

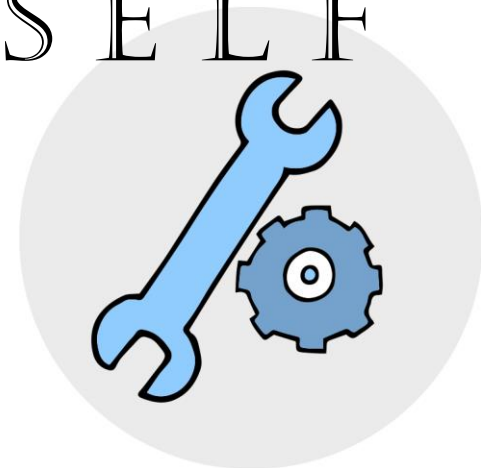
Web Archiving:

D O I T Y O U R S E L F

hey.

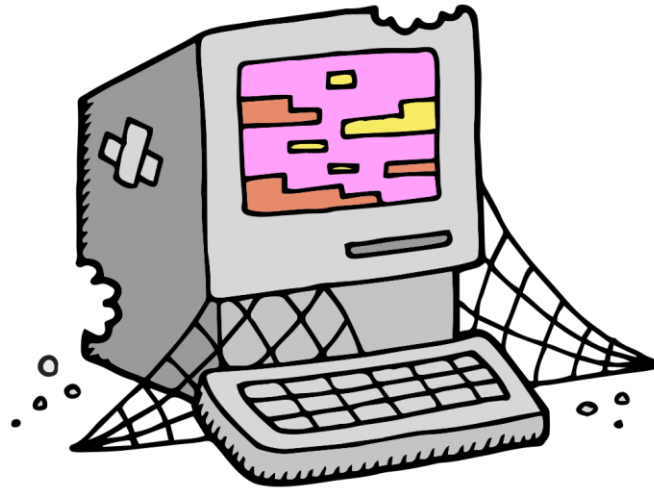


Sara Day Thomson
Digital Archivist
Centre for Research Collections





Why archive the web?





**Political movements
& activism**

**Government &
corporate
accountability**

**Research funder
requirements**

**Reproducibility &
re-use of research
outputs**

**Personal and
community digital
archiving**

**Scholarly
Citation**



Political movements
& activism

Government &

Research funder
requirements

**The Web = *the*
record of the
21st Century**

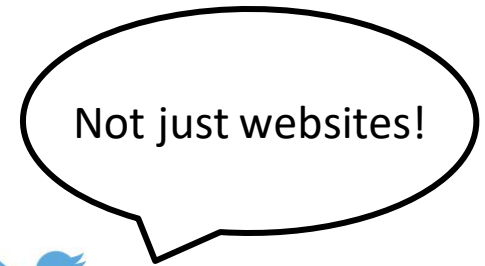
Repr
re-us

outputs

Personal and
community digital
archiving



Why archive web pages myself?





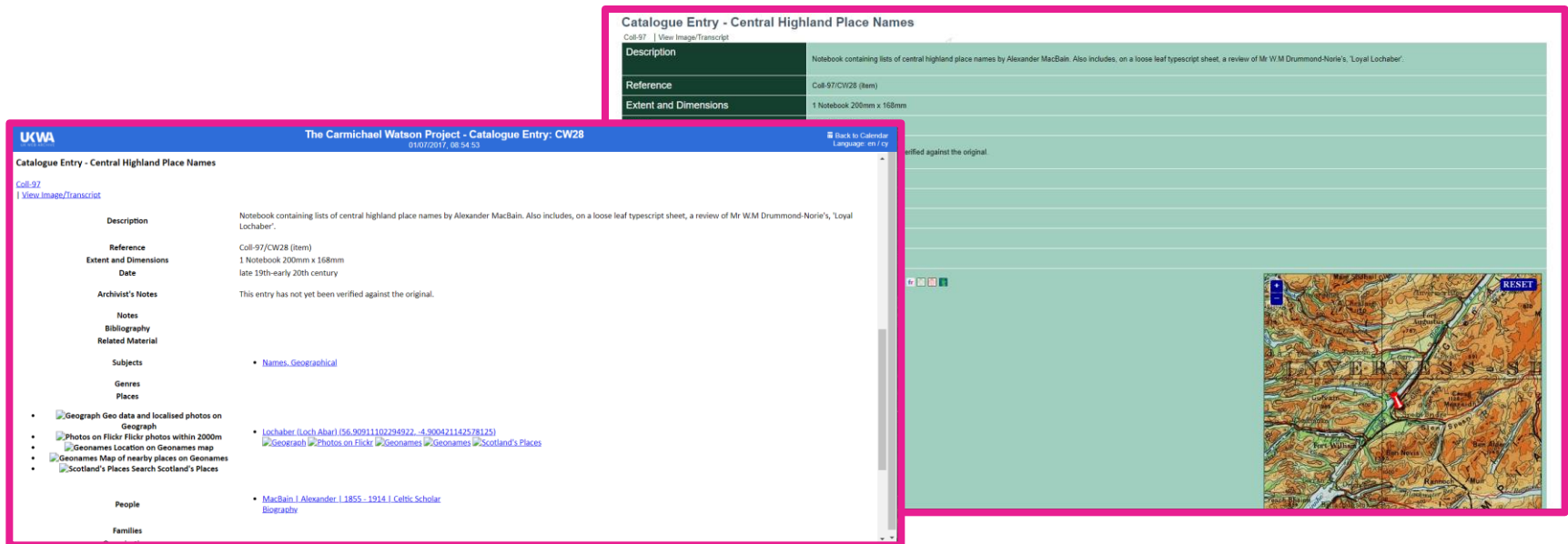
Why DIY...

Web page(s) not archived by UKWA or other web archiving programme



Why DIY...

Web page(s) is archived, but is broken or incomplete



Catalogue Entry - Central Highland Place Names

Coll:97 | [View Image/Transcript](#)

Description	Notebook containing lists of central highland place names by Alexander MacBain. Also includes, on a loose leaf typescript sheet, a review of Mr W M Drummond-Norie's, 'Loyal Lochaber'.
Reference	Coll:97/CW28 (Item)
Extent and Dimensions	1 Notebook 200mm x 168mm

UKWA The Carmichael Watson Project - Catalogue Entry: CW28 01/07/2017, 08:54:53 [Back to Catalogue](#) [Language: en](#)

Catalogue Entry - Central Highland Place Names

Coll:97 | [View Image/Transcript](#)

Description Notebook containing lists of central highland place names by Alexander MacBain. Also includes, on a loose leaf typescript sheet, a review of Mr W M Drummond-Norie's, 'Loyal Lochaber'.

Reference Coll:97/CW28 (Item)

Extent and Dimensions 1 Notebook 200mm x 168mm

Date late 19th-early 20th century

Archivist's Notes This entry has not yet been verified against the original.

Notes

Bibliography

Related Material

Subjects

- [Names, Geographical](#)

Genres

Places


- [Geograph Geo data and localised photos on Geograph](#)
- [Photos on Flickr Flickr photos within 2000m](#)
- [Geonames Location on Geonames map](#)
- [Geonames Map of nearby places on Geonames](#)
- [Scotland's Places Search Scotland's Places](#)

People

- [MacBain, J. Alexander | 1855 - 1914 | Celtic Scholar Biographies](#)

Families

verified against the original.





Why DIY...

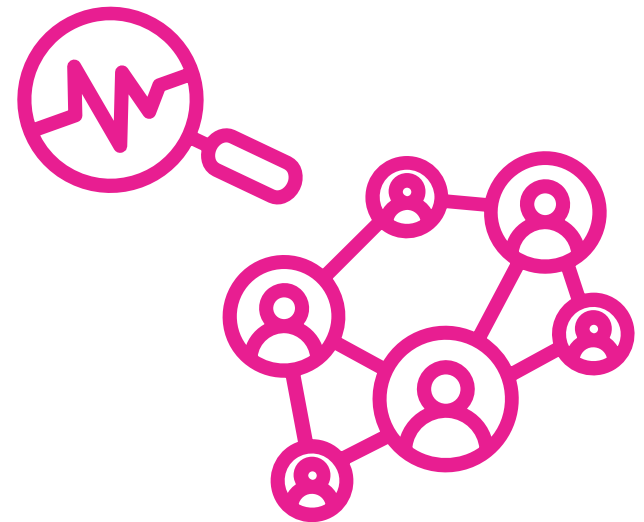
Requirement for an offline copy



Why DIY...

Requirement for a different format, e.g.
social media data

```
43 }, {
44   "retweeted" : false,
45   "source" : "<a href=\"http://twitter.com/download/android\"
46     rel=\"nofollow\">Twitter for Android</a>",
47   "entities" : {
48     "hashtags" : [ {
49       "text" : "DPC",
50       "indices" : [ "67", "71" ]
51     } ],
52     "symbols" : [ ],
53     "user_mentions" : [ {
54       "name" : "Sharon McMeekin",
55       "screen_name" : "SharonMcMeekin",
56       "indices" : [ "3", "18" ],
57       "id_str" : "124154729",
58       "id" : "124154729"
59     } ],
60     "urls" : [ ]
61   },
62   "display_text_range" : [ "0", "139" ],
63   "favorite_count" : "0",
64   "id_str" : "1147130277296246785",
65   "truncated" : false,
66   "retweet_count" : "0",
67   "id" : "1147130277296246785"
```



Why DIY...

Files required for project documentation,
research data management, or personal
digital archiving



When to DIY...

- When citing a web resource in a publication
- As soon as a new web page goes online
- Before big changes (e.g. upgrade) or deletion of out-of-date content
- Before migrating to a new service or platform

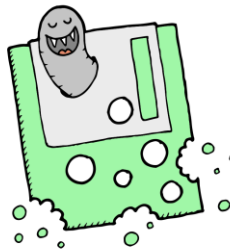




Web pages evolve –
if you don't begin
collecting at
the point of
publication, the
record of changes
over time will be lost

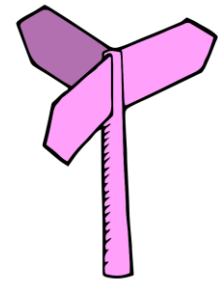
Link Rot

Web page(s)
disappears or returns
an error (404)



Link Drift

Content on web page
or entire domain
changes



Study conducted by Harvard Law School:
>70% of links in a sample of law journals don't work
>50% of links in Supreme Court opinions don't work



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DIY Approaches

- Check other web archives – it might already be archived
- Ask a web archive to do it for you (nominate a web page(s))
- Manually capture a web page(s) with a Webrecorder tool
- Download code and files for cheap & cheerful local copy
- Use a citation service
- Harvest machine-readable data (social media)
- Download your data directly from a platform





Check other web archives...

A screenshot of the Time Travel web archive interface. The interface is enclosed in a pink border. At the top left is a red suitcase icon with a clock face. To its right is a dropdown menu labeled 'Time Travel'. In the top right corner, there are links for 'About API Privacy Terms'. The main heading 'time travel' is centered in a large, lowercase font, with 'time' in black and 'travel' in red. Below the heading is a search form with three input fields: the first contains 'http://', the second contains '2003-05-15', and the third contains '02:45:43'. A 'Find' button is to the right of the third field. Below the search form, a line of text reads: 'Find Mementos in Internet Archive, Archive-It, British Library, archive.today, GitHub and [many more!](#)'

<https://timetravel.mementoweb.org/>



Check other web archives...

<https://ox.ac.uk>

The screenshot shows the Wayback Machine interface for the URL <http://www.ox.ac.uk/>. The search bar contains the URL, and the date selected is 1992-01-01 at 12:00:00. The interface displays several Memento entries, each with a title, a date, and a time offset from the requested date. The entries are:

- National Library of Israel Memento, 5 years 345 days after** (11 Dec 1997 08:07:14 GMT)
- Bibliotheca Alexandrina Web Archive Memento, 5 years 345 days after** (11 Dec 1997 08:07:14 GMT)
- Library of Congress Memento, 10 years 222 days after** (09 Aug 2002 10:24:13 GMT)
- Archive-It Memento, 14 years 135 days after** (12 May 2006 18:55:26 GMT)

Each entry includes links for 'Previous Memento', 'Next Memento', 'First Memento', and 'Last Memento'. On the right side of the interface, there are several promotional banners for Memento integrations with Chrome, MediaWiki, Robust Links, and Zotero.

etc etc



Check other web archives...

The screenshot shows the Internet Archive Wayback Machine homepage. At the top, there is a navigation bar with the Internet Archive logo and the text "INTERNET ARCHIVE". To the right of the logo are icons for various media types: a folder, a book, a film strip, a speaker, a floppy disk, and a photo. Further right are links for "SIGN UP | LOG IN" and "UPLOAD". Below the navigation bar is a secondary menu with links for "ABOUT", "BLOG", "PROJECTS", "HELP", "DONATE" (with a red heart icon), "CONTACT", "JOBS", "VOLUNTEER", and "PEOPLE". The main content area features the "WayBackMachine" logo in a stylized font. To the right of the logo is the text "Explore more than 563 billion web pages saved over time". Below this is a search input field containing "http://" and a "BROWSE HISTORY" button. Further down, there is a "Find the Wayback Machine useful? DONATE" link. At the bottom, there is a row of eight small thumbnail images representing various archived web pages.

<https://web.archive.org/>



Ask a web archive to do it for you ...



<https://web.archive.org/save/>



<http://www.webarchive.org.uk/en/ukwa/info/nominate>



Save a UK Website

We archive websites:

1. That are on a .uk or other UK geographic top-level domain such as .scot or .cymru
2. That are published in the UK.

We do *not* archive:

1. Online Sound or Video platforms, in which audio-visual material is the predominant content
2. Private Intranets and Emails
3. Personal data in social networking sites or websites only available to restricted groups.

Save a UK website

Fields marked with * are mandatory

Personal details you provide on this form are protected by UK Data Protection Law. Please view our [Privacy Statement](#).

* Name

Email address

We need your email address if you require a response from us. It would also be helpful if you are the owner of the nominated website and would like us to make archival copies of the website available through the UK Web Archive.

* Title of website

* URL of the website

Any other information

Use this space to tell us for example, if you own this website, or if it is about to go offline



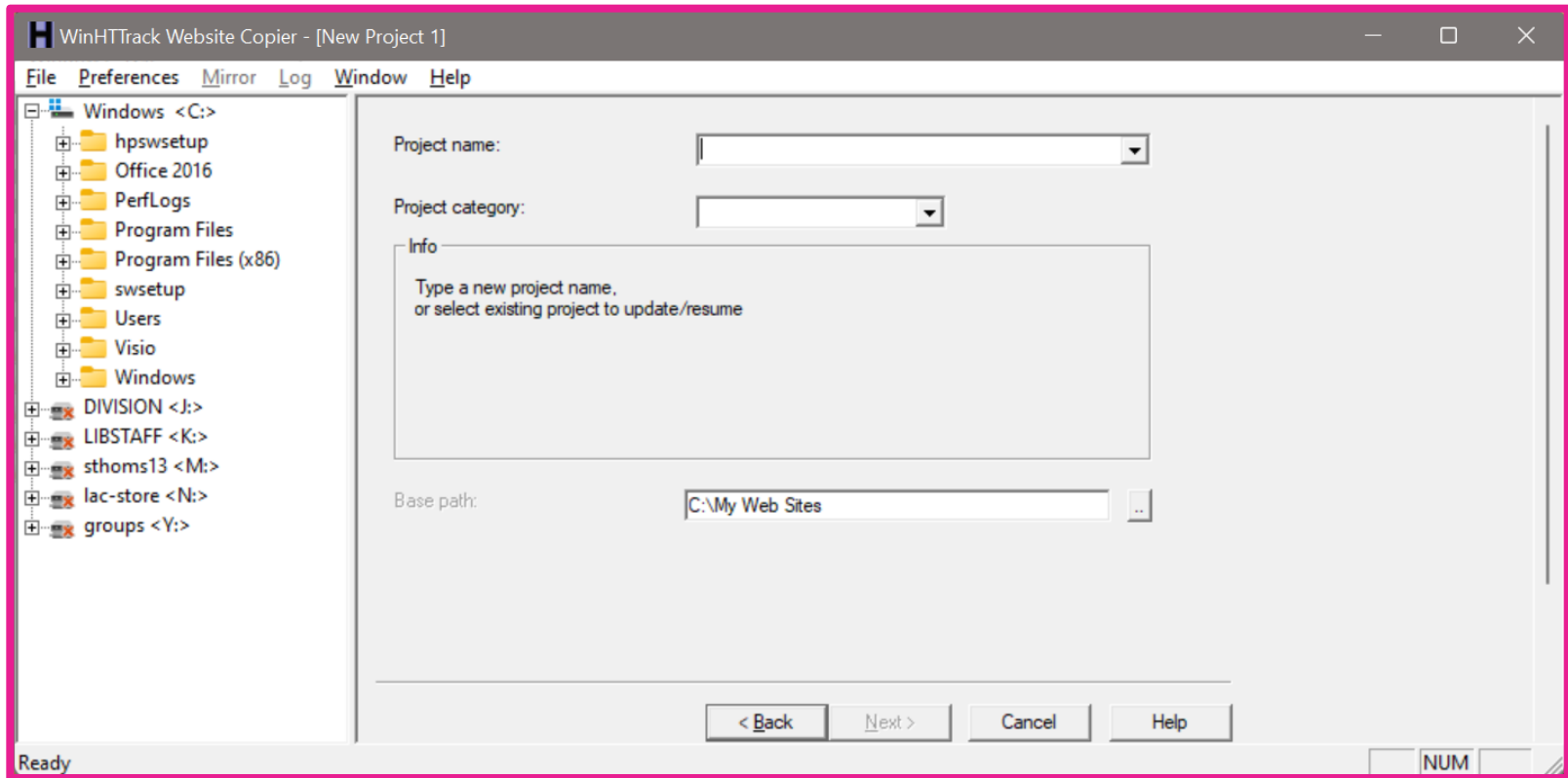
Manually capture a web page(s) with Webrecorder...

The screenshot shows the Webrecorder website in a browser. The browser's address bar displays 'webrecorder.net'. The website header includes the Webrecorder logo and navigation links: 'Blog', 'Tools', 'Community', 'About', 'Contact', and 'FAQ'. The main content area features the text: 'Webrecorder provides a **suite of open source tools and packages** to capture interactive websites as possible. Learn more about our key tools and efforts:'. Below this text are four tool cards: 'ArchiveWeb.page' (with a blue border and Webrecorder logo), 'ReplayWeb.page' (with a green border and Webrecorder logo), 'Browsertrix Crawler' (with a blue border and a laptop icon), and a partially visible fourth card with a green border. A browser extension menu is open on the right side of the browser window, titled 'Not Recording this Tab'. It contains a 'Record To:' dropdown menu with 'UoE CC-19 Latest Up...' selected, a 'Start' button, and a '+ Create New Archive...' option. A list of archived pages is visible below, including 'UoE CC-19 Latest Update Principal Mathieson 2020-03-13', 'Search Tiriodh', 'Stroke Whisper Test', 'EERC: 2 Questions', 'General Test', 'Life in Lockdown Demo', 'Carmichael Watson Project', 'genderED', 'Ruby Tuesday Live Sessions', 'ed.ac.uk through time', and 'My Web Archive'.

<https://webrecorder.net/>



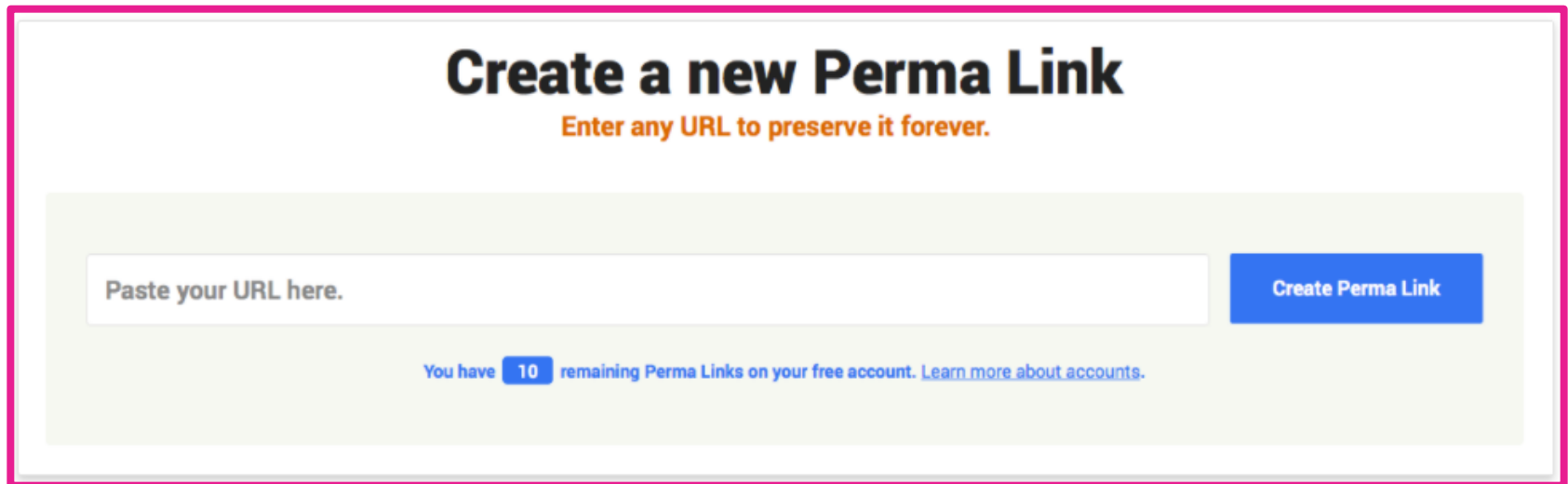
Download code and files for cheap & cheerful local copy...



<https://www.httrack.com/>



Use a citation service...

A screenshot of the Perma.cc website's 'Create a new Perma Link' interface. The page has a white background with a light green input area. At the top, the heading 'Create a new Perma Link' is in bold black text, followed by the subtext 'Enter any URL to preserve it forever.' in orange. Below this is a white text input field with the placeholder text 'Paste your URL here.' and a blue button labeled 'Create Perma Link'. At the bottom of the input area, there is a small blue box containing the number '10' and the text 'remaining Perma Links on your free account. Learn more about accounts.'

<https://perma.cc/>

Disclaimer: Paid Service (legal publications)



twarc.py

Harvest machine-readable data (social media) ...

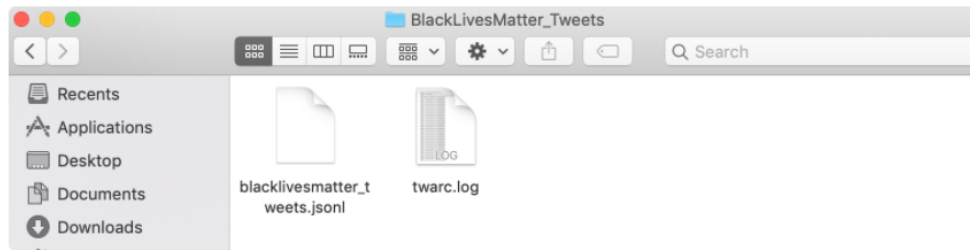
Type the following into your command prompt and press enter:

```
twarc search blacklivesmatter > tweets.jsonl
```

- Your collection may take some time to return all tweets. You can tell when the process has completed if your terminal has returned to the shell (\$) prompt:

```
eam5hc$ twarc search blacklivesmatter > blacklivesmatter_tweets.jsonl  
eam5hc$
```

- While the prompt is running, check to make sure your command was successful by looking inside the twarc folder. Inside you should see your tweets.jsonl file and a twarc.log file (You don't need to open these files, just make sure they've been created.):



<https://scholarslab.github.io/learn-twarc/>



Harvest machine-readable data (social media) ...

Social Feed Manager Collection Sets Credentials Exports Welcome, exampleuser -

Collection Sets / 2016 Election

2016 Election [Edit](#)

This is a collection of social media related to the 2016 United States presidential campaign. It was started on June 1, 2016.

Group: justinlittman

Stats:

- tweets: 2037252
- web resources: 33339

Id: 65a319f2dfc24839ad7867ba28fc762f

Created: June 1, 2016, 8:44 a.m.

Collections

Name	Harvest type	Seeds	On/off
Democratic party twitter timelines	Twitter user timeline	3 seeds	On
Republican party twitter timelines	Twitter user timeline	3 seeds	On
Republican candidate twitter timelines	Twitter user timeline	13 seeds	On
Candidate twitter filter	Twitter filter	1 seed	On
Democratic candidates user timelines	Twitter user timeline	4 seeds	On
Commentator twitter timelines	Twitter user timeline	30 seeds	On
Candidate photos	Flickr user	1 seed	On

[Add Collection -](#)

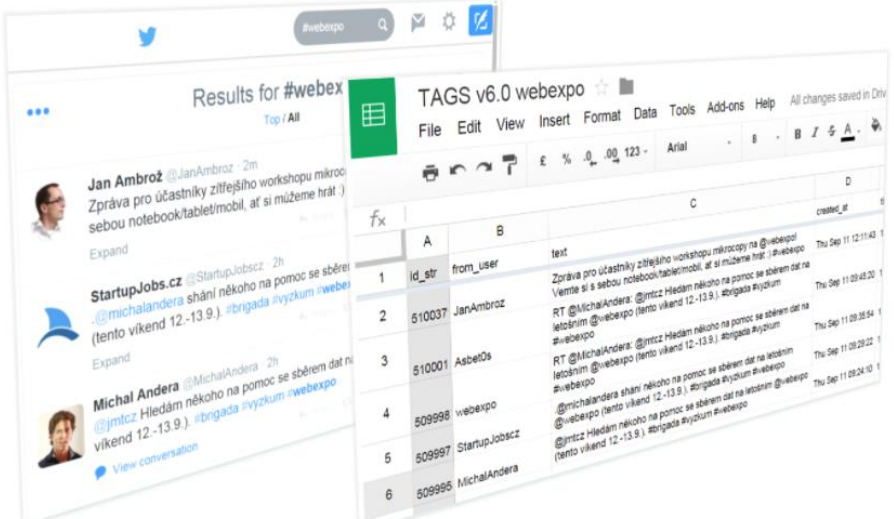
<https://social-feed-manager.readthedocs.io/>

Harvest machine-readable data (social media) ...



<https://tags.hawksey.info/>

Get TAGS



	A	B	C	D
	id_str	from_user	text	created_at
1	510037	JanAmbroz	Zpráva pro účastníky zřetěženého workshopu mikroo... sebou notebook/tablet/mobil, ať si můžeme hrát :)	Thu Sep 11 12:11:43
2	510001	AsbelOs	Zoráva pro účastníky zřetěženého workshopu mikroo... Vemte si sebou notebook/tablet/mobil, ať si můžeme hrát :)	Thu Sep 11 09:40:20
3	509998	webexpo	RT @MichalAndera: @jmtcz Hledám někoho na pomoc se sběrem dat na... #webexpo (tento víkend 12.-13.9.) #brigada #vyzkum #webexpo	Thu Sep 11 09:35:54
4	509997	StartupJobscz	RT @MichalAndera: @jmtcz Hledám někoho na pomoc se sběrem dat na... #webexpo (tento víkend 12.-13.9.) #brigada #vyzkum #webexpo	Thu Sep 11 09:29:22
5	509996	MichalAndera	@jmtcz Hledám někoho na pomoc se sběrem dat na... #webexpo (tento víkend 12.-13.9.) #brigada #vyzkum #webexpo	Thu Sep 11 09:24:10

To start using TAGS select one of the versions below then follow the steps below:

TAGS v6.0

TAGS v6.1



Download your data directly from a platform...

The screenshot shows the Twitter mobile app interface. On the left is a navigation menu with options: Home, Explore, Notifications, Messages, Bookmarks, Lists, Profile, and More. Below the menu is a blue 'Tweet' button. The main content area is divided into two sections: 'Settings' and 'Your Account'. The 'Settings' section has a search bar and a list of categories: Your account, Twitter Blue, Security and account access, Privacy and safety, Notifications, Accessibility, display, and languages, and Additional resources. The 'Your Account' section has a sub-header: 'See information about your account, download an archive of your data, or learn about your account deactivation options'. It lists several options: Account information, Change your password, Download an archive of your data (highlighted with a pink oval), TweetDeck Teams, and Deactivate your account. Each option has a right-pointing chevron icon.



Download your data directly from a platform...

The screenshot shows a mobile application screen with a pink border. At the top left is a back arrow icon. The title is "Download an archive of your data". Below the title is a subtitle: "Get insights into the type of information stored for your account." The main content is divided into two sections. The first section is titled "Twitter data" and contains the text: "You can request a ZIP file with an archive of your account information, account history, apps and devices, account activity, interests, and Ads data. You'll get an in-app notification when the archive of your data is ready to download. [Learn more](#)". Below this text is the label "Twitter" and a blue rounded button labeled "Request archive". The second section is titled "Periscope data" and contains the text: "You can request an archive of your Periscope data on Periscope directly." followed by a right-pointing arrow icon.





Download your data directly from a platform...

Name	Date modified	Type	Size
assets	05/03/2022 12:15	File folder	
data	05		
Your archive.html	05		

Hi @sdaythomson,

Here is the information from your archive which may be most useful to you.

As this information is not all the data from your archive, please open [this folder](#) if you want to see all the data that we have included. An explanation for each piece of data can be found in the [README](#) file included in the same folder.

Quick stats
Here's a glance at some numbers from your archive:

Tweets	2,855	Likes	4,478
Blocked accounts	87	Muted accounts	0
Lists	1	Moments	0



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Now for a Demo



Influencing the world since 1583



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Webrecorder
Web archiving for all!



Influencing the world since 1583



Webrecorder

Web archiving for all!

[About](#) | [Tools](#) | [Blog](#) | [FAQ](#) | [Contact](#) | [Jobs](#)

<http://webrecorder.net/>

Latest News

Read about the [ArchiveWeb.page Chrome Extension for high-fidelity web archiving](#).

Read about the [release of the new OldWeb.today browser emulation system](#).

Featured Tools

[ARCHIVEWEB.PAGE](#)

Webrecorder Toolset

webrecorder.net/2021/01/18/archiveweb-page-extension.html

Introducing ArchiveWeb.page - Local High-Fidelity Web Archiving

2021-01-18 · Ilya Kreymer

Introducing ArchiveWeb.page Chrome Extension

I am excited to announce the launch of [ArchiveWeb.page](#), a brand-new high-fidelity web archiving system available as a [Chrome extension from the Chrome Web Store](#)

The extension has been tested in latest versions of Chrome, as well as with the Edge and Brave browsers.

In classic Webrecorder style, the extension allows users to 'record' highly interactive websites, including social media, video, customized content, and even local intranet content.

When the original webrecorder.io was launched nearly six years ago, the goal was to allow users to record/capture exactly what is loaded in their browser. At the time, it was not possible to do entirely with a browser extension and an outside proxy server (running on webrecorder.io) was necessary. Now, thanks to evolution of the browser technologies, this original vision of archiving entirely in your browser can finally be realized!

The ArchiveWeb.page extension turns the browser into a full web archiving system, allow users to turn 'recording' mode on any tab, which will then capture/record all the elements of a page exactly as they are loaded. The archived data is then stored in the browser itself, and can be replayed/accessed even when offline. ArchiveWeb.page builds on and complements the [ReplayWeb.page](#) system, [announced last year](#).

User Guide

To get users started with the extension right away, we've also launched a detailed [User Guide](#), created by our Community Manager, Lorena Ramírez-López.

Read on below for an overview of some key features in ArchiveWeb.page.



Crawler

- Automated
- Capable of capturing high volume of URLs
- Typically captures minimal metadata
- Doesn't always capture AV or dynamic content
- Requires IT configuration and institutional infrastructure

vs

Webrecorder

- Manual
- More effective for small number of URLs
- Supports close qualitative analysis and more detailed metadata
- Excels at capturing high fidelity copies
- Easy to use for non-experts



<https://webrecorder.net/>



Webrecorder

Web archiving for all!

[About](#) | [Tools](#) | [Blog](#) | [FAQ](#) | [Contact](#) | [Jobs](#)

Webrecorder provides a **suite of open source projects and tools** to **capture** interactive websites and **replay** them at a later time as **accurately as possible**.

Latest News

Read about the [ArchiveWeb.page Chrome Extension for high-fidelity web archiving](#).

Read about the [release of the new OldWeb.today browser emulation system](#).

Featured Tool



is an extension for high-fidelity web archiving using your browser.



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Influencing the world since 1583



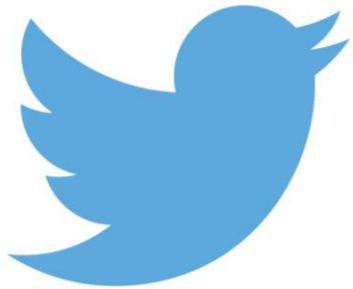
API Harvesting

- Application Programming Interface – backdoor to platform
- Harvest the underlying data
 - Machine-readable (JSON, XML)
 - Rich metadata
- Only available on certain platforms
- Licenced under Terms of Service
- Supports linking datasets from different sources
- More complex personal data issues



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APIs



Twitter Data



↑
Twitter
Interface

JSON



```
1 {
2   "created_at": "Thu Apr 30 21:53:11 +0000 2015",
3   "id": 593895901623496700,
4   "id_str": "593895901623496704",
5   "text": "This is a #test tweet @LoveforTestingT with an image. http://t.co/ZvgHovKZq4",
6   "source": "<a href='\"http://twitter.com/\"' rel='\"nofollow/\">Twitter Web Client</a>",
7   "truncated": false,
8   "in_reply_to_status_id": null,
9   "in_reply_to_status_id_str": null,
10  "in_reply_to_user_id": null,
11  "in_reply_to_user_id_str": null,
12  "in_reply_to_screen_name": null,
13  "user": {
14    "id": 2993982541,
15    "id_str": "2993982541",
16    "name": "Test Demo",
17    "screen_name": "jondee_test",
18    "location": "Denver, CO",
19    "url": null,
20    "description": "this is a test account.",,
21    "protected": false,
22    "verified": false,
23    "followers_count": 2,
24    "friends_count": 43,
25    "listed_count": 0,
26    "favourites_count": 0,
```



Tweet Elements

```
{ "user": {  
  "id": 6253282,  
  "id_str": "6253282",  
  "name": "Twitter API",  
  "screen_name": "TwitterAPI",  
  "location": "San Francisco, CA",  
  "url": "https://developer.twitter.com",  
  "description": "The Real Twitter API. Tweets  
about API changes, service issues and our Developer  
Platform. Don't get an answer? It's on my website.",  
  "verified": true,  
  "followers_count": 6129794,  
  "friends_count": 12,  
  "listed_count": 12899,  
  "favourites_count": 31,  
  "statuses_count": 3658,  
  "created_at": "Wed May 23 06:01:13 +0000 2007",
```



Twitter Terms & Conditions: *Re-sharing*

I.F.2.b.i. You may not distribute more than 1,500,000 Tweet IDs to any entity (inclusive of multiple individual users associated with a single entity) within any given 30 day period, unless you are doing so on behalf of an academic institution and for the sole purpose of non-commercial research or you have received the express written permission of Twitter.

Twitter's Developer Policies for
Researchers, Archivists, and
Librarians



Justin Littman [Follow](#)
Jan 7, 2019 · 16 min read

<https://medium.com/on-archivy/twitters-developer-policies-for-researchers-archivists-and-librarians-63e9ba0433b2>



#WDPD2019 search
File Edit View Insert F

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
	id_str	full_text	created_at	time	from_user	id_str	in_reply_to_status_id	source	profile_image_url	user_followers_count	user_friends_count	user_location	status_url	entities				
1		RT @OscarMediaUK: Happy World Digital Preservation Day! #WDPD2019 Explore hundreds of physical media formats and help identify those most at risk.	Thu Nov 07 18:52:25 07:11:2019	18:52:25	740465442			https://twitter.com/OscarMediaUK	81	663		Czech Republic	https://twitter.com/OscarMediaUK	#WDPD2019				
2	118251	__Beko oh my god oh my god oh my god. Library of Queensland !! #WDPD2019	Thu Nov 07 14:50:46 07:11:2019	14:50:46	549412719			https://twitter.com/Beko18	1758	774		Minneapolis/argus	https://twitter.com/Beko18	#WDPD2019				
3	118245	__arjaneda RT @OscarMediaUK: Happy World Digital Preservation Day! #WDPD2019 Explore hundreds of physical media formats and help identify those most at risk.	Thu Nov 07 13:51:20 07:11:2019	13:51:20	549412719			https://twitter.com/arjaneda	1758	774		Minneapolis/argus	https://twitter.com/arjaneda	#WDPD2019				
4	118249	__arjaneda RT @OscarMediaUK: Happy World Digital Preservation Day! #WDPD2019 Explore hundreds of physical media formats and help identify those most at risk.	Thu Nov 07 13:51:20 07:11:2019	13:51:20	549412719			https://twitter.com/arjaneda	1758	774		Minneapolis/argus	https://twitter.com/arjaneda	#WDPD2019				
5	118222	__alirez RT @ChrisFitz: Fellow us on Twitter. Our team is going to be introducing ourselves over the course of #WDPD2019 (which for me is still tomorrow). https://www.flickr.com/photos/1182222050@N00000000000/	Thu Nov 07 03:46:46 07:11:2019	03:46:46	188226678			https://twitter.com/alirez	211	365		Edmonton, AB	https://twitter.com/alirez	#WDPD2019				
6	118256	__BAnO Au total, BAnO met près de 18 millions de fichiers de documents patrimoniaux numériques à vote disposition en ligne. #WDPD2019 https://twitter.com/BAnO	Thu Nov 07 21:51:55 07:11:2019	21:51:55	25117978			https://twitter.com/BAnO	35175	1771			https://twitter.com/BAnO	#WDPD2019				
7	118252	__ben_franklin RT @USState: Hey, it's World Digital Preservation Day! #WDPD2019 My wish for all of us is that this work be taken seriously and resources appropriately Thank's a lot of nonsense out there about this. It harms our collective ability to do it.	Thu Nov 07 15:47:15 07:11:2019	15:47:15	85507790119423304			https://twitter.com/ben_franklin	4546	1834		Philadelphia, Penn	https://twitter.com/ben_franklin	#WDPD2019				
8	118250	__BobbleWilliams RT @Shantiga_anna: Happy World Digital Preservation Day everyone. My #WDPD2019 blog is up - more on the topics I come from @RIBA @cpl_daf and friends in the future https://www.blogtalkradio.com/bobbiem1802	Thu Nov 07 22:18:36 07:11:2019	22:18:36	637363888			https://twitter.com/BobbleWilliams	988	224		London	https://twitter.com/BobbleWilliams	#WDPD2019				
9	118249	__dretz_johnston RT @CountingDime: This World Digital Preservation Day #WDPD2019 we want to recognize the work of ADOO members who are fighting to ensure evidence of trafficking in antiquities and human artifacts on social media - vital evidence that must be preserved. @JettePaulley @DanielleHuter @eliasacostaaa https://www.aado.org/	Thu Nov 07 17:39:48 07:11:2019	17:39:48	1028545222184799017			https://twitter.com/dretz_johnston	199	2272		Albany, Western Aust	https://twitter.com/dretz_johnston	#WDPD2019				
10	118240	__BRICMICS RT @ABAAArchTeam: Digital archives need to be managed actively. Show them some love! #WDPD2019 #WDPD2019 #WDPD2019 https://twitter.com/ABAAArchTeam	Thu Nov 07 13:13:05 07:11:2019	13:13:05	3040560101194723303			https://twitter.com/BRICMICS	424	789		Around GB and Irel	https://twitter.com/BRICMICS	#WDPD2019				
11	118242	__BRICMICS RT @Riccio3rd_jmc: Important! https://twitter.com/Riccio3rd_jmc by @Riccio3rd_jmc Many points for us all to engage with. Thanks @cpl_daf for sharing https://www.blogtalkradio.com/bobbiem1802 #WDPD2019 https://www.blogtalkradio.com/bobbiem1802 #WDPD2019 https://www.blogtalkradio.com/bobbiem1802	Thu Nov 07 13:13:05 07:11:2019	13:13:05	8540560101194723303			https://twitter.com/BRICMICS	424	789		Around GB and Irel	https://twitter.com/BRICMICS	#WDPD2019				
12	118238	__BRICMICS RT @Riccio3rd_jmc: Important! https://twitter.com/Riccio3rd_jmc by @Riccio3rd_jmc Many points for us all to engage with. Thanks @cpl_daf for sharing https://www.blogtalkradio.com/bobbiem1802 #WDPD2019 https://www.blogtalkradio.com/bobbiem1802 #WDPD2019 https://www.blogtalkradio.com/bobbiem1802	Thu Nov 07 13:13:05 07:11:2019	13:13:05	8540560101194723303			https://twitter.com/BRICMICS	424	789		Around GB and Irel	https://twitter.com/BRICMICS	#WDPD2019				



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Questions?



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