

The Project



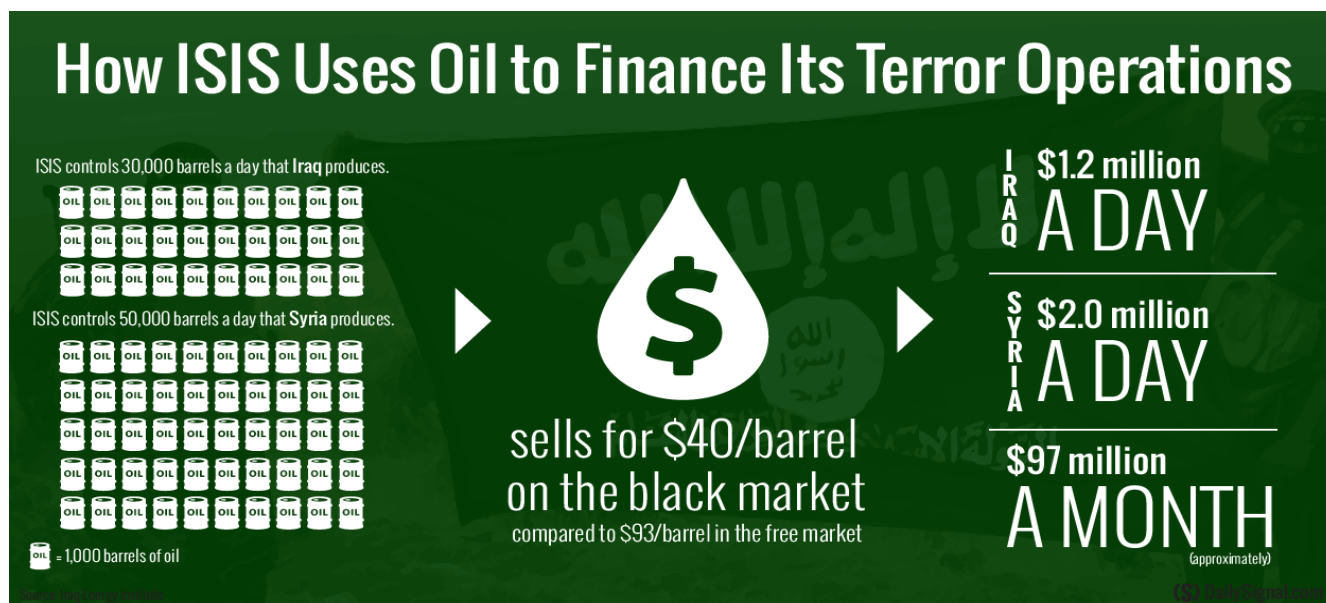
The DANTE project aims to deliver more **effective, efficient, automated data mining and analytics solutions** and an **integrated system** to detect, retrieve, collect and analyse huge amount of heterogeneous and complex multimedia and multi-language terrorist-related contents, from both the Surface and the Deep Web, including Dark nets.

The DANTE framework introduces innovative knowledge mining, information fusion, and automated reasoning techniques and services and provide automated functionalities such as

- detection and monitoring of *sources* of relevant terrorist-related data in surface/deep Web, and dark nets;
- accurate and fast *detection, analysis, categorization* of suspect terrorist related multi-language contents;
- large-scale temporal *analysis of terrorism trends*;
- real-time *summarization* of multilingual and multimedia terrorist-related contents;
- *detection of dis-information* in online contents;
- detection and monitoring of relevant *individuals and linking pseudonyms* with the *original authors*;
- accurate and fast *identification of terrorist online communities and groups*;
- capturing, storing and *preserving relevant data* for further forensic analysis.

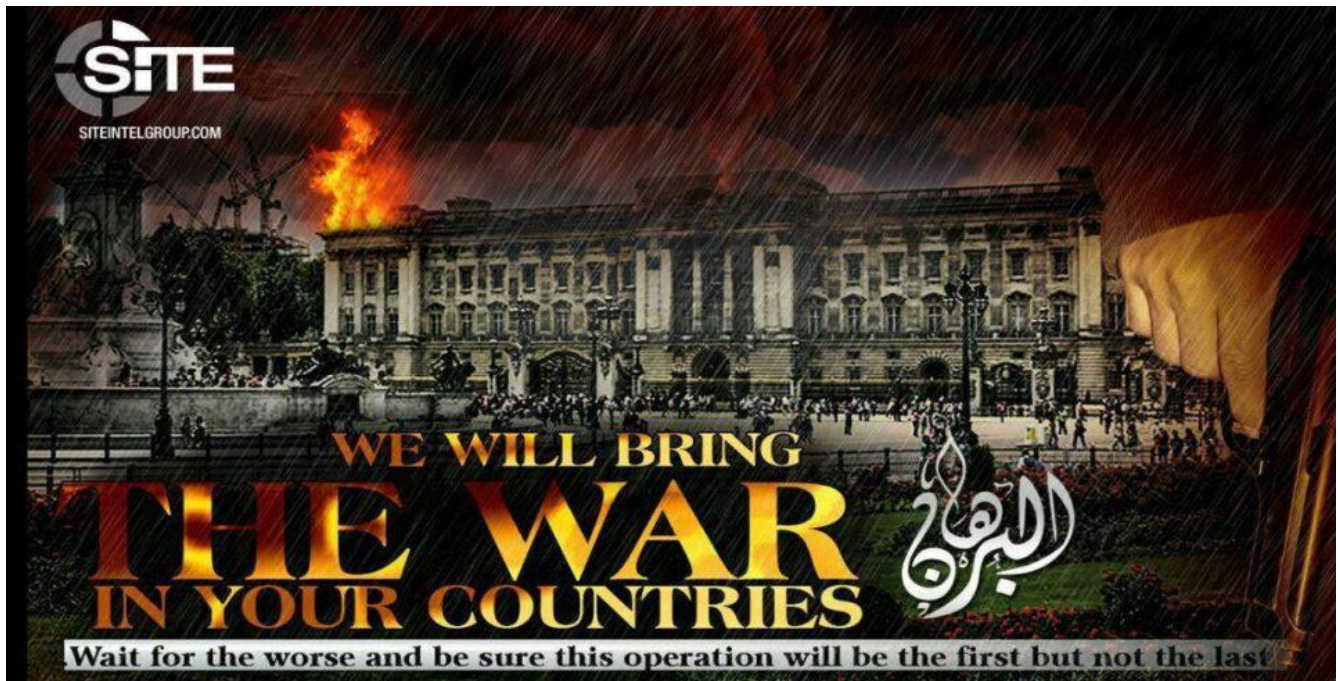
In this newsletter we will focus on the explanation of the first use cases of the DANTE project.

Use Case 1 - Financing Terrorism



Fund-raising terroristic activities are nowadays established in online sites that are publicly available to others in order to pick as many funds as possible. Interestingly, once Social Media have been rapidly grown up and gain so much popularity, they are in turn used for touting fundraising campaigns so as to elicit the money of persons that are potentially “mesmerized” by its ideological scope. Once some persons find interesting the content and purpose of the campaign, they will probably donate some of their money to the terrorist organization. Notably, terrorist organizations provide often fraudulent reasons for their campaigns so as to tempt more persons to donate an amount of money. Another practice they use is that they create contrived charitable organizations to allure more persons that are actually unaware of the real destination of their donation. DANTE will be used in this use case in order to identify fund-raising activities that are incited by terrorist organizations with a number of ways for sustaining their operations. In particular, functionalities related to pertinent source detection and indexing in the Surface and Deep Web, as well as in Dark Nets, can be proved consequential towards the efforts of hindering fund-raising activities for illegal usage.

Use Case 2 - Propaganda



In every terrorist organization, admittedly the most consequential factor for its sustainability is manpower. Having this in mind, terroristic organizations often distribute propagandistic content on the Web for alluring potential individuals that are prone to be radicalized. The propagandistic content mainly comprises information around religious and political issues that terrorists have them as guidelines to justify their illegal activities. The scenarios in UC-2 describe a broad range of propaganda incidents that reflect the issues and difficulties about propaganda detection which is the intended outcome. They involve radicalization attempts of individuals through Social Media, the significance of the temporal aspect when online content is distributed over the contemporary structure of Web, detection of early radicalized individuals, and in general the content and practices that terrorists utilize to attract as many persons as possible. DANTE's key role is to detect online propagandistic content and early radicalized individuals in minimum time, so as to anticipate further development of the organization. The envisaged tools that are to be developed with respect to UC-2 will assist officers to their everyday operations, as they will provide an automated and quick way for reliable detection of propagandistic content on the Web, as well as the relevant terrorists that incite such activities.

Use Case 3 - Training and knowledge sharing

The increasing availability of on-line sources made the finding of digital training material very easy. More and more terrorist organizations create online sites in the surface and, above all, in the deep and dark web where people can access and download training material. Thus, it is easier for interested people, especially the so-called lone wolves, to become in contact with material it was very difficult to find some years ago. Going in far and dangerous training camps is not mandatory anymore and all needed information can be reached from home. It is a challenging issue for LEAs, active in searching potential terrorists online and forced to monitor, sometimes manually, hundreds



of digital accounts and to follow their online activities. The DANTE platform will provide a strong support to LEAs in their struggle against terrorist online training sites. DANTE will assist them in automatically locating old and new sites, monitoring the contents update and discovering terrorist group or single accessing forbidden material. It will allow LEA to concentrate on suspicious accounts and to save precious time for advanced investigations. The main work in the project will be related to the cases of lone wolves, completely trained online, and in their online activities to create a useful pattern for detecting future terrorist activities.