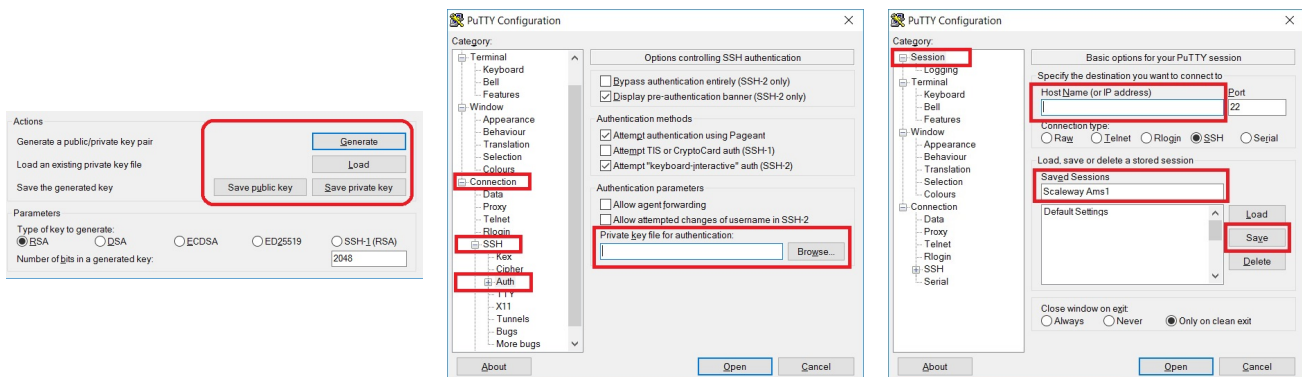


Assumptions:

- You already have a HEAT account id. If not, generate one at heatwallet.com
- You are normally using a Windows computer, but not able to keep it running 24hr a day.
- You would like to set up a VPS (Virtual Private Server) to host a HEAT node.

Step 1: Download putty and puttygen

- Download from: <http://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>
- Generate a pair of public/private keys with puttygen (SSH-2 RSA). Save public and private keys.
- Start putty and go to: Connection - SSH - Auth and Browse for your private ppk file.
- See also: <https://www.scaleway.com/docs/configure-new-ssh-key>



Step 2: Create an account on www.scaleway.com

- This guide is for scaleway, but other hosting services are similar.
- Sign up for a new account using your email address and a password.
- Register your public key on the website and generate a new server.
- Select server VC1S, location Paris or Amsterdam, Ubuntu Xenial. You get a public IP address.
- In putty (above, right), click on Session. Enter the public IP. Save Session settings for later use.

Step 3: Log in and set up software

- Log in with username root and password created in puttygen (Step 1).
- Type: `sudo apt-get update` followed by `sudo apt-get upgrade`
- Install Java: `sudo apt-get install default-jdk`
- Install unzip: `sudo apt-get install unzip`
- Check latest version here: <https://github.com/Heat-Ledger-Ltd/heatledger/releases>
- Note that to participate in the lottery, your node must use the latest version.
- Type: `wget https://github.com/Heat-Ledger-Ltd/heatledger/releases/download/v1.0.1/heatledger-1.0.1.zip` (obviously version number changes depending on current version)
- Copy (CTRL+C) the URL in Windows and click on mouse right button to paste into putty console.
- Type: `unzip heatledger-1.0.1.zip` followed by `cd heatledger-1.0.1`

Step 4: Generate hallmark

- Go to: <https://heatwallet.com/api/#!/Tools/encode>
- In the host field, type in your public IP address.
- In the secretPhrase field, type in the secret phrase for your HEAT account.
- Leave the weight and date fields as they are. Click on the 'Try It Out' button.
- Copy the hallmark from the 'Response Body' without the quotes "
- Alternatively, if you have already set up a HEAT node, you can generate the hallmark locally:
- `curl -k -s http://localhost:7733/api/v1/tools/hallmark/encode/ip-address/200/2016-01-01/secret`
- All white spaces in the secret above should be replaced by the characters %20
- For example, the phrase: "hello to this world" becomes "hello%20to%20this%20world"

Step 5: File heat/conf.properties

- Start text editor, type: `pico conf/heat.properties`
- Enter/copy in (right mouse button) the following information:
- `heat.apiKey=something` (Change this!)
- `heat.myAddress=Public IP address from step 2`
- `heat.myPlatform=Your HEAT account ID from Assumptions`
- `heat.maxNumberOfConnectedPublicPeers=500`
- `heat.myHallmark=Your Hallmark from step 4`
- Press CTRL+O ENTER to save and CTRL+X to exit the pico editor.
- Type: `cat conf/heat.properties` to double-check the contents.

Step 6: Run heatledger in detached screen

- To start the node, type: `screen -mS heatledger bin/heatledger`
- Press CTRL+A followed by D to detach from the screen. `screen -r` to return to the screen.
- When you are detached from the screen, type `logout` to logout from your node.
- Log back in and type `screen -r` to check that your node is running.
- Congratulations, you are done and now participating in the lucky node lottery.
- After some time, double-check that your node appears here: <https://heatwallet.com/nodes.cgi>
- After maximum 30 minutes, your node should appear in the map at www.heatnodes.org
- If, at some stage, you would like to stop your node, type: `screen -r` followed by CTRL+C

Step 7: Forging (optional)

- Forging is not required to participate in the lottery, but will earn you additional POS rewards.
- Check the current block height at <https://heatwallet.com/#/explorer>
- Attach with `screen -r` and check that your node has synced to the current block height.
- When in sync, detach with CTRL+A D, then type:
- `read -s KEY ; curl -k -s "http://localhost:7733/api/v1/mining/start/${KEY// /%20}?api_key=A" ; unset KEY`
- where A is replaced with your API key. Type or paste in your secret phrase and press ENTER.
- If forging is started, you should get a message like: `"deadline":135,"hitTime":107032000`
- After some time, check that your forging node appears here: <https://heatbrowser.com/report.html>
- Note that it takes 1440 blocks (10 hours) before a new balance is available for forging.

Thank you for running a node and forging. Both are important to strengthen and secure the HEAT blockchain. If you appreciate these instructions and would like to support the lottery, send a donation to account: 3783387583602366138 owned by the user lurker10.



HEAT

www.heatnodes.org