Timekoin Server Setup

Timekoin is an open source peer to peer based crypto-currency system. As such, it relies on a combination of its own database and the database of other peers to maintain one large public register. Because this public register can be seen by anyone, the only way to make sure that one peer doesn't tamper with the balance of another peer is to use key based encryption.

A peer has two keys. One to create transactions and another to unlock what is inside the transaction. When a transaction is created, the key to unlock it is also passed along with the transaction data. This allows anyone to look inside the data to verify the contents, but prevents anyone from trying to masquerade as that peer and create a transaction that is fake or changed. Any attempts to alter the transaction data will fail because the key provided with it will no longer work.

Timekoin uses 1,536 bit encryption keys to create the transactions and SHA256 hashing both inside and outside the transaction to provide multiple layers of anti-tampering protection wrapped in each other. Trying to tamper with any of the 3 points results in the collapse of the entire transaction data.

This walk-through details a typical installation of the software on a Microsoft Windows 7 system. Other versions of Windows should be nearly identical for the setup (2000, XP, Vista, etc)

Start by downloading the latest server version for Windows from http://timekoin.net/

Once the download is complete, move or copy the file to the location where you want to run the software from. For this document, the download was copied to the desktop.

1. Double-click the exe file to bring up the extraction location window. Click "Extract" to get the process started, this will extract all program files and data contained inside.
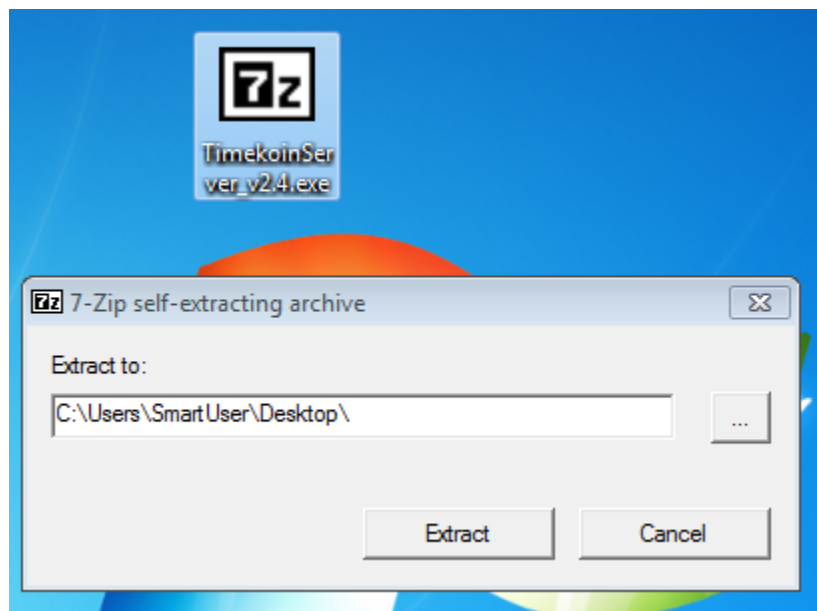
2. With the extraction complete, you will have one folder labeled as "**Timekoin Server**". Inside this folder is all the programs & data necessary to run the server software.

3. Open the new folder and search for, "**timekoin.exe**" file. Double-click this file to launch the server program.
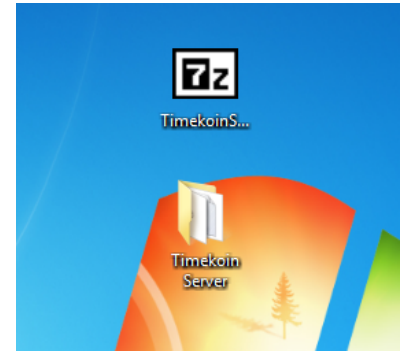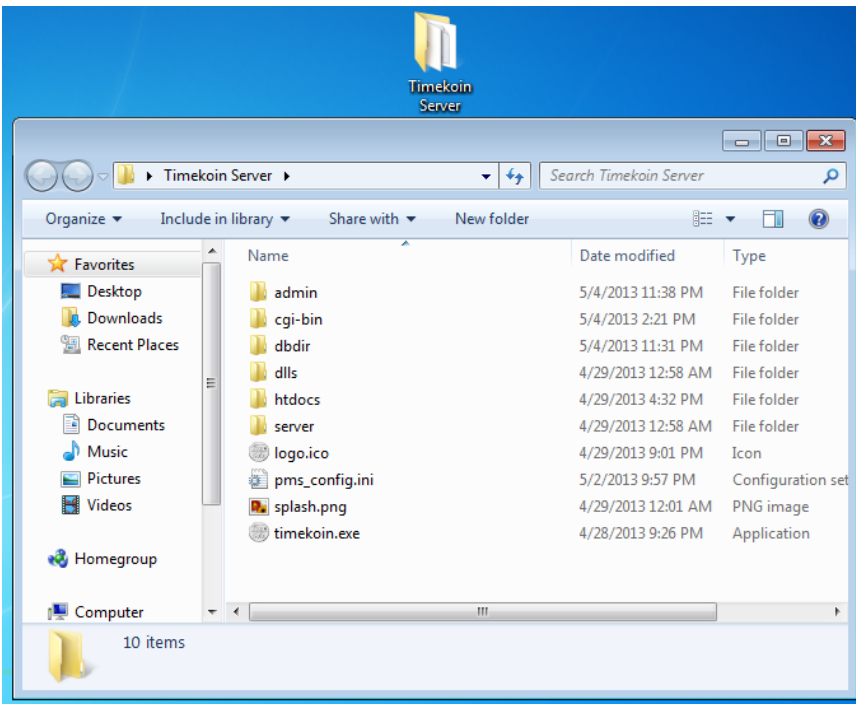

4. When starting for the first time, expect to see some Windows firewall warnings asking to give the program permission to function as a server. Be sure to enable this access for the software to fully function as a server.
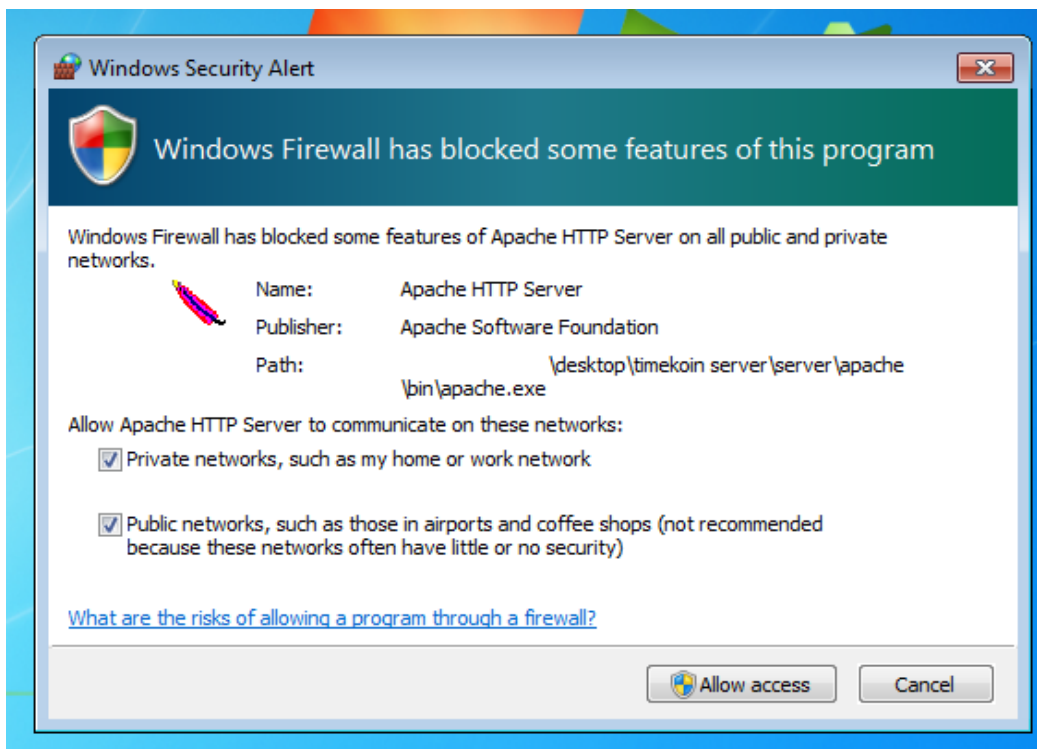
5. With the application started, you will notice a system tray icon with the Timekoin logo to show that all the background applications are running.

6. Timekoin will launch a browser window to allow you to login to the system. The default username and password is "timekoin" using password "12345", after entering in the information, click Login to continue.
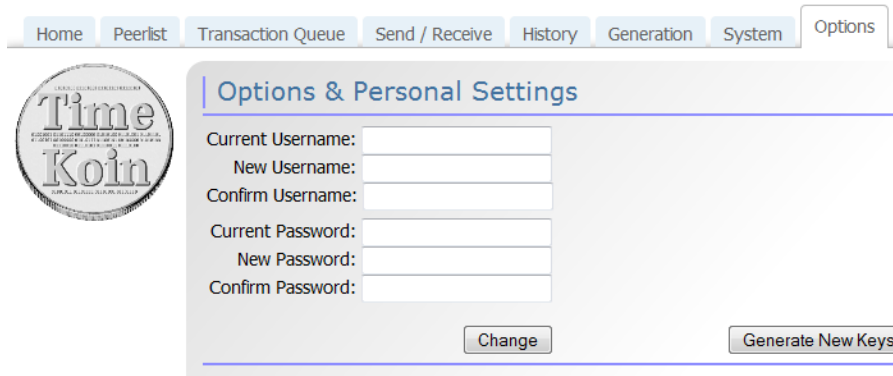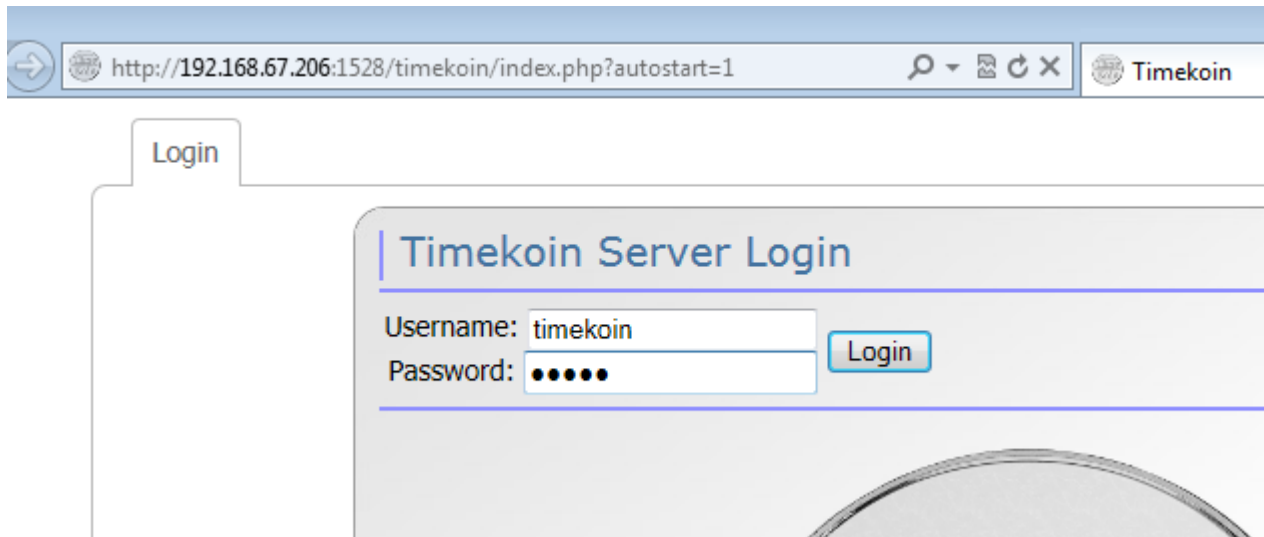
7. After initial login, you will see the status screen. To start Timekoin, click on the "**System**" tab where you will find the "**START Timekoin**" button. Once you click this button Timekoin will load all process and connect out to the network peers to begin updating the transaction history. You can see the status of this in either the "**Home**" tab or "**Peerlist**" tab.
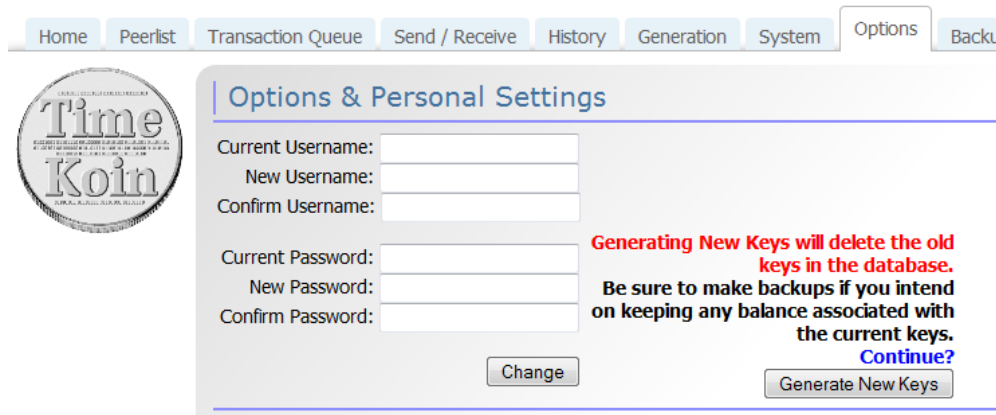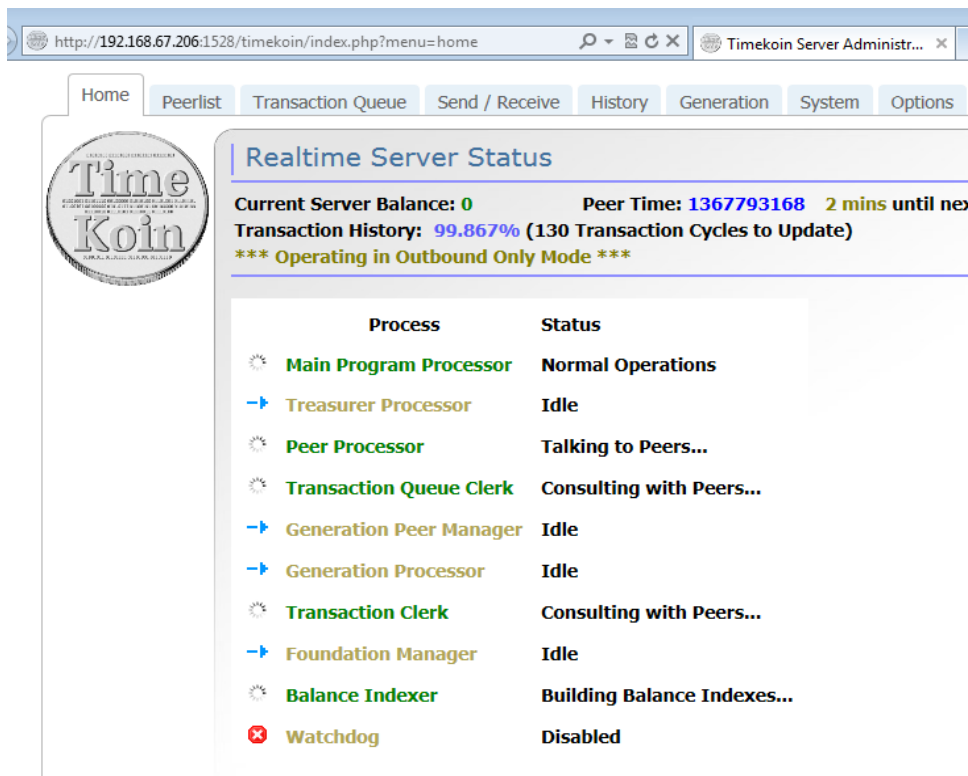
Secure Your Server with a Password

8. Next, secure your server by changing your username and password. You shouldn't leave it at the default as it's a security risk that others might be able to get into your Timekoin server.
9. You can do this in the "Options" tab of Timekoin.

10. Logout / Login with the new username and password to make sure they both work properly.

Install New Encryption Keys for Server

1. In the "Options" tab, find the button to "Generate New Keys", click this once to get the warning message, then click it twice to generate a new key pair.
2. You should get a "New Private & Public Key Pair Generated!" success message in blue at the bottom.

3. You are now up and running. It will take a some time for your system to get in sync with all the peers and update the transaction history in the database when starting new. Have patience.
4. **You are finished installing and setting up the Timekoin Server software.**
5. This document only covers how to install the Timekoin Server for Windows, more detailed information on the operation of the software can be found at http://timekoin.net/