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#### **Manual versions**

This manual describes the current software version. If any error occurs, inform us and we will try to assist you as soon as possible.

Contact us for further information on topics or routines not yet specified.

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Revision	Date	Ву	Description
2	141002	00	Chapter "Configuration of Mercury/32" updated. * Added information regarding a Mercury/32 configuration problem.
1	140926	00	Updated all pictures. Chapter "Settings file (Mercury.ini)" removed. Chapter "Mail provider configuration" added. Chapter "Configuration of Mercury/32" updated. * Added information on how to setup authentication credentials.
0	140404	MC	First version.

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# **Chapter 1**

# Mail provider configuration

Some mail providers are either not fully compatible with Mercury/32 and other mail clients. Some of them provide workarounds or settings to make them work with these clients as well. This chapter contains settings/workaround information for popular providers.

## 1.1 Google Mail

Google has changed their security requirements for Google Mail to OAuth2.0 . However even some popular clients such as Mozilla Thunderbird currently do not support it. Google Mail can be configured to lower the security to allow using those clients again. The following steps describe what needs to be done:



Login to your Google account by opening https://accounts.google.com in your browser. Enter your Google address and your password and click on the "Sign in" button.

Once logged in to your Google account switch to your account settings in case you did not land here directly (in this example Google Mail was opened by default):

Firefox  Minbox -	om - G 🕇			
https://mail.google.com/m	nail/u/0/?pli=1#inbox		☆ マ C 8 - Google	₽ 🖡 🏠 🖸 ד 🦉 ד 💆
Google			- Q	@googlemail.com 🗸
Gmail <del>-</del>	G	More 🔻		@googlemail.com
сомроѕе	Primary	Social	Promotions	Account - Privacy
Starred Important Chats Sent Mail Drafts All Mail Spam Trash More ▼ Search people	Y P T 0 GB (0%) of 15 GB used <u>Manage</u>	Your Primary tab is empty. ersonal messages and messages that dor o add or remove tabs click inbox settings. ©2014 Goo	i't appear in other tabs will be shown h gle - <u>Terms &amp; Privacy</u>	Add account Sign out ere. Last account activity: 5 minutes ago <u>Details</u>

To switch to the account settings click on your Google name in the upper right corner and click on "Account" in the dropdown box that appears. The account settings will be opened in a new tab/window.



In your account settings switch to the "Security" page:



On the security page click "Settings" that can be found in the "Account permissions" box:

On the "Less secure apps" configuration page allow logins with older security mechanisms byswitching the setting to "Enable". You should recognize the word "Updated." in a yellow box appearing as can be shown below.

Firefox *				
Inbox - @googlemail.com	x Security/lesssecureapps?hl=en	+ ☆ マ C <sup>4</sup> 8 - Goog	gle 🔎 🖡	↑
Google				@googlemail.com 👻 🧻
	Personal info Security Lang	uage Data tools Account history	Help	
	← Le:	Updated. SS Secure apps	<b>(</b> )	
	Some devices and apps use data. Choosing Disable prevents th accessing your Google Acco Choosing Enable increases y but allows you to continue us more Access for less secure apps	insecure sign-in technology to access your nese less secure devices and apps from unt. our chances of unauthorized account access sing these less secure devices and apps. Learn Disable	1	
	۲	Enable	Done	E
Google Terms & Privacy Help				

Then click the "Done" button to save and leave the settings dialog.

Firefox MInbox (1)-	Security - Account Settings × +		
https://www.google.com/settings/secu	rity?hl=en	^ マ C   🚼 - Google 🔎 🖡 🛔	N 🖸 - 🦗 - 🖸
Google	Personal info <b>Security</b> Language	Data tools Account history Help	≱googlemail.com ▼
Password Password 2-Step Verification	Change password     Disabled Setup	Recent activity Review security-related events in your account. View all event	D ts
Account permis Apps and websites Access for less secure apps	view all Enabled Settings	Recovery & alerts         Recovery phone       Add a phone number         Recovery email       Add a recovery email         Send phone alerts       Never         Edit       Edit	Đ
Secure your Act Get better protection settings.	COUNT for your account. Update your security Get started		
Google Terms & Privacy Help			~

Back on the security page you should be able to see the "Access for less secure apps" being set to "Enabled".

In addition to that Google has sent you a mail to your account notifying you of the change in case it was not your intention to do so.

You can then log out from your account and use mail clients like Mozilla Thunderbird or Mercury/32 with this Google Mail account.

## **Chapter 2**

## Installation of Mercury/32

This chapter describes the installation of the Mercury Mail Transport System in order to use it as an SMTP Relay Client.

The Mercury Mail Transport System is a standards-compliant mail server developed by David Harris. As the installation of specific Mercury program modules (MercuryC and MercuryS) is obligatory for the purpose of this document, the installation process is described step-by-step. Additionaly, three initial configurations are set during the installation process. In case you want to skip this chapter of the application note, make sure that both modules are installed and set the appropriate configurations from within the application.

## 2.1 Starting the installation process

The latest Win-32-application called Mercury/32, which is free to use for evaluation purposes, is available for download from:

http://www.pmail.com/downloads\_s3\_t.htm.

After downloading the executable, double-clicking it starts the installation process. As the executable contains a self-extracting archive, the first window to appear during the installation process is the Self-Extractor dialog:

WinZip Self-Extractor - m32-472.exe				
5	Mercury/32 Mail Transport System, v4.72	[]		
	Setup is ready to run the Mercury/32 Installation Wizard to install the software properly on your system. Please click 'Setup' to proceed.	Cancel		
		About		

 ${\rm Click}\ ``{\rm Setup}''$  to temporarily extract the installation files and proceed with the actual installation process.

## 2.2 The Mercury/32 installation wizard

Once the extraction of the installation files is completed, the Mercury/32 installation wizard should start automatically. It will then ask for several configurations such as installation paths and program modules. At first, the wizard should display the following window on your screen, asking whether an old version of Mercury/32 is already installed on the system:

Mercury/32 Setup	×		
	Mercury/32 Setup		
	Welcome to the Mercury/32 Mail Transport System!		
	This setup program will do the following things:		
Mercury/32	<ul> <li>Copy the Mercury/32 program files to your hard disk or to your file server if you are installing on a network.</li> </ul>		
	<ul> <li>Create a basic Mercury/32 configuration for you.</li> </ul>		
	* Create a Mercury/32 Start Menu Group for you.		
	If you have previously installed a version of Mercury/32 that you would like to update to the new version, click "Install update": your existing data files and settings will be preserved. If updating, please ensure that Mercury is *not* running before continuing.		
	Click here for an overview and comprehensive help on installing Mercury/32		
<u>N</u> ew installation	Install update Exit without installing		

This document focuses on installing Mercury/32 without any previous version installed, therefore you should click "New installation".

However, in case you already have an older version of Mercury installed, you may also click "Install update". Note that configuration settings of the previous installation will be preserved and need to be adjusted accordingly.

The next window asks whether to install NetWare Support together with Mercury/32:



For the purpose of this document, NetWare Support is not required and should be omitted by clicking "No NetWare Support".

Now the user gets prompted to enter the installation directory for Mercury/32:

Mercury/32 Setup		×
5	Where would you like	e to install it?
	Setup needs to know where you wou program and support files.	ld like to put the Mercury/32
Mercury/32	The Mercury/32 files can be placed in directory need not already exist - Sel required. If your system supports lon use one here if you wish.	any directory, and the tup will create it as ng filenames, you may
	Directory for Mercury/32 files:	
,		
OK, accept this direct	tory	Exit without installing

There is no restriction on where the Mercury/32 files should be installed. After entering a folder of your choice, click "OK, accept this directory" to proceed.

The next window asks whether to install Pegasus Mail together with Mercury/32:

Mercury/32 Setup	×
	Integration with Pegasus Mail Mercury/32 can act as a full Internet Mail transport for the Pegasus Mail system. When used this way, Mercury acts as a mail host for all
Mercury/32	your Pegasus Mail users, sending and receiving mail on their behalf without needing TCP/IP services on each workstation. If you would like Mercury and Pegasus Mail to co-operate, please enter the location of your copy of WINPM-32.EXE. Setup will then perform the necessary configuration to allow the two systems to interact
	You can also perform this step later from within Mercury/32 if you wish - select 'Pegasus Mail' from the 'Configuration' menu. Location of WINPM-32.EXE
OK, accept this direc	C:\PMAIL
OK, accept this direc	tory No <u>Pegasus Mail integration</u>

For the purpose of this document, Pegasus Mail is not required and should be omitted by clicking "No Pegasus Mail integration".

Once more the user is asked to specify a directory, but this time the directory will be used to store mails:



Using a subfolder of the installation directory is advisable, but not mandatory. After entering a folder of your choice, click "OK, accept this directory" to proceed.

Now the user is asked which program modules should be installed:

Mercury/32 Setup	×
	Protocol modules Mercury/32 communicates with the outside world via plug-in components called Protocol Modules. Each protocol module provides a particular kind of service - for instance, receiving or sending mail.
Mercury/32	Please select from the set shown below the protocol modules you would like. If you are in doubt, it is usually safe to install all protocol modules. Click the "?" button for more information on each module.         Image: MercuryS - SMTP Server Module       ?         Image: MercuryP - POP3 Server Module       ?         Image: MercuryD - POP3 Client Module       ?         Image: MercuryY - Task Scheduling Module       ?
	MercuryF - Finger Server Module     PH Query Server Module     PH Query Server Module     PH Query Server Module     MercuryW - Change password server     MercuryI - IMAP4rev1 server     MercuryB - HTTP (Web) server     P
OK, continue installa	tion Help me to choose Exit without installing

Make sure "MercuryS - SMTP Server Module" is checked before proceeding by clicking "OK, continue installation". You may want to install further modules, but for the purpose of this application note, MercuryS is sufficient. In addition to an SMTP server module (MercuryS), an SMTP client module is required and can be installed within the following dialog:



Click "Install MercuryC" to install the Mercury SMTP Client module.

The installation wizard now asks for initial configuration settings. In detail, it asks for the computer's internet domain name, the user name to use for the postmaster (admin), and the address of the host via which mails should be sent:



After entering valid values, click "OK, continue installation" to proceed.

The next window asks for the SMTP relaying mode:



Unless you need a more restrictive setting (or no restrictions at all), click "Normal" to proceed.

Once more, the user is asked to specify a directory, this time for the message queue of mails to be processed:

Mercury/32 Setup		×
Mercury/32	Mail queue is where clients such messages to be processed by Mercur directory for certain types of interim         You should enter a directory path the Mercury, and by every workstation mail transport - we strongly recommends using the Windows UNC format. If you workstations must be configured to use the strong filename         Setup will create the queue directory You should *not* use a long filename         Mail queue directory         C:\MERCURY\QUEUE	as Pegasus Mail will place ry. Mercury itself also uses this files. at is accessible both by needing to use Mercury as a end that you enter the path bu use a DOS path, all your use the same drive letter to a if it does not already exist. the here.
OK, continue installa	tion	Exit without installing

After entering a folder of your choice for storing mail queues, click "OK, continue installation" to proceed.

The installation wizard now has all the information it needs to execute the installation process:



Check or uncheck the "Create a Program Manager Group" box as you like and click "Install Mercury/32" to execute the actual installation.

By now, the actual installation is completed. However, in case you purchased a license for Mercury/32, you may want to create a Windows service for it to run at Windows start automatically:



For the purpose of this document, no license is required. Just click "Continue" to proceed without creating a Windows service.

Furthermore, the wizard now asks whether to install any Third-party Mercury Add-ins:



Click "Done'' if you do not want any of the add-Ins to be installed. They are not required for the purpose of this document.

Eventually, the installation process is completed:



 ${\sf Click}\ ``{\tt Exit}''$  to close the installation wizard.

# **Chapter 3**

# **Configuration of Mercury/32**

Even though some configurations have been set during the installation process, both the MercuryC and the MercuryS program modules require further configurations to properly work.

## 3.1 Getting started

Run the Mercury/32 application, which should be displayed on your screen similar to the following screenshot (the windows have been arranged for a better overview):

Amercury/32	
<u>File Edit Configuration Window H</u> elp	
Mercury Core Process       Image: Mercury SMTP Client (relay version)         Status and processing information       Status and processing information         Idle, next poll: 10:10:49       Poll now       Pause         Queue status       Ready       Pending       Complete         General/incoming jobs:       0       0       0         Outgoing jobs:       0       0       0         Mercury Mail Transport System v4.72       Transport System v4.72	Inow Pause lient Module v4.7 Its Reserved.
Copyright (c) 1993-2009, David Harris, All Rights Reserved Web: http://www.pmail.com, E-mail: support@pmail.gen.nz Fri 26, 10:08:38: Mercury MTS Core processing thread running. Fri 26, 10:08:38: Mercury MTS Core processing thread running. Current connections and status Ready Connection history: Mercury/32 Transport System, SMTP Server M Copyright (c) 1993-2009, David Harris, All Right	Todule v4.72
This copy of Mercury is licensed for non-commercial use only. Individuals, families, non-profit and charitable organization without charge, but commercial organizations (including academic institutions and government bodies) must purchase a using the program after 60 days evaluation. For more information, please select "Licensing" from the "Help" menu above.	is may use Mercury license to continue
Choose 'Contents' from the 'Help' menu for assistance.	10:10:48

## 3.2 Configuration of MercuryS

Click "Configuration" on the menu bar and select "MercuryS SMTP Server". In the "General" tab of the now opened configurations window you can for example set another port to use instead of the default SMTP port 25. Doing so might prevent finding your server by search engines that check for vulnerable servers on the internet:

Mercury SMTP Server ? 🗙		
General Connection control Spam control Compliance SSL		
TCP/IP timeout: 30 seconds		
ESMTP maximum size: 0 bytes		
Listen on TCP/IP port: 25 Alternate port: 0		
IP Interface to <u>u</u> se: (see help)		
Sender kill file: Edit		
Display session progress and debugging information		
Accept 8BITMIME data connections		
Accept mail for invalid local addresses		
Disable the SMTP 'VRFY' command		
E Logging		
Constal Logging		
Session logging: [C:\MERCURY\Sessions [Directory]		
I <u>E</u> nable session logging		
OK Cancel Help		

Mercury SMTP Server ? 🗙
General Connection control Spam control Compliance SSL
Connection control
IP Address Allow Refuse
Add restriction Change selection Remove selection
Relaying control
Do not permit SMTP relaying of <u>n</u> on-local mail
Use strict local relaying restrictions (see help)
Authenticated SMTP connections may relay mail
I Unly Authenticated SMTP connections may relay mail
AUTH Password file: C:\MERCURY\Auth.txt
OK Cancel Help

Proceed to the "Connection control" tab:

Check "Only Authenticated SMTP connections may relay mail". Enter the path to an authentication file to use manually (will be created if it does not exist). Click "Edit" to open the file for entering allowed credentials for authentication.

Pass	swords for authenticated SMTP	
Use	er Password	4
	<u>)</u>	⊻ -
	Each line should contain a username, a space, then the password associated with that username. Passwords are case-sensitive. Neither username nor password can exceed 48 characters.	
	Save Cut Copy Paste Cancel	]

In the following you can enter credentials that shall be allowed to authenticate (login) to your server.

Combinations of username and password are entered with a space in between, one combination per line, are not allowed to contain spaces and both username or password may not exceed a length of 48 characters.

Save the changes by clicking " ${\tt Save}$  and close the previous settings window by clicking " ${\tt OK}$  ".

## 3.3 Configuration of MercuryC

Click "Configuration" on the menu bar and select "MercuryC SMTP Client". Your screen should now look similar to this screenshot:

MercuryC SMTP Relay Client Configuration	×
SMTP "Smart" Host details	
Smart host name: [smtp.gmail.com	ОК
Connection port/type: 465 SSL encryption using direct connection	Help
	Cancel
Credentials for SMTP Authentication, if required	
Login <u>u</u> sername: name@domain.com Pass <u>w</u> ord: IIIIIIII	
Do not use CRAM-MD5 authentication even if the smart host advertises it	
Authenticate via prior POP3 connection using the login details above	
Connect to POP3 host:	
Connection port/type: 110 Normal (no SSL encryption)	
General log file: C:\MEBCUBY\Logs\MercuruC\?w?m-?d.lo	
Deliveru failure template: C:\MEBCUBY\Mercuru\EAILUBE MEB	
TCP/IP time <u>o</u> ut: 30 seconds	
Poll the queue every: 30 seconds	
✓ Use Extended SMTP features where available	

Change the SMTP port if your server uses another port than 25. As the purpose of this doscument is to use Mercury/32 for relaying SSL messages, in most cases this would be the SSL standard port "465". For the connection type choose "SSL encryption using direct connection".

Enter a valid login username and password for your mail provider (e.g. name@domain.com, password123).

 $\mathsf{Check}$  "Do not use CRAM-MD5 authentication even if the smart host advertises it".

Confirm these changes by clicking "OK".

## 3.4 Allowing remote client to send

Mercury/32 comes with a non RFC compliant filter rule that might prevent sending mails from hosts other than the Mercury/32 server itself. This is a known problem that has been reported here: http://www.mantisbt.org/bugs/view.php?id=9645

To change the filter rule to be RFC compliant and allow sending mails from other hosts locate the file "transfltr.mer" in your Mercury/32 installation folder and open it with an editor.

Locate the following rule that can be found nearly the end of the file as shown below:

H, "[EHeh][EHeh]LO +[0-9]+.[0-9]+.[0-9]+.[0-9]\*", R, "554 Invalid HELO format"

📴 transflt.mer - Notepad	_ 🗆 🗡
<u>File Edit Format View H</u> elp	
# Sample Rules	
# The rules below are examples you can use to get a feel for writing your	
# place, but it's probably better to remove them when you leave them in	
# rules.	
H, "*192.156.225.44*", R, "554 Get out of here, you worthless scumbag." R, "*honeypot@aphrodite.pmail.gen.nz*", RS, "554 Fraudulent RCPT rejected." S, "*viagra*", D, "'viagra' encountered in subject line - connection dropped." S, "*vicodin*", R, "554 'vicodin' encountered in subject line - message refused. H, "[EHeh][EHeh]LO +[0-9]+.[0-9]+.[0-9]*", R, "554 Invalid HELO format"	"
s, "/c*CONGRATULATIONS*WON*", BS, "554 Possibly Nigerian 419 Variant – please ch S, "*for job*", BS, "554 Possibly employment spam – please change and re-send."	iange
	_
	• //

Replace the line with the following rule:

H, "[EHeh][EHeh]LO +[0-9]+.[0-9]+.[0-9]+.[0-9]+.\*", X, ""

Save the file and restart Mercury/32 if necessary.

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