Welcome to Today’s IRS Web Conference

Understanding the Basics of the Dark Web

Philip Yamalis
Stakeholder Liaison

The original live broadcast of this web conference included an interactive polling feature which is disabled in this archived version.

Media: SBSE.SL.Web.Conference.Team@IRS.gov
Surface Web v Deep Web v Dark Web

Surface Web
Social media sites, sites indexed by search engines

Deep Web
Private databases, forums, password protected sites

Dark Web
Only accessible via special software; intentionally hidden; anonymous

Graphic: CNN
Surface Web
Deep Web
Dark Web
The anonymous Internet

Daily Tor users per 100,000 Internet users:
- >200
- 100 - 200
- 50 - 100
- 25 - 50
- 10 - 25
- 5 - 10
- <5
- no information

Average number of Tor users per day calculated between August 2012 and July 2013.

Data sources:
- Tor Metrics Portal: metrics.torproject.org
- World Bank: data.worldbank.org

by Mark Graham (@geoplace) and Stefano De Sabbata (@maps4thought)

Internet Geographies at the Oxford Internet Institute 2014 - geography.ox.ac.uk

Oxford Internet Institute
University of Oxford
Dark Web Services

Diagram 1:
- Pornography
- Pharmaceuticals
- Weapons
- Blogs
- Financial Fraud Sites
- Drugs
- Fake Documentation Services
- Carding Sites
Polling Question

What type of activities occur on the Dark Web?

a) Drug sales
b) Weapon sales
c) Money laundering
d) All of the above
Accessing the Dark Web

- Requires software running on computer or Tails and USB
  - The Onion Router (Tor) is most popular
  - Others include: 1P2 and Freenet
- Uses encryption and proxies/relays to conceal a user’s location and usage
  - More than 2.5 million daily users

The remainder of the presentation will focus on Tor; however, the same concepts apply to the others
How Tor Works

Step 1: Alice's Tor client obtains a list of Tor nodes from a directory server.
How Tor Works

Step 2: Alice’s Tor client picks a random path to the destination server. **Green links are encrypted, red links are in the clear.**

Graphic: [www.torproject.org](http://www.torproject.org)
How Tor Works:

Step 3: If at a later time, the user visits another site, Alice’s tor client selects a second random path. Again, green links are encrypted, red links are in the clear.

Alice → Bob

Dave

Jane

Graphic: www.torproject.org
Tor Browser

- Web browser based on Mozilla Firefox and pre-configured to protect your anonymity (Tor, scripting disabled, plugins, etc.)

- Note: does not protect your computer from malware, viruses, etc.
Congratulations. This browser is configured to use Tor.

Your IP address appears to be: 204.85.191.30

Please refer to the Tor website for further information about using Tor safely. You are now free to browse the Internet anonymously. For more information about this exit relay, see: Atlas.

Donate to Support Tor

Tor Q&A Site | Volunteer | Run a Relay | Stay Anonymous
Congratulations. This browser is configured to use Tor.

Your IP address appears to be: 204.85.191.30

Please refer to the Tor website for further information about using Tor safely. You are now free to browse the Internet anonymously. For more information about this exit relay, see: Atlas.

Donate to Support Tor

Tor Q&A Site | Volunteer | Run a Relay | Stay Anonymous
The Dark Web can be accessed through which web browser?
a) Chrome
b) Firefox
c) Tor
d) Explorer
Searching the Dark Web

- Onion URL Repository
- Uncensored Hidden Wiki
- notEvil
- ParaZite
- TorLinks
about 14047 results for 'cocaine' (0.7093 seconds)

Advanced Search

TradeRoute - Cocaine
traderoutelbgzt.on1on
Enjoy the rush and feel the thrill. Experience the euphoria of the first lines with our purest cocaine. Wait no more and place your order!

Quality cocaine 0.5 gram 80
valhallaxmn3fydu.on1on/products/91213 Valhalla
High quality fishscale cocaine http valhallaxmn3fydu.on1on depanage products See all quantities and discounts of this product Cocaine 0.5 gram 30 Cocaine 1 gram 47 Cocaine 2 gram 90 Cocaine 2.5 gram 116 Cocaine 3 gram 130 Cocaine 5 gram 225 Cocaine 10 gram 430 drugs stimulants cocaine

Vendor Depanage (0) Price B0.02128028 Location Netherlands

Quality cocaine 10 gram 80
valhallaxmn3fydu.on1on/products/91296 Valhalla
High quality fishscale cocaine http valhallaxmn3fydu.on1on depanage products See all quantities and discounts of this product Cocaine 0.5 gram 30 Cocaine 1 gram 47 Cocaine 2 gram 90 Cocaine 2.5 gram 116 Cocaine 3 gram 130 Cocaine 5 gram 225 Cocaine 10 gram 430 drugs stimulants cocaine

Vendor Depanage (0) Price B0.30501735 Location Netherlands

COCAINENE THE COMPLETE CULTIVATION AND SYNTHESIS OF
pwoah7foa6au2pul.on1on/listing.php?id=21794 Alphabay
ebook CONTENTS Cultivation 3 The coca plant 3 Peru 4 Bolivia 5 Columbia 5 Natural Enemies 5 Cocaine Synthesis 7 Coca Leaves to Coca Paste 7 Coca Paste to Cocaine Base 8 Cocaine Base to Cocaine Hydrochloride 8 A n in depth view of Synthesis for precision chemistry 9 Synthesis Diagrams 12 Base Conversion diagram 13 Legalization 14 Safety Procedure Recommendation 16 cocaine coke coca isellpizza passman...

Vendor fake (2613) Price B0.00829055 Location Worldwide
### MARKETS LIST & AVAILABILITY STATUS

#### TOP MARKETS
- Dream market - 98.02%
- Point / T•chka Free Market - 88.53%
- Wall Street Market - 97.19%

#### INVITE / REFERRAL MARKETS
- Olympus Market - 99.98%
- Libertas Market (Monero Only) - 86.35%

#### MARKETS
- The Majestic Garden - 96.34%
- Zion Market - 89.61%
- CGMC - 91.04%
- Berlusconi Market - 95.24%

#### VENDOR SHOPS
- Gammagoblin - 96.17%
- The French Connection - 98.37%
- CharlieUK - 95.56%
- ToYouTeam - 78.35%
- EuroPills - 46.24%
- Fight Club - 46.17%
- ElHerbolario - 98.19%
- I33TER - 45.48%
Welcome, angrydragon007.

Personal phrase: Angry Dragon 007

The sentence above is here to ensure that you are on the real AlphaBay Market site and not on a phishing site.

We highly recommend that you disable Javascript when viewing the marketplace for better security.

Quick Search

Search: [ ]

Use hyphen "-" in front of a word to exclude it from the results.

Featured Listings

- **10,000 U.S. Dollars (CASH FOR BTC) "GENUINE"**
  - #287462 - Other - gold_2
  - Buy: USD 11,000.00

- **14 GRAMS OF PURE FISHSCALE COCAINE | RATED THE BEST**
  - #338853 - Cocaine - LeftCoastLabs
  - Buy: USD 698.00

- **1/4 LB Pineapple Kush · Greenhouse (TOP SHELF)**
  - #183848 - CVV & Cards - BitcoinThief
  - Buy: USD 730.00

- **Heisenberg ACADEMY --> Make $15K - $40K per month --> VIDEO TUTORIALS**
  - #135090 - Fentanyl & RCs - bigjve33
  - Buy: USD 450.00

- **14 GRAMS OF PURE FISHSCALE COCAINE | RATED THE BEST**
  - #338853 - Cocaine - LeftCoastLabs
  - Buy: USD 698.00

- **ROAD TO RICHES • DOUBLE YOUR BITCOINS IN ONE DAY V3 [APRIL 2017 UPDATE] • [S48050.00**
  - #183848 - CVV & Cards - BitcoinThief
  - Buy: USD 730.00

- **FULL VIDEO PROOFS - THOUSANDS IN MINUTES] ROAD TO RICHES • DOUBLE YOUR BITCOINS IN ONE DAY V3 [APRIL 2017 UPDATE] • [S48050.00**
  - #183848 - CVV & Cards - BitcoinThief
  - Buy: USD 730.00
### AlphaBay Market

#### Search Results

**BROWSE CATEGORIES**
- Fraud
  - 43742
- Drugs & Chemicals
  - 237165
- Guides & Tutorials
  - 15184
- Counterfeit Items
  - 8886
- Digital Products
  - 17096
- Jewels & Gold
  - 1733
- Weapons
  - 4877
- Carded Items
  - 3827
- Services
  - 7664
- Other Listings
  - 3946
- Software & Malware
  - 3307
- Security & Hosting
  - 828

**SEARCH OPTIONS**
- Search terms: fulz
- Listing type:
  - All
  - Fixed Price
  - Auction

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Views</th>
<th>Bids</th>
<th>Quantity left</th>
<th>Buy price</th>
</tr>
</thead>
<tbody>
<tr>
<td>93584</td>
<td>Accounts &amp; Bank Drops / Other - BlockKids</td>
<td>7390</td>
<td>Fixed price</td>
<td>Unlimited</td>
<td>USD 40.00</td>
</tr>
<tr>
<td>306665</td>
<td>[MS] FIDO ACCOUNT FULZz+ PIN DOB ... ACCOUNT READY TO UPGRADE</td>
<td>1966</td>
<td>Fixed price</td>
<td>Unlimited</td>
<td>USD 41.57</td>
</tr>
<tr>
<td>306656</td>
<td>[MS] ROGERS ACCOUNT FULZz+ PIN DOB ... ACCOUNT READY TO UPGRADE</td>
<td>1064</td>
<td>Fixed price</td>
<td>Unlimited</td>
<td>USD 40.18</td>
</tr>
<tr>
<td>1312</td>
<td>Other / Other - lot_oo 7</td>
<td>2371</td>
<td>Fixed price</td>
<td>Unlimited</td>
<td>USD 7.18</td>
</tr>
</tbody>
</table>

Logged in as **angrydragon007**

BTC: 0.0000
XMR: 0.0000
ETH: 0.0000

---

**Dark Web**
THIS HIDDEN SITE HAS BEEN SEIZED
by the Federal Bureau of Investigation,
in conjunction with the IRS Criminal Investigation Division,
ICE Homeland Security Investigations, and the Drug Enforcement Administration,
in accordance with a seizure warrant obtained by the
United States Attorney’s Office for the Southern District of New York
and issued pursuant to 18 U.S.C. § 983(j) by the
United States District Court for the Southern District of New York
Polling Question

What is the name of a Dark Net Market?

a) Amazon
b) Google
c) Alphababay
d) Ethereum
Dark Web
Opioid Crisis
Dark Web

Opioid Crisis
Dark Web
Opioid Crisis
Dark Web
Opioid Crisis
Ransomware
Ransomware

What Happened to My Computer?
Your important files are encrypted. Many of your documents, photos, videos, databases and other files are no longer accessible because they have been encrypted. Maybe you are busy looking for a way to recover your files, but do not waste your time. Nobody can recover your files without our decryption service.

Can I Recover My Files?
Sure. We guarantee that you can recover all your files safely and easily. But you have not so enough time. You can decrypt some of your files for free. Try now by clicking <Decrypt>. But if you want to decrypt all your files, you need to pay. You only have 3 days to submit the payment. After that the price will be doubled. Also, if you don’t pay in 7 days, you won’t be able to recover your files forever. We will have free events for users who are so poor that they couldn’t pay in 6 months.

How Do I Pay?
Payment is accepted in Bitcoin only. For more information, click <About bitcoin>. Please check the current price of Bitcoin and buy some bitcoins. For more information, click <How to buy bitcoins>.

And send the correct amount to the address specified in this window. After your payment, click <Check Payment>. Best time to check: 9:00am - 11:00am GMT from Monday to Friday.

Send $300 worth of bitcoin to this address: 12t9YDPgwueZ9NyMgw519p7AA8isjr6SMw

About bitcoin
How to buy bitcoins?
Contact Us
### IMPORTANT INFORMATION !!!!!

All of your files are encrypted with RSA-2048 and AES-128 ciphers.
More information about the RSA and AES can be found here:

Decrypting of your files is only possible with the private key and decrypt program, which is on our secret server.
To receive your private key follow one of the links:
1. [http://twbers4hmi6dx65f.tor2web.org/66CCAB8A005BF0AF](http://twbers4hmi6dx65f.tor2web.org/66CCAB8A005BF0AF)
2. [http://twbers4hmi6dx65f.onion.to/66CCAB8A005BF0AF](http://twbers4hmi6dx65f.onion.to/66CCAB8A005BF0AF)
3. [http://twbers4hmi6dx65f.onion.cab/66CCAB8A005BF0AF](http://twbers4hmi6dx65f.onion.cab/66CCAB8A005BF0AF)

If all of this addresses are not available, follow these steps:
1. Download and install Tor Browser: [https://www.torproject.org/download/download-easy.html](https://www.torproject.org/download/download-easy.html)
2. After a successful installation, run the browser and wait for initialization.
3. Type in the address bar: `twbers4hmi6dx65f.onion/66CCAB8A005BF0AF`
4. Follow the instructions on the site.

!!! Your personal identification ID: 66CCAB8A005BF0AF !!!
Dark Web
Dark Web
Polling Question

What do hackers use to encrypt files and force someone to pay to have them unencrypted?

a) Miners
b) Hackware
c) Ransomware
d) Ransom Code
Q & A Session

Philip Yamalis
Stakeholder Liaison

and

James Daniels
Program Manager – Cyber Crimes
IRS – Criminal Investigation
Most Important Points

• Surface web has only around 5% of the data stored on the internet

• Special software like the Tor browser is used to access the dark web

• Don’t click on links from unknown people or email addresses
Thank You!