Ingest Workflow for Electronic Government Records at the State Archives of North Carolina
Approved March 2017

Purpose
As state and local governments continue to create electronic records as part of their day to day activities, the amount of born digital records scheduled for transfer to the State Archives continues to grow. In order to continue to meet the responsibilities of the State Archives of North Carolina, the Digital Services Section and Government Records Section collaborated to create policies and procedures that will streamline the ingest of data into the Digital Repository while still keeping track of incoming transfers and meeting digital best practices.

One product of these collaborations is the RC-2D transfer forms for State Records and Local Records. These forms provide representatives from state and local agencies guidance on what information is needed by State Archives staff to accession and take custody of their records, as well as giving staff the technical metadata needed to properly care for the records. Additionally, these forms allow Archives staff to track the records through the ingest process, from transfer to ingest to the Digital Repository.

The purpose of this document is to outline the workflows for each of the uses of the RC-2D transfer form for State and Local Records:

- Digital Repository ingest via media for State and Local Records for permanent retention
- Digital Repository ingest via FTP for State and Local Records for permanent retention
- Transfer to the Imaging Unit via media for State and Local Records for microfilming
- Transfer to the Imaging Unit via FTP for State and Local Records for microfilming

This document also includes the workflow for digital media that are found in boxes of accessioned materials already in the custody of the State Archives.

Workflows

Digital Repository Ingest via media, State and Local Records

1. Records Analyst confirms with the agency that the requested transfer is eligible per the retention schedule.
2. Agency materials are received by records analyst, via hard drive, flash drive, CD, or DVD. These records should be bagged using the Bagger tool prior to transfer, as per the NC Digital Repository collecting policy.
   
   **NOTE: Unbagged materials will be rejected because the chain of custody cannot be verified.**

3. Analyst views the transferred materials on non-networked computer/laptop to confirm that the materials indicated on the RC-2D form are indeed the materials transferred. If materials are not the items listed, the analyst must contact the agency.
4. Analyst validates transferred material on non-networked computer/laptop. If materials do not validate, the analyst must contact the agency.
5. Analyst notifies the following of the transfer: Records Description Unit Supervisor, Records Services Unit Supervisor, Digital Archivist.

6. Analyst gives RC-2D form and list of bags to Records Services Unit Supervisor for entering into holdings database (SCHEDS/FAIDS, AXAEM) if State Records, or Records Description Unit Supervisor for tracking if Local Records.

7. Records Services Unit Supervisor enters transfer into SCHEDS/FAIDS and sends RC-2D form to Records Description Unit Supervisor.

8. Records Description Unit Supervisor accessions records and returns form to Analyst.

9. Analyst delivers materials with accompanying paperwork to Digital Archivist.

10. Materials are virus scanned by Digital Archivist, and the date is noted on the RC-2D form.

11. Bags are validated by Digital Archivist, and the date is noted on the RC-2D form.

12. Materials are retained in quarantine for 30 days. When materials are transferred using media, the materials will remain stored on the media for the 30 days.

13. After 30 days, the materials will be rescanned and revalidated by the Digital Archivist, and the date is noted on the RC-2D form.

   **NOTE:** If materials do not validate or pass virus scan after the quarantine, the Digital Archivist will contact the Analyst, Digital Services Section Head, and Government Records Section Head to decide next action. These materials will NOT be transferred to the Digital Repository. Agency should not delete copies of materials until a successful quarantine and validation.

14. If materials pass virus scan and validate successfully, the Digital Archivist will perform preservation actions as needed and move files to the P: Preservation Drive (Digital Repository), and the date and location are noted on the RC-2D form.

15. Digital Archivist notifies Records Description Unit Supervisor, Records Analyst, and Records Services Supervisor that the materials have been released from quarantine.

   **NOTE:** When Records Description Unit staff are ready to process digital materials, refer to Appendix A.

16. Records Analyst notifies agency of successful transfer, and that agency can destroy all copies of records, if allowed by retention schedule.

17. If the materials were transferred to the Archives via agency-owned media, the media will be returned to the Records Analyst for return to the agency and alert them that the agency can delete all copies of the records if allowed by the schedule, or to the Records Services Unit Supervisor for destruction, as indicated on the RC-2D form. If materials were transferred via Archives-owned media, the records will be deleted from the media after successful transfer to the Digital Repository.

18. Digital Archivist delivers the RC-2D to the Records Services Supervisor for filing in the Records Turnover File (Item 23649).

Digital Repository Ingest via FTP, State and Local Records

1. Representative from agency send Records Analyst RC-2D and alerts them that the materials will be transferred via FTP.
2. Records Analyst contacts Digital Archivist with the request and the contact information for the agency representative.

3. Digital Archivist emails a ShareFile transfer link to the agency representative with directions on how to transfer the records.

4. Agency representative uploads zipped and bagged materials to ShareFile and contacts Digital Archivist to confirm transfer.

   **NOTE:** Unbagged materials will be returned to the agency for bagging in order to maintain chain of custody of the records.

   **NOTE:** When using ShareFile and other FTP programs, bags must be zipped, or they will not be readable when they are received by SANC.

5. Digital Archivist downloads, unzips, and virus scans files, and confirms the transfer with the agency representative.

6. Digital Archivist places materials on external drive and contacts the Analyst with the location of the materials.

7. Analyst confirms that the transfer is as scheduled.

8. Analyst views the transferred materials on non-networked computer/laptop to confirm that the materials indicated on the RC-2D form are indeed the materials transferred. If materials are not the items listed, contact agency.

9. Analyst validates transferred material on non-networked computer/laptop. If materials do not validate, contact agency.

10. Analyst gives RC-2D form and list of bags to Records Services Unit Supervisor for entering into AXAEM and contacts the Records Description Branch Supervisor and Digital Archivist that there is a transfer.

11. Records Services Unit Supervisor enters transfer into SCHEDS/FAIDS and sends RC-2D form to Records Description Unit Supervisor.

12. Records Description Unit Supervisor acquires materials and returns form to Analyst.

13. Analyst delivers materials with accompanying paperwork to Digital Archivist.

14. Materials are virus scanned by Digital Archivist, and the date is noted on the RC-2D form.

15. Bags are validated by Digital Archivist, and the date is noted on the RC-2D form.

16. Materials are retained in quarantine for 30 days.

17. After 30 days, the materials will be rescanned and revalidated by the Digital Archivist, and the date is noted on the RC-2D form.

   **NOTE:** If materials do not validate or pass virus scan after the quarantine, the Digital Archivist will contact staff to decide next action. These materials will NOT be transferred to the Digital Repository. Agency should not delete copies of materials until a successful quarantine and validation.

18. If materials pass virus scan and validate successfully, the Digital Archivist will perform preservation actions as needed and move files to the P: Preservation Drive (Digital Repository), and the date and location are noted on the RC-2D form.

   **NOTE:** When Records Description Unit staff are ready to process digital materials, refer to Appendix A.
19. Analyst contacts agency notify the agency that they may destroy all copies of the records, if allowed by the schedule. Digital Archivist deletes copies of the files from the FTP instance.
20. Digital Archivist delivers the RC-2D to the Records Services Supervisor for filing in the Records Turnover File (Item 23649).

**Imaging Unit Ingest via media, State and Local Records**

1. Agency or local government contacts analyst to have digital records transferred.
2. Analyst confirms that records in question are eligible for transfer.
3. Materials are received by records analyst, via hard drive, flash drive, CD, or DVD by analyst with accompanying RC-2D. Materials received from government agencies should be bagged using the Bagger tool prior to transfer, as per the NC Digital Repository collecting policy.

   **NOTE: Unbagged materials will be returned to the agency for bagging in order to maintain chain of custody of the records**

4. Analyst confirms that the transfer is as scheduled and is indexed, and virus scans and validates records on non-networked computer.
5. Analyst gives RC-2D form and list of bags to Records Services Unit Supervisor for entering into AXAEM and contacts the Microfilm Unit that there is a transfer.
6. Records Services Unit Supervisor enters transfer into SCHEDS/FAIDS and returns RC-2D form to analyst.
7. Analyst delivers materials with accompanying paperwork to Microfilm Unit.
8. Microfilm unit virus scans and validates transferred material on non-networked computer/laptop. If materials do not validate, contact analyst.
9. Microfilm unit views the transferred materials on non-networked computer/laptop to confirm that the materials indicated on the RC-2D form are indeed the materials transferred. If materials are not the items listed, contact analyst.
10. Materials are microfilmed. Upon completion, Imaging Unit notifies Analyst that imaging is complete and returns the Film Job Sheet to the Analyst.
11. Analyst matches Job Sheet to RC-2D form and updates necessary databases with microfilming information.
12. If the materials were transferred to the Archives via agency-owned media, the media will be returned to the Records Analyst for return to the agency and alert them that they can delete their copies of the digital materials if allowed by the schedule, or to the Records Services Unit Supervisor for destruction, as indicated on the RC-2D form. If materials were transferred via Archives-owned media, the records will be deleted from the media after successfully microfilmed.
13. Analyst destroys Job Sheet and RC-2D form for local records, or adds to Agency Turnover file for State Records.

**Imaging Unit Ingest via FTP, State and Local Records**

1. Agency or local government contacts Analyst to let them know they have records ready to be imaged, with RC-2D digital transfer form for local records.
2. Analyst confirms that the records in question are eligible for transfer and, if so, inputs information into the Min2Film database (Item 47021), or other relevant database, and Film Job sheet, and files form.
3. Analyst alerts Digital Archivist that records need to be electronically transferred.
4. Digital Archivist sends agency or local government representative a link to the ShareFile inbox
5. Agency or local government representative uploads zipped and bagged records to ShareFile instance and alerts Digital Archivist that the upload is complete.

**NOTE: Unbagged materials will be returned to the agency for bagging in order to maintain chain of custody of the records**

**NOTE: When using Sharefile and other FTP programs, bags must be zipped, or they will not be readable when they are received by SANC.**

6. Digital Archivist downloads and unzips bags before virus scanning and validating bag.
7. Digital Archivist places bag onto the Quarantine Drive and alerts the Analyst the records have been successfully received and are ready for imaging.
8. Analyst alerts Imaging Unit and agency or local government representative that the transfer has been completed and places the local government’s order for microfilm
9. Records are microfilmed. Upon completion, Imaging Unit notifies Analyst that imaging is complete.
10. Analyst notifies Digital Archivist and agency or local government that imaging is complete.
11. Digital Archivist deletes copy of records from ShareFile.
12. Imaging Unit returns Film Job Sheet to Analyst.
13. Analyst matches Job Sheet to RC-2D form, updates relevant databases with microfilming date information, and destroys job sheet and RC-2D for local records, or adds to Agency Turnover File for state agency records.

**Previously Accessioned Digital Records and Media**
If digital media are found in accessioned collections, the following steps should be taken:

1. Records Description Unit archivist reviews content to verify that materials are appropriate for processing per the relevant records retention and disposition schedule and therefore should be placed in the Digital Repository.

   **NOTE: When checking materials, media should be checked on a non-networked machine using a write-blocker.**

2. If the electronic records are appraised as being archival, the archivist will add the materials as an addition to the accession record via an ATM (Addition to Materials) record or as an FRO (For Record Only). If they are not, media will be weeded as archival trash to be destroyed and the destruction documented in the processing notes, and no further action is needed.
3. Archivist gives media to digital archivist for transfer to Digital Repository, along with a FAIDS print out with the relevant transfer highlighted.
4. Digital archivist performs virus scan and fixity check, and places records in 30-day quarantine.
5. After 30 days, digital archivist performs a virus scan and fixity check.
6. If records pass quarantine, the digital archivist will transfer records from media to Quarantine Drive to perform preservation actions and then place the records, with any additional reports or metadata, on the Preservation Drive.

   NOTE: If media does not pass quarantine, or if the files are not readable, a manifest of the files will be added to the accession record, along with a note from the Digital Archivist stating that an attempt was made to recover the files, but that it did not pass the quarantine.

7. Digital archivist will place media into archival trash for destruction by State Agency Services Unit staff.
Appendix A—Processing Digital Materials: Government Records Section

Note: Processing manual is in development – these steps will be updated.

1. When the Records Description Unit is prepared to process the materials, the Archivist contacts the Digital Archivist to request the materials needed.
2. Digital Archivist places a copy of the unbagged materials into the Processing drive, in the Processing folder, with any additional reports generated on the materials.
3. Archivist processes collection

   NOTE: Any changes to the original bitstream, including reformatting, renaming, or deletions, must be recorded in a metadata sidecar.

4. When processing and description is completed, the Archivist will bag the processed collection and metadata and place the bag on the S: Working drive in the Onboarding folder and notify the Digital Archivist.
5. Digital Archivist moves the processed collection bag to the Preservation drive.
6. Digital Archivist continues to perform regular fixity and virus checks, as well as maintains PREMIS records or all audits and changes.
Appendix B – Workflow Diagrams
RC-2D Form Part 1 – Records Accession
RC-2D Form Part 2 – Repository Ingest

Digital archivist
- Virus scans and validates materials, noting date on form

Materials quarantined for 30 days

Digital archivist rescans and revalidates files, noting date on form

RC-2D

Digital archivist performs preservation actions as needed, moves files to P: Drive, noting date and location

RC-2D

Digital archivist notifies RSU, RSU, and analyst that materials are out of quarantine

Digital archivist checks records from media

Analyst notifies agency of transfer

RSU files in Records Turnover File
Digital Repository Ingest Via Media, Part 1: Transfer and Accession

1. Analyst receives eligible, bagged transfer via media
2. Digital Files
3. Analyst confirms materials are correct per RC-2D on non-networked machine
4. Correct materials transferred?
   - Yes: Material validated transferred material on non-networked machine
   - No: Analyst contacts agency
5. Files valid?
   - Yes: Analyst notifies RDU, RSU, DA
   - No: Analyst validates transferred material on non-networked machine
6. RC-2D
7. RSU sends RC-2D form to RDU
8. RSU enters transfer into SCHEDS/FAIDS (AXAEM)
9. Analyst gives RC-2D and bag list to RSU
10. RC-2D
11. Archives Accessions Database
12. RDU accession records
13. RDU returns RC-2D to analyst
14. Analyst delivers materials and paperwork to digital archivist
15. RC-2D
Digital Repository Ingest Via Media Part 2: Repository Ingest