

MoVE-IT: Modeling Viable Electronic Information Transfers

Basic Electronic Records Transfer Requirements

Purpose

This document should serve as a baseline for conducting transfers or developing transfer procedures for government archives. Not every transfer will need all the following suggestions, and some will likely need more: more oversight, more transparency, more clearly articulated procedures. This is a place to start.

This list has been divided into two sections. The first refers to the development of policy and procedure and includes primarily long-term strategic foundations that can be built to make transfers successful. The second section deals with outlining how to address preserving the essential elements of records during transfer. Ultimately, a transfer of records should include as little loss of data or context as possible (hopefully *no* loss).

These requirements are intentionally fundamental. They could be easily translated into technical requirements for electronic systems

Process

These items should be considered when designing workflows, training materials, metadata standards, and other foundational elements related to electronic records transfers:

- Clearly define tasks for the management, transfer, and preservation of electronic records. Some fundamental tasks include:
 - Identification of records that have met retention and are eligible for transfer to archives
 - Notification of participants (producer/custodial agency, IT, archives, others) of intent to transfer

- Authorization of transfer(s)
- Description (metadata and context) of records eligible for transfer
- Creation of transfer packages (which include records + metadata and additional context)
- Transfer (send and receive protocols, whether network or physical exchange)
- Verification of transfer packages: integrity (fixity, malware, virus, characterization) and intellectual (completeness, record relationships intact)
- Official signoff / custody exchange signoff
- Clearly define roles for the transfer process and assign ownership (and accountability) of tasks to roles.
- Assign roles to participating staff. Some staff may have multiple roles or tasks assigned to them.
- Collaborate with producer agencies and IT staff to select, implement, and educate staff on approved protocols and tools (e.g. software/hardware) to be used conducting transfers. Use of unauthorized/unvetted tools is risky and should be avoided.
- Document and promulgate transfer protocols and requirements widely. Expectations and requirements for the process should be clear and known to all involved.
- Engage with state or agency information technology (IT) to include electronic records management and digital preservation requirements in enterprise software and systems. The objective is to ensure electronic government records are managed through their entire lifecycle, including during interagency transfer.
- Collaborate with records managers and agencies, as appropriate, to ensure that retention requirements (through records schedules and similar instruments) are updated with regard to legal and administrative requirements, as well as recordkeeping best practices. Communicate with agencies about the retention schedules they should use to identify permanent state government electronic records to be transferred.
- Develop and promulgate standards for the uniform application of metadata (especially recordkeeping metadata) across the enterprise. Included with the standards should be clear, concise instructions on how to create, store, and transfer metadata to support digital preservation purposes.

Preserving Authenticity

To preserve the authenticity of public records their provenance must be preserved throughout the transfer process. Archivists should:

- Ensure that chain-of-custody remains intact for all records. Note whose custody and control records have been in since creation.
- Ensure that enough metadata is captured to verify authenticity:
 - Legal context of the record's creation (agency/program/date)
 - Retention and classification information (schedule)
 - Individual creator context, where appropriate (who created/modified records). (e.g. sender/recipient of correspondence)

- Complete a transfer form describing the electronic records and their extent, condition, and any other information necessary to identify records and their context.
- Producer agencies should retain their master copies of electronic state records being transferred until the archives confirms receipt and validates integrity of the files.
- Ensure, whenever necessary, that authorized officials sign off on physical and legal custody transfers, consistent with chain-of-custody best practices

Preserving Reliability

To preserve the reliability of records, so that they can be relied upon as testaments of facts, acts, and decisions, archivists should:

- Document as much as possible the processes that led to the creation of records. Any unreliability in these processes should also be documented.
- Document as much as possible the systems and software that created or housed records.
- Preserve as best as possible contextual links between discrete records. Many records reference other records within (e.g. hyperlinks) or are part of a whole (e.g. emails in an email chain) and would be unreliable without the *complete* record. Any missing data should be documented.
- Document any gaps in the record with appropriate context.

Preserving Integrity

To preserve the physical and intellectual integrity of public records, archivists should:

- Encourage agency records custodians to create and maintain fixity information for permanent records. Verify received files against this information to confirm no loss or alteration during transit. (If no fixity is provided, it can be created at the point of packaging, prior to transfer)
- Many digital objects (for example individual records tied together by a database) need to have their *contextual* integrity protected just as much as their *physical* integrity. Websites, for example, are comprised of many discrete objects that create a contiguous experience.
- Ensure that full inventories are created before or at the point of transfer; verify receipt of records against this manifest and resolve any errors. The archives should receive all files the agency *intends* to transfer and no more.
- Quarantine the transferred data and perform its own virus and malware scans.
- Establish preservation schedules for verification of electronic records over time.
- Any objects or sets of objects with significant issues related to damage, format obsolescence, or contextual obsolescence should have preservation plans developed. This can include migrating files to more stable formats (assuming no loss of fidelity) or preserving entire software environments.

Preserving Useability

To preserve the long-term useability of public records, archivists should, for all records included in transfer:

- Perform characterization on all files received to determine file format and version. Note any software or operating environment requirements from these versions.
- Determine what aspects of records' presentation/access are essential to the nature of the records and if it can be recreated (example: web content using HTML renderers vs. web content as lines of code).
- For any "at-risk" or obsolete formats, develop preservation plans (as above).
- Determine if derivatives (e.g. low-res versions for online access) will be created, and be sure to associate them closely (e.g. through metadata) to their originals.

The Council of State Archivists (CoSA) is a nonprofit membership organization of the state and territorial government archives in the fifty states, five territories, and District of Columbia. Through collaborative research, education, and advocacy, CoSA provides leadership that strengthens and supports state and territorial archives in their work to preserve and provide access to government records. CoSA facilitates networking, information sharing, and project collaboration among its member organizations to help state and territorial government archives with their responsibilities for protecting the rights and historical documents of the American people. Read more at www.statearchivists.org.