	Montana Operations Manual **Standard**	Category	**Information Technology, Infrastructure**
		Effective Date	**04/01/2014**
		Last Revised	**06/04**/2014
Issuing Authority	**Department of Administration** **State Information** Technology Services Division		
STD-Document Imaging Technical Standard			

I. Purpose

The Document Imaging Technical Standard outlines the technical requirements and guidelines for document imaging in support of technological compatibility for electronic records management equipment or systems used to electronically capture, store, or retrieve public records on systems in the State of Montana Data Centers and State-wide network.

II. Scope

This Standard applies to all executive branch agencies and independent contractors, excluding the university system, who have access to, use, or manage state government-controlled information systems.

III. Standard Statement

A. General

The document imaging technical standard is to guide technological compatibility and standardization of document imaging systems. These standards and guidelines are based on the ISO standard-setting body of work.

B. Imaging Technical Standards

The following standards table defines the associated sections of each ISO standard which form the State's document imaging standards.

Publication	Section	Description
ISO/TR 15489-1	8.2	Record System Characteristics
	8.3	Designing and Implementing a Record

			System
ISO/TR 15801	5.3		Information Capture
	5.4		Document Image Capture
	5.6		Data Capture
	5.7		Authenticated Output
	5.8		File Transmission
	5.9		Document Retention
	5.12		Backup and Recovery
	5.18		Version Control
	6.3		Storage Media and Sub-system Considerations
	6.4		Access Levels
	6.5		System Integrity Checks
	6.6		Image Processing
	6.7		Compression Techniques
	6.8		Form Overlays and Form Removal
	6.10		Migration
	6.11		Information Deletion and/or Expungement
	7		Audit Trails
ISO/TR 18492	7.3.2		Security

C.   Guidance on Document Imaging Standards

General Requirements

1. Image and metadata are stored in non-proprietary format in SQL or Oracle database, preferably SQL. Metadata must include, but not be limited to:

    a. Image indexes
    b. Annotations
    c. Date/time stamps and other "burned" image stamps
    d. External file location identifier for hard copy files
    e. Essential record indicator

2. Images are compressed in a non-proprietary format to allow for minimal bandwidth consumption. The following image formats must be supported:

    a. TIFF group 4
    b. PDF
    c. PDF-A

d. JPG

3. System must be highly configurable, to allow for business rule creation and change without custom code. For example:

    a. Document classes, types, and associated metadata
    b. Image indexing requirements
    c. Document retention rules
    d. Workflow processes, queues, maps, etc.

Batch Scanning

1. Ability to adjust scanning resolution, duplex, etc.
2. Ability to enter batch counts (number of pages, etc.)
3. Ability to perform quality assurance (image control, image clarity, batch reconciliation)
4. Allow for image and data error detection and corrections (de-skew, contrast, deletion, rescan)

Document Imaging Software

1. Web image retrieval and workflow client is thin or non-existent (web-based).
2. Ability to import and export images and metadata in order to transfer images and metadata between different systems or to a new system.
3. Ability to define required and non-required indexes and metadata by document type.
4. Auto-indexing of images, via code 3/9 barcodes.
5. Provide manual indexing of metadata capture fields, such as Folder#, Entity Name, Document Type, Entity ID, file name, etc.
6. Ability to prompt user for missing indexes and/or metadata.
7. Ability to select pre-defined indexes and/or metadata from drop-down lists.
8. Provide image search queries based on index and metadata fields.
9. Ability to retrieve, view and print any or all images for an entity based on search query.
10. Ability to interface image retrieval and view with Microsoft Outlook to email images.
11. Ability for admin to make mass index changes and deletes based on search criteria.
12. Ability to log all image and metadata changes and deletes.
13. Ability to add annotations to images.
14. Ability to define and maintain metadata required for each document type.
15. Redaction - The application must incorporate appropriate technology to redact certain information from the image after scanning. Automated redaction capabilities can be form based and/or pattern based, and tools

must allow users to perform manual redaction as needed. The original layer document must be retained and all layers of the image must be viewable to those with appropriate rights.

16. Provide role-based permission levels for all users.

IV.　Definitions

Document Imaging:　is an information technology category for software-based systems capable of capturing, storing and recreating images.

ISO: International Organization for Standardization – an international standard-setting body composed of representatives from various national standards organizations.

V.　References

A.　Legislation

- MCA 2-6-214 (1) Department of Administration – Powers and Duties

B.　Policies, Directives, Regulations, Rules, Procedures, Memoranda

- SITSD Procedure: IT Policies, Standards, Procedures and White Papers

C.　Standards, Guidelines

VI.　Contact

All inquiries regarding this document and its contents may be sent to DOASITSDRiskMgt@.mt.gov.