

Forensics Visualisation Toolkit - FVT



GOALS

- Validation of our tool's usability
- Assessment of data volume that must be handled
- Measurement of efficiency and applicability to the needs of target customers
- Testing of implementation strategy and flexibility

Employ a fast setup time for small-scaled networks

CHALLENGES

- Introduce novel visualisations that help users quickly find the information they look for
- Efficiently handle data

DEMO SETUP



Virtual Wall 2 testbed with experiment instances running on 3 - 15 physical nodes, provisioned and managed using jFed

Probes in all nodes sending network traffic as netflows to one netflow collector.

FVT web app and middleware installed in one node and served via public IP (using adress pool)



- Traffic handled adequately for the executed experiments
- Fast-loading visualisation with advanced filtering/grouping being necessary to handle large amounts of data
- Installation and deployment time of required monitoring processes analogous to monitored assets
- Current implementation allows fast response to user requirements, i.e. new features added within the timeframe of the experiment

MORE RESULTS



Netflow Analysis Novel visualisations enabling fast exploration with advanced grouping and filtering





CONCLUSIONS

✓ □ Internal Test Nodes

10.2.0.0/16 (151 addre

10.2.47.252

> 234.5.130.0/24 (78 addr

> 234.5.129.0/24 (63 addre

🔲 172.17.0.2

□ 172.16.1.5

224.0.0.25

255.255.255.255

10.2.1.3

> 🗌 10.2.35.0/24 (32 ad

POST MORTEM

- Installation and deployment need to be streamlined to support bigger networks
- Visualisation elements require constant updates and new functionalities to keep up with emerging needs
- Netflow processing internal API performs satisfactory for 1-day traffic loads of the examined networks
- Excellent means of validating our tool

CISCO TALOS IP Reputati

- Business impact on our company via accelerating time-to-market and helping us better define target customers
- Experiment setup and management with jFed very straightforward
- Complete Fed4Fire Docs and fast online support
- Highly competitive funding scheme with minimal administration tasks