

# PlebNet

A self-replicating botnet  
for privacy protection

Final presentation

04-07-2018

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W. Nguyen  
H. van Velton  
V. Wigmore





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# Outline



- Introduction to Tribler, Clouddomate & PlebNet
- The project
- Development
- Demo
- Conclusion

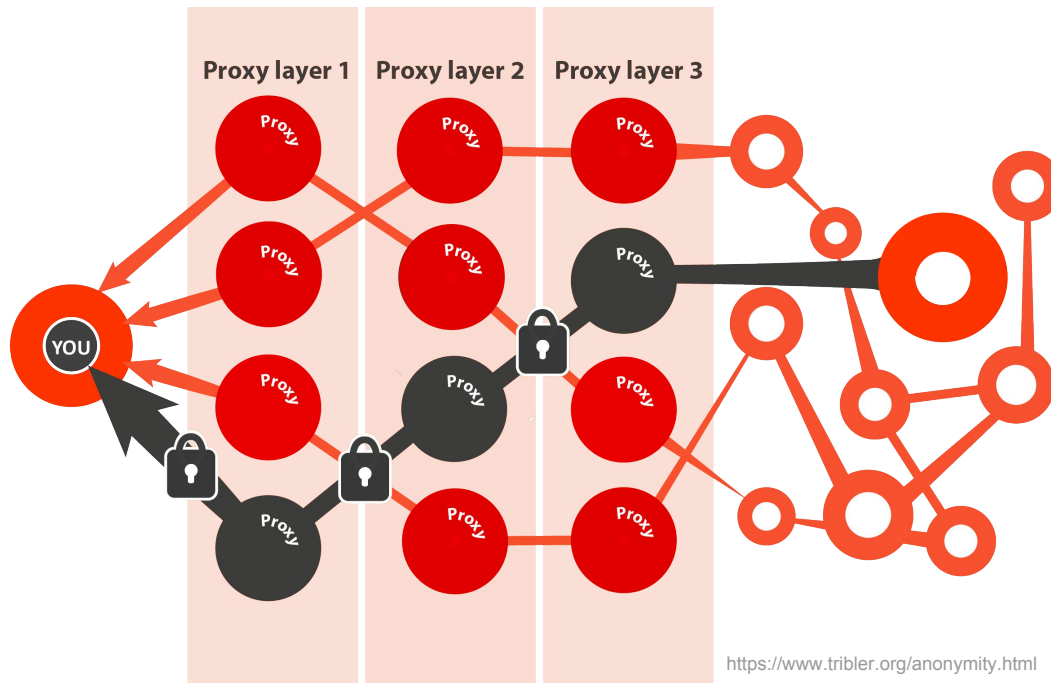
# Background



# Tribler



Peer to peer filesharing software



# Clouddomate



- Automatically acquire Virtual Private Servers (VPS) and Networks (VPN)



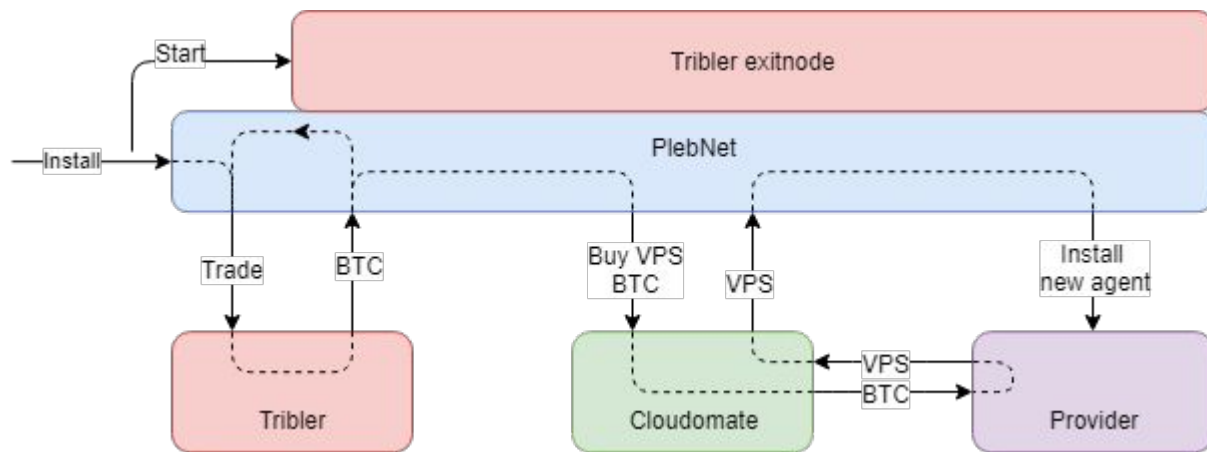


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# PlebNet



# The project



# Requirements



## Must have:

- Fully operational
- Monitoring

## Should have:

- Documentation and increased maintainability
- VPN functionalities

# Developments



# VPN protection



Why do we need VPN protection?

AzureVPN

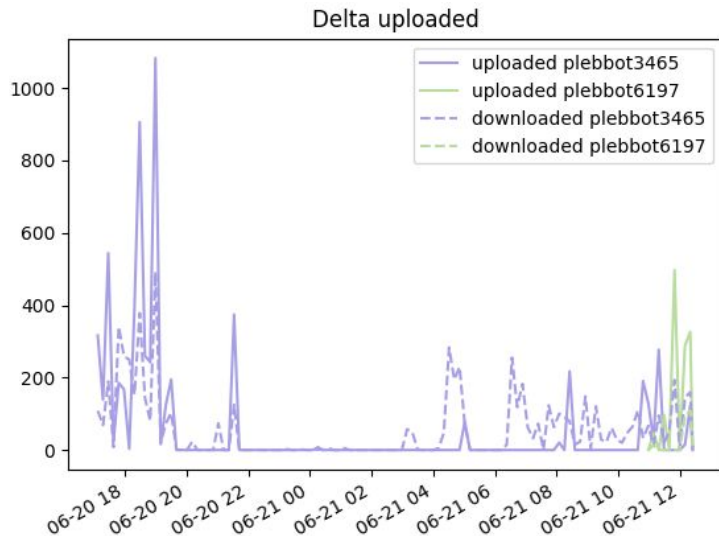
Installing VPN protection on Virtual Private Servers



# Monitoring



## IRC communication:



```
[14:01:05] trackerbot !MB_balance
[14:01:05] plebbot6525 My MB balance is: 570702
[14:01:05] plebbot6197 My MB balance is: 16655
[14:01:06] plebbot5600 My MB balance is: 5481
[14:01:07] trackerbot !BTC_balance
[14:01:07] plebbot6525 My BTC balance is: No BTC wallet found
[14:01:07] plebbot6197 My BTC balance is: 0.0
[14:01:08] plebbot5600 My BTC balance is: 0.0
[14:01:09] trackerbot !TBTC_balance
[14:01:09] plebbot6197 My TBTC balance is: No TBTC wallet found
[14:01:09] plebbot6525 My TBTC balance is: 1.38541867
[14:01:09] plebbot5600 My TBTC balance is: No TBTC wallet found
[14:01:12] trackerbot !matchmakers
[14:01:12] plebbot6525 I currently have: 197 matchmakers
[14:01:12] plebbot6197 I currently have: 59 matchmakers
[14:01:12] plebbot5600 I currently have: 81 matchmakers
[14:01:14] trackerbot !uploaded
[14:01:14] plebbot6525 I currently have uploaded: 754221.200048 MB
[14:01:14] plebbot6197 I currently have uploaded: 23793.2268667 MB
[14:01:14] plebbot5600 I currently have uploaded: 6450.29213715 MB
[14:01:15] trackerbot !downloaded
```



## Error registration:

- automated issues
- including log files

plebbot commented 28 days ago

An error occurred at a plebbot agent

The plebnet nick is *plebbot5251*

The track back of the error:

```
Traceback (most recent call last):
  File "/root/PlebNet/plebnet/communication/irc/ircbot.py", line 103, in keep_running
    self.handle_line(line)
  File "/root/PlebNet/plebnet/communication/irc/ircbot.py", line 161, in handle_line
    self.responses[words[3]]()
  File "/root/PlebNet/plebnet/communication/irc/ircbot.py", line 188, in msg_error
    self.send_msg("I create an error : %s" % plebnet_settings.get_instance().error())
AttributeError: 'Init' object has no attribute 'error'
```

The log file can be found [here](#)

More details regarding this post can be found [here](#)

Good luck fixing this!

# Quality Control



Maintainability

Unit testing

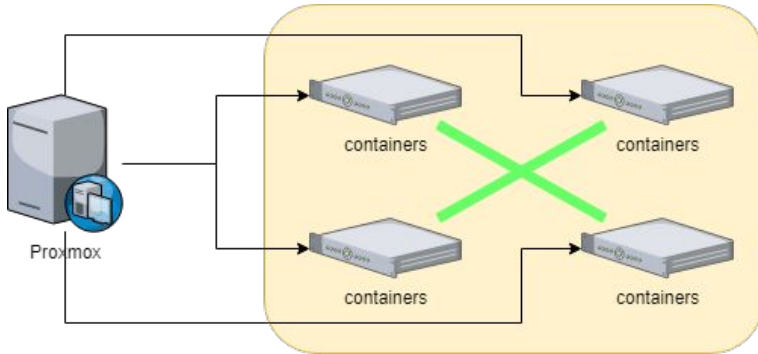
End-to-End testing with Proxmox



# Quality Control



## Proxmox



The screenshot shows the ProxHost Manage web interface. The browser address bar displays `codesalad.nl:5000/manage`. The page title is "ProxHost Manage". The interface displays a table of VM details for two different VMs. The first VM has a status of "online" and a "destroy" button. The second VM also has a status of "online" and a "destroy" button. The table includes columns for status, vmid, name, order\_time, ip, username, note, expiration, distro, and root\_password.

status	online	destroy	online	destroy
vmid	101		110	
name	proxhost-ubuntu-101		proxhost-ubuntu-110	
order_time	18-06-01 12:30:37		18-06-01 09:02:48	
ip	20.10.0.101		20.10.0.110	
username	demo		fox	
note	turned everything off, but keep for data	Add Note		Add Note
expiration	2018-07-01		2018-07-01	
distro	ubuntu		ubuntu	
root_password	plebnet		plebnet	

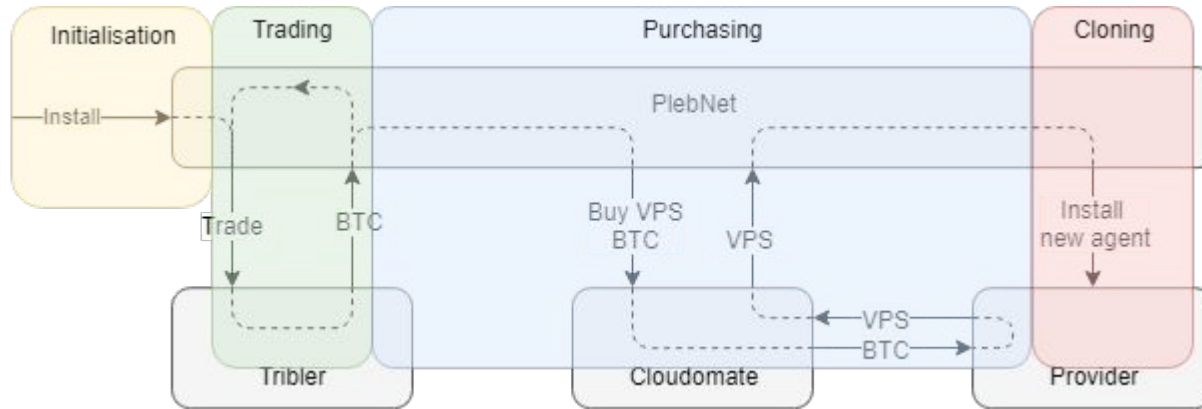
# Improvements Clouddomate



Old providers: Linevast, ~~BlueAngelHost~~, ~~GC Hosting~~, ~~CrownCloud~~,  
~~PulseServer~~, ~~UndergroundPrivate~~

Current: Linevast, BlueAngelHost, UndergroundPrivate, 2Sync

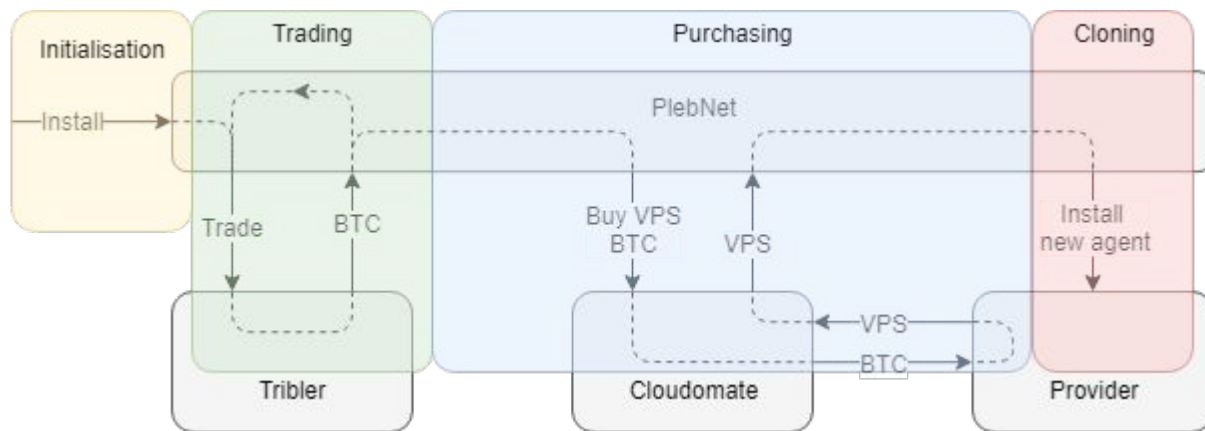
# Fully operational system



Demo



# DEMO



# Conclusions



# Conclusions



Must haves:

- ✓ Fully operational
- ✓ Monitoring

Should haves:

- ✓ Documentation and increased maintainability
- ✓ VPN functionalities

# Recommendations



- Stability of PlebNet depends on Clouddomate
- Implement advanced genetic algorithms for the agent
- Not always picking cheapest server



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