

PayPal's Security Key

[PayPal](#) is a great service for enabling both businesses and consumers to buy and sell goods and services online without exposing private financial information to the other parties in a transaction. As a consumer, you can safely purchase goods and services online without exposing your credit or debit card information to be recorded and possibly misused. As a business, you can be paid for your goods or services using the Web or email without the need of storing your customer's private financial information.

A big concern with PayPal is that anyone who knows the password of your PayPal account can access the financial services that you have authorized to be used with PayPal. For consumers, this means that unauthorized purchases or cash transfer may be performed from your credit cards and bank accounts. As a business, unauthorized PayPal access can be a source of fraudulent purchases. Password security *is always the responsibility of the PayPal account holder*; but now PayPal has a service to make the disclosure of your PayPal password an almost insignificant threat.

In February 2007, PayPal introduced an optional security key system for users to access their PayPal accounts. The security key does not replace your PayPal password; instead, it adds an extra layer of security by requiring an additional security code be entered with your password when you log into your PayPal account. What makes this security code so different from a password is that it randomly generated by a small, electronic device called a *security token*, which is a [key fob](#) that easily fits in the palm of your hand.

The PayPal Security Key is used when a user logs into their PayPal account. The user presses the token's activation button, causing a 6-digit number to be displayed by the key for about 32 seconds. The user then enters this number with his or her PayPal account password to gain access to the PayPal account. Without both the account password and the number generated by a specific PayPal Security Key token, the PayPal account is useless.

The PayPal Security Key provides a form of [two-factor authentication](#). One factor is the PayPal account password (the *what you know*), and the second factor is the random number displayed on the PayPal security token (the *what you have*). The PayPal authentication server verifies that

number was generated by the token registered with that account; it is assumed that only the authorized account owner has physical access to the account's PayPal Security Key.

The security key device itself is a [VASCO Digipass GO 3](#) security token branded with the PayPal and [VeriSign Identity Protection](#) service logos. It is VeriSign that provides that actual security key authentication service for PayPal using the [VeriSign Labs OpenID \(PIP Personal Identity Provider\)](#) platform. In fact, the PayPal Security Key can be registered with the VeriSign Labs OpenID provider as a [VeriSign Identity Protection \(VIP\) Credential](#).

PayPal users do not need to understand how the security key's number works with their PayPal password to provide secure login authentication. However, if you are studying for any IT security certifications, you should familiarize yourself with all types of [security tokens](#), [cryptographic hashes](#), [single sign-on](#) methods, and [Public Key Infrastructure](#) systems for [identity management](#).

Giving it a try...

Being concerned with who might gain access to *my* PayPal account, I decided to order a PayPal Security Key for myself [on PayPal's Web site](#) and give it a try.

My key arrived five days after I ordered, sealed in a cardboard mailing envelope. It came with instructions on how to activate and use the key, and included the usage instruction on a handy, wallet-sized card as well. There was also a nicely laminated card with the PayPal Top 10 Safety Tips for password, phishing, and using your PayPal account wisely.

The security key cannot be used until it is activated with your PayPal account. I did this by navigating to [PayPal's Web site](#), clicking on the *Activate It* link, and securely logging into my PayPal account. On the next screen, I followed the instructions to verify that the serial number displayed on the Web page was the same as the one printed on the back of my key (you can enter the serial number if it is not present). I then pressed the button on the key and entered the code into the Web page. I then waited 30 seconds for the key's display to clear, pressed the button again, and entered the new code and clicked the activate button on the Web page.

After a few seconds, I was taken to the "PayPal Security Key Activation Successful!" page where presented were the simple instructions for logging on to PayPal using the token. After clicking the continue button, my Web browser navigated to my PayPal *My Account Profile* screen, where I clicked the *Activate on eBay* button. The same procedure is used to activate the token on eBay, although I did need to enter the token's serial number this time. On eBay, my *Account Personal Information* pages showed a successful activation and the last four digits of my security key's serial number.

Testing the PayPal Security Key is as easy as logging into your PayPal and eBay accounts. The initial login screen is the same, where you enter your email address and password. But the Log In button takes you to a second screen where you enter the number from your security token. It works! I celebrated by successfully making a PayPal donation to [my favorite podcasts network](#).

This is Great! What could go Wrong?

No form of authentication is fool-proof, and this includes the PayPal Security Key. Here are some issues that you should consider when determining if the PayPal Security Key is right for you:

You must have physical access to the token to login to your PayPal (or eBay) account. If you need to login and the key is not physically accessible to you, PayPal can assist with interactively logging into your account by supplying you a one-time password via email or SMS. The token number can also be safely read to you over the phone by someone who has physical access to the token without compromising your account.

The PayPal Security Key is only usable with PayPal and eBay. It is not possible to use PayPal's key with other services that use similar security tokens, such as [RSA Security's SecurID](#). If you are already carrying one or more security tokens that you use for logging into a online bank account or your company's VPN, plan on carrying the PayPal Security Key in your pocket too.

The PayPal Security Key is a battery-powered device, and the battery is not user-replaceable. When the battery dies, a replacement key fob will need to be ordered from PayPal. Because the key is only active for a few seconds each time you use it to login, it should have many years of battery-life.

If you lose or break your security key token, or the battery needs replacement, you will only be able to log into your PayPal account with direct assistance from PayPal until you receive and activate a replacement security key token.

PayPal will only issue one security key token for each PayPal account. You therefore cannot have one token for home and another for the office.

The security token's display is not back-lit. Although the light from the PayPal login screen on your Web browser may be bright, the numbers on the token's display may be difficult for visually-impaired users to read in a dark room.

Just as you are responsible for keeping your password secret, you are also responsible for keeping your PayPal Security Key token physically secure. If someone has both your password and access to your token then your PayPal account may be compromised

Finally, if you find that the PayPal Security Key does not fit into your life-style, you can deactivate it using the Profile tab on your PayPal *Account* page. Your PayPal account will then revert to using the original password-only login. You will need to revert your eBay account using a separate procedure.

<http://www.techexams.net/blogs/jdmurray/paypals-security-key/>