

# Cisco RV230 SNMP monitoring with Zabbix

## Enable SNMP in Router

**CISCO RV320 Gigabit Dual WAN VPN Router**

Getting Started  
Setup Wizard  
System Summary  
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DHCP  
**System Management**  
Dual WAN  
Bandwidth Management  
**SNMP**  
SMTP  
Discovery-Bonjour  
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Diagnostic  
Factory Default  
Firmware Upgrade  
Language Selection  
Restart  
Backup and Restore  
Port Management  
Firewall  
VPN

### SNMP

#### SNMP Global Settings

System Name:

System Contact:

System Location:

Trap Community Name:

☒ Enable SNMPv1/v2c

Get Community Name:

Set Community Name:

SNMPv1/v2c Trap Receiver IP Address:  (For IPv4)

☐ Enable SNMPv3

## Check if it work

```
snmpwalk -v 1 -c public router.liuty.info 1
```

```
iso.3.6.1.2.1.1.1.0 = STRING: "Linux, Cisco RV320, Version 1.4.2.17 Mon Oct 30 15:52:47 CST 2017"
iso.3.6.1.2.1.1.2.0 = OID: iso.3.6.1.4.1.9.6.1.23.3.13
iso.3.6.1.2.1.1.3.0 = Timeticks: (8177300) 22:42:53.00

iso.3.6.1.2.1.1.4.0 = STRING: "noc@xlutyi.info"
iso.3.6.1.2.1.1.5.0 = STRING: "router.xliuty.info"
iso.3.6.1.2.1.1.6.0 = ""
iso.3.6.1.2.1.1.7.0 = INTEGER: 78
iso.3.6.1.2.1.1.8.0 = Timeticks: (11) 0:00:00.11

iso.3.6.1.2.1.1.9.1.2.1 = OID: iso.3.6.1.6.3.10.3.1.1
iso.3.6.1.2.1.1.9.1.2.2 = OID: iso.3.6.1.6.3.11.3.1.1
iso.3.6.1.2.1.1.9.1.2.3 = OID: iso.3.6.1.6.3.15.2.1.1
iso.3.6.1.2.1.1.9.1.2.4 = OID: iso.3.6.1.6.3.1
iso.3.6.1.2.1.1.9.1.2.5 = OID: iso.3.6.1.2.1.49
iso.3.6.1.2.1.1.9.1.2.6 = OID: iso.3.6.1.2.1.4
iso.3.6.1.2.1.1.9.1.2.7 = OID: iso.3.6.1.2.1.50
iso.3.6.1.2.1.1.9.1.2.8 = OID: iso.3.6.1.6.3.16.2.2.1

iso.3.6.1.2.1.1.9.1.3.1 = STRING: "The SNMP Management Architecture MIB."
iso.3.6.1.2.1.1.9.1.3.2 = STRING: "The MIB for Message Processing and Dispatching."
iso.3.6.1.2.1.1.9.1.3.3 = STRING: "The management information definitions for the SNMP User-based Security Model."
iso.3.6.1.2.1.1.9.1.3.4 = STRING: "The MIB module for SNMPv2 entities"
iso.3.6.1.2.1.1.9.1.3.5 = STRING: "The MIB module for managing TCP implementations"
iso.3.6.1.2.1.1.9.1.3.6 = STRING: "The MIB module for managing IP and ICMP implementations"
iso.3.6.1.2.1.1.9.1.3.7 = STRING: "The MIB module for managing UDP implementations"
```

iso.3.6.1.2.1.1.9.1.3.8 = STRING: "View-based Access Control Model for SNMP."

iso.3.6.1.2.1.1.9.1.4.1 = Timeticks: (7) 0:00:00.07  
iso.3.6.1.2.1.1.9.1.4.2 = Timeticks: (7) 0:00:00.07  
iso.3.6.1.2.1.1.9.1.4.3 = Timeticks: (7) 0:00:00.07  
iso.3.6.1.2.1.1.9.1.4.4 = Timeticks: (8) 0:00:00.08  
iso.3.6.1.2.1.1.9.1.4.5 = Timeticks: (8) 0:00:00.08  
iso.3.6.1.2.1.1.9.1.4.6 = Timeticks: (8) 0:00:00.08  
iso.3.6.1.2.1.1.9.1.4.7 = Timeticks: (8) 0:00:00.08  
iso.3.6.1.2.1.1.9.1.4.8 = Timeticks: (11) 0:00:00.11

#number of network interfaces

iso.3.6.1.2.1.2.1.0 = INTEGER: 8

iso.3.6.1.2.1.2.2.1.1.1 = INTEGER: 1  
iso.3.6.1.2.1.2.2.1.1.2 = INTEGER: 2  
iso.3.6.1.2.1.2.2.1.1.3 = INTEGER: 3  
iso.3.6.1.2.1.2.2.1.1.4 = INTEGER: 4  
iso.3.6.1.2.1.2.2.1.1.5 = INTEGER: 5  
iso.3.6.1.2.1.2.2.1.1.6 = INTEGER: 6  
iso.3.6.1.2.1.2.2.1.1.7 = INTEGER: 7  
iso.3.6.1.2.1.2.2.1.1.8 = INTEGER: 8

#network interface names

iso.3.6.1.2.1.2.2.1.2.1 = STRING: "lo"

iso.3.6.1.2.1.2.2.1.2.6 = STRING: "eth0"  
iso.3.6.1.2.1.2.2.1.2.7 = STRING: "eth1"  
iso.3.6.1.2.1.2.2.1.2.8 = STRING: "eth2"

iso.3.6.1.2.1.2.2.1.3.1 = INTEGER: 24  
iso.3.6.1.2.1.2.2.1.3.6 = INTEGER: 6  
iso.3.6.1.2.1.2.2.1.3.7 = INTEGER: 6  
iso.3.6.1.2.1.2.2.1.3.8 = INTEGER: 6

#MTU

iso.3.6.1.2.1.2.2.1.4.1 = INTEGER: 16436

iso.3.6.1.2.1.2.2.1.4.6 = INTEGER: 1500  
iso.3.6.1.2.1.2.2.1.4.7 = INTEGER: 1500  
iso.3.6.1.2.1.2.2.1.4.8 = INTEGER: 1500

# interface speed?

iso.3.6.1.2.1.2.2.1.5.1 = Gauge32: 10 000 000

iso.3.6.1.2.1.2.2.1.5.6 = Gauge32: 10 000 000

iso.3.6.1.2.1.2.2.1.5.7 = Gauge32: 1 000 000 000  
iso.3.6.1.2.1.2.2.1.5.8 = Gauge32: 1 000 000 000

# traffic

iso.3.6.1.2.1.2.2.1.10.1 = Counter32: 3098996

iso.3.6.1.2.1.2.2.1.10.6 = Counter32: 1085435540  
iso.3.6.1.2.1.2.2.1.10.7 = Counter32: 190195852  
iso.3.6.1.2.1.2.2.1.10.8 = Counter32: 4351921

iso.3.6.1.2.1.2.2.1.11.1 = Counter32: 15626

iso.3.6.1.2.1.2.2.1.11.6 = Counter32: 3082915  
iso.3.6.1.2.1.2.2.1.11.7 = Counter32: 4768695  
iso.3.6.1.2.1.2.2.1.11.8 = Counter32: 56825

iso.3.6.1.2.1.2.2.1.16.1 = Counter32: 3098996

iso.3.6.1.2.1.2.2.1.16.6 = Counter32: 248515118  
iso.3.6.1.2.1.2.2.1.16.7 = Counter32: 1102838746  
iso.3.6.1.2.1.2.2.1.16.8 = Counter32: 294752  
iso.3.6.1.2.1.2.2.1.17.1 = Counter32: 15626

iso.3.6.1.2.1.2.2.1.17.6 = Counter32: 4481681

```
iso.3.6.1.2.1.2.2.1.17.7 = Counter32: 2794479
iso.3.6.1.2.1.2.2.1.17.8 = Counter32: 2416
```

## Add Cisco template in Zabbix

search for Template on [https://www.zabbix.org/wiki/Zabbix\\_Templates](https://www.zabbix.org/wiki/Zabbix_Templates)

tbd: Create own template.

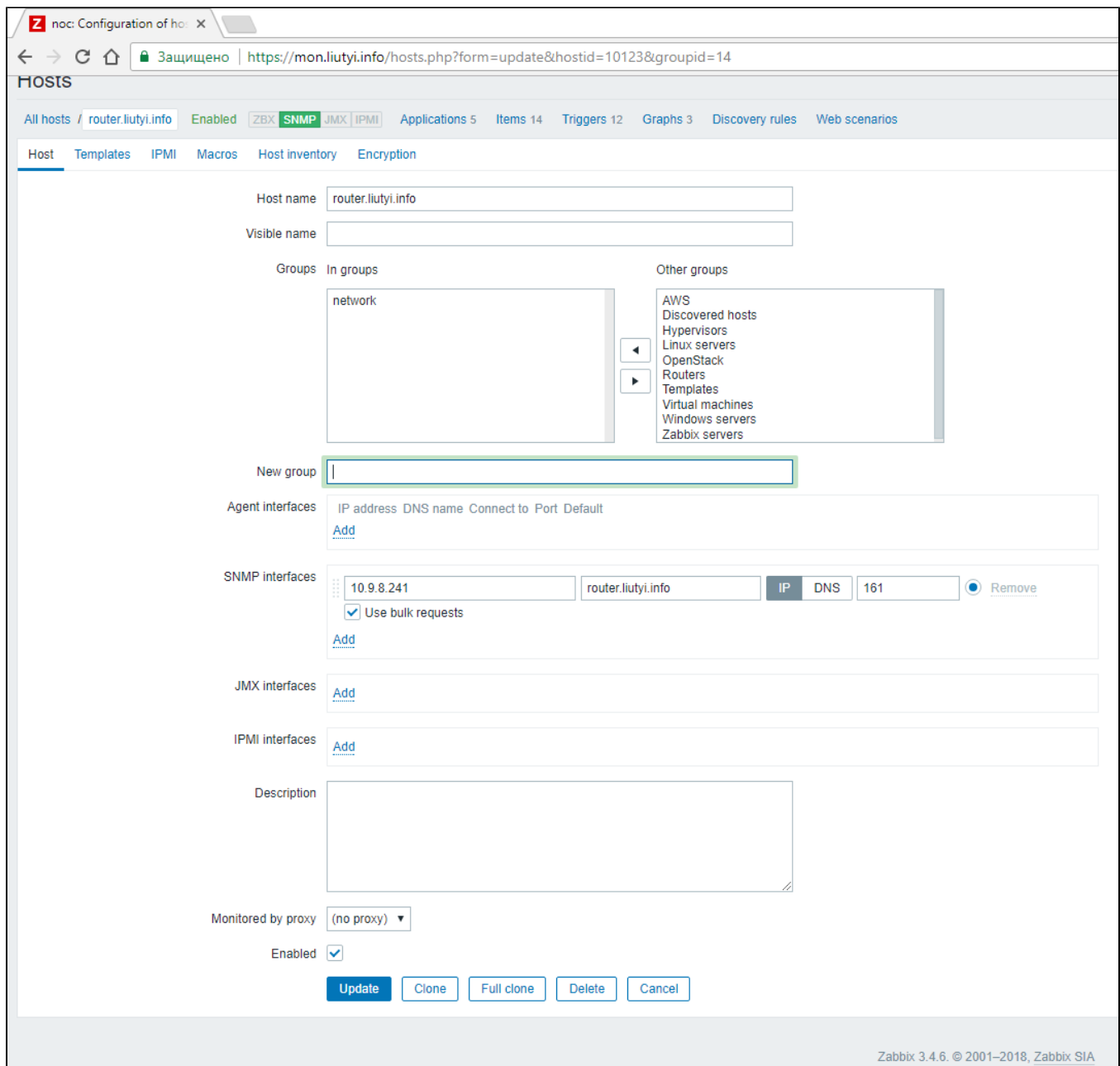
example [https://github.com/gcaracuel/Zabbix\\_Templates/blame/master/Cisco%20Routers/Cisco-Routers-Template.xml](https://github.com/gcaracuel/Zabbix_Templates/blame/master/Cisco%20Routers/Cisco-Routers-Template.xml)

The screenshot shows the Zabbix web interface with the 'Import file' dialog open. The dialog has a header with the Zabbix logo and navigation tabs: Monitoring, Inventory, Reports, Configuration, and Administration. Below the tabs are sub-tabs: Host groups, Templates, Hosts, Maintenance, Actions, Event correlation, Discovery, and Services. The 'Import file' section shows a file selection button 'Выберите файл' and the filename 'Cisco-Routers-Template.xml'. Below this is a table for selecting which components to import.

| Rules            | Update existing                     | Create new                          | Delete missing           |
|------------------|-------------------------------------|-------------------------------------|--------------------------|
| Groups           |                                     | <input checked="" type="checkbox"/> |                          |
| Hosts            | <input type="checkbox"/>            | <input type="checkbox"/>            |                          |
| Templates        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                          |
| Template screens | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Template linkage |                                     | <input checked="" type="checkbox"/> |                          |
| Applications     |                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Items            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Discovery rules  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Triggers         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Graphs           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Web scenarios    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Screens          | <input type="checkbox"/>            | <input type="checkbox"/>            |                          |
| Maps             | <input type="checkbox"/>            | <input type="checkbox"/>            |                          |
| Images           | <input type="checkbox"/>            | <input type="checkbox"/>            |                          |
| Value mappings   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                          |

At the bottom of the dialog are two buttons: 'Import' and 'Cancel'.

## Add SNMP host in Zabbix



ZABBIX

MonitoringInventoryReportsConfigurationAdministration

Host groupsTemplates**Hosts**MaintenanceActionsEvent correlationDiscoveryServices

Hosts

All hosts / router.liutyi.infoEnabledZBXSNMPJMXIPMIApplications 5Items 14Triggers 12Graphs 3Discovery rulesWeb scenarios

HostTemplates**IPMI**MacrosHost inventoryEncryption

Linked templates

| Name           | Action  |
|----------------|---|
| Template_Cisco | <a href="#">Unlink</a> <a href="#">Unlink and clear</a> |

Link new templates

Select

Add

Update

Clone

Full clone

Delete

Cancel

graph example

