



## How to use PostMail feature to send an alarm email (with MTA « ssmtp »)

date : 18-12-2018

### 1/ Introduction

In this guide we will study how to use the email sending feature on ProviewR v5.5 .

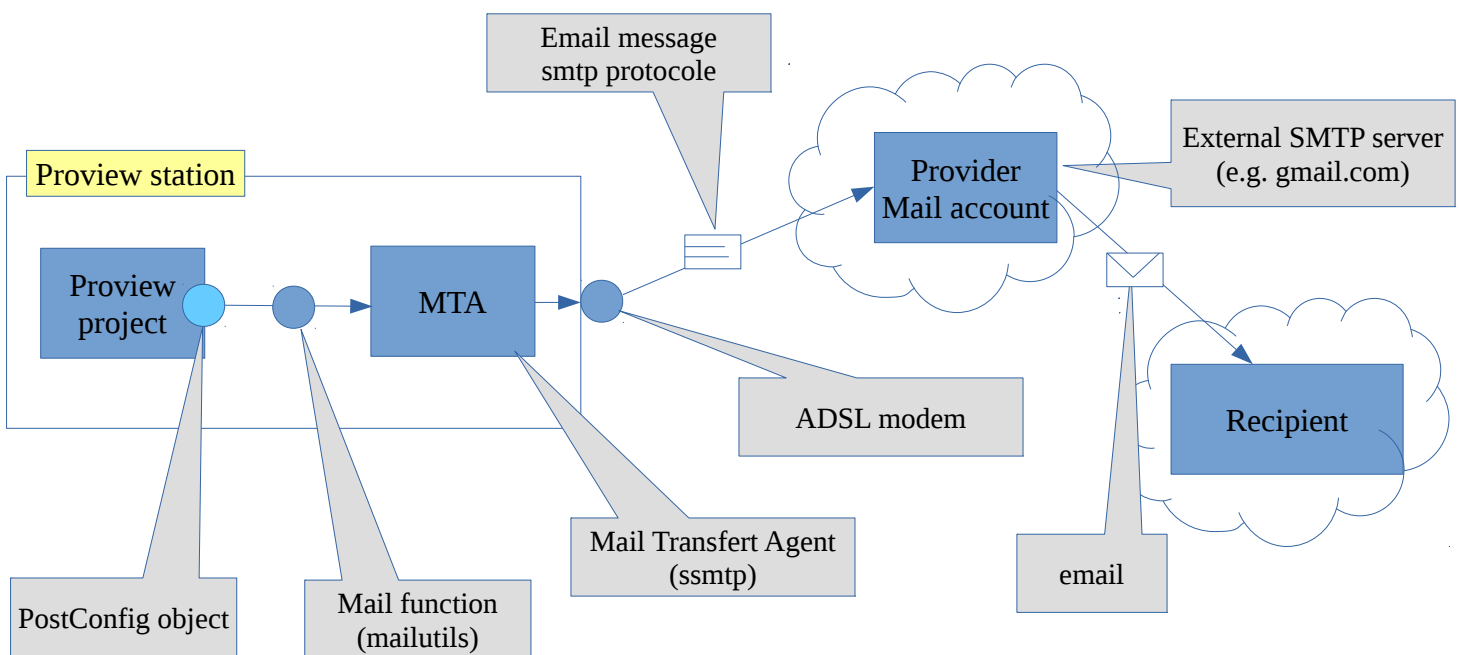
This feature is very usefull to send a email triggered for example by alarm event.

To do this we need to configure :

- > on host computer, the MTA (mail transfer agent),
- > on Proview, PostConfig, Asup or DSup objects.

In this guide, I use Linux Mint 18 64bit + ProviewR v5.5 (dev environment)

### 2/ Principe diagram



When an alarm event apper, the PostConfig object transmit a mail command (as can be use in terminal) to the MTA (thru a mail function for example provided by mailutils package). This mail command include the message core (alarm text).

Then the MTA transfert the email message to the external smtp server.

Finaly the email will be send to recipient by email server.

### 3/ Host computer configuration

**First** we need to install a MTA utility.

You can find a lot of MTA softwares (Postfix, Exim,...), but for this guide I choose to use a very simple one called « **ssmtp** ».

This MTA is very simple to configure and to use, and it's sufficient for basic use.

For Debian based OS (ubuntu, mint), you can install it thru the official repositories.

**Second**, to use a mail command (like mail, sendmail) we need to install « mailutils » package. You find it in the official repositories.

**Thirdy**, you need to create an email account.

In my case I use a free french email account provide by [www.laposte.net](http://www.laposte.net) (french mail service). Of course you can use an other one like gmail.com.

#### 3-1/ SSMTP configuration

To configure SSMTP we use 2 configuration files (with sudo rights):

```
> /etc/ssmtp/ssmtp.conf
```

```
> /etc/ssmtp/revaliases
```

##### 3-1-1/ [/etc/ssmtp/ssmtp.conf]

open a terminal and enter...

```
$ sudo nano /etc/ssmtp/ssmtp.conf
```

```
$ password for pwrp : *****
```

nano open the file...

```
#  
# Config file for sSMTP sendmail  
#  
# The person who gets all mail for userids < 1000  
# Make this empty to disable rewriting.  
root=ben@laposte.net  
  
# Username/Password  
AuthUser=ben@laposte.net  
AuthPass=*****  
#AuthMethod=LOGIN
```

Email address for the external smtp server  
... your email account

Note : it's not the recipient !

Password used to connect  
your email account

```
# The place where the mail goes. The actual machine name is required no
```

# MX records are consulted. Commonly mailhosts are named mail.domain.com

mailhub=**smtp.laposte.net:465**

External smtp server address,  
with dedicated IP port

Note : for IP port, see your server specifications

# Use SSL/TLS before starting negotiation

UseTLS=Yes

#UseSTARTTLS=Yes

TLS\_CA\_File=/etc/ssl/certs/ca-certificates.crt

# Where will the mail seem to come from?

rewriteDomain=**laposte.net**

# The full hostname

hostname=**pc-bur1**

Proview station name (node name)

# Are users allowed to set their own From: address?

# YES - Allow the user to specify their own From: address

# NO - Use the system generated From: address

FromLineOverride=Yes

This is my own basic configuration, maybe you have to not-comment certain options depending to your smtp server.

Don't forget to correctly configure your firewall (and your adsl modem) to permit IP ports in/out connections.

### **3-1-2/ [/etc/ssmtp/revaliases]**

open a terminal and enter...

\$ sudo nano /etc/ssmtp/revaliases

\$ password for pwrp : \*\*\*\*\*

nano open the file....

# sSMTP aliases

#

# Format: local\_account:outgoing\_address:mailhub

#

# Example: root:your\_login@your.domain:mailhub.your.domain[:port]

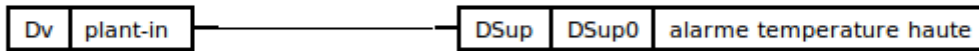
# where [:port] is an optional port number that defaults to 25.

root:**ben@laposte.net:smtp.laposte.net:465**

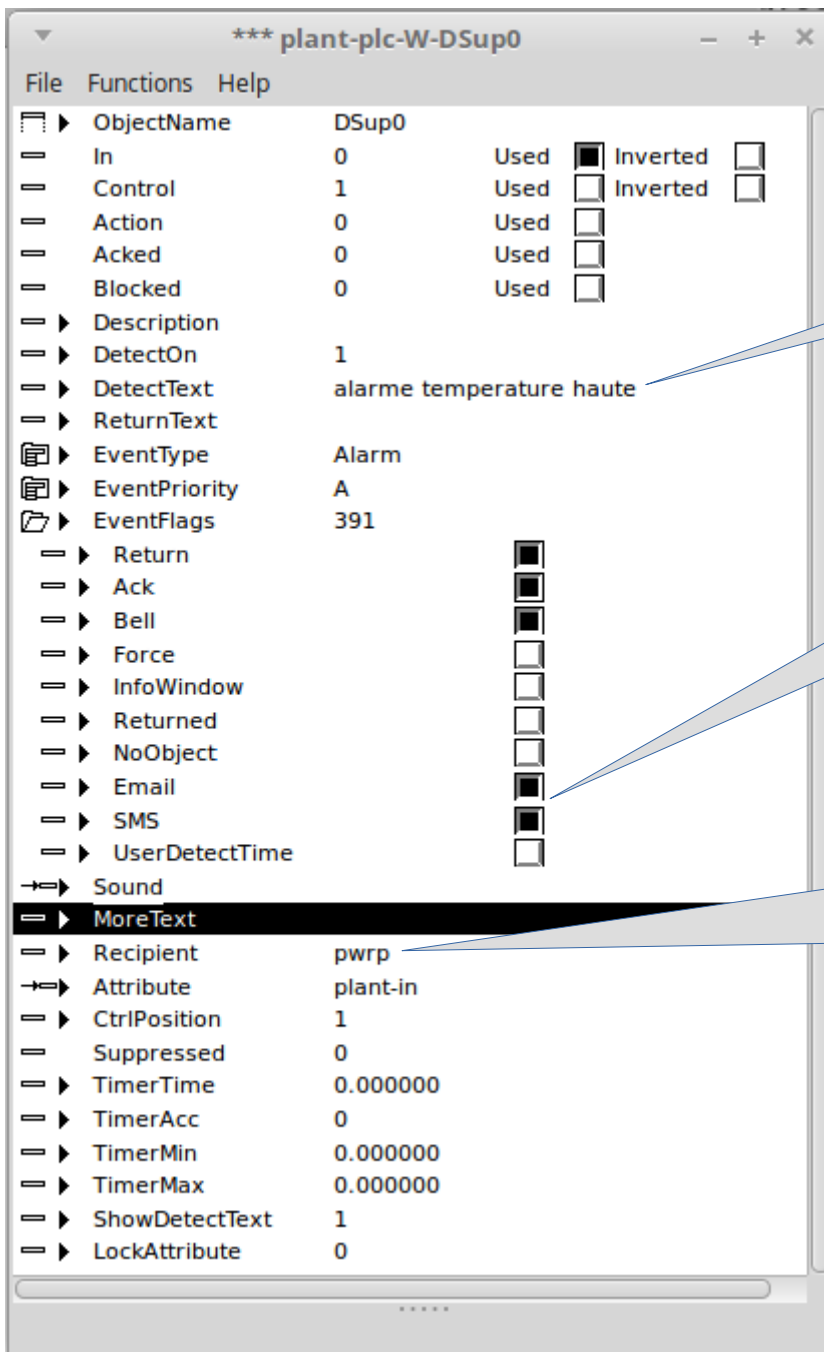
pwrp:**ben@laposte.net:smtp.laposte.net:465**

#### 4/ Proview project configuration

To test the mail sending feature, we will create a simple project with a plcpgm with the following program :



Dsup attributes....



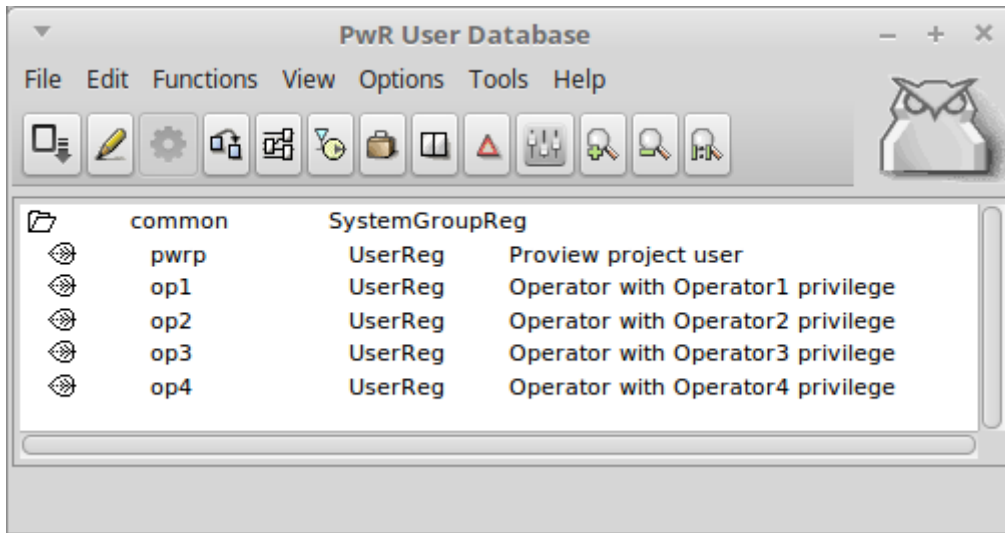
Text apper in the email boby

For Proview 5.5...  
Maybe a bug (?), but you have to select both options (Email and SMS)

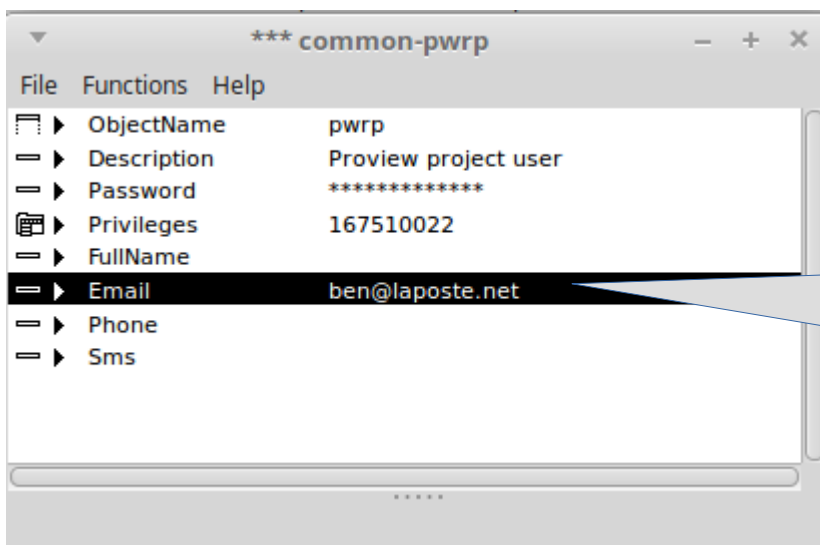
The recipient :  
pwrp user  
Profile define in the UserDataBase  
As :  
> email address

#### 4-1/ define email address for pwrp user

From ProjectList windows (first windows when you open dev environment), open the menu : file/open/userdatabase



turn on the edit mode and configure the pwrp user profile (right click in pwrp)...

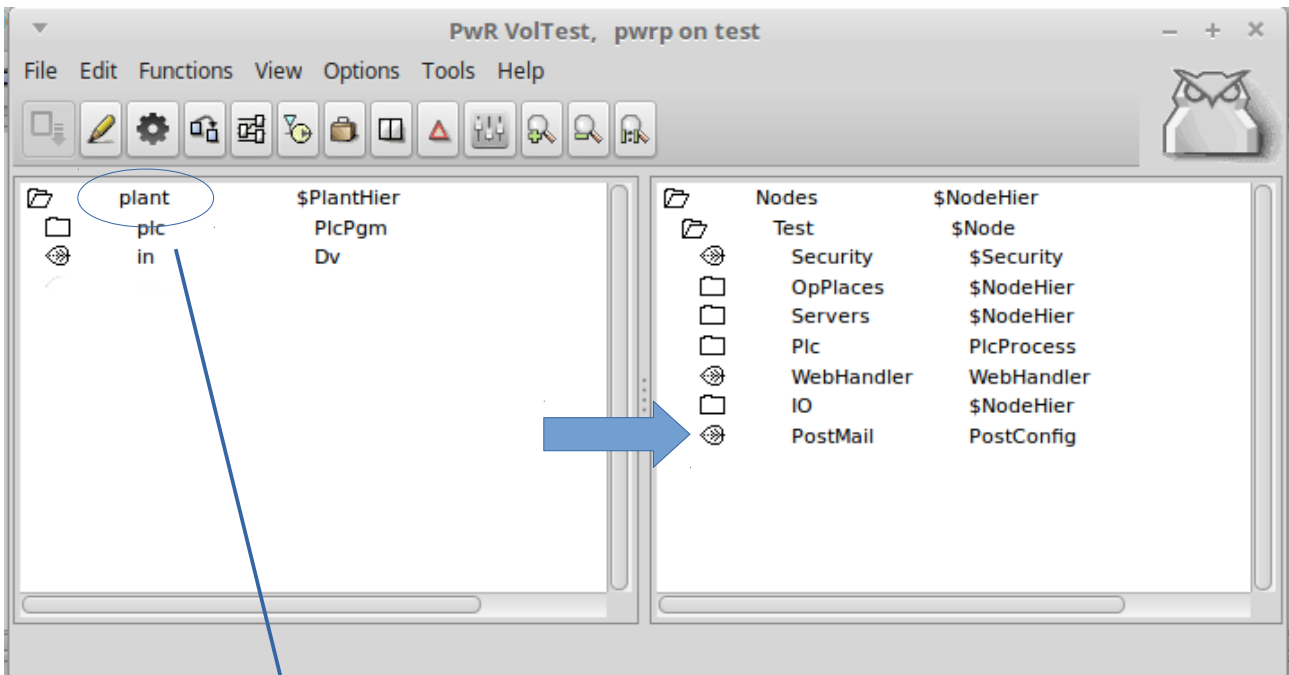


Email address for the recipient

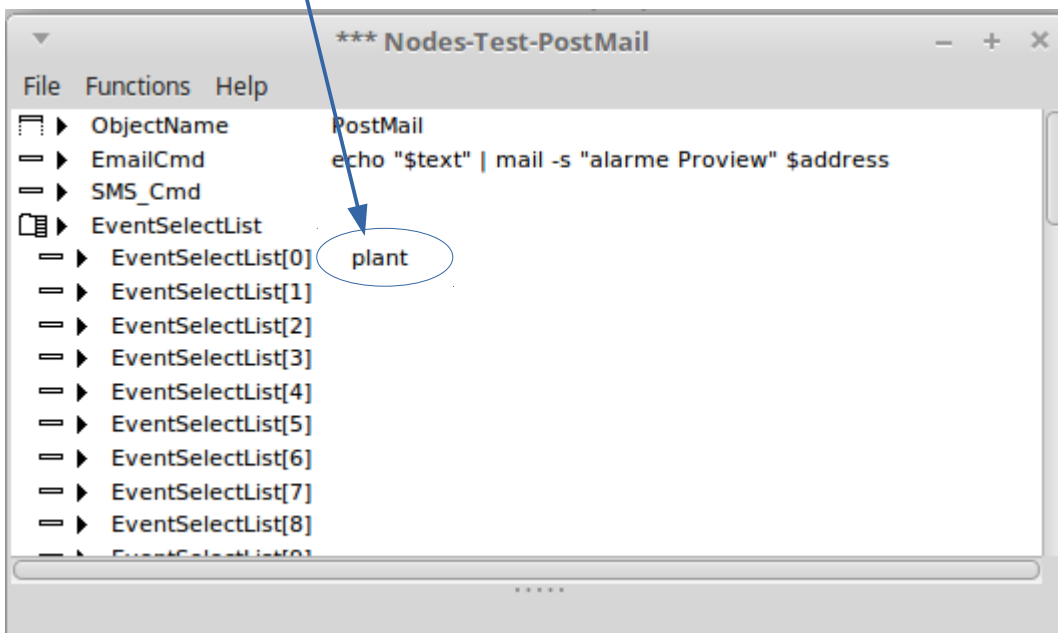
Note : you can use any addresses including the one used for external smtp server

## 4-2/ PostConfig object configuration

Put a PostConfig object under the \$node as following...



PostMail object attributes...



Email command:

**echo « \$text » | mail -s «text for subject» \$address**

Note : this email command can be different depending the mail functions utility you used.

## 4-3/ OpPlaces-Op configuration

Don't forget to add the \$planhier name in the EventSelectList attribute....

The screenshot displays the PwR software interface with the following components:

- Main Window:** Title bar: \*\*\* PwR VolTest, pwrp on test. Menu: File, Edit, Functions, View, Options, Tools, Help. Toolbar: [Icons for file operations, settings, and search].
- Left Panel:** Tree view showing Plant, Node, and AllClasses.
- Center Panel:** Configuration table for the selected object.
- Right Panel:** Nodes tree view showing Test, Security, OpPlaces, Maintenance, OpDefault, WebBrowser, Servers, Pic, WebHandler, IO, and PostMail.
- Pop-up Window:** \*\*\* Nodes-Test-OpPlaces-Op. It shows a list of configuration parameters and their values.

The configuration table in the center panel is as follows:

		\$PlantHier
plant		
plc		PlcPgm
in		Dv
Reg1		li

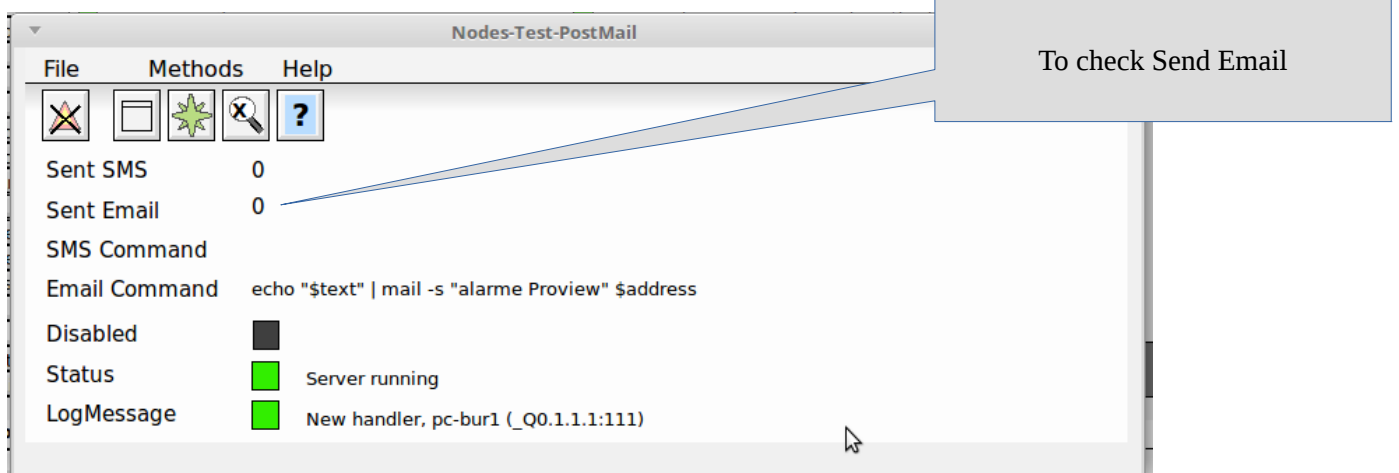
The pop-up window configuration is as follows:

Property	Value
ObjectName	Op
Description	
UserName	
DedicatedOpsysUser	
Display	
Language	0
StartJavaProcess	0
AutoStart	
FastAvail	
OpWindPop	3
OpWindLayout	0
OpWindEventNameSegments	2
AlarmBell	1
BellDelay	2.000000
AttachAudio	0
Options	0
ColorTheme	Standard
MaxNoOfAlarms	200
MaxNoOfEvents	500
EventSelectList	
EventSelectList[0]	plant
EventSelectList[1]	
EventSelectList[2]	
EventSelectList[3]	

Blue arrows indicate the relationship between the 'plant' entry in the center table and the 'plant' value in the 'EventSelectList[0]' field of the pop-up window.

## 5/ check email sending during the test program

During the test, open the services monitor and click to « rt\_post » bouton...



## 6/ Conclusion

Note SSMTP is not the best secure MTA so use it in your responsibility.

Due of this, I advice to not use your personnal email address account as external smtp server to avoid for example spam attacks.

Use preferently a free email account like gmail.

I hope this guide will be useful for yours projects.

Thanks.

/Ben