



The integration of sendQuick AlertPlus with HP Operations Manager Configuration Guide

Prepared by

TalariaX Pte Ltd

76 Playfair Road #08-01 LHK2 Singapore 367996 Tel: 65-62802881 Fax: 65-62806882

1. INTRODUCTION

This document is prepared as a guide to configure HP Operations Manager to run with sendQuick SMS gateway for the delivery of system alerts and notifications via SMS.

TESTING ENVIRONMENT			
HP Operations Manager (for Windows)	Version A.09.00		
sendQuick Alertplus	Version 20110630-4		

2. CONFIGURATION OF HP OPERATION MANAGER

(a) Creating Event Policy and Rule

2.1 Create a new policy group. Go to Policy management -> New -> Click on Policy group (see Fig 1). Select a name for the policy group. In this example, we have used "Notification Policies". The newly created policy group appears in the Policy Groups list (see Fig 2).



Figure 1: Create New Policy Group



Figure 2: Policy group name

2.2 Right click on the created policy group and select Windows Event Log (in this example, the testing was done on Windows Event Log). See Fig 3.



Figure 3: New Windows EventLog Policy

2.3 Specify the EventLog to be monitored (eg. Application). See Fig 4.

🛃 Alert Email/SMS [1.7] (Windows Event Log)	×
File View Help	
Save and Close 📳 Save 🍞 Help	
Source Rules Options	
Event log name* Application	
 Read mode Read from last position Read from beginning (first time) 	



2.4 Click on Rules tab and click "New".

👺 Alert Email/SMS [1.7] (Windows Event Log)	
File View Help	
🕾 Save and Close 📳 Save 💡 Help	
Source Rules Options	
Seq. 🛆 Description Rule Type	New
	Modify
	Delete
	Сору
	Move up
	Move down
	Move to:
	Defaults
	Test
Hule summary	

Figure 5: Add new rule

Create criteria for Rule. In this example, the following criteria was used (see Fig 6):Rule description: Alert Email/SMSSource: EventCreateType equals: Error

When completed, click OK.

New rule "Alert En	nail/SMS"				×
Condition Actions	;]				
Rule description*	Alert Ema	il/SMS			
	1				
- Specify condition	n (to match	incoming event of type 'Win	idows Event Log])	
Computer	equals	<any computer=""></any>		▼	
Source	equals	EventCreate		•	
Category	equals	<any category=""></any>		•	
Туре	equals	Information / Succes	ss Audit		
		Warning / Failure Au	ıdit		
Event ID	equals	<any event="" id=""></any>	Forma	^{at:} decimal	•
Description	matches	<*>			>
<u> </u>				Launch even	t viewer
				Launch even	
				1	
			OK	Cancel	Help

Figure 6: Criteria for the rule

(b) Setting Rule Action to connect to sendQuick SMS gateway

2.5 There are 2 options of configuring HPOM to send event alerts to sendQuick. The first is using a command line to forward the email alerts generated by HPOM to sendQuick server to deliver the SMS message. The second method is via HTTP Post using Curl.

Option 1: Using Command Line

2.6 Click on "Actions" tab and select "Automatic command" (Fig 7).

New rule "Alert Email/SMS"	×
Condition Actions	
Rule type: If If condition of this rule is True then:	matched, do actions and stop
O Do nothing: stop evaluation	
Send Message to	
C Acknowledged Msg. Browser or	
Active Msg. Browser and	
Start Automatic command	
None	
Operator-initiated command	
None	
Stop evaluation	
Else evaluate next rule	
	Cancel Help

Figure 7: Automatic command

2.7 Type the following in the "Command" field (Fig 8):

ovepmail.exe -to alert@192.168.1.8 -from hpom@company.com -mailsrv 192.168.1.8 -format plain -body FromHP -subject <\$LOGFILE>

"to" address: Email with assigned sendQuick IP address or domain name (eg. alert@192.168.1.8)

"from" address: Assigned sender's email address (eg. hpom@company.com)

"mailsrv": IP or domain name of the SMTP server to be used for sending the emails (in this example, we have used the in-built SMTP server in sendQuick at 192.168.1.8)

"format": plain

"body": <body text> is the message you want to send.

"subject": Eg. <\$LOGFILE>. Refer to HPOM Help on Policy Management for more information)

Automatic co	mmand X				
Command	ovepmail.exe -to alert@192.168.1.8 -from hpom@compan Browse				
Execute	Under agent account (\$AGENT_USER)				
	C As user:				
	Specify password:*				
Node	<\$MSG_NODE_NAME>				
_Message rela	ationship				
Append	output of command as annotation to the message				
- Acknow	edge the message when command is successful				
Send me	essage immediately				
🔿 Wait un	til local command completes and then:				
🖲 Ser	nd the message				
C Send the message only if the local command fails					
C Ser	C Send the message only if the local command is successful				
	OK Cancel Help				

Figure 8: Automatic Command

Click "Ok" once completed (fig 9)

New rule "Alert Email/5MS"
Condition Actions
Rule type: If matched, do actions and stop If condition of this rule is True 💌 then:
O Do nothing: stop evaluation
Send Message to
C Acknowledged Msg. Browser or
Active Msg. Browser and
Start
Automatic command
Command: ovepmail.exe -to alert@192.168.1.8 -fr
Operator-initiated command
None
Stop evaluation
Else evaluate next rule
OK Cancel Help

Figure 9: Created Automatic Command

Click on "Save and Close" (fig 10).

Alert Email/SMS [1.9] (Windows Event Log)		
File <u>View Help</u>		
😤 Save and Close 🕅 Save 🛛 💡 Help		
Source Rules Options		
Seq. Description	Rule Type	New
1 Alert Email/SMS	If matched, do actio	Modify
		Delete
		Сору
		Move up
		Move down
		Move to:
		Defaults
		Test
 Rule summary		
IF <u>Condition</u> (Source: EventCreate; Type: Error) of this rule is true THEN: Do <u>Actions</u> : Send <u>Message</u> to Active Msg. Browser () Start <u>Automatic command</u> (ovepmail.exe -to alert@ 192.168.1.8 -format plain -body FromHP -subject <\$LOG Stop evaluation ELSE evaluate next rule	192.168.1.8 -from hpom@company.com -mailsrv FILE>)	



Option 2: Using HTTP Post (Curl)

2.8 The second option of connecting to sendQuick is using HTTP command. You will need to install Curl. Curl can be downloaded from http://curl.haxx.se/download.html. Please move the downloaded file into C directory.

Type the following in the "Command" field (fig 11):

"C:\curl-7.22.0-devel-mingw32\bin\curl.exe" curl --data-urlencode "tar_num=91234567" --data-urlencode "tar_msg=Error!!!Source:<\$LOGFILE>" http://192.168.1.8/cmd/system/api/sendsms.cgi

tar_num : target (handphone) number

tar_msg : message to send via modem

http://<sendQuickAlertplus IP>/cmd/system/api/sendsms.cgi

Automatic co	mmand X					
Command	C:\curl-7.22.0-devel-mingw32\bin\curl.exe" curldata-url Browse					
Execute	Under agent account (\$AGENT_USER)					
	O As user:					
	Specify password:*					
Node	<\$M5G_NODE_NAME>					
_Message rela	ationship					
Append	output of command as annotation to the message					
C Acknow	ledge the message when command is successful					
Send message immediately						
O Wait until local command completes and then:						
Send the message						
C Send the message only if the local command fails						
C Send the message only if the local command is successful						
	OK Cancel Help					

Figure 11: Automatic Command

Once completed, follow the same steps as per Fig 9 and 10.

(c) Deploy rule on monitored system

2.9 Select created rule and click on "Deploy on" to install the rule (Alert Email/SMS) on the monitored system/server as shown in Figure 12.



Figure 12: Deploy rule

2.10 Select the monitored system/server and then click on "OK". In this example, we have used windows server 2008 R2 (fig 13).

🙀 Deploy policies on 🗙
Deployment Nodes
Select all nodes on which the current version of the policy is deployed
Select all nodes on which any version of the policy is deployed
Select nodes from the tree
Managed nodes:
■
Deployment Options
Deploy policy only if version is newer (physical nodes only)
Ignore policy owner
Policy status after deployment
Enable
O Disable
C Keep existing
OK Cancel Help

Figure 13: Deploy policy on the managed system

3. CONFIGURATION OF SENDQUICK

(a) Create Mail Message Filter (only if Command Line option is used)

3.1 Log on to sendQuick admin module. Select the Mail Message Filter (in the Navigation Menu) and the Message Filter Summary will be shown (Fig 14).

Click on "Create" button.

	Email Filter Summary							
Filter No.	То	From	Rules Subject	Message EromikiD	Priority	Date Created	Match Edi	t Alert Delete
					Sele	ct all: 🔲	Create	Delete
			Email Address	Message Time Buffer ((1))				

Figure 14. Email Filter Summary

- 3.2 Input the following fields (Fig 15):
- "From" : Email address that will send the event alert email messages from HPOM to sendQuick server. This is the same email address configured in HPOM (refer to para 2.7 and Fig 8)
- "Subject" : EventCreate
- "Message" : Desired text message

The filter works by checking on the three attributes of an email message - Sender email address (FROM field), Subject field and Message body content. Check the box if the desired field name is required for filtering. More than one checkbox can be selected, and determine the "All" or "Any" criteria relationship.

Click "Save"



Figure 15: Create a New Filter Rule

3.3 Go to Mail Filter Rules Alert list (Fig 16). Select "Create".



Figure 16: Mail Filter Alertee View

3.4 Input the mobile numbers (and email addresses if required) that will receive the event alert SMS (Fig 17).



IF the text box of Alert Message is blank, the original content is sent directly.

4. INTEGRATION TESTING OUTCOME

4.1 For the purposes of the testing, an Error in the ApplicationLog is generated on the test monitored server, using the below Windows command line.

eventcreate /T ERROR /ID 1 /L APPLICATION /D "TestError"



Figure 18: Generate an Error

4.2 The error is captured in HPOM. The status is reflected on the HPOM "Critical" log (Figure 19)

Image: File Action Wew Favorites Window Help Image: File Action Wew Favorites Wew Favorites Image: File Action Policies Image: File File Action Policies Image: File File Action Policies Image: File Policy File Actin Action File Actin Action File Action File Action File Actin Act	File Action View Pavorites Window Help Performations Manager: IPFOM Severity Duplicates S U I A O Message Properties S Workes Ontrial F Critical F	💼 HP Operations Manager - [Operations Manager : HPOM\Nodes\HPOM (Management Server)]						
Image: Instructions Image:	Corrections Manager : HPOM Corrections Torus Corrections Torus<	谙 File Action View Favorites Window Help						
Severity Duplicates S U I A O Message Properties X Image: Severity Duplicates S U I A O Message Properties X Image: Severity Duplicates S U I A O Message Properties X Image: Severity Duplicates S U I A O Message Properties X Image: Severity Duplicates S U I A O Message Properties X Image: Severity Duplicates S Critical - - F - State Commands Custom Message Attributes Image: State Command: S	Image: Control Manager: HPCM Image: Control Manager: Control Manager: HPCM Image: Control Manager: Control Ma	🗢 🔿 🖄 💼 🗎 💼 📓 💀 🛛	原 12 藤 参 7 日 や 降 5 号 1 日 日 1 日 7 元 1 日					
OK Cancel Apply Help		Operations Manager : HPOM Operations Manager : HPOM Operations Manager : HPOM Operations Manager : HPOM Operations Management Server) Operations Policy management Operations Policy groups Operations Policy groups Operations Operations	Severity Duplicates S U I A O Message Properties					



4.3 The testing was done on both integration methods of using a command line to connect to sendQuick server as well as using Curl.

Using Command Line

SMS messages were received on the mobile phone and email (Fig 20 & 21)



Fig 20: Received SMS

From: server@smsgateway.company.com To: thet@talariax.com Subject: System Alert from: hpom@company.com Date: Thu, 10 Nov 2011 16:57:53 +0800 Alert from: hpom@company.com Message: Alert Message From HP Operations Manager

Fig 21: Received Email

The status of successful SMS sent is also reflected in the SMS Outbox records in sendQuick server (Fig 22)

		, i			SMS (Re	Dutbox fresh						
Search From 2011/11/10 To 2011/11/10 Go												
Format: [year/month/day] Example: [2003/01/31]												
No	Date & Time	Delivery Date & Time	Priority	Sender	Mobile Number	SMSC (Modem IMEI)	Message	Delete				
No 1	Date & Time 10/11/2011 16:58:02	Delivery Date & Time	Priority 5	Sender	Mobile Number 91096771	SMSC (Modem IMEI) +6596845999 (359126030118822)	Message Alert Message From HP Operations Manager	Delete				
No 1	Date & Time 10/11/2011 16:58:02	Delivery Date & Time	Priority 5	Sender hpom@company.com	Mobile Number 91096771	SMSC (Modem IMEI) +6596845999 (359126030118822)	Message Alert Message From HP Operations Manager [Empty Outbox] Select all:	Delete Delete				
No 1	Date & Time	Delivery Date & Time	Priority 5	Sender	Mobile Number 91096771	SMSC (Modem IMEI) +6596845999 (359126030118822)	Message Alert Message From HP Operations Manager [Empty Outbox] Select all:	Delete Delete				
No 1	Date & Time	Delivery Date & Time	Priority 5	Sender	Mobile Number 91096771	SMSC (Modem IMEI) +6596845999 (359126030118822)	Message Alert Message From HP Operations Manager [Empty Outbox] Select all:	Delete Delete				
No 1	Date & Time 10/11/2011 16:58:02	Delivery Date & Time	Priority 5	Sender hpom@company.com	Mobile Number 91096771 ((SMSC (Modem IMEI) +6596845999 (359126030118822) 1)) ave	Message Alert Message From HP Operations Manager [Empty Outbox] Select all:	Delete Delete				

Figure 22: SMS Outbox (1)

Using HTTP Post (Curl)

The status of successful SMS sent is reflected in the SMS Outbox records in sendQuick server (Fig 23)

	SMS Outbox Refresh												
	Search From 2011/11/10 To 2011/11/10 Go												
	Format: [year/month/day] Example: [2003/01/31]												
No	Date & Time	Delivery Date & Time	Priority	Sender	Mobile Number	SMSC (Modern IMEL)		Message		Delete			
						(modern imer)				Delete			
1	10/11/2011 17:21:30		9	192.168.1.243	91072730	+6596845999 (359126030118822)	Source:EventCreate						
1	10/11/2011 17:21:30		9	192.168.1.243	91072730	+6596845999 (359126030118822)	Source:EventCreate	[Empty Outbox]	Select all: 🗖	Delete			
1	10/11/2011 17:21:30		9	192.168.1.243	91072730	((1))	Source:EventCreate	[Empty Outbox]	Select all: 🗖	Delete			
1	10/11/2011 17:21:30		9	192.168.1.243	91072730	+6596845999 (359126030118822)	Source:EventCreate	[Empty Outbox]	Select all: 🗖	Delet			

Figure 23: SMS Outbox (2)