

Introduction to the Dark Web

- Defining the Dark Web and Its Structure
- Your Name / Institution
- Date

What is the Dark Web?

- - Part of the internet not indexed by traditional search engines
- - Requires special software like Tor to access
- - Often confused with the Deep Web

Surface Web vs. Deep Web vs. Dark Web

- Surface Web: Public websites (e.g., Google, YouTube)
- Deep Web: Hidden content (e.g., medical records, banking)
- Dark Web: Encrypted networks requiring special tools

Structure of the Dark Web

- - Operates on overlay networks (e.g., Tor, I2P)
- - Uses .onion addresses (Tor network)
- - No centralized indexing or search engines
- - Peer-to-peer or onion routing to hide identities

How Access Works

- - Use of Tor browser
- - Encryption at multiple layers (Onion routing)
- - Data passes through several random nodes before reaching destination

Key Components of the Dark Web

- - Hidden Services: Websites with .onion domains
- - Marketplaces: Often for illegal goods (e.g., Silk Road)
- - Forums and Communities: Discussions, whistleblowing, etc.
- - Communication Platforms: Secure, anonymous messaging

Legal and Illegal Uses

- Legal:
 - - Anonymous journalism
 - - Activist communication
 - - Privacy protection
- Illegal:
 - - Drug trafficking
 - - Hacking services
 - - Stolen data marketplaces

Misconceptions about the Dark Web

- - Not everything is illegal
- - Not the same as the Deep Web
- - Not completely untraceable (law enforcement has tracked users)

Safety and Ethics

- - Risks: malware, scams, law enforcement tracking
- - Ethical dilemmas: balancing privacy with regulation
- - Importance of responsible use and digital literacy

Conclusion

- - The Dark Web is a hidden part of the internet with complex structure
- - Used for both legitimate and illegal purposes
- - Understanding its structure is key to navigating online privacy and security