NATION WIDE WEBS

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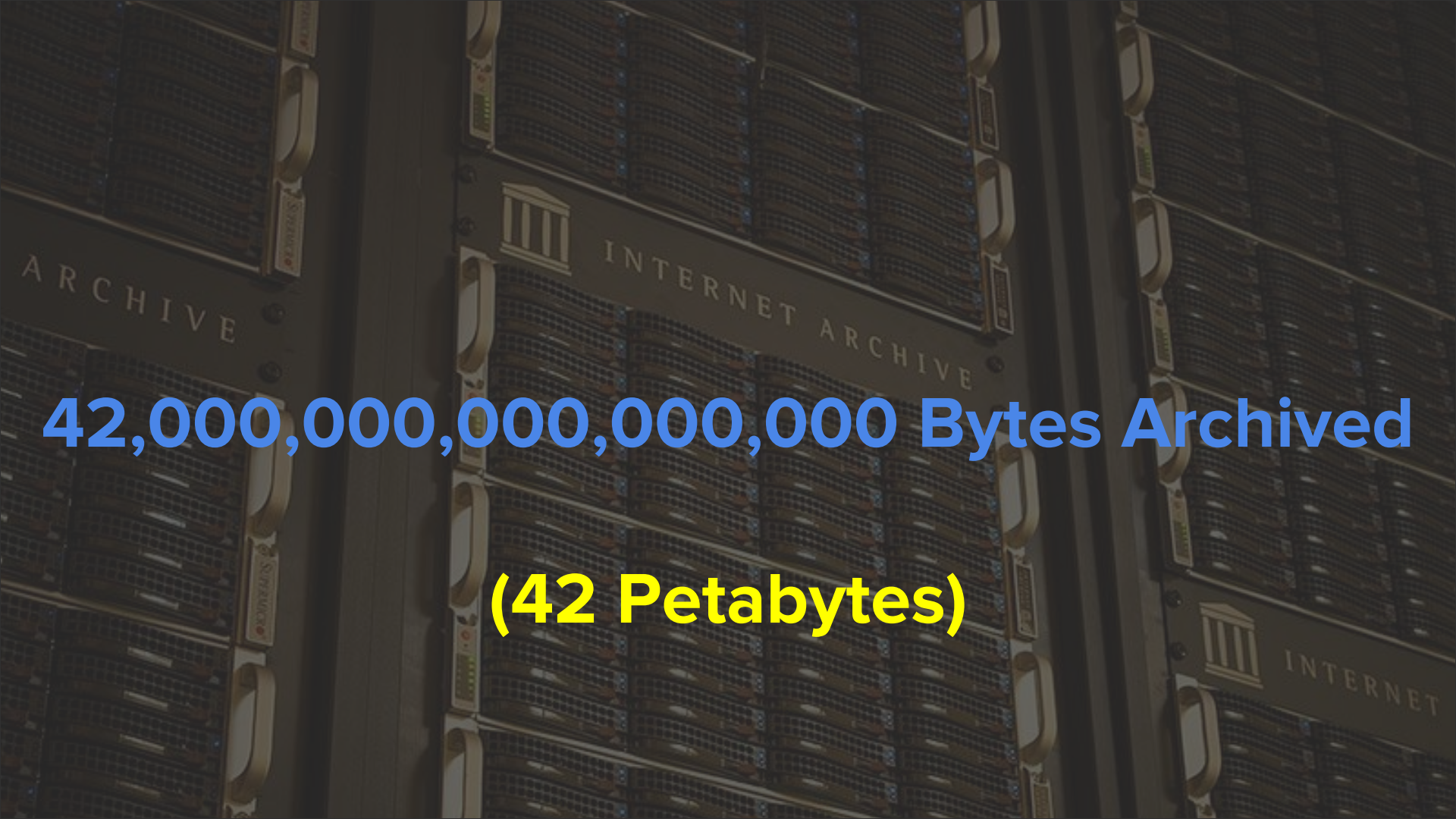
The Internet Archive

Non-Profit Library

Founded in 1996 by Brewster Kahle

Universal Access to All Knowledge



42,000,000,000,000,000 Bytes Archived

(42 Petabytes)

25,000 Software Titles
2,000,000 Moving Images
2,300,000 Book Archive
2,400,000 Audio Recordings
3,000,000 Hours of Television
4,000,000 eBooks
690,000,000,000+ URLs (~21PB)

INTERNET ARCHIVE
WayBackMachine

http://

BROWSE HISTORY

DONATE

Explore more than 286 billion web pages saved over time

Tools

Wayback Machine Availability API
Build your own tools.

WordPress Broken Link Checker
Banish broken links from your blog.

404 Handler for Webmasters
Help users get where they were going.

Subscription Service

Archive-It enables you to capture, manage and search collections of digital content without any technical expertise or hosting facilities. Visit Archive-It to build and browse the collections.

Save Page Now

http://

SAVE PAGE

Capture a web page as it appears now for use as a trusted citation in the future.

Only available for sites that allow crawlers.

ARCHIVE-IT
Home
Collections
Crawls
Archives
ARS
Help Center
Welcome, AIT Demo
Home
Archive-It Demo Account
3.6 TB archived since Sep 22, 2010
Archive-It
Web Archiving SaaS since 2006
625 Organizational Users
Active Collection List (3 Active Collections)
Collection Name
Data (this period)
Docs (this period)
Active Seeds
Last Crawl
Jan 6, 2016
2015 United Nations Climate Ch
42.6 GB
726,589
5
Dec 10, 2015
Climate Change
1.9 GB
92,932
13
Dec 27, 2015
628.9 GB
Archived
Data Budget Usage

NWW Scope of Work

- National web archive access portal that replays only specific ccTLD web resources from the entirety of IA's historical web archive
- Multiple additional search and metadata features for enhanced discovery
- Possibility to build branded or embedded interfaces to match and institution's design
- Inclusion of future ccTLD-specific content collected via domain, topical, contributed, and SPN harvests

NWW Technical Approach

- **Portal:** RESTful frontend web app built on Bootstrap and jQuery; no server apps used, just HTML+JavaScript
- **Indexing:** Dedicated APIs for search and summary stats at the website and URL levels serving the results and details
- **Access:** Replay uses IA's new Python Wayback Machine
- **Search:** URL/site, keyword, and possible full-text search is powered by ElasticSearch on Internet Archive's central ES cluster.

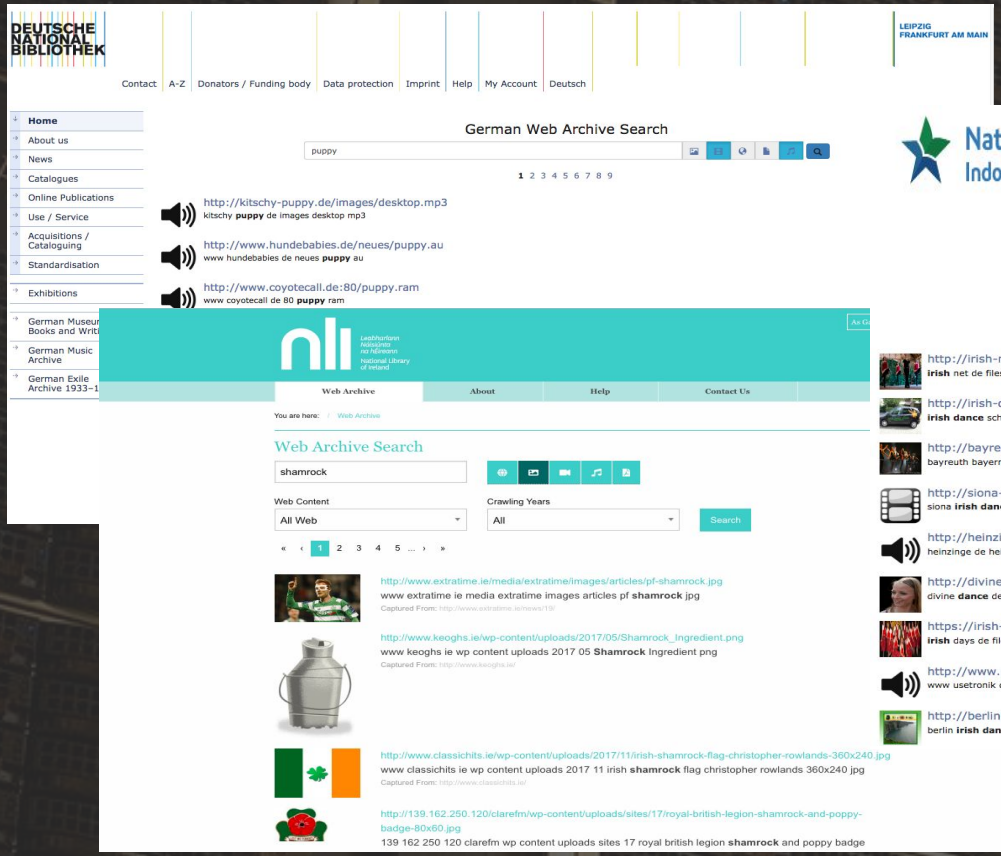
Search Details

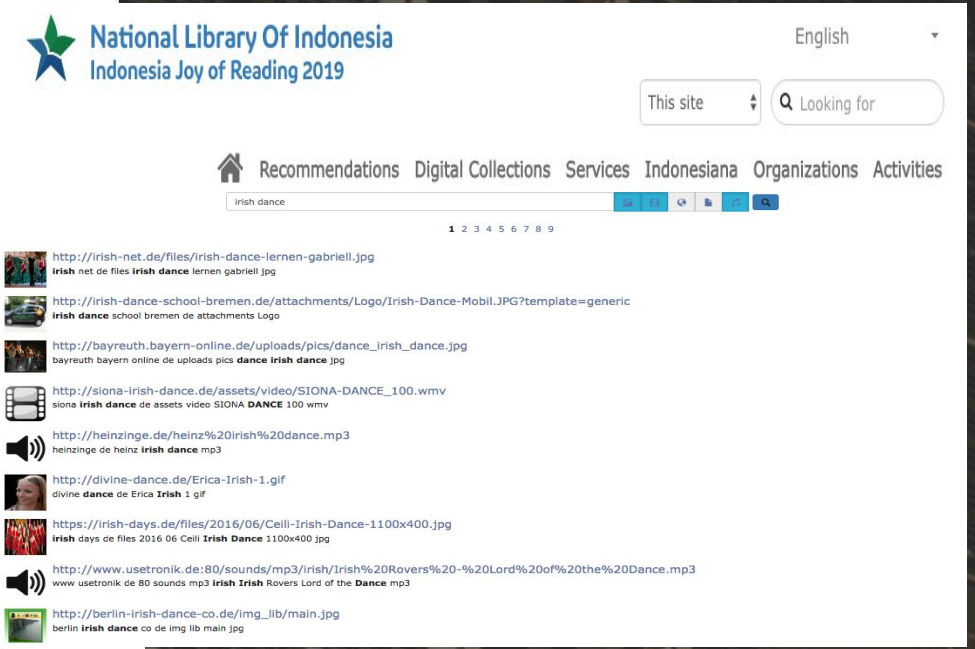
Webpage search: Keyword search for website homepages and URL-text search with a search index built on the anchor text of inbound links and the terms in the page's URL. Generally high 100Ms in prod.

Media Search: URL-based keyword search for all image, audio, video, and PDF media using terms in the URL and inbound anchor link text into a searchable text index. Generally low 100Ms in prod.

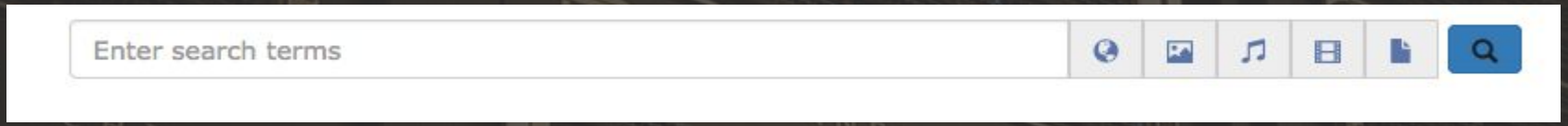
Media Linkback: Addition link to the webpage upon which the media file is embedded (when relevant), a la GifCities https://gifcities.org/.

NWW Prototypes - R&D + prod





NWW: Search Box



ENTER TEXT OR URL SEARCH | DEFAULTS TO HOMEPAGE SEARCH

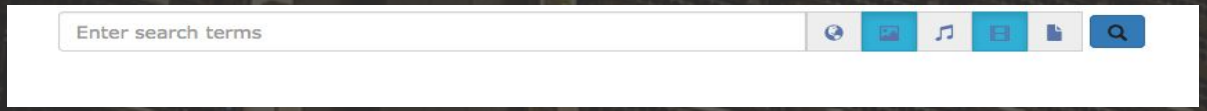
TEXT

AUDIO

PDFs

IMAGES

VIDEO



MULTIPLE MEDIA TYPES CAN BE SEARCHED SIMULTANEOUSLY

NWW: Search Results

- Web-only search will display a screenshot of the homepage, when available
- Image results will display a thumbnail of the image
- Other formats will display an icon indicating the media type
- Multi-format searches will return interleaved results in the order of the most relevant for each format

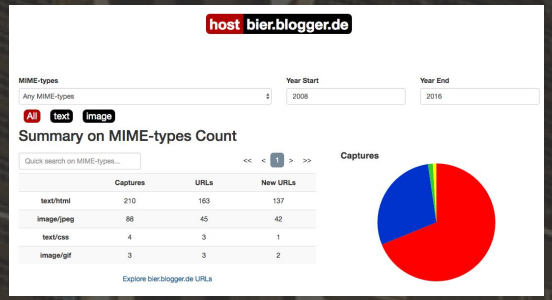
NWW: Result Details

WEBSITES LINK TO CALENDAR PAGE & MEDIA LINK DIRECTLY TO ARCHIVAL FILE

FIRST CAPTURE IN WAYBACK MACHINE

LATEST CAPTURE IN WAYBACK MACHINE

LINKS TO WAYBACK MACHINE CALENDAR PAGE



LINKS TO HOST/DOMAIN SITE STATISTICS

NWW: Other Possible Features

Additional Discovery: Potential for genre (blog, news, etc), topic (sports, culture), special (“lost” websites), or other unique points of entry for users to browse the collection.

Seed Submission or Nomination: Potential to integrate “Save Page Now” services into the portal.

Other Data: Potential to ingest archival web data collected outside of IA or custom crawls and include it in the portal.

Added Services: Include “special seeds” (lang, non-ccTLD ranked, geo-IP, etc) data. Integrated with specific services (Archive-It, etc), UI localization, site embedding, custom metadata, visualizations, etc.

NWW: WHY

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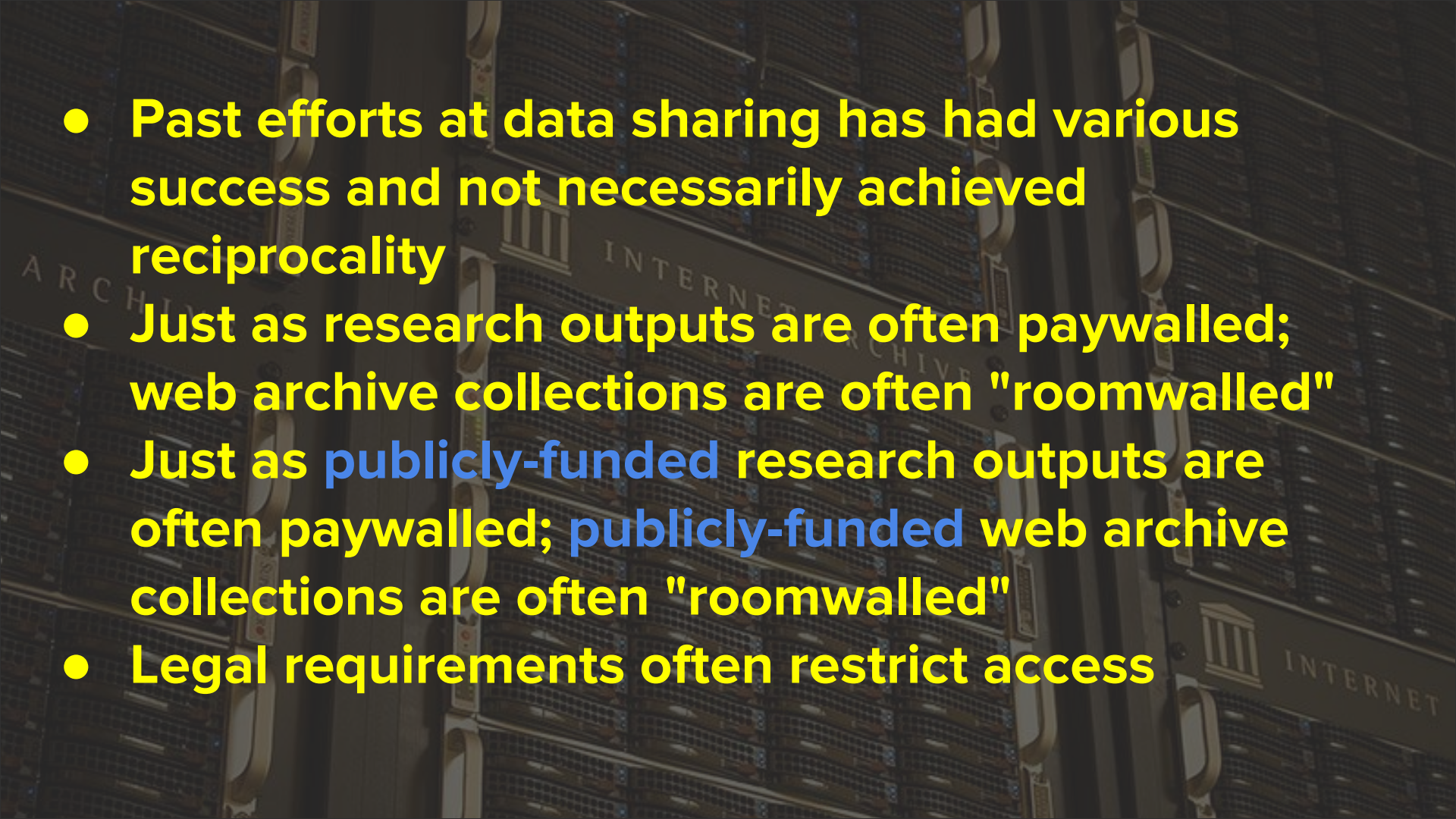
Why do we need a NWW and what does it say about the state of global data sharing and transnational access?



- Past efforts at data sharing has had various success and not necessarily achieved reciprocality
- Just as research outputs are often paywalled; web archive collections are often "roomwalled"
- Just as publicly-funded research outputs are often paywalled; publicly-funded web archive collections are often "roomwalled"
- Legal requirements often restrict access

HOW DO WE SOLVE:
• Access Issues
• Data Aggregation Issues
• Infrastructure Challenges
• Search Challenges

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