# Dark Web

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- Levels of the Internet
- Search Engines
- Overview of the Dark Web

Internet, Dark Web and Deep Web

- **The Internet**: This is the easy one. It's the common Internet everyone uses.

- **The Deep Web**: Is a subset of the Internet that is not indexed by the major search engines. You have to visit those places directly instead of been able to search for them.

Internet, Dark Web and Deep Web

Internet
Accessible, Indexed

Deep Web
Accessible, Non-indexed

Dark Web
Restricted, Non-indexed
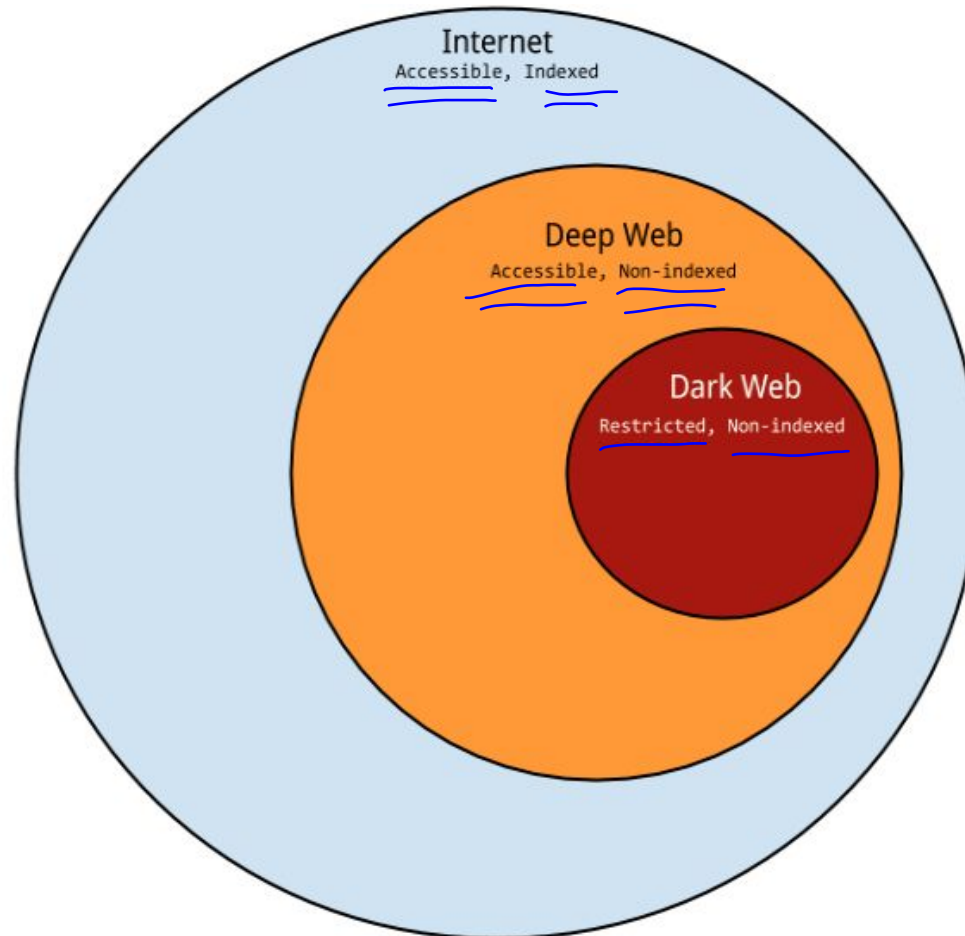
Search Engines

- Programs that search documents for specified keywords or phrases and returns a list of documents where the keywords were found

How search Engines Work

- Uses a **spider** program to fetch as many webpages as possible

- A program called an **indexer** then reads these webpages and creates an index, storing the URL and important content of webpage

- Each search engine has its own **ranking algorithm** that returns results based on their relevance to the user's specified keywords or phrases

The Invisible Web

- Everything not found by a search engine's spider program is part of the invisible web

- Most webpages on the internet are not indexed by search engines

- Some experts estimate that as much as 98% of the entire internet is invisible web content "Deep Web".

Dark Web vs. Deep Web vs. Surface Web

Dark Web vs. Deep Web vs. Surface Web

How to Access Safely

- Download TOR

- Select the safest option of Security setting of TOR

- Turn off ALL plug ins before accessing

- If your computer has a webcam, remove or obstruct it.

- VPN (ex: IPVANISH)

- Stay away from anything that looks remotely criminal or suggestive.

The onion router

- Similar to a Firefox browser

- Simple, anyone can get it

- Host machine is untraceable
  - Can stay anonymous
  - Can access Darknet
  - Can see .onion extensions

The onion router
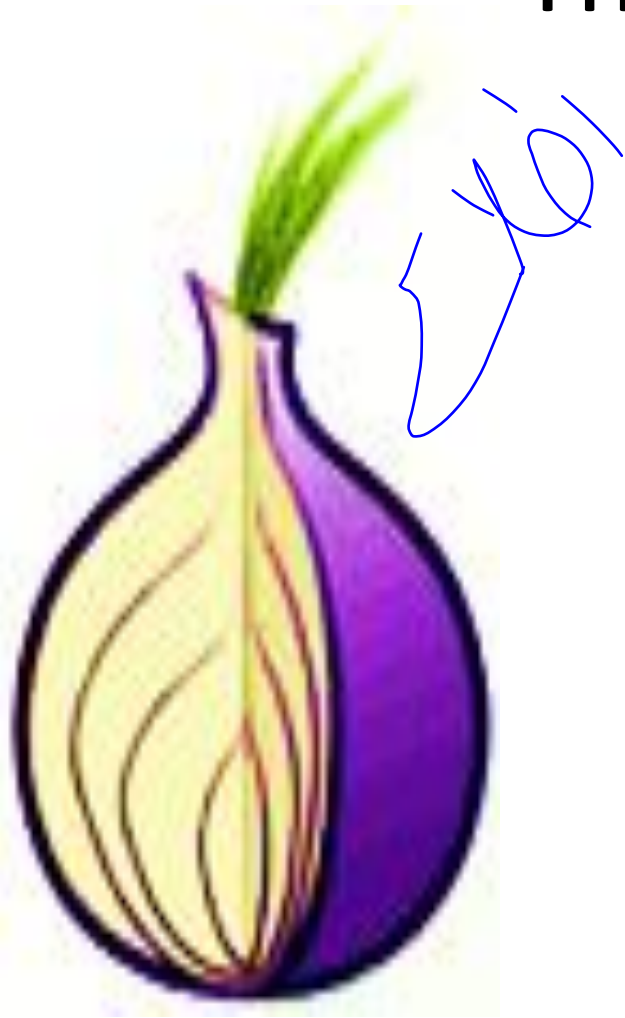
- So around 1990's United States Government and Military researchers created this technology to serve this purpose.
- TOR technology later released to the public for the simple reasoning: the more people using the system, the difficult it would be to distinguish the government's messages from the general noise.
- TOR evolved over the years ,and adopted by the open source community and become a widely used software.

The onion router

- Not only journalists and activists use TOR to protect their anonymity online from oppressive regimes but also by criminals who used TOR to sell drugs promote child pornography or Non-ethical hackers to solicit for doing illegal things online "Hacking your partner", selling accounts/passwords and credit cards information.

Dangers of the Dark Web

- If you decide to look into the Deep Web on your own volition, make sure to be careful.

- Have anti-virus protection.

- Be intelligent about what links you click. The Deep Web is a haven for Phishers.

- If you don't want to see any disturbing images or content, simply browse as text-only.

Dark Web Overview

- Dark Web: cyber criminal's (including Terrorist activities) use of the Internet

- Collection: Web sites, forums, blogs, YouTube, Second Life

- Analysis and Visualization: Link and content analysis; Web metrics analysis; Authorship analysis; Sentiment analysis; Multimedia analysis.

Single Forum Search & Translation

Dark Web Forum Portal

SEND COMMENTS

| Home | Forum Statistics | By Member | By Thread | By Time | By Topic | SNA Graph |

Alokab threads related to Topic: bomb, iraq

Search: bomb, iraq

This page shows all the threads related to the topic searched.

• **TO VIEW** all messages from a thread, left click anywhere in the corresponding row.

• **TO TRANSLATE** the thread titles, click the "Translate Titles" button.

Translations of thread titles

• **TO DOWNLOAD** messages from all threads, click "Download in TXT format" (limit: 200 messages).

ThreadID	Thread Title	Thread Title Translation
11645	دمعة على العراق - أبيات شعر مؤثرة بحق العراق ١	Tear on Iraq - an influential poems against Iraq a
38327	استفتاء : هل سيحرك الحكام جيوشهم ...إلقاء قنبلة نووية على غزة ..؟	Referendum: Are referees will move their armies. ..Dropping a nuclear bomb on Gaza. .?
13554	الأزمة المعاصرة للنظام الرأسمالي .. احتلال العراق	Contemporary crisis of the capitalist system. .The occupation of Iraq
21146	تكلفة الحرب في العراق	Cost of the war in Iraq
21287	الدولة الإسلامية في العراق	Islamic State in Iraq
21369	- خارطة عمليات دولة العراق الإسلامية	Map of Islamic State of Iraq --
22380	الفرق بين الجهاد والقتال الطائفي--في العراق	The difference between jihad and sectarian fighting - in Iraq
23225	صور (الصهاينة في العراق) ! حسبنا الله ونعم الوك	Photos (the Zionists in Iraq)! Being God and yes, Alok
24105	موارد بيت مال دولة الإسلام في العراق	Resources Bayt Al-Mal Islamic state in Iraq
26094	الدرر البهية في نصرة دولة العراق الإسلامية - محاضر	Mark Gorgeous in supporting the Islamic State of Iraq - Lecturer
26104	دولة العراق الأسلامية / القول المبين في حقيقة كتائ؛	Islamic State of Iraq / set out to say in the fact Ktai
26917	شاهد العملية البطولية لجيش الصديق السلفي في العراق	View the heroic operation of the Army of the ancestral Friends in Iraq
29230	دولة الإسلام في العراق وموقف المسلمين منها	Islamic state in Iraq and the position of Muslims
29809	من الأندلس إلى العراق: هل التاريخ يُعيد نفسه؟	From Andalusia to Iraq: Does history repeat itself?
31191	سجين العراق- نشيد	Prisoner of Iraq - commend
35224	مورغان ستانلي": عجز الموازنة الأميركية 540 بليون دولار ومخصصات العراق وأفغانستان 858 بليوناً منذ" 2001	"Morgan Stanley": U.S. budget deficit of $ 540 billion appropriations for the Iraq and Afghanistan 858 billion since 2001
35523	عقود التنازلات على ثروات المسلمين.. العراق	Contracts for concessions at the wealth of Muslims. .Iraq
37833	من دولة العراق الأسلاميه الى غزة الأبيه	Of the Islamic State of Iraq to the Gaza Strip proud
42680	هل من حق العراق مطالبة الكويت بدفع تعويضات؟	Is Iraq's right to demand that Kuwait to pay compensation?
45389	الأنشودة الرائعة - رجال العراق - فيديو	Wonderful song - Men Iraq - Video

|< First Page   < Previous Page   [Translate Titles]   Next Page >   Last Page >|

Records 1 to 20 of 32 Download in TXT format

Dark Web Forum Tools

- Information contained within Dark Web forums represent a significant source of knowledge for security and intelligence organizations.
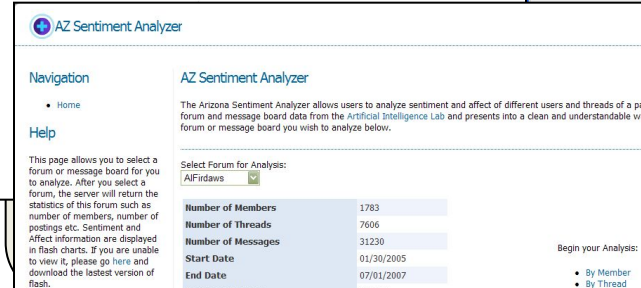
- A lot of developed tools supporting the large-scale *collection*, *search*, and *analysis* of Dark Web forums, specifically addressing the needs of security analysts.
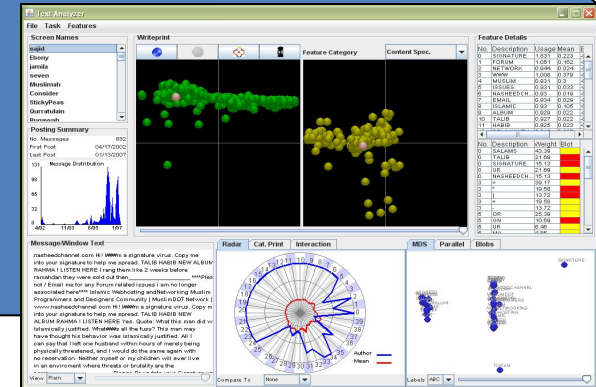
Collection

AZ Forum
Spider
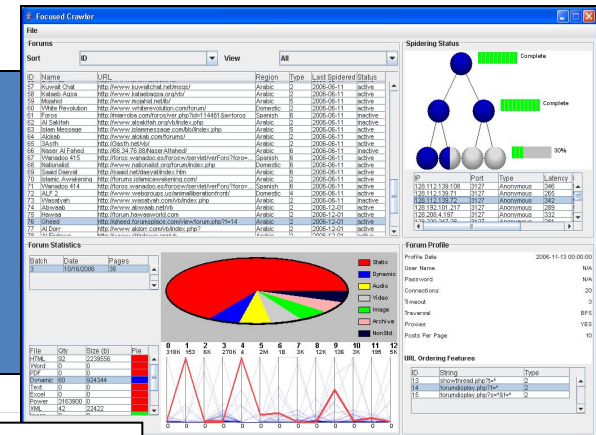
AZ Sentiment Analyzer

Analysis

AZ CyberGate
Text Analyzer

Case: Access to The Silk Road

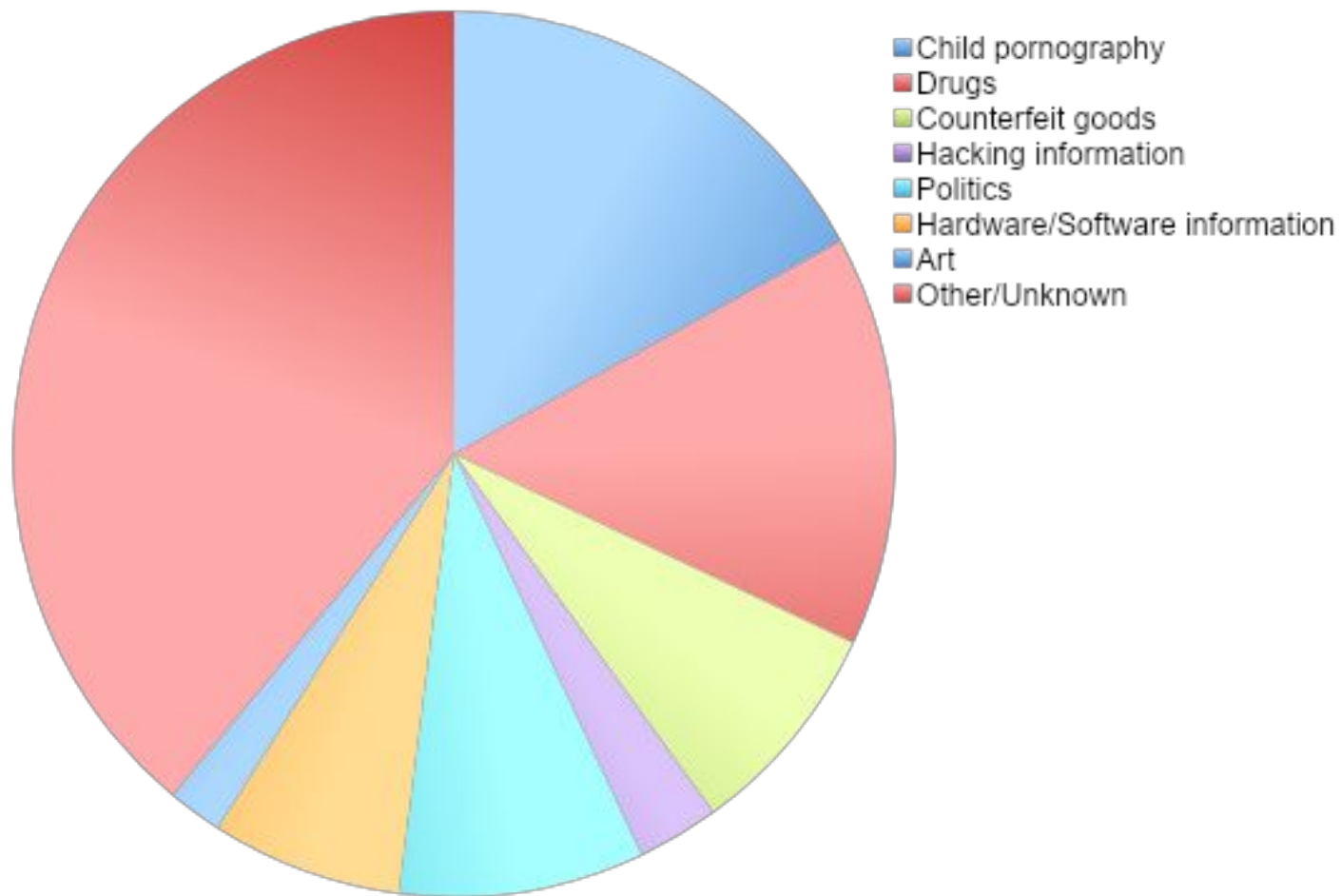- Access to Darkweb = Access to Information

  - Onions

  - Government Secrets

  - Conspiracy Theories

- The Silk Road (Market)

  - Weapons and drugs sold

  - 60,000 visits per day

  - $1.9 million in sales every month

Darkweb Usage

Legend:
- Child pornography
- Drugs
- Counterfeit goods
- Hacking information
- Politics
- Hardware/Software information
- Art
- Other/Unknown

telegraph.co.uk, 22 April 2014

Conclusion

First illegal online transaction **Early 1970's**

Rise of data havens **1980's**

1960's Formation of ARPANET

1983 ARPANET split in two

Release of Freenet **2000**

Internet open to the public **1991**

2002 Release of Tor

1999 Creation of Napster

Arab Spring **Early 2010's**

Snowden whistleblowing **2013**

2009 First Bitcoin mining

2013 Silk Road shut down

2015 Playpen shut down

?

The future of Darkweb is Uncertain after 2015

Conclusion

- In sum, the Dark Web poses a cyber-security risk to anyone on the Internet.

- Though accessing the Dark Web to patrol for your personal information is not advisable, being aware of its potential impact in facilitating cybercrime is important in developing a sound cyber-security protocol.

Questions