



# GUIDE TO INSTALLING AN SMTP MAIL SERVER

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MI00448-1.0.2.0-EN



Date	Version	Changes
05/07/2016	1.0.0.0	First revision
25/07/2016	1.0.1.0	Added Windows Firewall configuration.
		Changed debug chapter.
22/06/2020	1.0.2.0	Fix Title Name

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## **1. WHY USE AN INTERNAL MAILSERVER**

This guide is intended to guide the user in the installation of an SMTP server to send emails with Seneca Dataloggers that do not support an SSL/TLS connection.

In fact, public SMTP servers allowing a connection without SSL/TLS are increasingly rare.

Another good reason to install an internal mail server is that public SMTPs have blocking policies when sending emails that are too numerous or that contain incomprehensible data.

The use of an internal mailserver therefore provides control and debugging that is impossible to obtain in any other way.

## 2. hMailServer

Seneca recommends using hMailServer as an internal mail server as it has been tested with all Seneca Dataloggers.

It is a simple, fast, open source software that runs on Windows systems.

The supported operating systems are:

- Microsoft Windows 10
- Microsoft Windows 8.1
- Microsoft Windows 2012 (all editions)
- Microsoft Windows 2008 (all editions)
- Microsoft Windows 2003 (all editions)
- Microsoft Windows 7 (all editions)
- Microsoft Windows Vista
- Microsoft Windows XP Professional Service Pack 3

#### 3. INSTALLING hMailServer

Download the software from:

https://www.hmailserver.com/download

Launch the complete installation:

Which components should be install	ed?
Select the components you want to install. Click Next when you are rea	install; dear the components you do not want to dy to continue.
Full installation	-,
Server	10,7 N
Administrative tools	8,91
	() ( ) () - ( ) -
Current selection requires at least 1	12,6 MB of disk space.
erver	

Use the internal database:

🛃 Setup -	hMailServer	
Select Data	<b>database server type</b> base type	
	Use built-in database engine (Microsoft SQL Compact)     Use external database engine (MSSQL, MySQL or Postgres <u>More information</u>	5QL)
hMailServer	< <u>B</u> ack Next	t > Cancel

Set a password to access the administration tools:

hMailServer Security	Î
Specify main password	
The installation program will now cre Please enter a password below. You	eate a hMailServer user with administration rights.
hMailServer installation, so please re	emember it.
Password:	
•••••	
Confirm password:	
•••••	
ilServer	
ilServer —	< Back Next > Canc

#### ATTENTION!

MAKE A NOTE OF THE PASSWORD SO THAT YOU CAN ACCESS THE HMAILSERVER CONFIGURATION LATER ON.

# **4. PC CONFIGURATION**

It is necessary to set a static IP on the PC where hMailServer is installed.

Go to:

Control panel -> Network connection centre

Select the ethernet port:

🏺 Stato di Etherne	et		×
Generale			
Connessione Connettività IP Connettività IP Stato supporto Durata: Velocità: Dettagli	v4: v6: :	Internet Nessun accesso alla rete Abilitato 07:27:46 1.0 Gbps	-
Attività			-
	Inviati —	Ricevuti	
Byte:	685.442.802	750.696.937	
Proprietà	Pisabilita 🖓	<u>E</u> segui diagnosi	
		C <u>h</u> iudi	

Click on "Properties" and select "Version 4 IPv4 Internet Protocol":

🖗 Proprietà - Ethernet 🛛 🗙
Rete Condivisione
Connetti tramite:
🕎 Realtek PCIe GBE Family Controller
<u>C</u> onfigura
La connessione utilizza gli elementi seguenti:
CONVERTIGATION     CONVERTI
Installa Disinstalla Proprietà
Descrizione TCP/IP. Protocollo predefinito per le WAN che permette la comunicazione tra diverse reti interconnesse.
OK Annulla

Click "Properties" and set a static IP address like:

Proprietà - Protocollo Internet version	e 4 (TCP/IPv4)	$\times$
Generale		
È possibile ottenere l'assegnazione aut rete supporta tale caratteristica. In ca richiedere all'amministratore di rete le ir	omatica delle impostazioni IP se la so contrario, sarà necessario mpostazioni IP corrette.	
O <u>O</u> ttieni automaticamente un indiriz	zzo IP	
• Utilizza il seguente indirizzo I <u>P</u> :		
Indirizzo IP:	192.168.1.50	
Subnet mask:	255.255.0.0	
Gateway predefinito:	192.168.1.1	
Ottieni indirizzo server DNS autom	naticamente	
🔘 Utilizza i seguenti indirizzi server [	NS:	
Server DNS preferito:	8.8.8.8	
Server DNS alternativo:		
Con <u>v</u> alida impostazioni all'uscita	Avan <u>z</u> ate	
	OK Annull	a

Confirm with "OK".

# 5. CONFIGURATION OF the hMailServer SMTP SERVER

Launch the hMailServer Administrator administration tool:

	^	
	E	
hMailServer		
hMailServer Administrator		
Cerca programmi e file	Q	

lost name	hMailServer Usemame	Add
ocalhost	Administrator	Edit
		Remove

Press the Connect button and enter the password entered during the installation phase:

Host name	hMailServer Usemame	Add
ocalhost	Administrator	Edit
		Remove
MailServer passwo	rd	
Please enter the hM	ailServer password. What is this?	

Now you have access to all the hMailServer parameters:

<u>F</u> ile Help	
Welcome ① Status	Welcome
Domains     Bules	Getting started
	Add domain

On the left there is a tree with all the sections to be configured, here reference to a minimum configuration will be made.

Click on "Add domain ..."

hMailServer Administrator - [loca	lhost]
<u>F</u> ile Help	
Welcome Status Status Rules ⊕ 𝔅 Settings ⊕ 𝔅 Utites	General Names Signature Limits DKIM Signing Advanced Domain Test.com The field Enabled
	Ext

Enter the domain name of your organization for the email accounts that you are going to create, in the example "test.com" means that the emails created will be of the <u>utente@test.com</u> type.

Now create the mail accounts:

ile Help			
🔆 Welcome	Accounts		
Constants Com	Name	Enabled	Add Edk Remove

Click on "Add ...".

At this point, enter the name of the first mail account (in the example <u>test001@test.com</u>), reserve 10MB of data for the account and set a password (*VERY important to set a complex password of at least 8 alphanumeric characters!*).

🚯 hMailServer Administrator - [localhost]	
<u>F</u> ile Help	
Velcome Status Domains Accounts Alases Rules Settings Utilities	General       Auto-reply       Forwarding       Signature       External accounts       Rules       Active Directory       Advs 4         Address       est001       @ test.com       Password         Password
	Exit

The first account is ready, confirm with "Save".

<u>F</u> ile Help			
Welcome	Accounts		
Domains test.com Accounts Account	Name test001@test.com	Enabled Yes	Add Edt Remove
	Help		<u>S</u> ave
			Eu#

Now configure the SMTP protocol (the only one required, you can eliminate the POP3 and IMAP protocols):

ile Help	
ile     Help       Welcome     Status       Domains     International status       Image: International status     Asses       Image: International status     International status       Image: International status     Protocols       Image: International status </th <th>Protocols  If you change the settings below you must restart the server before your changes take affect.  If SMTP POP3 IMAP</th>	Protocols  If you change the settings below you must restart the server before your changes take affect.  If SMTP POP3 IMAP
Loging © Q Advanced ↓ ↓ Usities	

Set the welcome message:

Eile Help	
Lie     Help       Welcome     Status       Status     Domains       Liet com     Alsees       Distribution lists     Distribution lists       Rules     Status       Protocols     MAP       MAP     Market       Advanced     Warket	SMTP         General       Delivery of e-mail       Statistics       RFC compliance       Advanced         Connections       Maximum number of simultaneous connections (0 for unlimited)       Image: Connections       Image: Connections         Other       Welcome message       Image: Connections       Image: Connections       Image: Connections         Max message size (KB)       20480       Image: Connections       Image: Connections       Image: Connections
	Heb Save

And the local host name:

Welcome	SMTP	
<ul> <li>Jomains</li> <li>Itest.com</li> <li>Accounts</li> <li>Detribution lists</li> <li>Protocols</li> <li>Protocols</li> <li>Protocols</li> <li>PoP3</li> <li>Anti-spam</li> <li>Advanced</li> <li>Vitilities</li> </ul>	General       Delivery of e-mail       Statistics       RFC compliant         Delivery of e-mail       Number of retries       Minutes between         4       60         Local host name       60         Lest.com       SMTP Relayer         Remote host name       25         Server requires authentication       User name         Password       <         Connection security       None	nce Advanced

#### 6. MAKING THE SMTP SERVER VISIBLE FROM THE INTERNET

You need to make port 25 visible from the outside and "turn it" onto the IP of the PC where hMailServer is installed.

To do this you need:

- 1) A static public IP or DDNS service
- 2) A routing rule in the Adsl/xDsl modem

For point 1) if it is a Business connection, the static public IP is active (for confirmation, contact your internet provider).

To know your public static IP connect to the ADSL/xDSL modem and retrieve the IP address, for example on an Alice modem:

IMPOSTAZIONI BASE       Si consiglia di cambiare periodicamente la propria chiave di cifratura, e di impostare la modalità di cifratura WPA-PSK AES 250         Home       Stato Modem         Stato Modem       Connessione a Internet: ATTIVA Indirizzo IP Pubblico: 82         Stato Connessione       St28kbps Velocità max download: 8128kbps Velocità max upload: 448kbps Profilo tariffario: ADSL Biz         UN-Fi       DISPOSITIVI COLLEGATI	
Home Stato Modem Stato Connessione a Internet: ATTIVA Stato Connessione a Internet: ATTIVA Stato Connessione a Internet: ATTIVA Stato Connessione a Internet: ATTIVA Velocità max upload: 448kbps Profilo tariffario: ADSL Biz DISPOSITIVI COLLEGATI	256 bit
Stato Modem     Connessione a Internet: ATTIVA       Indirizzo IP Publico: 82       Stato Connessione       Stato Connessione       Stato Servizi       LAN       Wi-Fi       DISPOSITIVI COLLEGATI	
Stato Connessione Stato Servizi LAN Wi-Fi DISPOSITIVI COLLEGATI Dettagli Modem	
Stato Servizi LAN Wi-Fi Dispositivi Collegati	
LAN Wi-Fi DISPOSITIVI COLLEGATI	
Wi-Fi DISPOSITIVI COLLEGATI	
Dettagli Modem	
Dettagi woden	
Statistiche (6) ethernet Windows Android- Phone Phone	android- bd1a3403 009ab031

If the static IP is not available, it is necessary to subscribe to a Dynamic DNS service, the most famous is the following:

www.dyn.com

There are also free services like: <a href="http://www.noip.com/">http://www.noip.com/</a>

For point 2), the rule is:

INTERNET		LOCAL
Port 25	$\rightarrow$	Port 25 PC IP

In Alice modems this rule is configurable in the "Port Mapping" section:

	<b>M</b>					×	
GESTIONE MODEM							
IMPOSTAZIONI BASE	Port Mapping per appl Gestione Port Mapping	licazioni Gaming g				<u> </u>	IMPOSTAZIONI AVANZATE
Home	Applicazione	IP destinazion	e			Configura	Porta USB
Stato Modem	<selezionare dall'elenco=""> Range porte TCP abilitate</selezionare>	<b></b>		<ip d<="" td=""><td>isponibili&gt; 🔻</td><td>Attiva</td><td>Port Mapping</td></ip>	isponibili> 🔻	Attiva	Port Mapping
Stato Connessione	Range porte UDP abilitate						DNS Dinamico
Stato Servizi		Indietro	<				Rete ospiti Wi-Fi
LAN						_	Firewall
Wi-Fi	Virtual Server per pro	tocolli Internet					Strumenti
Dettagli Modem	Gestione Virtual Serve	er					Assistenza
Statistiche	Protocollo	IP destinazione		Porta Interna	Porta Esterna	Configura	Sicurezza
	<seleziona protocollo=""> V</seleziona>	· · · · · · · · · · · · · · · · · · ·				Attiva	
	Virtual server persona	lizzati					
	Nome	IP destinazione	Porta Interna	Porta Esterna	Tipo Porta	Configura	
		<ip disponibili=""></ip>			Scegli	• Attiva	
	Virtual Server configu	rati					

Then insert the customized Virtual server, in our example:

SMTPZGPRS3	192.168.1.50	ALL	25	25	Attivo Modifica

# 7. CONFIGURING YOUR ACCOUNT ON SEAL

Let's see how to configure SEAL for sending emails using the example account just configured:

Click on the CLOUD icon:

Enter the account address you just created:

CLOUD Clouding Services Configuration	
CLOUD	Configure Cloud Connections
General SMTP Client FTP Client H	TTP Client
RTU E-Mail Address zgprs3@t	est.com
Mobile (GSM-GPRS)	
Internet (PPP/ETH TCP-IP)	
Outgoing E-Mail Server Address	Port 25
Authentication Required	User Name zgprs3@test.com
Protect Connection (SSL)	Password
0	APPLY CANCEL

Which coincides with the User Name.

The email server address is given by the public IP of the ADSL/xDSL connection.

#### 8. DEBUGGING

hMailServer allows to analyse the incoming traffic and verify which RTU connections are in progress:

Select Status in the maintenance tool and press "Start" in the logging section:

erver Statu	IS Logging	Delivery qu	ieue		
Stop		Clear			
Туре	Session	Thread	Time	IP	Text
		4036	2016-07-05 16:00:11.249		TCP - 2, 192, connected to 192, 168, 1, 50:25.
		4036	2016-07-05 16:00:11.262		Creating session 43457
SMTPD	43457	4036	2016-07-05 16:00:11.274	2.192.122.184	SENT: 220
SMTPD	43457	4012	2016-07-05 16:00:12.468	2.192.122.184	RECEIVED: EHLO
SMTPD	43457	4012	2016-07-05 16:00: 12.474	2.192.122.184	SENT: 250-
SMTPD	43457	4036	2016-07-05 16:00:13.288	2.192.122.184	RECEIVED: AUTH LOGIN
SMTPD	43457	4036	2016-07-05 16:00:13.294	2.192.122.184	SENT: 334
SMTPD	43457	4000	2016-07-05 16:00:14.028	2.192.122.184	RECEIVED: 29t
SMTPD	43457	4000	2016-07-05 16:00: 14.044	2.192.122.184	SENT: 334
SMTPD	43457	4036	2016-07-05 16:00:14.888	2.192.122.184	RECEIVED: ***
SMTPD	43457	4036	2016-07-05 16:00: 14.933	2.192.122.184	SENT: 235 authenticated.
SMTPD	43457	4044	2016-07-05 16:00:15.428	2.192.122.184	RECEIVED: MAIL FROM:
SMTPD	43457	4044	2016-07-05 16:00: 15.443	2.192.122.184	SENT: 250 OK
SMTPD	43457	4020	2016-07-05 16:00: 15.967	2.192.122.184	RECEIVED: RCPT TO:
SMTPD	43457	4020	2016-07-05 16:00:15.973	2.192.122.184	SENT: 250 OK
SMTPD	43457	3996	2016-07-05 16:00: 16.488	2.192.122.184	RECEIVED: DATA
SMTPD	43457	3996	2016-07-05 16:00:16.494	2, 192, 122, 184	SENT: 354 OK, send.

It is therefore possible to analyse any server error responses.

# 9. FURTHER INFORMATION

It is possible to consult an updated online guide (in English) at the following address:

https://www.hmailserver.com/docs