SELKS
&
Black Magic

Lets talk about ME

Myself

- Stamus Networks co-founder
- Suricata core team - QA Lead
- OISF Suricata instructor
- Part of the Mob

StamusN

- Bring professional grade products and services through the Suricata IDPS eco-system
- **Open Source Projects**
  - SELKS
  - Amsterdam
  - Scirius

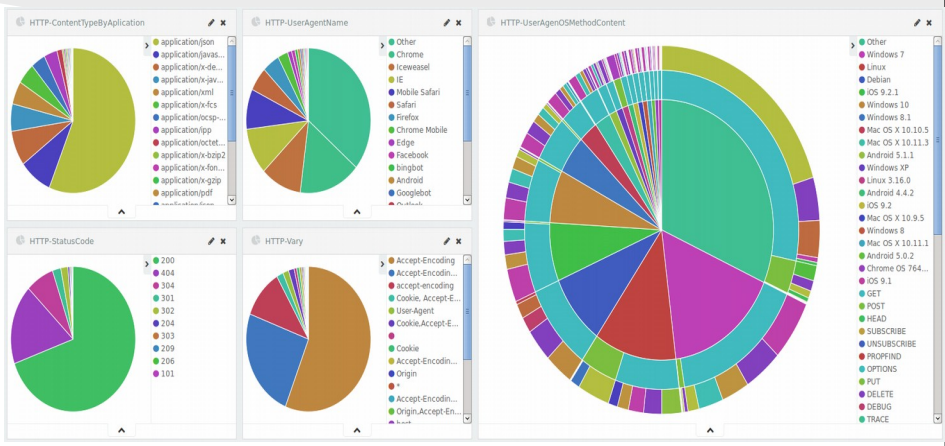
Why we need SELKS

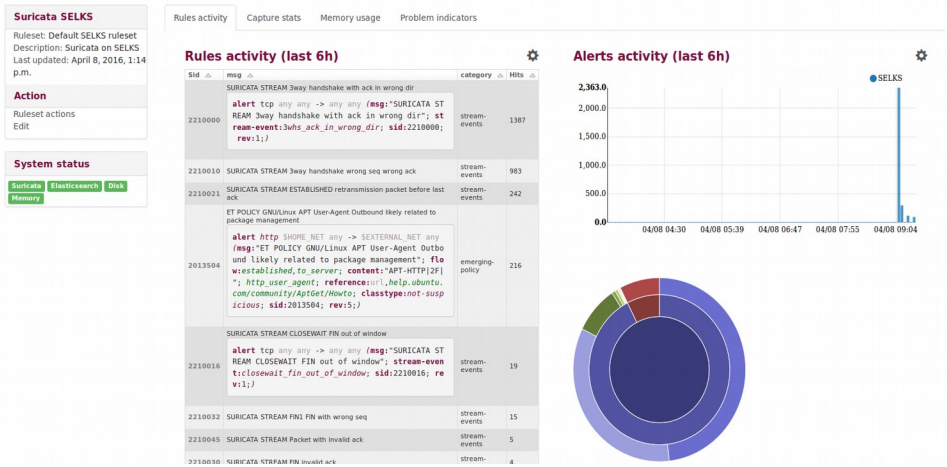
- Entirely Open Source
  - The only graphic Suricata's rule manager
  - Standard Debian Jessie 64 bit live and installable distro
  - Want to get the best out of Suricata
  - Showcase build for Suricata

- Scalable
- Modular
- Flexible
- Correlate

Lets talk about SELKS

- **S** - Suricata IDPS
- **E** - Elasticsearch
- **L** - Logstash
- **K** - Kibana
- **S** – Scirius
- EveBox





SELKS – Suricata IDS/IPS/NSM

- **Suricata**
  - Supercalifragilisticexpialidocious IDPS/NSM
  - Open Source
  - Native Multithreading
  - Multitenancy
  - High Performance
  - Modular and flexible
  - Lua scripting
  - Awesome core teammates

SELKS – The ELK stack

- **Elasticsearch 2.x**
  - Distributed, scalable, and highly available
  - Real-time search and analytics capabilities
  - Sophisticated RESTful API
  - Schema free, Apache Lucene™
- **Logstash 2.x**
  - Centralize data processing of all types
  - Log collector
- **Kibana 4.x**
  - Flexible analytics and visualization platform
  - Real-time summary and charting of streaming data
  - Intuitive interface for a variety of users
  - Instant sharing and embedding of dashboards

SELKS – Scirius

- Suricata graphic rule set manager

Suricata SELKS

Ruleset: Default SELKS ruleset
Description: Suricata on SELKS
Last updated: May 5, 2015, 6:20 p.m.

Action

Update
Edit

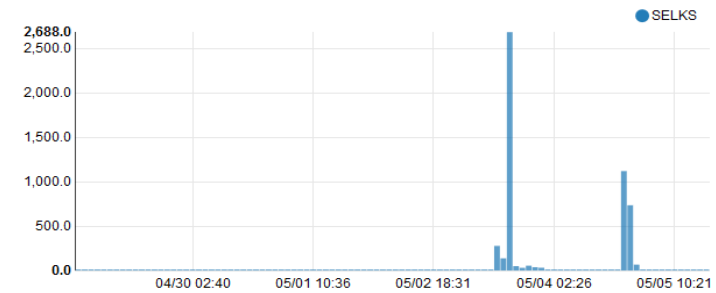
System status

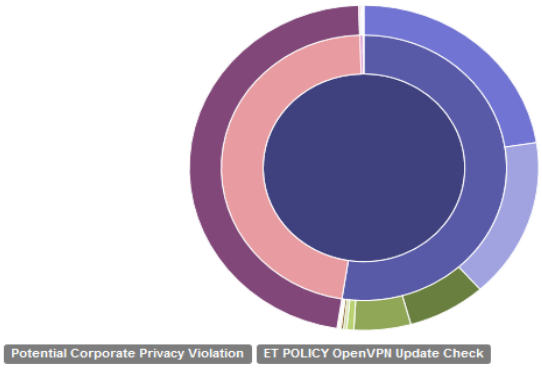
Suricata | Elasticsearch | Disk | Memory

Rules activity (last 7d)

Sid	msg	category	Hits
2013504	ET POLICY GNU/Linux APT User-Agent Outbound likely related to package management	emerging-policy	2489
2210000	SURICATA STREAM 3way handshake with ack in wrong dir	stream-events	1191
2210010	SURICATA STREAM 3way handshake wrong seq wrong ack	stream-events	842
2210021	SURICATA STREAM ESTABLISHED retransmission packet before last ack	stream-events	383
2200029	SURICATA ICMPv6 unknown type	decoder-events	278
2210042	SURICATA STREAM TIMEWAIT ACK with wrong seq	stream-events	35
2210045	SURICATA STREAM Packet with invalid ack	stream-events	15
2210044	SURICATA STREAM Packet with invalid timestamp	stream-events	13
2014799	ET POLICY OpenVPN Update Check `alert http $HOME_NET any -> $EXTERNAL_NET any (msg:" ET POLICY OpenVPN Update Check"; flow:established,to_server; content:"Host|3a| swupdate.openvpn.net|0d 0a|"; fast_pattern:14,14; http_header; content:"User-Agent|3a| Twisted PageGetter|0d 0a|"; http_header; classtype:policy-violation; sid:2014799; rev:2;)`	emerging-policy	8
2210046	SURICATA STREAM SHUTDOWN RST invalid ack	stream-events	7
2018959	ET POLICY PE EXE or DLL Windows file download HTTP	emerging-policy	6
2008438	ET MALWARE Possible Windows executable sent when remote host claims to send a Text File	emerging-malware	6
2210029	SURICATA STREAM ESTABLISHED invalid ack	stream-events	5
2210030	SURICATA STREAM FIN invalid ack	stream-events	3
2210020	SURICATA STREAM ESTABLISHED packet out of window	stream-events	2
2100230	GPL CHAT Jabber/Google Talk Outgoing Traffic	emerging-chat	2
2210038	SURICATA STREAM FIN out of window	stream-events	1
2200073	SURICATA IPv4 invalid checksum	decoder-events	1
2100232	GPL CHAT Google Talk Logon	emerging-chat	1
2002334	ET CHAT Google IM traffic Jabber client sign-on	emerging-chat	1

Alerts activity (last 7d)

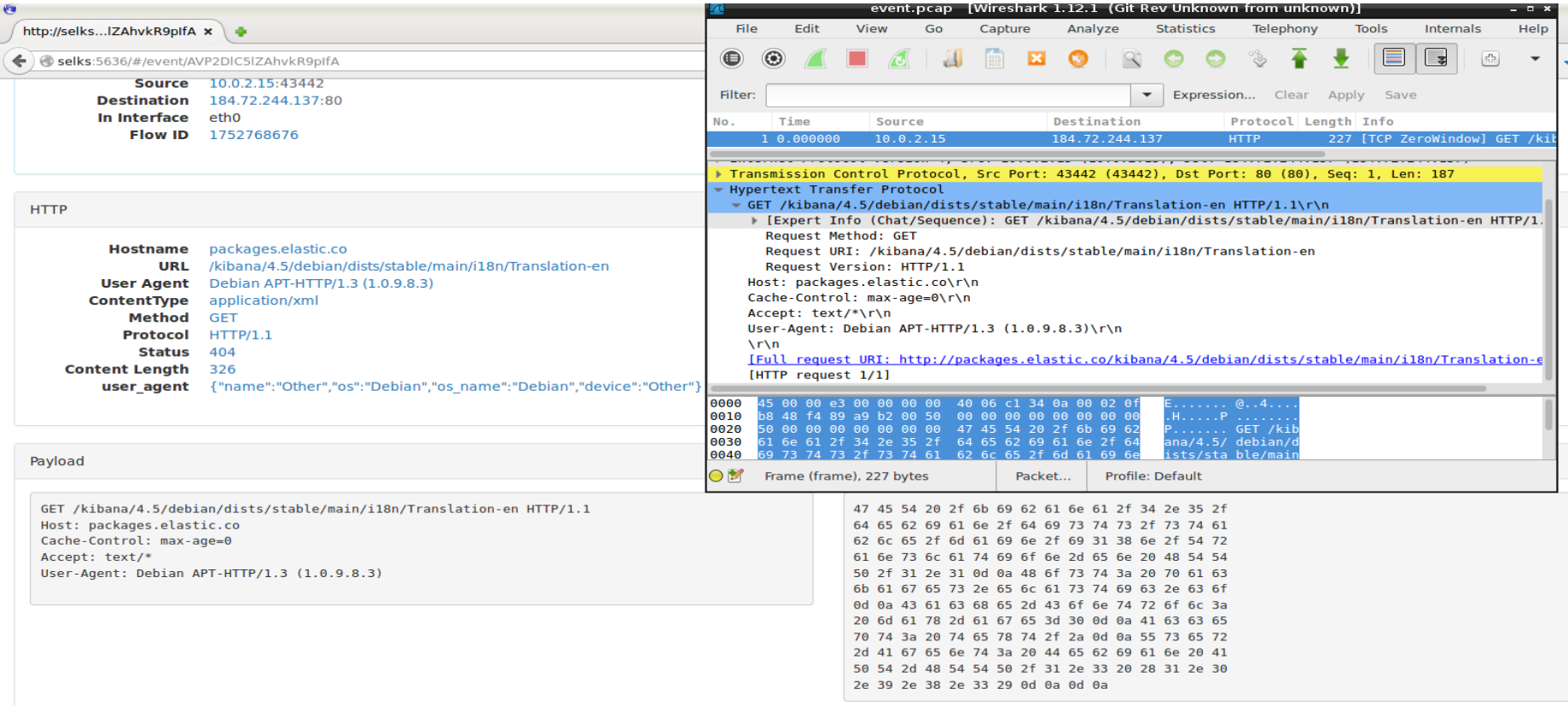




>I Do See<

SELKS – EveBox

- EveBox is a web based Suricata "eve" event viewer for Elastic Search



Visualization & Filtering

- Filter and visualize on over 360 metadata fields
- GeoIP Maps

Dashboards

- 11 ready to use out of the box dashboards
  - ALL
  - ALERTS
  - DNS
  - FILE-Transactions
  - FLOW
  - HTTP
  - SMTP
  - STATS
  - TLS
  - SSH
  - VLAN

Correlate

- Correlate
  - Events
  - Alerts
  - Logs
  - Rules

Rule set manager

- Suricata’s graphic rule set management
  - Rules to alerts direct mapping
  - Suricata performance indicators
  - Thresholding/Suppression of alerts

Black (file) Magic

Identify a file which:

- is a picture taken with a camera from Huawei Nexus 6p phone
- has a an extension “.docx”

Lets do some Black Magic ...

Getting SELKS

Source & ISO:

- Build your from source or with a custom kernel version -
  - https://github.com/StamusNetworks/SELKS#selks
- Download ready to use ISO image -
  - https://www.stamus-networks.com/open-source/#selks

THANK YOU

c u @SuriCon

>I Do See<