
PDG Software

Encryption Guide

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Using encryption with PDG Software

This guide assumes you have installed and have a basic familiarity with PDG Shopping Cart or PDG Commerce. This manual also assumes that you have a basic understanding of zip/unzip utilities and file transfer protocol (FTP) programs. If not, you may want to enlist additional help or familiarize yourself with these programs before proceeding.

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 software programs. You will use the PGP Keys tool to create your security keys and GNU Privacy Guard to encrypt your customer order email and order logs. You will import the key to your PDG Shopping Cart or PDG Commerce program through the PDG Merchant Administrator.

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 free 30 day trial package available from:
<http://www.pgp.com/downloads/desktoptrial.php>
The PGP Desktop Security software may be purchased from:
<http://www.pgp.com/products/index.html>

PDG Software does not provide technical support for these products. 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.

Note: PGP is not a free program. At the end of the 30 day trial, it must be purchased. The version explained in this guide is PDG Desktop Security.

Quick Overview

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

1. Download two encryption software programs 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 the GNUPG file to your host server in the correct file format.
5. Use the Encryption section of the PDG Merchant Administrator to import your security key into GNUPG.
6. Configure PDG software to use GNUPG to encrypt vendor emails sent to you.
7. Configure PDG software to use GNUPG to encrypt your order log files.
8. Configure your email program (e.g., 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.

Download/Uncompress

You must download two encryption software programs to your local computer.

First, create two folders on your local computer and name them gnupg and pgp.

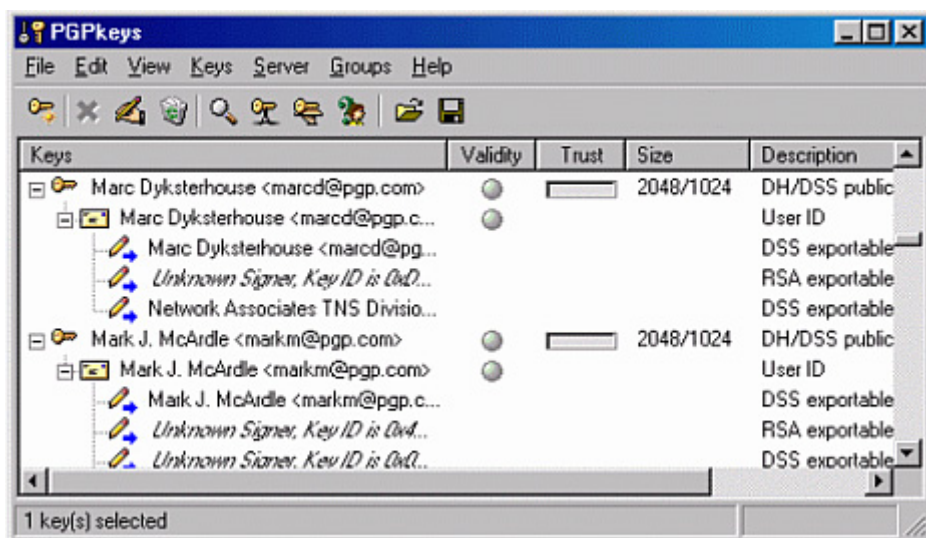
Second, connect to the Internet and go to <http://www.gnupg.org/download.html>.

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 and your shopping cart is running on a UNIX machine, you will have to uncompress the `-.tar.gz` archive appropriately. If you need assistance obtaining the gnupg program, please contact PDG technical staff.

Next, go to <http://www.pgpi.org> and download the appropriate PGP 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 onto your local computer. Follow the on screen instructions for installation. We recommend you accept the default settings.



Create Security Keys

Now you can create your security keys using PGP Keys.

When you install PGP, 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.

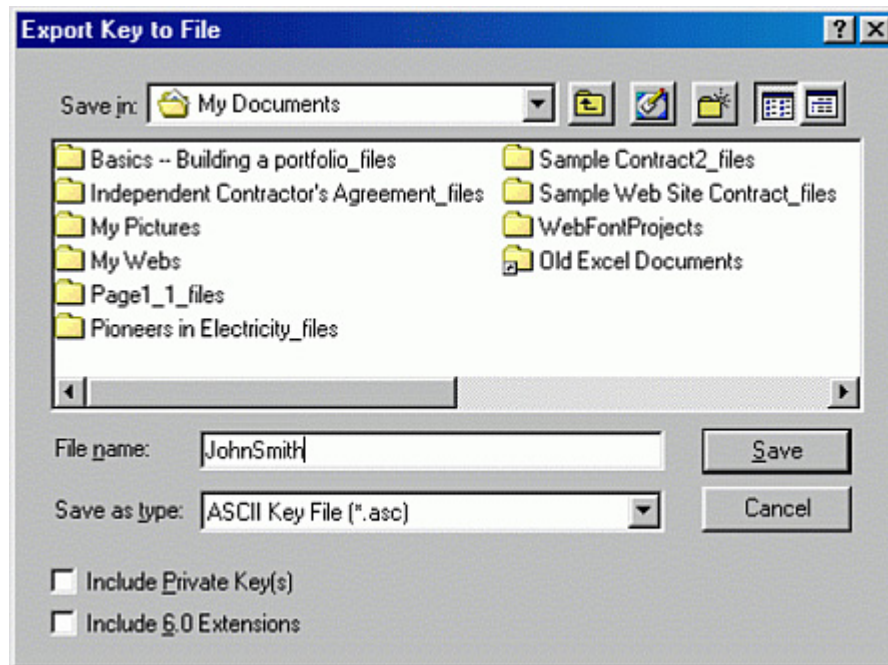
Note: The first time you run PGP Keys, a wizard screen will appear to assist you in creating your keys. Follow the on screen instructions in the wizard to create your keys. Be sure to remember your passphrase. When you finish creating your keys, a screen similar to the following should appear.

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

Close PGP Keys.

Export Key

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



Enter a filename (e.g. JohnSmith) and make sure the file type is ASCII (this will add a .asc file extension).

Click the Save button.

Close PGP Keys.

Copy/FTP

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

If you are NOT using Windows on your server there will be no .exe extension to the file name for executable files (the file will be named gpg).

```
gpg.exe--> \cgi-bin\PDG_Cart\ or \cgi-bin\PDG_Commerce\
```

You must set the permissions for this file as 755 (Read, Write, Execute).

Import Key

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

Open a web browser and log into your PDG Merchant Administrator.

Click the “Encryption” link on the Main Menu to access the encryption settings in your Cart or Commerce Administrator. The following screen will appear:

Encryption

GPG Information:

```
Executing: .\gpg.exe --version
gpg (GnuPG) 1.4.0
Copyright (C) 2004 Free Software Foundation, Inc.
This program comes with ABSOLUTELY NO WARRANTY.
This is free software, and you are welcome to redistribute it
under certain conditions. See the file COPYING for details.

Home: c:/gpg
Supported algorithms:
Pubkey: RSA, RSA-E, RSA-S, ECG-E, DSA
Cipher: 3DES, CAST5, BLOWFISH, AES, AES192, AES256, TWOFISH
Hash: MD5, SHA1, RIPEMD160, SHA256, SHA384, SHA512
Compression: Uncompressed, ZIP, ZLIB, BZIP2
```

GPG keys:

Public keyring (pubring.gpg) does not exist.

GPG Delete Encryption Key: [Delete Key](#)

GPG Add Encryption key: *(you can copy & paste your key below):

[Add Key](#)

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 “GPG Add Encryption key” box. Click on the ‘Add Key’ button.

The page will then refresh, and the key should now be listed in the “GPG keys” portion of the page.

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 logs - the order logs are the files 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 Submit Changes button.</p>	
<p>Do not include Credit Card Data in vendor email notifications and Order Logs: <input checked="" type="checkbox"/> <small>* 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.</small></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 the “E-mail” link on the Main Menu.

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 text contained within the '<' and '>' symbols must be the name of the key you imported.

The entry should appear similar to the following with NO SPACES.
jsmith@yourwebsite.com<jsmith@yourwebsite.com>

Click the ‘Submit Changes’ button.

Click the ‘Return to Main Menu’ link.

Click the “Make Changes Live” link.

To encrypt your order log, click the “Order” link on the Main Menu.

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

In the “Order Log text File” field, add the '<' symbol after the name of the log, then enter your email address, followed by the '>' symbol with NO SPACES. The text contained within the '<' and '>' symbols must be the name of the key you imported.

The entry should appear similar to the following:
order.log<jsmith@yourwebsite.com>

You may also encrypt the “Order Log CSV File” and “Order Log XML File” fields in the same manner.

Note: If you have an existing order log files, ONLY orders received AFTER configuring PDG for encryption will be encrypted. These new orders will be appended to the end of the existing order log files.

Configure your Email Program

Next you may configure your email program to decrypt the customer order emails you receive. For assistance with this configuration, you should contact PGP technical support or consult their online documentation (accessible at <http://www.pgp.com>).

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 text 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 PGP 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. Also you may reach us directly by phone at (770) 270-0062 extension 3.

