New Me:
Understanding Expert and Non-expert Perceptions and Usage of the Tor Anonymity Network

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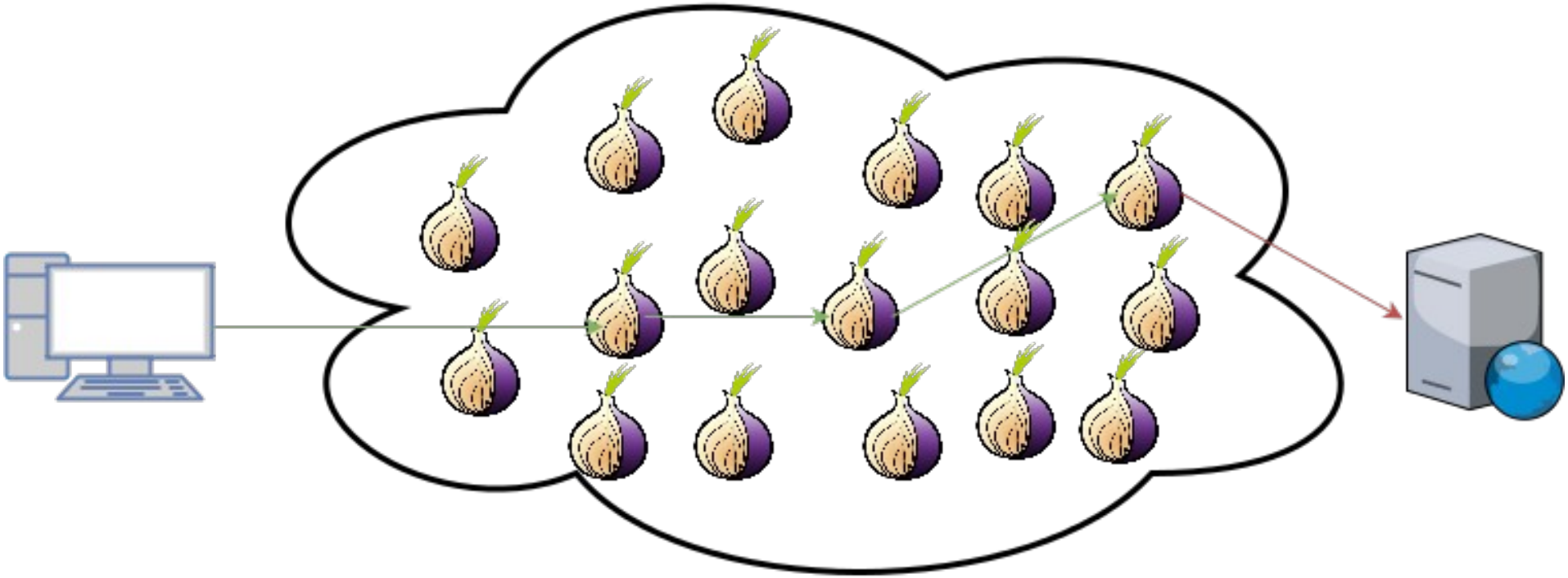
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Tor is a decentralized anonymity network.



= Tor Node

Little is known about Tor users.



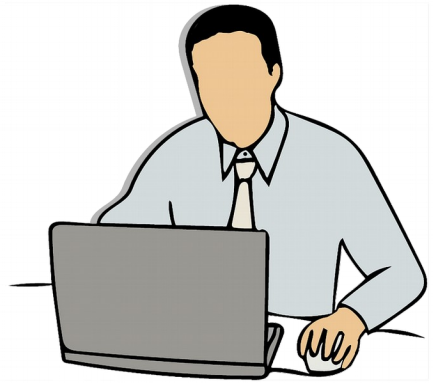
We utilized multiple recruitment strategies.

*

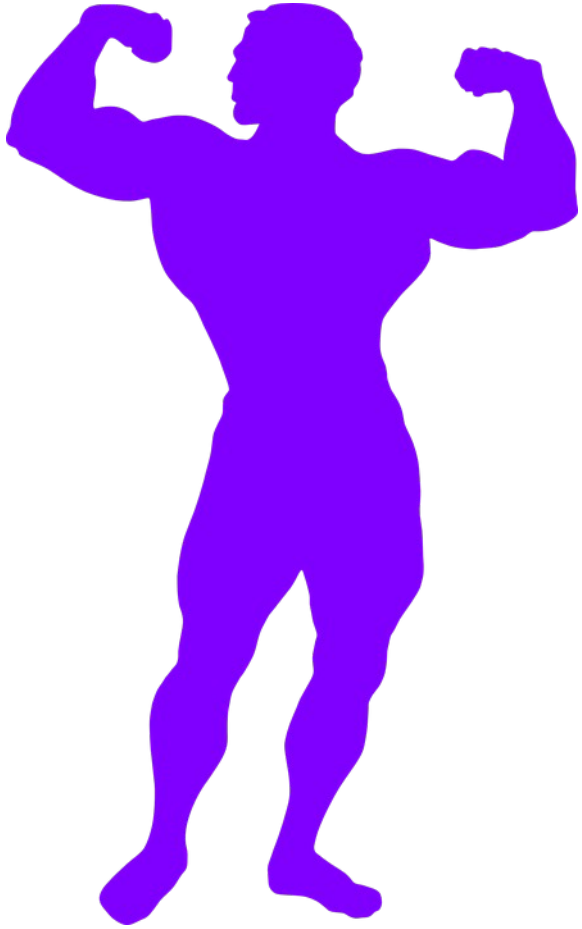


* Reddit was also used, but did not allow us to use their logo.

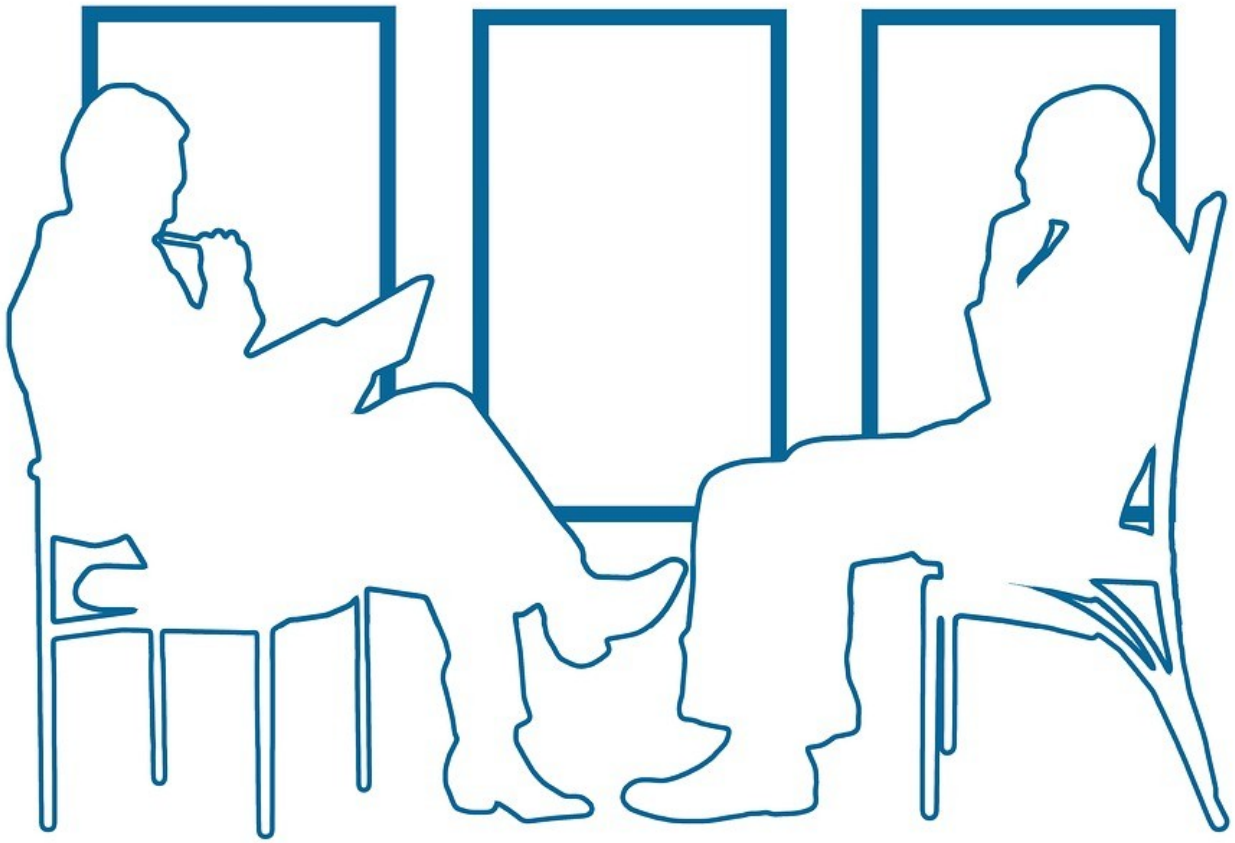
We recruited participants from all walks of life.







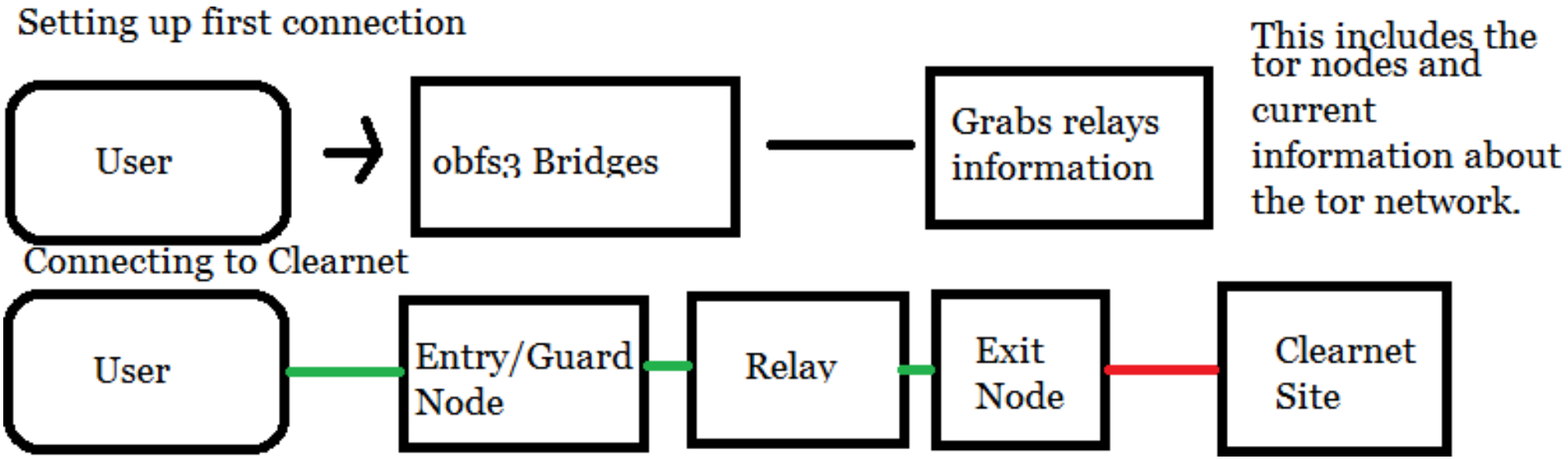
Participants took part in an interview.



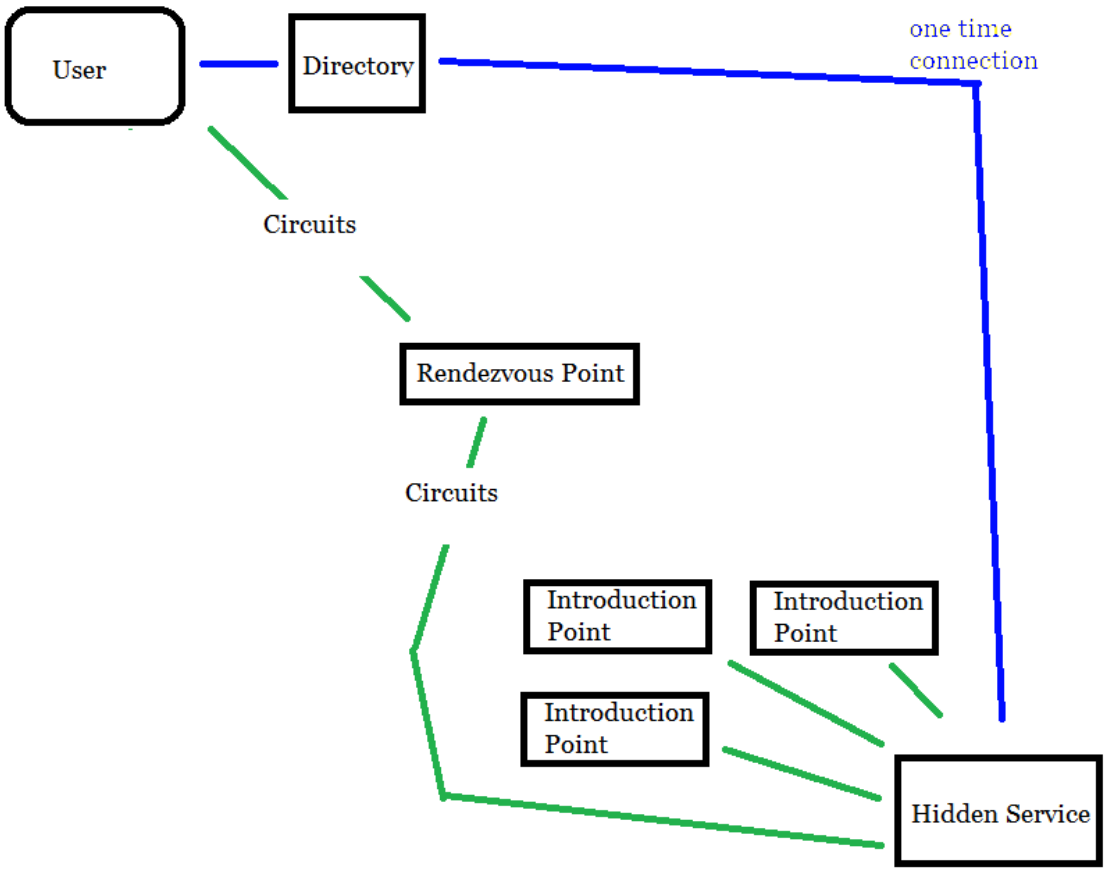
There is not enough time to cover all findings.

Category	Expert	Non-Expert
Mental Model	Complex network	On-demand service
Threat Model	Multiple threats	Specific (single) threat
Frequency of Use	Frequent	Mostly for specific uses
Discovery	Varied	Mostly through news
Morality of Tor	Good, positive	Varied, mostly positive

Experts treat Tor as a Complex Network.



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“When I started off I understood [Tor] pretty crudely as just kind of a way to get past state firewalls and to hide your identity from Web sites you are visiting. As I continued to use it, it’s really good for NAT [Network Address Translation] traversal for example. Like, if you want to host a Web site from your home address and you’re behind NAT, a Tor hidden service is a great way to give you that kind of access.”

(P8, Expert, Male)

Experts understood the threat model.

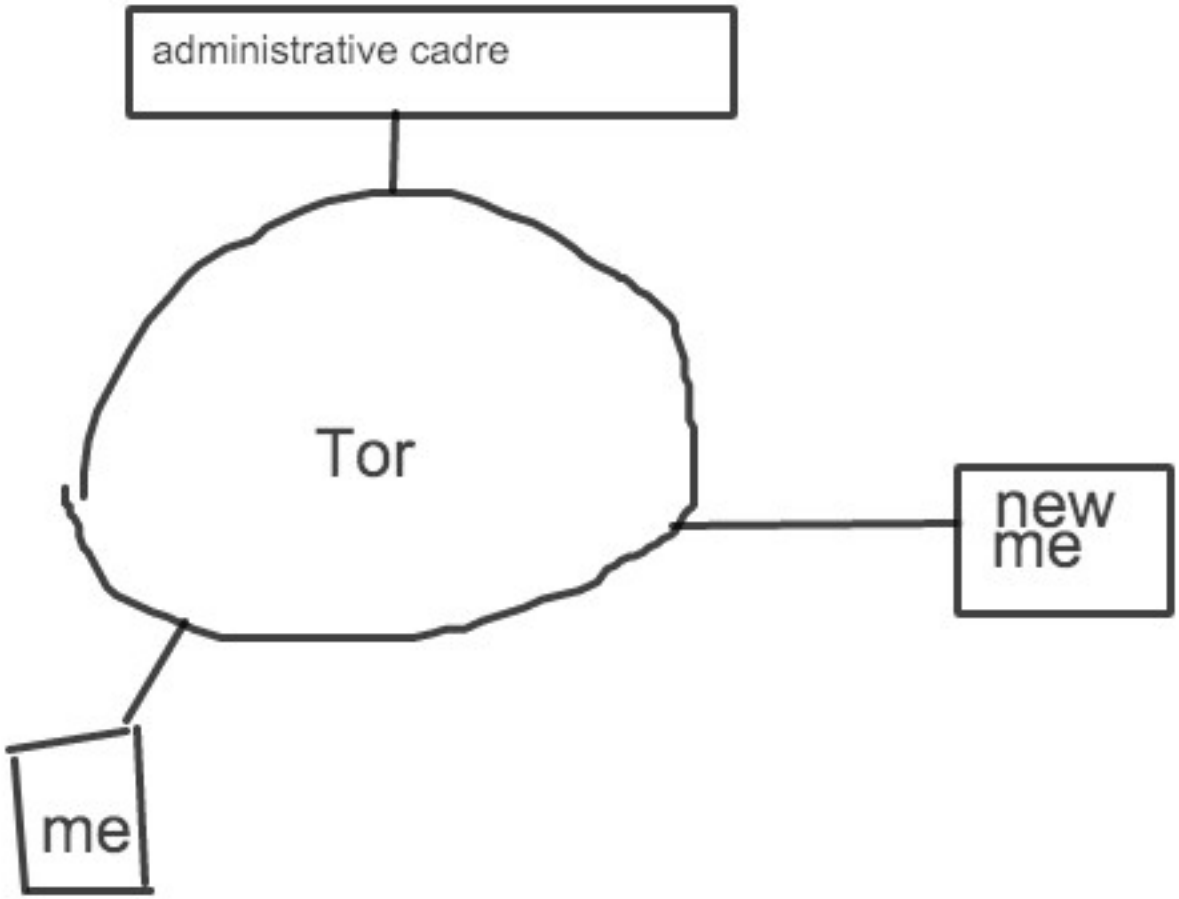


“Between the laptop and the entry I will write a little note that says ISP can see that I’m using Tor. And then between the entry and the middle I’m going to say ‘encrypted traffic.’ And then between the middle and the exit I’m going to say ‘encrypted traffic’ and between the exit and the Web site I’m going to say ‘ISP can see requests, but not the originator.”

(P1, Expert, Male)

“*Nodes may be owned/0wned by governments.*”
(P5, Expert, Unspecified gender)

Non-experts view Tor as a service.

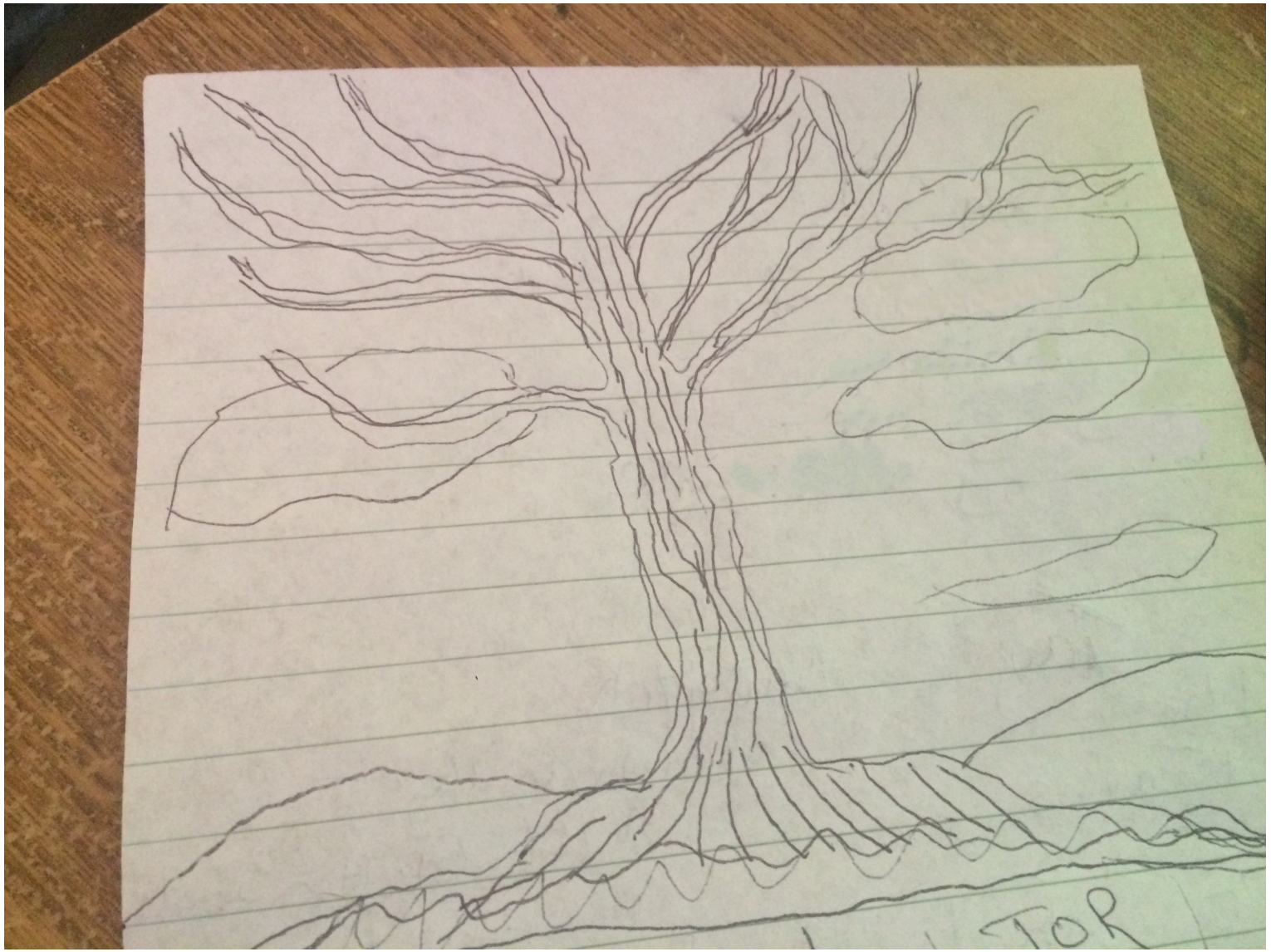


“As far as I’m aware the way it works is it bounces your signal around a lot . . . To various countries and such.”

(P3, Non-expert, Male)

“And then like IP address . . . I don’t know . . . does Tor jumble up your IP? Maybe, perhaps it does, perhaps it doesn’t. Perhaps it gives you a new IP.”

(P2, Non-expert, Female)



Non-experts misunderstand the threat model.

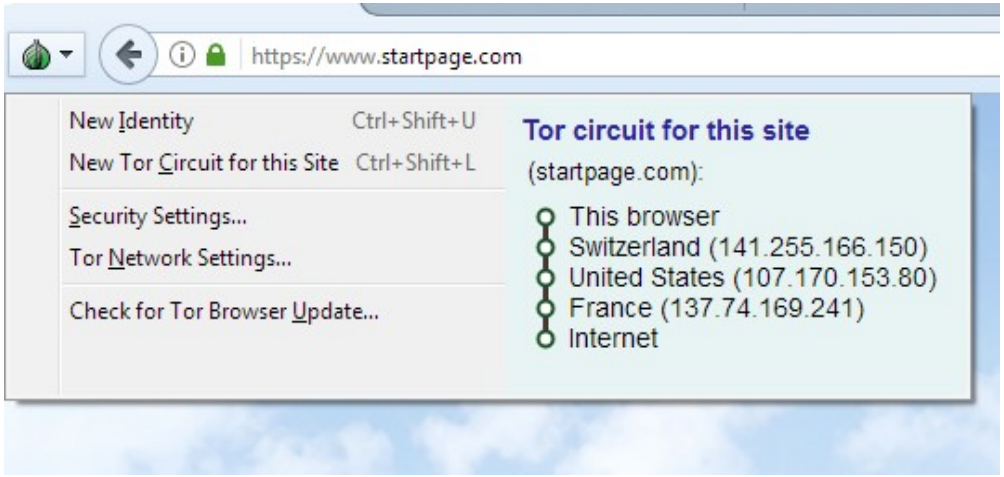


“I know that I’m not doing anything dangerous but they don’t know that, so I can see why the government would want to have access to that kind of thing. Or maybe they can receive alerts from Tor saying ‘hey this person is suspicious by your standards’ . . . but that’s bad business, so...”

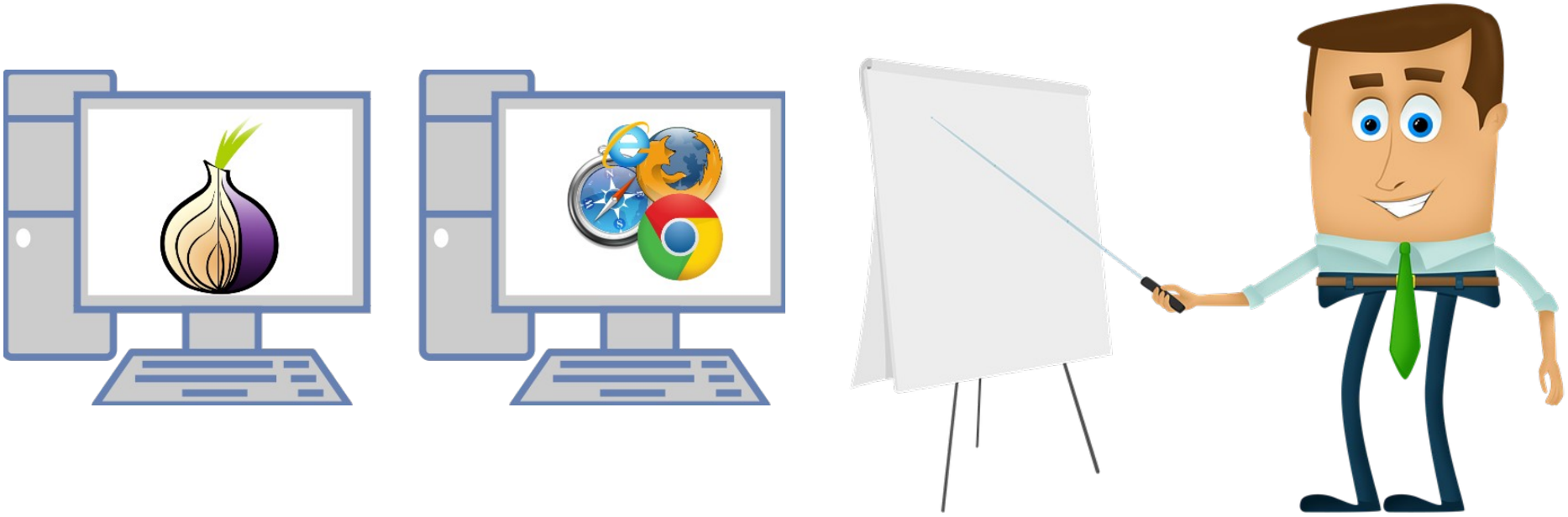
(P4, Non-expert, Female)

Our findings have a few actionable implications.





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