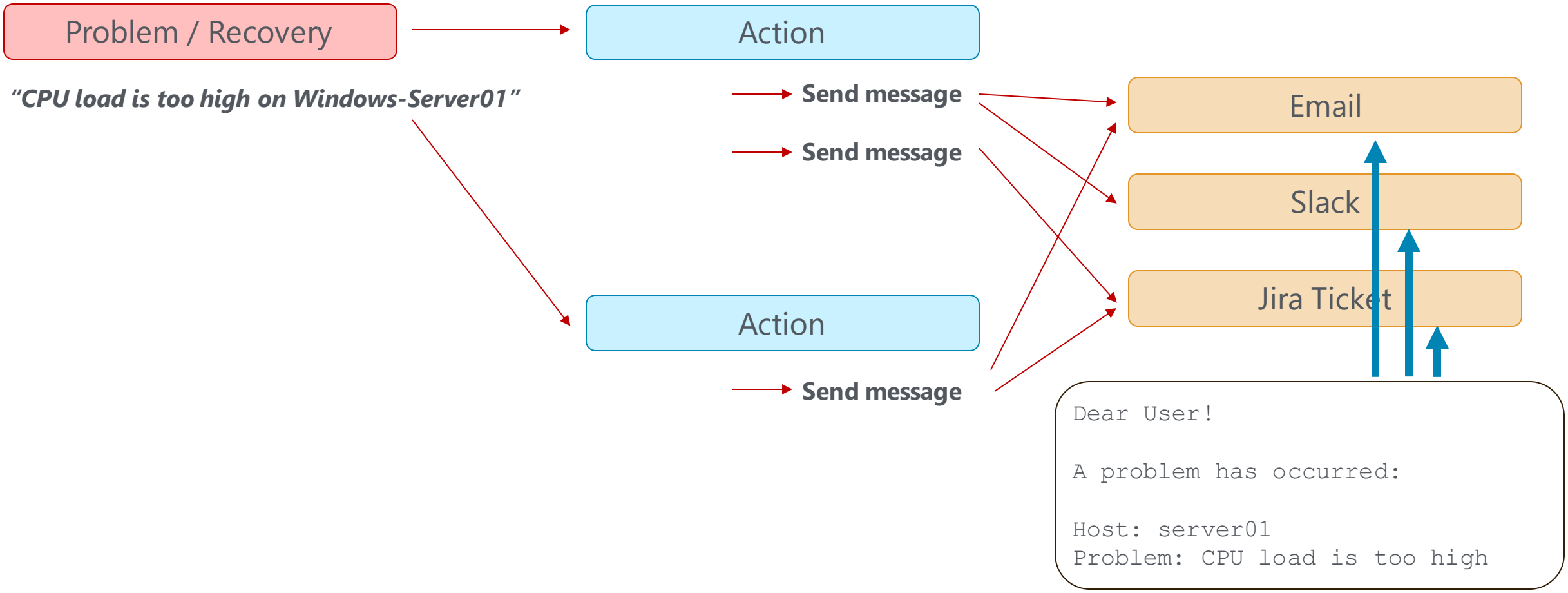
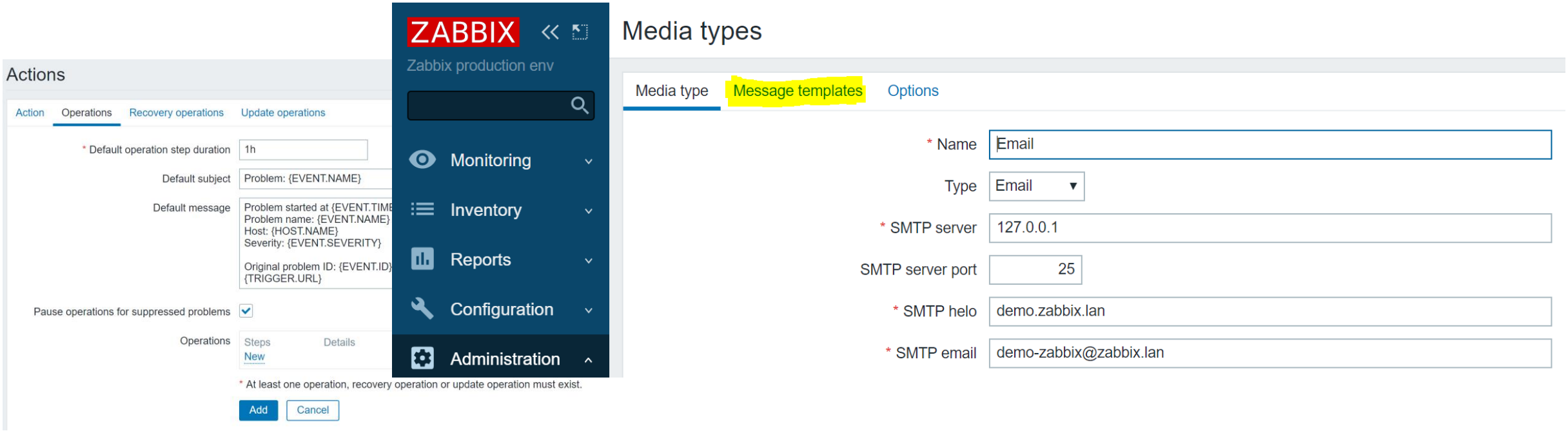


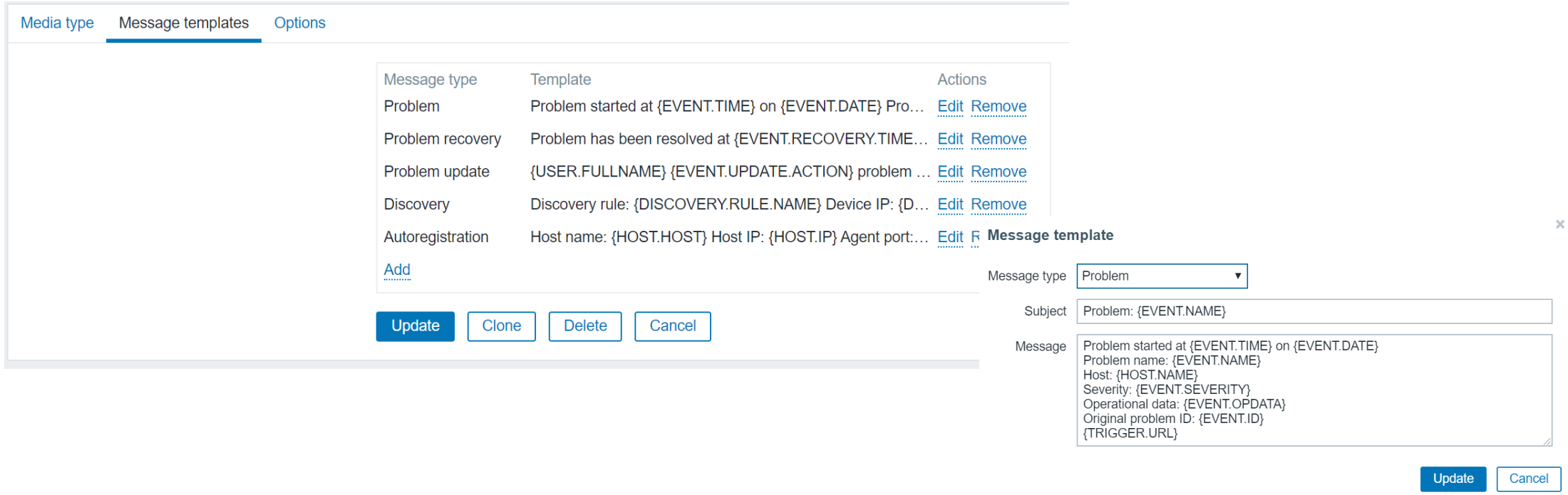
DEFAULT MESSAGES
FOR EACH MEDIA TYPE

- More flexible configuration of complex notification scenarios with less effort
- Manage high amount of actions with a wide variety of media types
- Transferable between Zabbix installations (NEW: **import/export** media types!!!)



DEFAULT MESSAGES
FOR EACH MEDIA TYPE

- Define standard messaging for Media type
- Define standard messaging for every state of a problem
- If needed – **override on Action level**



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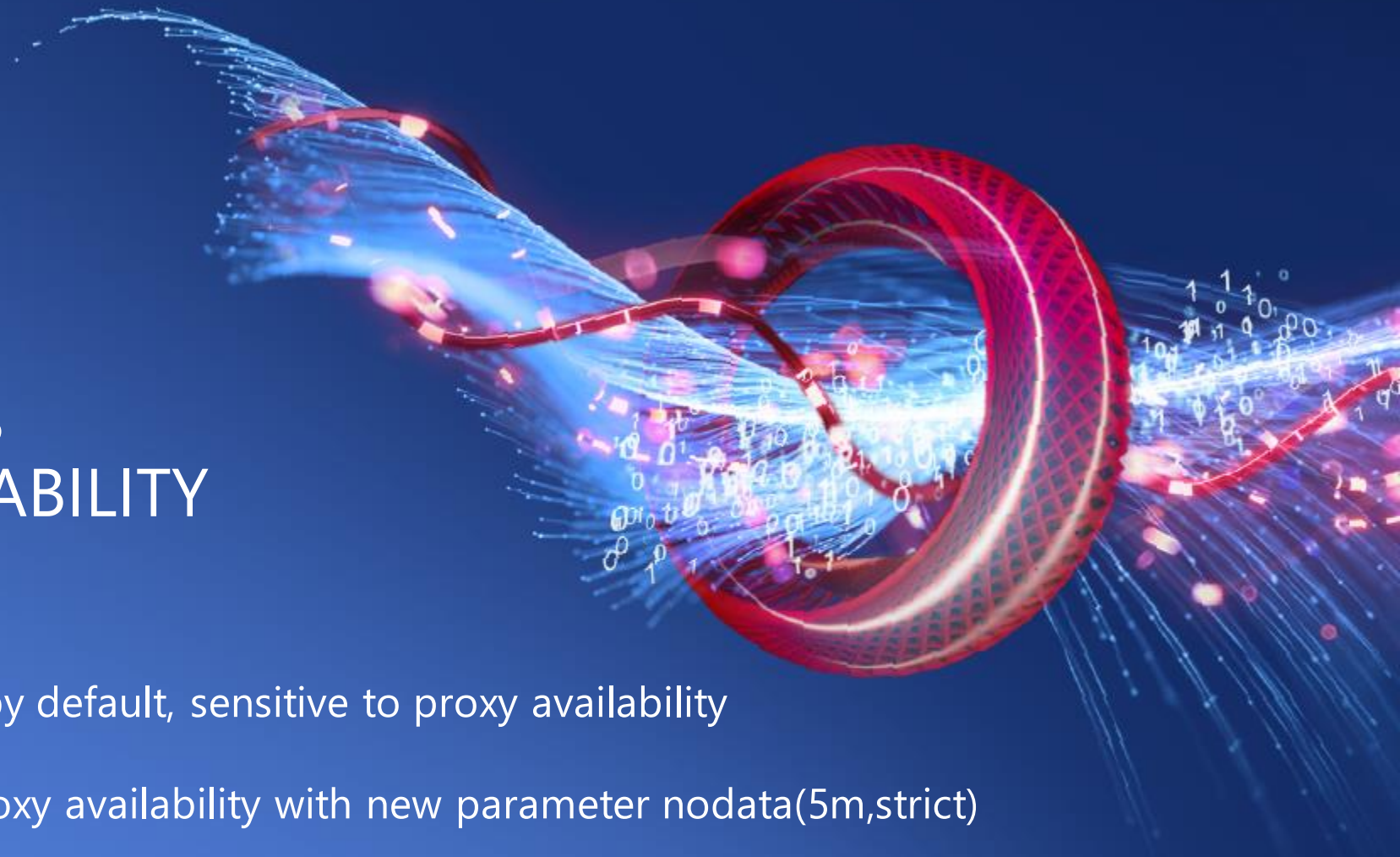
03

NODATA TRIGGERS AND PROXY AVAILABILITY



- nodata() triggers are now, by default, sensitive to proxy availability
- Turn off sensitiveness to proxy availability with new parameter nodata(5m,strict)
- Avoid massive event storms and other issues because of single proxy

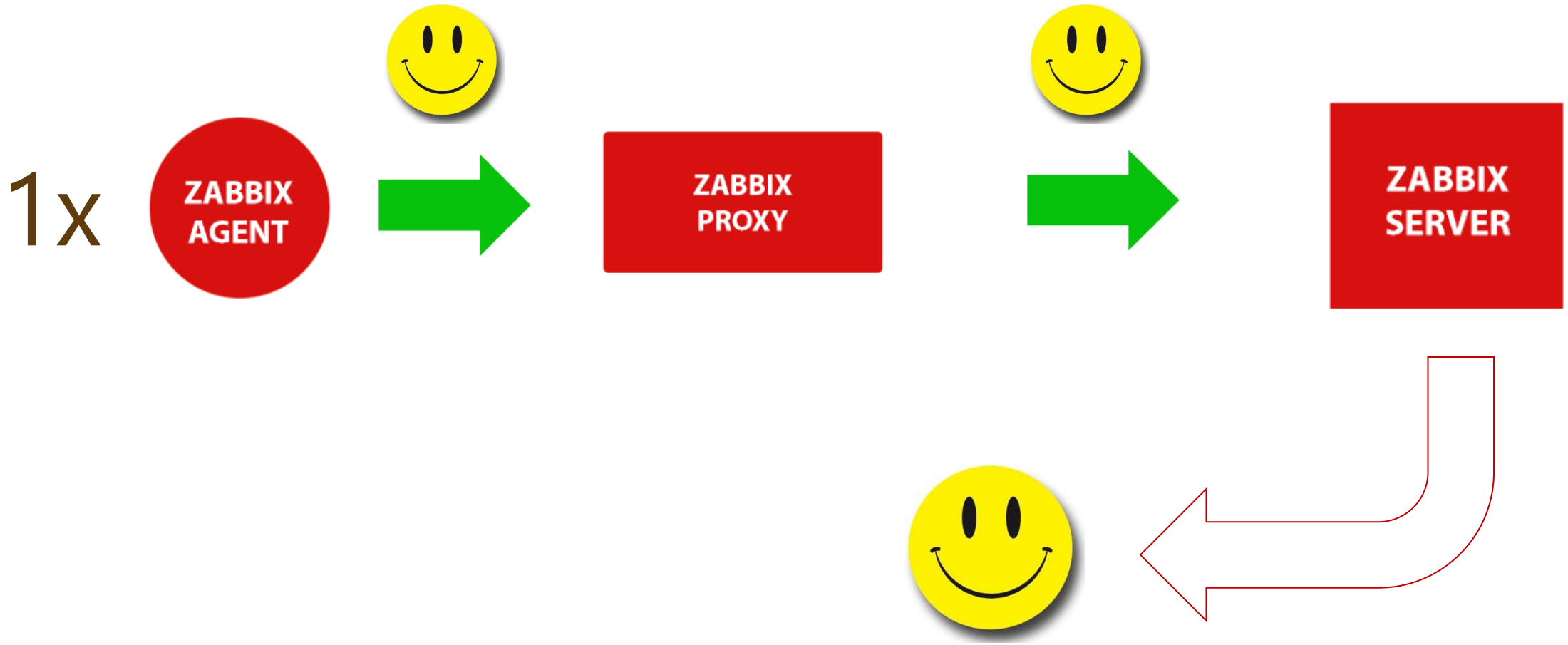
NODATA TRIGGERS
AND PROXY AVAILABILITY BACKGROUND

ZBXNEXT-1891 – Implicit trigger dependency when monitored via proxy (2003)

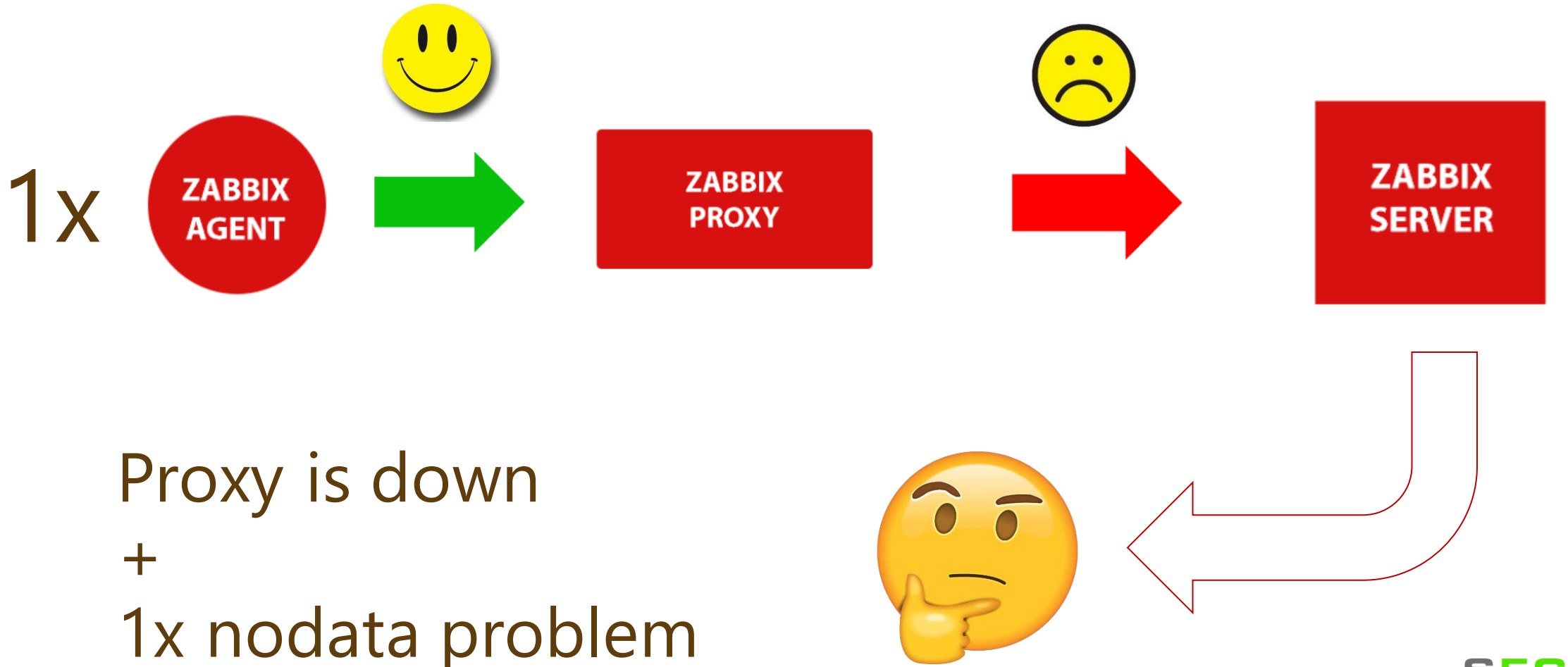
- nodata() trigger function – Checking for no data received
- If host is monitored by proxy, but proxy can't report data to server = no data
- Event and alert storms, other performance issues
- nodata() triggers are used in official Zabbix agent templates
- cheap in calculation

High	OK	Template App Zabbix Agent - active agent: Zabbix agent on is unreachable for 5 minutes	{phineas:agent.ping.**nodata**(5m)}=1

NODATA TRIGGERS
LET'S VISUALIZE

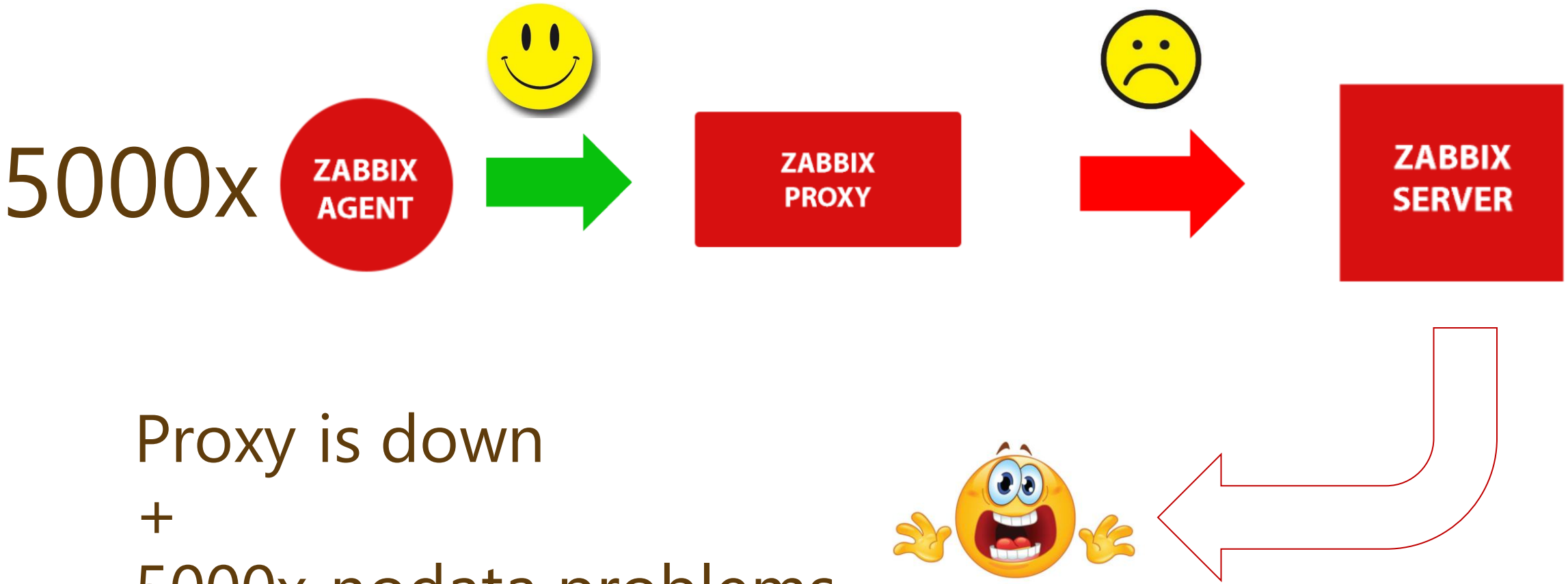


NODATA TRIGGERS
LET'S VISUALIZE



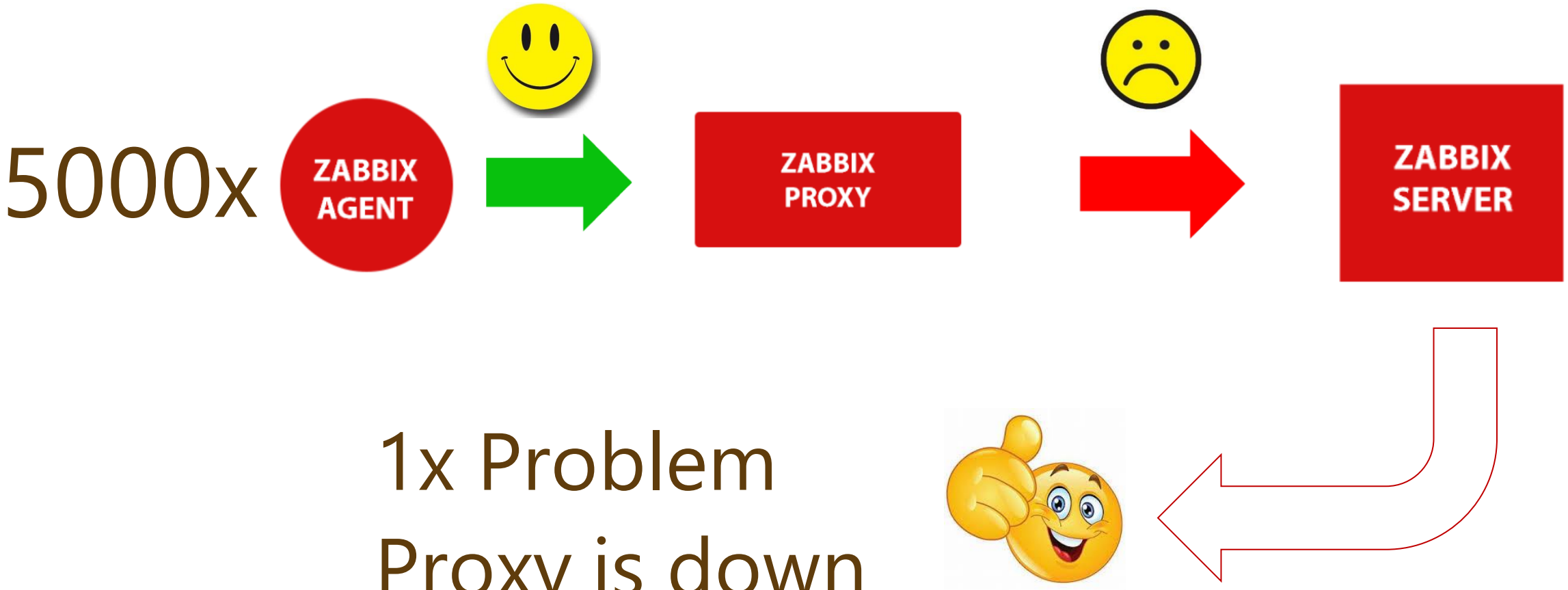
Proxy is down
+
1x nodata problem

NODATA TRIGGERS
LET'S VISUALIZE



Proxy is down
+
5000x nodata problems

NODATA TRIGGERS
LET'S VISUALIZE – 5.0



NODATA TRIGGERS
FINAL NOTES

- Much easier than setting up global event correlation and Trigger dependencies
- Out of the box functionality, just works as expected without any further setup
- What if I **don't** want to respect proxy availability? `nodata(5,strict)` !

04

LLD OVERRIDES

- Exception handling for specific Item and Trigger prototypes in LLD rules

LLD OVERRIDES
AND HOW THEY DIFFER FROM LLD FILTERS

LLD filters define whether an **entity** is being discovered or not

- Example: do not discover file systems with type «swap» or «proc»

LLD overrides define exceptions for **specific prototypes** based on content of LLD macros

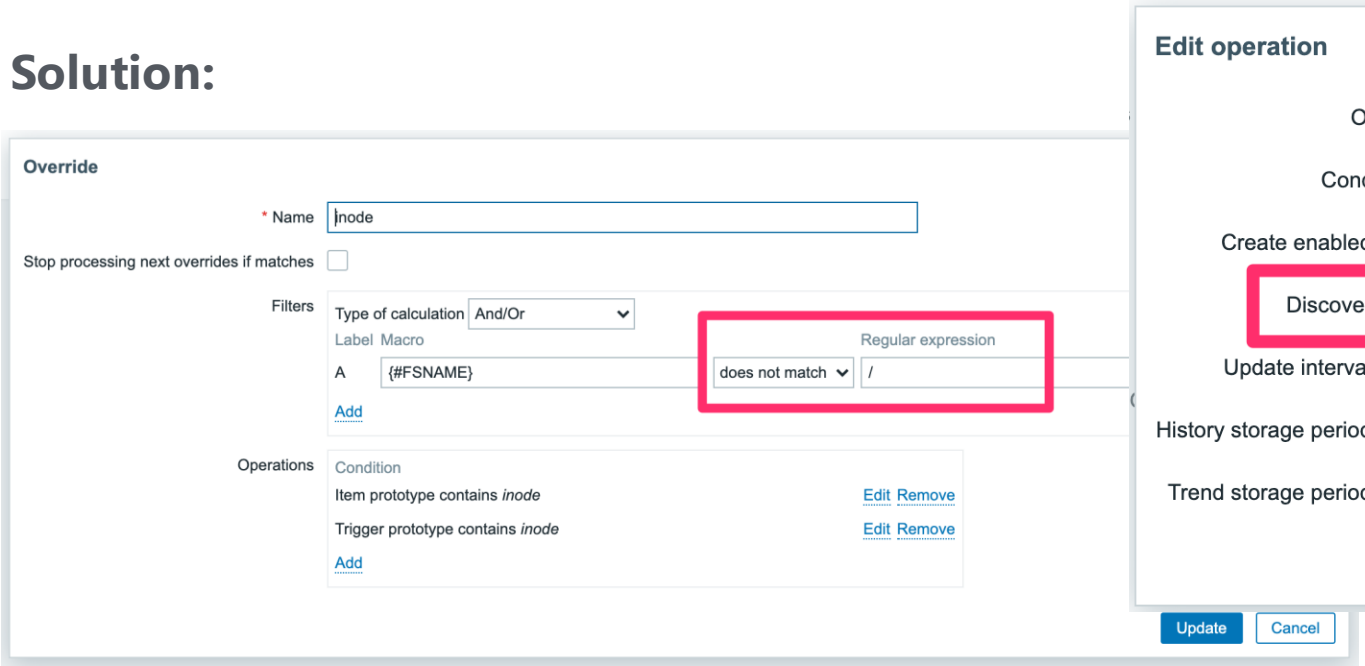
- Example: set a different severity for a trigger on a root file system
- Example: do not add Trigger/Item for the entity in certain circumstances
- Example: set specific update interval / storage period for item

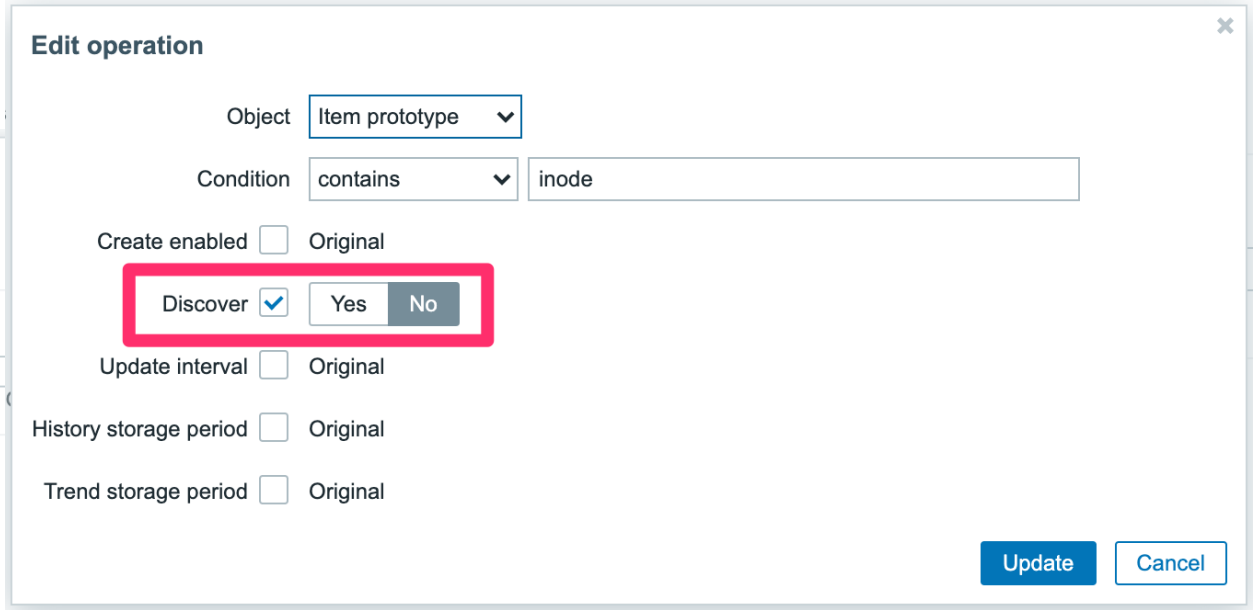
LLD OVERRIDES USE CASE:
ONE FILE SYSTEM LLD FOR BOTH WINDOWS AND LINUX

Problem:

- Windows does NOT support Inode monitoring: `vfs.fs.inode(fsname, <mode>)`

Solution:





05

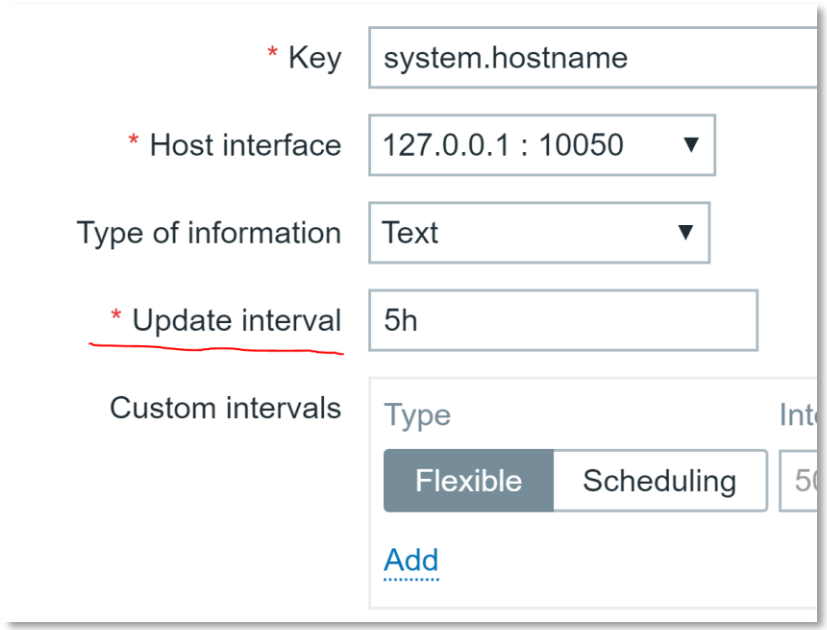
TEST ITEM FROM USER INTERFACE

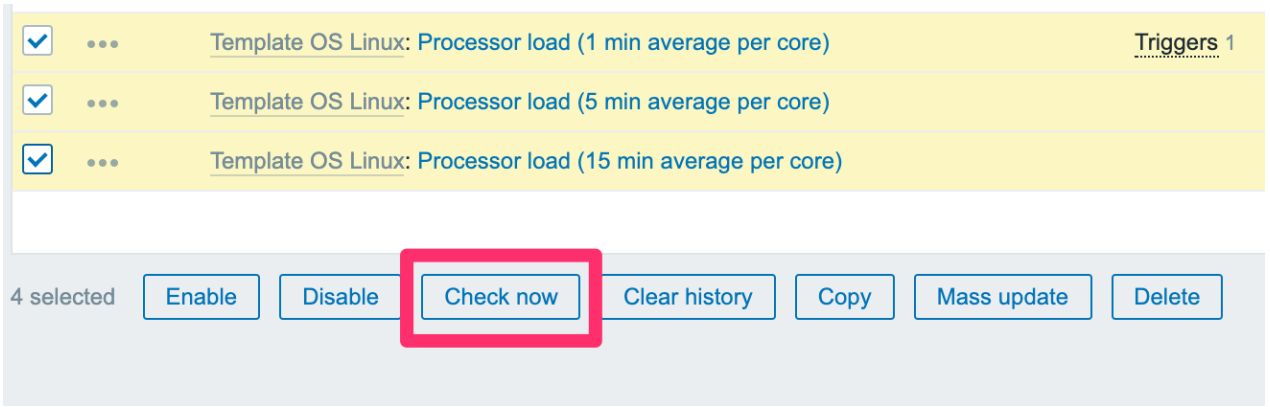
- In previous versions it was difficult to tell if a newly-configured item was configured correctly or not.
- Now it is possible to test item from UI even before saving it, and get a real value in return.
- And even test all pre-processing steps

TEST ITEM
WHAT WE DID BEFORE?

```
[root@meetup tmp]# zabbix_get -s 127.0.0.1 -k system.hostname
meetup
[root@meetup tmp]#
[root@meetup tmp]#
[root@meetup tmp]# zabbix_agentd -t system.hostname
system.hostname                                [s|meetup]
[root@meetup tmp]#
```

- Simply wait for next update interval cycle
- zabbix_agentd -t < item_key >
- zabbix_get -s <host> -k <key>
- In Zabbix 4.0, «Check now» aka «Execute Now» has been added for passive items





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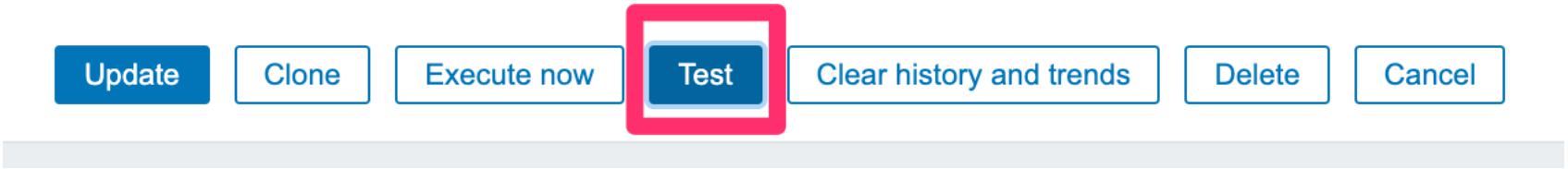
TEST ITEM
PROBLEMS

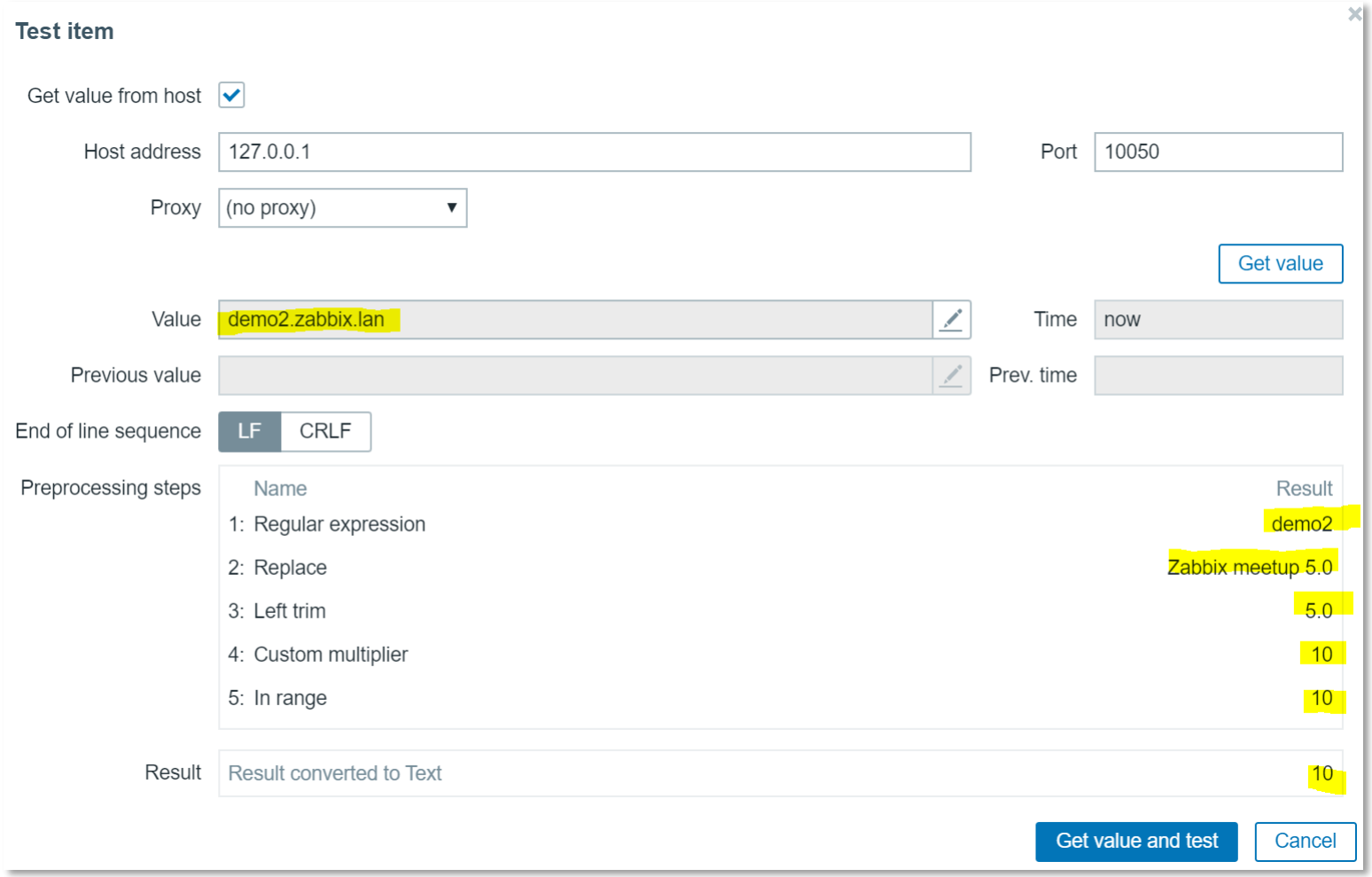
- Waiting is not an option!
- «Check Now» is only available on host level (not templates)
- «Check Now» is executed by the server (Configuration cache, …)
- Zabbix_agentd and zabbix-get don’t respect pre-processing
- Dependent Items…?

TEST ITEM
5.0

- Works on **host** and **template** level (by entering a valid IP and port to connect to for testing)
- Can be used **before** an item is actually saved in configuration
- Gives **instant** feedback
- Runs through and visualizes the whole **preprocessing** chain and outputs of all steps
- Can test items located on hosts behind **Proxy**
- Also works for **calculated** and **aggregated** items
- Allows substitution of **macro values** (NEW: secret macros)



TEST ITEM
5.0



06

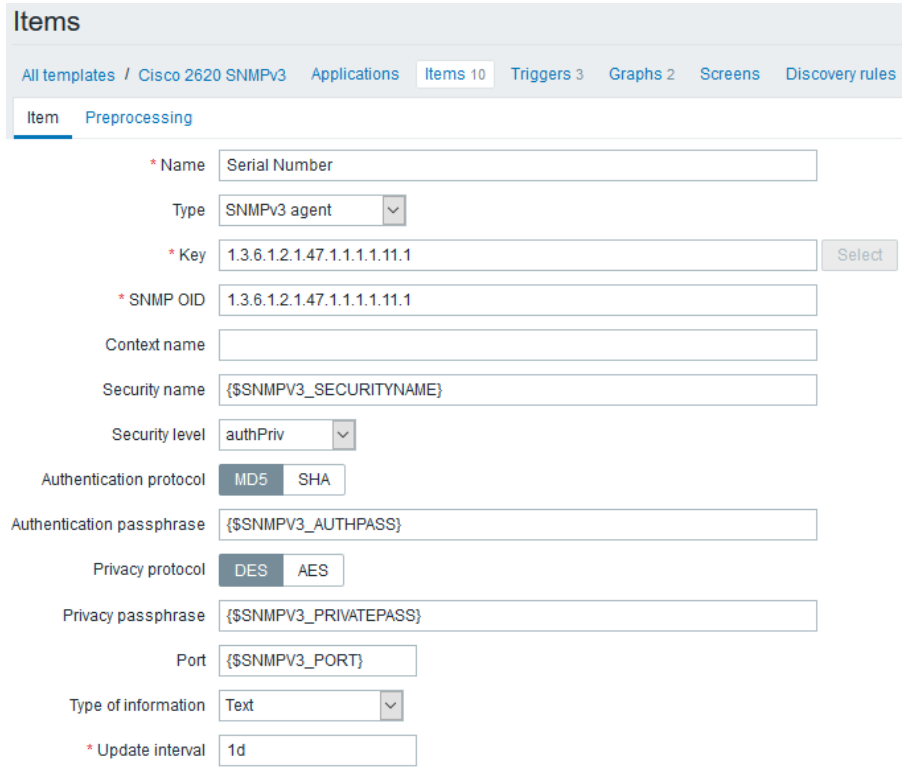
SNMP CREDENTIALS AT HOST INTERFACE LEVEL

- SNMP connection related settings where they should be
- Simplify configuration: make templates unique and transportable
- SNMPv1, SNMPv2, SNMPv3 => SNMP Agent

SNMP CREDENTIALS
AT HOST INTERFACE LEVEL

- Complexity of authentication parameters
- Simple human mistakes – typos
- In case of many items, chance to make mistake increases
- One mistake in Item prototype can affect whole host

* Name	Hardware serial number
Type	SNMPv3 agent
* Key	system.hw.serialnumber (Select)
* SNMP OID	1.3.6.1.2.1.47.1.1.1.1.11.1
Context name	zAbbIxMonitorIng
Security name	letsM0n1t0rzabb1x
Security level	authNoPriv
Authentication protocol	MD5 / SHA
Authentication passphrase	z318$2@sjwe#*21AAa



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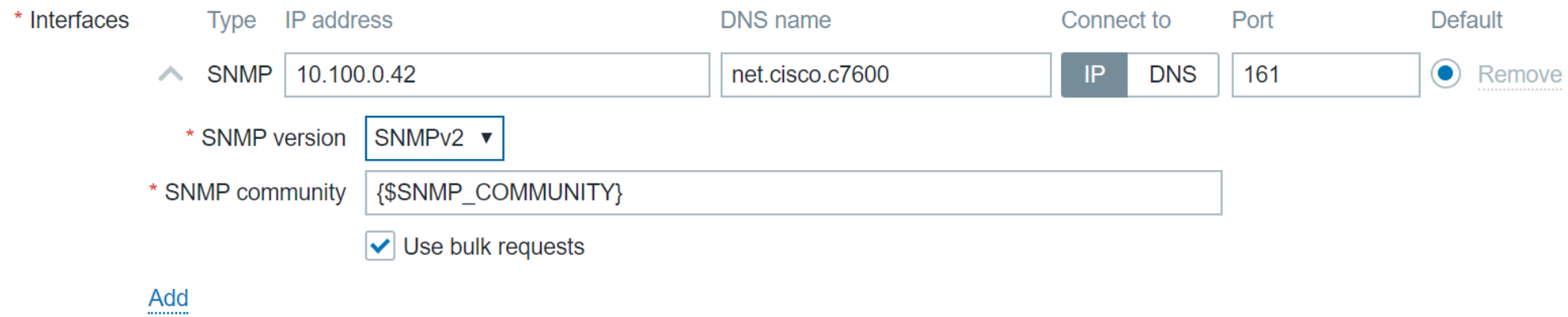
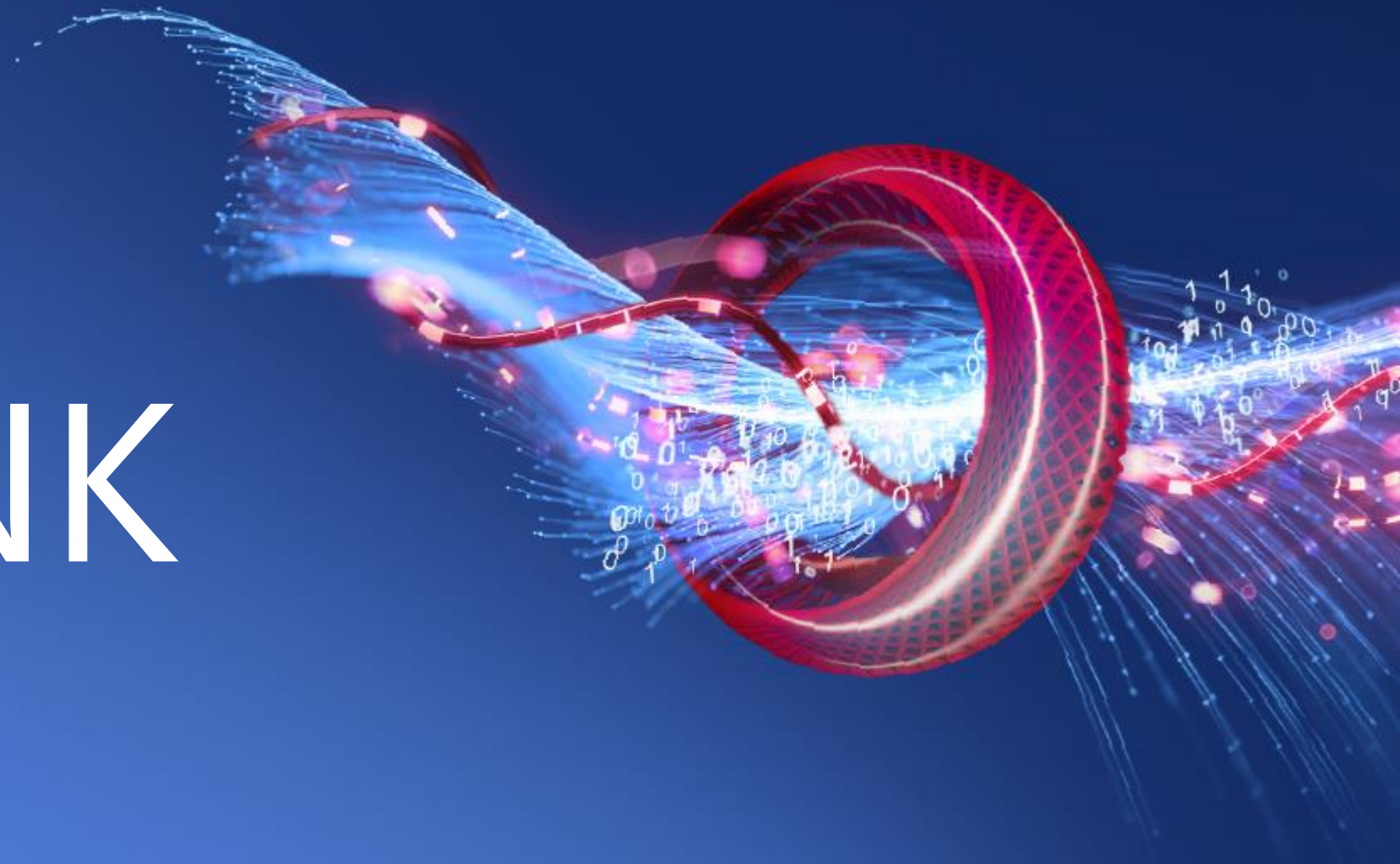
SNMP CREDENTIALS
AT HOST INTERFACE LEVEL

- Instead of suggesting to «be careful!» minimize possibilities to make mistake
- snmpv1, snmpv2, snmpv3 replaced with SNMP Agent
- All configuration is done on interface level
- All items inherit settings from chosen interface



THANK YOU!



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