

Zabbix × AI Agent

Zabbix operation transformed by AI Agent

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Introduction

- Who I am**
- What is SCSK**

Executive Summary

Case 1 Host Registration

Case 2 Creating Map

Case 3 Item Creation and Trigger Creation

Case 4 Improve initial response to failure events

Summary

Introduction

Who I am

Yukihisa Soga from Japan

Working in IT since 2000

Joined SCSK in 2008

Zabbix user since 2017

Zabbix Certified Professional



What is SCSK?

SCSK Group's Business Lines



Overseas Network





Executive Summary

Workforce Shortage

- Difficulty recruiting qualified engineers
- Reduced team size for operations

Complex Settings

- Diversified monitoring requirements
- Complicated Zabbix configurations

Fast Recovery

- Immediate response to system failures
- Minimize service downtime

Using AI as workforce

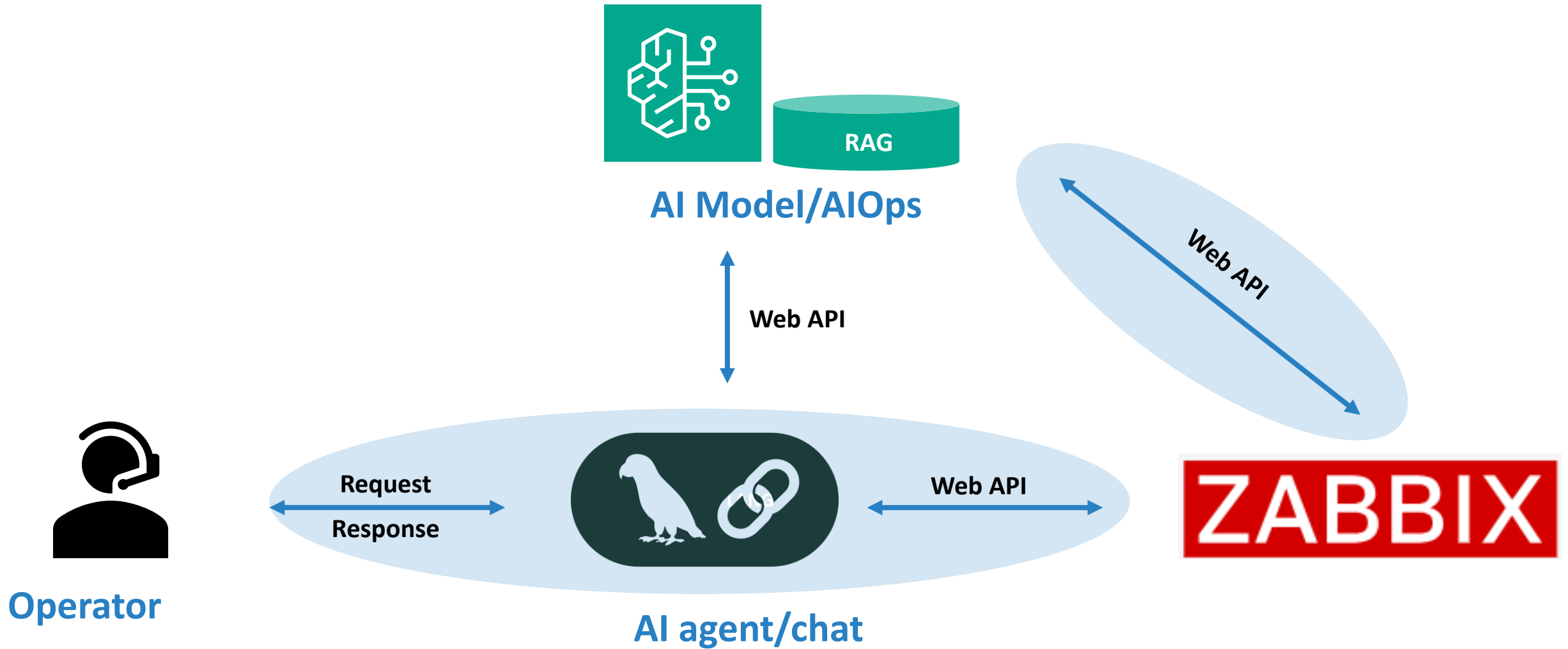
- Reduce manual work and setup time.

AI Automated Config

- AI agents handle complex setup tasks.

AI Assisted Incident

- Use past alerts/incidents for optimal recovery suggestions (AIOps).





Case 1

Host Registration

Case 1 Host Registration (Single Registration)

AI chat widget includes dashboard

The screenshot displays the Zabbix AI Chat Manager dashboard. On the left is a dark blue sidebar with navigation links: Dashboards, Monitoring, Services, Inventory, Reports, Data collection, Alerts, Users, Administration, Support, Integrations, Help, User settings, and Sign out. The main content area has a header 'AIダッシュボード' and a sub-header 'URL'. Below this, the title 'Zabbix API Chat Manager' is prominently displayed. A chat conversation is shown with a user message 'I would like to add new server monitoring.' and an AI response providing a list of six required details for adding a new server. At the bottom, there is a text input field with the placeholder 'What Zabbix task would you like to perform?' and a send button. The Windows taskbar is visible at the very bottom of the screen.

ZABBIX AIダッシュボード

All dashboards / AIダッシュボード

URL

Zabbix API Chat Manager

I would like to add new server monitoring.

Certainly! I'd be happy to help you add a new server for monitoring in Zabbix. To do this, we'll need to create a new host in Zabbix. However, I'll need some more information to properly configure the new server monitoring. Could you please provide the following details:

1. The name you want to give to the new server in Zabbix
2. The IP address or DNS name of the server
3. The groups you want to add this server to (e.g., "Linux servers", "Windows servers", etc.)
4. The templates you want to apply to this server (e.g., "Template OS Linux by Zabbix agent", "Template OS Windows by Zabbix agent", etc.)
5. The type of Zabbix agent installed on the server (Zabbix agent, Zabbix agent (active), SNMP, etc.)
6. If using SNMP, what SNMP version and community string (for v1/v2c) or context name (for v3) should be used

Once you provide this information, I can create the appropriate API request to add the new server to Zabbix monitoring.

The AI has finished the task. No further API requests are needed.

What Zabbix task would you like to perform?

16:03
2025/08/19

Case 1 Host Registration (One host)

Ask to AI how to create a host

I would like to add new server monitoring.



I would like to add new server monitoring.



Certainly! I'd be happy to help you add a new server for monitoring in Zabbix. To do this, we'll need to create a new host in Zabbix. However, I'll need some more information to properly configure the new server monitoring. Could you please provide the following details:

1. The name
- 2.
3. The
4. The
5. The type
6. If using

1. The name you want to give to the new server
2. The IP address or DNS name of the server
3. The groups you want to add this server to
4. The templates you want to apply to this server
5. The type of Zabbix agent installed on the server
6. If using SNMP, what SNMP version and community

Case 1 Host Registration (One Host)

Answer the questions from 1 to 5.

5. The type of Zabbix agent installed on the server (Zabbix agent, Zabbix agent (active), SNMP, etc.)
6. If using SNMP, what SNMP version and community string (for v1/v2c) or context name (for v3) should be used

Once you provide this information, I can create the appropriate API request to add the new server to Zabbix monitoring.

1. WEBSV001
2. 192.168.11.100
3. AI-CREATE
4. Linux by Zabbix agent
5. Zabbix agent

- 1.WEBSV001
- 2.192.168.11.100
- 3.AI-CREATE
- 4.Linux by Zabbix agent
- 5.Zabbix agent

Case 1 Host Registration (One Host)

Register a host by executing the Zabbix API in the background.



Excellent! The API response indicates that the new host has been successfully created in Zabbix. Let's break down the response:

```
{"jsonrpc": "2.0", "result": {"hostids": ["11675"]}, "id": 1}
```

This means:

1. The API request was successful.
2. A new host has been created with the hostid "11675".

To summarize what we've accomplished:

1. We've successfully added a new server named "WEBSV001" to Zabbix monitoring.
2. The server's IP address is set to 192.168.11.100.
3. It's been added to the "AI-CREATE" host group.
4. The "Linux by Zabbix agent" template has been applied to it.
5. It's configured to use the Zabbix agent on the default port 10050.
6. Host inventory has been enabled for this server.

Case 1 Host Registration (One Host)

The host has been registered.

ZABBIX

zb7

Dashboards

Monitoring

Services

Inventory

Reports

Data collection

Template groups

Host groups

Templates

Hosts

Hosts

Host groups

AI-CREATE X

type here to search

Select

Templates

type here to search

Select

Name

DNS

IP

Port

Status

Any

Enabled

Disabled

Monitored by

Any

Server

Proxy

Proxy group

Tags

And/Or

Or

tag

Contains

Add

Apply

Reset

<input type="checkbox"/>	Name ▲	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates
<input type="checkbox"/>	WEBSV001	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.11.100:10050		Linux by Zabbix agent

Case 1 Host Registration (Bulk Host)

Register hosts in bulk using CSV format.

Please register the following hosts in bulk.

Host name, IP address, Template, Host group

APSV001,192.168.2.11,Linux by Zabbix agent,AI-CREATE

APSV002,192.168.2.12,Linux by Zabbix agent,AI-CREATE

APSV003,192.168.2.13,Linux by Zabbix agent,AI-CREATE

APSV004,192.168.2.14,Linux by Zabbix agent,AI-CREATE

APSV005,192.168.2.15,Linux by Zabbix agent,AI-CREATE



Case 1 Host Registration (Bulk Host)

Create a host by executing the Zabbix API in the background.



Thank you for providing the API response. The result indicates that the operation was successful, and all five hosts have been created in Zabbix. Let's break down

```
{
  "jsonrpc": "2.0",
  "result": {
    "hostids": ["11676", "11677", "11678", "11679", "11680"]
  },
  "id": 1
}
```

This response shows that:

1. Five new hosts were successfully created in Zabbix.
2. The Zabbix server assigned the following hostids to the newly created hosts:
 - 11676
 - 11677
 - 11678
 - 11679
 - 11680

Case 1 Host Registration (Bulk Host)



The bulk host has been registered.

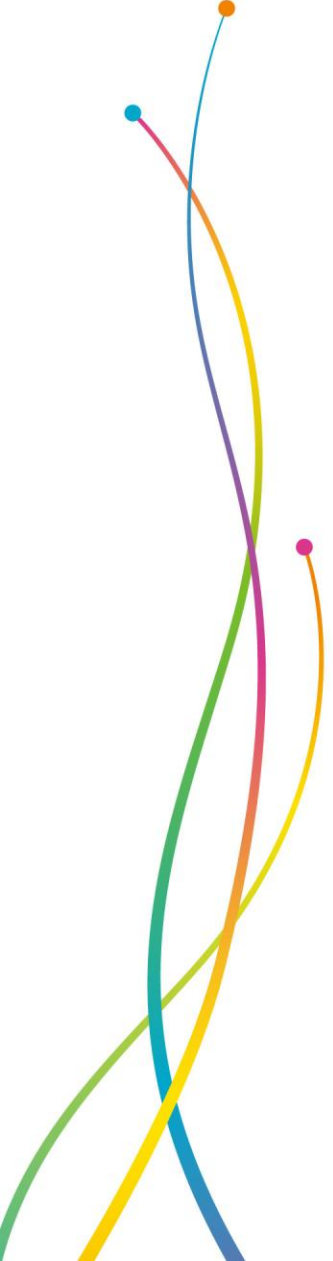
<input type="checkbox"/> Name ▲	Items	Triggers	Graphs	Discovery	Web	Interface
<input type="checkbox"/> APSV001	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.11:10050
<input type="checkbox"/> APSV002	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.12:10050
<input type="checkbox"/> APSV003	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.13:10050
<input type="checkbox"/> APSV004	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.14:10050
<input type="checkbox"/> APSV005	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.15:10050
<input type="checkbox"/> WEBSV001	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.11.100:10050

URL

Deploy

Zabbix API Chat Manager

I would like to add new server monitoring.



Case 2

Creating a Map

Case 2 Creating a Map (Host Group)

Create a map.

The screenshot shows the Zabbix web interface. On the left is a dark blue sidebar with the ZABBIX logo and a search bar. Below the search bar is a list of menu items: Dashboards, Monitoring, Services, Inventory, Reports, Data collection, Alerts, Users, Administration, Support, Integrations, Help, User settings, and Sign out. The main content area is titled 'AIダッシュボード' (AI Dashboard) and contains a 'URL' field and a 'Deploy' button. A large, light blue chat manager overlay is positioned in the center, displaying the text: 'Please create a map with the hosts belonging to the host group "AI-CREATE".' A blue line points from this text to a similar text box at the bottom of the chat manager. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 16:32 on 2025/08/19.

Case 2 Creating a Map (Host Group)

Execute the Zabbix API in the background.



API response: {"jsonrpc": "2.0", "result": {"sysmapids": ["6"]}, "id": 5}

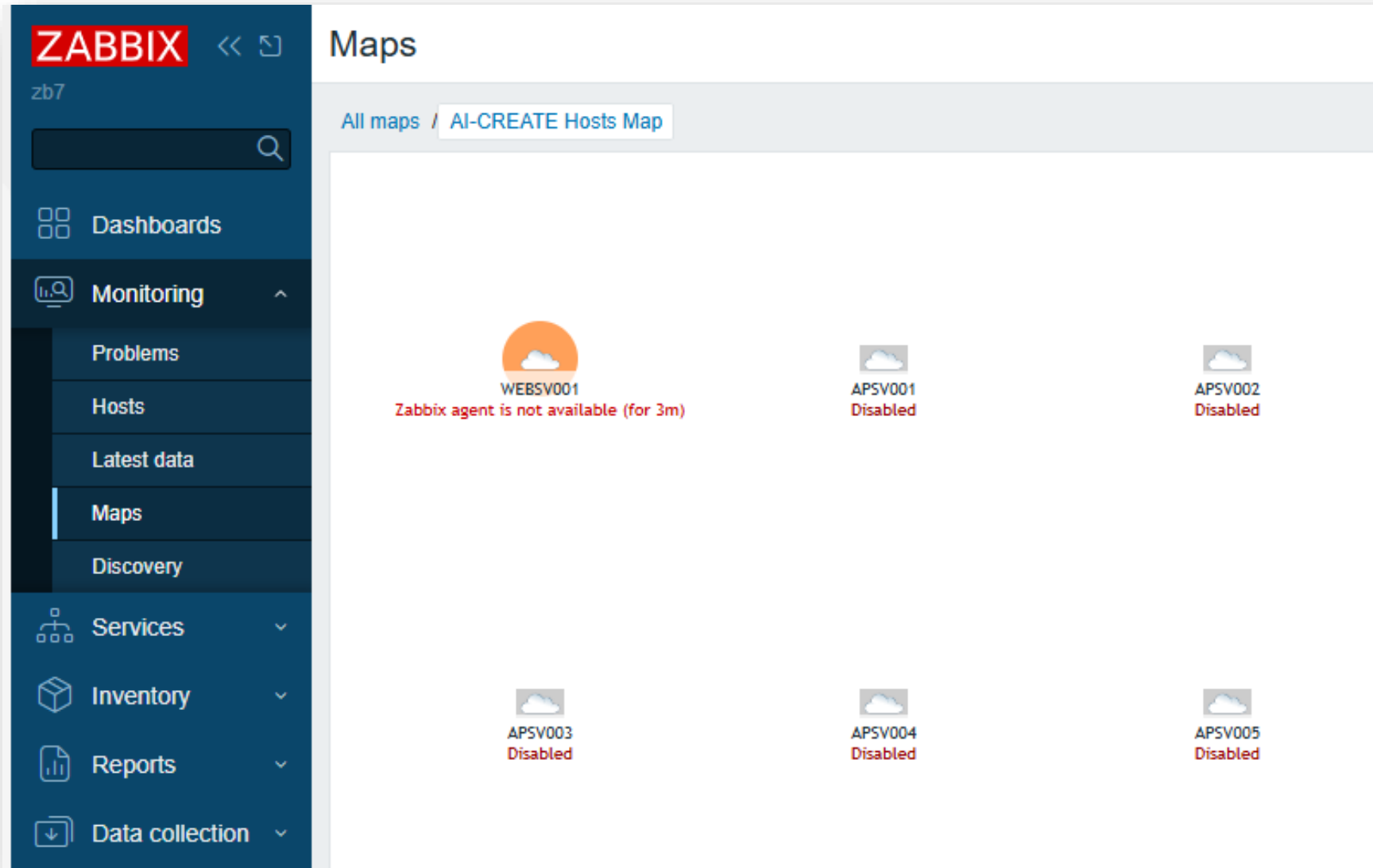


Excellent! The API response indicates that the map update was successful. The map with sysmapid "6" has been updated with the new configuration what we've accomplished:

1. We identified the existing map "AI-CREATE Hosts Map" with sysmapid "6".
2. We updated this map to include all six hosts from the "AI-CREATE" host group.
3. The map now has the following properties:
 - Dimensions: 800x600 pixels
 - 6 hosts arranged in a 3x2 grid
 - Each host is represented by a default icon
 - Each host is labeled with its hostname

Case 2 Creating a Map (Host Group)

The map has been created.



Case 2 Creating Map (Hosts with Links)

Map links and sorting are also possible

ZABBIX AIダッシュボード

すべてのダッシュボード / AIダッシュボード

URL

Deploy

Zabbix API Chat Manager

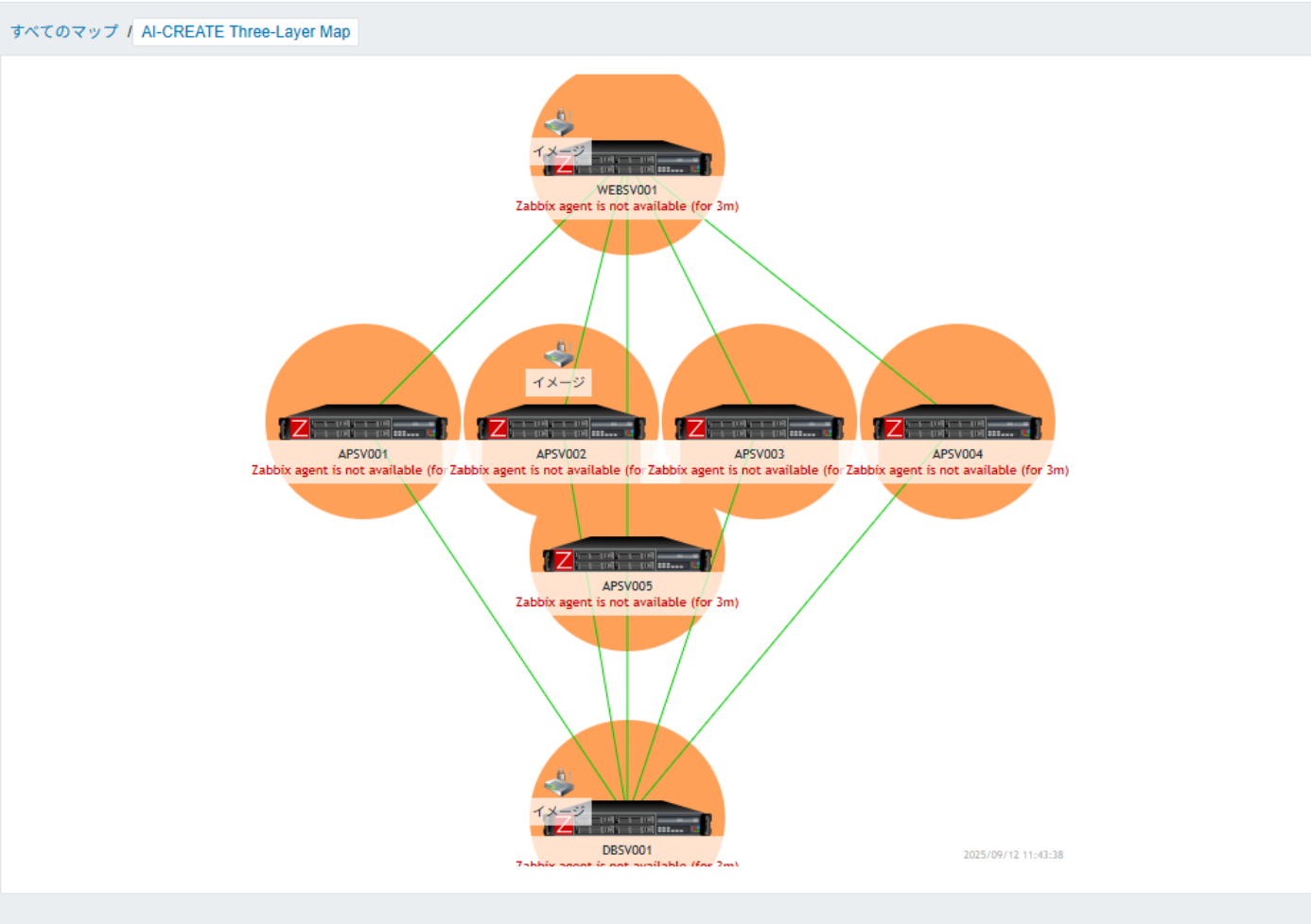
Create a map using a host in the "AI-CREATE" host group.
Draw lines to separate the map into three levels: WEB, AP, and DB.

Create a map using a host in the "AI-CREATE" host group.
Draw lines to separate the map into three levels: WEB, AP, and DB.

Case 2 Creating Map (Hosts with Links)

The map has been created.

マップ



Case 2 Creating Map (Drawing Network Switch Interfaces)

Map the port status of a network switch

The screenshot shows the ZABBIX AI Dashboard interface. On the left is a dark blue sidebar with navigation links: ダッシュボード, 監視データ, サービス, インベントリ, レポート, データ収集, 通知, ユーザー, 管理, サポート, インテグレーション, ヘルプ, ユーザー設定, and サインアウト. The main content area is titled 'AIダッシュボード' and contains a large light blue box with the following text:

Switch001 is a network switch.
Triggers are set to monitor each port.
Create a map that allows you to check the status of each port.
Also, arrange the ports in the order they appear on the network switch.
Use the icon type and trigger, and use link-down and link-up images.
The image ID for link-up is 188.
The image ID for link-down is 189.

Below this box, a smaller version of the same text is visible. A blue line points from the main text box to the smaller one. The Windows taskbar is visible at the bottom with various application icons. The system clock in the bottom right corner shows 13:22 on 2025/09/12.

Not in the same order as the physical devices

マップ



ZABBIX

zb7

Search

Dashboards

Monitoring

Services

Inventory

Reports

Data collection

Template groups

Host groups

Templates

Hosts

Maintenance

Event correlation

Discovery

Alerts

Users

Administration

Support

Integrations

Help

User settings

Sign out

Hosts

?

Create host

Import

Filter

Host groups

AI-CREATE ✕

Select

Templates

type here to search

Select

Name

DNS

IP

Port

Status

Any

Enabled

Disabled

Monitored by

Any

Server

Proxy

Proxy group

Tags

And/Or

Or

tag

Contains

value

Remove

Add

Apply

Reset

<input type="checkbox"/>	Name ▲	Items	Triggers	Graphs	Discovery	Web	Interface	Proxy	Templates	Status	Availability	Agent encryption	Info	Tags
<input type="checkbox"/>	APSV001	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.11:10050		Linux by Zabbix agent	Enabled	ZBX	None		
<input type="checkbox"/>	APSV002	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.12:10050		Linux by Zabbix agent	Enabled	ZBX	None		
<input type="checkbox"/>	APSV003	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.13:10050		Linux by Zabbix agent	Enabled	ZBX	None		
<input type="checkbox"/>	APSV004	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.14:10050		Linux by Zabbix agent	Enabled	ZBX	None		
<input type="checkbox"/>	APSV005	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.2.15:10050		Linux by Zabbix agent	Enabled	ZBX	None		
<input type="checkbox"/>	WEBSV001	Items 43	Triggers 15	Graphs 8	Discovery 3	Web	192.168.11.100:10050		Linux by Zabbix agent	Enabled	ZBX	None		

0 selected

Enable

Disable

Export

Mass update

Delete

Displaying 6 of 6 found

Zabbix 7.0.0. © 2001–2024, Zabbix SIA



Case 3

Item Creation and Trigger Creation

Case 3 Item Creation and Configuration - Trigger Creation

Add Ping monitoring to APSV001.

The screenshot displays the Zabbix AI Dashboard interface. On the left is a dark blue sidebar with the Zabbix logo and a navigation menu including Dashboards, Monitoring, Services, Inventory, Reports, Data collection, Alerts, Users, and Administration. The main content area is titled 'AIダッシュボード' and features a large chat window. The chat window has a header 'Zabbix API Chat Manager' and a 'URL' input field. A message bubble from the system says 'Please add Ping monitoring to APSV001.' A blue line points from this message to a similar message in a smaller input field at the bottom of the chat area. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 17:44 on 2025/08/19.

Answer the questions from 1 to 4.



Certainly! I'd be happy to answer a few questions:

1. Do you want to use a template or host?
2. How frequently do you want to check?
3. Do you have a specific IP address?
4. What is the IP address?

1. simple ICMP ping check or more advanced ping.
2. How frequently
3. template or host
4. IP Address

Once you provide this information, I'll be able to create the appropriate API request to add the Ping monitoring for APSV001.

The AI has finished the task. No further API requests are needed.

1. simple ICMP ping
2. 60s
3. host
4. 192.168.2.11

1. simple ICMP ping
2. 60s
3. host
4. 192.168.2.11

Execute the Zabbix API in the background.



Excellent! The API request was successful, and the ICMP ping monitoring item has been created for APSV001. The response shows that the new item has been assigned an ID of 102251.

To summarize what we've accomplished:

1. We've added a simple ICMP ping monitoring item to the host APSV001 (hostid: 11676).
2. The monitoring interval is set to 60 seconds.
3. The item is created directly on the host.
4. The item ID for this new ICMP ping check is 102251.

The Zabbix system will now start monitoring APSV001 using ICMP ping every 60 seconds. You should be able to see the monitoring data for this item in the Zabbix frontend under the host APSV001.

Is there anything else you would like to do with the Zabbix configuration, or do you have any questions about the ping monitoring we've just set up?

The item has been created.

Item

Item

Tags 1

Preprocessing

* Name

ICMP ping

Type

Simple check

▼

* Key

icmpping

Select

Type of information

Numeric (unsigned)

▼

Host interface

None

▼

User name

Password

Units

* Update interval

60s

Copyright © SCSK Corporation 31

Create a trigger for this item.

The screenshot displays the Zabbix 7.0.0 web interface. On the left is a dark blue sidebar with navigation links: Dashboards, Monitoring, Services, Inventory, Reports, Data collection, Alerts, Users, Administration, Support, Integrations, Help, User settings, and Sign out. The main content area shows the 'URL' tab for item configuration. It displays a JSON response from an API: `{ "jsonrpc": "2.0", "result": { "itemids": ["102251"], "id": 1 }, "id": 1 }`. Below this, a message states: 'Excellent! The API request was successful, and the ICMP ping monitoring item has been created for APSV001. The response shows that the new item has been assigned an ID of 102251.' A summary section follows, listing steps 1 through 4. A large, light blue rounded rectangle with a red border contains the text 'Please create a trigger for this item.' with a cursor at the end. Below this, a message says: 'The AI has finished the task. No further API requests are needed.' At the bottom of the main area, there is a text input field with the same text 'Please create a trigger for this item.' and a right-pointing arrow button. The footer of the interface shows 'Zabbix 7.0.0. © 2001–2024, Zabbix SIA' and the date/time '17:53 2025/08/19'.

Execute the Zabbix API in the background.



Certainly! I'd be happy to create a trigger for the ICMP ping item we just set up. Let's create a trigger that will activate when the host becomes unreachable (i.e., when the ping fails).

First, we'll use the `trigger.create` method to set this up. Here's the API request to create the trigger:

```
<API-MAIN> { "jsonrpc": "2.0", "method": "trigger.create", "params": { "description": "APSV001 is unreachable by ICMP", "expression": "last(/APSV001/icmpping)=0", "priority": 4, "status": 0, "type": 0, "recovery_mode": 0, "recovery_expression": "", "manual_close": 0, "tags": [ { "tag": "Scope", "value": "Availability" } ] }, "auth": "4fcba553b7a6e936d1da0043f5467fc1eb04e5c57fb93fd3aa74330da825ab3", "id": 1 } </API-MAIN>
```

Let me explain the key parameters in this trigger configuration:

1. "description": This is the name of the trigger that will appear in the Zabbix interface.
2. "expression": This defines when the trigger will activate. In this case, it activates when the last ICMP ping check returns 0 (meaning the host is unreachable).
3. "priority": Set to 4, which typically corresponds to "High" severity in Zabbix.
4. "status": Set to 0, which means the trigger is enabled.
5. "type": Set to 0 for a normal trigger (as opposed to a multiple problem trigger).
6. "recovery_mode": Set to 0, which means the trigger will recover automatically when the expression becomes false.
7. "manual_close": Set to 0, which means the problem can be closed automatically.
8. "tags": We've added a tag to categorize this trigger under "Availability".

Please execute this API request to create the trigger for the ICMP ping item. After execution, the API should return a trigger ID if the creation was successful.

Case 3 Item Creation and Configuration - Trigger Creation

The trigger has been created.

Trigger

Trigger Tags 1 Dependencies

* Name

APSV001 is unreachable by ICMP

Event name

APSV001 is unreachable by ICMP

Operational data

Severity

Not classified

Information

Warning

Average

High

Disaster

* Expression

last (/APSV001/icmpping)=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

Allow manual close

☐

URL

Deploy ⋮

Zabbix API Chat Manager

Please add Ping monitoring to APSV001.



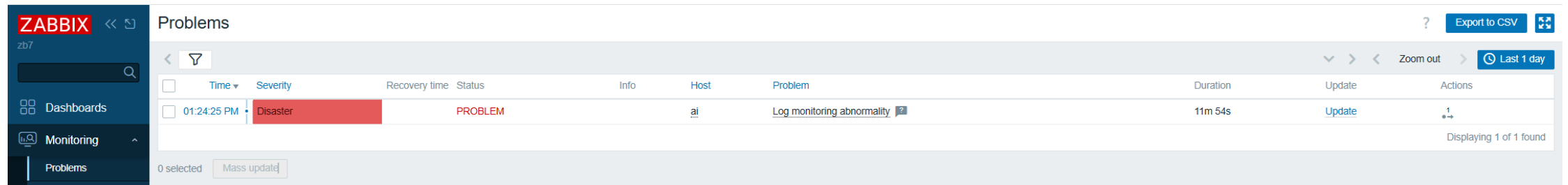


Case 4

Improve initial response to failure events

Case 4 Improve initial response to failure events

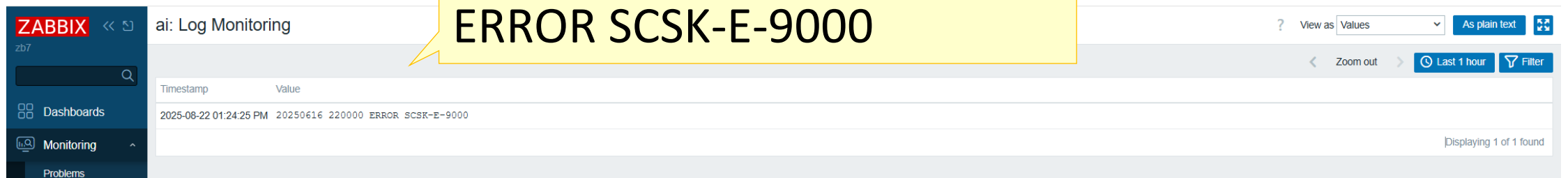
Suppose a failure is detected through log monitoring.



The screenshot shows the ZABBIX 'Problems' interface. On the left is a sidebar with 'ZABBIX' logo, 'zb7' host name, and navigation links for 'Dashboards', 'Monitoring', and 'Problems'. The main area is titled 'Problems' and contains a table of issues. The table has columns for 'Time', 'Severity', 'Recovery time', 'Status', 'Info', 'Host', 'Problem', 'Duration', 'Update', and 'Actions'. A single problem is listed with a severity of 'Disaster' (highlighted in red), status 'PROBLEM', host 'ai', and problem description 'Log monitoring abnormality'. The duration is '11m 54s'. Below the table, it says '0 selected' and 'Mass update'. On the right, there are buttons for 'Export to CSV' and 'Last 1 day'.

Time	Severity	Recovery time	Status	Info	Host	Problem	Duration	Update	Actions
01:24:25 PM	Disaster		PROBLEM		ai	Log monitoring abnormality	11m 54s	Update	1

Copy the log contents from the latest data screen

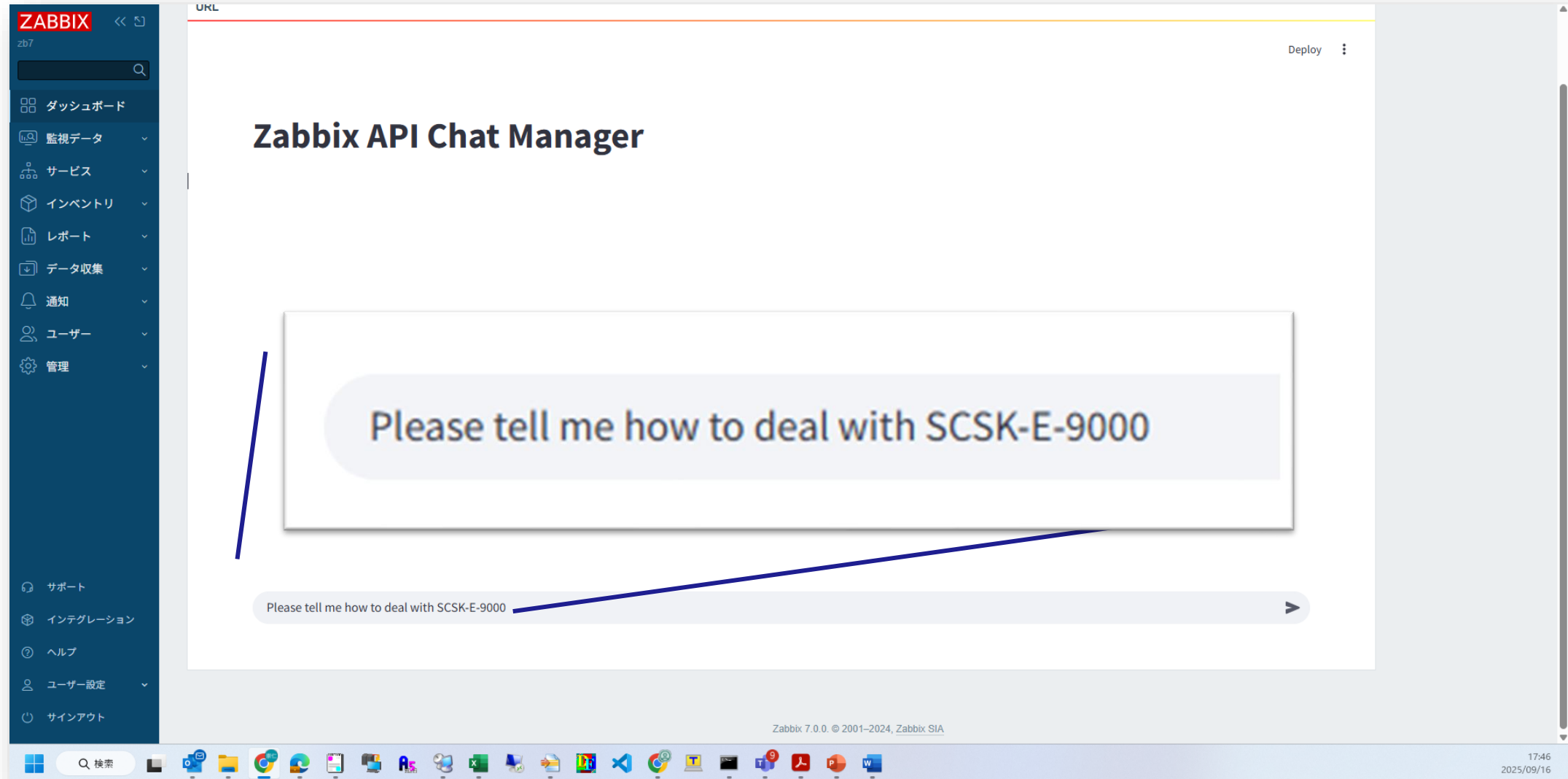


The screenshot shows the ZABBIX 'ai: Log Monitoring' interface. The sidebar is the same as the previous screenshot. The main area is titled 'ai: Log Monitoring' and contains a table of log entries. The table has columns for 'Timestamp' and 'Value'. A single log entry is shown with a timestamp of '2025-08-22 01:24:25 PM' and a value of '20250616 220000 ERROR SCSK-E-9000'. On the right, there are buttons for 'View as Values', 'As plain text', 'Last 1 hour', and 'Filter'. A yellow callout box points to the error message in the log value.

Timestamp	Value
2025-08-22 01:24:25 PM	20250616 220000 ERROR SCSK-E-9000

Case 4 Improve initial response to failure events

Find out how to respond to AI.



Case 4 Improve initial response to failure events

If you find it troublesome to copy and ask this AI every time, you can create a script.

Script

*

Name

Confirmation of response method

Scope

Action operationManual host actionManual event action

Menu path

<sub-menu/sub-menu/...>

Type

URLWebhookScriptSSHTelnetIPMI

Execute on

Zabbix agentZabbix proxy or serverZabbix server

*

Commands

python /usr/lib/zabbix/externalscripts/bedrock.py "{ITEM.VALUE}"

Case 4 Improve initial response to failure events

Run the script from the Problem screen

<input type="checkbox"/>	Time ▼	Severity	Info	Host	Problem	
<input type="checkbox"/>	2025-09-12 02:59:24 PM	Warning		abc123	Proxy [zb7p2]: Zabbix proxy last seen more than 600 seconds ago last(/abc123/zabbix.proxy.last_seen)	VIEW
<input type="checkbox"/>	2025-09-12 02:59:24 PM	Warning		abc123	Proxy [zb7p1]: Zabbix proxy last seen more than 600 seconds ago last(/abc123/zabbix.proxy.last_seen)	Problems
<input type="checkbox"/>	2025-09-12 02:58:11 PM	Average		abc123	Utilization of proxy poller processes Problem: avg(/abc123/zabbix[process,proxy p Recovery: avg(/abc123/zabbix[process,proxy p	History
<input type="checkbox"/>	2025-09-12 11:26:39 AM	Average		APSV004	Zabbix agent is not available (for 3m max(/APSV004/zabbix[host,agent,a	CONFIGURATION
<input type="checkbox"/>	2025-09-12 11:26:25 AM	Average		DBSV001	Zabbix agent is not available (for 3m max(/DBSV001/zabbix[host,agent,a	Trigger
<input type="checkbox"/>	2025-09-09 06:13:14 PM	Average		db001	Zabbix agent is not available (for 3m max(/db001/zabbix[host,agent,available],3m)=0	Items
						PROBLEM
						Mark as cause
						Mark selected as symptoms
						SCRIPTS
						Bedrock
						Confirmation of response method

Case 4 Improve initial response to failure events

This AI's answer will be displayed.

You can also use the data from past response history added to RAG.

Confirmation of response method




Script execution successful.


Output



The error that occurred is SCSK-E-9000. This error indicates a failure to connect to the database. The full error message is: "Failed to connect to the database. Please follow the job operation verification steps."

Ok

zb7



 Dashboards

 Monitoring 

Problems



Hosts

Latest data



Maps



Discovery

 Services 



 Inventory 


 Reports 


 Data collection 

 Alerts 

 Users 


 Administration 

 Support

 Integrations

 Help

 User settings 

 Sign out



Host groups

Hosts

ai 

Name

Tags

And/Or Or

Contains

 [Remove](#)

[Add](#)

Show tags

None 1 2 3

 Tag name

Full Shortened None

Tag display priority

State

All Normal Not supported

Show details ☐


Subfilter affects only filtered data

HOSTS

ai 1

DATA

[With data](#) [Without data](#)

<input type="checkbox"/>	Host	Name 	Last check	Last value	Change	Tags	Info
<input type="checkbox"/>	ai	Log Monitoring	2m 57s	20250616 220000 ERROR...			 History

Displaying 1 of 1 found

0 selected

Using AI as workforce



Useful as an assistant

AI Automated Config



Discernment is required

AI Assisted Incident



Useful, but more

AI Infrastructure Concierge

AI automatically provisions resources, adjusts thresholds, and deploys countermeasures

Predictive Monitoring

- AI predicts failures
- Proactive replacement orders placed automatically

Global Intelligence Network

- Your Zabbix learns from millions of other deployments worldwide
- Anonymous pattern sharing creates collective intelligence

Thank You for Listening

