



Gateway Bulletin GB-2014-04

Advisory for Gateways: CFPB Opinion on Virtual Currency

September 11, 2014

The United States Consumer Finance Protection Bureau (CFPB) issued a [Consumer Advisory](#) in August 2014 around virtual currencies, which describes risks of which consumers should be aware when using or buying virtual currencies. The CFPB points out that while virtual currencies offer the potential for innovation, consumers should be aware of the risks.

The purpose of this bulletin is to provide information that may help you address the areas of concern raised by the CFPB as they relate to your users. We recommend that if you have a consumer interfacing business you review this advisory in consultation with legal counsel to determine whether you need to modify your terms of use, other areas of your website or make changes to products that you offer.

Account Security

The CFPB raised concerns about account security with respect to digital wallets. The Advisory states among other things: “If you use virtual currency, the data on your computer or phone can be an attractive target to hackers.”

The CFPB warns that virtual currencies such as XRP or Bitcoin can be targets for hackers. Virtual currencies are stored in a “digital wallet,” which is identified by a consumer’s “public keys” and accessed with “private keys”. (Private keys are random sequenced letters and numbers that should be kept secret; Public keys, or “public address”, are corresponding letter/number sequences that others can identify when sending or receiving funds.) Users can store their private keys themselves on their computer or entrust them to a service such as a wallet provider to protect them.

Gateways are highly encouraged to establish best practices for securing logins and passwords that their users can follow. At a minimum gateways may wish to encourage the following practices: (1) create strong passwords when opening a gateway account, (2) store username and password in a secure place, (3) not share their Ripple private keys or password with anyone, and (4) create unique passwords and not share them between their Ripple and gateway accounts.

Ripple Labs has recently enabled 2-Factor Authentication on the Ripple Trade Client which adds an extra layer of security to an account by requiring them to sign in with something they know (password) and something they have (a code sent to their phone), which could reduce the incidence of account fraud. We suggest gateways remind their users that this functionality is now available.

If a user turns *off* 2FA, they are vulnerable: attackers who log on to the Ripple Trade Client can attempt to guess a user's login and password. Anyone who can easily guess a user's password will be able to access the user's account and funds. Gateways should encourage users to create unique passwords and not share them between accounts. Hackers might buy passwords stolen from unencrypted databases and try those passwords on the Ripple Trade or gateway account. 2FA requires a second factor, so that a username/password combination aren't enough to access a user account. Similarly, in order to reset their passwords, Ripple users must have their private key.

Know Who You Are Dealing With

The CFPB advises consumers to know “Who you are dealing with if you decide to buy.”

The CFPB warns consumers that if they trust someone else to hold their virtual currencies and something goes wrong, that company may not offer them the kind of help they expect from a bank or credit card provider.

This is a reminder for gateways to be transparent about their terms of use and the protections they may provide its users. Suggested terms of use may include, as appropriate: (1) any fees charged to consumers, (2) gateway contact information and address, (3) gateway's dispute resolution process, (4) description of protection against unauthorized transactions, (5) efforts around privacy and security, (6) customer services, and (7) chargeback policy.

CFPB points out that U.S. gateways are required to register as money services businesses with FinCEN, which is part of the U.S. Treasury Department. Gateways should consult with their legal counsel to determine if and how FinCEN guidance may apply to them. Consumers can verify that a gateway has registered by checking www.fincen.gov/financial_institutions/msb/msbstateselector.html

Know the Cost of Exchanging or Holding Virtual Currency

The CFPB advises consumers to “Understand what the actual costs will be” of buying or holding virtual currency. “Virtual currencies can cost consumers much more to use than credit cards or even regular cash.”

The CFPB warns consumers about the costs associated with virtual currencies. Consumers should understand the exchange rate for the virtual currency that they are purchasing or using

and how it is determined. Gateways can help consumers understand these costs by disclosing them on their website.

Gateways may charge fees to hold or redeem virtual currency or a gateway issued balance. Gateways may also charge bank or other transaction fees if users want to transfer their virtual currency from a gateway account into fiat currency at a bank account. Gateways are encouraged to make these fees transparent when users open accounts at gateways.

Consumers who are interested in purchasing or exchanging XRP for fiat or other virtual currencies can know the real-time exchange rate which is currently represented in four different fiat currencies: USD, EUR, JPY, and CNY. To promote transparency, gateways can encourage their users to understand these exchange rates which can be found at ripplecharts.com. Users can also see the amount of XRP that they will receive when initiating an exchange between fiat currency and XRP on Rippletrade.com. Ripple makes it possible to exchange currencies at no extra charge.

Beware of Scams

The CFPB warns consumers that “Fraudsters are taking advantage of the hype surrounding virtual currencies to cheat people with fake opportunities.”

Gateways are encouraged to warn their users about misleading investment opportunities around virtual currencies. Gateways should notify their users to be cautious if they are approached by anyone advertising fake opportunities around virtual currencies, including get-rich-quick scams or ponzi schemes. While they may seem attractive, these “investment opportunities” may be intended to cheat consumers. Ripple Labs does not support these schemes nor is it tied to the organizations that promote them. The U.S. Securities and Exchange Commission has issued important warnings about virtual currency investment scams, which you can read at www.sec.gov/investor/alerts/ia_virtualcurrencies.pdf and www.sec.gov/oiea/investor-alerts-bulletins/investoralertsia_bitcoin.html. Gateways are encouraged to share this information with their users.

Ripple Labs recently became aware that certain companies in Japan were promoting get rich quick scams using Ripples. Ripple Labs posted a notice on the [Ripple Labs Japanese Forum](#) clarifying that Ripple Labs does not promote the sale of XRP to consumers for short term gains.

Price Fluctuations

The CFPB encourages consumers to “Be prepared to weather very large price fluctuations.”

Gateways that provide the service to purchase or sell virtual currencies are strongly encouraged to post information about potential price fluctuations. Virtual currencies can be subject to wide price fluctuations which means that short term losses as well as short term gains are likely to

occur at times. Gateways and consumers are encouraged to understand the current market price of XRP which is available on ripplecharts.com.

Additional Resources:

[CFPB Consumer Advisory on Virtual Currency, August 2014](#)

[Ripple Protocol Primer](#)

[Compliance Resources for Gateways on the Ripple Wiki](#)

SEC Warning on Virtual Currency Investment Scams, [May 7, 2013](#) and [May 7, 2014](#)

[Check if a Gateway is Registered as an MSB](#)