

# Transferring Digital Records to the Georgia Archives

## Procedures for State Officials

### Purpose

The purpose of this guideline is to provide instructions for completing the transfer of permanent digital records to the Georgia Archives.

### Identifying Eligible Records

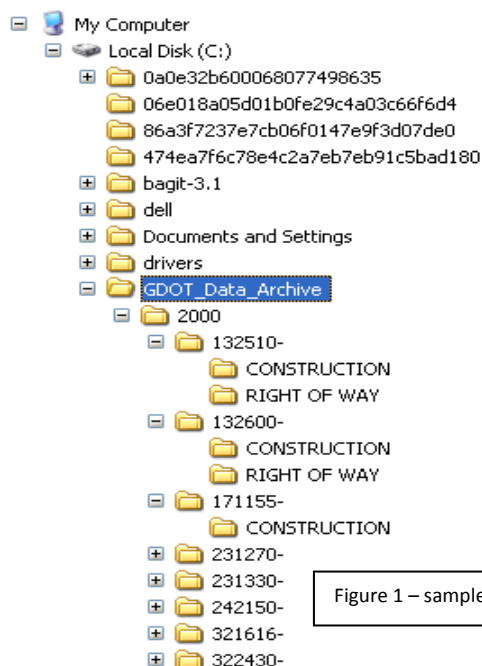
Only permanent digital records are eligible for transfer to the archives. These records should be either born-digital (i.e., created as an electronic records originally) or reformatted digital (i.e., created as paper but then scanned) and have no paper equivalent. Where paper records and digital records exist, contact the Georgia Archives for assistance in determining which media should be transferred as the archival record. Initially, the Archives will accept only the following file formats –

- Portable Document Format (.pdf)
- Tagged Image Format (.tif).

Additional file formats will be added as the digital archives system comes into full production.

Use the most recent version of the Georgia Retention Schedules for State Government or a relevant agency-specific schedule to determine if your records are eligible for transfer to the Georgia Archives as permanent records.

### The Transfer Process



Currently, agencies wishing to transfer digital records must contact the Georgia Archives and arrange for an external hard drive to be sent to the agency. On this hard drive will be the software needed to complete the transfer.

Transfer of digital records is accomplished through the use of BagIt, a software application developed by the Library of Congress to ensure the integrity and reliability of data being transferred to a digital archive. BagIt uses a list of command line (cmd) interface options to operate. An intermediate knowledge of the command line interface is desired in operating BagIt, but the procedures below will walk agency staff through the process of creating a bag and transferring data into it.

Figure 1 – sample directory

BagIt's versatility in the command line makes it easy to use with any operating system (OS), and the help functions written as "help" in BagIt, along with the bag command, give a list of commands and options to use with the application.

### **Prepping Records for Transfer**

Create a source folder from which BagIt will pull the records. The source folder should be named using the agency's four or five letter initials (for example, the Department of Transportation is GDOT) followed by "\_Data\_Archive". So, the resulting source folder will be named: GDOT\_Data\_Archive. This source folder may be on any drive on the computer network.

Below the source folder, copy or move the individual records being transferred. Below the source folder will be any number of subfolders containing the records. If the agency is transferring records from multiple years, there should be a subfolder for each year with the records and/or additional subfolders below. The records should be filed in the same (or similar) manner as they exist in the agency system. For example, if records are accessed by project ID number (PI), and there under grouped by construction or right of way, the directory structure would look like figure 1.

### **Prepping Records for Transfer - Metadata**

All records transferred to the Georgia Archives for permanent retention must be transferred with associated metadata. Metadata is transferred along with the records. Currently, the Georgia Archives preferred methods of accepting metadata:

1. Records and metadata together as an XML encapsulated object;
2. An XML schema as a separate file, or;
3. A metadata schema in another pre-approved file format. Currently, the Archives accepts .csv files, tab delimited files, and comma separated files.

The separate metadata schema should be placed in the directory structure along with the associated records and in the appropriate subfolders. An XML encapsulated object exported from the agency's document management (or other) system is the recommended method of transferring metadata. The metadata collected by the agency should also be listed on the transmittal form. Additional information provided on the transmittal form serves as core metadata to describe the records. For more information on how the Archives uses metadata to ensure the accessibility and integrity of records over time, refer to "Capabilities and the Capture of Metadata in the Digital Archives of Georgia," available on the Preserving Georgia's Historical Data webpage at [http://sos.georgia.gov/archives/who\\_are\\_we/rims/digital\\_History/documents.htm](http://sos.georgia.gov/archives/who_are_we/rims/digital_History/documents.htm).

### **Running BagIt**

Step 1: the BagIt software can be run from the external hard drive without being loaded on the agency's network. However, **you must have the current version of JAVA on your computer to proceed.**

Step 2: Open a command line interface by going to 'Start' on the desktop (for a Windows XP environment), click on 'run', then type 'cmd'; for Windows Vista and 7, in the start user page, type in 'cmd' in the search space.

Step 3: Make sure your command prompt is the appropriate destination drive (whatever letter that designates the external drive on your computer – **for the purposes of this leaflet, we use drive e: as the external drive letter**). If the command prompt does not indicate the external drive, you can change the directory by typing e:. Once you are in the correct destination drive, change the directory to the BagIt Bin directory by typing: e:\cd bagit-3.1/bin

**The command line should now read – e:\bagit-3.1/bin>**

To view all the commands available using BagIt, type 'help' after the '>' . (e:\bagit-3.1/bin>help) the command line should now read – e:\bagit-3.1\bin>help, followed by a list of commands.

Step 4: Create a Bag. To create a bag, you will need to designate a source folder (created above as part of prepping your records) and a destination folder. The location of the source folder can be on any drive of your computer or network, so long as you can access it. The destination folder should be named as follows: agency four or five letter initials (for example GDOT) followed by “\_ Archive\_ Transfer”. The resulting folder title is: GDOT\_Archive\_Transfer. You should have one destination folder and one source folder. The amount of data within the folder does not matter; BagIt’s transfer capability is unlimited. The command to create a bag is – bag create + destination folder + source folder

Note: The software creates the destination folder as part of the command to create a bag.

1. At the command line type, bag create, followed by the name of the destination folder and the source folder. **The command line should now read - e:\bagit-3.1\bin>bag create e:\GDOT\_Archive\_Transfer c:\GDOT\_Data\_Archive.** (This example uses a source folder on the local drive c:, but any network drive can be used for the source folder.) Note, when naming your destination and source folders, there cannot be any spaces in the file name or BagIt will return a bag creation error.

2. Hit return and BagIt will find the source folder, copy the materials, and create the destination folder along with a manifest which lists every item contained in the bag. The process begins with BagIt indicating that it is performing an operation. It may take a few minutes to create the bag. Once complete, BagIt will indicate that the operation is complete and successful. The destination folder – GDOT\_Archive\_Transfer should now be located on the external hard drive along with several text (.txt) documents. One of the documents will be named Manifest-MD5.txt. This is the transport manifest, or shipping inventory for the records. It contains a list of each record in the bag along with an associated hash digest. This hash digest will be used by the Archives to validate the shipment and verify that records were not corrupted or lost in transit.

**Completing the Transmittal Form**

Each transfer of digital records to the Georgia Archives must be accompanied by a Transmittal Form (that is different from that used for paper records). A blank copy of the Transmittal Form is included on

the hard drive that is sent to you by the Archives. To complete the forms, please provide the following information:

Agency/Department	Name of the transferring agency
Address	Mailing address of the transferring agency
Accession No.	Leave blank
Record Title	Title of the records as it appears on the approved retention schedule
Retention Schedule no.	Schedule identification number
Date span	Date span of the records being transferred
Access – Open, Closed, Conditional	Check the appropriate-open: open to public access; closed – confidential record; or conditional - some of the information in the record is restricted (for example, a SSN).
Access Restriction	If closed or conditional are checked, provide the citation for this restriction.
Operating System/version	Indicate the operating system the agency uses and, if applicable, provide its version number.
Application/version	Indicate the software application used to create the records, and provide the version of the software. For example, FileNet 8 enterprise content management system
File Format/extension	Name the file format for the records. For example, Tagged Image File Format - .tif, or Portable Document Format - .pdf
Directory Structure	Describe the directory structure. Refer to above discussion on prepping records for transfer.
Agency metadata	Provide a list of the metadata fields used to locate and describe the records. List by name and if necessary, explain any acronyms.
Level	Indicate the level at which the metadata applies – folder or object
Description	If the metadata term is abbreviated or if the term is unclear, please provide a description of what the metadata element means. For example – PI refers to the project identification number assigned to each project.

After completing the transmittal form, the form should be saved to the hard drive AND printed out. All transfers of records must be accompanied by a 'wet' signature.

### **Complete transfer**

Contact the Georgia Archives and arrange for the external hard drive to be picked up. The records will be uploaded into the Digital Archives of Georgia (DAG). The agency will be notified of the completed transmittal through receipt of a copy of the transmittal with accession number assigned.