First Friday Fraud Facts+

April 3, 2015

The Idaho State Controller's Office distributes this newsletter as a cost-effective method of increasing awareness about ways to detect and prevent fraud, waste, and abuse in government.

Welcome to First Friday Fraud Facts+ (F4+). This edition will discuss bitcoin and other virtual currencies.

Virtual currency is a digital representation of value; however, it is not legal tender. Virtual currency can be digitally traded between users, exchanged for other virtual currency forms, and used in a variety of online forms. Virtual currency can also be purchased or exchanged into U.S. dollars and other foreign currencies (and vice versa) through bitcoin exchanges.[1]

Bitcoin

Bitcoin is a virtual currency created in 2009 by an unknown person under the alias Satoshi Nakamoto. Transactions do not involve any middle men (e.g., banks, credit card processors). In addition, transaction fees are not charged and a person's real name is not required. Bitcoins can be used to make international payments, buy merchandise, or purchase as an investment, hoping their value increases.

Bitcoins are stored in a 'digital wallet', which can exist on a user's computer or in the cloud. While a 'digital wallet' is essentially a virtual bank account, bitcoin digital wallets are not insured by the FDIC.[2]

Bitcoin virtual currency is basically a massive public ledger with a long list of transactions, replicated across a network of thousands of computers.[3]

Bitcoin Mining

Bitcoins are earned by successfully 'mining' or solving time-consuming and complex mathematical computer puzzles before other 'miners'. The puzzles are designed to be hard to solve (taking an average of 10 minutes), but easy to check. The first computer to solve the puzzle tells the network and wins ownership of 25 new bitcoins.

Questions or Comments:

Chris Floyd, CPA
Financial Specialist
P.O. Box 83720
Boise, ID 83720-0011

Phone: (208) 332-8814
Fax: (208) 334-3415
E-mail: cfloyd@sco.idaho.gov

Inside this issue:

Welcome	1
Bitcoin	1
Bitcoin Mining	1
Other Virtual Currency	2
Fraud Case	2
Announcements	3

In order to stay competitive, an arms race has developed between miners to find and use the fastest computers possible. The race has evolved to the point that successful mining now requires the use of computers built from specially-designed bitcoin chips. An ordinary personal computer (PC) can no longer keep up with the speed needed to solve a puzzle before other miners. Consequently, an ever-increasing number of PC miners are quitting the competition. PC miners have to balance the high costs of electricity used for mining and the value of the bitcoins earned (if any).[3]

Other Virtual Currency

While bitcoin is the most prevalent type of virtual currency, other types of virtual currency have been created, including:

- Litecoin
- Peercoin
- Freicoin
- Ripple
- Linden Dollar

Several of these virtual currencies are offshoots of bitcoin, as users have tried to fix inefficiencies in the bitcoin code, and are referred to as altcoins.[4]

Fraud Case

Bitcoin has been used in a range of financial crimes, including theft, price manipulation, sale of illicit goods, money laundering, and even Ponzi schemes. This fraud case involves a Texas man accused of combining financial fraud and cyber fraud into a bitcoin Ponzi scheme.

In November 2014 the federal government announced its first bitcoin securities fraud case. Prosecutors claim that from September 2011 through September 2012 the defendant convinced 100 investors to turn over their bitcoins with the promise of up to 7 percent weekly interest earned on the investments and the ability to recoup their investment at any time. Roughly half of these investors lost part or all of their bitcoin investments. At the peak of the scheme, the defendant possessed about 7 percent of all bitcoin in public circulation.

The defendant has been released on bail and faces up to 40 years in prison if convicted of the securities fraud and wire fraud charges.

In a related civil case, the defendant has already been ordered by a federal court in Texas to relinquish more than $40 million and pay a $150,000 penalty.[5]

[1] What is virtual currency? http://www.irs.gov/pub/irs-utl/OC-WhatisVirtualCurrencyFINAL.pdf. Accessed February 10, 2015.
[2] What is Bitcoin? http://money.cnn.com/infographic/technology/what-is-bitcoin/ Accessed February 11, 2015.
[3] What is bitcoin and how does it work? http://moneyweek.com/bitcoin/ Accessed February 10, 2015.
[4] Five virtual currencies other than bitcoin. http://www.marketwatch.com/story/five-virtual-currencies-other-than-bitcoin-2013-11-18. Accessed February 10, 2015.
[5] Somebody Ran a $40 million Bitcoin Ponzi Scheme. http://www.inc.com/associated-press/us-announces-first-bitcoin-securities-fraud-case.html. Accessed February 13, 2015.

ANNOUNCEMENTS

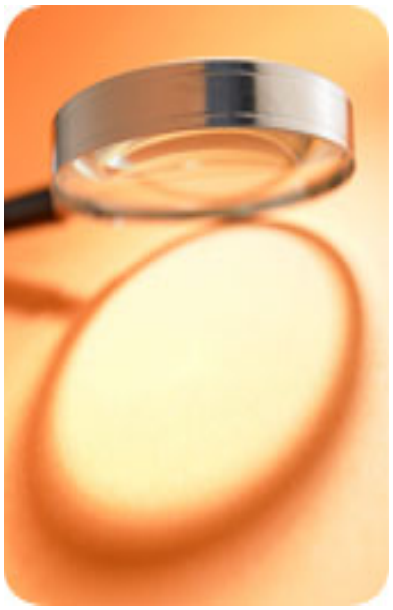
Annual Internal Control Training held at the State Controller's Office:

a) Tuesday, April 14, 2015, from 10:00 a.m. — 12:00 p.m.

OR

b) Wednesday, April 15, 2015, from 8:00 a.m. — 10:00 a.m.

Learn why internal controls are important to your organization and who is responsible for ensuring they are practiced. The training will cover the objectives of internal controls, including the COSO's 17 principles, and a round table style discussion, which will provide participants an opportunity to share their internal control concerns, insights, and receive feedback.

CPE: 2 Free

Registration details coming soon.