WikiLeaks - Vault 8

wikileaks.org/vault8/

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Tor

Tor is an encrypted anonymising network that makes it harder to intercept internet communications, or see where communications are coming from or going to.

In order to use the WikiLeaks public submission system as detailed above you can download the Tor Browser Bundle, which is a Firefox-like browser available for Windows, Mac OS X and GNU/Linux and pre-configured to connect using the anonymising system Tor.

Tails

If you are at high risk and you have the capacity to do so, you can also access the submission system through a secure operating system called Tails. Tails is an operating system launched from a USB stick or a DVD that aim to leaves no traces when the computer is shut down after use and automatically routes your internet traffic through Tor. Tails will require you to have either a USB stick or a DVD at least 4GB big and a laptop or desktop computer.

Tips

Our submission system works hard to preserve your anonymity, but we recommend you also take some of your own precautions. Please review these basic guidelines.

1. Contact us if you have specific problems

If you have a very large submission, or a submission with a complex format, or are a high-risk source, please contact us. In our experience it is always possible to find a custom solution for even the most seemingly difficult situations.

2. What computer to use

If the computer you are uploading from could subsequently be audited in an investigation, consider using a computer that is not easily tied to you. Technical users can also use Tails to help ensure you do not leave any records of your submission on the computer.

3. Do not talk about your submission to others

If you have any issues talk to WikiLeaks. We are the global experts in source protection – it is a complex field. Even those who mean well often do not have the experience or expertise to advise properly. This includes other media organisations.

How to contact WikiLeaks? What is Tor? Tips for Sources After Submitting

After

1. Do not talk about your submission to others

If you have any issues talk to WikiLeaks. We are the global experts in source protection – it is a complex field. Even those who mean well often do not have the experience or expertise to advise properly. This includes other media organisations.

2. Act normal

If you are a high-risk source, avoid saying anything or doing anything after submitting which might promote suspicion. In particular, you should try to stick to your normal routine and behaviour.

3. Remove traces of your submission

If you are a high-risk source and the computer you prepared your submission on, or uploaded it from, could subsequently be audited in an investigation, we recommend that you format and dispose of the computer hard drive and any other storage media you used.

In particular, hard drives retain data after formatting which may be visible to a digital forensics team and flash media (USB sticks, memory cards and SSD drives) retain data even after a secure erasure. If you used flash media to store sensitive data, it is important to destroy the media.

If you do this and are a high-risk source you should make sure there are no traces of the clean-up, since such traces themselves may draw suspicion.

4. If you face legal action

If a legal action is brought against you as a result of your submission, there are organisations that may help you. The Courage Foundation is an international organisation dedicated to the protection of journalistic sources. You can find more details at https://www.couragefound.org.

Submit documents to WikiLeaks

WikiLeaks publishes documents of political or historical importance that are censored or otherwise suppressed. We specialise in strategic global publishing and large archives.

The following is the address of our secure site where you can anonymously upload your documents to WikiLeaks editors. You can only access this submissions system through Tor. (See our Tor tab for more information.) We also advise you to read our tips for sources before submitting.

http://ibfckmpsmylhbfovflajicjgldsqpc75k5w454irzwlh7qifgglncbad.onion

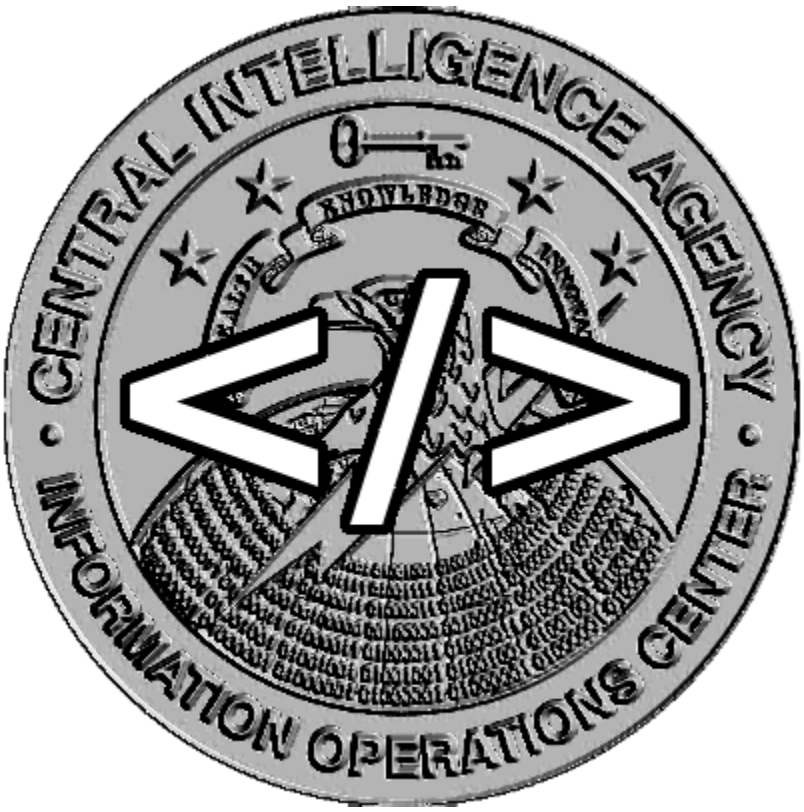
If you cannot use Tor, or your submission is very large, or you have specific requirements, WikiLeaks provides several alternative methods. Contact us to discuss how to proceed.

Vault 8

Source code and analysis for CIA software projects including those described in the Vault7 series.

This publication will enable investigative journalists, forensic experts and the general public to better identify and understand covert CIA infrastructure components.

Source code published in this series contains software designed to run on servers controlled by the CIA. Like WikiLeaks' earlier Vault7 series, the material published by WikiLeaks does **not** contain 0-days or similar security vulnerabilities which could be repurposed by others.



Releases
Documents

All Releases

Hive - 9 November, 2017

Hive

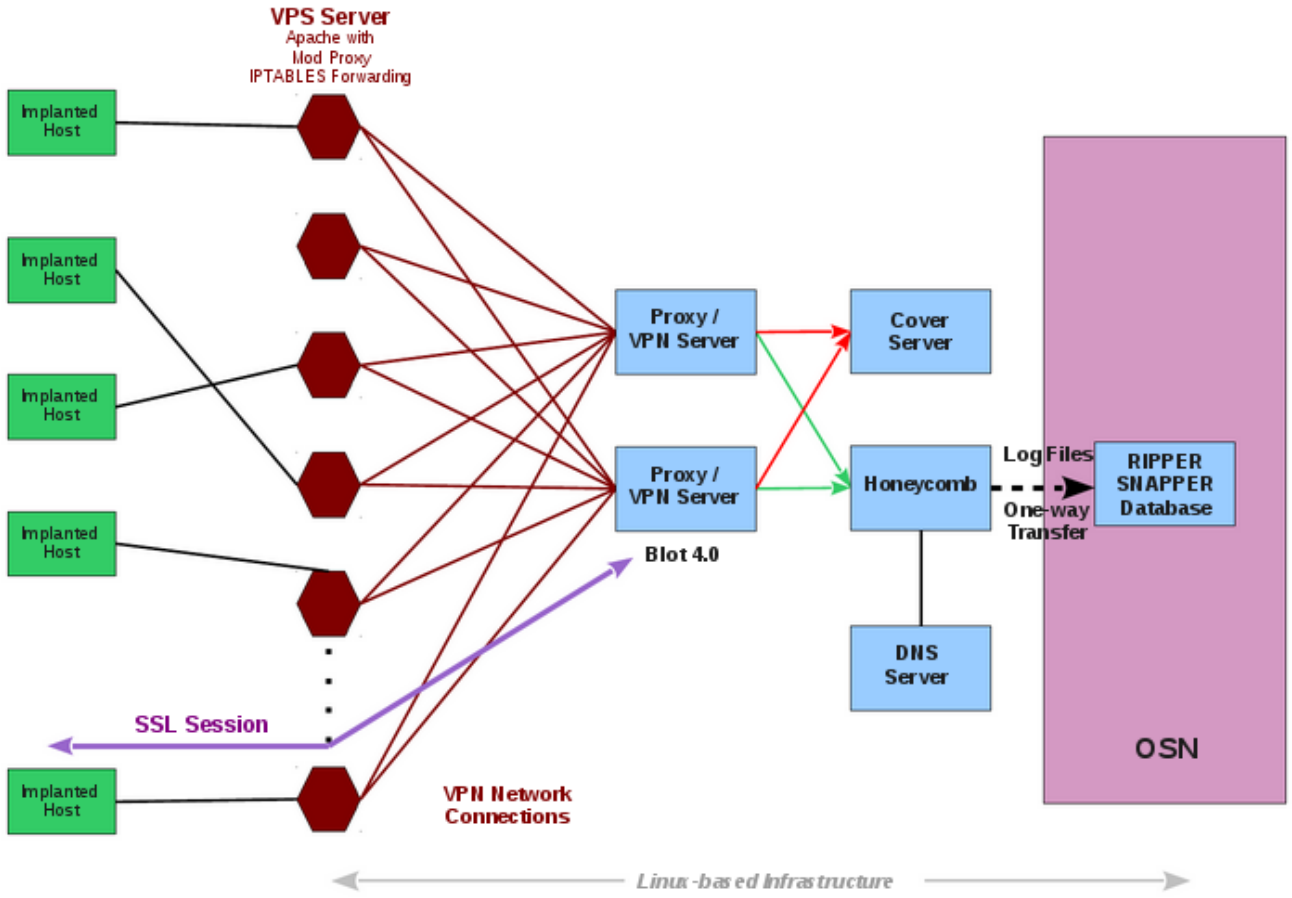
9 November, 2017

Today, 9 November 2017, WikiLeaks publishes the source code and development logs to *Hive*, a major component of the CIA infrastructure to control its malware.

Hive solves a critical problem for the malware operators at the CIA. Even the most sophisticated malware implant on a target computer is useless if there is no way for it to communicate with its operators in a secure manner that does not draw attention. Using *Hive* even if an implant is discovered on a target computer, attributing it to the CIA is difficult by

just looking at the communication of the malware with other servers on the internet. *Hive* provides a covert communications platform for a whole range of CIA malware to send exfiltrated information to CIA servers and to receive new instructions from operators at the CIA.

Hive can serve multiple operations using multiple implants on target computers. Each operation anonymously registers at least one cover domain (e.g. "perfectly-boring-looking-domain.com") for its own use. The server running the domain website is rented from commercial hosting providers as a VPS (virtual private server) and its software is customized according to CIA specifications. These servers are the public-facing side of the CIA back-end infrastructure and act as a relay for HTTP(S) traffic over a VPN connection to a "hidden" CIA server called 'Blot'.



The cover domain delivers 'innocent' content if somebody browses it by chance. A visitor will not suspect that it is anything else but a normal website. The only peculiarity is not visible to non-technical users - a HTTPS server option that is not widely used: *Optional Client Authentication*. But *Hive* uses the uncommon *Optional Client Authentication* so that the user browsing the website is not required to authenticate - it is optional. But implants talking to *Hive* do authenticate themselves and can therefore be detected by the *Blot* server. Traffic

from implants is sent to an implant operator management gateway called *Honeycomb* (see graphic above) while all other traffic go to a cover server that delivers the insuspicious content for all other users.

Digital certificates for the authentication of implants are generated by the CIA impersonating existing entities. The three examples included in the source code build a fake certificate for the anti-virus company Kaspersky Laboratory, Moscow pretending to be signed by Thawte Premium Server CA, Cape Town. In this way, if the target organization looks at the network traffic coming out of its network, it is likely to misattribute the CIA exfiltration of data to uninvolved entities whose identities have been impersonated.

The documentation for *Hive* is available from the WikiLeaks Vault7 series.