





数据驱动安全 2015中国互联网安全大会 China Internet Security Conference

Security
Innovation &
Startup

ALIENVAULT OTX





OPEN THREAT EXCHANGE (OTX): THE HISTORY AND FUTURE OF OPEN THREAT INTELLIGENCE COMMUNITY



PRESENTATION OVERVIEW





- A very quick overview of AlienVault
- Our Open approach to crowd sourced threat intelligence
- The OTX Platform and Data

ABOUT ALIENVAULT





AlienVault is the leading provider of Unified Security Management (USM) and crowd-sourced threat intelligence technology required to detect and act on today's advanced cyber threats

USM PLATFORM





5 CRITICAL CAPABILITIES

SECURITY INTELLIGENCE/SIEM

- SIEM Event Correlation
- Incident Response







ASSET DISCOVERY

- Active Network Scanning
- Passive Network Scanning
- Asset Inventory
- Host-based Software Inventory

BEHAVIORAL MONITORING

- Log Collection
- Netflow Analysis
- Service Availability Monitoring







VULNERABILITY ASSESSMENT

- Continuous Vulnerability Monitoring
- Authenticated / Unauthenticated Active Scanning



THREAT DETECTION

- Network IDS
- Host IDS
- File Integrity Monitoring



THE ATTACKER'S ADVANTAGE





- They only need to be successful once
- Determined, skilled and often funded adversaries
- Custom malware, 0days, multiple attack vectors, social engineering
- Persistent

IMPORTANCE OF SHARING





"In the case of threat-intelligence sharing, the adversary has only to mess up once – being detected – and all the defenders will know about it. It's in our best interest, as an industry, to keep the odds ever in our favor."

-- Wendy Nather, 451 Group, 2014 Threat Intelligence Report

- Helps you to achieve a preventative response to changes in the threat landscape by learning how attackers are targeting others
- Armed with real-time, detailed security event information, you can update your defenses to avoid becoming a victim
- The right solution will allow you to automatically share anonymized threat information





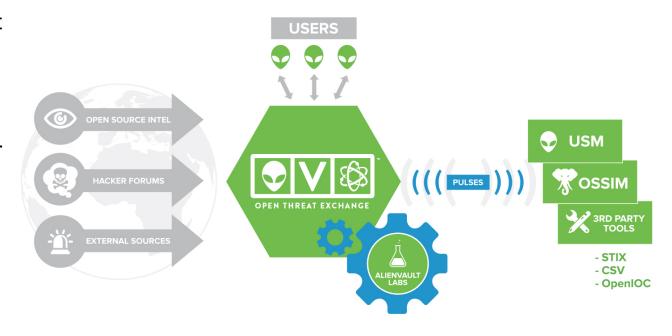
OPEN THREAT EXCHANGE





OTX

- Launched in 2012 The world's largest open threat sharing and analysis network
- Supports more than 26,000 participants in over 140 countries contributing more than 1 million threat indicators daily
- Provides access to realtime, detailed information about threats and incidents around the world



COLLABORATION

ISC 2015



POWERING OTX

Collaborate

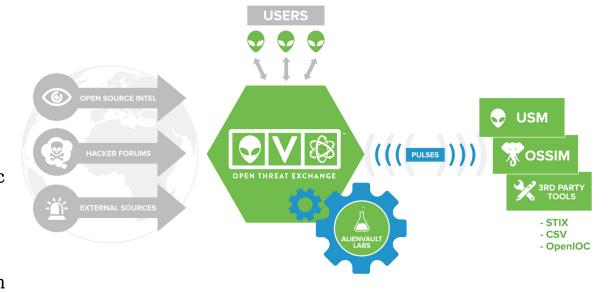
Openly research and collaborate on emerging threats.

Defend

Integrate with AlienVault USM or Export IoCs to any security produc

Learn

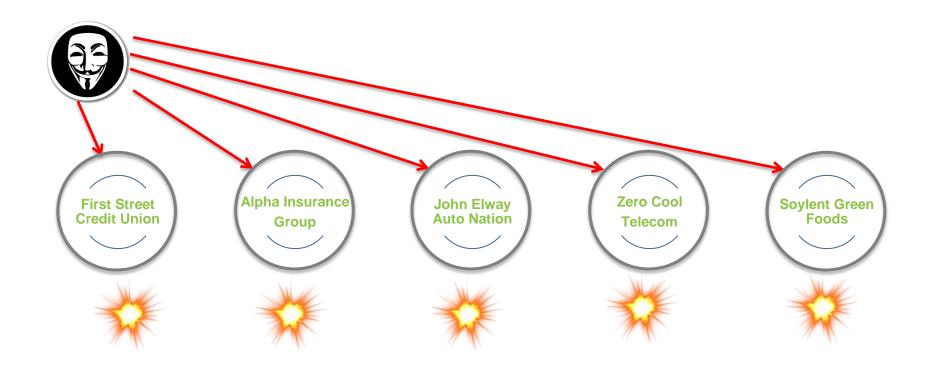
Extract, validate and investigate data from logs, blogs, articles an reports



THE DEFENDER'S DILEMMA

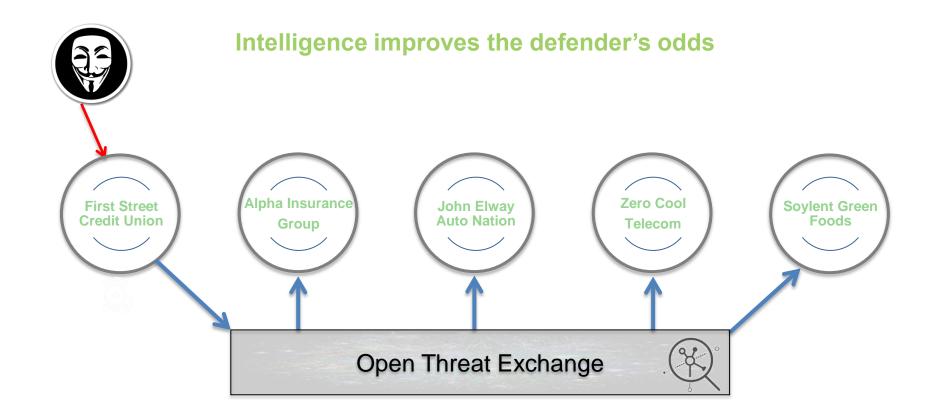






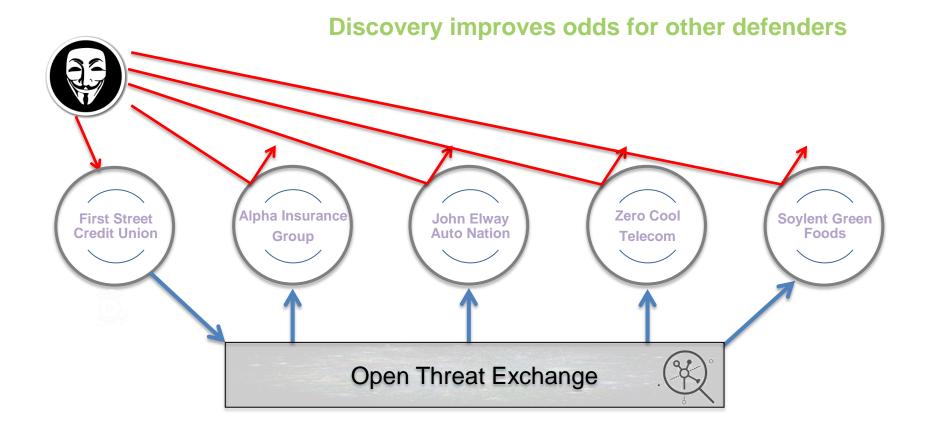
THREATINTELLIGENCE APPLIE





THREAT INTELLIGENCE APPLIED ...





OTX 1.0





IP REPUTATION DATA

- Updates provided every 30 minutes
- 200,000-350,000 validated malicious IP's at any point

Malware Domain

Distributing malware or hosting exploit code

Malware IP

Instrumental in malware, including malicious redirection

Command and Control

Sending command and control instructions to malware or a botnet

Scanning Host

Observed repeatedly scanning or probing remote systems

APT

Observed to be actively involved in an APT campaign

Spamming Host

Actively propagating or instrumental in the distribution of spam

Malicious Host

Engaged in malicious but uncharacterized activity



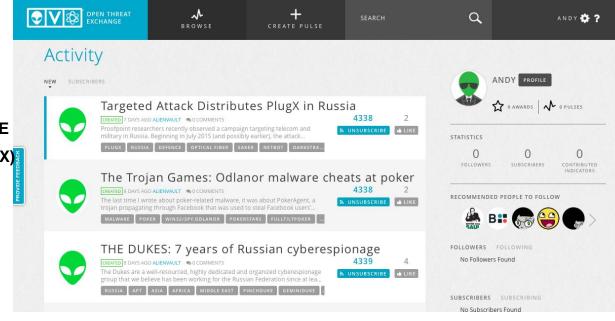
OTX 2.0: "PULSES"





CROWD SOURCED THREAT RESEARCH

- THE FACE OF OTX SOCIAL INTERFACE
 TO COLLABORATIVELY DEVELOP &
 SHARE THREAT INTELLIGENCE IN REALTIME
- CREATE, ENHANCE OR CONSUME
 "PULSES" SHORT MULTIVARIATE
 ANALYSIS OF THREAT INDICATORS
- EXPORT INDICATORS OF COMPROMISE
 INTO SECURITY TOOLS (OPENIOC, STIX)
 AND AUTOMATICALLY CONSUME IN
 ALIENVAULT PRODUCTS
- INTEGRATE & EXPLORE THROUGH AN OPEN API
- STRENGTHEN DEFENSES AND HELP
 OTHERS DO THE SAME



INVESTIGATING THREATS





- Pulse: ONE_data construct for ALL types of threats (Data breach, Botnet, APT Campaign, etc.)
- Defined by *Indicators of Compromise or IoCs*: (md5, IPv4s, URLs, hostnames, etc.)
- Explore attack vectors and threat geolocation information
- Share and comment on Pulses and IoCs

OTX HOME PAGE











SEARCH



STATISTICS

FOLLOWERS



CONTRIBUTED INDICATORS

Activity

Targeted Attack Distributes PlugX in Russia

CREATED 7 DAYS AGO ALIENVAULT 90 COMMENTS

4338

Proofpoint researchers recently observed a campaign targeting telecom and military in Russia. Beginning in July 2015 (and possibly earlier), the attack...

RUSSIA DEFENCE OPTICAL FIBER SAKER



The Trojan Games: Odlanor malware cheats at poker

CREATED 8 DAYS AGO ALIENVAULT 9 0 COMMENTS

4338

M UNSUBSCRIBE

The last time I wrote about poker-related malware, it was about PokerAgent, a trojan propagating through Facebook that was used to steal Facebook users' ...

M UNSUBSCRIBE

No Followers Found

FOLLOWERS FOLLOWING

RECOMMENDED PEOPLE TO FOLLOW

SUBSCRIBERS



THE DUKES: 7 years of Russian cyberespionage

CREATED 8 DAYS AGO ALIENVAULT 90 COMMENTS

4339

The Dukes are a well-resourced, highly dedicated and organized cyberespionage group that we believe has been working for the Russian Federation since at lea...

M UNSUBSCRIBE

AFRICA

MIDDLE EAST PINCHDUKE GEMINIDUKE

SUBSCRIBERS SUBSCRIBING

No Subscribers Found

2015中国互联网安全大会

DETAILED INTELLIGENCE







Indicators of Compromise

Show 10 c entr	ies	Search:
TYPE	▲ INDICATOR	
domain	bbsystems.info	
FileHash-SHA1	510acecee856abc3e1804f63743ce4a9de4f632e	



FEEDBACK

ADDITIONAL DETAIL











trojar

Q



Indicator of Compromise: 510acecee856abc3e1804f63743ce4a9de4f632e

A file hash is an indicator of compromise commonly used in identifying malware such as viruses, trojans, ransomware, or other types of malicious software.

GENERAL DETAILS

1

ANALYSIS

RELATED PULSES

Type

Sha1

File Type

FILE TYPE: PE32 executable (GUI) Intel 80386 (stripped to external PDB), for MS Windows

MIME-TYPE: application/octet-stream

SIZE: 520704

FILE CLASSIFICATION: PEXE

ANALYSIS DATE: May. 6, 2015, 5:48 am

Analyzed: File

MD5: ce19c30ffda76cd63a88eeb8af0340f0

SHA256: da6a2e97bbc433ae36714da1aa6eaa3b01970b50e65ccb5735dc32dca006ff8d

SHA1: 510acecee856abc3e1804f63743ce4a9de4f632e

IMPHASH: 045e87923a29e07468a3e464d4fb1ffd

PEHASH: 2008dd5046a921ac23d6870149e59616d9d2b2c5

External Sources

VirusTotal

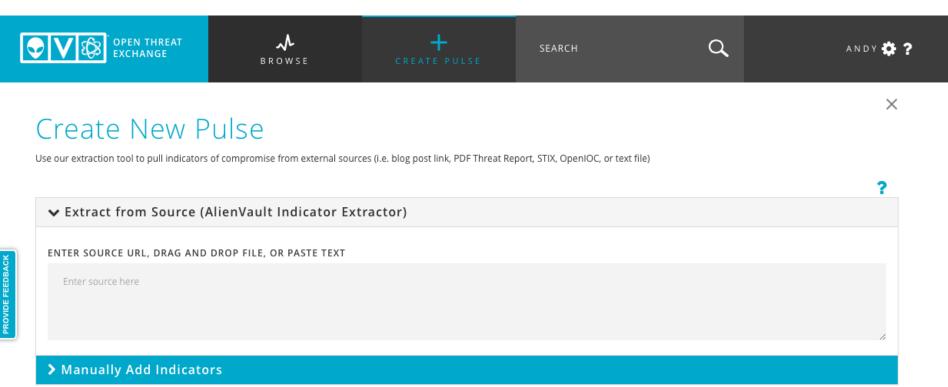


CREATING A PULSE





FROM SOURCE FILE





CREATING PULSE





MANUALLY







SEARCH

Q

ANDY 🌣 🥐

X

Create New Pulse

Use our extraction tool to pull indicators of compromise from external sources (i.e. blog post link, PDF Threat Report, STIX, OpenIOC, or text file)

> Extract from	> Extract from Source (AlienVault Indicator Extractor)					
✓ Manually Add Indicators						
TYPE	INDICATOR					
	No Indicators Added. Add indicators below.					
✓ Choose Type		Indicator				
IPv4		indicator				
IPv6						
domain hostname			NEXT			
email						
URL						
URI FileHash-MD5						
FileHash-SHA1						
FileHash-SHA256						
FileHash-PEHASH	4					



PULSE API:





OPEN ACCESS, OPEN STANDARDS

DirectConnect API

- Free access to Java and Python SDKs for pulse data
- DirectConnect Agents for popular open source software suites (e.g.: BroIDS)



Open Formats

Export pulses to STIX, OpenIoC, CSV



SUMMARY





EFFECTIVE THREAT SHARING

- Crowd-source threat data without attribution
- Provide valuable intelligence that can be acted on quickly
- Facilitate the collection, validation and dissemination of diverse, crowd sourced threat data
- Open, collaborative and affordable
- Enable organizations to share threat intelligence with each other in a trusted environment
- Should span industries, market categories and geographies





