

FreeBSD Administration - Support #893

Install CoiniumServ on FreeBSD

04/25/2017 10:17 PM - Daniel Curtis

Status:	Suspended	Start date:	04/25/2017
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	70%
Category:	Cryptocurrency	Estimated time:	1.50 hour
Target version:	FreeBSD 10	Spent time:	3.50 hours

Description

This is a guide for setting up CoiniumServ on FreeBSD 10.

Prepare the Environment

- Make sure the system is up to date:

```
pkg update && pkg upgrade
```

- Create a coinium user:

```
pw add user -n coinium -s /bin/sh -c "CoiniumServ"
```

- Install a few dependencies:

```
pkg install bash git mono
```

- Install the bitcoin daemon, refer to issue [#889](#)

Install Redis

- Install redis:

```
pkg install redis
```

- Start and enable redis at boot:

```
echo 'redis_enable="YES"' >> /etc/rc.conf  
service redis start
```

Install MariaDB

- Start by installing the mariadb100-server and mariadb100-client packages:

```
pkg install mariadb100-{server,client}
```

- Copy a base MySQL configuration to use:

```
cp /usr/local/share/mysql/my-small.cnf /var/db/mysql/my.cnf
```

- Enable and start mysql at boot:

```
echo 'mysql_enable="YES"' >> /etc/rc.conf
service mysql-server start
```

- Prepare the database for use by running the secure installation:
NOTE: Choose a strong root password and answer yes to all questions.

```
mysql_secure_installation
```

Create Databases and Users

- Login to MySQL and create appropriate databases and users.

```
mysql -u root -p
```

- And run the following SQL queries to create the coiniumdb database and coiniumuser user:

```
CREATE DATABASE coiniumdb CHARACTER SET utf8;

CREATE USER 'coiniumuser'@'localhost' IDENTIFIED BY 'SuperSecretPassword';

GRANT ALL PRIVILEGES ON coiniumdb.* TO 'coiniumuser'@'localhost';

FLUSH PRIVILEGES;

quit
```

Install CoiniumServ

- Download the latest CoiniumServ from GitHub:

```
git clone https://github.com/bonesoul/CoiniumServ.git /usr/local/CoiniumServ
cd /usr/local/CoiniumServ
git submodule init
git submodule update
```

- Compile the sources:

```
cd build/release
bash build.sh
```

Configure CoiniumServ

- Switch to the CoiniumServ config directory:

```
cd /usr/local/CoiniumServ/bin/Release/config
```

- Create a main config file from the example:

```
cp config-example.json config-example.json
```

- Edit the main config file:

```
vi config.json
```

- And modify accordingly:

```
{
  "stack": {
    "name": "pool.example.com",
    "nodes": [
      {
        "location": "us",
        "address": "pool.example.com",
        "default": true
      }
    ]
  },
  "statistics": {
    "updateInterval": 60,
    "hashrateWindow": 300
  },
  "website": {
    "enabled": true,
    "bind": "",
    "port": 8000,
    "template": "default",
    "feed": "",
    "backend": {
      "metrics": {
        "enabled": false
      }
    }
  },
  "logging": {
    "root": "logs",
    "targets": [
      {
        "enabled": true,
        "type": "file",
        "filename": "server.log",
        "rolling": false,
        "level": "information"
      },
      {
        "enabled": true,
        "type": "file",
        "filename": "debug.log",
        "rolling": false,
        "level": "verbose"
      },
      {
        "enabled": false,
        "type": "packet",
        "filename": "packet.log",
        "rolling": false,
        "level": "verbose"
      }
    ]
  }
}
```

- Create a market config file from the example:

```
cp markets-example.json markets.json
```

- Create a software config file from the example:

```
cp software-example.json software.json
```

- Create a default per-pool config file:

```
cp pools/default-example.json pools/default.json
```

- Edit the default per-pool config:

```
vi pools/default.json
```

- And modify the config accordingly:

```
{
  "daemon": {
    "host": "127.0.0.1",
    "timeout": 5
  },
  "meta": {
    "motd": "Welcome to CoiniumServ pool, enjoy your stay! - http://pool.example.com",
    "txMessage": "http://pool.example.com/"
  },
  "payments": {
    "enabled": true,
    "interval": 60,
    "minimum": 0.01
  },
  "miner": {
    "validateUsername": true,
    "timeout": 300
  },
  "job": {
    "blockRefreshInterval": 1000,
    "rebroadcastTimeout": 55
  },
  "stratum": {
    "enabled": true,
    "bind": "0.0.0.0",
    "diff": 16,
    "vardiff": {
      "enabled": true,
      "minDiff": 8,
      "maxDiff": 512,
      "targetTime": 15,
      "retargetTime": 90,
      "variancePercent": 30
    }
  },
  "banning": {
    "enabled": true,
    "duration": 600,
    "invalidPercent": 50,
    "checkThreshold": 100,
    "purgeInterval": 300
  },
  "storage": {
    "hybrid": {
```

```

    "enabled": true,
    "redis": {
      "host": "127.0.0.1",
      "port": 6379,
      "password": "",
      "databaseId": 0
    },
    "mysql": {
      "host": "127.0.0.1",
      "port": 3306,
      "user": "coiniumuser",
      "password": "SuperSecretPassword"
    }
  },
  "mpos": {
    "enabled": false,
    "mysql": {
      "host": "127.0.0.1",
      "port": 3306,
      "user": "username",
      "password": "password"
    }
  }
}
}
}

```

- Create a bitcoin pool config:

```

mv pools/pool.json pools/bitcoin.json
vi pools/bitcoin.json

```

- And add the following:

NOTE: Make sure to set the **daemon port**, **username** and **password** to the match the bitcoin daemon from [#889](#)

```

{
  "enabled": true,
  "coin": "bitcoin.json",
  "daemon": {
    "port": 2300,
    "username": "bitcoinrpc",
    "password": "SuperSecretPassword"
  },
  "wallet": {
    "address": "15gFDeS8zsb48xc7pQWrMSDEAC2qDjq9Cn"
  },
  "rewards": [
    {
      "15gFDeS8zsb48xc7pQWrMSDEAC2qDjq9Cn": 1
    }
  ],
  "stratum": {
    "port": 3333
  },
  "storage": {
    "hybrid": {
      "mysql": {
        "database": "coiniumdb"
      }
    }
  }
}

```

- Test running the server:

```
mono /usr/local/CoiniumServ/bin/Release/CoiniumServ.exe
```

Resources

- <https://github.com/bonesoul/CoiniumServ>
- <https://github.com/bonesoul/CoiniumServ/wiki/Getting-Started:-Linux>
- <https://github.com/bonesoul/CoiniumServ/wiki/Configuration>

History

#1 - 04/25/2017 10:19 PM - Daniel Curtis

- Status changed from *New* to *Resolved*

- % Done changed from 0 to 30

#2 - 04/26/2017 11:33 PM - Daniel Curtis

- Description updated

- Status changed from *Resolved* to *In Progress*

- % Done changed from 30 to 60

#3 - 04/27/2017 10:22 PM - Daniel Curtis

- Description updated

- % Done changed from 60 to 70

#4 - 03/19/2018 09:06 PM - Daniel Curtis

- Status changed from *In Progress* to *Suspended*