CORRELATION BETWEEN DEVICES ACROSS CLIENT SITE

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A PROPERTY

Can be:
a building,
a block,
Owns a
firewall and core switch

Building can have:
multiple flors.
Owns an edge switch

Each flor can have sections.
A section can have a router
VISION

When something goes off, I want to see: «what’s the damage».

For example:
2 edge switches down
Core switch is down
15 routers down
Firewall is down

Generate only one message:
A summary what is happening with property.
**PREREQ:** HOST GROUP = VALUE OF MACRO

All client nodes belong to one **host group:**

<table>
<thead>
<tr>
<th>Host</th>
<th>Templates</th>
<th>IPMI</th>
<th>Tags</th>
<th>Macros</th>
<th>Inventory</th>
<th>Encryption</th>
</tr>
</thead>
</table>

* Host name: switch1 of Client1

Each host object owns a **macro** \{PROPERTY_HOST_GROUP\}

<table>
<thead>
<tr>
<th>Host macros</th>
<th>Inherited and host macros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro</td>
<td>Value</td>
</tr>
<tr>
<td>{PROPERTY_HOST_GROUP}</td>
<td>Riga/Block7</td>
</tr>
</tbody>
</table>
PREREQ: **DUMMY HOST, PASSIVE CHECKS**

Dummy host for calculated checks.

At least one passive check must be running towards devices we monitor.
HOW IT WORKS?
INTERNAL ITEM WILL READ COLOR OF ICON

Item type «Zabbix Internal»:
```
zabbix[host,agent,"available"]
zabbix[host,snmp,"available"]
```

If **red**, internal item reports **0**.

0 is bad.
2 ITEMS IN TEMPLATE

- firewall
- core switch
- switch
- router

Availability
- ZBX
- SNMP
- JMX
- IPMI

Template "passive firewall"
- if (value == 0) {return 100000} else {return 0}
- 1000000

Template "passive core switch"
- 0100000

Template "passive switch"
- 0000100

Template "passive router"
- 0000001
AGGREGATION
DETECT **FLAPPING**

- 1000000
- 0100000
- 0000100
- 0000001

**Key**: 
- Sample triggers
- Dependent items

**1100101**: 
- 0 < number < 100
- 100 < number 100000
- 100000 < number < 1000000
- 1100101 < number

**Discard unchanged**
- Down[routing]
- Down[switch]
- Down[core]
- Down[firewall]

**Count**
Solution:

=> iOS

Type:

=> switch

=> core

=> router

(firewall, core switch, switch, router)

x

(iOS)
MORE INFO

Enter «blog.zabbix.com» and search: «Correlation»

Downloadable template:

<table>
<thead>
<tr>
<th>Name</th>
<th>Hosts</th>
<th>Applications</th>
<th>Items</th>
<th>Triggers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000000 passive aggregate status</td>
<td>Hosts</td>
<td>Applications</td>
<td>Items</td>
<td>Triggers</td>
</tr>
<tr>
<td>0000001 passive router</td>
<td>Hosts</td>
<td>Applications</td>
<td>Items</td>
<td>Triggers</td>
</tr>
<tr>
<td>0000100 passive switch</td>
<td>Hosts</td>
<td>Applications</td>
<td>Items</td>
<td>Triggers</td>
</tr>
<tr>
<td>0100000 passive core switch</td>
<td>Hosts</td>
<td>Applications</td>
<td>Items</td>
<td>Triggers</td>
</tr>
<tr>
<td>1000000 passive firewall</td>
<td>Hosts</td>
<td>Applications</td>
<td>Items</td>
<td>Triggers</td>
</tr>
<tr>
<td>Property passive for Riga Block7</td>
<td>Hosts</td>
<td>Applications</td>
<td>Items</td>
<td>Triggers</td>
</tr>
</tbody>
</table>
QUESTIONS?

THANK YOU!

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