

Getting started with BIG-MAP Archive

Francois Liot (francois.liot@epfl.ch)

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What you will accomplish using a web browser:

1. Log into a training instance of the archive
 - (a) Click this link <https://demo.archive.big-map.materialscloud.org/> or insert the URL into the address bar of a web browser. Alternatively, navigate to a production instance of the archive <https://archive.big-map.eu/> and click the button labeled “Training instance” on the archive’s front page.
 - (b) Click **Log in**.
 - (c) Enter your email address and the displayed password. If you receive an error message such as “Invalid email address”, your email address does not correspond to any user accounts. In this case, contact us at as soon as possible.
2. Create and share a record
 - (a) Click **New record** in the header.
 - (b) Select the files that you wish to attach to the record. Drag and drop them in the drop zone (light gray region). Note that you are limited to 100 files and a total file size of 100 GB. For this exercise, I recommend choosing two small files (total size ≤ 1 MB) containing dummy data.
 - (c) Fill in the record’s metadata:
 - A resource type. This field is compulsory and describes the overall nature of your data files’ contents.
 - A title (compulsory).
 - Authors (compulsory). Note that inserting the name of another archive user in this list does not make that user a co-owner of the record.

- A description (optional).
 - A license (optional). The recommended license is the BIG-MAP license which allows re-distribution and re-use of work within the BIG-MAP community.
 - Keywords (optional). Make sure that your keywords are entered one by one: there should be a small cross on the right side of each of them. You are allowed to create your own keywords. For instance, if you split a large dataset over multiple records, you may want to tag these records with the same 15 digit random number to help humans and machines retrieve the whole dataset easily using the built-in search engine. The text box may contain any arbitrary values. It also benefits from an autocomplete feature that suggests keywords based on input. Type, e.g., “wp”.
 - References to external documents (optional).
- (d) Click **Share on archive** to save and make your record visible to all authenticated users.
- (e) Click **Shared records** in the header to check that your record appears in the shared records’ list. Click the record’s title and click “Download” to start downloading one of the uploaded files to your local machine.
3. Create and share a second version of your record
- (a) At this stage, let us assume that you wish to update your record. There may be a typo in the title, a missing file, etc. Go to **My records** and click the record’s title.
- (b) Click **New version** and **Import files**.
- (c) Make a few changes: change the title, add a file, remove a file, etc.
- (d) Once you are satisfied with your changes, click **Share on archive**.
- (e) Navigate to **Shared records** and check that your record appears in the shared records’ list.
- (f) Switch the toggle on the left side of the web page to display both versions of the record.

- (g) Click any of its two versions. Find the card entitled **Versions** on the right side of the web page. You should be able to easily navigate from one version to the other by clicking the corresponding light blue area.
4. Ask a collaborator to create and share a third version of your record
 - (a) Click **My records**.
 - (b) Find the latest version of your record and click its title.
 - (c) Click **Collaborate** to generate a URL that you will send to another user of the archive. Equipped with this URL, he should be able to create a third version of the record.
 - (d) Ask him for a URL for one of his shared records so that you can create an extra version of that record.
 5. Search for a shared record using the archive's built-in search engine
 - (a) Click **Shared records**.
 - (b) Type `"Liot" "WP9"` into the search box to find all shared records whose metadata contains “Liot” and “WP9”. Depending on the contents of the database, you may get zero, one, or more hits. If you wish to make more advanced queries (e.g., find all shared records where a specific field contains a value, read, e.g., the search guide). Note that, by default, the toggle switch is off (i.e., only the latest version of each record is displayed).
 6. Get an API access token
 - (a) In preparation for the API exercise below, click **API access tokens** in the header's dropdown.
 - (b) Click **New token** and follow the displayed instructions. Note that the access token is shown only once and has an unlimited lifetime (unless you delete it). Keep it in a safe storage and do not share.

What you will accomplish using a client Python script:

1. Create and share a record via the API

- (a) Clone the source code repository hosted on GitHub at `https://github.com/materialscloud-org/big-map-archive-api-examples`.
- (b) Follow the instructions in the `README.md` file.