

DF-14-878493

Mission Report

Name

[REDACTED]

Institute/Unit/Action/Project
IPSC/ GlobeSec/Optima/OSINT

Object of the mission

1. Meet with DG OLAF to discuss the evaluation of EMM OSINT Suite
2. Meet with DG HOME to discuss new AA for Open Source Intelligence
3. Meet with Australian Customs to discuss ongoing cooperation and use of our software

Place, date, organizations visited and contacted persons

(Please continue on a separate sheet, if necessary)

1. 23.01.14 DG OLAF, Brussels
2. 23.01.14 DG HOME, Brussels
3. 24.01.14 JRC HQ Brussels

[REDACTED], DG OLAF
[REDACTED], DG Home
[REDACTED], Australian Customs

Other Participants

Of the establishment

(3) [REDACTED], JRC

Other services of the
Commission

(1) [REDACTED],
DG OLAF

Distribution List

Obligatory(*) + Messrs.

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Main Results of the mission:

(Please attach as many separate sheets as necessary)

1) Meeting with DG OLAF

Background

DG OLAF is currently evaluating our software package EMM OSINT Suite. They want to use it as a front line analyst's tool and interface it with the existing tool chain they have in-house.

Discussion

[REDACTED] demonstrated how DG OLAF uses the EMM OSINT Suite (EOS) software. They are processing documents imported from local disk. Furthermore, they perform online research using search engines such as Google.

We made the following observations:

- The system slowed down substantially while processing a large amount of documents (mainly extracted PDF with a lot of found entities)
- The user experience can be improved by streamlining the browsing of the extracted data
 - The entity browser view should support entity filtering
 - The related entities view should sport a search field
- A meta-search engine could facilitate the online research for specific topics.

Since OLAF has invested into its own information extraction tools it would be best to use mainly the research tools (search engine result extraction) and text extraction tools of EOS and provide a customised export which in turn can be imported into the existing tool chain. In order to achieve this we need to improve the existing export function. Interesting information is that OLAF converts all input documents into image based PDFs and then does an optical character recognition to import the documents into its information extraction tool chain.

Follow-up actions

- Provide a performance tuned version of EMM OSINT Suite to cope better under heavy load
- Enhance export function to include meta data for document export
- Provide export function of entity data for import into Analyst Notebook and other tools
- Enhance user interface of EMM OSINT Suite to improve browsing of results

2) Meeting with DG HOME

Background

We have an ongoing collaboration with DG HOME to improve the capabilities of MS' law enforcement authorities in the field of Open Source Intelligence (OSINT). After the last OSINT related AA has run out end of 2013 we are discussing how to create a new AA to continue the successful collaboration.

Discussion

We discussed how to best prepare a new AA between the JRC and DG HOME to sustain the community of OSINT practitioners we have created in the past years. Especially the increase in the number of participants at our events shows that there is a need in the MS to learn how to apply OSINT related techniques for the work of law enforcement authorities.

As part of the past collaboration we have developed the EMM OSINT Suite software which is currently used by around 30 authorities in Europe. Still, we see further potential to disseminate the software to more law enforcement authorities. For this reason we want to draw up a list of contact points in the MS to send them a letter with more information about the software.

In order to better understand, how the EMM OSINT Suite software is used and to prepare for future events we decided to create a survey which will be made available to users of the software and attendants of the past events.

In summary, the new AA would therefore mainly contain the following work programme:

- Yearly OSINT workshops
- Optional on-premises OSINT training for law enforcement authorities

Follow-up actions

- Develop a dissemination strategy for EMM OSINT Suite
- Create a concept for future OSINT related workshops

- Create a draft questionnaire to evaluate past OSINT related activities and to gather requirements for future events
- Discuss terms of reference for new AA

3) Meeting with Australian Customs

Background

A delegation of the Australian Customs headed by [REDACTED] visited Brussels to meet with different services of the Commission to discuss current and future collaboration. The Australian Customs has already licensed the EMM OSINT Suite software and plans to use it for its analysts. They are interested in further tools and activities we undertake in the field of anti-fraud.

Discussion

[REDACTED] gave an overview of our tools for anti-fraud and trade data analysis. The main points addressed can be summarised as follows¹:

1. The approach of the Australian Customs to price outlier detection is based on a percentile ranking of the unit prices (values/quantities) for homogeneous declarations (homogeneity determined by concomitant variables such as tariff classification, statistical code, country of origin and number of imports). They identify suspected under-valuation cases using filters of the percentile rank. In relation to this problem, [REDACTED] has illustrated the SITAF approach, which is based on a regression model fit on the trade values and quantities.
2. [REDACTED] illustrated two systematic under-pricing problems and the solutions developed in the years by SITAFS. The first, applied on aggregated COMEX data, is based on multiple regressions fit on covariates such as the Member States of destination. The second, experimented on nominal customs declarations, is based on clustering robustly the values and quantities declared, without distinguishing between countries or companies. The Australian Customs found that this is, "not only very impressive, but very important work".
3. The Australian Customs stressed the need of developing models to identify structural changes in behaviour or anomalous trade behaviour that are not structural but deviate from normal trade patterns.
4. The Australian Customs and the JRC are both conducting tests to experiment the use of Benford's Law to test for the presence of manipulations in the digits of the nominal customs declarations. SITAFS had the chance to test the approach recently, as a follow up of the clustering workshop of October 2013. [REDACTED] reported very briefly the results obtained in checking the invariance of the digits distribution to typical rescaling that may happen in trade, such as the application of an exchange rate or a fixed percentage discount.
5. In closing the meeting, the Australian Customs stressed that they see modelling of trade as a key priority and confirmed the intention to work more closely with OLAF and the JRC on this front. More concretely, in the short term they will provide us with information on their work on the Unit Price Model and the Bedford Law. If requested, they can also provide mirror data on trade between Australia and the EU. Finally, they can provide more details on the suspected areas of non-compliance of concern and clarify better the form of "structural changes in behaviour" in which they are interested.

[REDACTED] demonstrated the latest version of the EMM OSINT Suite software and gave an outlook of future functional additions to the software, such as a Meta search function and improvements to the entity extraction. Furthermore, he explained that the JRC is exploring ways to tailor the software for the customs domain. Originally, the software was designed mainly for law enforcement purposes.

Follow-up actions

- Provide Australian Customs with latest version of the EMM OSINT Suite

¹ This summary is taken from the Mission Report DF-14-878493 by [REDACTED].

