Allien Vault OSSIM Custom Plugin Oluşturmak

Alien Vault OSSIM üzerinde özel plugin yazmak için aşağıdaki adımlar takip edilir.

1- Plugin için konfigurasyon dosyası oluşturulur.

/etc/ossim/agent/plugins/elastichoney.cfg

Not:

- a- Regex yazımı için regex101.com sitesi kullanılabilir.
- b- Regex yazarken değeri boş gelen bir alan var ise null değer şeklinde tanımlanmalıdır.

```
# Alienvault plugin
# Author: Fatih usta <fatihusta@labrisnetworks.com>
# Plugin elastichoney id:91111 version: 0.0.1
# Last modification: 2018-10-09 10:15
# Plugin Selection Info:
# elastichoney:-
# END-HEADER
#
# Description:
# elastichoney
#
#
#
[DEFAULT]
plugin_id=91111
[config]
type=detector
enable=yes
source=log
location=/var/log/elastichoney.log
create_file=false
process=
start=no
stop=no
startup=
shutdown=
[translation]
attack=1
recon=2
#Oct 22 13:47:54 ahtapot elastichoney {"source":"10.0.3.254","@timestamp":"2018-10-22
16:47:55.585121988", "url": "10.0.3.24:9200/\_search? pretty", "method": "POST", "form": "pretty=\&\%7B\%22script\_fields\%22\%3A+10.0.3.24:9200/\_search? pretty=\&\%7B\%22script\_fields\%22\%3A+10.0.3.24:9200/\_search? pretty=\&\%7B\%22script\_fields\%22\%3A+10.0.3.24:9200/\_search? pretty=\&\%7B\%22script\_fields\%22\%3A+10.0.3.24:9200/\_search? pretty=\&\%7B\%22script\_fields\%22\%3A+10.0.3.24:9200/\_search? pretty=\&\%7B\%22script\_fields\%22\%3A+10.0.3.24:9200/\_search? pretty=\&\%7B\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22script\_fields\%22scrip
%7B%22myscript%22%3A+%7B%22script%22%3A+%22java.lang.Math.class.forName%28%5C%22java.lang.Runtime%5C%22%2
9%22%7D%7D%7D=","payload":"","payloadCommand":"","payloadResource":"","payloadMd5":"","payloadBinary":"","headers"
:{"user agent":"curl/7.52.1","host":"10.0.3.24:9200","content type":"application/x-www-form-urlencoded","accept language"
```

```
:""},"type":"attack","honeypot":"10.0.3.24"}
[0001 - elastichoney]
event type=event
load>"null|.*?"),"\\ w+":(?P<payload\_command>"null|.*?"),"\\ w+":(?P<payload\_resource>"null|.*?"),"\\ w+":(?P<payload\_md5>"null|.*?"),"\\ w+":(?P<payload\_md5"),"\\ w+":(?P<payload\_m5"),"\\ w+":(?P<payload\_m5"),"\\ w+":(?P<payload\_m5"),"\\ w+":(?P<payload\_m5"),"\\ w+":(?P<payload\_m5"),"\\ w+":(?P<payload\_m5"),"\\ w+":(?P<payload\_m5"),"\\ w+":(?P<payload\_m5"),"\\ w+":(?P<paylo
null | .*?"), "\\w+": (?P < payload\_binary > "null | .*?"), "\\w+": (?P < user\_agent > "null | .*?"), "\\w+": "(?P < host > \\d \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1,3\}. \{1
1,3):(?P < dst_port > (d+)","\\w+":(?P < content_type > ".*?"),"\\w+":(?P < accept_language > "null | .*?")),"\\w+":(?P < type > (w+)","\\w+":(?P < 
":"(?P<destination>\d{1,3}.{1,3}.{1,3}.{1,3})"}'
date={$date}
device={$device}
plugin_sid={translate($type)}
src ip={$source}
dst_ip={$destination}
dst_port={$dst_port}
userdata1={$url}
userdata2={$method}
userdata3={$form}
userdata4={$payload}
userdata5={$payload command}
userdata6={$payload_resource}
userdata7={$payload_md5}
userdata8={$payload_binary}
userdata9=headers: Host: {$host}:{$dst_port}, User-Agent: ${$user_agent}, Content-Type: {$content_type}, Accept-Language:
```

```
{$accept_language}
```

Plugin Sid Nedir?: Gelen logun veri tabanında karşılığı olan kaydın ID'sidir. Bu sid numarasına göre veri tabanı şekillendirilmeli ve config dosyasındaki translation kısmı buna göre düzenlenmelidir.

Translate Bölümünün Mantığı: Gelen log içinde type'a göre plugin_sid numarasına otomatik çevirip veri tabanı ile eşleştirip alarm üreten bölümdür.

2- Plugin için veritabanı dosyası oluştur ve ossim-db aracını kullanarak veritabanına dahil edilir.

/usr/share/doc/ossim-mysql/contrib/plugins/elastichoney.sql

```
-- elastichoney
-- plugin id: 91111
SET @pluginid = 91111;
SET @type = 1;
SET @pluginname = 'elastichoney';
SET @desc = 'Elastichoney: Elastic Search Honeypot (CVE-2015-1427)';
SET @product_type = 11;
SET @vendor = NULL;
DELETE FROM plugin WHERE id = @pluginid;
DELETE FROM plugin sid where plugin id = @pluginid;
-- id | type | name | description
                                             | product_type | vendor
INSERT IGNORE INTO plugin (id, type, name, description, product_type, vendor) VALUES (@pluginid, @type, @pluginname,
@desc, @product type, @vendor);
-- plugin_id | sid
                  | class_id | reliability | priority | name
                                                                      aro subcategory_id category_id
INSERT IGNORE INTO plugin_sid (plugin_id, sid, reliability,
                priority, subcategory id,
                category id, name) VALUES (@pluginid, 1, 1, 1, 11, 19, 'elastichoney: Attack Detected');
INSERT IGNORE INTO plugin_sid (plugin_id, sid, reliability,
                 priority, subcategory_id,
                category id, name) VALUES (@pluginid, 2, 1, 1, 11, 19, 'elastichoney: Recon Detected');
```

Oluşturulan SQL Dosyası OSSIM DB import idilir

```
ossim-db < /usr/share/doc/ossim-mysql/contrib/plugins/elastichoney.sql
```

- 3- Hem OSSIM üzerinde hemde gönderici üzerinde Syslog yapılandırmasını yapılır.
 - A- /etc/rsyslog.d/elastichoney.conf

```
#AlienVault OSSIM Server Rsyslog
#Conf Start
if $fromhost-ip == '169.254.2.254' and $programname == "elastichoney" then /var/log/elastichoney.log
& ~
#End of Conf
```

B - Client(Honeypoy) Rsyslog /etc/rsyslog.d/elastichoney.conf

```
#Only needs to be loaded once, like most rsyslog modules
$ModLoad imfile
#path to the file which you want to monitor
$InputFileName /var/log/elastichoney/elastichoney.log
#The tag apache can be changed to whatever you'd like
$InputFileTag elastichoney:
#the name of file within rsyslogs working directory
$InputFileStateFile elastichoney-stat
#By default this is set to 'notice'
$InputFileSeverity notice
#This is necessary for file monitoring (no parameters)
$InputRunFileMonitor
#Set to how often the file should be polled. (default = 10s)
$InputFilePollInterval 1
# This is a template for Loggly. Substitute your Customer Token for TOKEN
#$template LogglyFormatAccess,"%protocol-version% %HOSTNAME% %app-name% %msg%\n"
$template LogglyFormat,"%HOSTNAME% %app-name% %msg%\n"
#$template LogglyFormatAccess,"<%pri%>%protocol-version% %timestamp:::date-rfc3339% %HOSTNAME% %app-name%
%procid% %msgid% [TOKEN@41058 tag=\"Access\"] %msg%\n"
#$template LogglyFormatAccess,"<%pri%>%protocol-version% %timestamp:::date-rfc3339% %HOSTNAME% %app-name%
%procid% %msgid% [TOKEN@41058 tag=\"apache\"] %msg%\n"
# Make sure the template above is on one line.
if $programname == 'elastichoney' then @169.254.1.150:514;LogglyFormat
```

4- OSSIM Logrotate ayar dosyası oluşturulur.

```
/var/log/elastichoney.log {
    weekly
    missingok
    rotate 7
    compress
    notifempty
}
```

5- Rsyslog servisi her iki cihazda da yeniden başlatılır.

systemctl restart rsyslog

6- "alienvault-setup" komutu ile Sensör ayarlarından plugin aktif edilir.

alienvault-setup > configure sensor > configure data source plugins > [x] elastichoney

Aşağıdaki config.cfg dosyasında plugins section'a ilgili satır eklenir.

Ayar Dosyası: /etc/ossim/agent/config.cfg

Eklenecek satır: elastichoney=/etc/ossim/agent/plugins/elastichoney.cfg

 $sed -i "/^{[plugins/,/^$/s]^$| elastichoney=/etc/ossim/agent/plugins/elastichoney.cfg\\n|" / etc/ossim/agent/config.cfg\\n| | "/etc/ossim/agent/config.cfg\\n| "/etc/ossim/agent/config.cfg\\n| | "/etc/ossim/agent/config.cfg\\n| | "/etc/ossim/agent/$

ve

Aşağıdaki ossim_setup.conf ayar dosyasındaki [sensor] bölümündeki detectors değişkenine eklenmelidir.

/etc/ossim/ossim_setup.conf

```
....

[sensor]
asec=no
detectors=ssh, shockpot, sudo, ssh-pardus, ossec-single-line, pam_unix, prads, suricata, elastichoney
....
```

7- Seçim yapıldıktan sonra geri ana ekrana dönülür ve seçim uygulanır.

```
alienvault-setup > Apply all changes
```

veya

```
alienvault-reconfig --quiet veya --console-log
```

8- OSSIM web arabirimiden kayıtlar izlenir.

```
https://ossim_ip_address > Analysis > Security Events > Real Time
```

Yardımcı SQL Sorguları

```
#Mysql
export myhost=$(grep "^db_ip" /etc/ossim/ossim_setup.conf|cut -d"=" -f 2)
export myuser=$(grep "^user" /etc/ossim/ossim_setup.conf|cut -d"=" -f 2)
export mypass=$(grep "^pass" /etc/ossim/ossim_setup.conf|cut -d"=" -f 2)
plugin_id=91111

#Plugin
mysql -h ${myhost} -u ${myuser} -p${mypass} alienvault -e "select * from plugin where id = '${plugin_id}' "

#plugin sid control
mysql -h ${myhost} -u ${myuser} -p${mypass} alienvault -e "select * from plugin_sid where plugin_id = '${plugin_id}' "

#Product Type List
mysql -h ${myhost} -u ${myuser} -p${mypass} alienvault -e "select * from product_type"

#category List
mysql -h ${myhost} -u ${myuser} -p${mypass} alienvault -e "select * from category"

#Sub Category List
mysql -h ${myhost} -u ${myuser} -p${mypass} alienvault -e "select * from subcategory"
```