KunLun Zabbix Template V1.0.0

User Guide

Issue 01

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About This Document

Purpose

This document describes the functions and usage of the Zabbix plug-in. The Zabbix plug-in is provided as a Zabbix template. Users can directly use it or use it for secondary development. The Zabbix plug-in can be used to monitor the intelligent Baseboard Management Controller (iBMC).

Intended Audience

This document is intended for:

- Technical support engineers
- System maintenance engineers

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
▲ DANGER	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
A CAUTION	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results.
	NOTICE is used to address practices not related to personal injury.
□ NОТЕ	Supplements the important information in the main text. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

Change History

Issue	Date	Description				
01	2024-07-19	This issue is the first official release.				

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1

Zabbix Template Introduction

The Zabbix plug-in is provided as a Zabbix template. Users can directly use it or use it for secondary development. The Zabbix plug-in can be used to monitor the iBMC.

- 1.1 Zabbix Compatibility Information
- 1.2 Zabbix Template Names

1.1 Zabbix Compatibility Information

For details about the Zabbix compatibility, see Table 1-1.

Table 1-1 Compatibility information

Managed Object	Compatible Zabbix Version	Version Dependency	Hardware Compatibility	Interface Protocol	
іВМС	Zabbix 5.0Zabbix 5.4Zabbix 6.0Zabbix 6.4	iBMC V3.03.00.59 or later	KunLun 2280	• SNMPv2 • SNMPv3	

1.2 Zabbix Template Names

1.2.1 Template Names (for Zabbix 5.0 only)

template_kunlun_iBMC.xml

1.2.2 Template Names (for Zabbix 5.4 or later)

template_kunlun_iBMC.yaml

2 Template Functions

iBMC Template

Monitoring page:

- Latest data tab page: CPU, fan, hard disk, iBMC system information, memory, power supply, RAID controller card, firmware Info, network card, OCP card, PCIe card, BusinessPort, LogicalDrive, and temperature
- Problems and triggers tab page: system health status, CPU status, fan status, power supply status, hard disk status, memory status, OCP card status, PCIe card status, network card status, management network port status, and business port link status
- Graphs tab page: inlet temperature, power consumption, system CPU usage, averagePower, peakPower, presentSystemPower and system memory usage

Inventory page: type, name, OS, serial number, tag, and MAC address

3 Verify the software package

You need obtained software package for the Zabbix plug-in Templates and verified its integrity.

- Step 1 Obtain software package for the Zabbix plug-in Templates (for example, *KunLun_Zabbix_Template_V1.0.0.tar*) and its SHA256 verification file (for example, *KunLun_Zabbix_Template_v1.0.0.sha256.sum*) from GitHub.
- **Step 2** Verify the integrity of the Zabbix plug-in Templates software package(on Linux).
 - 1. Go to the directory where the Templates installation package and SHA256 verification file are stored.
 - 2. Run the **sha256sum -c < (grep** software package name sha256 verification file name) command to verify the software package.
 - Example: sha256sum -c <(grep KunLun_Zabbix_Template_V1.0.0.tar KunLun_Zabbix_Template_v1.0.0.sha256.sum)
 - 3. Check whether the verification result is **OK**.
 - If yes, the software package has not been tampered with and can be used.
 - If no, the software package has been tampered with. Obtain a new software package.

----End

4 Template Configuration

- 4.1 Configuring the iBMC
- 4.2 Importing an iBMC Template
- 4.3 Configuring an iBMC Template
- 4.4 Adding a Host

4.1 Configuring the iBMC

- Step 1 Enable SNMPv2/SNMPv3 protocol.
- Step 2 Configure a community name.

This parameter is required if the SNMP version is set to SNMPv2.

----End

4.2 Importing an iBMC Template

- The imported template is for reference only. You can modify it as required.
- For Zabbix 5.0, use the XML template.
- **Step 1** Log in to GitHub and obtain the **template_kunlun_iBMC.yaml**, or **template_kunlun_iBMC.xml** template.
- Step 2 Log in to the Zabbix WebUI.
- **Step 3** Choose **Configuration > Templates**. The **Templates** page is displayed.
- Step 4 Click Import. The Import page is displayed.
- Step 5 Click Import file and select the template obtained in Step 1.
- Step 6 Click Import.

----End

4.3 Configuring an iBMC Template

- The community name needs to be configured in the template if the SNMP version is set to SNMPv2.
- The community name does not need to be configured if the SNMP version is set to SNMPv3.
- Step 1 Log in to the Zabbix WebUI.
- **Step 2** Choose **Configuration > Templates**. The **Templates** page is displayed.
- **Step 3** Click the name of the iBMC template that has been imported. The template configuration page is displayed.
- **Step 4** Click Macros and set **\$SNMP_COMMUNITY**} and **\$SNMP_PORT**}.
 - The value of **\\$SNMP_COMMUNITY**} is the community name configured in 4.1 Configuring the iBMC.
 - Retain the default value 161 for {\$SNMP_PORT}.

Step 5 Click Update.

----End

4.4 Adding a Host

- **Step 1** Log in to the Zabbix WebUI.
- **Step 2** Choose **Configuration > Hosts**. The **Hosts** page is displayed.
- Step 3 Click Create host. The page for creating a host is displayed.

Parameters:

- **Host name**: Enter the host name.
- Groups: Select KunLun Server.
- interfaces:
 - Agent interfaces: Click Remove to remove the existing IP address information. (This is only required for Zabbix 5.0.)
 - SNMP interfaces: Click Add, set the IP address of the iBMC and retain the default port number 161.
 - SNMP version: Select SNMPv2 or SNMPv3 based on the SNMP version enabled on the server.

□ NOTE

If the SNMP version is set to **SNMPv3**, the value of the sub-parameter must be the same as that on the iBMC WebUI of the server. The iBMC supports only the authPriv security level. SHA1, SHA, and SHA128 are of the same encryption algorithm. AES and ASE128 are of the same algorithm.

■ The value of **SNMP community** is the community name configured in 4.1 Configuring the iBMC.

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This parameter is mandatory when the SNMP version is set to **SNMPv2**.

Enabled: Retain the default value.

Templates: Click **Select**. In the upper right corner of the displayed page, select the corresponding group (**KunLun Server**) and select the required template. After the selection is complete, click **Add**.

Inventory: Select **Automatic**.

Step 4 Click Add.

----End

A Obtaining Technical Support

To obtain assistance, contact technical support as follows:

- Contact customer service center at
 - 400-009-8999
 - support@kunlunit.com
- Contact technical support personnel.

B Communication Matrix

Sour ce Devi ce	So urc e IP Ad dre ss	Sour ce Port Num ber	Desti natio n Devic e	Destina tion IP Addres s	Desti natio n Port Numb er	Prot ocol	Port Descri ption	Destin ation Port Config urable (Yes/N o)	Authenticat ion Mode	Encrypti on Mode
Devi ce to whic h zabb ix belo ngs	IP add res s of the dev ice to whi ch zab bix bel ong s	Ran	iBMC	IP address of the device to which iBMC belongs	161	UD P	iBMC SNMP server port is used to obtain SNMP informa tion.	Yes	v1 v2c: Team name v3: Username/P assword Note: using v1 and v2c will reduce security of the system. Exercise caution when performing this operation.	SNMPV3 is subject to iBMC user settings.
iBM C	IP add res s of the dev ice to whi ch iBM C bel ong	Ran dom	Devic e to which zabbi x belon gs	IP address of the device to which zabbix belongs	162	UD P	iBMC SNMP Trap receivin g port is used to obtain SNMP Trap informa tion.	Yes	v1 v2c: Team name v3: Username/P assword Note: using v1 and v2c will reduce security of the system. Exercise caution when	None

Sour ce Devi ce	So urc e IP Ad dre ss	Sour ce Port Num ber	Desti natio n Devic e	Destina tion IP Addres s	Desti natio n Port Numb er	Prot ocol	Port Descri ption	Destin ation Port Config urable (Yes/N o)	Authenticat ion Mode	Encrypti on Mode
	S								performing this operation.	