

GUIDE FOR SENDING EMAILS WITH SENECA RTUs

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Guide FOR SENDING EMAILS WITH SENECA RTUs

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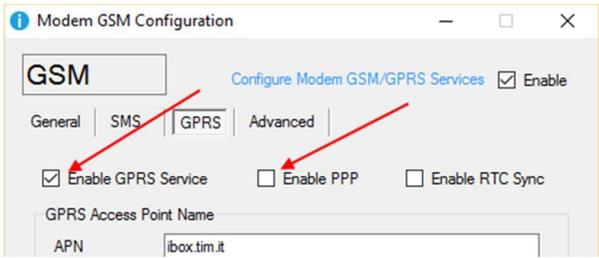
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1. SENDING EMAILS WITH SENECA RTUs

The guide is intended to guide the user in the correct use of Seneca RTUs and mail servers.

With regard to Seneca RTUs, the following table can be drawn up:

PRODUCT	SENDING EMAILS WITHOUT A SECURE CONNECTION	SENDING EMAILS WITH A SECURE CONNECTION	NOTES
Z-TWS4	YES	YES (SSL/TLS1.2)	It is possible to send emails from SMTP servers that support SSL/TLS (e.g. gmail)
Z-PASS2-S	YES	YES (SSL/TLS1.2)	It is possible to send emails from SMTP servers that support SSL/TLS (e.g. gmail)
S6001-RTU	YES	YES (SSL/TLS1.2)	It is possible to send emails from SMTP servers that support SSL/TLS (e.g. gmail)
Z-GPRS3 (Ethernet)/Z-LOGGER3	YES	NO	It is possible to send emails only from SMTP servers without SSL/ TLS
Z-GPRS3 (modem GPRS)/Z-UMTS (modem 3G)/Z-LTE (modem 4G)	YES	YES (SSL/TLS1.2)*	<p>(*)</p> <p>To send encrypted emails it is necessary to disable the PPP connection as shown in the figure:</p>  <p>It will therefore not be possible to access the TCP-IP Modbus and Webserver via the GPRS modem.</p>
MyALARM2	YES	YES (SSL/TLS1.2)	It is possible to send emails from SMTP servers that support SSL/TLS (e.g. gmail)
Z-TWS11	YES	NO	It is possible to send emails only from SMTP servers without SSL/ TLS

2. SENDING EMAILS WITH RTUs WITHOUT SECURE CONNECTION SUPPORT

The following solutions are available to send emails with RTUs that do not support secure connections:

- 1) Use public SMTP servers where the use of SSL/TLS connections is not required
- 2) Use a corporate SMTP server
- 3) Use a server with Stunnel

2.1. Use public SMTP servers where the use of SSL/TLS connections is not required

These servers do not require an SSL/TLS connection and typically use port 25.

For more information it is strongly recommended to connect to the respective websites:

SMTP SERVER	GATEWAY
out.alice.it	25
smtp.email.it	25
smtp.live.com	25
mail.iol.it	25
smtp.libero.it	25
smtp.lycos.it	25
smtp.live.com	25
smtp.tele2.it	25

2.2. Use a corporate SMTP server

The most reliable solution is to use your company SMTP server and request access to your IT manager without a secure connection.

If you do not have a corporate SMTP server, you can use the "installation of an SMTP server" guide on Windows available on the RTU page of the Seneca website.

These solutions are suggested to get around the blocks imposed by public SMTP servers (maximum number of daily emails, spam etc ...).

2.3. Use Stunnel

It is possible to use an SMTP server that requires a secure connection even if the RTUs do not support it thanks to the Stunnel software.

Stunnel can be used in many operating systems, as far as Windows is concerned, the following is required:

Microsoft (32-bit and 64-bit editions)

- Windows Server 2012 / 2008 / 2003 / 2000
- Windows 10 / 8.1 / 8 / 7 / Vista / XP

The .exe file with the Stunnel installer can be downloaded from:

<https://www.stunnel.org/downloads.html>

The screenshot shows the Stunnel website's Downloads page. The browser address bar displays <https://www.stunnel.org/downloads.html>. The page title is "stunnel: Downloads".

On the left sidebar, there are navigation links: About, Features, Screenshot, Documentation, Examples, Vulnerabilities, Downloads (highlighted), Ports, Maintainers, Versions, ChangeLog, License, Support, and Contact. Below these links are a "Donate with PayPal" button, a "View my profile on LinkedIn" button, a "W3C HTML 4.01" logo, and logos for "Our Supporters": ChameleonJohn, PSW, CERT, and NAMES MEANING.

The main content area is titled "Latest Version" and contains a table with the following data:

File Name	Size	Date
stunnel-5.34-android.zip	1128245	5th July 2016
stunnel-5.34-android.zip.asc	811	5th July 2016
stunnel-5.34-android.zip.sha256	91	5th July 2016
stunnel-5.34-installer.exe	3221265	5th July 2016
stunnel-5.34-installer.exe.asc	811	5th July 2016
stunnel-5.34-installer.exe.sha256	93	5th July 2016
stunnel-5.34.tar.gz	644677	5th July 2016
stunnel-5.34.tar.gz.asc	811	5th July 2016
stunnel-5.34.tar.gz.sha256	86	5th July 2016

Below this table is a section titled "Beta Versions" with another table:

File Name	Size	Date
stunnel-5.35b2.tar.gz	644803	6th July 2016
stunnel-5.35b2-installer.exe	3220940	6th July 2016
stunnel-5.35b1.tar.gz	644648	6th July 2016
stunnel-5.35b1-installer.exe	3221110	6th July 2016

Once installed, we need to make some small changes to the "stunnel.conf" configuration file that we find in the installation directory:

C:\Programmi\stunnel

The GMAIL SMTP configuration file is the following:

```
stunnel.conf - Blocco note
File Modifica Formato Visualizza ?

; Disable support for insecure SSLv2 protocol
options = NO_SSLV2
; Workaround for Eudora bug
;options = DONT_INSERT_EMPTY_FRAGMENTS

; These options provide additional security at some performance degradation
;options = SINGLE_ECDH_USE
;options = SINGLE_DH_USE

; *****
; * service definitions (at least one service has to be defined) *
; *****

; Example SSL server mode services

[pop3s]
accept = 995
connect = 110

[imaps]
accept = 993
connect = 143

[ssmtp]
accept = 465
connect = 25

; Example SSL client mode services

;[gmail-pop3]
;client = yes
;accept = 127.0.0.1:110
;connect = pop.gmail.com:995

;[gmail-imap]
;client = yes
;accept = 127.0.0.1:143
;connect = imap.gmail.com:993

[gmail-smtp]
client = yes
accept = 127.0.0.1:25
connect = smtp.gmail.com:465

; Example SSL front-end to a web server

;[https]
;accept = 443
;connect = 80
```

Now just configure the RTUs in the following way:

Email address: esempio@gmail.com

SMTP server: IP address of the PC where Stunnel is installed

Port: 25

Account: esempio@gmail.com

Password: *****

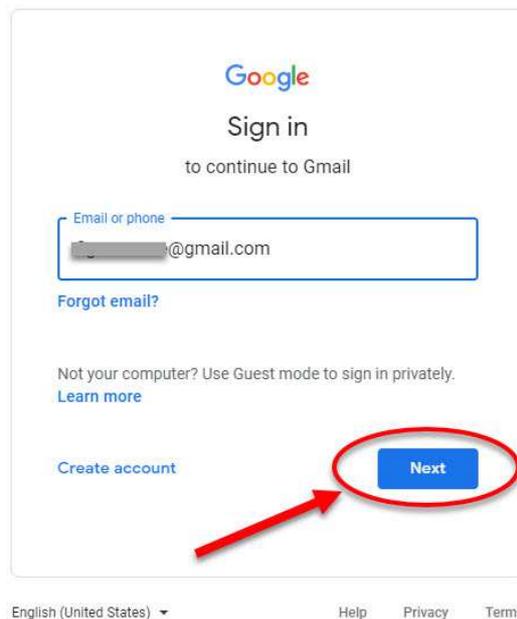
The emails will be sent to Stunnel which will send them to the GMAIL mail server using the secure SSL connection.

3. SENDING EMAILS USING GMAIL SERVER

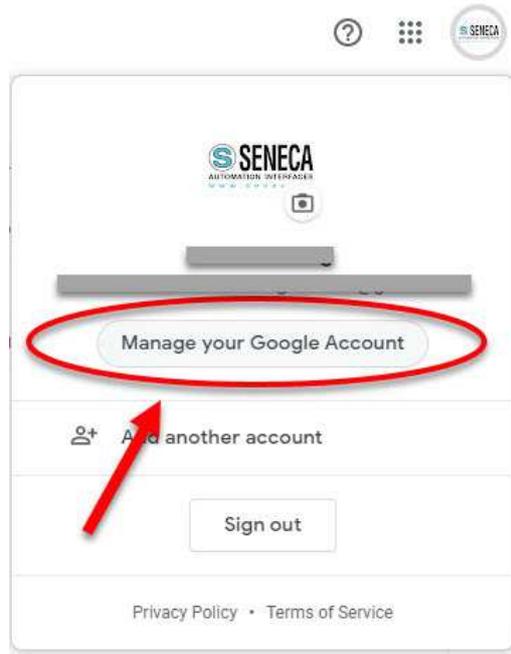
Sending emails using the Gmail SMTP server is only possible using a secure connection (SSL/TLS1.2 on port 465) or using Stunnel (refer to the chapter 2.3 for more information).

First of all, it is necessary to allow access from applications not using the OAuth 2 protocol otherwise the gmail server will not accept any emails sent by the RTUs.

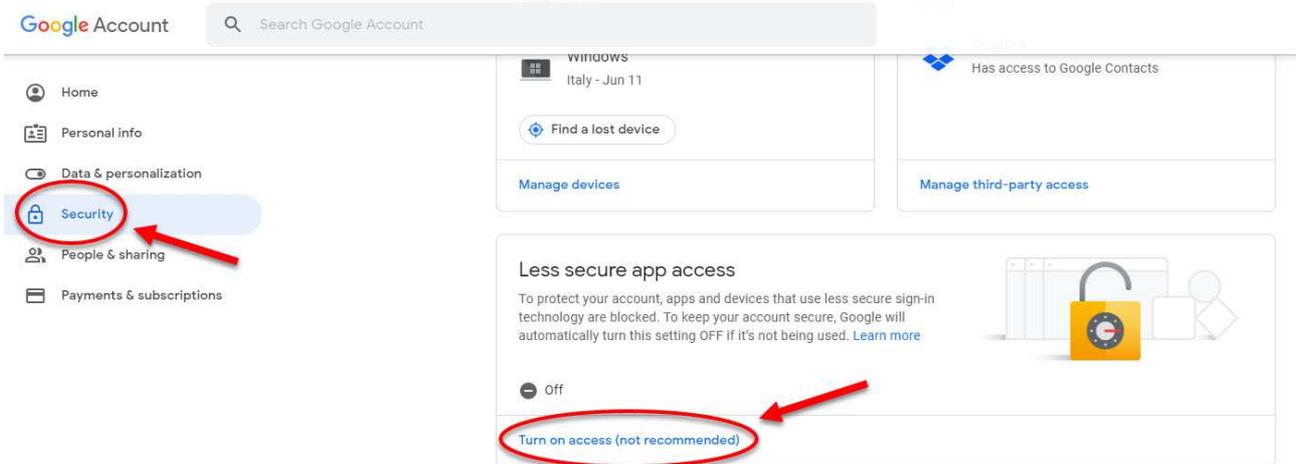
To do this, log into gmail:



Click on "Personal Account":



Click on App and connected sites:



And allow access to less secure apps:

← Less secure app access

Some apps and devices use less secure sign-in technology, which makes your account vulnerable. You can turn off access for these apps, which we recommend, or turn it on if you want to use them despite the risks. Google will automatically turn this setting OFF if it's not being used. [Learn more](#)

Allow less secure apps: ON

