



GDPO Situation Analysis

May 2014

Law enforcement is currently not the greatest threat to the survival of Darknet drug markets

Subject

Since the arrest of the alleged administrator of the Silk Road, Ross Ulbricht, by the FBI and the closure of the Utopia market place earlier this year, law enforcement agencies have made very little progress in stopping the activities of online drug markets. The pending implementation of new technological and organisational structures by market administrators will continue to cause significant challenges to enforcement agencies. At present the greatest risk to the survival of individual drug markets comes not from law enforcement agencies but from within their own communities.

Analysis

Earlier this year the widely anticipated Utopia market place launched to much fanfare from the Darknet community. This new hidden service was run by administrators previously involved with the management of the ground breaking but now closed marketplace Black Market Reloaded (BMR). The technical credibility of the site's managers coupled with a public endorsement of the new market by the infamous and revered BMR lead administrator 'Backopy' lead to speculation that this market could become a

'The market will be based on BMR (Black Market Reloaded) and is developed with some help and inspiration from Backopy. As mods/admins from BMR we can say we do our best to make this place the best there is on the Darknet'.

Utopia Admin SWIM

serious competitor to Silk Road 2.0. Within a few hours of Utopia launching over 1200 different items were already listed for sale including narcotics, firearms and hacking services.

'The Commodore investigation is a clear message to anyone thinking they can commit crimes using digital anonymity: even within the anonymous "Tor" environment, nobody is unassailable'.

Dutch Police press release

User experiences of the market were initially positive. However, after only a few days the site was subject to a barrage of assaults ranging from wide scale distributed denial of service (DDOS) attacks, misinformation campaigns and apparent hacking attempts. The market continued to face difficulty until its servers were located (in Germany) and five people arrested by Dutch police in 'Operation Commodore'.

While law enforcement agencies were quick to tout this as a significant success that had made a dent in the online narcotics trade, its worth noting that:

- Most of Utopia's users simply migrated to other market places.
- While the administrators of the site were apprehended, the overwhelming majority of buyers and sellers have not been found or prosecuted.
- The majority of items for sale in the virtual environment of Utopia cannot be confiscated and were simply re-listed on other market places.
- Soon after the closure of Utopia the Silk Road market place saw an increase in the number of users.

The response by other marketplaces to Utopia's closure was to provide quick support to their users including a space within the market's forums for Utopia users to organize and communicate.

Utopia marketplace's closure had very little impact on the narcotics trade over the TOR network. At the time of writing there are approximately three times more listings for narcotics in various Darknet markets 'Make yourselves at home here, regroup and do it again. Show them that you, we, are a hydra cut off one head and ten more spring up'

Silk Road Forum Moderator 'Stealth'

then there were in October 2013 prior to the closure of the original Silk Road. This shows that despite the efforts of enforcement agencies there has been considerable growth in online narcotics black markets.

Current threats

While law enforcement will always be of concern to black markets there are more significant threats that can have a detrimental impact on their operations:

1. Competing markets

Competing marketplaces threaten the existence of each other in two distinct ways. The first is typical of any competitive free market system. Online black markets survive and make profits only when buyers and sellers are using them. Markets that provide the highest level of service, security and user experience will gain more users at the expense of those that don't. Indeed, rapid customer service response times became a key feature of black market advertising after several users of the Silk Road started complaining that customer service queries were being either completely ignored or replied to after excessive delays. It is suspected that one of the reasons that the infamous "Sheep" marketplace administrators closed the market and stole their users Bitcoins was because it had become unprofitable to run due to competition.¹

The second threat competing markets pose is when they become openly hostile to each other, best illustrated by the altercation between the Silk Road and Tormarket: In late 2013 the Silk Road was under constant DDOS attacks that caused significant issues for the market. As a consequence the site became difficult to use and at times almost impossible to access. "DPR" the administrator of the Silk Road was convinced the rival market, Tormarket was behind the attacks and responded in kind. This continued for a short period until it finally culminated with DPR hacking and publishing the internal database of Tormarket, which eventually lead to its closure².

Sheep market place was seen to be potential competitor to the Silk Road. However, it is now credited as the biggest known scam on the Darknet taking approximately \$40 million from its users.

² The leaked database was redacted to ensure that users of Tormarket were not put in danger of being identified.

2. Hacking, extortion and misinformation

Despite most markets maintaining relatively high levels of security the potential to gain large amounts of money from an organization that cannot engage with law enforcement is an attractive target for hackers.

- During February 2014 the Darknet community was stunned to hear that Silk Road, the most reputable black market had been hacked and over \$2.5 million stolen.
- This caused several buyers and sellers on the Silk Road to lose confidence in the market and either move to competing markets or stop using online markets entirely.
- Despite the Silk Road administrator "Defcon" constructing a system that repaid stolen user funds with commission payments, the markets reputation has yet to fully recover.

A market's reputation is one of the key indicators used by buyers and sellers to decide upon its legitimacy. Several review articles similar to those seem on mainstream e-commerce sites give details on any given users experience and are regularly posted on key Darknet forums. Market administrators are understandably proactive in ensuring the reputation of their market places remains positive and intact. Misinformation deliberately spread by individuals or groups can have strongly negative ramifications for marketplaces:

- The previously mentioned Utopia marketplace was the victim of a particularly aggressive misinformation campaign within hours of its launch.
- A user identifying themselves as 'Whyusheep' made alarming comments about the market, its administrators and security.
- These claims circulated around the Darknet community causing buyers and sellers to leave the market place and Utopia to be treated with suspicion.
- The same user made claims about an alternate market called Black Bank which once again caused panic amongst the market's relatively small user base.

3. Scam markets

While on the surface scam or fake marketplaces may seem to be a danger to only those who trust them, they have the potential to cause significant issues for the online narcotics trade:

- The prevalence of scam markets makes it difficult for new marketplaces to emerge and establish themselves.
- This causes users to rely on a small number of established markets.

What next?

With this in mind, there are a number of issues for consideration:

- The various online communications platforms used by both buyers and sellers on Darknet black-markets seem to have been largely underutilized in enforcement strategies. Darknet forums, social media sites and Clearnet messaging boards have ensured that if adversarial actors, including law enforcement agencies, were able to bring down a market place there was a space where users were able to effectively organize and regroup.
- Indeed, each time a market was taken offline, it has been on these platforms that users regrouped
 and sought out information for the addresses of alternate and reputable black-markets. To date
 it appears none of these communications platforms have been taken offline by law enforcement
 agencies. Targeting these communications networks whilst simultaneously seeking to remove online
 black-markets could prove to be a potent and effective strategy.

- As online narcotic markets continue to grow, security agencies will dedicate more financial, technical and human resources to enforcement activities in virtual environments. However, with enforcement an ongoing concern for black market operators, administrators will invest in enhanced security
- As the use of Darknet and associated technology continue to expand, the number of hacks, cyberattacks and scam markets will proportionately increase, perpetuating the risks associated with this type of market activity. Smaller and emerging markets may merge in a bid to compete with bigger markets, but it remains unlikely that significant cooperation will be seen between larger markets.

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