

Commonwealth of Kentucky
Office of the Chief Information Officer
Enterprise Standards

ENT-103:
Enterprise Digitization
Standards

Commonwealth Office of Technology

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Contents

Purpose 2

Applicability 2

Business Context..... 3

Enterprise Digitization Standards..... 4

Analysis and Planning 4

Security 4

Hardware 4

Software 4

Maintenance..... 5

Quality Control..... 5

Indexing and Metadata 5

Storage..... 5

Disposition..... 5

Contact 6

References 6

Purpose

This document details the digitization standards for the Commonwealth Office of Technology (COT) and other executive branch agencies. These standards support [CIO-122 Enterprise Document Management Policy](#) and are supplemented by the [ENT-302 Enterprise Digitization Guidelines and Best Practices](#) and [ENT-303 Enterprise Document Storage Guidelines and Best Practice](#) documents.

Applicability

These standards apply to all digitization efforts under the authority of the Commonwealth of Kentucky’s executive branch agencies. COT, agencies, and vendors shall adhere to the associated policy, standards, and guidelines published in the [Commonwealth of Kentucky Enterprise IT Policies](#).

Business Context

Digitization is the process of converting physical documents into a digital format, usually from a hard-copy source such as paper, or other hard-copy formats, including projector slides, green cards, or other formats not maintained in a digital realm. Digitization is often called “scanning;” so these terms may be used interchangeably in this document and the associated policy and guidelines.

Commonwealth agencies have varying digitization needs based on statutes, policies, business needs, resource availability, skill level, and other factors. There are, however, certain standards that agencies should apply to their digitization (scanning) operations to enhance the agencies’ efficiency and ensure the quality of digitized documents. Regardless of whether an agency conducts scanning in-house or outsources to an approved vendor, the standards in this document apply.

Agencies may want or need to digitize their documents for statutory or business reasons, including transparency, information accessibility, or reduction of processes and costs associated with physical document storage and handling. Some business benefits of digitization standards are:

- Productivity improvement due to enhanced access to the agency’s records/documents
- Reduction in filing errors and the volume of duplicate content
- Improved data sharing across information systems and programs
- Reduction in the volume of hard-copy information, resulting in better hard-copy management and reduction in associated hard-copy costs
- Explicit identification of an agency’s “official copy” of documents.

Some business objectives of these standards are to:

- Support the migration from hard-copy or paper-based documents to electronic documents
- Standardize the digitization process and integrate it as part of the records life cycle
- Leverage existing investments in Enterprise Content Management (ECM) systems
- Serve as a framework into which additional program-specific standards and workflows can be incorporated, based upon the needs of business units
- Establish standard business practices to satisfy the requirements of the policies and procedures under which the agencies must operate.

Agencies shall adhere to all statutory requirements related to document handling, including storage, processing, security, and destruction of documents. Agencies should review their document handling and scanning operations with their records officers and with the [Kentucky Department of Libraries and Archives \(KDLA\)](#) to ensure adherence to legal requirements and responsibilities. Agencies shall:

- apply these standards in the capture of hard-copy documents and records in agency content repositories or other designated storage environments, where their use does not jeopardize existing standard business practices; and
- incorporate the standards into documented agency operating procedures for consistency, progressively establishing a scanning framework for standard business practices.

Technology improvements and changes in requirements may necessitate modifications to these standards. Agencies should coordinate with COT in developing the most cost-efficient solution to meet their needs. While these standards intend to provide reliable and repeatable quality scanning, agencies may need to modify or request exemptions to some standards. In such cases, agencies shall coordinate with COT using the appropriate exemptions request forms and processes.

Enterprise Digitization Standards

Analysis and Planning

If agencies determine the business need to scan documents, they shall develop and document scanning processes and policies in an agency **Scanning Plan** (alternatively, Digitization Plan). At minimum the Scanning Plan shall include the following elements:

1. Business Assessment
2. Document Analysis and Cataloging
3. Document Processing and Personnel
4. Scanning Output Requirements
5. Security Requirements (hard copy and digital data)
6. Storage Repository Planning
7. Hard-copy Document Disposition.

Agencies may include other topics in their plan as well. E.g., agency-specific scanning policies, processes, or practices.

Security

Agencies shall ensure that their policies and work processes address proper security and handling of hard-copy and digital versions of their records. Agencies shall adhere to the [Commonwealth of Kentucky Enterprise IT Policies](#), including security policies. When developing their Scanning Plan, agencies shall consider all facets of security, including but not limited to physical and logical protections, appropriate access control to documents and data, encryption of digital data in transit or at rest (in storage) if necessary, separation of duties, etc.

Hardware

Agencies shall only use scanning hardware (e.g., imaging devices, multi-function devices, special format scanners, etc.) approved by COT as found in the [Kentucky Information Technology Standards \(KITS\)](#) library. Agencies should coordinate with COT to identify the best hardware scanning solution for their business and statutory needs. Specifically, agencies will need to consider their work volume, staff expertise, type of documents to scan, document preparation processes, funding, and other agency-specific factors, to determine the best hardware for their needs.

If agencies contract with a vendor for scanning operations, the vendor may use different hardware. Nonetheless, the vendor must adhere to appropriate security, output, document handling, image quality, indexing, and disposition requirements as outlined by Commonwealth and agency standards. Agencies will be responsible for outlining the requirements for the vendors.

Software

Agencies shall use only scanning software approved by COT as listed in the [KITS](#) library or software tied to KITS-approved hardware. Agencies should coordinate with COT to identify the best software solution to meet their needs and to capitalize on economies-of-scale pricing. ***These standards apply both to new acquisitions and to upgrades to software already in use by the agencies. It is not the intent of these standards to require wholesale replacement of existing software.***

If agencies contract with a vendor for scanning operations, the vendor may use different software. Nonetheless, the vendor must adhere to appropriate security, output, document handling, image

quality, indexing, and disposition requirements as outlined by Commonwealth and agency standards. Agencies will be responsible for outlining the requirements for the vendors.

Maintenance

Agencies shall ensure scanning personnel properly maintain the scanning devices according to manufacturer specifications and contract requirements. Agencies shall incorporate device maintenance into their local processes. Maintenance may include:

- Cleaning the document glass, rollers, and tires
- Cleaning panels, touch screens, feeder trays, and output trays
- Running cleaning sheets through the scanner.

Agency scanner personnel should know and follow the proper maintenance procedures for the devices used in their business processes. Agencies shall also maintain the appropriate licenses for the hardware and software used in their scanning operations.

Quality Control

Quality control during the digitization process, including document validation of the content, is critical to ensuring the integrity and utility of agency business data. Agencies shall incorporate quality control steps into their scanning processes and plans to ensure that the digitized content accurately and fairly represents the quality and quantity of the original source documents, sufficient to meet regulatory and business requirements.

Indexing and Metadata

Agencies shall use indexing or a similar method to maintain metadata about the scanned documents. COT does not require agencies to replace or overhaul existing processes if they do not already maintain metadata. However, agencies shall incorporate document indexing or a similar method when upgrading or replacing software used in their scanning program.

Indexing should be machine-readable and machine-retrievable. Indexing should include at least:

- The date of the document's origin and any other agency-specific data (outlined in the agency's Scanning Plan) that will allow electronic searching to retrieve it, based on an agency's documented needs for retrieval.
- Tracking of edits of digitized documents.

Agencies should consider including critical information to which they and their customers refer in their day-to-day activities, such as case numbers or permit numbers. COT recommends designing the content indexing requirements to strike a balance between adding overhead and resources to the scanning process, versus maximizing the power, effectiveness, and accuracy of enterprise search and retrieval tools.

Storage

Agencies shall store scanned documents and images in COT-approved storage repositories. For more guidance on storage repositories, refer to [ENT-303 Enterprise Document Storage Guidelines and Best Practice](#). Agencies shall not store final documents or images on local workstations.

Disposition

The agency Scanning Plan shall include guidance on the disposition of original documents following scanning. Agencies shall dispose of the hard-copy original according to statutory, KDLA, and agency policies. Disposition may include placing documents into physical storage, physical destruction, or

some combination if necessary. Agencies shall consider open records requests, litigation hold requirements, and other requirements when determining the disposition of original documents. Agencies should physically destroy documents if statutory and legal considerations allow.

Contact

For more information about the Commonwealth's enterprise digitization standards, please contact COT's Enterprise Content Management Services (ECM) Team, or the [Commonwealth Service Desk](#) by email ("Assign ticket to COT's ECM Services Team") or phone (502) 564-7576 or (800) 372-7434.

References

- [CIO-122 Enterprise Document Management Policy](#)
- [Commonwealth of Kentucky Enterprise IT Policies](#)
- [Commonwealth Service Desk \(502\) 564-7576 or \(800\) 372-7434](#)
- [ENT-302 Enterprise Digitization Guidelines and Best Practices](#)
- [ENT-303 Enterprise Document Storage Guidelines and Best Practice](#)
- [Kentucky Department for Libraries and Archives \(KDLA\)](#)
 - [KDLA State Government Records Retention Schedules](#)
- [Kentucky Information Technology Standards \(KITS\)](#)
 - [Kentucky Information Technology Standards \(KITS\) Library \('Catalog'\)](#)