HTRC Workset Toolkit

HTRC Workset Toolkit is a command line interface for use in the HTRC Data Capsule environment. It streamlines access to the HTRC Data API and includes utilities to pull OCR text data and volume metadata into a capsule. Additionally, it allows a researcher to point OCR text data to analysis tools that are also available in the capsule.

Capsules created after March 18, 2018 contain the Toolkit by default. If you created your capsule before March 18, 2018, please skip to Getting the HTRC Workset Toolkit below.

Additional documentation is also available here: https://htrc.github.io/HTRC-WorksetToolkit/cli.html

Usage

The HTRC Workset Toolkit has four primary functions which allow users to download metadata and OCR data, run analysis tools, and export lists of volume IDs from the capsule.

- Volume Download
  - `htrc download`
- Metadata Download
  - `htrc metadata`
- Pre-built Analysis Workflows
  - `htrc run`
- Export of volume lists
  - `htrc export`

Identifying volumes

Each command expects a *workset path*, which is how you point to the volume(s) you would like to analyze. The Toolkit accepts several different forms of identifiers for the workset path, as described in the following table. You can choose to use whichever is the most conducive to your research workflow. You don't need to specific which kind of workset path you will be using, you can simply include the identifier (e.g. the HathiTrust ID or the HathiTrust Catalog URL) in your command.

Workset path	Example	Note
File of volume IDs	/home/dcuser/Downloads/collections.txt	
HathiTrust ID	mdp.39015078560078	
HathiTrust Catalog ID	001423370	
HathiTrust URL	https://babel.hathitrust.org/cgi/pt?id=mdp.39015078560078;view=1up;seq=13	must be in quotes in command
Handle.org Volume URL	https://hdl.handle.net/2027/mdp.39015078560078	must be in quotes in command
HathiTrust Catalog URL	https://catalog.hathitrust.org/Record/001423370	must be in quotes in command
HathiTrust Collection Builder URL (for public collections only)	https://babel.hathitrust.org/shcgi/mb?a=listis;c=696632727	must be in quotes in command

Building a dataset

To customize your dataset, you will need to search and build a collection in HathiTrust. Or use other metadata sources, including HathiFiles, to create a list of HathiTrust volume IDs. HathiTrust IDs are the unique identifier for each volume, and you can see an example in the table above.

If you are importing data using a file of volume IDs, your file should in txt format with one ID per line.

You can access data that corresponds to the permissions level associated with your capsule. Only capsules that have been granted full corpus access are able to import any volume from the HathiTrust collection. Demo and general research capsules can only import public domain (i.e. "Full View") items.

Volume Download

The basic form to import OCR data is to use the "htrc download" function. When you run the command, you have your choice of several arguments that impact how the data is transferred and you also provide the workset path. This command will only work in ***secure mode***; it won't work in maintenance mode for security reasons.

The format for the command looks like this:

```
htrc download [-f] [-o OUTPUT] [-c] [WORKSET PATH]
```

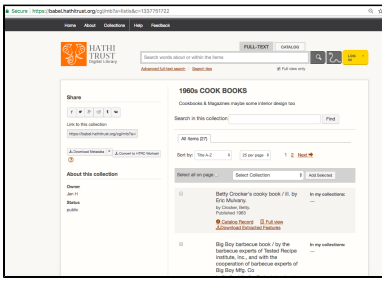
The brackets indicate optional text and/or text that should be changed before you run the command. The named arguments, which are the "flagged" letters in the command, are described in the following table:

Named argument	What it does	What happens if it's NOT included
-f, --force	Remove folders if they exist	Each volume in your dataset will be located in it's own folder
-o, --output	Indicates that you will be choosing a directory location where the files should go. Should be followed by the in-capsule directory path of your choice. You can call the destination folder anything you like.	Data will be sent to “/media /secure_volume/workset/”
-c, --concat	Concatenate a volume’s pages in to a single file.	Page files will not be concatenated
-pg, --pages	Download only certain pages from a volume.	All page files for each volume will be downloaded
-m, --mets	Includes the METS file for each volume in your download request. Cannot be used with both -pg (pages) and -c (concatenate).	METS files are not downloaded
-h, --help	Displays the help manual for the toolkit	Help manual is not displayed

Examples

Be sure that you are in secure mode before trying these!

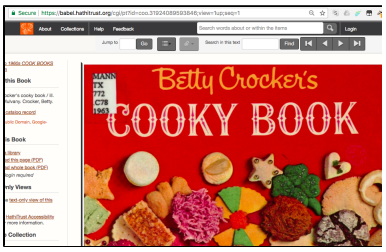
Volume URL



The following command will import the data for the volumes in a HathiTrust collection using the URL you can find when viewing the collection. It will not concatenate files or remove folders. The files will be directed to the standard location (/media/secure_volume/workset/).

```
htrc download “https://babel.hathitrust.org/cgi/mb?a=listis&c=1337751722”
```

Volume ID



The following command will import the data for one volume, indicated by its HathiTrust volume ID, to a specified directory location called my_workset in this example. The files will not be concatenated and the folders will not be removed.

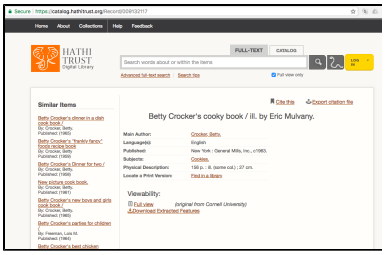
```
htrc download -o /media/secure_volume/my-workset coo.31924089593846
```

Local volume ID file

The following command will import the data for volumes IDs that have been saved to a text file in your capsule. The list should NOT include a header row, and should include the IDs only in a single column. You can call the file whatever you like; we have called it mylist.txt for the example. In this example, the folders will be removed, but the files will not be concatenated, and the files will be directed to the standard location (/media/secure_volume/workset/).

```
htrc download -f mylist.txt
```

Record ID



The following command will import data for the volumes that share a HathiTrust record ID, which generally indicates that multiple items were digitized representing the same work, or that they are serial publications for a periodical. The record ID can be found in the URL when viewing the catalog record for an item. In this example, the files will be concatenated, the folders retained, and the files directed to a specific directory, which we have called my-workset for illustrative purposes.

```
htrc download -c -o /media/secure_volume/my_workset 009132117
```

Download pages from volumes

Some users have identified specific pages of volumes they would like to analyze in order to skip, for example, paratextual content. They would generate a list of page numbers using HTRC Extracted Features, the HathiTrust Data API, or the METS file for the volume. The following command demonstrates how to download only specified pages from a volume. This command also works with a local volume ID file, where there is no header row and the IDs are listed as a single column. Include the bracketed list of pages to download after the volume ID both in the command version below, or in the file if using that method.

```
htrc download -c -o /media/secure_volume/specified_pages -pg coo.
31924089593846[5,6,7,8,9,10]
```

Getting the HTRC Workset Toolkit

- Capsules created prior to March 18, 2018 did not contain the HTRC Workset Toolkit command line interface by default, and user-installed versions of the Toolkit may now be out of date and fail to run. To ensure you are running the most up-to-date version of the Toolkit, please follow these steps to uninstall the current version and re-install the latest version:
    - Check whether you have the correct Python version installed in your capsule by typing the command indicated below on the command line in your capsule. The HTRC Workset Toolkit requires the Anaconda Python distribution, which is likewise standard in all recently-created capsules. And while the Toolkit is compatible with both Python 2.7 and 3.6, we recommend using the 3.6 version for future compatibility.

Check python version

```
dcuser@dc-vm:~$ python --version
```

You should see this

```
Python 3.6.0 :: Anaconda 4.3.1 (64-bit)
```

- Some users may have self-installed the Toolkit in their capsules prior to March 18, 2018. If you have already installed the HTRC Workset Toolkit, uninstall it by using pip, as indicated below.

Uninstall the toolkit

```
dcuser@dc-vm:~$ pip uninstall htrc
```

- Install the latest version of the HTRC Workset Toolkit.

Install the toolkit

```
dcuser@dc-vm:~$ pip install htrc
```

Please note that updating may affect the versions of packages listed at HTRC-WorksetToolkit/setup.py that you are running in your capsule, and therefore should be done with care for your existing workflows. Contact htrc-help@hathitrust.org for assistance upgrading your version of the Toolkit.