

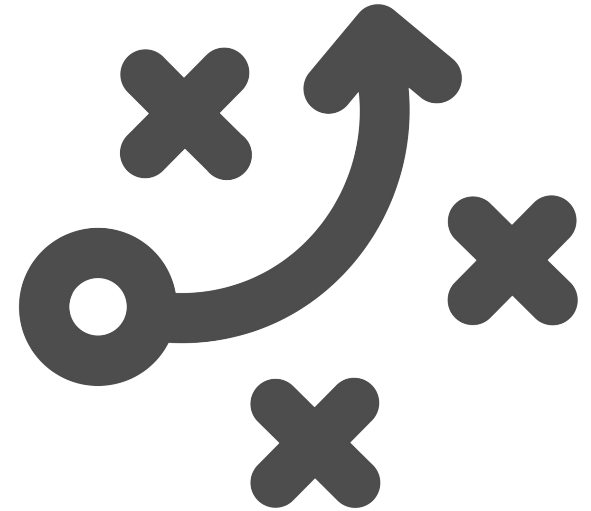
See a little Warclight: Building an open-source web archive portal with Project Blacklight

Nick Ruest (York University)
Ian Milligan (University of Waterloo)



Plan for The Talk

- Introduction
- Background
- Warclight
- Implementation at scale
- Next steps



Background



One perspective



Standing on Shoulders of Giants

- Analytical Access to the Domain Dark Archive
 - webarchive-discovery
- Big UK Domain Data for the Arts and Humanities
 - Shine
- Ruby on Rails
- Project Blacklight (UVa)
 - Library Catalogues
 - Panama Papers
 - GeoBlacklight
 - Arclight
 - Warclight



R+L = J

(Solr + webarchive-discovery) + Project Blacklight = Warclight



Warclight



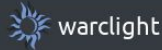
What is it?

- Rails Engine
- Tight integration with webarchive-discovery
 - Collection, and Collection-ID
 - Institution
 - Resource name
- Features
 - Field search
 - Faceted search
 - Memento Replay URL check
 - Live web check
 - Thumbnail display
 - Plug-in architecture
 - Advanced Search
 - Range limit





Live Demo



All Text ⇅ mi'kmaq

Search 🔍

Start Over

mi'kmaq

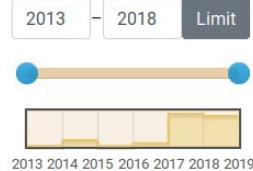


Limit your search

General Content Type

html	274
text	36
other	9
pdf	6

Crawl Year



Public Suffix

ca	188
com	109
org	15
ab.ca	8
gc.ca	3
fm	2

« Previous | 1 - 10 of 325 | Next »

1. [Mi'kmaq Archives - APTN News](#) APTN News

Title: Mi'kmaq Archives - APTN News APTN News
 Host: aptnnews.ca
 Crawl Date: 2017-10-13T18:44:09Z
 General Content Type: [html](#)
 Content Language: [en](#)
 Domain: aptnnews.ca
 Collection: [Truth and Reconciliation](#)
 Collection Id: [7685](#)
 This page links to: aptn.ca; aptncommunity.com; aptncsr.com; aptnnews.ca; aptnpress.com...

2. [Young aboriginal musicians pay tribute to poet Rita Joe at the NAC](#) | CBC News

Title: Young aboriginal musicians pay tribute to poet Rita Joe at the NAC | CBC News
 Host: cbc.ca
 Crawl Date: 2018-04-13T18:22:29Z
 General Content Type: [html](#)
 Content Language: [en](#)
 Domain: cbc.ca
 Collection: [Truth and Reconciliation](#)
 Collection Id: [7685](#)
 This page links to: cbc.ca; cbckids.ca; cbcshop.ca; facebook.com; instagram.com...



Implementation at Scale



WALK

- 6 Canadian Universities
- Archive-It Partners
- 30T of WARC's
- 1+ Billion Solr docs
- ~1-2 months to download and index



Warclight apps

- warclight demo - warclight.archivesunleashed.org (2,775,723)
- University of Toronto - utoronto.archivesunleashed.org (691,803,697)
- University of Alberta - ualberta.archivesunleashed.org (331,924,814)
- University of Victoria - uvic.archivesunleashed.org (18,873,434)
- University of Winnipeg - uwinnipeg.archivesunleashed.org (30,793,376)
- Dalhousie University - dalhousie.archivesunleashed.org (736,023)
- Simon Fraser University - sfu.archivesunleashed.org (787,991)
- GeoCities - geocities.archivesunleashed.org (316,694,661)
- WALK (federated) - walk.archivesunleashed.org (1,077,695,058)

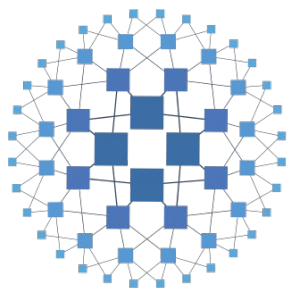


Components

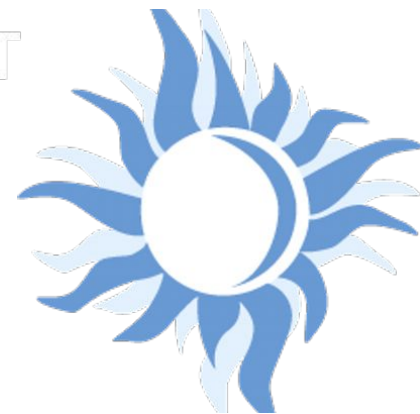


APACHE

HTTP SERVER PROJECT



HAPROXY



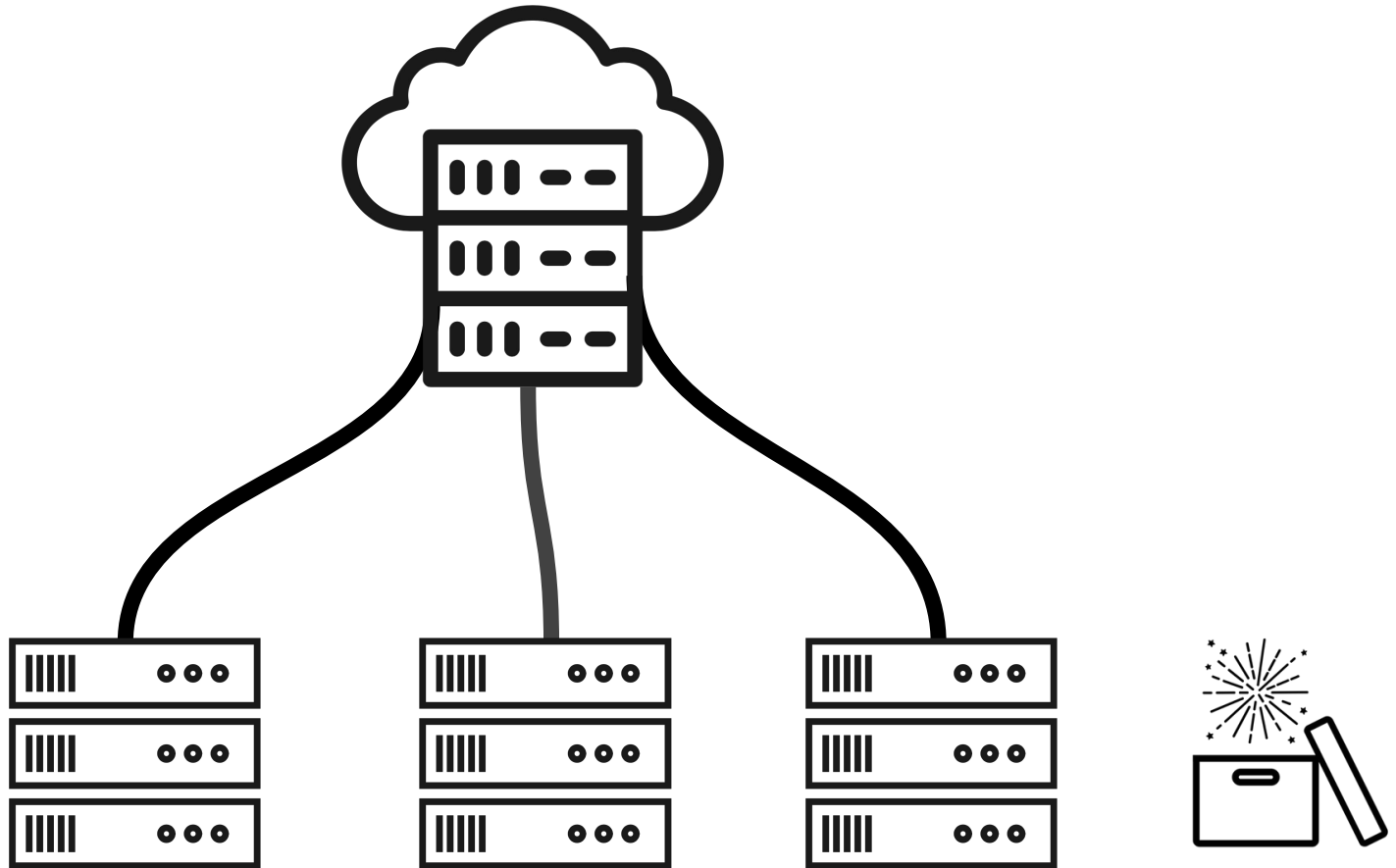
Solr



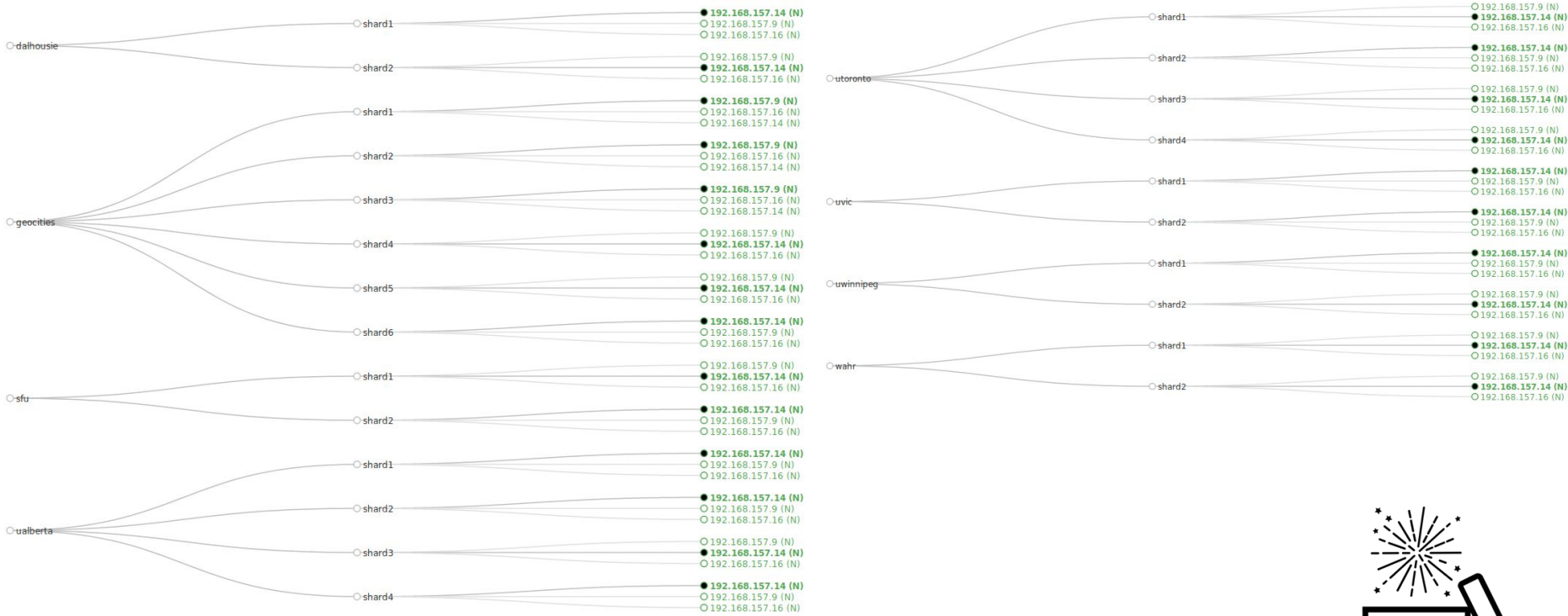
RAILS



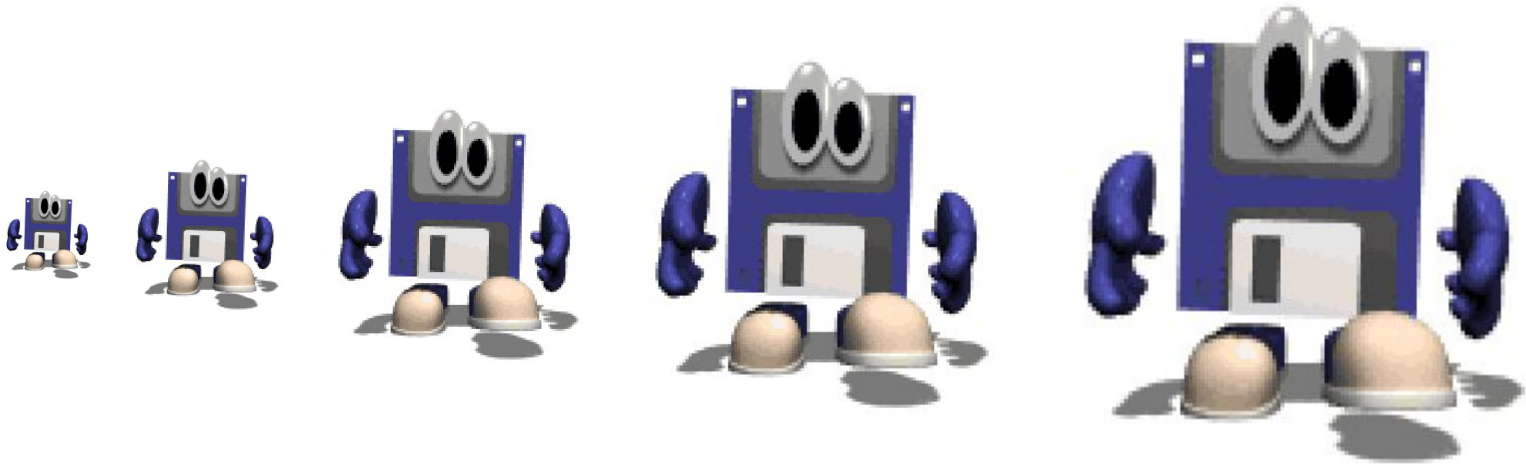
System diagram



SolrCloud Collections



Implementation



Facet caching:

- <https://issues.apache.org/jira/browse/SOLR-13132>
- <https://github.com/magibney/solr-facet-cache>

Solr index:

- 🤖
- 📄



Next Steps



Discussion

- Another framework for webarchive-discovery
- Ruby on Rails vs Play Framework
- Parity features with Shine?
 - [Concordance](#)
 - [Trend search](#)
 - Blacklight plugins
- Growing the community - is there one?
- Reality of time and Archives Unleashed priorities
- Is this even sustainable?? (Solr index size)



**We look forward to
your questions and
thoughts.**



Thank you!

- **Toke Eskildsen, Thomas Egense**
- **Andy Jackson, Gil Hoggarth**
- **Chris Beer, Jesse Keck, Justin Coyne**
(Blacklight Community)



Thanks to our supporters!

THE
ANDREW W.
MELLON
FOUNDATION

 **START
SMART
LABS**

YORK
UNIVERSITÉ
UNIVERSITY 

compute | calcul
canada | canada



UNIVERSITY OF
WATERLOO



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

Canada 



Links

- archivesunleashed.org/warclight
- archivesunleashed.org
- cloud.archivesunleashed.org
- github.com/archivesunleashed
- slack.archivesunleashed.org
- news.archivesunleashed.org
- twitter.com/unleasharchives

