

University of Virginia Center for Politics



Talking Turkey: Cybersecurity

- **National Security** is a concept which centers on a nation's ability to protect itself and its citizens from threats on political, economic, and military fronts. Today, national security is a huge priority for both the United States and most other countries.
 - Nations maintain resources like armies, intelligence agencies, and law enforcement, or use strategies like diplomacy and alliances, to protect the national security.
 - Source: https://en.wikipedia.org/wiki/National_security

- **Cybersecurity** refers to a relatively new subcategory of National Security which deals specifically with the security of electronic data which could be misused with criminal intent. Cybersecurity did not become an active concern for individuals or governments until the 1980's, but the importance of Cybersecurity has only grown as society becomes more dependent on computers and the Internet.
 - Cybersecurity encompasses efforts to prevent examples of hacking and digital theft of all kinds from altering the content of a website, to stealing identity information, to sharing important government secrets.
 - Cybersecurity is much more difficult to maintain, given that threats to it have no physical presence. It's much easier to control a national border, for example, than it is to track down a hacker who may be anywhere in the world.
 - Sources: <https://www.merriam-webster.com/dictionary/cybersecurity>
<https://www.dhs.gov/cybersecurity-overview>

- The Department of Homeland Security (DHS) spearheads the United States' Cybersecurity efforts, but also works in conjunction with other departments.
 - In general, the United States is ranked poorly in terms of its Cybersecurity measures. The federal, state, and local governments of our country rank behind 17 private industries,

and important entities like the U.S. Department of State and NASA held extremely low positions relative to other government agencies.

- Source: <https://www.dhs.gov/topic/combating-cyber-crime>
<http://www.reuters.com/article/us-usa-cybersecurity-rankings-idUSKCN0XB27K>

- **Hactivism** is a form of hacking wherein the perpetrators act to make a political or social statement. Instead of stealing information, **hacktivists** usually leave large visual calling cards, and strive to bring public attention to issues which they consider to be important.

- Hacktivism is controversial, and opinions are split on whether hacktivism is a form of protest--and therefore protected free speech--or a crime similar to vandalism and trespassing.

- Source:

<http://searchsecurity.techtarget.com/definition/hacktivism>

- The Obama Administration considered increasing measures of Cybersecurity a priority. Near the end of his time in office, former President Barack Obama attempted to have a sum of \$19 billion allotted to advancing U.S. Cybersecurity. However, the timeline requires President Donald Trump to approve the plan before it goes further, and President Trump Cybersecurity priorities have not been presented in a detailed fashion.

- **Cybersecurity in the News:**

July 2016 - Russian intelligence agencies hack Democratic National Convention and release more than 20,000 emails.

- <http://www.cnn.com/2016/12/12/politics/russian-hack-donald-trump-2016-election/>

September 2015 - Cybersecurity researchers uncovered a Russian hacking group called “The Dukes”, which is allegedly responsible for attacks against foreign governments and think tanks in Europe, Central Asia, and the United States over more than seven years.

- <http://www.dailydot.com/layer8/russia-apt-the-dukes-f-secure-whitepaper/>

April 2015 - U.S. officials report that Russian hackers gained access to White House networks and sensitive information.

- https://www.nytimes.com/2015/04/26/us/russian-hackers-read-obamas-unclassified-emails-officials-say.html?_r=0

November 2014 - Sony Pictures Entertainment is hacked by North Korea. The attack resulted in the deletion of data and the posting of employee information and unreleased films.

- <http://money.cnn.com/2014/12/03/media/sony-north-korea-cyberattack/index.html>

March 2012 - NASA reports that they have been the victim of regularly cyberattacks. Including one where the algorithms of the space station were stolen.

- <http://usatoday30.usatoday.com/tech/science/space/story/2012-03-05/nasa-cybersecurity-lawmakers/53372826/1>

June 2007 - The Secretary of Defense's unclassified email account was hacked by unknown foreign intruders as part of a larger series of attacks to access and exploit DOD networks.

- <http://www.nato.int/docu/review/2013/Cyber/timeline/EN/index.htm>

Questions about Cybersecurity for you and your child:

- Individuals are susceptible to cybersecurity attacks when they use the internet, just like national infrastructure. What are some steps that we can take at home to stay safe online?
- Do you think that a government program for cybersecurity should require all departments to meet the same standards, or leave room for departments to customize their security measures? What are some benefits and drawbacks of each idea?
- Who do you think represents the biggest threat to cybersecurity today? What entity or entities are most susceptible to attacks?
- Should we care more about state-backed cyber attacks, or attacks perpetrated by individuals or private groups?
- What cyber attacks or threats have you heard about in the news?
- What do you think of hacktivism? Is it a reasonable means of expressing dissatisfaction or disagreement?

Links for More Information and Exploration:

Kid-friendly:

- https://www.dhs.gov/sites/default/files/publications/Cybersecurity%20for%20Kids%20Tip%20Card_1.pdf

Tips for having Kids Stay Safe Online:

- <http://www.businessinsider.com/heres-what-cyber-security-experts-teach-their-kids-about-the-internet-2014-8>
- <http://www.connectsafely.org/wp-content/uploads/securityguide.pdf>
- <http://www.savvycyberkids.org/>

More Discussion Questions:

- <http://www.cybersecurityandwar.com/discussion-questions/>