

PGPSendmail

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Chapter 1

PGPSendmail

1.1 PGPSendmail.guide

Pretty Good Privacy Sendmail

Release 2 (24 May 1994)

Legal stuff	copyright and disclaimer
What is it?	Why do I need PGPSendmail?
Installation	integrating PGPSendmail in your setup
Configuration	customizing PGPSendmail to your needs
Future releases	things to do for upcoming versions
System requirements	what you need to run PGPSendmail
How to contact me	where you can complain about this program
About the author	written by guest author <arno@yaps.dinoco.de>
Acknowledgments	thanks and greetings

A few comments by famous users:

"I have no idea what this program does, but the manual is very funny and a real pleasure." -- Douglas Adams

"PGPSendmail has changed my life. Even sex has become better since I installed it." -- Sharon Stone

"Unfortunately, I haven't read the manual, but the program is very funny and a real pleasure." -- Dr. Peter Kittel, Germany

1.2 PGPSendmail.guide/Legal stuff

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Version 2, June 1991

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1.3 PGPSendmail.guide/What is it?

What is PGPSendmail?

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PGPSendmail is a small tool, to encrypt your outgoing e-mail automatically. Despite the name, PGPSendmail does not handle any transport stuff, but requires the original sendmail.

PGPSendmail scans through the outgoing mail and checks whether a public key is available for the recipient(s). Multiple recipients via To: or Cc: are supported. (1) If a key is available, a requester will pop up, asking you if you'd like to encrypt the mail. When you choose the "encrypt" gadget, the message-body will be encrypted and the result will be sent to sendmail to handle the routing and transport.

Since PGPSendmail is only a front-end, it can be used in any kind of setup. It doesn't matter whether you use AmiTCP, UUCP or whatever to deliver your mail, PGPSendmail can be customized for your requirements.

The encrypted message will look like this:

Automatically encrypted message-body follows:

-----BEGIN PGP MESSAGE-----

Version: 2.3a

owHrZAhlYmXUqV9ctnnP/pPtVcsSGRm3aDEx7G1+9enVmcr3Ff5GfN6fdKde2Zau
X3kjdonMydeTi4zuvlDZH/sialO/ZYKDsAGXt+K+0lVOyvx9h3Yc2hUkoFXGor4m
uoSlJLW4hAEIPFIrFXIT83QUUvLz1EsUKvNLFTISy1IVivNzU0syMvPSFZJSS0pS
ixRK8oFKdBRKMhLzQOzkosTkbLAqXq7k/JTUYNsFK11NTV4uAA==
=y7/l

-----END PGP MESSAGE-----

How does it work?

=====

PGPSendmail has to be called instead of sendmail. It determines the recipients (2) and checks whether a public key is available for each of them. Currently PGPSendmail does not handle the situation, that a few keys are available and a few not. It will not encrypt the message, even if only one key is missing.

Then PGPSendmail saves the message-body to a temporary file and encrypts it, using the keys of the recipients. Afterwards, the encrypted copy is handed over to sendmail, using exactly the same commandline PGPSendmail has been called with. PGPSendmail itself doesn't need any parameters.

If any error occurs, PGPSendmail will stop immediately and call sendmail to handle the unencrypted mail, to prevent data-loss.

----- Footnotes -----

- (1) Bcc: might be supported in a future release.
- (2) PGPSendmail does alias expansion using UULIB:Aliases.

1.4 PGPSendmail.guide/Installation

How to install PGPSendmail into your site:

=====

The Installation of PGPSendmail is pretty simple:

- First of all, copy PGPSendmail somewhere into your command path, usually UUCP:c/ or inet:c/ for AS225r2.
- Install the netsupport.library on your system. Please read the included guide "InstallingNSPLib". PGPSendmail's systemname for the file logging is "PGPSendmail". (Could you guess it? :->)
- Configure you mail reader to call PGPSendmail instead of sendmail. Just change the name of the program, leave the options and parameters alone. In fact you have to change this in any program that has the capability to send e-mails! This may include your newsreader, too.

With AmigaELM this would be something like this:

```
SendMail      pgpsendmail <$MSG
```

ATTENTION: Do NOT change the SendMail-entry in your master config file to call pgpsendmail, or any mail routed through your system will be encrypted!

- Now generate a list of your keyring, calling

```
PGP -kvv >UULIB:PGPKeys.lst
```

so PGPSendmail can determine whether a public key for a certain recipient is available.

ATTENTION: You have to generate this list using the -kvv command, or PGPSendmail won't recognize the "also known as ..." feature of PGP.

- If you haven't set PGPPASS yet, the time has come to do so, or PGPSendmail won't be able to encrypt anything. Please read PGP's manual for further details on PGPPASS.

That's all! Now, every outgoing mail will be piped to PGPSendmail and will be encrypted if a key for the recipient is available. (1)

If your system has enough memory, you should make PGP and PGPSendmail resident to speed the whole process up. (2)

----- Footnotes -----

- (1) Public keys with undefined validity won't be used for encryption

unless you have used them by hand once. Then PGP will assume you trust these keys at least a little bit. :-)

(2) This is a preliminary release of PGPSendmail that can not be made resident!!

1.5 PGPSendmail.guide/Configuration

Configuring PGPSendmail:

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PGPSendmail uses the netsupport.library's logfile mechanism to provide you the required (debugging) information. Please refer to the libraries' documentation for a brief description. PGPSendmail uses the magic keyword "PGPSendmail" as systemname for the log entries.

PGPSendmail checks whether one of the following keywords exists as local or global variable or is set in your systems master configfile (in order of precedence):

UULib

Here you can specify a directory path, where the other configfiles are stored. This path is required to access the Aliases and PGPPKeys.lst file. Default is UULIB:.

Sendmail

This entry specified the path and name of the command PGPSendmail should call to actually deliver the mail. The default is sendmail.

ConfirmEncryption

Set this entry to either "Y" or "N". When set to "Y"es, PGPSendmail will pop up a requester asking you whether you'd like to encrypt the mail. If set to "N"o, PGPSendmail will encrypt any mail where all keys are available automatically. The default is to ask before encryption.

1.6 PGPSendmail.guide/Future releases

What is planned for future version?

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- The current version of PGPSendmail does not handle multiple recipients in the best way. Bcc: is not supported and the whole process breaks if only one key is missing. This will be improved in future releases.

The next version of PGPSendmail will send the mail out in encrypted form for the recipients that have a key available and unencrypted for the rest of 'em. :-) Maybe PGPSendmail will append a note automatically, encouraging the key-less recipients to install PGP.

- This version does not parse the keyring directly, but needs a keylist to be around. This is somewhat uncomfortable for the user, because he has to generate a new list every time he modifies the keyring. Future version will access the keyring directly.
- PGPSendmail has to expand aliases in order to determine the addresses of the recipients. The alias-expansion code has been taken from Matt Dillon's UUCP package with slight modifications. But someone really has to optimize this code, because it's uh... horrible. (No offense Matt!)
- Also worth improving is the way PGP is controlled by PGPSendmail. At the moment you need PGPPASS (see system requirements) set in order to make PGP encrypt anything. This is no real security lack, since PGP does support local shell variables, however, I'm planning to add a routine to PGPSendmail, that pops up a requester and asks the user for the password, submitting the result to PGP via the commandline.

Also I'm thinking about opening a console-window for PGP, so the user can see what is going on and can possibly control PGP interactively.

- I plan to add a kind of fortune cookie program that places the real subject in the encrypted body and inserts a random cookie instead.

1.7 PGPSendmail.guide/System requirements

What do I need to run PGPSendmail?

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- You need at least KICKSTART 2.04 to run PGPSendmail.
- PGPSendmail requires less than 4k stack.
- PGPSendmail works only with PGP v2.2 or later. Earlier version were not able to encrypt mails for several recipients, neither did they have the +batchmode feature.
- You must have T: assigned, because all temporary files go into T:.
- The original "sendmail" must be available.
- Your PGP must be configured correctly. PGPPATH and PGPPASS have to be set properly. If you have problems with PGP leaving files in your UUSpool:, check out if PGP's KeepBinary option is turned off.

1.8 PGPSendmail.guide/How to contact me

How to contact me

=====

If you want to contact me (e-mail preferred), you may use the following addresses:

SnailMail: Peter Simons	E-Mail: simons@peti.GUN.de (Usenet)
Europaring 20	
D-53123 Bonn 1	Voice: +49 228 746061
Germany	

BTW, a mailing list for the Amiga version of PGP and all related topics exists on peti. New PGP and PGPSendmail versions will be announced and possibly posted to this list. You can also reach many other users there and get help if you have problems with your setup. To subscribe, send e-mail to listserv@peti.GUN.de and put the commands

```
ADD your_address PGPAmiga
HELP
```

in the mailbody. Your address will be added to the subscribers list and you'll receive the ListSERV's helpfile. To post to the list (even if not subscribed), send e-mail to PGPAmiga@peti.GUN.de.

1.9 PGPSendmail.guide/About the author

About the author

=====

Congratulations! Amongst the 12.42% of software users who actually bother to read the documentation, you are one of the brightest as you have apparently chosen to read the hidden gem in it: The section "About The Author".

Disclaimer(1): Although this has not been written by Peter Simons himself, it is not necessarily more objectively than it would have been if he did it himself.

As a first approximation to the author, let us have a look at a text he wrote about himself in a list of systems in his home domain. (It may be of interest to some that his self-description has been 4.46 times as long as the actual technical data of his site.)

I (Peter Simons) was born on Sep 4th 1973 as child of a plain supermodel and a nobel price winner and I had a very nice childhood, although it has always been some kind of nuisance to me that the people used to overlook my really notable IQ because of my extraordinarily handsome appearance.

Note for the reader: I have not known Peter as a child, but you may approximate his look of today by imagining a friendly ice bear with a full beard. (Still a very handsome ice bear, as his girl-friend would probably remark, if she bothered about "all that computer stuff" like this text.)

Although Peter is not really a computer freak - PGPSendmail probably owes its existence to the boring breaks between playing and watching

basketball, meeting girls, going to parties, watching M*A*S*H, etc. - the adoption of his nickname "Peti" as site name for his A3000 homebox (peti.GUN.de) symbolizes the fusion of man and machine to a system of high productivity. Furthermore, the natural environment of Peter is best-suited for computer people: The stationer's shop near his home is the only one I know offering Amigas, Amiga literature and Fish disks just as natural as the more mundane things a stationer sells.

<abrupt and unreasonable break>

This "About The Author" section is shareware. If you want to know how it ends or if you have moulded an opinion about Peter Simons utilizing the information provided herein, send me all your money.

Arno Eigenwillig <arno@yaps.dinoco.de>

----- Footnotes -----

(1) Which documentation can get along without disclaimer nowadays? :-)

1.10 PGPSendmail.guide/Acknowledgments

Acknowledgments

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"I could see that far, because I stood on the shoulders of giants."
-- Albert Einstein

I'd like to thank many, many people for their help and support that made this and all my other programs possible or at least much easier. Unfortunately, there were too many participants and I can only name a few. Sorry if I didn't mentioned your name!

Phillip R. Zimmermann

Thanks a lot for writing PGP! IMHO, PGP is a really important program and one day all net-traffic may rely on it or a similar tool to guarantee secure communication and mail authentication. PGP is more than just a freeware tool--it's a political statement for free and independent citizens.

Matt Dillon

With Matt's permission, I used his alias code in PGPSendmail. This has really made my job much easier. Thanks a lot Matt for your great efforts for the Amiga in the early days. Thanks for porting/writing the UUCP package and especially for DME, still my favorite editor!

Mark Constable

Mark was my first beta tester for the PGP Mail Integration Project and also ran the developer mailing list on his system! Mark, you contributed a lot to this, and many other of my PGP-related programs.

Ralph Thomas Aussem

Marc 'Nepomuk' Heuler

Thanks a lot to these two for reliable and active beta testing of

PGPSendmail and PGPRMail. Without your help and your reports, this program would be less reliable by much.

Thomas Mildemberger

Thomas, thanks for bringing me into the Usenet and for beeing a good friend since more than 1 year now. (Greetings to Phillip, Robert and - of course - Christine!)

Reinhold Pickartz

Thanks for reliable beta testing of anything I write and for supplying me with the latest PD software all the time!

Frank Bergknecht

Thanks for providing a reliable Internet access and for all the time and effort you had to take because one of my programs crashed your machine!

Arno Eigenwillig

For the fine description of my person. :-)
