

The logo for ZABBIX 2020 Conference CHINA. It features the word 'ZABBIX' in white on a red rectangular background, followed by '2020' in white. Below this, the word 'Conference' is written in a large, white, sans-serif font. At the bottom, the word 'CHINA' is written in white on a dark green rectangular background.

ZABBIX 2020
Conference
CHINA

演讲主题

Zabbix中那些容易被忽略的重要功能

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Zabbix大中华区培训师

01

Unsupported 监控项的检查

如何查看Unsupported监控项？

监控统计信息		
Parameter	Value	Details
Zabbix server is running	Yes	10051
Number of hosts (enabled/disabled/templates)	115	16 / 0 / 99
Number of items (enabled/disabled/not supported)	1237	1178 / 15 / 44
Number of triggers (enabled/disabled [problem/ok])	434	432 / 2 [37 / 395]
Number of users (online)	5	1
Required server performance, new values per second	27.4	



不支持的监控项到底有哪些呢？怎么查看呢？

查看Unsupported监控项

The screenshot shows the Zabbix 'Items' configuration page. At the top, there are filter controls. A red box highlights the 'Host group' dropdown set to 'Zabbix servers' and the 'State' dropdown set to 'Not supported'. Red arrows point to these elements. Below the filters are 'Apply' and 'Reset' buttons. The main area contains a table of items. A red box highlights the 'Status' column, which shows 'Not supported' for all items. A red arrow points to the 'Status' column header.

Wizard	Host	Name	Triggers	Key	Interval	History	Trends	Type	Applications	Status	Info
<input type="checkbox"/>	...	Zabbix server	Template App Zabbix Server: Zabbix vmware cache, % used	Triggers 1 zabbix[vmware,buffer,pused]	1m	1w	365d	Zabbix internal	Zabbix server	Not supported	
<input type="checkbox"/>	...	Zabbix server	Template App Zabbix Server: Utilization of vmware data collector processes, in %	Triggers 1 zabbix[process,vmware_collector,avg,busy]	1m	1w	365d	Zabbix internal	Zabbix server	Not supported	
<input type="checkbox"/>	...	Zabbix server	Template App Zabbix Server: Utilization of snmp trapper data collector processes, in %	Triggers 1 zabbix[process,snmp_trapper,avg,busy]	1m	1w	365d	Zabbix internal	Zabbix server	Not supported	
<input type="checkbox"/>	...	Zabbix server	Template App Zabbix Server: Utilization of ipmi poller data collector processes, in %	Triggers 1 zabbix[process,ipmi_poller,avg,busy]	1m	1w	365d	Zabbix internal	Zabbix server	Not supported	
<input type="checkbox"/>	...	Zabbix server	Template App Zabbix Server: Utilization of ipmi manager internal processes, in %	Triggers 1 zabbix[process,ipmi_manager,avg,busy]	1m	1w	365d	Zabbix internal	Zabbix server	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Used space	vfs.fs.used[storageUsed.62]	5m	30d	365d	Calculated	Storage	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Used space	vfs.fs.used[storageUsed.61]	5m	30d	365d	Calculated	Storage	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Storage units	vfs.fs.units[hrStorageAllocationUnits.63]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Storage units	vfs.fs.units[hrStorageAllocationUnits.62]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Storage units	vfs.fs.units[hrStorageAllocationUnits.61]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Used storage in units	vfs.fs.units.used[hrStorageUsed.63]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Used storage in units	vfs.fs.units.used[hrStorageUsed.62]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Used storage in units	vfs.fs.units.used[hrStorageUsed.61]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Total space in units	vfs.fs.units.total[hrStorageSize.63]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Total space in units	vfs.fs.units.total[hrStorageSize.62]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Total space in units	vfs.fs.units.total[hrStorageSize.61]	5m	1w	0d	SNMPv2 agent	Internal items	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Total space	vfs.fs.total[storage.Total.62]	5m	30d	365d	Calculated	Storage	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Total space	vfs.fs.total[storage.Total.61]	5m	30d	365d	Calculated	Storage	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Storage utilization	Triggers 2 vfs.fs.pused[storageUsedPercentage.62]	5m	30d	365d	Calculated	Storage	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	Storage Discovery: /run/user/0: Storage utilization	Triggers 2 vfs.fs.pused[storageUsedPercentage.61]	5m	30d	365d	Calculated	Storage	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	CPU Discovery: #196611: CPU utilization	Triggers 1 system.cpu.util[hrProcessorLoad.196611]	3m	30d	365d	SNMPv2 agent	CPU	Not supported	
<input type="checkbox"/>	...	Zabbix server snmp	CPU Discovery: #196610: CPU utilization	Triggers 1 system.cpu.util[hrProcessorLoad.196610]	3m	30d	365d	SNMPv2 agent	CPU	Not supported	
<input type="checkbox"/>	...	Zabbix server	Template OS Linux: FSAutoExtendScan	FSAutoExtendScan	5m	10d		Zabbix agent (active)	Filesystems	Not supported	

"Items" -> "Filter" -> "Not supported" item

为什么会出现Unsupported监控项？

◆ 不合理的监控项参数配置


◆ 监控项Key值不可用或不存在

◆ 采集的数据不可用或错误

◆ 无执行权限或权限配置错误

为什么要关注Unsupported监控项？

Other configuration parameters

* Refresh unsupported items 

Group for discovered hosts

Default host inventory mode

User group for database down message

Log unmatched SNMP traps

- ① Unsupported监控项会导致监控失效，无法采集数据；
- ② Unsupported监控项会导致相关触发器转变为Unknown状态，无法触发；
- ③ Unsupported监控项会消耗Zabbix Server的性能。

基于Internal Action检查Unsupported监控项

The screenshot shows the Zabbix Actions configuration page. At the top, there are navigation tabs: Monitoring, Inventory, Reports, Configuration, Administration, Host groups, Templates, Hosts, Maintenance, Actions, Event correlation, Discovery, and Services. The 'Actions' tab is active. Below the navigation, there is a search bar and a 'Create action' button. A dropdown menu for 'Event source' is open, showing options: Triggers, Discovery, Auto registration, and Internal. A red arrow points to the 'Internal' option. Below the dropdown, there is a 'Name' input field, a 'Status' dropdown (set to 'Any'), and 'Apply' and 'Reset' buttons. A table lists three actions:

Name	Conditions	Operations	Status
Report not supported items	Event type equals <i>Item in "not supported" state</i>	Send message to user groups: Zabbix administrators via all media	Enabled
Report not supported low level discovery rules	Event type equals <i>Low-level discovery rule in "not supported" state</i>	Send message to user groups: Zabbix administrators via all media	Enabled
Report unknown triggers	Event type equals <i>Trigger in "unknown" state</i>	Send message to user groups: Zabbix administrators via all media	Enabled

At the bottom right, it says 'Displaying 3 of 3 found'.

This screenshot shows the configuration for the 'Report not supported items' action. The 'Name' field contains 'Report not supported items'. The 'Type of calculation' is set to 'And/Or'. The 'Conditions' table is as follows:

Label	Name	Action
A	Event type equals <i>Item in "not supported" state</i>	Remove
B	Host group equals <i>Linux servers</i>	Remove
C	Host group equals <i>MidGroup</i>	Remove
D	Host group equals <i>Windows_Server</i>	Remove
E	Host group equals <i>Zabbix servers</i>	Remove

The 'New condition' section shows 'Host group' equals 'type here to search'. The 'Enabled' checkbox is checked.

This screenshot shows the configuration for the 'Report unknown triggers' action. The 'Name' field contains 'Report unknown triggers'. The 'Type of calculation' is set to 'And/Or'. The 'Conditions' table is as follows:

Label	Name	Action
A	Event type equals <i>Trigger in "unknown" state</i>	Remove
B	Host group equals <i>APP_Health</i>	Remove
C	Host group equals <i>MidGroup</i>	Remove
D	Host group equals <i>Windows_Server</i>	Remove
E	Host group equals <i>Zabbix servers</i>	Remove
F	Host group equals <i>Linux servers</i>	Remove

The 'New condition' section shows 'Application' contains 'type here to search'. The 'Enabled' checkbox is checked.

This screenshot shows the configuration for the 'Report not supported low level discovery rules' action. The 'Name' field contains 'Report not supported low level discovery rules'. The 'Type of calculation' is set to 'And/Or'. The 'Conditions' table is as follows:

Label	Name	Action
A	Event type equals <i>Low-level discovery rule in "not supported" state</i>	Remove
B	Host group equals <i>APP_Health</i>	Remove
C	Host group equals <i>Database</i>	Remove
D	Host group equals <i>Linux servers</i>	Remove
E	Host group equals <i>MidGroup</i>	Remove
F	Host group equals <i>Windows_Server</i>	Remove
G	Host group equals <i>Zabbix servers</i>	Remove

The 'New condition' section shows 'Host group' equals 'type here to search'. The 'Enabled' checkbox is checked.

基于Action动作发送相关通知

2020-08-18 21:04:38 Report not supported Items Event content to File Admin (Zabbix Administrator) **Subject:** Sent
aaa Not supported: Zabbix server:Forecast Total_size trigger_depends

Message:
Host: Zabbix server
Item: Forecast Total_size trigger_depends
Key: Forecats_Total_size[trigger_depends]
State: Not supported

```
#####  
Host: Zabbix server  
Item: Forecast Total_size corr_operation  
Key: Forecats_Total_size[corr_operation]  
State: Not supported  
#####  
Host: Zabbix server  
Item: Forecast Total_size correlation  
Key: Forecats_Total_size[correlation]  
State: Not supported  
#####  
Host: Zabbix server  
Item: Forecast Total_size dashboard  
Key: Forecats_Total_size[dashboard]  
State: Not supported  
#####  
Host: Zabbix server  
Item: Forecast Total_size maintenances_windows  
Key: Forecats_Total_size[maintenances_windows]  
State: Not supported  
#####  
Host: Zabbix server  
Item: Forecast Total_size mappings  
Key: Forecats_Total_size[mappings]  
State: Not supported
```

- ① 利用Zabbix自身Internal 检查机制；
- ② 将Unsupported监控项信息及时发出通知；
- ③ 便于优化监控项配置，提升Zabbix性能。

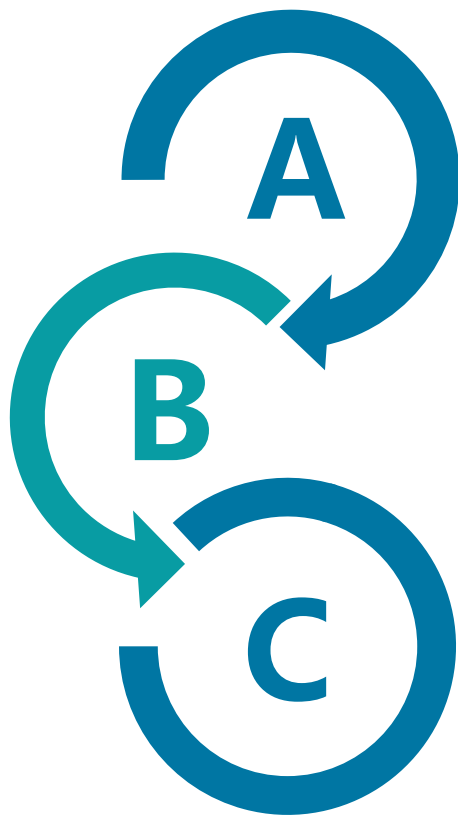
02

Inventory资产功能的使用

Inventory资产功能的使用

领导的问题1

Zabbix监控了多少台Linux服务器？多少套MySQL数据库？多少台Cisco网络设备？



领导的问题2

Zabbix监控系统中有多少台主机是张三负责管理，多少台是李四负责管理？

领导的问题3

Zabbix监控了多少台在上海数据中心的设备？多少台在成都数据中心的设备？

Inventory资产功能的使用

Other configuration parameters

* Refresh unsupported items

Group for discovered hosts

Default host inventory mode Disabled Manual Automatic

User group for database down message

Log unmatched SNMP traps

默认Host inventory模式未启用

Other configuration parameters

* Refresh unsupported items

Group for discovered hosts

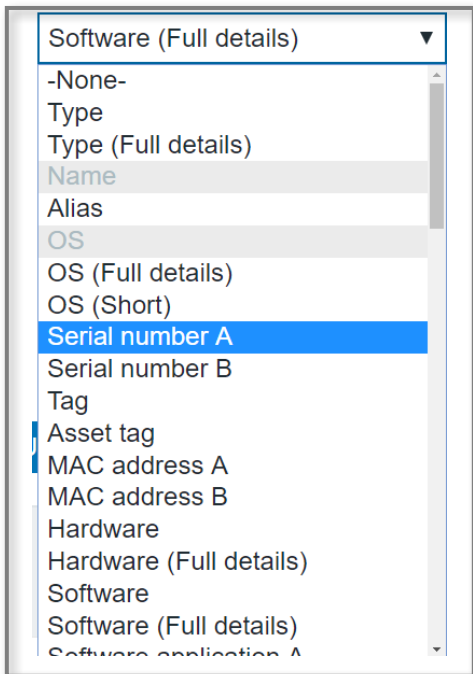
Default host inventory mode Disabled Manual Automatic

User group for database down message

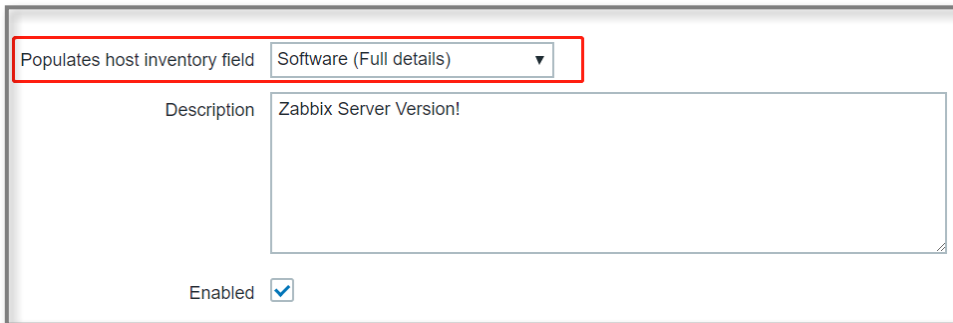
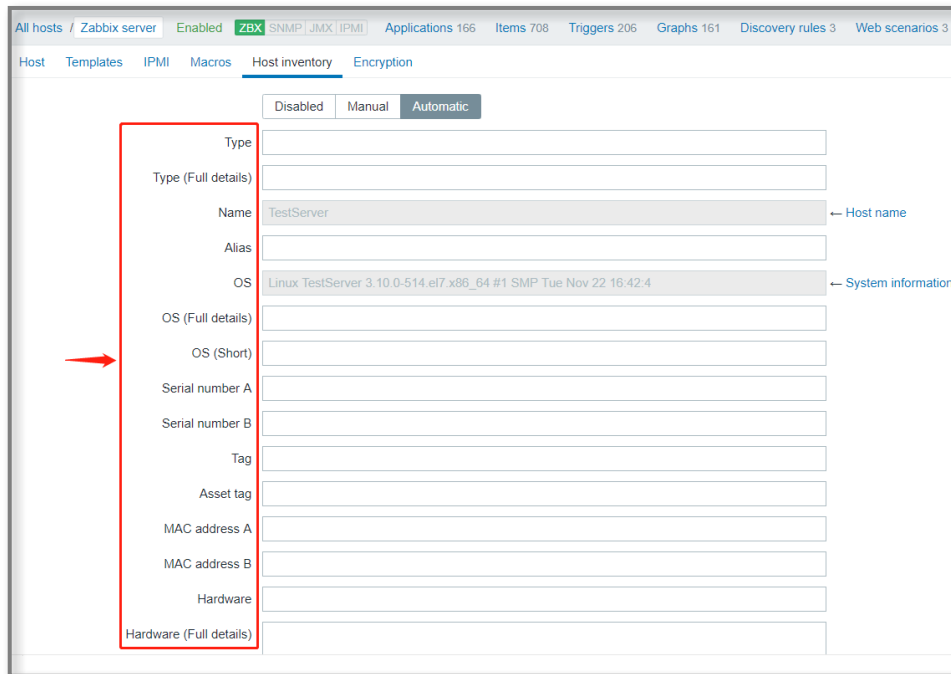
Log unmatched SNMP traps

可以选择启用手动或者自动模式

Inventory资产功能的使用



选择
Inventory
字段



监控项关联
Inventory
字段

Inventory资产功能的使用

Overview Hosts Zabbix 4.0 Training

Host inventory overview

Group: all Grouping by: OS

OS	Host count
Windows LAPTOP-2R56M1TU 10.0.18363 Microsoft Windows 10 家庭中文版 x64	1
Linux TestServer 3.10.0-514.el7.x86_64 #1 SMP Tue Nov 22 16:42:4	1
CentOS 7.3 64bits	13

按照特定
Inventory
字段统计

Host inventory

Overview Details

Name: TestServer

OS: Linux TestServer 3.10.0-514.el7.x86_64 #1 SMP Tue Nov 22 16:42:4

Software: zabbix_server (Zabbix) 4.0.14

Software (Full details): zabbix_server (Zabbix) 4.0.14

Software application A: MariaDB 5.5.60

Contact: Andy Zhou

Location: Shanghai

Notes: This is Zabbix monitoring system.

[Cancel](#)

Host inventory

Group: all Filter

Field: OS contains Centos

[Apply](#) [Reset](#)

Host	Group	Name	Type	OS	Serial number A	Tag	MAC address A
Zabbix_server_snmp	MidGroup, Zabbix servers	TestServer		CentOS 7.3 64bits			
Tomcat_MonitorByTemplate	Linux servers, MidGroup			CentOS 7.3 64bits			
TomcatServer168	Linux servers, MidGroup			CentOS 7.3 64bits			
TestServer_2	Discovered hosts, NetworkDiscovery/TestGroup			CentOS 7.3 64bits			
TestServer	Discovered hosts, NetworkDiscovery/TestGroup			CentOS 7.3 64bits			
MySQL_Server_Test_BSZ	Database, Linux servers			CentOS 7.3 64bits			
MySQL_Server_fullclone	Database, Linux servers, Templates/测试环境, custom			CentOS 7.3 64bits			
MySQL_Server_clone	Database, Linux servers, Templates/测试环境, custom			CentOS 7.3 64bits			
MySQL_Server	Database, Linux servers, Templates/测试环境, custom			CentOS 7.3 64bits			

详细的
Inventory
资产信息

Inventory资产功能的使用

Actions

Action Operations Recovery operations Update operations

Default operation step duration 1h

Default subject Problem: {EVENT.NAME}

Default message

告警信息:
Problem started at {EVENT.TIME} on {EVENT.DATE}
Problem name: {EVENT.NAME}
Host: {HOST.NAME}
Severity: {EVENT.SEVERITY}
OS Type:{INVENTORY.OS}
Location:{INVENTORY.LOCATION}
Software APP:{INVENTORY.SOFTWARE.APP.A}
Contact:{INVENTORY.CONTACT}
Original problem ID: {EVENT.ID}
{TRIGGER.URL}

Pause operations for suppressed problems

Operations Steps Details

1 Send message to users: Admin (Zabbix Administrator) via Event content to File

[New](#)



告警信息中带入inventory宏变量

```
#####  
告警信息:  
Problem started at 00:53:25 on 2020.08.19  
Problem name: 主机: Linux_Server服务器TCP端口37594状态为DOWN!  
Host: Linux_Server  
Severity: High  
OS Type:CentOS Linux 7.3  
Location:Guangzhou  
Software APP:zabbix server (Zabbix) 4.0.14  
Contact:梁朝伟, 刘德华, 张学友, 郭富城  
Original problem ID: 345749  
  
#####  
告警信息:  
Problem started at 00:53:26 on 2020.08.19  
Problem name: 主机: Linux_Server服务器TCP端口37728状态为DOWN!  
Host: Linux_Server  
Severity: High  
OS Type:CentOS Linux 7.3  
Location:Guangzhou  
Software APP:zabbix server (Zabbix) 4.0.14  
Contact:梁朝伟, 刘德华, 张学友, 郭富城  
Original problem ID: 345753
```



告警信息中inventory宏变量使用效果

Inventory资产功能的使用

Event details

Trigger details	
Host	Linux_Server
Trigger	主机: Linux_Server服务器TCP端口10052状态为DOWN!
Severity	High
Problem expression	{Linux_Server:net.tcp.listen[10052].last()}=0
Recovery expression	
Event generation	Normal
Allow manual close	Yes
Enabled	Yes

Event details

Event	主机: Linux_Server服务器TCP端口10052状态为DOWN!
Severity	High
Time	2020-08-19 01:01:19
Acknowledged	No
Resolved by	Trigger
Tags	Object: TCP Port 物理位置: Guangzhou 联系人: 梁朝伟, 刘德...

Actions

Step	Time	User/Recipient	Action	Message/Command	Status	Info
	2020-08-19 01:06:23	Admin (Zabbix Administrator) aaa	✉	Resolved: 主机: Linux_Server服务器TCP端口10052状态为DOWN! 告警恢复信息: Problem has been resolved at 01:06:19 on 2020.08.19 Problem name: 主机: Linux_Server服务器TCP端口10052状态为DOWN! Host: Linux_Server OS Type:CentOS Linux 7.3 Location:Guangzhou Software APP:zabbix_server (Zabbix) 4.0.14 Contact:梁朝伟, 刘德华, 张学友, 郭富城 Severity: High Original problem ID: 346162	Sent	
	2020-08-19 01:06:19		📅			
1	2020-08-19 01:01:20	Admin (Zabbix Administrator) aaa	✉	Problem: 主机: Linux_Server服务器TCP端口10052状态为DOWN! 告警信息: Problem started at 01:01:19 on 2020.08.19 Problem name: 主机: Linux_Server服务器TCP端口10052状态为DOWN! Host: Linux_Server Severity: High OS Type:CentOS Linux 7.3 Location:Guangzhou Software APP:zabbix_server (Zabbix) 4.0.14 Contact:梁朝伟, 刘德华, 张学友, 郭富城 Original problem ID: 346162	Sent	
	2020-08-19 01:01:19		📅			

Inventory宏变量功能强大、方便灵活

03

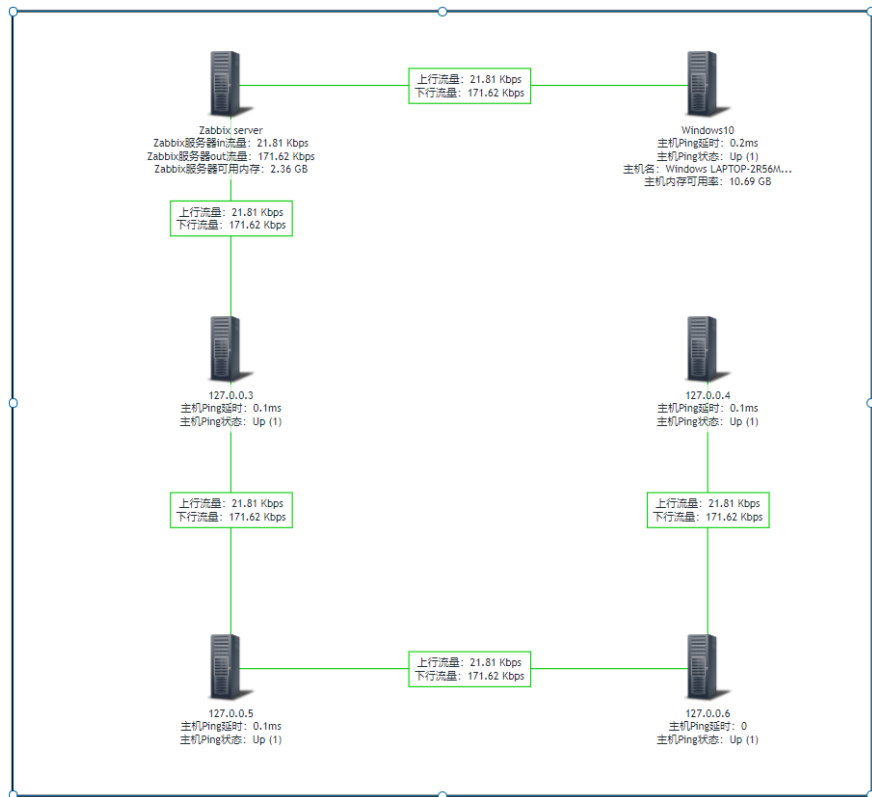
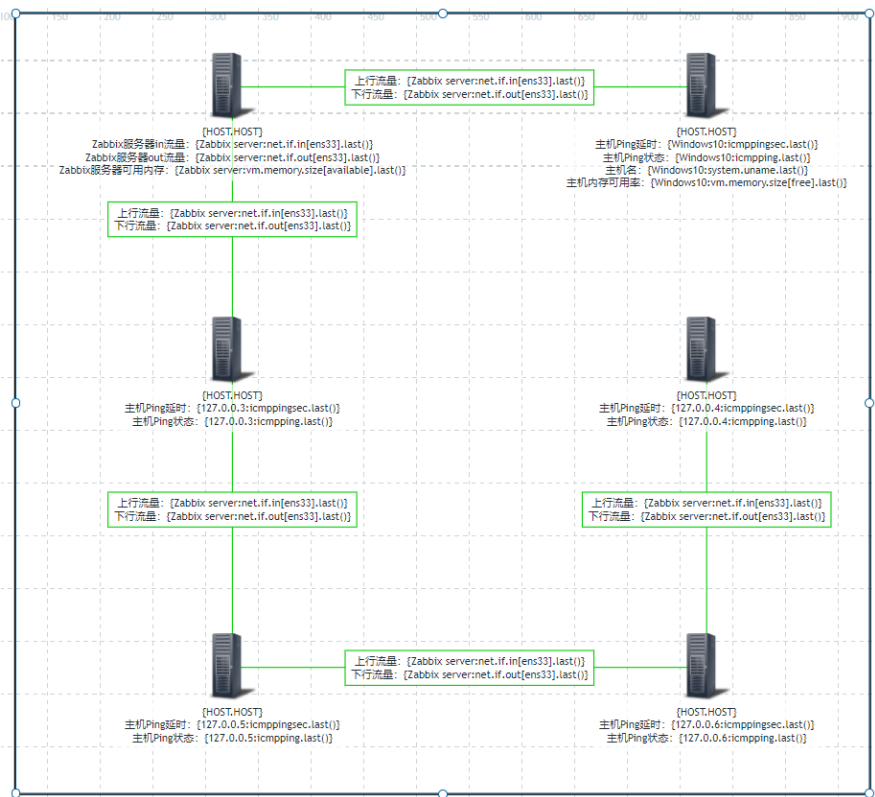
ICON Mapping功能在MAP和 Dashboard中的使用

ICON Mapping功能在MAP和Dashboard中的使用



Zabbix原生支持灵活的MAP图绘制功能

ICON Mapping功能在MAP和Dashboard中的使用



MAP图中可使用Macro宏变量来实时展示监控数据

ICON Mapping功能在MAP和Dashboard中的使用

Host inventory

Group: all

Filter

Field: OS contains Linux




Apply Reset

Host	Group	Name	Type	OS	Serial number A	Tag	MAC address A
Zabbix server	NetworkDiscoveryTestGroup, Zabbix servers	TestServer	Linux	TestServer 3.10.0-514.el7.x86_64 #1 SMP Tue Nov 22 16:42:4			
Linux_Server	Linux servers, NetworkDiscoveryTestGroup		CentOS	Linux 7.3			

Icon mapping

Name: TEST

Mappings

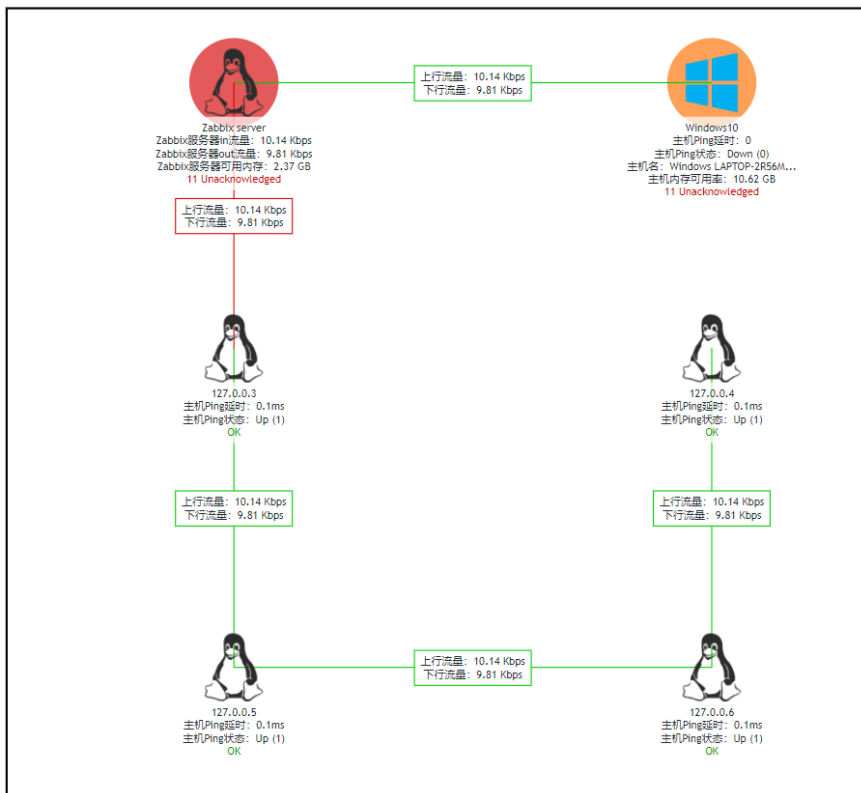
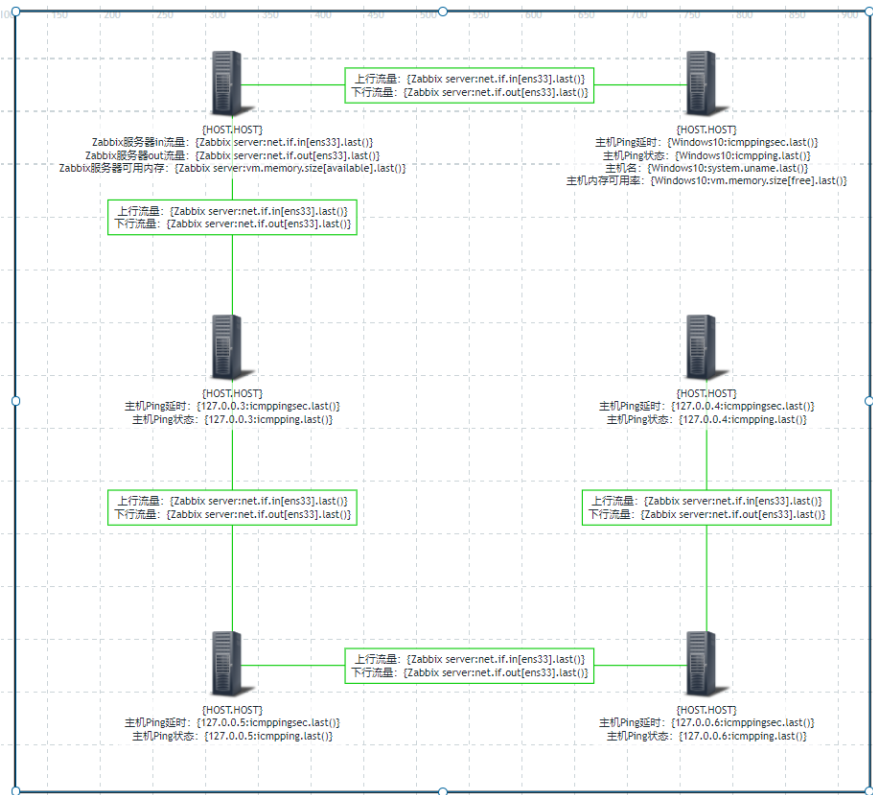
Inventory field	Expression	Icon	Action
1: OS	Windows LAPTOP-2R56M	Windows_Icon	 Remove
2: OS	CentOS 7.3 64bits	Linux_Icon	 Remove
3: OS	Linux TestServer 3.10.0-5	Linux_Icon	 Remove

Add

Default: Server_(64)

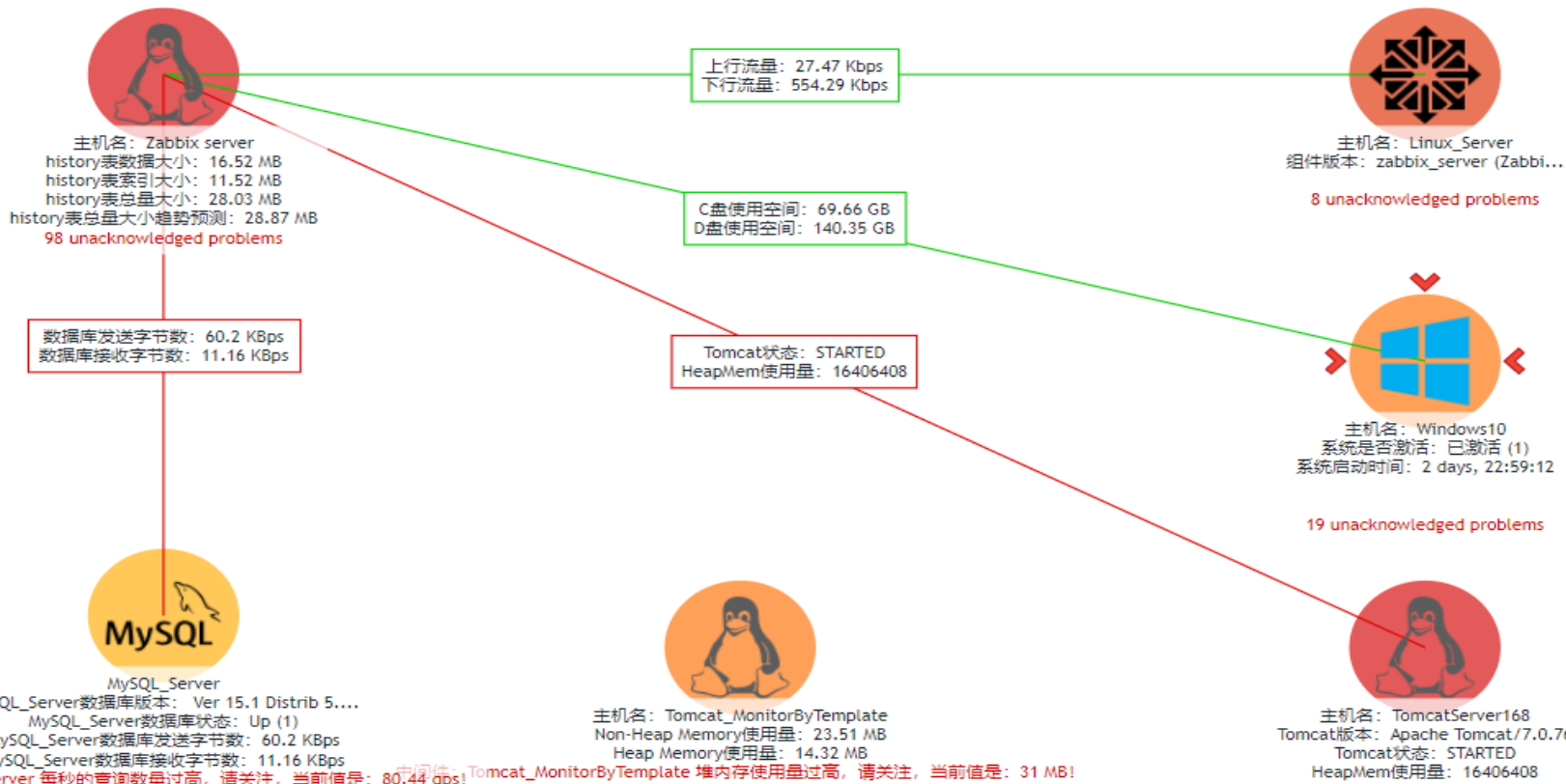
Update Clone Delete Cancel

ICON Mapping功能在MAP和Dashboard中的使用



结合监控对象资产信息，自动关联对应ICON

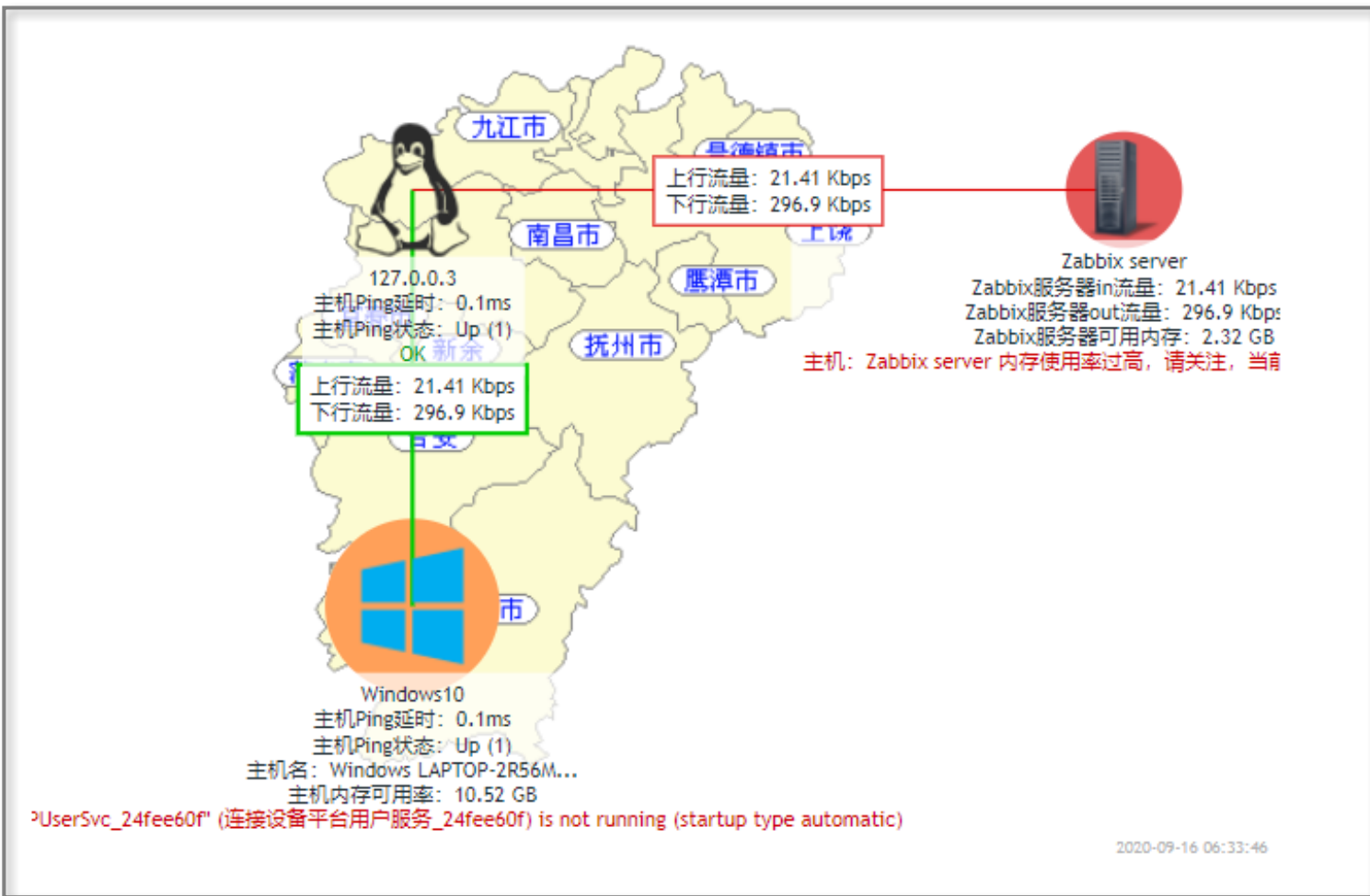
ICON Mapping功能在MAP和Dashboard中的使用



数据库: MySQL_Server 每秒的查询数量过高, 请关注, 当前值是: 80.44 qps!
中间件: Tomcat_MonitorByTemplate 堆内存使用量过高, 请关注, 当前值是: 31 MB!

中间件: TomcatServer168 服务状态异常, 请关注, 当前值是: STARTED

ICON Mapping功能在MAP和Dashboard中的使用



支持自定义背景图, 绘制MAP

ICON Mapping功能在MAP和Dashboard中的使用

基础架构监控Dashboard6

Group Zabbix servers

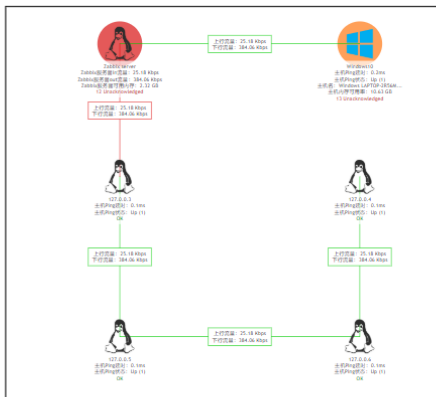
Host Zabbix server

Edit dashboard

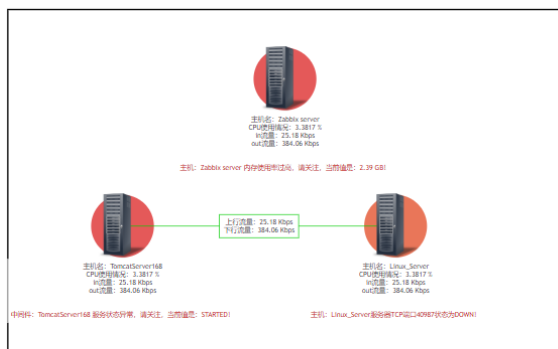


All dashboards / 基础架构监控Dashboard6

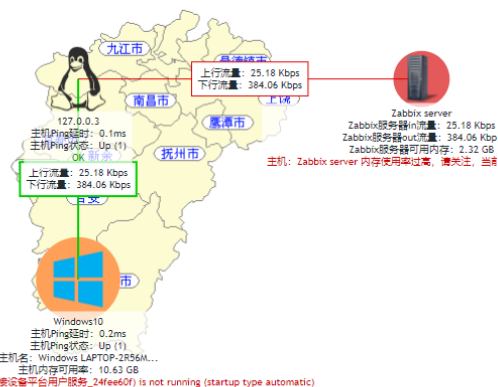
监控MAP



应用系统MAP



江西省网点运行状态图



告警事件

Time	Recovery time	Status	Info	Host	Problem • Severity	Duration	Ack	Actions
06:30:20		PROBLEM	Windows10	Windows10	Service "RasMan" (Remote Access Connection Manager) is not running (startup type automatic)	6m 11s	No	4
06:30:20		PROBLEM	Windows10	Windows10	Service "CDPUserSvc_24fee60f" (连接设备平台用户服务_24fee60f) is not running (startup type automatic)	6m 11s	No	4
06:30:17		PROBLEM	Windows10	Windows10	Service "OneSyncSvc_1ec276d6" (同步主机_1ec276d6) is not running (startup type automatic delayed)	6m 14s	No	4
06:30:17		PROBLEM	Windows10	Windows10	Service "edgeupdate" (Microsoft Edge 更新 服务 (edgeupdate)) is not running (startup type automatic delayed)	6m 14s	No	4
06:30:16		PROBLEM	Windows10	Windows10	Service "gpsvc" (Group Policy Client) is not running (startup type automatic)	6m 16s	No	4
06:30:16		PROBLEM	Windows10	Windows10	Service "QQMusicService" (QQMusicService) is not running (startup type automatic)	6m 16s	No	4
06:30:16		PROBLEM	Windows10	Windows10	Service "Intel(R) TPM Provisioning Service" (Intel(R) TPM Provisioning Service) is not running (startup type automatic)	6m 16s	No	4
06:30:16		PROBLEM	Windows10	Windows10	Service "MapsBroker" (Downloaded Maps Manager) is not running (startup type automatic delayed)	6m 16s	No	4
06:30:16		PROBLEM	Windows10	Windows10	Service "CDPUserSvc_1ec276d6" (连接设备平台用户服务_1ec276d6) is not running	6m 16s	No	4

监控统计信息

Parameter	Value	Details
Zabbix server is running	Yes	192.168.65.135:10051
Number of hosts (enabled/disabled/templates)	116	16 / 0 / 100
Number of items (enabled/disabled/not supported)	1237	1186 / 15 / 36
Number of triggers (enabled/disabled [problem/ok])	431	429 / 2 [32 / 397]
Number of users (online)	5	1
Required server performance, new values per second	27.36	

Zabbix server: Apache:BPS

Timestamp	Name	Value
2020-09-16 06:36:09	Apache:BPS	9.75 KB
2020-09-16 06:35:09	Apache:BPS	9.59 KB
2020-09-16 06:34:09	Apache:BPS	9.62 KB

04

Tag标签功能的使用

Tag标签的定义

Trigger prototype Dependencies

* Name 主机: {HOST.HOST}服务器TCP端口(#TCP_PORT)状态为DOWN!

Severity Not classified Information Warning Average High Disaster

* Expression {Linux_Server:net.tcp.listen({#TCP_PORT}).last()}=0 Add

[Expression constructor](#)

OK event generation Expression Recovery expression None

PROBLEM event generation mode Single Multiple

OK event closes All problems All problems if tag values match

Tags

Object	TCP Port	Remove
Port	{#TCP_PORT}	Remove

物理位置
联系人
重要级别

[Add](#)

Allow manual close

- ① 支持触发器配置Tag
- ② 支持多Tag配置定义
- ③ Tag支持Macro宏变量
- ④ Tag支持手动定义

Zabbix 5.0 支持主机和模板Tag

Hosts

All hosts / Training-VM-ZBXSRV2 Enabled ZBX SNMP JMX IPMI Applications 19 Items 98 Triggers 39 Graphs 19 Discovery rules 3 Web scenarios

Host Templates IPMI **Tags** Macros Inventory Encryption

Name	Value	Action
ApplicationName	Zabbix监控系统	Remove
Location	上海	Remove
应用组件	{INVENTORY.SOFTWARE}	Remove
服务器类型	CentOS 8.0 64位	Remove

[Add](#)

[Update](#) [Clone](#) [Full clone](#) [Delete](#) [Cancel](#)

Tag标签功能的使用

The screenshot displays the Zabbix Action configuration interface, divided into several sections:

- Actions:** Includes tabs for Action, Operations, Recovery operations, and Update operations.
- Name:** Set to "告警测试".
- Type of calculation:** Set to "And/Or".
- Conditions:** A table with columns "Label", "Name", and "Action":

Label	Name	Action
A	Trigger severity is greater than or equals <i>Warning</i>	Remove
B	Tag <i>监控类型</i> equals <i>日志监控</i>	Remove
C	Tag equals <i>系统级别</i>	Remove
D	Tag contains <i>操作系统</i>	Remove
- New condition:** A dropdown menu is open, showing options like "Tag", "Application", "Host", etc. The "Tag" option is selected and highlighted with a red box and an arrow.
- Default message:** A text area containing a message template with variables like {EVENT.TIME}, {EVENT.DATE}, {EVENT.NAME}, {HOST.NAME}, {EVENT.SEVERITY}, {INVENTORY.OS}, and {INVENTORY.LOCATION}.
- Operations:** A table with columns "Steps", "Details", "Start in", "Duration", and "Action":

Steps	Details	Start in	Duration	Action
1	Send message to users: Admin (Zabbix Administrator) via Event content to File	Immediately	60	Edit Remove
1 - 5	Send message to users: zabbix_admin (zabbix_admin), zabbix_super_admin (zabbix_super_admin) via 测试微信发送	Immediately	20m	Edit Remove
2 - 5	Send message to user groups: super admin via Email	00:01:00	15m	Edit Remove

Tag可以作为Action中动作的触发条件

Problems事件中Tag的使用

Host inventory

Tags

Show tags Tag name

Tag display priority

Problem事件列表中使用Tag作为
事件筛选条件

Time	Severity	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
2020-08-13 18:02:02	Warning		PROBLEM		Zabbix server	数据库: Zabbix server数据表trends_uint的大小超过...	7d 1h 22m	No		Object: trends_uint
2020-08-11 23:12:31	Warning		PROBLEM		Zabbix server	数据库: Zabbix server数据表history的大小超过10M!	8d 20h 12m	No		Object: history
2020-08-11 23:12:35	Warning		PROBLEM		Zabbix server	数据库: Zabbix server数据表history_uint的大小超过...	8d 20h 11m	No		Object: history_uint
2020-08-11 23:12:33	Warning		PROBLEM		Zabbix server	数据库: Zabbix server数据表history_str的大小超过1...	8d 20h 11m	No		Object: history_str
2020-08-11 23:12:20	Warning		PROBLEM		Zabbix server	数据库: Zabbix server数据表events的大小超过10M!	8d 20h 12m	No		Object: events
2020-08-11 23:12:24	Warning		PROBLEM		MySQL_Server	数据库: MySQL_Server 每秒的查询数量过高, 请关...	8d 20h 12m	No		TagMacro: 重要系统 系统级别: 1级系统
2020-08-11 23:12:17	Warning		PROBLEM		MySQL_Server_fullclone	数据库: MySQL_Server_fullclone 每秒的查询数量...	8d 20h 12m	No		TagMacro: 重要系统 系统级别: 1级系统
2020-08-11 23:12:12	Disaster		PROBLEM		Zabbix server	应用系统-集中监控平台 当前健康度为Disaster, 请关...	8d 20h 12m	No		应用系统: APPHealthy 系统组件: Zabbix Server 系统所属DC: Shanghai
2020-08-11 23:12:07	Disaster		PROBLEM		Zabbix server	主机: Zabbix server 内存使用率过高, 请关注, 当...	8d 20h 12m	No		系统级别: 1级系统 系统组件: Zabbix Server
2020-08-12 00:00:14	Warning		PROBLEM		Zabbix server snmp	主机: Zabbix server snmp 主机物理位置发生变化, ...	8d 19h 24m	No		操作系统类型: CentOS 监控方式: SNMP协议 系统级别: 测试系统
2020-08-11 23:12:07	Average		PROBLEM		Zabbix server	主机: Zabbix server CPU使用率过高, 请关注, 当...	8d 20h 12m	No		系统级别: 1级系统
2020-08-11 23:12:07	Warning		PROBLEM		Zabbix server	主机: Zabbix server Apache worker进程数量过高, ...	8d 20h 12m	No		中间件类型: Apache2.1 系统级别: 1级系统
19:08:44	High		PROBLEM		Linux_Server	主机: Linux_Server服务器TCP端口10052状态为DO...	15m 48s	No	1	Object: TCP Port Port: 10052 物理位置: Guangzhou ***
2020-08-11 23:12:12	Average		PROBLEM		Tomcat_MonitorByTemplate	中间件: Tomcat_MonitorByTemplate 堆内存使用量...	8d 20h 12m	No		Last Value: 57.5 MB 系统级别: 2级系统
2020-08-13 22:30:55	Disaster		PROBLEM		TomcatServer168	中间件: TomcatServer168 服务状态异常, 请关注, ...	6d 20h 53m	No		中间件类型: Tomcat 7.0 系统级别: 3级系统

利用Tag实现Event Correlation

The image displays two screenshots of the Zabbix Event Correlation Rules configuration interface.

Left Screenshot (Correlation Tab):

- Name:** Error Log Event Correlation
- Conditions:** A table with columns 'Label', 'Name', and 'Action'. It contains one row: Label 'A', Name 'New event tag 告警类型 equals 日志监控', and Action 'Remove'.
- New condition:** A dropdown menu is open, showing options: 'Old event tag', 'Old event tag', 'New event tag', 'New event host group', 'Event tag pair', 'Old event tag value', and 'New event tag value'. The first 'Old event tag' option is selected. A red box highlights the dropdown, and a red arrow points to the selected option.
- Description:** An empty text input field.

Right Screenshot (Operations Tab):

- Operations:** A table with columns 'Details' and 'Action'. It contains one row: Details 'Close old events' and Action 'Remove'.
- New operation:** A dropdown menu is open, showing options: 'Close old events', 'Close old events', and 'Close new event'. The first 'Close old events' option is selected.
- Buttons:** Update, Clone, Delete, and Cancel.

基于告警事件Tag实现Event correlation关联功能和告警压制

Event Correlation实现效果

Problems

Time	Severty	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
22:07:46	Warning		PROBLEM		Zabbix server	Test1 Error Log Test!	22s	No	1	告警类型 日志监控
22:07:36	Warning		PROBLEM		Zabbix server	Test1 Error Log Test!	32s	No	1	告警类型 日志监控
22:07:28	Warning		PROBLEM		Zabbix server	Test1 Error Log Test!	40s	No	1	告警类型 日志监控
22:07:23	Warning		PROBLEM		Zabbix server	Test1 Error Log Test!	45s	No	1	告警类型 日志监控
22:07:14	Warning		PROBLEM		Zabbix server	Test1 Error Log Test!	54s	No	1	告警类型 日志监控
22:07:09	Warning		PROBLEM		Zabbix server	Test1 Error Log Test!	59s	No	1	告警类型 日志监控
22:08:04	Warning		PROBLEM		Zabbix server	Test2 Error Log Test!	4s	No	1	告警类型 日志监控
22:07:48	Warning		PROBLEM		Zabbix server	Test2 Error Log Test!	20s	No	1	告警类型 日志监控
22:07:39	Warning		PROBLEM		Zabbix server	Test2 Error Log Test!	29s	No	1	告警类型 日志监控
22:07:30	Warning		PROBLEM		Zabbix server	Test2 Error Log Test!	38s	No	1	告警类型 日志监控
22:07:21	Warning		PROBLEM		Zabbix server	Test2 Error Log Test!	47s	No	1	告警类型 日志监控
22:07:17	Warning		PROBLEM		Zabbix server	Test2 Error Log Test!	51s	No	1	告警类型 日志监控
22:07:05	Warning		PROBLEM		Zabbix server	Test2 Error Log Test!	1m 3s	No	1	告警类型 日志监控

Event correlation 关联机制未启用

Problems

Time	Severty	Recovery time	Status	Info	Host	Problem	Duration	Ack	Actions	Tags
22:09:54	Warning		PROBLEM		Zabbix server	Test2 Error Log Test!	15s	No	1	告警类型 日志监控
22:08:05	Warning	22:09:54	RESOLVED	i	Zabbix server	Test1 Error Log Test!	1m 49s	No	2	告警类型 日志监控
22:08:04	Warning	22:09:54	RESOLVED	i	Zabbix server	Test2 Error Log Test!	1m 50s	No	2	告警类型 日志监控
22:07:48	Warning	22:09:54	RESOLVED	i	Zabbix server	Test2 Error Log Test!	2m 6s	No	2	告警类型 日志监控
22:07:46	Warning	22:09:54	RESOLVED	i	Zabbix server	Test1 Error Log Test!	2m 8s	No	2	告警类型 日志监控
22:07:39	Warning	22:09:54	RESOLVED	i	Zabbix server	Test2 Error Log Test!	2m 15s	No	2	告警类型 日志监控
22:07:36	Warning	22:09:54	RESOLVED	i	Zabbix server	Test1 Error Log Test!	2m 18s	No	2	告警类型 日志监控
22:07:30	Warning	22:09:54	RESOLVED	i	Zabbix server	Test2 Error Log Test!	2m 24s	No	2	告警类型 日志监控
22:07:28	Warning	22:09:54	RESOLVED	i	Zabbix server	Test1 Error Log Test!	2m 26s	No	2	告警类型 日志监控
22:07:23	Warning	22:09:54	RESOLVED	i	Zabbix server	Test1 Error Log Test!	2m 31s	No	2	告警类型 日志监控
22:07:21	Warning	22:09:54	RESOLVED	i	Zabbix server	Test2 Error Log Test!	2m 33s	No	2	告警类型 日志监控
22:07:17	Warning	22:09:54	RESOLVED	i	Zabbix server	Test2 Error Log Test!	2m 37s	No	2	告警类型 日志监控
22:07:14	Warning	22:09:54	RESOLVED	i	Zabbix server	Test1 Error Log Test!	2m 40s	No	2	告警类型 日志监控
22:07:09	Warning	22:09:54	RESOLVED	i	Zabbix server	Test1 Error Log Test!	2m 45s	No	2	告警类型 日志监控
22:07:05	Warning	22:09:54	RESOLVED	i	Zabbix server	Test2 Error Log Test!	2m 49s	No	2	告警类型 日志监控

Event correlation 关联机制启用并生效，避免事件风暴

05

Zabbix trapper功能的使用

Zabbix支持的数据采集方式

Zabbix被动监控

- Zabbix agent
- Simple check (agent-less)
- SNMP agent (v1, v2, v3)
- IPMI agent
- JMX agent
- HTTP agent
- SSH agent (pass/key)
- Telnet agent
- Database monitor (ODBC)
- External check

Zabbix主动监控

- Zabbix agent (active)
- SNMP trap
- Zabbix trapper

其他监控方式

- Shell、Python、Perl、Go
- Zabbix API

Zabbix trapper功能优势

无需依赖Zabbix
Agent组件



数据传输可加密，
更安全



Active主动模式，
性能更优



便于对接其他
系统数据



Zabbix trapper功能的使用

zabbix_sender规则：

```
zabbix_sender -z <Zabbix server IP/DNS> -s <HOST NAME> -k trapper.key -o Value
```

```
echo <HOST NAME> Key Value | zabbix_sender -z <Zabbix server IP/DNS> -i -
```

zabbix_sender发送单值数据用于监控：

```
[root@TestServer opt]# zabbix_sender -z 127.0.0.1 -s "TestServer_2" -k TestItem0 -o 1689
info from server: "processed: 1; failed: 0; total: 1; seconds spent: 0.000082"
sent: 1; skipped: 0; total: 1
[root@TestServer opt]# zabbix_sender -z 127.0.0.1 -s "TestServer_2" -k TestItem0 -o 1866
info from server: "processed: 1; failed: 0; total: 1; seconds spent: 0.000035"
sent: 1; skipped: 0; total: 1
[root@TestServer opt]# █
```

<input type="checkbox"/>	Host	Name ▼	Last check	Last value	Change
▼	TestServer_2	Zabbix-Sender (1 Item)			
<input type="checkbox"/>		TestItem0	2020-09-16 05:56:00	1866	+177

Zabbix trapper功能的使用

zabbix_sender规则：

```
zabbix_sender -z <Zabbix server IP/DNS> -i /opt/Datafile.txt
```

zabbix_sender从文件中获取数据用于监控：

```
[root@TestServer opt]# cat Datafile.txt
"TestServer_2" TestItem1 366
"TestServer_2" TestItem2 388
"TestServer_2" TestItem3 399
"TestServer_2" TestItem4 666
"TestServer_2" TestItem5 688
"TestServer_2" TestItem6 699
[root@TestServer opt]# █
```

```
[root@TestServer opt]# zabbix_sender -z 127.0.0.1 -i /opt/Datafile.txt
info from server: "processed: 6; failed: 0; total: 6; seconds spent: 0.000093"
sent: 6; skipped: 0; total: 6
[root@TestServer opt]# █
```

Zabbix trapper功能的使用

zabbix_sender从文件中获取数据效果：

```
[root@TestServer opt]# cat Datafile.txt
"TestServer_2" TestItem1 366
"TestServer_2" TestItem2 388
"TestServer_2" TestItem3 399
"TestServer_2" TestItem4 666
"TestServer_2" TestItem5 688
"TestServer_2" TestItem6 699
[root@TestServer opt]#
```

<input type="checkbox"/> Host	Name ▼	Last check	Last value	Change
▼ <u>TestServer_2</u>	Zabbix-Sender (6 Items)			
<input type="checkbox"/>	TestItem6	2020-09-16 05:50:53	699	+400
<input type="checkbox"/>	TestItem5	2020-09-16 05:50:53	688	+400
<input type="checkbox"/>	TestItem4	2020-09-16 05:50:53	666	+400
<input type="checkbox"/>	TestItem3	2020-09-16 05:50:53	399	+200
<input type="checkbox"/>	TestItem2	2020-09-16 05:50:53	388	+200
<input type="checkbox"/>	TestItem1	2020-09-16 05:50:53	366	+200

0 selected

Zabbix trapper功能，可极大提升数据采集性能，更高效

```
total: 6; seconds spent: 0.000093"
```

联系我们

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Zabbix 中国致力于为国内用户提供培训、咨询、以及其他的专业技术支持。也为国内的用户搭建交流学习的平台。



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加入技术交流群

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THANK YOU 😊

谢谢！

