Internet Law: Class 2

Localization, Geolocation, Geoblocking, and the Circumvention of Geoblocking

"Internet Law"
2020

Class 1 Slides

In this course we analyze a variety of internet law topics through the prism of a single theme: the conflict between the territoriality of political-legal structures and the ubiquity of the internet. The architecture of the internet, at least in its initial form, defied the territorial limits within which national legal systems operate; however, national legal systems do not yield easily to the ubiquity of the medium. The goal of the course is to investigate whether and how the architecture of the internet has affected the territorial functioning of national legal systems and whether and how the territoriality of national legal systems has shaped the internet since its inception as a mass medium of communication and commerce. The topics discussed in the course are, for example, the scope of countries' jurisdiction and power on the internet and over the internet, the reinstatement of borders through geolocation and geoblocking on the internet, and alternatives to national legal systems as forms of governance of the internet and on the internet.

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The Architecture of the Internet

- Devices
- Routers
- Gateways
- Hubs or Internet exchange points (IXPs)
- Datacenters
- Cables

Critical Infrastructures Protection Act of 2001,
42 U.S.C. § 5195c(e)

Critical infrastructure (CI) means the "systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters."

The Relevance of Physical Location on the Internet

Physical Location and Physical Territory and the Internet

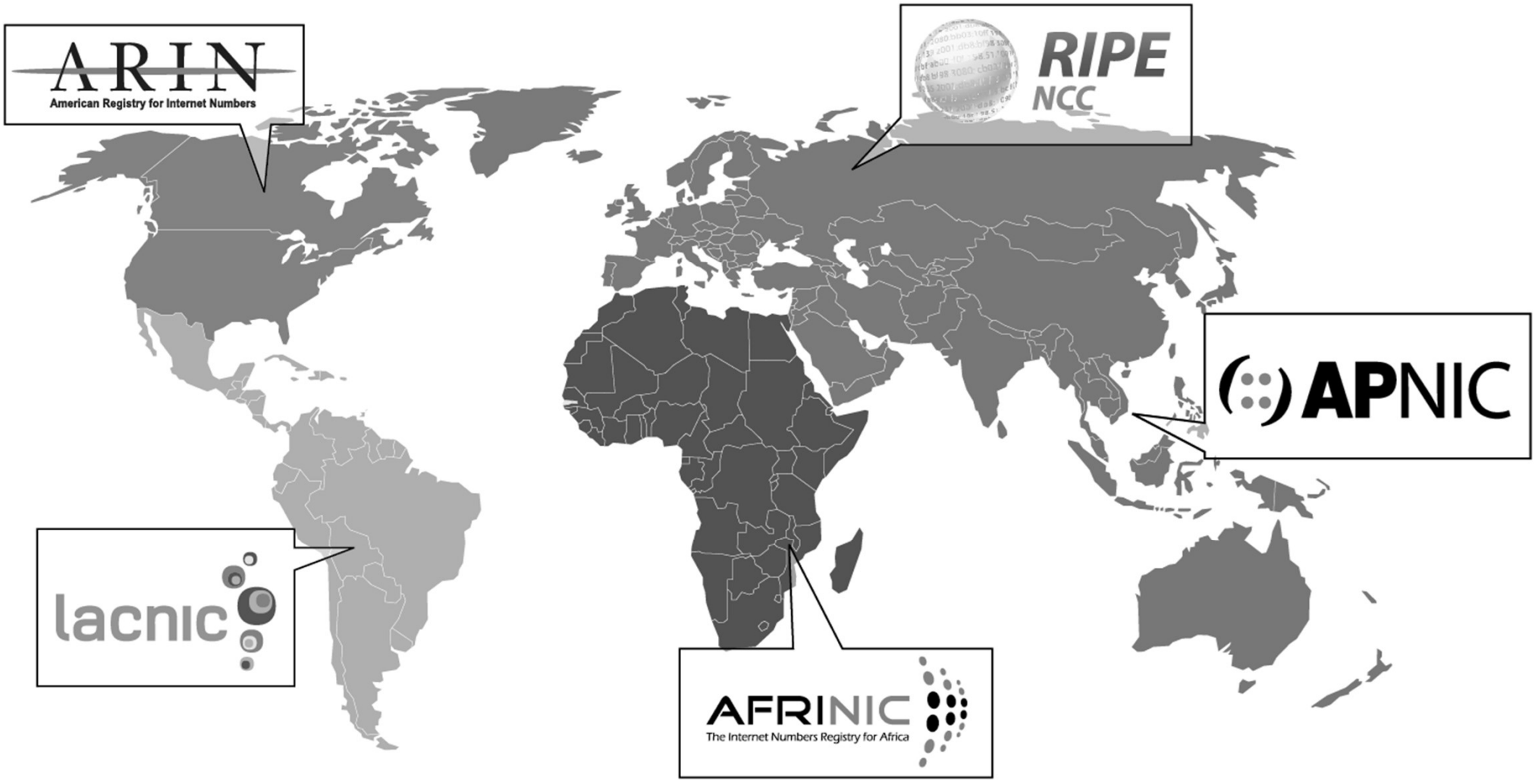
- Internet governance
- Regulatory/Prescriptive jurisdiction
  - Choice of applicable law
- Adjudicatory jurisdiction
  - Personal jurisdiction; subject-matter jurisdiction
- Enforcement jurisdiction

Physical Locations on the Internet

- User (recipient, viewer of content)
- Website operator
- Content creator (uploader)
- ISP
  - User connection
  - Website hosting
- Domain name registrar
- Domain name registry
- Computer / device
- Server
- Network (gateways, routers, switches, cables)

IP Addresses

- Internet protocol addresses
  - IPv4 *192.0.2.53*
  - IPv6 *2001:0db8:582:ae33::29*
- Domain names
- User connections
- Any location on the internet


ARIN
American Registry for Internet Numbers
RIPE
NCC
APNIC
lacnic
AFRINIC
The Internet Numbers Registry for Africa

IP Address Ranges by Country

This page displays the complete IPv4 address ranges organized by country. There are 249 countries listed below, and each link will bring you to a new page containing the respestive IP address ranges.

If you are interested to learn more about the ranking of IP addressess allocated for each country, please visit IP Address Reports for details.

Afghanistan	Aland Islands	Albania
Algeria	American Samoa	Andorra
Angola	Anguilla	Antarctica
Antigua and Barbuda	Argentina	Armenia
Aruba	Australia	Austria
Azerbaijan	Bahamas	Bahrain
Bangladesh	Barbados	Belarus
Belgium	Belize	Benin
Bermuda	Bhutan	Bolivia (Plurinational State of)
Bonaire, Sint Eustatius and Saba	Bosnia and Herzegovina	Botswana
Bouvet Island	Brazil	British Indian Ocean Territory
Brunei Darussalam	Bulgaria	Burkina Faso

IP Addresses

- Static v. dynamically assigned IP addresses

Which Are Known and to Whom?

- User (recipient, viewer of content)
- Website operator
- Content creator
- ISP
  - User connection
  - Website hosting
- Website registrar
- Website registry
- Computer / device
- Server
- Network (gateways, routers, switches, cables)

Location v. Identity

- Attribution problem
- Domain names & Whois databases

Location v. Identity

- Attribution problem
- Domain names & Whois databases
- Computer fingerprinting
  - https://panopticlick.eff.org/

Geolocation

Geolocation

- There are various means to determine the location of a user
- Might be based on a user's answer to a question
- Might be based on an IP address

Resources & Tools

UltraGeoPoint Provides Authoritative IP Address Geolocation Insights

Neustar's IP Intelligence data family, which includes UltraGeoPoint and UltraReputation, is the authoritative source of IP decisioning data on 99.99%* of allocated IP addresses worldwide. With UltraGeoPoint's proprietary algorithms and global data collection network, if a decision is made to deliver digital media to a user, block user access to a site, or tag an IP address with a history of fraud or risk, you can be sure that decision will be made using the most accurate IP geolocation, ownership and routing data available in the market.

Superior IP Decisioning Data

For each IP address, we collect and maintain more than 40 attributes including continent, country, state, city, postal/zip, latitude/longitude, phone prefix/area code, time zone, anonymizer/proxy, hosting facility and DMA and MSA codes. With insight into both IPv4* and IPv6** addresses, you have the ability to accurately decision not only on location, but also on the type of connection the IP is using to access your site. This is the IP decisioning data you need to win in today's competitive market.

UltraGeoPoint Data Packages

Our UltraGeoPoint data packages have been created to make it easy for you to select the foundational location decisioning data you need – while giving you an easy way to add insight as your data needs change. With over 40 data fields, and global insight into both IPv4 and IPv6 addresses, look no further than Neustar UltraGeoPoint data to support your threat intelligence, cybersecurity, content distribution,

Highlights

- General Data Protection Regulation (GDPR) compliant
- IPv4 and IPv6** support
- Most web developers can set up access in less than 15 minutes
- Weekly or daily data updates
- Simple RESTful API interface for fast implementation
- Distributed API Gateway locations meet your performance needs:
  - US (West Coast)
  - US (East Coast)
  - Europe (Ireland)
- Sample code provided for easy customization and testing

Geolocation

- There are various means to determine the location of a user
- Might be based on a user's answer to a question
- Might be based on an IP address
- Might be based on a combination of indicators
  - IP address
  - Cookies
  - GPS signal
  - WiFi signal
- Might provide detailed localization

Examples of Geolocation Uses

- Content localization
  - Advertising
  - Tailored content (beyond advertising)
- Security
- “Soft” market partitioning, price disrimination
- Identifying the location of a user for jurisdictional purposes (e.g., John Doe suits in the U.S.)

(Il)legality of Geolocation

- Detection of location
- Collection of location data
- Storing of location data
- Tracking location over time

- Anonymized v. identifiable data

- Personal data?

In re iPhone Application Litigation

- U.S. District Court for the District of Northern California, 2012
- A class action by Apple users, including the "Geolocation Class"
- Invasion of privacy under the California Constitution
- Computer Fraud and Abuse Act

In re iPhone Application Litigation

- Invasion of privacy under the California Constitution

  Three elements:

  (1) A legally protected privacy interest;

  (2) A reasonable expectation of privacy under the circumstances; and

  (3) Conduct by the defendant that amounts to a serious invasion of the protected privacy interest

  "…an egregious breach of the social norms underlying the privacy right…"

In re iPhone Application Litigation

- Computer Fraud and Abuse Act

  "… knowingly accessed a protected computer without authorization…"

  and sufficient harm

In re Facebook Internet Tracking Litigation

- U.S. Court of Appeals for the Ninth Circuit, 9 April 2020
- Harm to privacy interests
- "… a clear invasion of the historically recognized right of privacy…"
- "unwanted access … in violation of the law or social norms"
  - Facebook's Data Use Policy
  - The amount of data collected
- "egregious breach of the social norms" – for the trial

Breyer v. Deutschland

- CJEU, 2016
- Logfiles kept by German federal agencies
- Dynamic IP addresses
- Indirectly identifiable natural person

EU Electronic Communications Sector Data Directive

- Location data “more precise than necessary for the transmission of communications” which “are used for the provision of value added services”

- Processing only if data anonymous or with consent of the users to the extent and for the duration necessary for the provision of the value added service

EU GDPR

- "Natural persons may be associated with online identifiers provided by their devices, applications, tools and protocols, such as internet protocol addresses, cookie identifiers or other identifiers such as radio frequency identification tags. …" (Recital 30)

- "'personal data' means any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person…" (Article 4(1))

OECD

TACKLING CORONAVIRUS (COVID-19)
CONTRIBUTING TO A GLOBAL EFFORT

Tracking and tracing COVID: Protecting privacy and data while using apps and biometrics

Updated 23 April 2020

Key messages

"Disclosures of personal information can allow the public to better identify potential COVID-19 infections andtrack the spread over time. However, current digital solutions for monitoring and containment have varying implications for privacy and data protection."

"Fully transparent and accountable privacy-preserving solutions should be embedded by design to balance the benefits and the risks associated with personal data collection, process and sharing. Data should be retained only for so long as is necessary to serve the specific purpose for which it was collected."

http://www.oecd.org/coronavirus/policy-responses/tracking-and-tracing-covid-protecting-privacy-and-data-while-using-apps-and-biometrics-8f394636/#boxsection-d1e26

The U.S. COVID-19 Consumer Data Protection Act would:

- Require companies under the jurisdiction of the Federal Trade Commission to obtain affirmative express consent from individuals to collect, process, or transfer their personal health, device, geolocation, or proximity information for the purposes of tracking the spread of COVID-19.
- Direct companies to disclose to consumers at the point of collection how their data will be handled, to whom it will be transferred, and how long it will be retained.
- Establish clear definitions about what constitutes aggregate and de-identified data to ensure companies adopt certain technical and legal safeguards to protect consumer data from being re-identified.
- Require companies to allow individuals to opt out of the collection, processing, or transfer of their personal health, geolocation, or proximity information.
- Direct companies to provide transparency reports to the public describing their data collection activities related to COVID-19.
- Establish data minimization and data security requirements for any personally identifiable information collected by a covered entity.
- Require companies to delete or de-identify all personally identifiable information when it is no longer being used for the COVID-19 public health emergency.
- Authorize state attorneys general to enforce the Act.

(https://www.commerce.senate.gov/2020/5/committee-leaders-introduce-data-privacy-bill)

Geoblocking

Examples of Geoblocking Uses

- Security
- Effective market partitioning
  - Different pricing (price discrimination)
  - Staggered release of content
  - Safety standards, territorially-limited warranties
- Delimitating jurisdictional reach
- Compliance with contractual obligations (e.g., territorially-limited copyright licenses)
- Compliance with territorially-limited national laws

(Il)legality of Geoblocking

- Market partitioning
- WTO rules
- EU and other regional internal market/free trade rules
- National (internal) rules (e.g., the U.S. Dormant Commerce Clause)
- National competition (antitrust) laws
- Anti-discrimination rules
- EU anti-geoblocking rules

EU Anti-Geoblocking Regulations

EU Cross-Border Portability

- Regulation (EU) 2017/1128 of the European Parliament and of the Council of 14 June 2017 on cross-border portability of online content services in the internal market

EU Cross-Border Portability

Definition of cross-border portability

Article 1:

"This Regulation introduces a common approach in the Union to the cross-border portability of online content services, by ensuring that **subscribers to portable online content services which are lawfully provided in their Member State of residence can access and use those services when temporarily present in a Member State other than their Member State of residence**."

EU Cross-Border Portability

Services covered by the Regulation

Article 2(5):

- " 'online content service' means a service as defined in Articles 56 and 57 TFEU that a provider lawfully provides to subscribers in their Member State of residence on agreed terms and online, which is portable and which is:

  (i) an audiovisual media service as defined in point (a) of Article 1 of Directive 2010/13/EU, or

  (ii) a service the main feature of which is the provision of access to, and the use of, works, other protected subjectmatter or transmissions of broadcasting organisations, whether in a linear or an on-demand manner;…"

EU Cross-Border Portability

- "The provider of an online content service provided **against payment of money** shall enable a subscriber who is temporarily present in a Member State to access and use the online content service in the same manner as in the Member State of residence, including by providing access to the same content, on the same range and number of devices, for the same number of users and with the same range of functionalities." Art. 3(1)
- "The provider of an online content service provided **without payment of money** may decide to enable its subscribers who are temporarily present in a Member State to access and use the online content service on condition that the provider verifies the subscriber's Member State of residence in accordance with this Regulation." Art. 6(1)

EU Cross-Border Portability

- **Impact on localization (choice of law & jurisdiction)**
  - "The provision of an online content service under this Regulation to a subscriber who is temporarily present in a Member State, as well as the access to and the use of that service by the subscriber, shall be deemed to occur solely in the subscriber's Member State of residence." Art. 4
- Im**pact on privacy**
  - "At the conclusion and upon the renewal of a contract for the provision of an online content service provided against payment of money, the provider shall verify the Member State of residence of the subscriber by using not more than two of the following means of verification and shall ensure that the means used are reasonable, proportionate and effective…" Art. 5(1)

EU Cross-Border Portability

- **Impact on licensing practices**
  - "Any contractual provisions, including those between providers of online content services and holders of copyright or related rights or those holding any other rights in the content of online content services, as well as those between such providers and their subscribers, which are contrary to this Regulation, including those which prohibit cross-border portability of online content services or limit such portability to a specific time period, shall be unenforceable." Art. 7(1)
- **Impact on geolocation and geoblocking**

EU Anti-Geoblocking Regulation

- Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market…

EU Anti-Geoblocking Regulation

- "A trader shall not, through the use of technological measures or otherwise, block or limit a customer's access to the trader's **online interface** for reasons related to the customer's nationality, place of residence or place of establishment." (Art. 3.1)
- "A trader shall not apply different general conditions of **access to goods or services**, for reasons related to a customer's nationality, place of residence or place of establishment…" (Art. 4.1)
- "A trader shall not, within the range of means of payment accepted by the trader, apply, for reasons related to a customer's nationality, place of residence or place of establishment, the location of the payment account, the place of establishment of the payment service provider or the place of issue of the payment instrument within the Union, different conditions for a **payment transaction…**" (Art. 5.1)

EU Anti-Geoblocking Regulation

- However, geoblocking is permitted for example in cases of electronically supplied "services the main feature of which is the provision of access to and use of **copyright protected works** or other protected subject matter, including the selling of copyright protected works or protected subject matter in an intangible form…" (Art. 4.1(b))
- A review shall be conducted to assess "whether this Regulation should also apply to electronically supplied services the main feature of which is the provision of access to and use of copyright protected works or other protected subject matter, including the selling of copyright protected works or protected subject matter in an intangible form, provided that the trader has the requisite rights for the relevant territories" (Art. 9.2)

Circumvention of Geoblocking

Circumvention of Geoblocking

- Means
  - Proxies
  - VPNs
  - TOR

Examples of Uses of Circumvention of Geoblocking

- To access content that is not available in the user's current physical location
- To bypass security
- To avoid market partitioning
- To access content that is illegal in the current location (gambling, copyrighted content, censorship)
- To anonymize

(Il)legality of Circumvention of Geoblocking

- Terms of service of the circumvention tool provider
- Terms of service of the content provider (e.g., SAT1)
- Access/content limitations
- Digital rights management tool under copyright law?
  - 1996 WIPO Treaties
  - U.S.: 17 USC 1201
- Anti-hacking laws?
- 1998 EU Conditional Access Directive?
- Secondary transmissions (e.g., Aereo)?

Circumvention of Geoblocking

- Global Mode dispute in Australia
- BBC's iPlayer
- VPN advertisements and other statements

- Additional issues
  - Cybertravel from a country where content is legal to a country where it is illegal
  - Inadvertent cybertravel to a random jurisdiction

Internet Law: Class 2

Marketa Trimble, 20 May 20 2020