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# *PDG Software*

## *Keyman Encryption Guide*

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PDG Software, Inc.  
<http://www.pdgsoft.com>

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# Encryption and PDG Software

*Using encryption with PDG Software*

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**T**his guide assumes you have installed and have a basic familiarity with PDG Shopping Cart or PDG Commerce. See the appropriate User Guide for additional details on configuring your PDG Software product.

**Note:** If you are using PDG Commerce, you will install files to the PDG\_Commerce folder, not to the PDG\_Cart folder as noted in this guide.

## Introduction

You can protect the privacy of your customer order email messages and your order log files by encrypting them so that only you can read them. To do so, you will need to download and configure two free software programs and the free PDG Software encryption utility. You will use the PGP Keys tool to create your security keys, PDG Key Manager to import your keys into PDG Shopping Cart, and GNU Privacy Guard to encrypt your customer order email and order logs.

1. GNU Privacy Guard (GNUPG) - This encryption software is available free from:  
<http://www.gnupg.org/download.html>
2. PGP Keys tool - This tool is contained inside the PGP Freeware package available from:  
<http://web.mit.edu/network/pgp.html>  
or in PGP Desktop Security software available from:  
<http://www.pgp.com/products/index.html>

PDG Software does not provide technical support for these products nor do the authors of these programs. This guide is provided as a courtesy to our software users who wish to use encryption to protect their order email and order log files.

3. PDG Software Key Manager (keyman) - This is an import utility to import your security keys into PGP software to be used by GNU Privacy Guard and is avail-

able free from:  
<http://www.pdgsoft.com>

## Quick Overview

These are the basic steps necessary to use encryption with PDG software.

1. Download two encryption software programs and the PDG Key Manager utility to your local computer and place them in different folders.
2. Uncompress the archived (compressed) programs and install them as appropriate.
3. Create your security keys using PGP Keys and export your key.
4. Copy or FTP certain files to your host server in the correct file format.
5. Use the PDG Key Manager to import your security key into GNUPG.
6. Configure PDG software to use GNUPG to encrypt customer order email to you
7. Configure PDG software to use GNUPG to encrypt your order log files (Optional)
8. Configure your email program, for example, Microsoft Outlook, to decrypt order emails you receive.
9. Test your configuration.

**Note:** We strongly recommend you follow these steps in the order shown. Detailed explanations of each step in the process are shown below.

**Note:** If your PDG\_Cart folder is located outside of the document root, the keyman program will not be able to find it. You will need to either move it temporarily to import your keys, or use GNUPG to directly import your keys without using keyman.

**Note:** If you will be using GNUPG directly to import your keys to your server, instead of using Keyman, you will need to move the keys after they are imported. GNUPG will create the key files in a default folder on your server. You must copy these key files and move them to your PDG\_Cart folder.

## Download/Uncompress

You must download two encryption software programs plus the PDG Key Manager to your local computer.

First, create three folders on your local computer and name them gnupg, pgp, and keyman respectively.

Second, connect to the Internet and go to <http://www.gnupg.org/download.html>.

Download the appropriate GNU Privacy Guard version for your host server's operating system, e.g. Windows, UNIX, etc. This is a compressed archive containing all the program's files. Place it in the gnupg folder you created. Uncompress this archive.

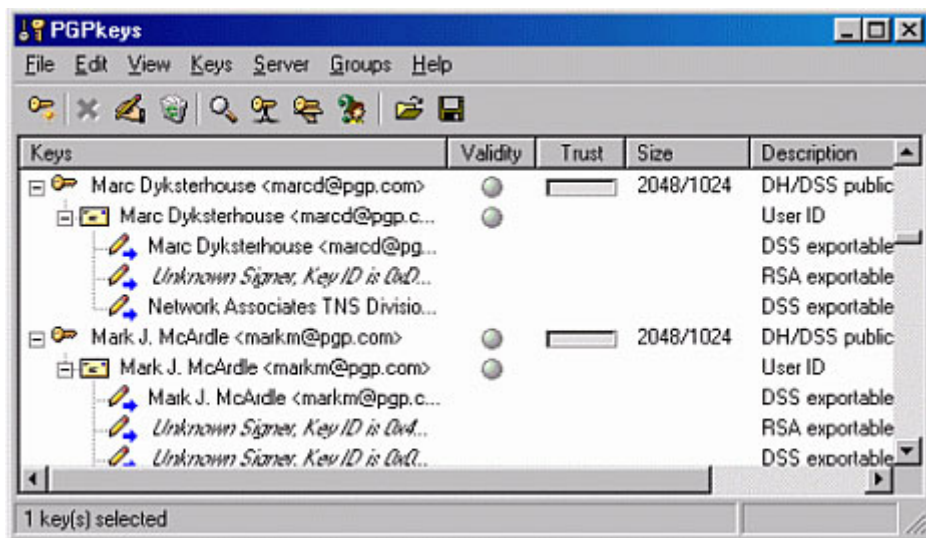
**Note:** If you are using Windows 98 and your shopping cart is running on a UNIX machine, you will have to uncompress the `-.tar.gz` archive appropriately.

Next, go to <http://web.mit.edu/network/pgp.html> and download the appropriate PGP Freeware version for your local computer's operating system, e.g. Windows, UNIX, etc. and place it in the `pgp` folder you created.

Uncompress this archive, then run 'Setup' to install PGP Freeware onto your local computer. Follow the on screen instructions for installation. We recommend you accept the default settings.

Lastly, go to <http://www.pdgsoft.com> and download the appropriate version of Key Manager for your host server's operating system, e.g. Windows, UNIX, etc. and place it in the `keyman` folder. Uncompress this archive.

**Note:** If you are using Windows 98 and your shopping cart is running on a UNIX machine, you will have to uncompress the `-.tar.gz` archive appropriately.



## Create Security Keys

Now you can create your security keys using PGP Keys.

When you install PGP Freeware, the installation program should have placed shortcuts in your Start - Programs menus and an icon on your system tray.

You can start PGP Keys by clicking on the entry in the Start - Programs menu or click on the lock icon in the system tray and click on PGP Keys.

**Note:** The first time you run PGP Keys, a wizard screen will appear to assist you in creating your keys. Follow the on screen instructions in the wizard to

create your keys. Be sure to remember your passphrase. When you finish creating your keys, a screen similar to the following should appear.

Scroll down to the new keys you created to view it. It should show up in **bold face type** to indicate it is the default.

Close PGP Keys.

## Copy/FTP

Now you must copy or FTP the following files to your host server.

If you are NOT using Windows 95/98/2000 there will be no .exe extension to the file name for executable files.

**gpg.exe--> \cgi-bin\pdg\_cart\**

**keyman.exe -->\cgi-bin\**

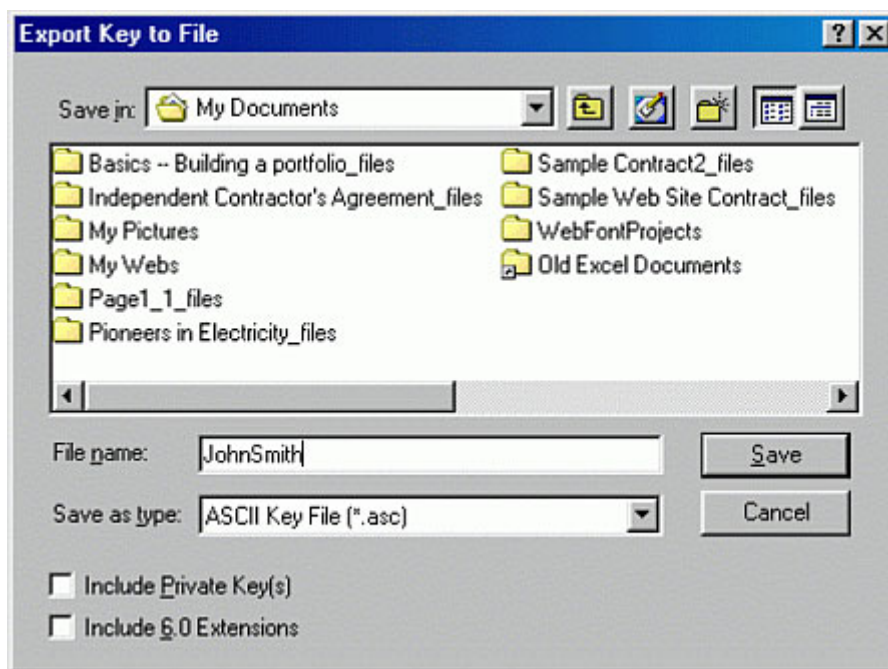
**keyman.html -->\yoursite's root directory**

You must set the permissions for these files as Read, Write, Execute.

## Export and Import Key

### Export

Now you must export your security key FROM PGP Keys. First, Open PDG Keys and Highlight the key you created. Select Keys - Export from the menu. A screen similar to the following will appear.



Enter a filename and make sure the file type is ASCII.

Click the Save button.

Close PGP Keys.

## Import

After you have exported the key, you must then import the key into PDG Software.

Connect to the Internet and open the file name keyman.html that you copied to your host server.

A screen similar to the following should appear.



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## PDG KeyManager

PDG Key Manager will import your security key to be used by GNU Privacy Guard in PDG Software. However, if you have not exported a key from PGP Keys, you must do so before continuing. Note that you **MUST** be viewing this page via an Internet connection, e.g. [www.yoursite.com/keyman.html](http://www.yoursite.com/keyman.html) and have completed the steps for creating and exporting keys in the KeyMan documentaion for KeyManager to work properly.

After you have exported your key, open the exported file in Microsoft Notepad or other text editor, NOT a word processor. Select ALL of the text and press, 'Control+C' to copy the text to the clipboard.

Place the cursor inside the Key Box below and press, 'Conrol+V' to paste the text from the clipboard.

Click on the 'Import This Key' button. Verify the key has been imported by clicking on the 'List Keys' button. If the import was successful, you should see your key listed.

**Note:** Once all of your key files have been imported into your PDG Software, **it is imperative that you remove** the keyman.exe file from your cgi-2004.

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Select PDG Product:

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List Keys

Clicking on the 'List Keys' button displays all of the keys currently available in PDG Software for the selected PDG Product.

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### Key Box

This box is used to contain the text of your exported key.

Import This Key

Clicking on this button will import it for use by GNU Privacy Guard within PDG Software for the PDG Product selected above. See the PDG Key Manager documentation for details on configuring PDG Software for encryption.

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Delete This Key

If you enter a **Key ID** in this box, e.g. [jsmith@website.com](mailto:jsmith@website.com), then press the 'Delete This Key' button, PDG KeyManager will delete it from the list of available keys that GNU Privacy Guard can use for the selected PDG Product.

Remember in our example, we saved the exported key file with the name, “JohnSmith.asc”. Open the exported file in Notepad or other text editor, NOT a word processing program.

Select ALL of the text shown in the file and press, ‘Control+C’ to copy it into the clipboard.

Place the cursor in the Key Box and press, ‘Control+V’ to paste the info in the Key Box. Click on the ‘Import this Key’ button.

Verify the key was imported by clicking on the ‘List Keys’ button. If the import was successful your key should be listed.

**Note:** Once all of your key files have been imported into your PDG Software, it is imperative that you remove the keyman.exe file from your cgi-bin.

## Configure PDG Software

You can configure two items in PDG software for encryption.

1. Vendor emails - These are the customer order emails sent to you, the vendor.
2. Order log - the order.log is the file in which your customer orders are stored on the server.

General Email Settings	
<p>These settings allow you to specify who receives confirmation e-mails and how they look. All file locations are assumed to be relative to the PDG_Cart subdirectory in your CGI directory, unless a full path from the root directory is specified. When you have finished setting options, press the <b>Submit Changes</b> button.</p> <p>Do not include Credit Card Data in vendor email notifications and Order Logs: <input checked="" type="checkbox"/> * PDG strongly advises that this field remains checked unless you are utilizing GPG encryption to encrypt such data. You can CHANGE this value in the CART OPTIONS section ONLY.</p>	
Email Customer Notifications To:	<input type="text" value="[CUSTOMER]"/>
Template File for Customer Notifications:	<input type="text" value="Templates/Customer.Email"/>
Email Vendor Notifications To:	<input type="text"/>
Template File for Vendor Notifications:	<input type="text" value="Templates/Vendor.Email"/>

To configure these two items for encryption, go to the Merchant Administrator and click on Cart Options. Scroll down to the E-mail Notification Options section.

In the “E-mail Vendor Notifications To:” field, enter your email address, e.g. jsmith@yourwebsite.com followed by the '<' symbol, then enter your email address again, followed by the '>' symbol. The entry should appear as follows with NO SPACES.

jsmith@yourwebsite.com<jsmith@yourwebsite.com>

Click on the ‘Submit Changes’ button.

Click on the ‘Return to Main Menu’ link.

Order Logging Settings	
Do not include Credit Card Data in vendor email notifications or Order Logs:	<input checked="" type="checkbox"/> * PDG strongly advises that this field remains checked unless you are utilizing GPG encryption to encrypt such data.
Order Log text File:	<input type="text"/>
Order Log CSV File:	<input type="text"/>
Order Log XML File:	<input type="text"/>

Click on the ‘Make Changes Live’ button.

If you wish to encrypt your order log, click on Cart Options, then scroll down to the order log fields.

In the Order Log File: field add the '<' symbol after “order.log” then enter your email address, followed by the '>' symbol with NO SPACES.

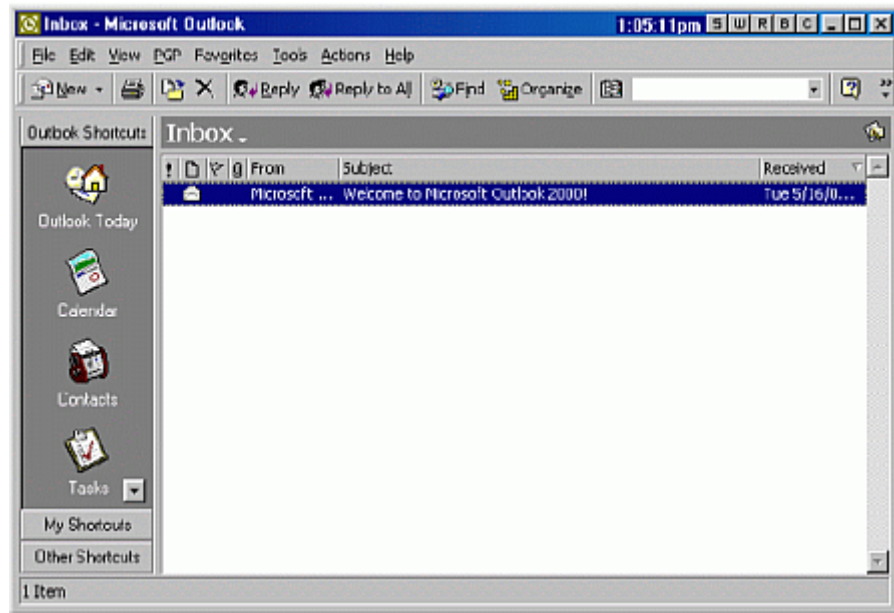
The entry should appear similar to the following:

order.log<jsmith@yourwebsite.com>

**Warning:** This will only encrypt the order.log on an unsecure server. If you are running SSL you must open the cart.html that resides there and from the merchant administrator, configure the Order Log File: entry as shown above.

**Note:** If you have an existing order.log, (either secure or unsecure) ONLY new order info (orders received AFTER configuring PDG for encryption, will be encrypted. These new orders will be appended to the end of the existing order.log file.

## Configure your Email Program

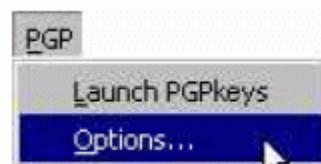


Next you must configure your email program to decrypt the customer order emails you receive. When you installed the encryption software, it added plug-ins for popular email programs such as Microsoft Outlook and created a menu button on the main menu. Our example uses

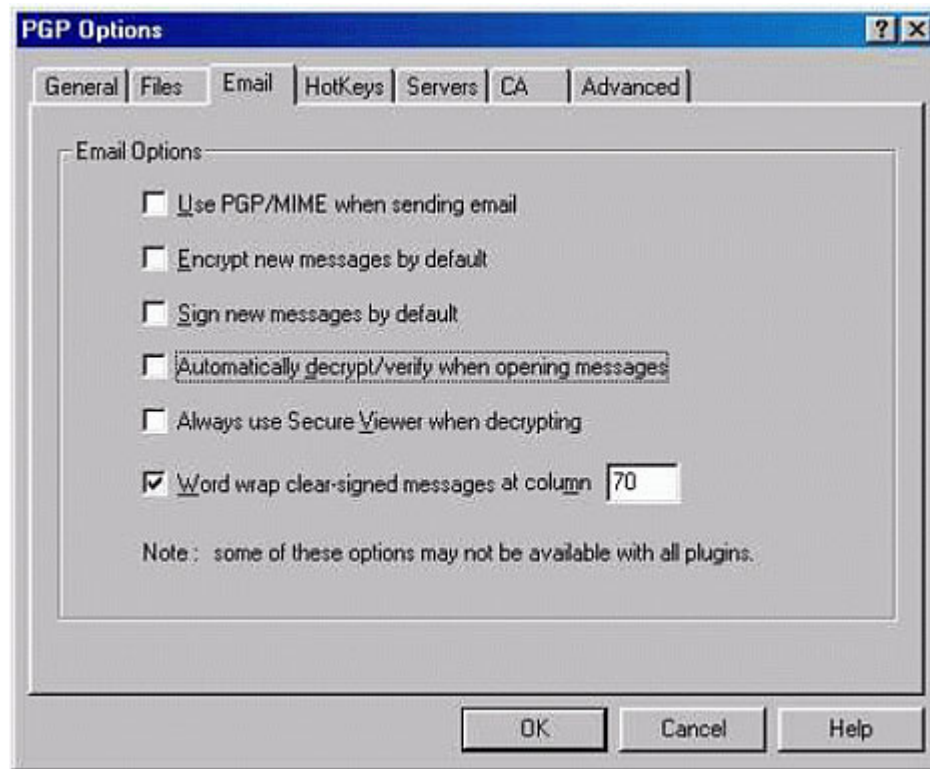
Microsoft Outlook 2000.

Open Outlook.

Note that there is now a PGP menu item on the main menu bar.



Click on the PGP menu button to see the menu items.



Click on 'Options' and the PGP Options window should appear. Click on the Email Tab. The screen should appear similar to the following.

Make sure there is NO CHECKMARK next to 'Automatically decrypt/verify when opening messages'. If you place a checkmark in this box, Outlook will decrypt/verify the message and save it in UNENCRYPTED format.

Click on 'OK'

Now when you open an encrypted message, a window will appear asking you for the passphrase for your key. Enter your passphrase and click OK. The message will be decrypted for reading.

**Warning:** If, after reading the decrypted message, you try to close it, Outlook will pop up a message asking you if you want to save changes. If you click on Yes, your email file will be saved in unencrypted format. If you click on No, the email file will be saved in the original encrypted format.

Close Outlook 2000.

Now you can test your settings.



## Test your settings

The simplest way to test your settings is to send yourself a test order. Go to your web site and enter a test order to buy a product. Be sure to enter all the proper order information in the order fields.

You should receive two emails:

1. One plain confirmation email, just like a customer buying a product would receive
2. One encrypted email of the order, just as you would receive as the vendor

## Getting Help

**Note:** PDG Software does not provide technical support for these products nor do the authors of these programs. This guide is provided as a courtesy to our software users who wish to use encryption to protect their order email and order log files.

However, PDG technical support staff is available for support of PDG products via our web site at <http://www.pdgsoft.com> and through e-mail at [support@pdgsoft.com](mailto:support@pdgsoft.com). Also you may reach us directly by phone at (770) 270-0062.