Passive SSH, a Fast-Lookup Database of SSH Key Materials to Support Incident Response

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https://www.d4-project.org/

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PROBLEM STATEMENT

- CIRCL (and other CSIRTs) have their own passive DNS¹ and passive SSL² database
- Historical data is a companion to incident response, infrastructure attribution and threat intelligence at large
- SSH is a major protocol for remote management (for normal users but also attackers)
- SSH protocol provides a significant number of fingerprints to track similar infrastructures (e.g. from banners to key fingerprints)

https://www.circl.lu/services/passive-dns/

²https://www.circl.lu/services/passive-ssl/

PASSIVE SSH DESIGN

- A fast-lookup database to find SSH key per IP, fingerprint or hassh³
- Supporting the storage of the key materials, key types and banners
- Lightweight design and supporting different kind of importers (scanner, network capture)
- The system can be used externally (for Internet-wide scan) or internally (for internal network ssh infrastructure scanning)
- Supporting IPv4, IPv6 but also Tor onion addresses or random TCP ports

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³https://github.com/salesforce/hassh

CONTACT

- Get in touch if you want to get access to the Passive SSH database (you need to be a FIRST.org, TF-CSIRT or CNW member)
- Contact: info@circl.lu
- Source code: https://github.com/D4-project/passive-sshhttps://twitter.com/d4_project