



# Nagios - sendQuick Integration Guide Version 1.0

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# **REVISION SHEET**

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# Nagios - sendQuick Integration Guide

# **1.0 Introduction**

### 1.1 About TalariaX Pte Ltd

TalariaX<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, TalariaX'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**

*sendQuick* is a comprehensive Short Messaging Service (SMS) gateway that is available in the form of an **appliance** or as a **cloud-based** solution. *sendQuick* is used by more than 1,500 businesses, including many Fortune Global 500 companies, in 40 countries and across industries such as banking, finance, insurance, manufacturing, retail, government, education, and healthcare.

### **1.3 Purpose of Document**

This document is prepared as a guide on how to integrate sendQuick with Nagios to send SMS alerts. In this guide, we will be using sendQuick Alert Plus for the integration.

The method we will be using to integrate Nagios with sendQuick is the **email method**. This method allows users to make full use of sendQuick 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 appliance using SMTP

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

## 2.1 Configuring Email Settings in Nagios

To access the configuration of Email Settings in Nagios XI, navigate to the following: **Configure > System Configuration > Email Settings.** 

On the dashboard of Nagios XI platform, click Configure.

<u>N</u> agios' XI	Home	Views	Dashboards	Reports	Configure	Tools	Help	Admin	$ \land                                   $
This trial copy of Nagios XI has	s expired. Purch	nase a Lice	ense Now or Ente	r your license	key.				
✓ Quick View	▲ <sup>‡</sup>								
Home Dashboard Tactical Overview Birdseye Operations Center Operations Screen	Hom	e Das	Started Guide	•					Host Status Sumn
Open Service Problems Open Host Problems		Common	Tasks:						Up Down
All Service Problems All Host Problems		Chan     Chan	ige your account se ige your account pa	ettings assword and ge	neral preferences				64 11 Unhandled
Network Outages		Chan	ige your notification	ns settings					11
✓ Details		Chan	ige how and when y	you receive aler	t notifications.				Last Updated: 2020-12-01 1
Service Status Host Status		Add	or modify items to	be monitored w	ith easy-to-use w	izards.			
Hostgroup Summary Hostgroup Overview		Getting S	tarted:						
			Figure 1:	Nagios	Dashboar	d			

#### Click System Configuration.



Figure 2: Configuration Page



#### Lastly, click on Email Settings.

<u>N</u> agios' XI	Home	Views	Dashboards	Reports	Configure	Tools	Help	Admin
This trial copy of Nagios XI has	expired. Purch	hase a Lice	nse Now or Enter	your license ke				
✓ System Information		-						
<ul> <li>System Status</li> <li>Monitoring Engine Status</li> <li>Audit Log</li> <li>Check For Updates</li> </ul>	Syst	em So	Security Pass	words & Accounts	- 🖵 Theme	e & Display	🛔 User	Accounts
↓ Users	Genera	l Progran	n Settings					
<ul> <li>▲ Manage Users</li> <li>⇒ LDAP/AD Integration</li> <li>▲ Notification Management</li> <li>★ User Sessions</li> </ul>	Program URL:	n htt The c	p://192.168.1.251/ default URL used to a	'nagiosxi/ ccess Nagios XI dir	ectly from your	internal netw	ork.	
✓ System Config	Externa	u -						
<ul> <li>♦ System Settings</li> <li>■ License Information</li> <li>▼ Proxy Configuration</li> <li>■ System Profile</li> <li>■ Email Settings</li> <li>■ Mome Carners</li> <li># Performance Settings</li> <li>✓ Automatic Login</li> <li>&gt; SSH Terminal</li> </ul>	Timezo	The ( quick 	URL used to access N. access to the interfa automatically Check allow HTML Tags in H	agios XI from outsi ice. for Updates (Cheo lost/Service Statu	de of your inter ok Now) IS	nal network (	if different (	than the defau
∧ Monitorina Confia								
	Fi	igure 3:	System Confi	guration Pag	ge			

The **Email Settings** page will appear as shown:

<u>N</u> agios <sup>,</sup> XI	Home	Views	Dashboards	Reports	Configure	Tools	Help	Admin
This trial copy of Nagios XI has	expired. Purch	ase a Lice	nse Now or Enter	your license	key.			
✓ System Information								
<ul> <li>System Status</li> <li>Monitoring Engine Status</li> <li>Audit Log</li> <li>Check For Updates</li> </ul>	Emai Modify the	settings us	tings sed by your Nagios	XI system for	sending email al	erts and info	ormational	messages.
✓ Users	A Sent	La nest Ell						
<ul> <li>▲ Manage Users</li> <li>         ដ LDAP/AD Integration     </li> <li>▲ Notification Management</li> <li>★ User Sessions</li> </ul>	🖌 🖌 Outl	bound	Inbound					
✓ System Config	Note:	Mail messag	ges may fail to be de	elivered if your	XI server does n	ot have a val	lid DNS nar	me. For mor
<ul> <li>System Settings</li> <li>License Information</li> <li>Proxy Configuration</li> </ul>	Outbour	nd Mail S	ettings					
<ul> <li>System Profile</li> <li>Email Settings</li> <li>Mobile Carriers</li> </ul>	Send Fro	om: na	agios@company.cor	n				
≇ Performance Settings ∮ Automatic Login >_ SSH Terminal	Send Me	thod: O	Sendmail SMTP					
▲ Monitoring Config	Logging	:	Enable logging of m	nail sent with th	he internal mail c	omponent (P	HPMailer)	/usr/local,
		Figure	4: Email Sett	ings Page	l.			



Under **Outbound Mail Settings**, you can key in any email address of your choice (for example: <u>nagios@company.com</u>) in the field for **Send From**.

#### Select SMTP for Send Method.

Under **SMTP Settings**, key in the **IP address** of a sendQuick device (in this example, we will be using <u>192.168.1.96</u>) for the field of **Host**.

For Port field, enter 25.

Select option None for Security.

Outbound N	1ail Settings		
Send From:	nagios@company.com		
Send Method	I: O Sendmail SMTP		
Logging:	Enable logging of mail sent with the internal m	ail component (PH	PMailer) <b>/usr/lo</b>
SMTP Setti	ngs		
Host:	192.168.1.96	0	
Port:	25		
Username:			
Password:	۲		
Security:	<ul> <li>None</li> <li>TLS</li> <li>SSL</li> </ul>		
✓ Send a T Update Sett	Test Email		
	Figure 5: Configuration for Email Se	ettings	



# 2.2 Add Email Address

To add Email Address, you have to navigate to the following: Configure > My Account Setting > Account Information.

On the dashboard of Nagios XI platform, click Configure.

<u>N</u> agios XI	Home	Views	Dashboards	Reports	Configure	Tools	Help	Admin			
		chase a Lice	ense Now or Ente		key.						
✓ Quick View	A .	_									
Home Dashboard Tactical Overview Birdseye Operations Center	Hor	ne Das	shboard	0					-		
Operations Screen	*	Getting	Started Guide						*	Host Sta	tus Sumn
Open Service Problems Open Host Problems		Common	Tasks:							Up	Down
All Service Problems All Host Problems		Char     Char	nge your account se inge your account pa	ettings assword and ge	neral preferences.					64 Un	11 handled
Network Outages		Char	nge your notification	ns settings							11
✓ Details		Char	nge how and when y	you receive aler	t notifications.					Last Updated	2020-12-01 1
Service Status Host Status		Add	or modify items to	be monitored w	ith easy-to-use w	izards.					
Hostgroup Summary Hostgroup Overview		Getting S	tarted:								
			Figure 6:	Nagios	Dashboai	ď					

#### Click on My Account Settings.





Lastly, click on Account Information.



Figure 8: Account Settings Page

Under General Account Settings, enter <u>anyname@sendQuickIP</u> (in this example, we are using <u>alert@192.168.1.96</u>) under Email Address.

(Note that the email address entered here must be the same as the email address for the Email Filter in sendQuick)

<u>N</u> agios <sup>,</sup> XI	Home	Views	Dashboards	Reports	Configure	Tools	Help	Admin
This trial copy of Nagios XI has e	xpired. Purcl	hase a Lice	nse Now or Ente	r your license	key.			
✓ My Account			_					
Account Information User Sessions	Acco	ount I	nformati	on				
✓ Notification Options	Genera	Account	Settings					
Notification Preferences Notification Methods	New Pa	ssword:	1					
Notification Messages Send Test Notifications	Repeat	New Passv	vord:					
	Name:		Nagios Ad	dministrator				
	Email A	ddress:	alert@19	2.168.1.96				
	API Key	:	BKBk27M	QeEAQtERkneR	Wp9WKg8KsFDb	dDLAE8jrlW	/hcJU34hBl	JdgjpZCQZksCuYb
			Generate	e new API key				
			🗹 Enable	API Access				

Figure 9: Configuration for Account Settings



# **3.0 Configure Email Filter in sendQuick**

sendQuick allows you to configure alerts to be sent to multiple phone numbers, groups or even combinations of emails and SMS.

# 3.1 Navigate to Email Filter

To explore this feature, navigate on the sendQuick dashboard to: **Filter Rules > Email Filter** 



Figure 10: sendQuick Dashboard

# 3.2 Create a rule in Email Filter

Click on Add New Record

Account:		senc	l <mark>Q</mark> uick®	Ale	rtPlu	s Serv	er Adm	in	
admin		Filter Rule	es > Email Filte	er					
Dashboard									
Server Setup	>	Show	10 🗸 entri	es					
Messaging Setup	>	↓ž						Rules	
🖨 Modem Setup	>	No	Description	.↓↑ To	From	.↓↑ Subject		L† Priority	Rule
▼ Filter Rules	~		Description	10	TION	Subject	message	No data	availab
Email Filter	>	Add	New Record						
SNMP Trap Filter	>	Showin	a 0 record						
Syslog Filter	>	Chowin	gorecord						
Network Monitor	>						Er	nail Forwarding	g Me
Security Setup	>								
		Figure	11: Email I	Filter	Page			-	

You can then create a new record to define the email address Nagios should send to (in our

X



Edit Mail Filter Rule

example, we will use <u>alert@192.168.1.65</u>).

# (Note that this email must be the same as the one entered in Nagios Account Information)

It will be filtered by the **Mail To** field. Nagios will trigger an email to <u>alert@192.168.1.96</u>. If the rule is matched, SMS will be triggered.

You can enter your own **Description** for example **Nagios** to specify that this rule is used for Nagios.

Description	Nagios
	Variables Usage
Mail To 🗹	alert@192.168.1.96
Mail From 🗆	
_	
Subject 🗆	
Message 🗌	
Match Mode	● ALL ○ ANY
Priority	5 🗸
Rule Status	Enable 🗸
Group	-
	Select No Group 🗸 Add
	New
	Figure 12: Adding Email Filter Rule



## 3.3 Configure mobile number to receive alert notifications

The Email Filter rule will be shown after created.

#### Click on View.

Account:		senc		AlertPlus	Serve	r Adm	in			3	English	✓ ♂ Shutdo	wn CR	estart 0	+ Logout
admin		Filter Rul	es > Email Filt	ter											
<table-of-contents> Dashboard</table-of-contents>															
Server Setup	•	Show	10 🗸 entr	ries								Search:			
Messaging Setup	>	14					Rules								
🖨 Modern Setup	>								Rule		Message	Date			
▼ Filter Rules	~	No	Description	To	From	Subject	Message	Priority	Status	Group	Buffer	Created	Match	Alert	
Email Filter	>	1	Nagios 🗷	alert@192.168.1.96				5	Enable		Yes	02/12/2020	ALL	View 2	
SNMP Trap Filter	>	Add	New Record								-	Duplicate	nable	Disable	Delete
Syslog Filter	>	Showin	g 1 to 1 of total 1	1 records									Previous	1	Next
C Notwork Monitor			5										11011000		

Figure 13: Email Filter Rule

#### Click Add New Record.

Account:		send <mark>@</mark> uick®.	AlertPlus Ser	ver Admin	🐚 English 🛛 🗸 🖒 Shutdo
admin		Filter Rules > Email Filter	r > View Alert		
🚯 Dashboard					
Server Setup	>			Email Filter Rules	
Messaging Setup	>		Description	Nagios	
🖨 Modem Setup	>		Mail To	alert@192.168.1.96	
▼ Filter Rules	~		Mail From		
Email Filter	>		Subject		
SNMP Trap Filter	>		Message		
Svslog Filter	>		Match Mode	ALL	
Network Monitor	>	Expand			
Security Setup	>				
e Password Management	>	Show 5 🗸	entries		Search:
😵 Backup & Diagnostic	>	No ↓≞		Message Receiver	Alert Template
🔟 Usage Logs	>			No data available in table	
System Test Tools	>	Add New Record			

Figure 14: Email Filter Rule

You will be able to enter multiple mobile numbers of personnel. They will be the one to receive the alert notifications.

Scroll down to Alert Receiver. Under Mobile Number to Receive Alert, key in as many numbers as you want.

(Note that each number must be entered per line)

Click Save.



Alert Receiver			
Mobile Number to Receive Alert	Email to Receive Alert	Voice to Receive Alert	
98765432 87654321  89123567 90123456			li li
	Save	Cancel	

Figure 15: Email Filter Rule Configuration

#### You will be able to see the mobile numbers that you have assigned.



Figure 16: Email Filter Rule Configuration



# **4.0 Testing Configuration**

After configuring both Nagios and sendQuick, we must ensure both parties are able to communicate with one another.

# 4.1 Sending Test Email from Nagios

Navigate to Email Settings and click on Send Test Email

<u>N</u> agios' XI	Home Vi	ews Dashbo	ards Report	s Configu <del>r</del> e	Tools	Help	Admin	
This trial copy of Nagios XI has expired. Purchase a License Now or Enter your license key.								
✓ Users								
<ul> <li>▲ Manage Users</li> <li>➡ LDAP/AD Integration</li> <li>▲ Notification Management</li> <li>★ User Sessions</li> </ul>	Email S Modify the set	Settings	· Nagios XI system	for sending email a	alerts and info	ormational	messages.	
✓ System Config	🖪 Send a	Test Email						
<ul> <li>✿ System Settings</li> <li>■ License Information</li> <li>▼ Proxy Configuration</li> <li>□ System Profile</li> </ul>	🖌 Outbour	nd 🖸 Inbound						
■ Email Settings Mobile Carriers Performance Settings	Note: Mail messages may fail to be delivered if your XI server does not have a valid DNS name. For more info							
✓ Automatic Login >_ SSH Terminal	Outbound Mail Settings							
A Monitoring Config					_			
V Check Transfers	Send From:	nagios@com	pany.com					
<ul> <li>Outbound Transfers</li> <li>Inbound Transfers</li> </ul>	Send Metho	d: O Sendmail						
✓ System Extensions	Logging:	Enable logo	ing of mail sent wi	th the internal mail	component (F	PHPMailer)	/usr/local/nagi	
<ul> <li>Manage Components</li> <li>Manage Config Wizards</li> <li>Manage Dashlets</li> <li>Manage Dashlets</li> </ul>	SMTP Setti	ings						
<ul> <li>✓ Manage Plugins</li> <li>→ Manage Graph Templates</li> <li>→ Manage MIBs</li> <li>Custom Includes</li> </ul>	Host:	192.168.1.96			Ø			
V System Backung	Port:	25						
System backups	Username:							
🥔 ocnequied backups 🚽				Daga				





If email is sent successfully, the following message will appear:

<u>N</u> agios' <mark>XI</mark>	Home Views Dashboards Reports Configure Tools Help Admin								
This trial copy of Nagios XI has expired. Purchase a License Now or Enter your license key.									
✓ Users									
▲ Manage Users ➡ LDAP/AD Integration	Test Email Settings								
<ul> <li>Notification Management</li> <li>User Sessions</li> </ul>	A test email was sent to alert@192.168.1.96								
✓ System Config	 Mailer said: [12-02-2020 10:50:05] Message sent! (method=smtp;host=192.168.1.96;port=25;security=none), Referer: admin/testemail.php								
<ul> <li>♦ System Settings</li> <li>■ License Information</li> <li>▼ Proxy Configuration</li> <li>□ System Profile</li> <li>■ Email Settings</li> <li>⊂ Mobile Carriers</li> <li>№ Performance Settings</li> </ul>	Use this to send a test email to your current logged in user address to verify you can recieve alerts from Nagios XI. An email will be sent to: alert@192.168.1.96 Change your email address								
* retrormance bettinos	Figure 19: Email Testing Successful								

# 4.2 Ensuring sendQuick receives Email

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.

Account:	sendQuick® AlertPlus Server Admin 🛛 🔅 English 🗸 O Shutdown 🗢	Restart ⊕Logou
admin	Usage Logs > Message Log	
🚳 Dashboard		
Server Setup >	Queue Sent Unsent Inbox	
Messaging Setup >		
⊟ Modem Setup >	Main Defer SMS Sqoope	
▼ Filter Rules >	Search From To	
Network Monitor	Show 100 v entries Search:	
▲ Security Setup >		
A Password Management	No lh Date & Time 11 Sender 11 Mobile Number 11 Message 11 Pr	Priority 🕴 🗆
♥ Backup & Diagnostic >	1 02/12/2020 10:56:12 nagios@company.com (Nagios) 97604550 o remove this message.***** Nagios XI Alert ***** Nagios has detected a problem with this service. Notification Type: PROBLEM Service: HTTP Host: 192.	9
	Figure 20: Testing Successful	