# DART

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The **Digital Archivist's Resource Tool** (DART) is a desktop application developed and maintained by the Academic Preservation Trust (AP Trust) to support transfers of digital materials to repositories using the BagIt File Packaging Format (RFC 8493). Source code, documentation and download links are all available on AP Trust's GitHub site.

In Fall 2023, SFU Archives retired its custom-built BagIt packaging app, SFU MoveIt, and began investigating DART as a possible replacement. DART provides an interface that allows users to

- Select files for packaging.

- Enter their contact information and some descriptive data about the material.

- Create a BagIt-compliant package ("bag") ready for transfer to Archives.

The app supports the creation of multiple BagIt Profiles that can accommodate different transfer scenarios and user groups (e.g. require different metadata fields). The app can be configured to support transfers over a network to any sftp server or S3-compliant API. Finally, DART can also be used to validate bags received.

In SFU Archives' use, SFU staff and private donors:

- Install DART on their local machines.

- Import SFU-specific transfer profiles.

- Create transfer packages to their desktop.

- Transfer them to the Archives via SFU Vault or external drives physically delivered to the Archives.

No data is transferred over the network through DART (though longer term this is something the Archives could investigate with IT Services). The Archives in turn uses DART to validate transfers. The Archives may also use DART to package its own in-house digitization output and with vendors when outsourcing digitization work.

As of June 2024, DART is included in SFU's Managed Software Center, allowing university staff working on SFU-managed machines to easily download and install the program.

- For user documentation, see the [DART page on the Archives website](#).

## ⌃  BagIt profiles

A **BagIt Profile** sets out a particular implementation of the BagIt specification, by defining how the optional components of BagIt are to be handled. Bags can be created and validated against particular profiles, and DART supports the use of create multiple profiles for different contexts / uses. SFU Archives has created five profiles.

- SFU University Records Transfer

- Private Organization Transfer

- Personal Archives Transfer

- SFU in-house digitization

- Outsourced digitization.

Each profile uses a somewhat different set of metadata tags.

- The DART interface presents tags as field for user data-entry.
- The data submitted by the user in these fields is written to the Bag's **bag-info.txt** file.
- See the [BagIt Profiles](#) page for details on each profile.

## ⌃ Collection notice

DART collects the contact information of the producer.

- In the case of SFU staff, this is business information rather than personal information and no collection notice is required.
- With private donors, their contact information may include personal addresses and telephone numbers; here a collection notice is needed.

There is no straightforward way to add a collection notice to a DART [BagIt Profile](#). The Archives' workaround is to:

- Include a custom metadata field (**Collection Notice**) on the two private-records profiles.
- Include the text of the collection notice as the default value of the **Collection Notice** field.
- Include the same text as the tooltip help text.

The main downside of this approach is that fields with default values are by default hidden from the user in the interface. The user must select the **Show all tags** button to reveal default text. This will need to be addressed in user documentation / training.

Text of the Collection Notice for Private organization transfer:

> This app collects personal information on behalf of SFU under the authority of the University Act (RSBC 1996, c.468) and the Freedom of Information and Protection of Privacy Act (RSBC 1996, c.165). The personal information collected includes your name, position title, telephone number, and email address. The information is related directly to and needed by the University to

verify users' authority to transfer records to the Archives and to follow up with questions about the contents of the transfer and its suitability for long-term archival preservation. As a user of an SFU Archives service, you may also be contacted in the future to participate in the evaluation of the effectiveness of the service. The information will be used by SFU Archives staff; it may be disclosed to other members of your parent organization in the context of questions about the circumstances of the transfer in the event that these later arise. If you have any questions about the collection and use of this information please contact the University Archivist and Coordinator of Information and Privacy, Paul Hebbard, pgh@sfu.ca, 778-782-2313.

Text of the Collection for Personal archives transfer:

This app collects personal information on behalf of SFU under the authority of the University Act (RSBC 1996, c.468) and the Freedom of Information and Protection of Privacy Act (RSBC 1996, c.165). The personal information collected includes your name, telephone number, and email address. The information is related directly to and needed by the University to verify users' authority to transfer records to the Archives and to follow up with questions about the contents of the transfer and its suitability for long-term archival preservation. As a user of an SFU Archives service, you may also be contacted in the future to participate in the evaluation of the effectiveness of the service. The information will be used by SFU Archives staff. If you have any questions about the collection and use of this information please contact the University Archivist and Coordinator of Information and Privacy, Paul Hebbard, pgh@sfu.ca, 778-782-2313.

## ⌃ Serialization

All of the SFU profiles "serialize" the bag so that the output is a single tar file.

- In DART, serialization is required to preserve the timestamps of the original files packaged in the bag.
- If the bag is created in unserialized form, timestamps will be overwritten with the data / time of bag creation.

# ⌃ Export BagIt Profiles

The BagIt profiles must be saved (as json files) to a public url. This ensures that:

- SFU users can access them to import to their local version of the app.
- The archivist's local DART app can access the profiles to validate any bags received that used them.

DART provides two ways to export a profile, via:

- Settings > BagIt Profiles > Export Profile; or
- Settings > Export Settings.

The **Export Settings** method is preferred:

- The **Export Profile** method creates a profile that complies with the BagIt Profile Specification but loses some of the richer additional information that DART supports (e.g. help text or drop-down list values).
- Use **Export Settings** to ensure all this information is captured in the json profile document that users will import.

Profile names should include version numbers.

- Non-current versions should be retained so that packages created using them can be properly validated.
- The Archives' profiles are stored on the [Archives' GitHub site](#),

# ⌃ Import BagIt Profiles

To import the Archives' BagIt profile, see the [instructions page](#) on the Archives' website.

Profiles (current versions) are stored at the following public urls.

## SFU University Records Transfer

```
https://raw.githubusercontent.com/SFU-Archives/digital-repository-
utilities/master/bagit-profiles/university-records-transfer-v1-0.json
```

## Private Organization Transfer

```
https://raw.githubusercontent.com/SFU-Archives/digital-repository-
utilities/master/bagit-profiles/private-organization-transfer-v1-0.json
```

## Personal Archives Transfer

```
https://raw.githubusercontent.com/SFU-Archives/digital-repository-
utilities/master/bagit-profiles/personal-archives-transfer-v1-0.json
```

## Digitization SFU Archives

```
https://raw.githubusercontent.com/SFU-Archives/digital-repository-
utilities/refs/heads/master/bagit-profiles/digitization-sfu-archives-v1-0.json
```

## Digitization Outsourced

```
https://raw.githubusercontent.com/SFU-Archives/digital-repository-
utilities/refs/heads/master/bagit-profiles/digitization-outsourced-v1-0.json
```

# ⌃ Links

AP Trust website:

- https://aptrust.org

AP Trust DART GitHub repository:

- https://github.com/APTrust/dart

BagIt File Packaging Format specification (RFC 8493):

- https://datatracker.ietf.org/doc/html/rfc8493

SFU Archives BagIt Profiles:

- Description: SFU Archives BagIt Profiles page
- json files: https://github.com/SFU-Archives/digital-repository-utilities/tree/master/bagit-profiles