

# Azure Monitor – SendQuick Cloud Integration Guide

version 1.0

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Azure Monitor – SendQuick Cloud Integration Guide 1.0

# **REVISION SHEET**

Release No.	Date	Description
1.0	20/10/2020	First published version



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# Azure Monitor – SendQuick Cloud Integration Guide

#### **1.0 Introduction**

#### 1.1 About SendQuick Pte Ltd

SendQuick<sup>™</sup> develops and offers **enterprise mobile messaging solutions** to facilitate and improve business workflow and communication, and is widely used in areas such as IT alerts & notifications, secure remote access via 2-Factor Authentication, emergency & broadcast messaging, business process automation and system availability monitoring.

In addition to functionality, SendQuick's messaging solutions have also been developed with other key features in mind. These include **security** and **confidentiality** of company information, and **ease in mitigating disruption** during unplanned system downtime such as that arising from cyberattacks.

#### **1.2 About SendQuick Cloud**

**SendQuick Cloud** is a cloud based Software-as-a-Service (Saas) application to monitor and notify for cloud based incidents with omni-channel messaging capability. It has ability to monitor using ICMP Ping, Port check and URL check. It has policy based notifications using Email and Webhook, supporting any applications as well as Cloud Providers like AWS, Azure, Alibaba Cloud, Google Cloud and Oracle. Given the above integration methods, SendQuick Cloud is able to work with any applications to send notifications. Supporting notification channels include SMS, Telegram, Slack, Facebook Messenger and others. Lastly, there is Roster for messaging based on duties and time frame for each recipients, reducing alert fatigue.

#### **1.3 Purpose of Document**

This document is a guide on how to integrate SendQuick Cloud with Azure Monitor to send message notifications and alerts. In this guide, we will be using SendQuick Cloud for the integration.

Azure Monitor is accessible from the Azure Portal. You will need to login to **Azure Portal** and select **Azure Services** and is presented with all the Azure Services options. Select **Monitor**. You will need to configure the **Alert** function as found in the Left Menu and shown in the diagram below.

#### Azure Monitor – SendQuick Cloud Integration Guide 1.0

Microsoft Azure	① Upgrade _	♀ Search resources,	services, and docs	s (G+/)	
Azure servic	es				
+		*	<b>V</b>	<b>P</b>	
Create a resource	Storage accounts	Subscriptions	Resource Explorer	Monitor	All resources



Home > Monitor				
Monitor   Alerts ≯ Microsoft				
	+ New alert rule 🔅 N	1anage alert rules 🤌 Manage actions	Q View classic alerts	🕐 Refresh
Overview	Don't see a subscription? C	pen Directory + Subscription settings		
Activity log	Subscription * 🕦	Resource group ①		Resource ①
III Alerts	Azure subscription 1	✓ ResourceGroup1	~	
m Metrics	Selected subscriptions > Res	ourceGroup1		
₽ Logs	Total alerts	Smart groups (preview) 🕕	Total alert rules	Action ru
💝 Service Health	1	10	1	0
🧹 Workbooks	Since 10/15/2020, 2:16:33 PM	0.00% Reduction	Enabled 1	Enabled 0
Insights	Severity	Total alerts		
Applications	Sev 0	0		

Figure 1.2: Azure Monitor, Alerts Page

In Azure Monitor, you can send Alert via Email (SMTP) and Webhook (HTTP) method. This document will explain both methods in details in the following sections.

### 2.0 Configure in SendQuick Cloud

SendQuick Cloud is designed to complement the systems, virtual instances, devOps and other applications on the cloud for sending message notifications when an event happen. This will your services uptime for your cloud services.

#### 2.1 Email Filters in SendQuick Cloud

SendQuick Cloud can receive any emails (SMTP) from any applications, apply the configured filters (policies) and if the condition matches, messages will be sent to the recipients. When starting to configure, create an account in SendQuick Cloud and go to **Email Filter** (left Menu) and **Create New Mail Filter Rule**. You will be presented with the interface as shown below.

You will notice the Email Address **TO** as the first Policy item. The email address is preassigned by SendQuick Cloud and will follow the name of your account name. This email address cannot be changed and will be used to configure in Cloud Monitor as explained in section 3.1.

usademocompany	SendQuic	k° Clo	oud					
	Email Filter Help	Eng	glish 🗸	Alerts •	= - 🔑 C	hange Pass	word (→ I	ogout
sendQuick®		_				_		
usademocompany ( Super Admin )		1	The selected rec	ord(s) have beer	deleted. $ imes$	(		
E Analytics >								
	Create New Mai	l Filter Rul	e Inbox					
🐮 User >								
Device	Show 10 🗸 en	tries			S	earch:		
Cloud Providers	* *	×	×	×	Rule	*	×	
A Network Monitor	Rule Name To	From	Subject	Message	Time Buffer	Match Mode	Date Created	
▼ Email Filter	1		No d	ata available in ta	ible			
Y Email Filter								
Message Broadcast	Showing 0 to 0 of 0 en	tries					Previous	Next
Configuration								
	I			Sele	ect All:	ule Time B	Buffer De	lete

Figure 2.1: SendQuick Cloud Email Filter

usademocomp	SendQui	ick <sup>®</sup> Cloud
		elp - I English → I Alerts - I - P Change Password (→ Logout
sendQuick*	Email Filter / No	New Filter Rule Create New Mail Filter Rule
토 Analytics	> Rule Name :	
📲 User	> New Rule	e
	To : placehold	ldemail@sendquickcloud.com
Cloud Providers	Trigger alert wh	when the email is received with this receiver.
A Network Monitor	C From :	
▼ Email Filter		when the email is received with this sender.
🗩 Message Broadcast	Subject :	
Configuration	Trigger alert wh	when email is received with this subject.
	Trigger alert whether the test of	when email is received matching the content here.

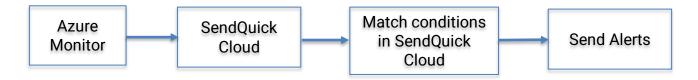
Figure 2.2: Creating New Email Filter Rule

#### 2.2 Cloud Provider in SendQuick Cloud using Webhook

The second method to integrate between Cloud Monitor and SendQuick Cloud is using Webhook method. This is via an Application Programming Interface (API) where the event information is sent to SendQuick Cloud and SendQuick Cloud will process and check against the pre-configured policies (conditions). If the conditions are met, it will trigger an alert to the assigned users.

In summary, the flow is as below:

SendQuick<sup>®</sup>



The webhook sending to SendQuick Cloud is found on the Service Configuration for Cloud Provider in SendQuick Cloud. This is depicted in interface below.



	usademocompa	any
	sendQuick*	
	usademocompany ( Super Ad	tmin )
	토 Analytics	>
	🐮 User	>
		>
	Cloud Providers	>
	C-D Alibaba Cloud	
	aws	
	Soogle Cloud	
	HUAWEI CLOUD	
	Microsoft Azure	
	ORACLE	
	🔬 Network Monitor	
	▼ Email Filter	
	🗩 Message Broadcast	>
	Configuration	>
I	Figure 3.1: SendQuick Cloud Me	enu (left)

Chose the Cloud Provider as shown on the left Menu in the diagram above.

Copy the Integration URL as shown on the top of the Integration page. This is the URL to be configured in Azure Action as shown in section 4.0.

SendQuick <sup>®</sup> Cloud	Help 🔹 🖾 English 🛛 🔹 🖉 Alerts 🔹 🚍 🗸 🔎
Cloud Providers / Azure	
Integration Key :	e92115dbb10f908d0c9b3de2a3 Copy
Integration URL :	https://us.sendquickcloud.com/a Copy
Create Azure Rule	

Figure 3.2: Cloud Providers Integration Information



### **3.0 Configure Azure Monitor Manage (Alert) Actions**

When any event happens or there is a need to send a notification alert, Azure Monitor (Azure) can trigger an email to SendQuick Cloud. SendQuick Cloud will then convert the email message to alerts and send to mobile phone based on the policy (filter) rules assigned. The email messages are sent from Azure to SendQuick Cloud for processing.

In Azure, the first configuration is to configure the Manage Actions, creating the recipient list to receive the notifications. Since SendQuick Cloud is used to manage the recipients on the different channels, you just need to configure one (1) email in Manage Actions for Azure. This is explained below.

# **3.1 Configure Email and Webhook for SendQuick Cloud in Azure Manage Actions**

On the main page of Azure, select **Alerts** and **Manage Actions**. These are shown in the Figures below.

Home > Monitor >					
Manage actions					
$\equiv$ Column: + Add action group	)				
Action groups Action rules (preview)					
Subscription * ①				Resource group *	D
Azure subscription 1			$\sim$		
$\mathcal P$ Search action groups					
Action group name $\uparrow \downarrow$	Short name	$\uparrow_{\downarrow}$	Resource group	$\uparrow_{\downarrow}$	Status
actiongroup1	actiongroup1		resourcegroup1		Enabled

Figure 4.1: Manage Actions in Azure

Select **Add Action Group** and you will see the interface as below.

Create action group         An action group invokes a defined set of notifications and actions when an alert is triggered. Learn more         Project details         Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.         Subscription * ①       Azure subscription 1         Resource group * ①       ResourceGroup1         Create new         Instance details         Action group name * ①       AzureMon         Display name * ①       AzureMon	Home > Monitor > Rules > Man	age actions >	
Project details         Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.         Subscription * ①       Azure subscription 1         Resource group * ①       ResourceGroup1         Create new         Instance details         Action group name * ①       AzureMon	Create action group	)	
Project details         Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.         Subscription * ①       Azure subscription 1         Resource group * ①       ResourceGroup1         Create new         Instance details         Action group name * ①       AzureMon	An action group invokes a defined so	t of notifications and actions when an alart is triggered. L	
Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources. Subscription * ① Azure subscription 1 Resource group * ① Resource Group 1 Create new Instance details Action group name * ① AzureMon	5	t of notifications and actions when an alert is thggered. E	earn more
all your resources.   Subscription * ①   Azure subscription 1   Resource group * ①   ResourceGroup1   Create new   Instance details   Action group name * ①     AzureMon	Project details		
Resource group * ①     ResourceGroup1     ✓       Create new       Instance details       Action group name * ①     AzureMon		oyed resources and costs. Use resource groups like folder	rs to organize and manage
Create new Instance details Action group name * ① AzureMon	Subscription * 🛈	Azure subscription 1	$\checkmark$
Instance details Action group name * ① AzureMon	Resource group * ①	ResourceGroup1	$\checkmark$
Action group name * ① AzureMon ✓		Create new	
	Instance details		
Display name * ① AzureMon ✓	Action group name * 🛈	AzureMon	$\checkmark$
	Display name * 🕕	AzureMon	$\checkmark$
This display name is limited to 12 characters		This display name is limited to 12 characters	
	Review + create Previou	15 Next: Notifications >	

Figure 4.2: Creating Action Group in Azure

Complete the required information in **Project Details** and give the action a name. Then select **Next Notification** to configure notifications as shown below.

Create action group			
Basics <b>Notifications</b> Actions	Tags Review + create		
Notifications			
Configure the method in which users wil reciever details and add a unique descri		riggers. Select notification types, pr	rovide
Notification type ①	Name 🛈	Selected 🕕	
Email/SMS message/Push/Voice	$\overline{}$		0 🖻
	~		
	Figure 4.3: Selecting Notification	on Type	

Select **Email/SMS/Push/Voice** and insert the email from SendQuick Cloud into the **Email** text box as below. Select the Email check list as shown. The select **OK**.



In the **Actions** section, select **Webhook** and then enter the URL (from SendQuick Cloud) in Section 2.2 above into the **URI text box** and select **OK**. These are shown in the three images below.

	nail/SMS message/Push/Voice or edit an Email/SMS/Push/Voice action	×
Email	Email I * democompany@sg.sendquickoncloud.com	~
	SMS (Carrier charges may apply) htry code 1	$\sim$
	e number	
	Azure app Push Notifications e account email ①	
	Voice htry code 1	$\sim$
Phon	e number	
Y	le the common alert schema. Learn more res No OK	

Figure 4.4: Inserting SendQuick Cloud's Email



Create action gro	oup			
Basics Notifications A	Actions Tags Review + create			
Actions				
Configure the method in which actions are performed when the action group triggers. Select action types, fill out associated details, and add a unique description. This step is optional.				
Action type 🛈	Name ①	Selected 🛈		
Webhook	\[         \]     \[		0	
	~ [			

Figure 4.5: Creating Webhook Action

Webhook	$\times$
Add or edit a Webhook action	
Send a notification to this URI when an alert fires	
URI *	
https://sg.sendquickoncloud.com/azure/azure_process.php?coy=democompany&key=democompan	e V
Enable the common alert schema. Learn more	
Yes No	
OK	

Figure 4.6: Inserting SendQuick Cloud's URL

Once completed, you will then proceed to configure the Alert Rules. You may be required to verify the email (provided by SendQuick Cloud) to activate the emails.

### **4.0 Configure Alert Rules with SMTP and Webhook**

In Cloud Monitor, the configuration for Email (SMTP) and webhook is configured in the same rule. Hence, this section will explain both methods in the same configuration.

Select **Alert Rules** and **Create Alert Rule** and you will see the interface to configure the rule as below.

Select and assign the desired resources, **Resources** and **Conditions** and once completed, the resources and conditions are selected as shown in the next Figure.

Then, proceed to **Select Action Group**, to specify the desired actions to send messages for this rule.

Но	ome > Monitor > Rules >	
$ _{\mathbf{C}}$	reate alert rule	
	les management	
	Create an alert rule to identify and address issues when important con- When defining the alert rule, check that your inputs do not contain any	
	Scope	
	Select the target resource you wish to monitor.	
	Resource	Hierarchy
	No resource selected yet	
$\langle$	Select resource	
	Condition	
	Configure when the alert rule should trigger by selecting a signal and o	defining its logic.
	Condition name	
	No condition selected yet	
C	Select condition	

Figure 5.1: Creating Alert Rule

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Create alert rule		
Rules management		
Create an alert rule to identify and address issues when important conditions are found in your monitorin When defining the alert rule, check that your inputs do not contain any sensitive content.	g data. Learn more	
Scope		
Select the target resource you wish to monitor.		
Resource	Hierarchy	
All VM images (classic)	Azure subscription 1	
Edit resource		
Condition		
Configure when the alert rule should trigger by selecting a signal and defining its logic.		
Condition name		
Signal name='Delete Virtua Whenever the Activity Log has an event with Category='Administrative', Signal name='Delete Virtua	I Machine Image (Microsoft.ClassicStorage/storageAccounts/vmImages)'	Ū
Select condition		



Home > Monitor > Rules >	
Create alert rule	
No condition selected yet	
Select condition	
Actions Send notifications or invoke actions Action group name	when the alert rule triggers, by selecting or creating a new action group. Learn more Contains actions
No action group selected yet	
Select action group	
Provide details on your alert rule so	that you can identify and manage it later.
Alert rule name * ①	Specify the alert rule name
Description	Specify the alert rule description
Enable alert rule upon creation	

Figure 5.3: Select Action Group

Select an action group to attach to this alert rule The action group selected will attach to this alert rule			
+ Create action group			
Subscription (i)			
Azure subscription 1			
$\wp$ Search to filter items			
Action group name	$\uparrow_{\downarrow}$ Contain actions		
actiongroup1	1 Email, 1 Webhook		
AzureMon	1 Email, 1 Webhook		

Figure 5.4: Select Action Group for the Rule

Once selected the **Action Group** and **Select**, you can complete the rule with the Description and then **Save** at the top of the rule. This completes the creation of a rule in Azure Monitor.

The rule is ready to use and will send via Email and webhook (or any combination) based on the Rule Actions configured in Section 3.1 above.

Home > Monitor >							
Rules							
Rules management							
🕂 New alert rule 📰 Edit columns 🍫 Manage actions 🗘 View classic alerts 🕐 Refresh 🛛 🗁 Enable 🔲 Disable 📋 Delete							
Don't see a subscription? Open Directory + Subscription settings							
Subscription * 🛈	Resource group ①	Resource type ①	Resource ()	Signal type 🕕	Status 🛈		
Azure subscription 1 V	ResourceGroup1 V	2 selected V	×	All signal types V	Enabled		
Selected subscriptions > ResourceGroup1							
Displaying 1 - 2 rules out of total 2 rules							
D Search alert rules based on rule name and condition							
Name ↑↓	Condition	`↓ Status	Target resource ↑	↓ Target resource type ↑↓	, Signal type		
TestAlertStaging	Whenever the average successserverlate	n 🔮 Enabled	testsendquickstorage1	storage accounts	Metrics		
Monitor Azure VM	category equals Administrative and reso	u 🔮 Enabled	-	vm images (classic)	Activity log		

Figure 5.5: New Rule Completed in Dashboard

You can create more rules, as desired and use either Email or webhook to send the notifications to SendQuick Cloud.

Upon completion, you can start using SendQuick Cloud and configure all the filter/policies and user roster to receive the alerts on their phones. For more SendQuick Cloud configuration, refer to SendQuick Cloud User Manual or Video Tutorial.