**What is PGP Desktop Email?**

PGP Desktop Email is part of the PGP Desktop family of products. Use PGP Desktop Email to:

- Automatically and transparently encrypt, sign, decrypt, and verify email messages through policies you control.
- Use part of your hard drive space as an encrypted virtual disk volume with its own drive letter.
- Create secure, encrypted Zip archives.
- Put files and folders into a single encrypted, compressed package that can be opened on Windows systems that do not have PGP Desktop Email or PGP Desktop installed.
- Completely destroy files and folders so that even file recovery software cannot recover them.
- Securely erase free space on your drives so that your deleted data is truly unrecoverable.

**Understanding the Basics**

PGP Desktop Email uses keys to encrypt, sign, decrypt, and verify your messages. After installation, PGP Desktop Email prompts you to create a PGP keypair. A keypair is the combination of a private key and a public key.

- Keep your private key and its passphrase private, as the name suggests. If someone gets your private key and its passphrase, they can read your messages and impersonate you to others. Your private key decrypts incoming encrypted messages and signs outgoing messages.
- Your public key you can give to everyone. It does not have a passphrase. Your public key encrypts messages that only your private key can decrypt and verifies your signed messages.

Your keyring holds both your keypairs and the public keys of others, which you use to send encrypted messages to them. Click the PGP Keys Control Box to see the keys on your keyring:

1. The icon for a PGP keypair has two keys, denoting the private and the public key. Alice Cameron has a PGP keypair in this illustration, for example.
2. The icons for the public keys of others have just one key. Ming Pa’s public key, for example, has been added to the keyring shown in this illustration.
What Am I Installing?

PGP Desktop Email uses licensing to provide access to the features you purchase. Depending on the license you have, some or all of the PGP Desktop Email family of applications will be active.

This document contains instructions for viewing the features activated by your license.

**PGP Desktop Email** is a member of the PGP Desktop family of applications. You can use PGP Desktop Email to automatically and transparently encrypt, sign, decrypt, and verify email messages through policies you control. You can also use PGP Desktop Email to encrypt IM sessions for clients such as AIM and iChat. Both users must have PGP Desktop Email enabled.

Other components included with PGP Desktop Email are:

**PGP Virtual Disk volumes** — Uses part of your hard drive space as an encrypted virtual disk volume with its own drive letter. A PGP Virtual Disk is the perfect place for storing your sensitive files; it is as if you have stored them in a safe. When the door of the safe is open (when the volume is mounted), you can change files stored in it, take files out of it, and move files into it. Otherwise (when the volume is unmounted), all the data on the volume is protected.

**PGP Zip** — Adds any combination of files and folders to an encrypted, compressed, portable archive. PGP Desktop must be installed on a system to create or open a PGP Zip archive. PGP Zip is a tool for securely archiving your sensitive data, whether you want to distribute it to others or back it up.

**PGP Self-Decrypting Archives (SDAs)** — Puts files and folders into an encrypted, compressed package that can be opened on Windows systems that do not have any PGP software installed. SDAs are the perfect solution for securely exchanging files with someone who does not have PGP software installed.

**PGP Shredder** — Completely destroys files and folders so that even file recovery software cannot recover them. Deleting a file using the Windows Recycle Bin does not actually delete it; it sits on your drive and eventually gets overwritten. Until then, it is trivial for an attacker to recover that file. PGP Shredder, in contrast, immediately overwrites files multiple times. This is so effective that even sophisticated disk recovery software cannot recover these files. This feature also completely wipes free space on your drives so your deleted data is truly unrecoverable.

**Key Management** — PGP Desktop Email also manages PGP keys, both your keypairs and the public keys of others. You use your private key to decrypt messages sent to you encrypted to your public key and to secure your PGP Virtual Disk volumes. You use public keys to encrypt messages to others or to add users to PGP Virtual Disk volumes.

System Requirements


**Note:** The above operating systems are supported only when all of the latest hot fixes and security patches from Microsoft have been applied.

- 512 MB of RAM
- 64 MB hard disk space

Installing PGP Desktop Email

PGP Corporation recommends exiting all open applications before you begin the install. The installation process requires a system restart.

**Note:** If you are using PGP Desktop Email in a PGP Universal Server-managed environment, your PGP Desktop Email installer may be configured with specific features and/or settings.

To install PGP Desktop Email

1. Locate the PGP Desktop Email installation program you downloaded.
   The installer program may have been distributed by your PGP administrator using the Microsoft SMS deployment tool.
2. Double-click the installer.
3. Follow the on-screen instructions.
4. Reboot your system when instructed.
5. When your system restarts, follow the on-screen instructions to configure PGP Desktop Email.
Licensing

To see what features your license supports, open PGP Desktop Email and select Help > License. Those features with a checkmark are supported by the active license.

Starting PGP Desktop Email

To start PGP Desktop Email, use any of the following methods:

1. Double-click the PGP Tray icon.
2. Right-click the PGP Tray icon and then select Open PGP Desktop Email.
3. From the Start menu, select Programs > PGP > PGP Desktop Email.

The PGP Desktop Email Main Screen

The PGP Desktop Email application window is your main interface to the product.

The PGP Desktop Email main screen includes:

1. **The Menu bar.** Gives you access to PGP Desktop Email commands. The menus on the Menu bar change depending on which Control box is selected.
2. **The Toolbar.** Gives you access to frequently used features. You can create a new PGP Zip archive, verify an existing PGP Zip archive, shred selected files, search for a key, synchronize your keys, or find text in the user IDs of the keys currently visible in the PGP Keys work area.
3. **The PGP Keys Control Box.** Gives you control of PGP keys.
4. **The PGP Messaging Control Box.** Gives you control over PGP Messaging.
5. **The PGP Zip Control Box.** Gives you control of PGP Zip, as well as the PGP Zip Assistant, which helps you create new PGP Zip archives.
6. **The PGP Disk Control Box.** Gives you control of PGP Disk.
7. **The PGP NetShare Control Box.** Gives you control of PGP NetShare.
8. **Expand/Collapse Control Box Control.** Use to display or hide Control Boxes.
9. **The PGP Desktop Email Work area.** Displays information and actions you can take for the selected Control box.
10. **PGP Keys Find box.** Use to search for keys on your keyring. As you type text in this box, PGP Desktop Email displays search results based on either name or email address.

Each Control box expands to show available options, and collapses to save space (only the Control Box’s banner displays). Expand a Control Box by clicking its banner. Collapse a Control Box by clicking its Expand/Collapse arrow in the upper right corner.

Using PGP Desktop Email

PGP Desktop Email automatically and transparently encrypts and signs outgoing messages and decrypts and verifies incoming messages. All you need to do is to send and receive your email just as you always have; PGP Desktop Email will take care of the rest.

Sending Encrypted Email

After installation, PGP Desktop Email inserts itself between your email client and your mail server and watches your email traffic.

When incoming messages arrive, PGP Desktop Email intercepts them before they get to your inbox and automatically attempts to decrypt and verify them; it uses your private keys to decrypt and the public keys of others to verify. When it is done with your messages, PGP Desktop Email delivers them to your inbox.
In most cases, you do not have to do anything special; decrypted incoming messages will appear in your inbox just like any other incoming messages.

When you send outgoing messages, PGP Desktop Email intercepts them on the way to your mail server and automatically attempts to encrypt and sign them, based on configured policies.

Again, you do not have to do anything special; just create your messages using your email client and send them—PGP Desktop Email handles everything else.

Details of how PGP Desktop Email transparently handles your incoming and outgoing messaging is found in the following sections.

**Incoming Messages**

PGP Desktop Email handles incoming messages based on their content:

- **Not encrypted or signed.** If a message is not encrypted or signed, PGP Desktop Email just passes it along to your email client. You can read the message as is, so there is nothing for PGP Desktop Email to do to it.

- **Encrypted but not signed.** If a message is encrypted, PGP Desktop Email attempts to decrypt it so that you can read it. It will look first on your keyring for the private key that can decrypt the message. If it finds the private key, PGP Desktop Email uses it to decrypt the message and then passes the message to your email client. If it cannot find the private key, PGP Desktop Email passes it to your email client still encrypted. It will look something like this.

Creating New Policies

PGP Desktop Email includes the ability to create and use new policies in addition to the four default policies. You can create policies based on a wide variety of criteria. If you are using PGP Desktop Email in a PGP Universal Server-managed environment, your messaging policies and other settings may be controlled by your organization’s PGP administrator.

For complete information about how to create and implement messaging policies, see the **PGP Desktop User’s Guide**.

**Outgoing Messages**

PGP Desktop Email handles your outgoing email messages based on policies, sets of instructions that can be set up to handle any situation.

**Default Policies**

PGP Desktop Email includes four default policies:

- **Mailing List Admin Requests.** Administrative requests to mailing lists are sent in the clear; that is, not encrypted or signed.

- **Mail List Submissions.** Submissions to mailing lists are sent signed (so they can be authenticated) but not encrypted.

- **Require Encryption: [PGP] Confidential.** Any message flagged as confidential in your email client or containing the text “[PGP]” in the subject line must be encrypted to a valid recipient public key or it will not be sent. This policy gives you a way to easily handle messages that must be sent encrypted or not sent at all.

- **Opportunistic Encryption.** Specifies that any message for which a key to encrypt cannot be found should be sent without encryption (in the clear). Having this policy as the last policy in the list ensures that your messages will be sent (unless you flag the message as Confidential), albeit in the clear, even if a key to encrypt it to the recipient cannot be found.

**Was My Message Encrypted?**

Because PGP Desktop Email does its work automatically and transparently, from time to time you may find yourself wondering, was my message really sent encrypted? The answer is probably yes, but there are ways to make certain.

**Notifier Alerts**

PGP Desktop Notifier alerts are a feature of PGP Desktop that both tell you what is going on with your messaging and give you control over it.

For example, when you send an encrypted message, the Notifier alert appears in the lower right corner of your screen. It shows:

1. Subject.
2. Who it is being sent to.
3. Keys found for the recipient.

![Image of PGP Outgoing Email]

If you want more information about the message being sent, click More. Now you also see:
5. What PGP Desktop Email did to the message.
6. Who signed the message.

For more information about Notifiers, see the PGP Desktop User’s Guide.

**PGP Log**
The PGP Log lists a variety of actions that PGP Desktop Email is taking to secure your messaging.

For example, the message whose Notifiers are shown above generated this entry in the PGP Log. It shows:
1. That an outgoing message was sent, who sent it, and what the subject was.
2. The time it was encrypted, the email address it was encrypted to, and the email address it was sent from.

**Creating PGP Virtual Disk Volumes**
The PGP Virtual Disk Volumes feature uses part of your hard drive space as an encrypted virtual disk volume with its own drive letter. You can create additional users for a volume so that people you authorize can also access the volume.

1. Click New Virtual Disk in the PGP Disk Control box.
2. Type a Name for the volume.
3. Specify a Disk File Location for the volume.
4. To specify your mount preferences, do the following:
   - select a drive letter for the volume to Mount as.
   - select Mount at Startup to have your new volume mount automatically at startup.
   - select Unmount when inactive for x mins to have the volume automatically unmount when it has been inactive for the specified number of minutes.
5. From Capacity, select Dynamic (resizeable) if you want the volume to grow in size as you add files or Fixed size if you want the volume to always remain the same size.
6. Specify a file system Format for the volume.
7. Specify an Encryption algorithm for the volume.
8. Click Add User Key to add users who authenticate using public-key cryptography or click New Passphrase User to add users who authenticate using passphrases.
9. Click Create.

Use the User Access section to control existing users of a PGP Virtual Disk volume:
1. Click Add User Key to add users who authenticate using public-key cryptography.
2. Click New Passphrase User to add users who authenticate using passphrases.
3. Select a passphrase user, then click Change Passphrase to change their passphrase.
4. Select a user, then click Make Admin to give the user administrative rights.
5. Select a user, then click Delete to delete the user.
Creating a PGP Zip Archive

PGP Zip archives let you put any combination of files and folders into a compressed, portable archive. There are four kinds of PGP Zip archives:

- **Recipient keys.** Encrypts the archive to public keys. Only the holder of the corresponding private keys can open the archive. This is the most secure kind of PGP Zip archive. Recipients must be using PGP software (for Windows or Mac OS X).
- **Passphrase.** Encrypts the archive to a passphrase, which must be communicated to the recipients. Recipients must be using PGP software (for Windows or Mac OS X).
- **PGP Self-Decrypting Archive.** Encrypts the archive to a passphrase. Recipients do not need to be using PGP software to open it, but their computer must be running Microsoft Windows. The passphrase must be communicated to the recipients.
- **Sign only.** Signs the archive but does not encrypt it, allowing you to prove you are the sender. Recipients must be using PGP software (for Windows or Mac OS X) to open and verify the archive.

The Passphrase and Sign only PGP Zip types are described in detail in the PGP Desktop User’s Guide; they are described briefly here.

1. **Click New PGP Zip in the PGP Zip Control Box.**

2. **Drag and drop the files/folders you want to be in the archive or use the buttons to select them.**

3. **Select Send original files to PGP Shredder when finished if you want the files/folders you put into the archive to be shredded when the archive is created.**

4. **Click Next.**

5. **Select the desired kind of PGP Zip archive:**
   - **Recipient keys**
   - **Passphrase**
5. Click Next. The PGP Zip archive is created. The Finished screen displays information about the new archive.

6. Click Finish.

**Note:** The Passphrase type of PGP Zip archive is very similar to Recipient Keys, the difference being that a passphrase is used to protect the archive instead of a key.

**Note:** The Sign only type of PGP Zip archive is similar to Recipient Keys, the difference being that because the archive is only signed, not encrypted, you do not select public keys.

**PGP Self-Decrypting Archive**

The Create a passphrase screen appears.

1. Type a passphrase for the PGP Zip Self-Decrypting Archive (SDA), then type it again to confirm it.
2. Click Next.

3. Choose a private key on the local system to use to sign the archive.

4. Specify a name and a location for the archive. The default name is the name of the first file or folder in the archive; the default location is the location of the files/folders going into the archive.

5. Click Next. The PGP SDA is created.

6. Click Finish.

**Using PGP Shred to Shred Files**

The PGP Shredder feature completely destroys files and folders so that even sophisticated file recovery software cannot recover them. While both the PGP Shredder icon and the Windows Recycle Bin appear on your desktop, only PGP Shredder immediately overwrites the files you specify so that they are not recoverable.

You can shred files using any of the following methods:

- Using the PGP Shredder icon.
- Using the PGP toolbar.
- Using the PGP shortcut menu.

**Shredding Files Using the PGP Shredder Icon**

- **To shred files using the PGP Shredder icon**

  1. On your Windows desktop, drag the files and folders you want to shred into the PGP Shredder. A dialog box appears, asking you to confirm you want to shred the files.
2. Click Yes. The specified files and folders are shredded.

Shredding Files Using the PGP Shortcut Menu

➢ To shred files in Windows Explorer
1. Open Windows Explorer.
2. Right-click on the files or folders you want to shred, then select PGP Desktop > PGP Shred <filename>. Control-click to select multiple files or Control-A to select all files showing.
3. Click Yes. The specified files and folders are shredded.

Note: If you do not use the PGP Shredder feature often, you can remove the PGP Shredder icon from your desktop via PGP Options. To do this, select Tools > Options, select the Disk tab, deselect the Place PGP Shredder icon on the desktop option, and then click OK.

Note: You can also use PGP Options to control the number of passes made when shredding (more passes are more secure but takes longer), whether files in the Windows Recycle Bin should be shredded when you empty it, and whether the warning dialog box is displayed when you shred.

Shredding Free Space

The PGP Shred Free Space feature completely shreds free space on your drives so that your deleted data is truly unrecoverable. Keep in mind that “free space” is actually a misnomer. What PGP Shred Free Space does is overwrite the portions of your hard drive that Windows believes to be empty; in fact, that space could be empty or it could be holding files Windows told you were deleted.

When you put files into the Windows Recycle Bin and empty it, the files are not really deleted; Windows just acts like there is nothing there and eventually overwrites the files. Until those files are overwitten, they are easy for an attacker to recover. PGP Shred Free Space overwrites this “free space” so that even disk recovery software cannot get those files back.

➢ To shred free space on your disks
1. Open PGP Desktop Email.
2. Select Tools > PGP Shred Free Space.
3. On the Introduction screen, read the information, then click Next.
4. On the Gathering Information screen, in the Shred drive field, select the disk or volume you want shredded and the number of passes you want PGP Shred Free Space to perform.
5. Choose whether to Wipe internal NTFS data structures (not available on all systems), then click Next.
6. On the Perform Shred screen, click Begin Shred.

Note: Click Schedule to schedule a shred of your free space instead of doing it now. The Windows Task Scheduler must be installed on your system.

The length of the shred session depends on the number of passes you specified, the speed of the processor, how many other applications are running, and so on.
7. When the shred session is complete, click Next.

Getting Assistance

Contacting Technical Support

- To learn about PGP support options and how to contact PGP Technical Support, please visit the PGP Corporation Support Home Page (https://pgp.custhelp.com).
- To access the PGP Support Knowledge Base or request PGP Technical Support, please visit PGP Support Portal Web Site (https://pgp.custhelp.com). Note that you may access portions of the PGP Support Knowledge Base without a support agreement; however, you must have a valid support agreement to request Technical Support.
- For any other contacts at PGP Corporation, please visit the PGP Contacts Page (http://www.pgp.com/about_pgp_corporation/contact/index.html).
- For general information about PGP Corporation, please visit the PGP Web Site (http://www.pgp.com).
- To access the PGP Support forums, please visit PGP Support (http://forum.pgp.com). These are user community support forums hosted by PGP Corporation.

Available Documentation

Prior to installation, complete Product Documentation is available through the PGP Support Knowledge Base (https://support.pgp.com/?faq=589).

PGP Desktop Email documentation is installed onto your computer during the installation process. To view it, select Start > Programs > PGP > Documentation. All documents are saved as Adobe Acrobat Portable Document Format (PDF) files. You can view and print these files with Adobe Acrobat Reader, available on the Adobe Web site (http://www.adobe.com). PGP Desktop Email also includes integrated online help.