



Zabbix - sendQuick Integration Guide

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Zabbix - sendQuick Integration Guide

1.0 Introduction

This document is a guide on how to integrate sendQuick with Zabbix to send SMS alerts. In this guide, we will be using sendQuick Entera for the integration.

The simplest method to integrate Zabbix with sendQuick is the email method. This method allows users to make full use of sendQuick Entera's notification management features such as roster and escalation management. Besides SMS, sendQuick can also notify alerts through other communication channels such as social messenger applications, multiple emails and automated Voice calls

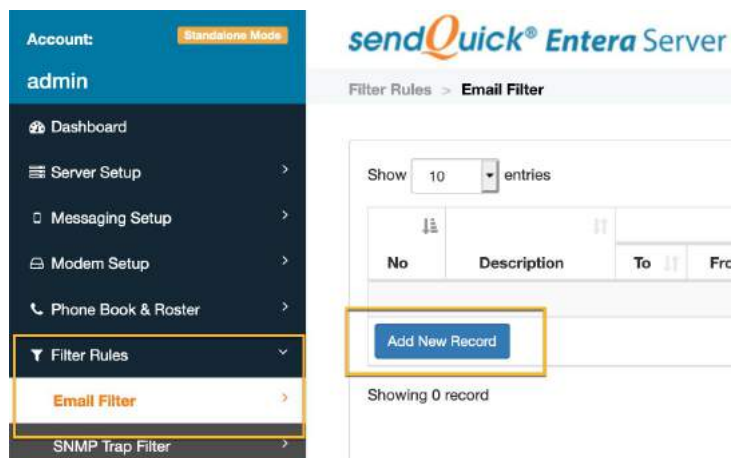
2.0 Send Email to sendQuick

When any device is down or there is a need to send a notification alert, Zabbix can trigger an email to sendQuick. sendQuick will then convert the email message to SMS.

2.1 Configure Email Filter in sendQuick

sendQuick allows you to configure alerts to be sent to multiple phone numbers, groups or even combination of emails and sms. To explore this feature, navigate on the sendQuick dashboard to :

Filter Rules > Email Filter



Click on **Add New Record**.

You can then create a new record to define the email address Zabbix should send to. In our example, we will use ***zabbix@entera64.sendquick.messenger***

The user email can be anything meaningful that you choose but the domain name of the email address must correspond to your domain name of your sendQuick system.

Fill in the **Description**, **Mail To** and for **Match Mode**, check on **ANY**. Once done, click **Save**.

Add Mail Filter Rule

Description: Zabbix Alerts

Variables Usage

Mail To : zabbix@entera64.sendquick.messenger

Mail From

Subject

Message

Match Mode: ALL ANY

Priority: 5

Save Cancel

Click on **View** for the record that you have created :

sendQuick® Entera Server Admin

Filter Rules > Email Filter

Show 10 entries

No	Description	To	From	Subject	Message	Priority	Date Created	Match	Alert
1	Zabbix Alerts	zabbix@entera64.sendquick.messenger				5	11/12/2019	ANY	View

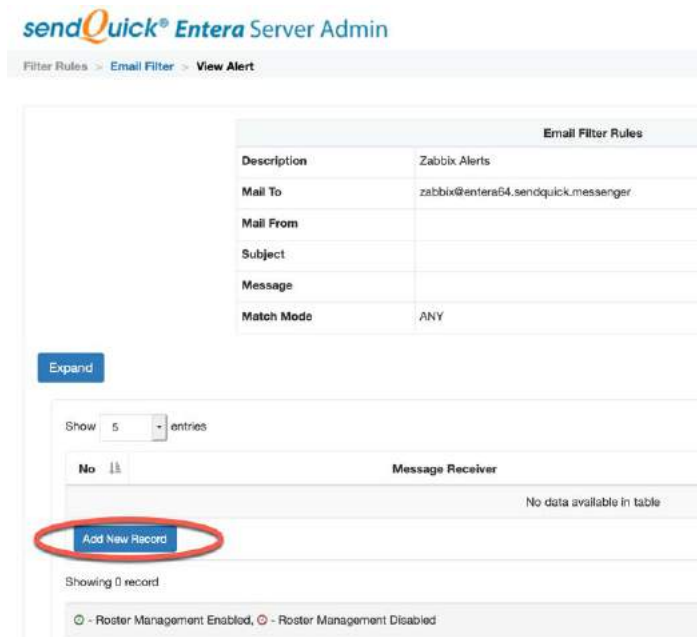
Add New Record

Showing 1 to 1 of total 1 records

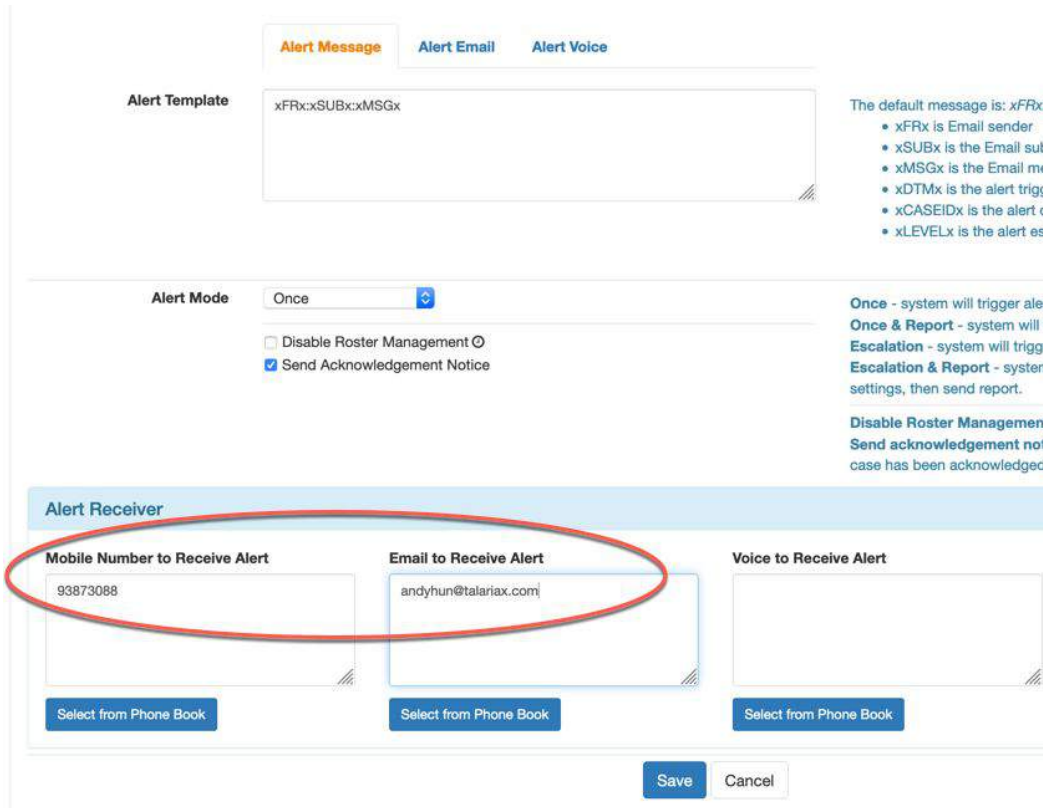
Previous 1 Next

Email Forwarding Message Time Buffer

Then click on **Add New Record**



You can then add multiple numbers, emails, or even pre-defined groups to receive the notification alerts.



After you have keyed in the information, click on **Save** to continue.

Quicktip - To check your host and domain name and IP address, you can find the value in the sendQuick dashboard under **Server Setup > IP Configuration**

For e.g. our domain name is **entera64.sendquick.messenger** and the IP address is **192.168.1.95**

The screenshot displays the 'sendQuick® Entera Server Admin' interface. On the left, a navigation menu shows 'Server Setup' and 'IP Configuration' highlighted with a red circle. The main content area is titled 'Server Setup > IP Configuration' and contains the following fields:

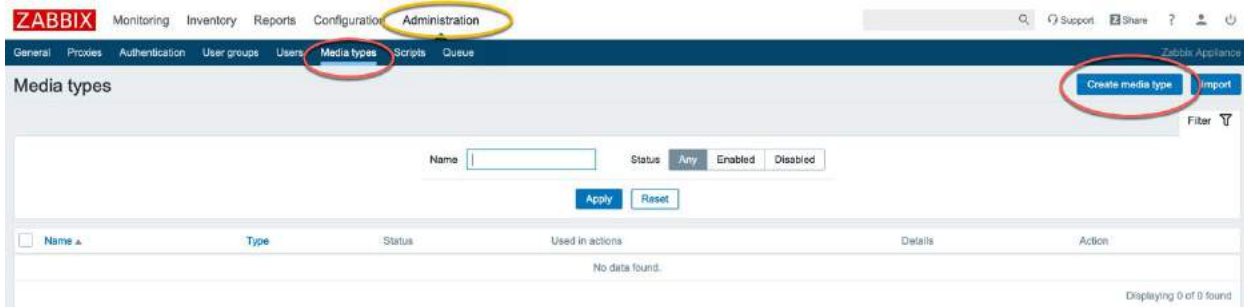
Field	Value
Host and Domain name	Host: entera64 Domain: sendquick.messenger
IP Address	192.168.1.95
Netmask	255.255.255.0 <small>(If unsure, set to: 255.255.255.0)</small>

2.2 Configure Email Settings on Zabbix.

On the dashboard of Zabbix, navigate to the following item :

Administration > Media types

Click on **Create media type**.



Enter a suitable **Name** to identify this media type. Ensure **Type** is “*Email*”. For the **SMTP server** field, key in the IP address of your sendQuick server.

Leave the **SMTP server port** as “25”.

ZABBIX Monitoring Inventory Reports Configuration Administration

General Proxies Authentication User groups Users **Media types** Scripts Queue

Media types

Media type Options

* Name

Type

* SMTP server

SMTP server port

* SMTP helo

* SMTP email

Connection security STARTTLS SSL/TLS

Authentication Username and password

Message format

Description

Enabled

For **Connection security**, leave it as “None” unless you have configured SSL or TLS in sendQuick. Please note that you will also need to have the same security certificate on Zabbix for this to work. Please refer to Zabbix manuals on how to configure this. If no security has been configured, leave the **Authentication** as “None”. Ensure **Enabled** box is checked and click on **Add**.

Quicktip - To check what security was installed on sendQuick, navigate to the following item on the sendQuick dashboard :

Security Setup > SSL Setup > SSL Protocol

Once added, test the configuration to ensure it is correct. Click on **Test**.

A popup will appear. For the **Send to** field, enter the email that was configured as the email address used in the email filter in section 2.1

For our example we are using *zabbix@entera64.sendquick.messenger* for **Send to** field as per the email filter set up on Section 2.1

Test media type

* Send to

Subject

* Message

Click on the **Test** button. If successful, a popup will appear as below:

Test media type

Media type test successful.

* Send to

Subject

* Message

To confirm that sendQuick has subsequently received the email and sent out as SMS, go to sendQuick dashboard. Navigate to :

Usage Logs > Message Logs

Click on the **Sent** tab and **SMS** tab. If there is a corresponding entry in the logs, that means the SMS text was sent successfully.

The screenshot displays the 'sendQuick® Entera Server Admin' interface. On the left is a navigation menu with 'Message Log' highlighted. The main content area shows the 'Message Log' page with tabs for 'Queue', 'Sent', 'Unsent', and 'Inbox'. The 'SMS' sub-tab is selected. Search filters for 'From' and 'To' are set to 03/12/2019. A table lists message records with columns: No., Date & Time, Delivery Date, Turnaround Time, Sender, Mobile Number, Message, and IMEI. One record is shown with the following details:

No.	Date & Time	Delivery Date	Turnaround Time	Sender	Mobile Number	Message	IMEI
1	03/12/2019 17:46:28	03/12/2019 17:46:30	10:10	anyemail@yourdomain.com (Zabbix Alerts)	53875088	anyemail@yourdomain.com:Test Alert:This is the test message from Zabbix	359180087997349

Below the table are buttons for 'Save CSV', 'Save Excel', 'Save PDF', and 'Refresh'. The page indicates 'Showing 1 to 1 of total 1 records'.

2.3 Configuring Actions on Zabbix to send email to sendQuick

Before creating the trigger and action to send SMS alerts, there are several items that need to be configured.

2.3.1 Creating Host and Host Groups

Firstly, read [Zabbix manual](#) on how to create a Host and Host Groups. This will be the device that needs to be monitored and to trigger alerts if certain conditions are met.

There are already many pre-configured Host Groups in Zabbix and you can find one that matches your device. In our example, we will create a new Host Group for *sendQuick servers*.

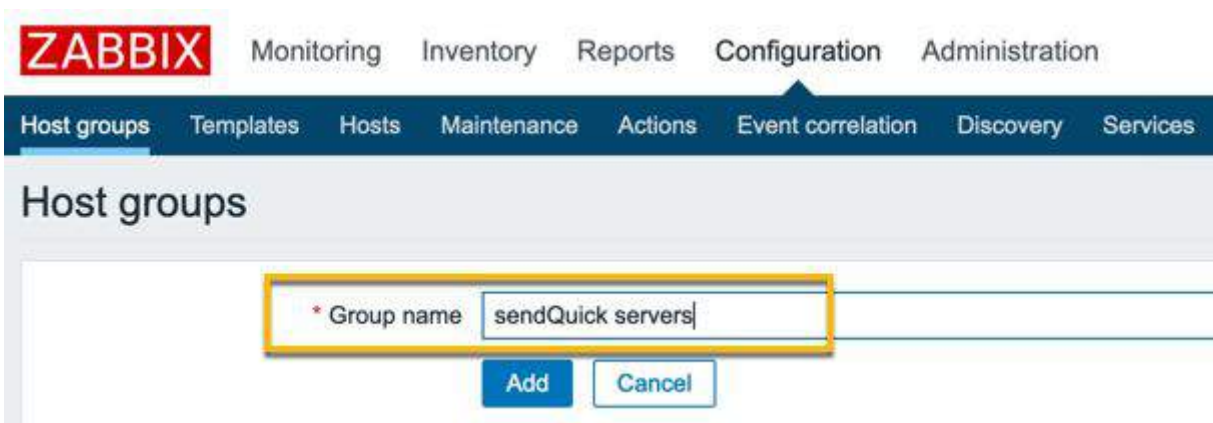
On the dashboard of Zabbix, navigate to the following item :

Configuration > Host groups

Click on **Create host group**.



Fill in the name of the new **Group name** as below. Click on **Add**.



Next, we will create the host for the device we want to monitor and add them into this Host group.

On the dashboard of Zabbix, navigate to the following item :

Configuration > Hosts

Click on **Create host**.



Fill in the following.

- **Host name** : Provide any name to identify the device
- **Groups** : Select the group that was created or from the predefined list
- **IP Address** : Key in IP Address of device
- Ensure **Enabled** box is ticked

Click on the **Template** tab at the top after you have filled the fields.

Hosts

Host Templates IPMI Tags Macros Inventory Encryption

* Host name Test Server

Visible name

* Groups sendQuick servers X type here to search Select

* At least one interface must exist.

Agent interfaces	IP address	DNS name	Connect to	Port
	192.168.3.85		IP DNS	10050

Add

SNMP interfaces Add

JMX interfaces Add

IPMI interfaces Add

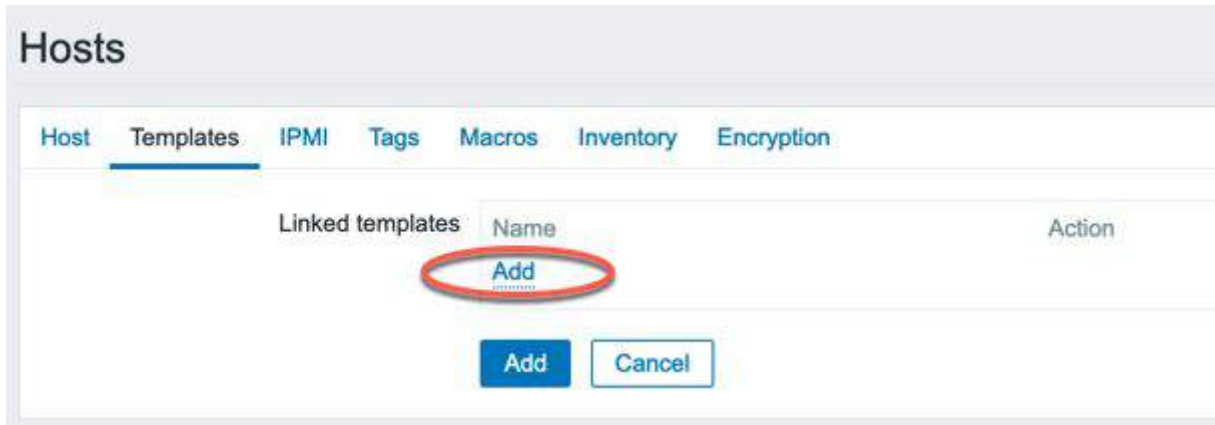
Description

Monitored by proxy (no proxy)

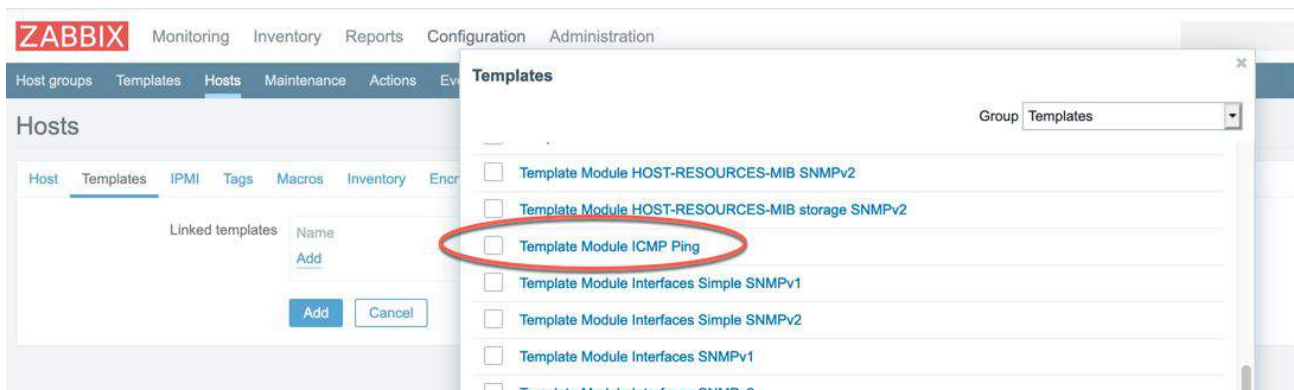
Enabled

Add Cancel

For this example, we will not be installing Zabbix agent to monitor device. We will monitor the availability of the server using **ICMP ping**. In order to do that, we have to link the template to this host. Click on **Add**.

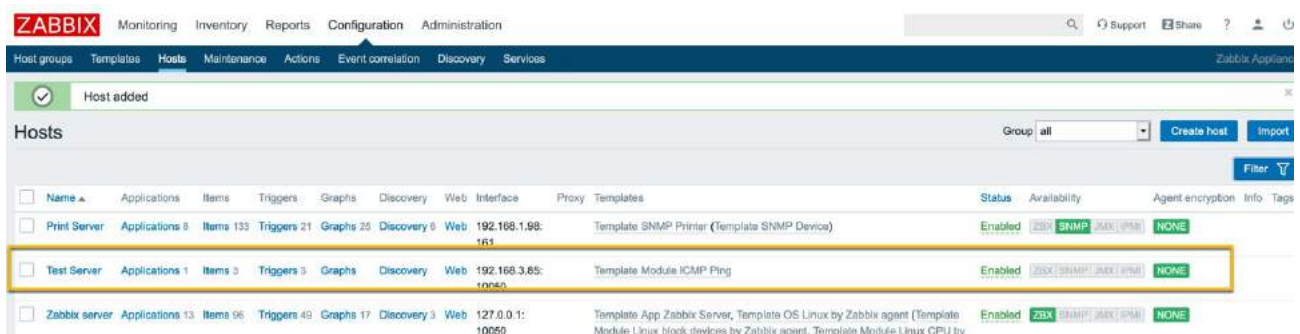


Select the template “**Template Module ICMP Ping**” and click on **Select**. If this template is not available for selection, you can download it from [Zabbix Share](#) and add the template under **Configuration > Templates**



After the template has been linked, click on **Add**.

Verify that the host has been added successfully.



2.3.2 Creating User Group

Next we will create a user to associate the trigger action to. First we will create a new User Group for this user or you can use existing user groups predefined in Zabbix.

In our example, will create a new user group, “**Alert Users Group.**”

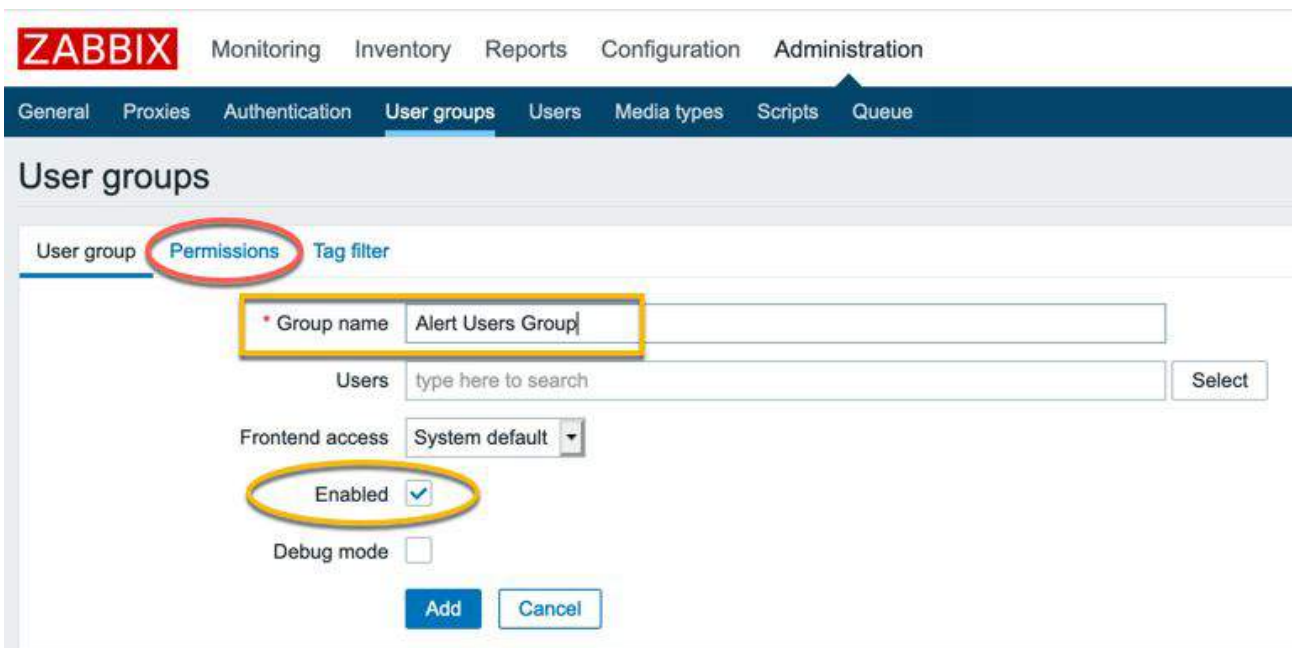
On the dashboard of Zabbix, navigate to the following item :

Administration > User groups

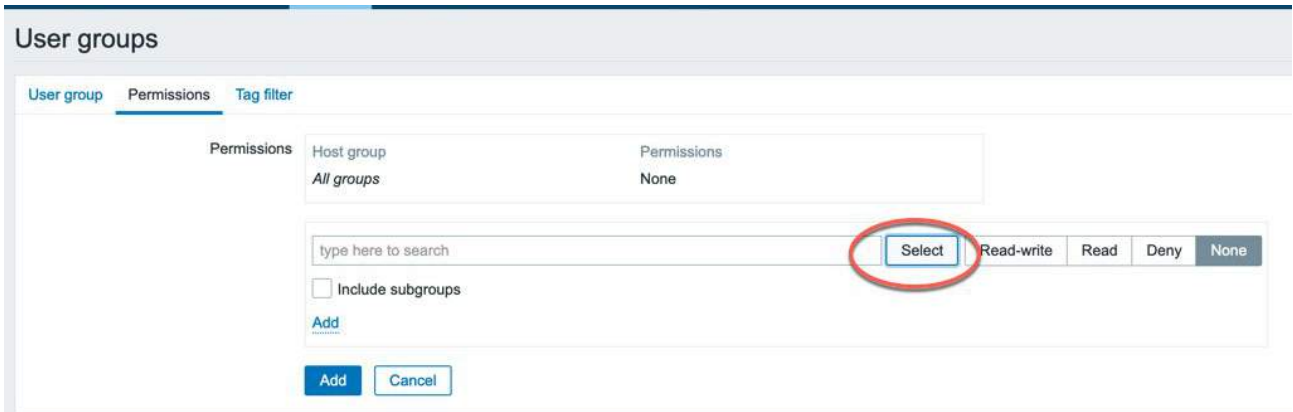
Click on **Create user group.**



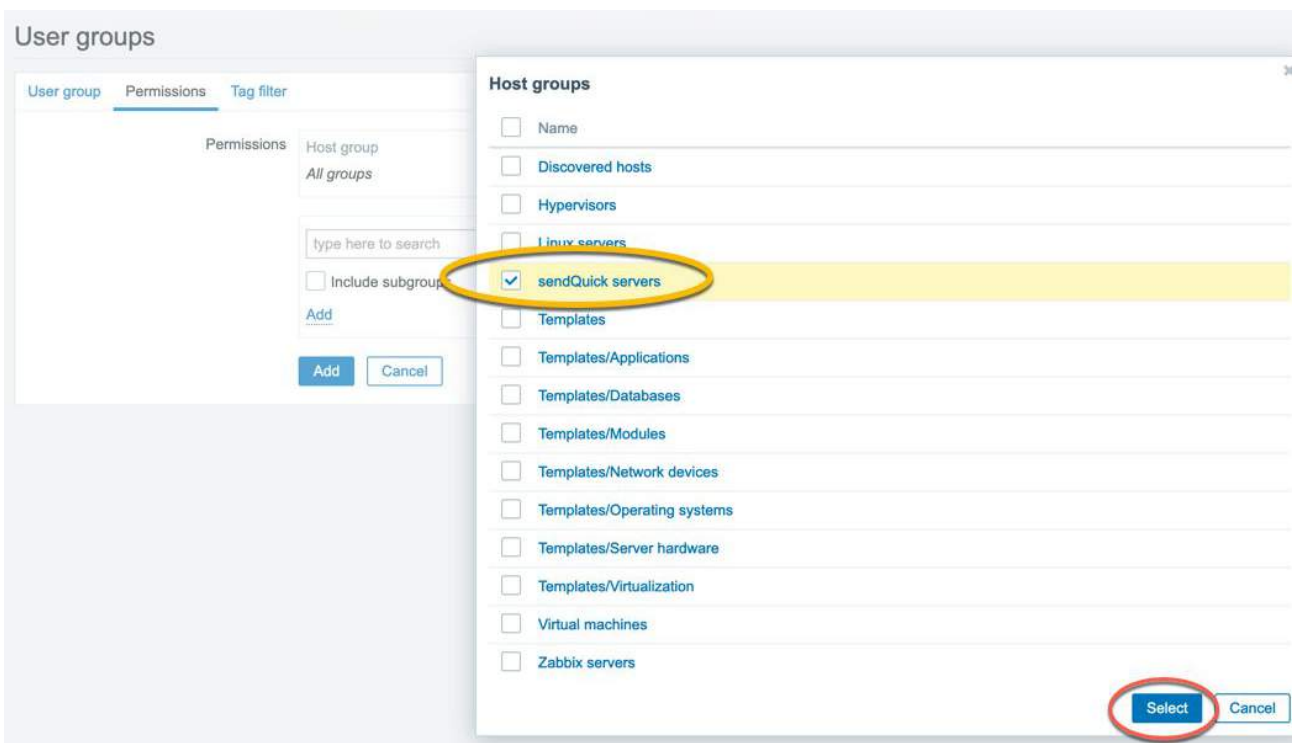
Fill in the **Group name** and ensure the box for **Enabled** is ticked. Click on the **Permissions** tab at the top.



Click on the **Select** button.



Select the User Group to set the permissions. In this example, we will select the “*sendQuick servers*” host group to give access to this group of servers for the alert action. Click on **Select**.



Click on **Read** and click on the **Add** link shown below. (Do not click on the **Add** button below instead)

The screenshot shows the ZABBIX interface with the 'User groups' section selected. Under the 'Permissions' tab, a table lists host groups and their permissions. The entry 'sendQuick servers' is selected, and the 'Read' permission button is highlighted with a yellow circle. Below the table, there is a search input field, an 'Include subgroups' checkbox, and an 'Add' link circled in red. At the bottom, there are 'Add' and 'Cancel' buttons.

Confirm that the entry of the host group and the correct permission is highlighted as reflected below. If so, then click on the **Add** button.

This screenshot shows the same ZABBIX interface. A yellow box highlights the 'sendQuick servers' entry in the table, specifically the 'Read' permission button. The 'Add' link is circled in red, and the 'Add' button at the bottom is also circled in red.

2.3.3 Creating User

Next we will create a user to associate to this user group to inherit the permissions.

On the dashboard of Zabbix, navigate to the following item :

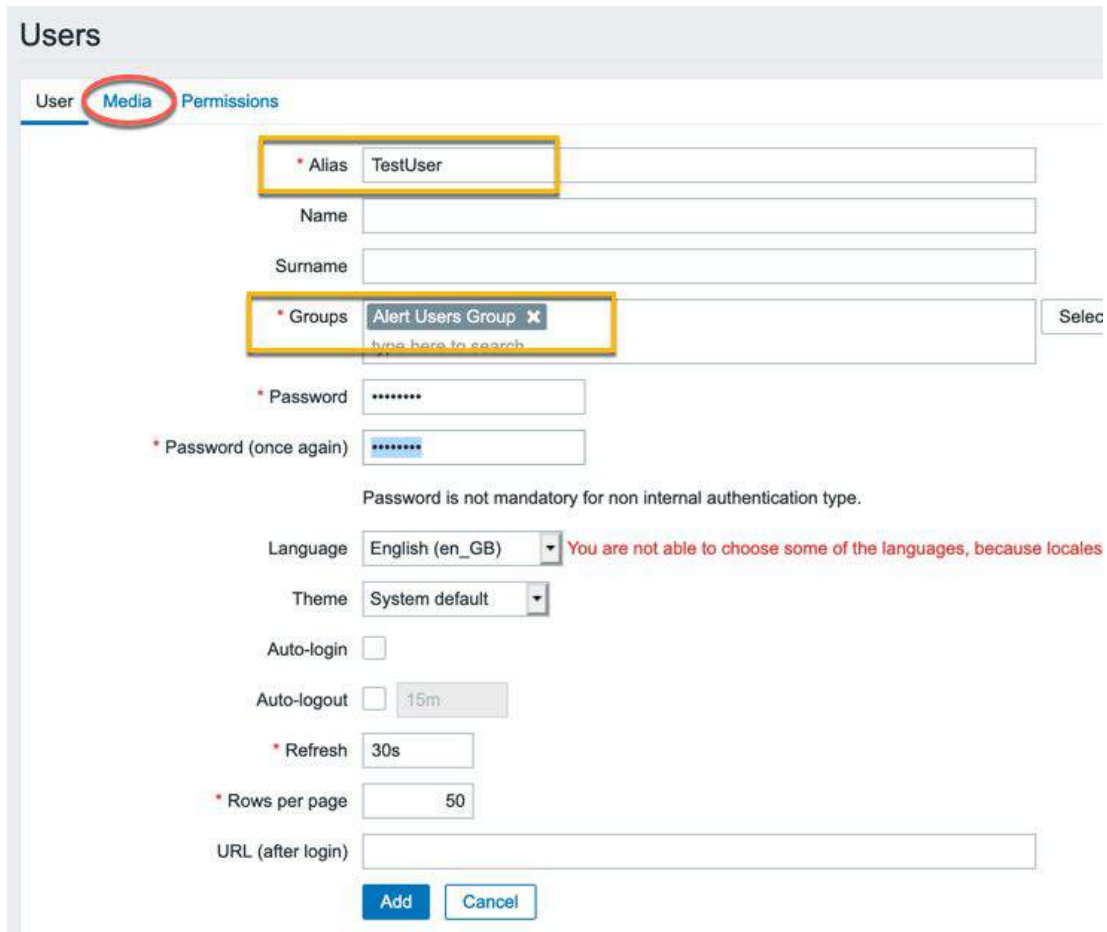
Administration > Users

Click on **Create user**.

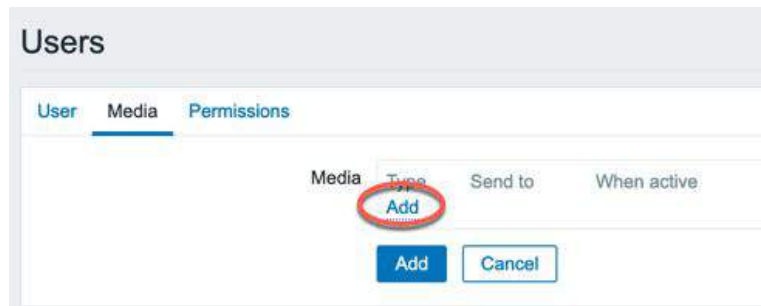


Fill in the **Alias** and select for the **Groups** with the User Group created in Section 2.3.2. Choose any password to be used for this user and key them twice in the field provided.

Before adding this user, click on **Media** in the tab menu at the top.

A screenshot of the Zabbix 'Users' form. The 'Media' tab is selected and circled in red. The 'Alias' field contains 'TestUser' and is highlighted with a yellow box. The 'Groups' field contains 'Alert Users Group' and is also highlighted with a yellow box. The 'Password' and 'Password (once again)' fields are filled with asterisks. Below these fields, there is a note: 'Password is not mandatory for non internal authentication type.' The 'Language' dropdown is set to 'English (en_GB)' and has a red error message: 'You are not able to choose some of the languages, because locales'. The 'Theme' dropdown is set to 'System default'. There are checkboxes for 'Auto-login' and 'Auto-logout' (set to 15m). The 'Refresh' field is set to '30s' and the 'Rows per page' field is set to '50'. There is a 'URL (after login)' field. At the bottom, there are 'Add' and 'Cancel' buttons.

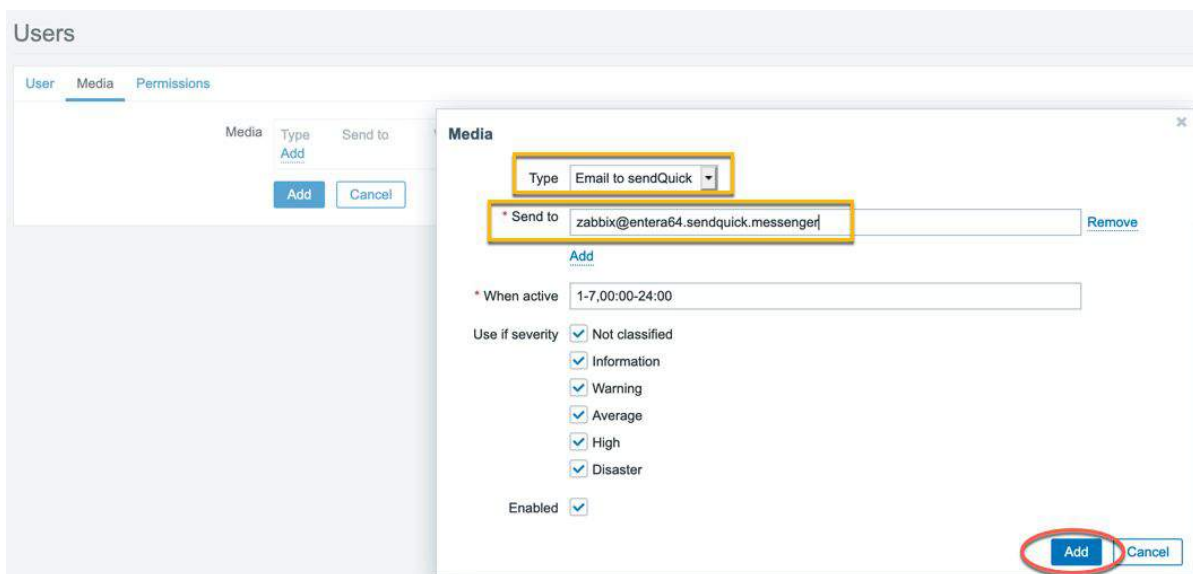
Click on the **Add** link (not the **Add** button)



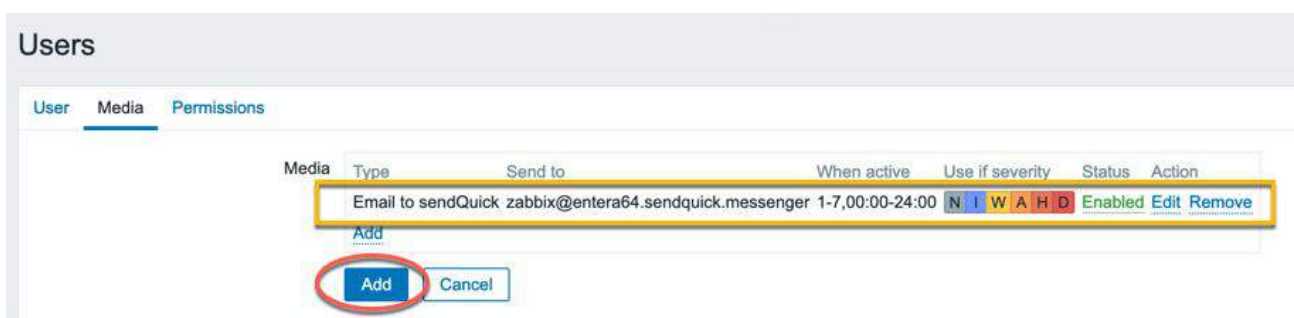
Fill in the fields with the values that were configured earlier. For **Type** select the Media type that was configured in Section 2.2

For the email address to fill in **Send to** type in the email configured in Section 2.1

Click on **Add**.



Confirm that the entry is reflected such as below and click on **Add**.



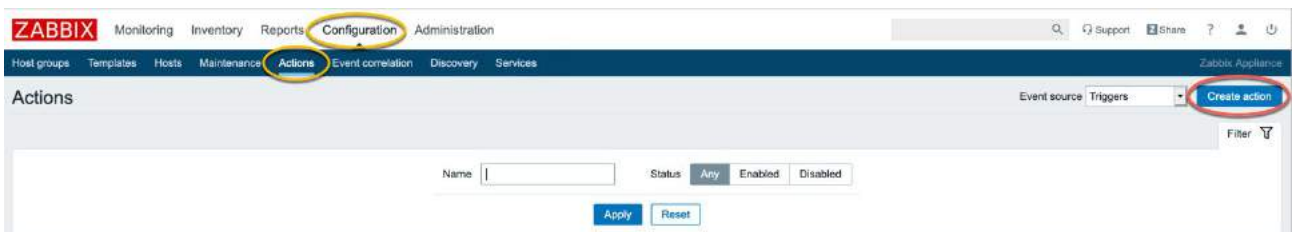
2.3.4 Creating Action

We will now create the Action for Alert Triggers to send email to sendQuick server when conditions are met.

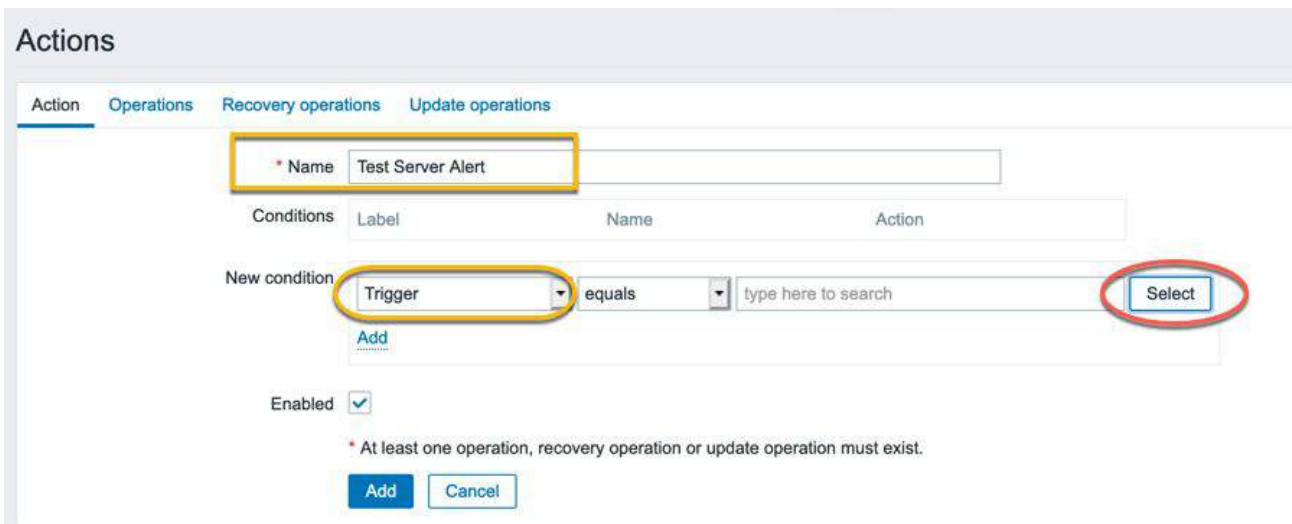
On the dashboard of Zabbix, navigate to the following item :

Configuration > Actions

Click on **Create action**.

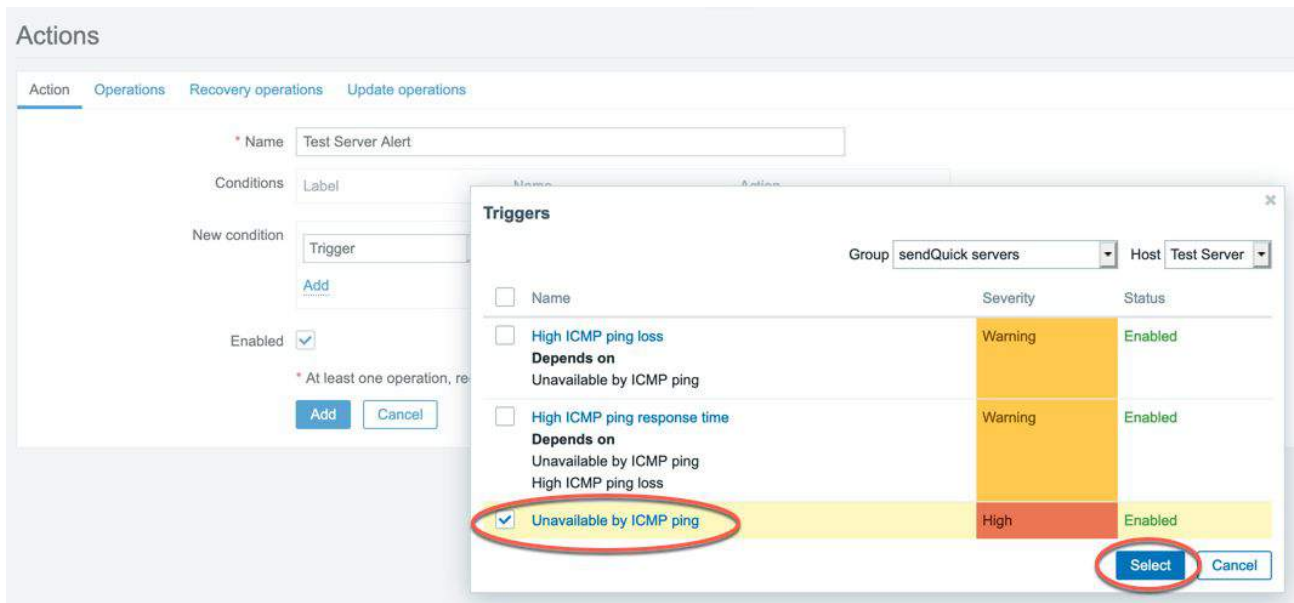


Fill in the **Name** for this Action. For this example, we will call it *Test Server Alert*. For the **New Condition**, select the conditions that you want to trigger the alert. For this example, we will use **Trigger**. Click on **Select**.

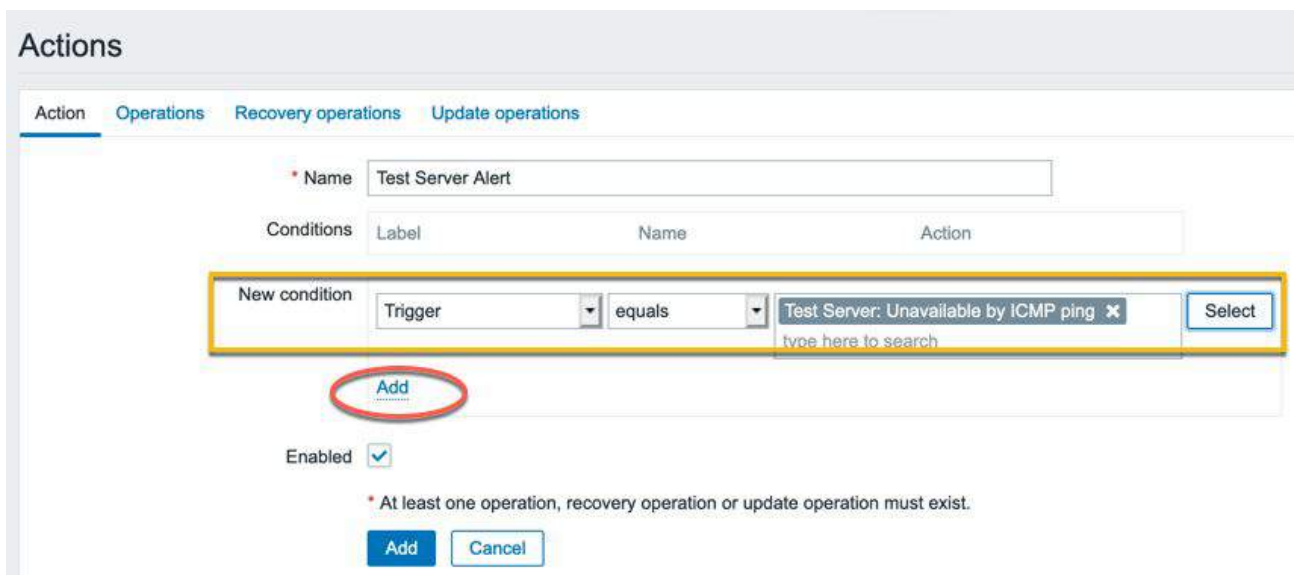


In our example, we will use the Triggers already made available in the *Template Module ICMP Ping*. Select “Unavailable by ICMP Ping” and click on **Select**.

Make sure the Group and Host at the top right is the correct device that you want to monitor and send alerts.



Ensure the New Condition is now reflected as below and click on the **Add** link. (NOT Add Button)



Check that the **Conditions** has been added. You can add more conditions to determine the trigger action by selecting more parameters for **New Condition** and clicking on the **Add** link.

Click on **Operations** on the tab menu at the top.

The screenshot shows the 'Actions' configuration page with the 'Conditions' tab selected. The 'Name' field contains 'Test Server Alert'. A table lists one condition with label 'A' and name 'Trigger equals Test Server: Unavailable by ICMP ping', with a 'Remove' link. Below the table is a 'New condition' section with dropdowns for 'Trigger' and 'equals', a search input, and an 'Add' button. An 'Enabled' checkbox is checked. A note states: '* At least one operation, recovery operation or update operation must exist.' At the bottom are 'Add' and 'Cancel' buttons.

Operations section will define what happens next after the condition is triggered.

Click on **New**.

The screenshot shows the 'Actions' configuration page with the 'Operations' tab selected. The 'Default operation step duration' is '1h'. The 'Default subject' is 'Problem: {EVENT.NAME}'. The 'Default message' contains a template with placeholders for event details. A 'Pause operations for suppressed problems' checkbox is checked. A table at the bottom has columns for 'Operations', 'Steps', 'Details', 'Start in', 'Duration', and 'Action'. The 'Steps' column has a 'New' link highlighted with a red circle. A note states: '* At least one operation, recovery operation or update operation must exist.' At the bottom are 'Add' and 'Cancel' buttons.

Edit the message to send as Alerts or leave it as the default message.

For **Send to Users**, select the User that was configured earlier in Section 2.3.3

For **Send only to**, select the Media type that was configured earlier in Section 2.2

The screenshot shows the 'Actions' configuration interface. At the top, there are tabs for 'Action', 'Operations', 'Recovery operations', and 'Update operations'. Below the tabs, there is a section for 'Default operation step duration' set to '1h'. A yellow box highlights the 'Default subject' and 'Default message' fields. The 'Default subject' is 'Problem: {EVENT.NAME}'. The 'Default message' contains: 'Problem started at {EVENT.TIME} on {EVENT.DATE}', 'Problem name: {EVENT.NAME}', 'Host: {HOST.NAME}', 'Severity: {EVENT.SEVERITY}', and 'Original problem ID: {EVENT.ID} {TRIGGER.URL}'. Below this, there is a checkbox for 'Pause operations for suppressed problems' which is checked. A table with columns 'Steps', 'Details', 'Start in', 'Duration', and 'Action' is shown. Under 'Operation details', there are fields for 'Steps' (1 - 1), 'Step duration' (0), and 'Operation type' (Send message). A note states '* At least one user or user group must be selected.' Below this, there are sections for 'Send to User groups' and 'Send to Users'. The 'Send to Users' section has a yellow box around it, containing 'User', 'TestUser', and an 'Add' link. The 'Send only to' dropdown is set to 'Email to sendQuick' and is highlighted with a red box. At the bottom, there is a 'Default message' checkbox which is checked.

Click on the **Add** link (NOT the Add button)

This is a close-up of the 'Send to Users' section from the previous screenshot. It shows a table with columns 'User' and 'Action'. The 'User' column contains 'TestUser' and the 'Action' column contains 'Remove'. Below the table is an 'Add' link. Below the 'Add' link is a 'Send only to' dropdown menu set to 'Email to sendQuick'. Below that is a 'Default message' checkbox which is checked. At the bottom, there is a 'Conditions' section with columns 'Label', 'Name', and 'Action', and a 'New' link. A red circle highlights the 'Add' link. At the very bottom, there are 'Add' and 'Cancel' buttons.

Confirm that the Operations has been added and click on the **Add** button.

Actions

Action Operations Recovery operations Update operations

* Default operation step duration 1h

Default subject Problem: {EVENT.NAME}

Default message Problem started at {EVENT.TIME} on {EVENT.DATE}
Host: {HOST.NAME}
Severity: {EVENT.SEVERITY}
Original problem ID: {EVENT.ID}

Pause operations for suppressed problems

Operations	Steps	Details	Start in	Duration	Action
1	Send message to users: TestUser via Email to sendQuick	Immediately	Default	Edit Remove	

* At least one operation, recovery operation or update operation must exist.

[Add](#) [Cancel](#)

If configured correctly, the Action entry would have been added like below

ZABBIX Monitoring Inventory Reports Configuration Administration

Host groups Templates Hosts Maintenance Actions Event correlation Discovery Services

Event source Triggers [Create action](#)

Name Status Any Enabled Disabled [Apply](#) [Reset](#)

Name	Conditions	Operations	Status
Report problems to Zabbix administrators		Send message to user groups: Zabbix administrators via all media	Disabled
Test Server Alert	Trigger equals Test Server: Unavailable by ICMP ping	Send message to users: TestUser via Email to sendQuick	Enabled

Displaying 2 of 2 found

2.3.5 Monitoring Problem

If the Action has been configured properly, whenever there is a problem that meets the condition, the operation of sending email to sendQuick will then be triggered.

On the dashboard of Zabbix, navigate to the following item :

Monitoring > Problems

If there is a problem (in our example, the server is down and ping to the server failed), it will be reflected as shown below.

The screenshot shows the Zabbix Monitoring Problems page. The top navigation bar includes 'Monitoring', 'Inventory', 'Reports', 'Configuration', and 'Administration'. The 'Monitoring' menu item is highlighted with a yellow circle. Below the navigation bar, the 'Problems' section is active, showing a search and filter interface. The interface includes fields for 'Host groups', 'Hosts' (set to 'Test Server'), 'Application', 'Triggers', and 'Problem'. There are also options for 'Minimum severity' (set to 'Not classified') and 'Age less than' (set to '14 days'). The right side of the interface has options for 'Host Inventory', 'Tags', 'Show tags', 'Tag display priority', 'Show operational data', 'Show suppressed problems', 'Show unacknowledged only', 'Compact view', 'Show details', and 'Highlight whole row'. At the bottom, a table displays the following problem:

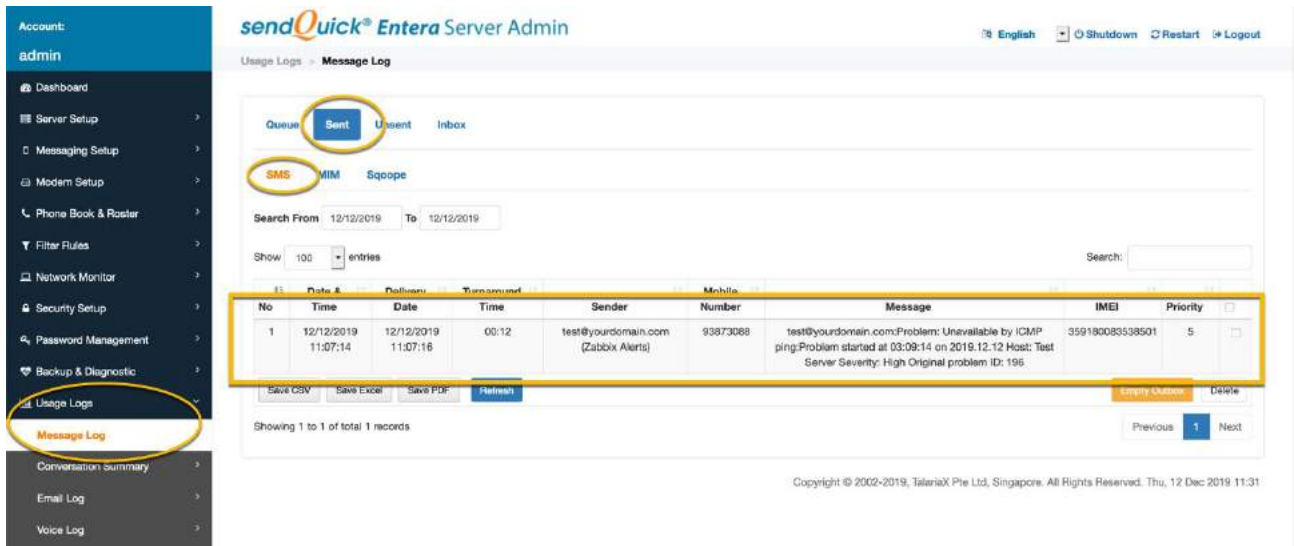
Time	Severity	Info	Host	Problem	Duration	Ack	Actions	Tags
11:09:14	High		Test Server	Unavailable by ICMP ping	8h 22m 36s	No		

Displaying 1 of 1 found

To confirm that sendQuick has subsequently received the email and sent out as SMS, go to sendQuick dashboard. Navigate to :

Usage Logs > Message Logs

Click on the **Sent** tab and **SMS** tab. If there is a corresponding entry in the logs, that means the SMS text was sent successfully.



The screenshot displays the 'sendQuick Entera Server Admin' dashboard. On the left, a navigation menu is visible with 'Usage Logs' and 'Message Log' highlighted. The main content area shows the 'Message Log' for 'SMS'. The 'Sent' tab is selected, and the 'SMS' filter is active. A search range is set from 12/12/2019 to 12/12/2019, and 100 entries are displayed. A table with one record is shown, detailing a successful SMS transmission.

No	Date & Time	Delivery Date & Time	Transmission Time	Sender	Mobile Number	Message	IMEI	Priority
1	12/12/2019 11:07:14	12/12/2019 11:07:16	00:12	test@yourdomain.com (Zabbix Alerts)	93873068	test@yourdomain.com:Problem: Unavailable by ICMP ping:Problem started at 03:08:14 on 2019.12.12 Host: Test Server Severity: High Original problem ID: 196	359180083538501	5