Interagency Project Team
and the
Records Management Service
Components Program Office of the
National Archives and Records
Administration

Functional Requirements, Attributes, and Unified Modeling Language Class Diagrams for Records Management Services

September 7, 2006

This report is published pursuant to the "Interagency Project Team, RMS Requirements Development Project Workshop Report – Session 10, September 7, 2006," and updates the "Interagency Project Team and the Records Management Service Components Program Office of the National Archives and Records Administration, Functional Requirements and Attributes for Records Management Services December 7, 2005."

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National Archives and Records Administration

Records Management Services (RMS) Requirements Development Project

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EXECUTIVE SUMMARY

On September 7, 2006, an Interagency Project Team (IPT) comprised of stakeholders in records management and enterprise architecture from 18 Federal agencies and the National Archives and Records Administration (NARA), facilitated by members of the NARA Records Management Service Components Program Office, met and reviewed proposed updates to the report "Functional Requirements and Attributes for Records Management Services, December 7, 2005." The IPT approved the update of the December 7, 2005, report unanimously.

The IPT authoring this updated report represents a community of interest in the field of records management as envisioned in the Federal Enterprise Architecture (FEA). The IPT approves this report as a set of records management service (RMS) functional requirements, attributes, and Unified Modeling Language (UML) class diagrams ready for acquisition and development purposes, and for submission to the FEA's component repository, CORE.gov. The RMS adds value to previous work such as the Records Management Profile of the FEA. It is envisioned that IPT members and other agencies will use this report to help them improve their records management capabilities through the acquisition and development of systems as they evolve their agency enterprise architectures.

IPT members were named by their Chief Information Officers (CIO), E-Government program managers, and the Deputy Archivist of the United States as qualified to speak and vote for their agencies on session objectives, requirements approval, and future activities. As a community of interest, members agreed upon a shared vocabulary, grounded in statute and regulation, in order to support the exchange of information in pursuit of common goals, interests, and business objectives in the domain of records management.

During the period of December 2005 through August 2006, the Records Management Service Components Program Office received comments and suggestions from industry, academia, and government. These were collected, documented, and presented to the Interagency Project Team on September 7, 2006, for their consideration in producing an updated report for use in their RMS acquisition and development activities.

The IPT identified seven records management activities they believe can be supported by services within an electronic environment, including the services-oriented architecture defined in the FEA. The seven records management services are: Record Capture, Provenance, Category, Authenticity, Case File, Disposition, and Reference. These are documented in the report "Functional Requirements, Attributes, and Unified Modeling Language Class Diagrams for Records Management Services, September 7, 2006."

Interagency Project Team January 2005 – September 2006

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Department of Defense
Department of Energy
Department of Health and Human Services
Department of Homeland Security
Department of Justice
Department of Labor
Department of State
Department of the Interior
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Department of Veterans Affairs
Environmental Protection Agency
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INTRODUCTION

On September 7, 2006, an Interagency Project Team (IPT) comprised of stakeholders in records management and enterprise architecture from 18 Federal agencies and the National Archives and Records Administration (NARA), facilitated by the NARA Records Management Service Components (RMS) Program Office, met and reviewed proposed updates to the report "Functional Requirements and Attributes for Records Management Services, December 7, 2005." On September 7, 2006, the IPT directed changes in order to correct a function in the Case File Service, add function to the Record Capture Service, and update the Unified Modeling Language (UML) class diagrams. The IPT approves this report as a set of RMS functional requirements, attributes, and UML class diagrams ready for acquisition and development purposes, and for submission to the Federal Enterprise Architecture, Component Organization and Registration Environment (CORE.gov).

The process leading to this publication was the result of a 21-month effort by representatives of 19 Federal agencies, empowered to speak for, and make decisions on behalf of their agencies as a community of interest in the area of records management. All participants were named by their Chief Information Officers (CIO) and E-Government program managers as experts authorized to speak on behalf of their agencies and to providing a binding vote for their agencies. To date, their work has proceeded over three phases.

In the first phase, participants attended facilitated meetings from January to March 2005, and identified and described eight proposed records management activities supportable by software service components. These are documented in the report "Records Management Service Components Requirements Development Project Final Report, March 31, 2005." This report incorporated review and comments from industry and the National Archives and Records Administration (NARA).

Phase two began when a sub-group of participants, along with NARA Subject Matter Experts met with the Records Management Service Components Program Office and produced a set of functional requirements and attributes from their March 31, 2005 report, in a use case like format. Interim progress of phase two is documented in the "Records Management Service Components Use case Development Workshop Report – Session 7, May 2-3, 9-10, 2005," and the NARA technical report "Functional Requirements and Attributes for Records Management in a Component-Based Architecture, July 20, 2005." In August 2005, NARA's Leadership Guidance Team directed the RMSC Program Office to issue a Request for Information (RFI) which was published on October 28, 2005, in FedBizOpps.gov, the Federal government's point-of-entry for procurement opportunities over $25,000. The RFI requested comments on the completeness and clarity of functional requirements in the July

20, 2005 report, and for additional information necessary to provide a technology solution. Comments received responsive to the RFI were reviewed by the RMSC Program Office and consolidated for presentation at the November 16, 2005, Session 8. Agency representatives considered the comments and adopted recommendations to:

- Move the requirements up a level of abstraction from component requirements (one type of technology solution) to service requirements (technology independent).
- The product name was changed to Records Management Services.
- Produce models using Unified Modeling Language (UML) and Integration Definition for Function Modeling (IDEF0).
- Provide references to Federal records management functions in the United States Code (USC) and Code of Federal Regulations (CFR) supported by the records management services functional requirements.

On December 7, 2005 representatives from the 19 agencies met and reviewed an RMSC Requirements Development Project technical report "Functional Requirements and Attributes for Records Management Services, November 15, 2005." The review was to determine if it incorporated changes they directed the RMSC Program Office to make to the report from the November 16, 2005, Session 8 meeting. Changes were directed to bring the report to a level of detail needed to describe records management services for inclusion in the FEA's CORE.gov.

The third phase took place during the calendar year 2006 during which the RMSC Program Office again received additional comments and suggestions from industry, academia, and government. This resulted in two technical reports to correct a function in the Case File Service and add functionality to the Record Capture Service. Interim progress of phase three is documented in the reports: "Case File Service – Case File Record Capture Use Case and Case File Part Associate Use Case (amended)
Functional Requirements and Attributes for Records Management Services December 7, 2005, March 17, 2006," and "Record Capture Service, Record Annotation Establish Use Case, Record Annotation First Update Use Case, Record Annotation Subsequent Update Use Case, and Record Annotation De-populate Use Case (ADDITION), of the Functional Requirements and Attributes for Records Management Services December 7, 2005, June 30, 2006." Additionally, an updated UML class diagram was drafted to reflect the content of the two technical reports for consideration by the IPT.

These materials were presented to the IPT on September 7, 2006, Session 10 meeting, for its consideration in producing this updated report for use in RMS acquisition and development activities.

The IPT identified seven records management activities they believe can be supported by services within an electronic environment, including the services-oriented architecture defined in the FEA. The seven records management services are: Record Capture, Provenance, Category, Authenticity, Case File, Disposition, and Reference. These are documented in the report "Functional Requirements, Attributes, and Unified Modeling Language Class Diagrams for Records Management Services, September 7, 2006."

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FORWARD

The reader should be aware the following information when reviewing this document.

The structure of this document is derived from use case format. The structure ensures uniformity between the functions internal to any service and between the services themselves. Therefore, it does not employ all use case conventions, such as naming the specific actor who is carrying out the activity or initiating an activity described in the function. Additionally, the level of abstraction documented in the services does not identify domain specific elements in order to meet the widest range of agency acquisition and development needs. In this way, each agency can work from this core set of requirements down to their domain-specific context.

This report organizes seven services that include functional requirements, attributes, and a UML class diagram, around core records management activities. The seven records management services are those records management activities the IPT determined to be most appropriate for development in support of the FEA.

Agency representatives identified only those records management activities they believe can be supported with software services within the context defined by the FEA. Their records management service requirements and attributes were developed and remain within a defined scope and necessary constraints:

- **Viewpoint**: Records management activities.
- **In Scope**: From record receipt, identification, capture to record disposition.
- **Out of Scope**: Document creation, format (e.g., pdf, tif, doc), storage methods and media, systems management, maintenance, backup, recovery (both system and disaster), requirements for privacy and information security, security classification and declassification, disposition schedule creation and maintenance.

Human factors, knowledge, and business rules are brought to bear on the activities of deciding what makes up a record, how it should be categorized or aggregated, how long it should be retained and its ultimate disposition. These activities and the decisions behind them for the most part require human intervention and therefore cannot be directly supported by software services at this time. Once decided, however, many of the activities may be implemented or carried out by software services. Hence, a records management service cannot create a disposition schedule; it can implement disposition based on criteria the business owner provides that is executable within a computing environment.

Terms used to describe a record as it "moves" through the records management process (Captured, Declared, Provenancial, etc.) are used to assist the reader in understanding the unique activities required for proper records management – they depict a state the record is in at a particular time in the records management life cycle process. The terms reflect the activities used to manage the record from its creation through its use, maintenance, and disposition. Records acquire additional value and usability as data are populated into attributes evidencing ongoing and completed management activities.

The reader is reminded the business owner decides when and what to set aside as a record. When that decision is made the functions described in the services can be applied to the record, assuring its proper management and disposition. The record as set aside by the business owner remains unchanged even as the records management attributes are populated and updated during its life-cycle. The sum of a record and its records management attributes (current and historical) is a managed record.

In records management practice there are relationships and dependencies among and between the activities identified in this report. Those relationships and dependencies are not made explicit between each use case because doing so might impose a requirement to implement one service in order for another service to initiate or work. Instead, each service is described independently allowing each to be implemented by itself or in conjunction with other services, including non-RM services such as search and retrieve, to address requirements across the record life cycle.

CONTEXT FOR RECORDS MANAGEMENT SERVICES

The functions presented in this report describe the immediate context in which interactions take place between users and records management services available to them within an electronic environment to meet common records management business and legal requirements. Additionally, records management services exist within the broader contexts of the life cycle of Federal records, the provision of functionality through software services, and the FEA.

To facilitate efforts to transform the Federal government to one that is citizen-centered, results-oriented, and market-based, the Office of Management and Budget (OMB) is developing the FEA. The FEA is both a design framework and decision-making tool for Federal Information Technology (IT) investment. Using five reference models, the FEA describes the relationship between business functions and the technologies and information

that supports them.[1] The Service Component Reference Model (SRM) classifies service components integral to the FEA that support business requirements common throughout Federal agencies. Records management services are included in the SRM as one of the service components required for agencies to effectively manage "intellectual capital and electronic media" across the entire government.[2] The OMB intends to assemble a repository of service components and guidance for use by Federal agencies to reduce duplicative IT development, save money, and improve quality (CORE.gov). The detailed functional requirements and use case for records management services provided in this report align with and support the FEA and the SRM.

The FEA is a services-oriented architecture.[3] This means the design of enterprise-wide IT solutions to business requirements is approached through the use of modular service components. Basically a component is software that provides a service or function within a computing environment, and is defined by the interfaces it has with entities around it. It is inherently modular, portable, and designed to be used by many applications requiring similar services.[4] This enables not only the provision of services to multiple applications and users through a central point but also allows the "swapping out" of service layers and components, the reuse of existing components, and the integration of improvements without negative impacts to the whole IT environment. Since requirements for records management are common across all agencies of the Federal government providing them through service components within a services-oriented architecture is a promising development.

Records management services deliver functionality supporting the creation, management, transfer, and destruction of records within an electronic environment.
Within information management, records management, and archival theory, records are understood to go through a life cycle in which they are created, used, managed, and disposed of after their active business use. Effective control and management of records depends upon the application of methods and procedures to identify, classify, index, store, and access them – methods and procedures most profitably applied to records earlier in their life cycle than later.

[1] Executive Office of the President of the United States, FY07 Budget Formulation - FEA Consolidated Reference Model Document, May 2005, at http://www.whitehouse.gov/omb/egov/a-1-fea.html
[2] Ibid., p. 48.
[3] See Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004, at http://www.cio.gov
[4] An example of a software service component is the system clock embedded in many computer operating systems that provides time and date services to all the applications running in association with the operating system.

The FEA, service-oriented architecture, and the records life cycle converge in records management services to enable a revolutionary method to capture electronic records, attest to their reliability, and ensure their authenticity and accessibility over time.

Records management services will allow the management of records to begin much earlier in their life cycle than is currently practicable. Solutions such as records management applications now on the market, although they appear to be able to be implemented towards the beginning of the business process, have historically been implemented at the end of the business or mission process. This means information critical to records management is only associated with the record after it has left its creating application and context.

Other electronic records management analyses and standards are concerned with identical and in some cases broader portions of the records life cycle, but they address different topics and/or viewpoints. For example, ANSI/ARMA/AIIM TR48-2004, Framework for Integration of Electronic Document Management Systems and Electronic Records Management Systems, is concerned with the integration of two types of standalone applications where records management functionality is provided well after records are created and managed in other applications. Similarly, DoD 5015.2-STD, Design Criteria Standard for Electronic Records Management Applications, addresses design for one type of records management implementation – not for records management services which can be implemented at the beginning of the record life cycle in any electronic environment to include a services-oriented architecture. Finally, ISO 15489-1: Information and Documentation - Records Management - Part 1: General; ISO/TR 15489-2 Information and Documentation - Records Management - - Part 2: Guidelines, discuss guidelines and best practices for setting up an organizational records management program.

Records management services will capture the context of creation at the point of creation and carry it forward, updating as necessary, adding management attributes and providing management services, through the entire record life cycle. Records management services may be developed, implemented, reused, and improved across an enterprise with lower costs and higher quality. Records management services will enable more efficient and effective management of electronic records throughout their life cycle.

RECORD CAPTURE SERVICE – RECORD CAPTURE FUNCTION

Purpose

The **Record Capture Function** populates records management attributes for a **DECLARED RECORD** that provide evidence of **RECORD CREATOR** and the date the record was set aside,[1] and ensures the record is uniquely identified in the electronic environment – creating a **CAPTURED RECORD** available to be managed**.**

The reliability of a record and the ability to manage it over time depend heavily upon capturing evidence about the legitimate user, application or system procedure setting aside the record in the electronic environment at its point of creation and carrying that evidence forward with the record. A record is reliable when created in an electronic environment by a legitimate user, application, or system procedure in accordance with legitimate business rules.[2]

Functional Requirement(s)

- (RCS-RCF-1) The **Record Capture Service** shall provide the capability to populate the **Record_Creator_Identifier**[3] attribute when a **DECLARED RECORD** is set aside producing a populated **Record_Creator_Identifier** attribute.
- (RCS-RCF-2) The **Record Capture Service** shall provide the capability to populate the **Record_Identifier** attribute when a **DECLARED RECORD** is set aside producing a populated **Record_Identifier** attribute.
- (RCS-RCF-3) The **Record Capture Service** shall provide the capability to populate the **Record_Capture_Date** attribute using the **SYSTEM DATE** when a **DECLARED RECORD** is set aside producing a populated **Record_Capture_Date** attribute.
- (RCS-RCF-4) The **Record Capture Service** shall provide the capability to make available for output all data populating the attributes created by the **Record Capture Function**.[4]

[1] A concept in archival theory and Federal law whereby a person (or a system) determines that the evidence of one or more organization, function, policy, decision, procedure, transaction, or activity is complete enough to be maintained and managed as a record, either for the conduct of current business or for future reference.
[2]Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "reliability;" InterPARES, "Findings on the Preservation of Authentic Electronic records," pp. 14-19; ISO 15489-2, 4.3.2.
[3] This attribute supports capturing reliability by providing contemporaneous evidence of the person, application, or system procedure setting aside the record in accordance with the business rules.
[4] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **DECLARED RECORD** is available.
2. An Identifier exists for the **RECORD CREATOR**.

Main Flow

1. An Actor is aware a **DECLARED RECORD** is available.
2. Populate the **Record_Creator_Identifier** attribute.
3. Populate the **Record_Identifier** attribute.
4. Populate the **Record_Capture_Date** attribute.
5. A **MANAGED RECORD** with populated **Record Capture Service** attributes is available to be managed.
6. Make available all data populating all attributes of the **Record Capture Function**.[5]

Sub Flow(s) – None

Alternate Flow(s) – None

Glossary

1. Captured Record – A uniquely identified declared record carrying the date it was initially controlled as a record within an electronic environment along with the record creator identifier. A captured record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.
2. Declared Record – An electronic document or object that is considered by the business owner to evidence one or more organization, function, policy, decision, procedure, transaction, or activity completely enough to be maintained and managed as a record, either for the conduct of current business or for future reference.
3. Identifier – The name, position, application or system designation (or concatenation of that data and other data about the user and/or the environment) differentiating the user.
4. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

[5] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

5. Record Creator – An individual, application, or system procedure in an electronic environment specifically designed in accordance with the business rules to carry out the legal authorities of the organization to which the individual, application, or system procedure belongs.
6. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

Reference(s)

1. http://www.dictionary.com
2. http://www.webopedia.com
3. Design Criteria Standard for Electronic records Management Software Applications, June 19, 2002 – DoD 5015.2–STD (Standard)
4. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
5. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
6. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
7. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
8. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
9. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
10. 44 U.S.C. § 3101 Records management by agency heads; general duties
11. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
12. 44 U.S.C. § 3104 Certifications and determinations on transferred records
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
15. 44 U.S.C. § 3301 Definition of records
16. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
17. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
18. 36 CFR §1220.34 Creation of records
19. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
20. 36 CFR §1222.12 Defining Federal records

21. 36 CFR Part 1222 -Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
22. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents.
23. 36 CFR §1234.24 Standards for managing electronic mail records

RECORD CAPTURE SERVICE – RECORD ANNOTATE ESTABLISH FUNCTION

Purpose

The **Record Annotate Establish Function**[1] populates attributes of a **MANAGED RECORD** to identify unique records within or across any given category set(s) and to identify records that require special handling upon their creation, throughout their business use, and disposition. The **Record Annotate Establish Function** also supports requirements to assign more than one annotation to a record simultaneously; make annotation(s) viewable with a record; and be available when the record is captured in its electronic environment. The **Record Annotation Establish Function** requires the population of attributes that evidence the authority, date, and allow for a description of an annotation.

Functional Requirements(s)

- (RCS-RAEF-1) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Identifier** attribute producing a populated **Record_Annotation_Identifier** attribute.
- (RCS-RAEF-2) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Authority** attribute for each populated **Record_Annotation_Identifier** producing a populated **Record_Annotation_Authority** attribute.
- (RCS-RAEF-3) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Assignment_Date** attribute using the **SYSTEM DATE** when a **Record_Annotation_Identifier** attribute is populated producing a populated **Record_Annotation_Assignment_Date** attribute.
- (RCS-RAEF-4) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Description** attribute for each populated **Record_Annotation_Identifier** producing a populated **Record_Annotation _Description** attribute.
- (RCS-RAEF-5) The **Records Capture Service** shall provide the capability to ensure for every populated **Record_Annotation_Identifier** attribute of a **MANAGED RECORD** both a populated **Record_Annotation_Authority** attribute and a populated **Record_Annotation_Assignment_Date** attribute exists.[2]

[1] Each annotation association is unique and each annotation and shall be managed as a single instance of association.
[2] This requirement ensures all three attributes of the service are populated to provide a complete set of information about the annotation and the authority for placing the annotation with the record and the date of that decision.

- (RCS-RAEF-6) The **Records Capture Service** shall provide the capability to ensure for every populated **Record_Annotation_Identifier** attribute of a **MANAGED RECORD** a **Record_Annotation_Description** attribute is available to be populated.
- (RCS-RAEF-7) The **Records Capture Service** shall provide the capability to allow multiple instances of a **Record_Annotation_Identifier** attribute to be associated to a single **MANAGED RECORD** producing a **MANAGED RECORD** with zero, one or more populated **Record_Annotation_Identifier** attributes.[3]
- (RCS-RAEF-8) The **Records Capture Service** shall provide the capability to make available for output data populating the attributes created by the **Record Annotate Establish Function**.[4]

Actor(s)

1. User – an individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Main Flow

1. An Actor becomes aware the annotation attributes of a **MANAGED RECORD** need to be populated.
2. Populate **Record_Annotation_Identifier** attribute.
3. Populate **Record_Annotation_Authority** attribute.
4. Populate **Record_Annotation_Assignment_Date** attribute.
5. A **MANAGED RECORD** with populated **Record Annotation Establish Function** attributes is available to be managed.
6. Make available all data populating all attributes of the **Record Annotation Function**.[5]

Sub Flow(s) – None.

[3] This requirement differentiates annotation from category service that allows for only one current category attribute for any given instance of record.
[4] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) 3 Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[5] ibid.

Alternate Flow: Populate Record Annotation Description Attribute.[6]

1. After 4 **Main Flow.**
2. If the **Record_Annotation_Description** attribute is required to be populated.
3. Then populate **Record_Annotation_Description** attribute.
4. Return 5 **Main Flow**.

Glossary

1. Annotation – A marking that differentiates a record from like records within its own record category or across other categories of records for special handling or management arising from business needs.
2. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
3. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

Reference(s)

1. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "annotation."
2. Design Criteria Standard for Electronic records Management Software Applications, June 19, 2002 – DoD 5015.2–STD (Standard) s.v., "vital record," "classified records."
3. 36 CFR Part 1236 – Management of Vital Records -- §1236.20 Vital records program objectives.
4. Executive Order 12958, "Classified National Security Information," April 17, 1995.

[6] This alternate flow allows for the required three attributes to be populated while allowing each agency to implement their business rules with regard to each instance of an annotation and choose to populate or not populate the description attribute.

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RECORD ANNOTATE EXTABLISH FUNCTION

RECORD CAPTURE SERVICE – RECORD ANNOTATE FIRST UPDATE FUNCTION

Purpose

The **Record Annotate First Update Function** updates attributes of a **MANAGED RECORD**, providing evidence of the conduct and outcome of a review of an existing annotation. This review can include activities that determine the need for either maintaining or changing an existing annotation. The **Record Annotate First Update Function** provides the capability to establish a historical chronology of an annotation and the review that took place.

Functional Requirements(s)

- (RCS-RAFUF-1) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Identifier(n)**[1] attribute using the information contained in the **Record_Annotation_Identifier** when the **Record_Annotation_Identifier** is updated[2] producing a populated **Record_Annotation_Identifier(n)** attribute.
- (RCS-RAFUF-2) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Authority(n)** attribute for each populated **Record_Annotation_Identifier(n)** using the information contained in the **Record_Annotation_Authority** producing a **Record_Annotation_Authority(n)** when the **Record_Annotation_Authority** attribute is updated.
- (RCS-RAFUF-3) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Assignment_Date(n)** attribute for each populated **Record_Annotation_Identifier(n)** using the date from the **Record_Annotation_Assignment_Date** attribute producing a populated **Record_Annotation_Assignment_Date(n)** attribute.
- (RCS-RAFUF-4) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Description(n)** attribute for each populated **Record_Annotation_Identifier(n)** attribute when the **Record_Annotation_Description** attribute is updated producing a populated **Record_Annotation_Description_History(n)** attribute.
- (RCS-RAFUF-5) The **Records Capture Service** shall provide the capability to ensure for every populated **Record_Annotation_Identifier(n)** attribute of a

[1] (n) indicates the first instance of change to an attribute has occurred and is required to be kept.
[2] The term updated includes actions such as updating the annotation under an authority because a new term, set, etc., has been created or removed for a business need. Additionally, this supports "crossing out" an annotation under an authority while at the same time keeping the history of the annotation with the record.

MANAGED RECORD both a populated **Record_Annotation_Authority(n)** attribute and a populated **Record_Annotation_Assignment_Date(n)** attribute exists.[3]

- (RCS-RAFUF-6) The **Records Capture Service** shall provide the capability to ensure for every populated **Record_Annotation_Identifier(n)** attribute of a **MANAGED RECORD** a **Record_Annotation_Description(n)** attribute is available to be populated.[4]
- (RCS-RAFUF-7) The **Records Capture Service** shall provide the capability to make available for output data populating the attributes created by the **Record Annotate First Update Function**.[5]

Actor(s)

1. User – an individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with populated annotation attributes exists.

Main Flow

1. An Actor becomes aware the annotation attributes of a **MANAGED RECORD** need to be updated for the first time since an annotation for a **MANAGED RECORD** was established.
2. Access **Record_Annotation_Identifier** attribute.
3. Populate **Record_Annotation_Identifier(n)** attribute.
4. Access **Record_Annotation_Authority** attribute.
5. Populate **Record_Annotation_Authority(n)** attribute.
6. Access **Record_Annotation_Assignment_Date** attribute.
7. Populate **Record_Annotation_Assignment_Date(n)** attribute.
8. A **MANAGED RECORD**'s annotation attributes have been updated.
9. A **MANAGED RECORD** with updated annotation attributes is available to be managed.

[3] This requirement ensures these attributes of the service must be populated to provide a complete set of information about the annotation and the authority for placing the annotation with the record and the date of that decision.
[4] This requirement ensures there are a total of four attributes associated with each instance of an annotation to a record. The Record_Annotation_Description(n) attribute is not required to be populated but must be available.
[5] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

10. Make available all data populating all attributes of the **Record Annotate First Update Function**.[6]

Sub Flow(s) – None.

Alternate Flow: Populate Record_Annotation_Description Attribute(s).[7]

1. After 7 **Main Flow**.
2. If a **MANAGED RECORD**'s **Record_Annotation_Description** attribute is populated.
3. Access **Record_Annotation_Description** attribute.
4. Populate **Record_Annotation_Description(n)** attribute.
5. Return 8 **Main Flow**.

Glossary

1. Annotation – A marking that differentiates a record from like records within its own record category or across other categories of records for special handling or management arising from business needs.
2. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

Reference(s)

1. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "annotation."
2. Design Criteria Standard for Electronic records Management Software Applications, June 19, 2002 – DoD 5015.2–STD (Standard) s.v., "vital record," "classified records."
3. 36 CFR Part 1236 – Management of Vital Records -- §1236.20 Vital records program objectives.
4. Executive Order 12958, "Classified National Security Information," April 17, 1995.

[6] ibid.
[7] This alternate flow allows for the required three attributes to be populated while allowing each agency to implement their business rules with regard to each instance of an annotation and choose to populate or not populate the description attribute.

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RECORD ANNOTATE FIRST UPDATE FUNCTION

RECORD CAPTURE SERVICE – RECORD ANNOTATE SUBSEQUENT UPDATE FUNCTION

Purpose

The **Record Annotate Subsequent Update Function** continues the process of updating attributes of a **MANAGED RECORD**, providing ongoing evidence of the conduct and outcome of a review of an existing annotation. This review can include activities that determine the need for either maintaining or changing an existing annotation. The **Record Annotate Subsequent Update Function** provides the capability to maintain a historical chronology of an annotation and the review that took place.

Functional Requirements(s)

- (RCS-RASUF-1) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Identifier(n+1)**[1] attribute using the information contained in the **Record_Annotation_Identifier** when the **Record_Annotation_Identifier(n)** is updated[2] producing a populated **Record_Annotation_Identifier(n+1)** attribute.
- (RCS-RASUF-2) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Authority(n+1)** attribute for each populated **Record_Annotation_Identifier(n+1)** using the information contained in the **Record_Annotation_Authority(n)** producing a **Record_Annotation_Authority(n+1)** when the **Record_Annotation_Authority** attribute is updated.
- (RCS-RASUF-3) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Assignment_Date(n+1)** attribute for each populated **Record_Annotation_Identifier(n+1)** using the date from the **Record_Annotation_Assignment_Date(n)** attribute producing a populated **Record_Annotation_Assignment_Date(n+1)** attribute.
- (RCS-RASUF-4) The **Records Capture Service** shall provide the capability to populate a **Record_Annotation_Description(n+1)** attribute for each populated **Record_Annotation_Identifier(n+1)** attribute when the **Record_Annotation_Description(n)** attribute is updated producing a populated **Record_Annotation_Description(n+1)** attribute.

[1] (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept.
[2] The word "updated" includes actions such as reviewing or changing the annotation under an authority because a new term has been created or removed. Additionally, this supports "crossing out" an annotation under an authority while at the same time keeping the history of the annotation with the record. An example would be that a record was annotated as a Vital Record but on a specific date, it was no longer a Vital Record and the annotation was identified as no longer valid for that record.

- (RCS-RASUF-5) The **Records Capture Service** shall provide the capability to ensure for every populated **Record_Annotation_Identifier(n+1)** attribute of a MANAGED RECORD both a populated **Record_Annotation_Authority(n+1)** attribute and a populated **Record_Annotation_Assignment_Date(n+1)** attribute exists.[3]
- (RCS-RASUF-6) The **Records Capture Service** shall provide the capability to ensure for every populated **Record_Annotation_Identifier(n+1)** attribute of a **MANAGED RECORD** a **Record_Annotation_Description(n+1)** attribute is available to be populated.[4]
- (RCS-RASUF-7) The **Records Capture Service** shall provide the capability to make available for output data populating the attributes created by the **Record Annotate Subsequent Update Function**.[5]

Actor(s)

1. User – an individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

A **MANAGED RECORD** with populated annotate first update attributes exists.

Main Flow

1. An Actor becomes aware the annotation attributes of a **MANAGED RECORD** need to be updated subsequent to the first update of the **MANAGED RECORD** annotation was updated.
2. Access **Record_Annotation_Identifier(n)** attribute.
3. Populate **Record_Annotation_Identifier(n+1)** attribute.
4. Access **Record_Annotation_Authority(n)** attribute.
5. Populate **Record_Annotation_Authority(n+1)** attribute.

[3] This requirement ensures these attributes of the service must be populated to provide a complete set of information about the annotation and the authority for placing the annotation with the record and the date of that decision.
[4] This functional requirement ensures there are a total of four attributes associated with each instance of an annotation to a record. The Record_Annotate_Description(n+1) attribute is not required to be populated but must be available since during the life of the record as the annotation is reviewed, historical instances may include a description if necessary.
[5] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

6. Access **Record_Annotation_Assignment_Date(n)** attribute.
7. Populate **Record_Annotation_Assignment_Date(n+1)** attribute.

8. A **MANAGED RECORD**'s annotation attributes have been updated.
9. A **MANAGED RECORD** with updated annotation attributes is available to be managed.
10. Make available all data populating all attributes of the **Record Annotate Subsequent Update Function**.[6]

Sub Flow(s) – None.

Alternate Flow: Populate Record Annotation Description Attribute.[7]

1. After 7 **Main Flow**.
2. If a **MANAGED RECORD**'s **Record_Annotation_Description(n)** attribute is populated.
3. Access **Record_Annotation_Description(n)** attribute.
4. Populate **Record_Annotation_Description(n+1)** attribute.
5. Return 8 **Main Flow**.

Glossary

1. Annotation – A marking that differentiates a record from like records within its own record category or across other categories of records for special handling or management arising from business needs.
2. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

Reference(s)

1. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "annotation."
2. Design Criteria Standard for Electronic records Management Software Applications, June 19, 2002 – DoD 5015.2–STD (Standard) s.v., "vital record," "classified records."

[6] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[7] This alternate flow allows for the required three attributes to be populated while allowing each agency to implement their business rules with regard to each instance of an annotation and choose to populate or not populate the description attribute.

3. 36 CFR Part 1236 – Management of Vital Records -- §1236.20 Vital records program objectives.
4. Executive Order 12958, "Classified National Security Information," April 17, 1995.

RECORD CAPTURE SERVICE – RECORD ANNOTATE ATTRIBUTE DE-POPULATE FUNCTION

Purpose

The **Record Annotate Attribute De-populate Function** provides the capability to de-populate attributes related to an annotation in accordance with business rules. This includes the ability to make the data contained in the attributes available for destruction and to remove the attributes from the records management information about the **MANAGED RECORD**.

Functional Requirements(s)

- (RCS-RAADF-1) The **Records Capture Service** shall provide the capability to de-populate a **Record_Annotation_Identifier** attribute producing a de-populated **Record_Annotation_Identifier** attribute.
- (RCS-RAADF-2) The **Records Capture Service** shall provide the capability to de-populate a **Record_Annotation_Authority** attribute for each de-populated **Record_Annotation_Identifier** producing a de-populated **Record_Annotation_Authority** attribute.
- (RCS-RAADF-3) The **Records Capture Service** shall provide the capability to de-populate a **Record_Annotation_Assignment_Date** when a **Record_Annotation_Identifier** attribute is de-populated producing a de-populated **Record_Annotation_Assignment_Date** attribute.
- (RCS-RAADF-4) The **Records Capture Service** shall provide the capability to de-populate a **Record_Annotation_Description** attribute for each de-populated **Record_Annotation_Identifier** producing a de-populated **Record_Annotation_Description** attribute.
- (RCS-RAADF-5) The **Records Capture Service** shall provide the capability to make the de-populated annotation attributes available for destruction when the **Record_Annotation_Identifier**, **Record_Annotation_Authority**, **Record_Annotation_Assignment_Date**, and **Record_Annotation_Description** attributes of a **MANAGED RECORD** have been de-populated.
- (RCS-RAADF-6) The **Records Capture Service** shall provide the capability to de-populate all associated record annotation first update attributes when a **Record_Annotation_Identifier** attribute is de-populated producing de-populated record annotation first update attributes.
- (RCS-RAADF-7) The **Records Capture Service** shall provide the capability to de-populate all associated record annotation subsequent update attributes when a

Record_Annotation_Identifier attribute is de-populated producing de-populated record annotation subsequent update attributes.

- (RCS-RAADF-8) The **Records Capture Service** shall provide the capability to make available for output data populating the attributes created by the **Record Annotate Attribute De-populate Function**.[1]

Actor(s)

1. User – an individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with populated record annotation attributes exists.

Main Flow

1. An Actor becomes aware an annotation attribute of a **MANAGED RECORD** needs to be de-populated.
2. De-populate the **Record_Annotation_Identifier** attribute.
3. De-populate the **Record_Annotation_Authority** attribute.
4. De-populate the **Record_Annotation_Assignment_Date** attribute.
5. Make the **MANAGED RECORD** annotation attributes available for destruction.

10. Make available all data populating all attributes of the **Record Annotate Attribute De-populate Function**. [2]

Sub Flow(s) – None.

Alternate Flow 1: De-populate Record_Annotation_Description Attribute.[3]

1. If at 4 **Main Flow** **Record_Annotation_Description** is populated.
2. De-populate **Record_Annotation_Description** attribute.
3. Return 5 **Main Flow**.

[1] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[2] ibid.
[3] This alternate flow allows for the required three attributes to be populated while allowing each agency to implement their business rules with regard to each instance of an annotation and choose to populate or not populate the description attribute.

Alternate Flow 2: De-populate Record_Annotation_Identifier(n) Attribute.

1. If at 2 **Main Flow** **Record_Annotation_Identifier(n)** is populated.
2. De-populate **Record_Annotation_Identifier(n)** attribute.
3. De-populate the **Record_Annotation_Authority(n)** attribute.
4. De-populate the **Record_Annotation_Assignment_Date(n)** attribute.
5. If at 4 **Alternate Flow 2**: **De-populate Record_Annotation_Identifier(n)** the attribute **Record_Annotation_Description(n)** is populated.
6. De-populate the **Record_Annotation_Description(n)** attribute.
7. Return 5 **Main Flow**.

Alternate Flow 3: De-populate Record_Annotation_Identifier(n+1) attribute.

1. If at 2 **Main Flow** **Record_Annotation_Identifier(n+1)** is populated.
2. De-populate **Record_Annotation_Identifier(n+1)** attribute.
3. De-populate the **Record_Annotation_Authority(n+1)** attribute.
4. De-populate the **Record_Annotation_Assignment_Date(n+1)** attribute.
8. If at 4 **Sub Flow 2**: **De-populate Record_Annotation_Identifier(n+1)** the attribute **Record_Annotation_Description(n+1)** is populated.
9. De-populate **Record_Annotation_Description(n+1)**.
10. Repeat **Sub Flow 3**: De-populate **Record_Annotation_Identifier(n+1)** attribute for each instance of (n+1).
11. Return 5 **Main Flow**.

Glossary

1. Annotation – A marking that differentiates a record from like records within its own record category or across other categories of records for special handling or management arising from business needs.
2. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

Reference(s)

1. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., “annotation.”
2. Design Criteria Standard for Electronic records Management Software Applications, June 19, 2002 – DoD 5015.2–STD (Standard) s.v., “vital record,” “classified records.”
3. 36 CFR Part 1236 – Management of Vital Records -- §1236.20 Vital records program objectives.
4. Executive Order 12958, "Classified National Security Information," April 17, 1995.

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RECORD ANNOTATE DE-POPULATE FUNCTION

PROVENANCE SERVICE – PROVENANCE ESTABLISH FUNCTION

Purpose

The **Provenance Establish Function** populates attributes of a **MANAGED RECORD** providing evidence of the context of creation – its Provenance – and facilitates management of the record for business purposes.

The **Provenance Establish Function** ties the record to the circumstances of its creation at the time of creation. The function establishes the person or system and the agency in which the record was created or received, the record keeper responsible for the record custody, and the date upon which that record keeper assumed that responsibility. The significance of a record and the ability to manage it over time depend heavily upon its provenance and the attributes populated by this service provide the basic information to meet these requirements.

The **Provenance Establish Function** supports both the concept of capturing evidence of provenance across time as well as the hierarchy between an agency and its components (e.g. department, bureau, office). This function allows an agency to evidence down in granularity appropriate and legitimate within their agency environment – a decision that is made by the agency, or its component (sub-part) based upon the agency, agency component (sub-part) mission needs. This supports the business requirement that an individual, position, or office be identified as the record creator.

Functional Requirement(s)

- (PS-PEF-1) The **Provenance Service** shall provide the capability to populate the **Agency_Official_Name_Current**[1] attribute producing a populated **Agency_Official_Name_Current** attribute.
- (PS-PEF-2) The **Provenance Service** shall provide the capability to populate the **Agency_Official_Name_Current_Date** attribute when the **Agency_Official_Name** attribute is populated using the **SYSTEM DATE** producing a populated **Agency_Official_Name_Current_Date** attribute.
- (PS-PEF-3) The **Provenance Service** shall provide the capability to populate the **Agency_Official_Name_superordinate a…∞)_Current**[2] attribute producing a populated **Agency_Official_Name_(superordinate a…∞)_Current** attribute.

[1] This attribute identifies the organizational entity – whether office, position, or person – within the agency directly responsible for the creation, use, and maintenance of the records under Federal law, while transacting public business, or in the course of carrying out official duties. It identifies the juridical person charged with records responsibilities in accordance with 44 U.S.C. § 3301 and 36 CFR §1222.12 (b)(3)(4).
[2] The infinity symbol – ∞ – recognizes different agencies will have different policy and procedures for implementing the level of provenance they require to evidence for their records. Allows for the association between any organizational entity (from as granular a level as an individual) to those organizational entities superior to it – example: Individual: Agency: Bureau: Department.

- (PS-PEF-4) The **Provenance Service** shall provide the capability to populate the **Agency_Official_Name_(superordinate a…∞)_Current_Date** attribute when the **Agency_Official_Name** attribute is populated using the **SYSTEM DATE** producing a populated **Agency_Official_Name(superordinate a…∞)_Current_Date** attribute.
- (PS-PEF-5) The **Provenance Service** shall provide the capability to populate the **Recordkeeper_Current**[3] attribute upon the population of the **Agency_Offical_Name_Current** attribute producing a populated **Recordkeeper_Current** attribute.
- (PS-PEF-6) The **Provenance Service** shall provide the capability to populate the **Recordkeeper_Current_Date** using the data contained in the **Agency_Official_Name_Current_Date** attribute when the **Agency_Offical_Name_Current** attribute is populated producing a populated **Recordkeeper_Current_Date** attribute.
- (PS-PEF-7) The **Provenance Service** shall provide the capability to make available for output all data populating the attributes created by the **Provenance Establish Function**.[4]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

[3] This attribute directly supports 36 CFR §1222.50 (b)(3) which requires the agency to formally specify which officials are responsible for maintenance and disposition of electronic records and which computer systems are used for recordkeeping.
[4] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Precondition(s)

1. A **MANAGED RECORD** is available.

Main Flow

1. An Actor becomes aware the provenance attributes of a **MANAGED RECORD** are available to be populated.
2. Populate **Agency_Official_Name_Current** attribute.
3. Populate **Agency_Official_Name_Current_Date** attribute.
4. Populate **Recordkeeper_Current** attribute.
5. Populate **Recordkeeper_Current_Date** attribute.
6. A **MANAGED RECORD** with populated **Provenance Service** attributes is available to be managed.
7. Make available all data populating all attributes of the **Provenance Establish Function**.[5]

Sub Flow(s): Establish Superordinate Structure

1. After 2 Main Flow:
2. Populate **Agency_Official_Name(superordinate a…∞)_Current** attribute.
3. Populate **Agency_Official_Name(superordinate a…∞)_Current_Date** attribute.
4. Repeat Step 2 and 3 Sub Flow: Establish Superordinate Structure until super ordinate structure is complete.
5. Return 3 Main Flow.

Alternate Flow(s) – None

Glossary

1. Captured Record – A uniquely identified declared record carrying the date it was initially controlled as a record within an electronic environment along with the record creator identifier. A captured record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.
2. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
3. Provenance – Ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record's active use for business purposes. Provenance establishes the person or system and the agency in which the record was created or received, the record keeper responsible for the record

[5] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of subsequent custodians(s), if applicable.

4. Provenancial Record – A record for which information about the time and place of its creation has been collected and preserved. This information supports the reliability of the record as evidence of its creator and the activity from which it results.
5. Record Keeper – The administrative entity, unit, office, or person responsible for the custody and ongoing management of the records during their active business use.
6. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C3I), "The Department of Defense Records Management Function and Information Models," Oct. 6, 1995
5. InterPARES, "Findings on the Preservation of Authentic Electronic records," Final Report to the National Historical Publications and Records Commission, Sept. 2002.
6. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "provenance."
7. International Standards Organization, ISO 15489-1: Information and Documentation - Records Management - Part 1: General, Sept. 15, 2001, 7.2.1
8. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
9. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
10. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
11. 44 U.S.C. § 3101 Records management by agency heads; general duties
12. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
15. 44 U.S.C. § 3301 Definition of records

16. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
17. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
18. 36 CFR §1220.34 Creation of records
19. 36 CFR §1220.36 Maintenance and use of records (a)
20. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
21. 36 CFR §1222.12 Defining Federal records
22. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
23. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
24. 36 CFR §1234.24 Standards for managing electronic mail records

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PROVENANCE ESTABLISH FUNCTION

PROVENANCE SERVICE – PROVENANCE FIRST UPDATE FUNCTION

Purpose

The Provenance First Update Function updates attributes of a **MANAGED RECORD** providing continual evidence of provenance at the first instance of change in provenance after the initial provenance was established. This service provides the concept that after provenance has been established initially (**Provenance Establish Function**) there is the capability to document the evidence of any changes in provenance.

The **Provenance First Update Function** allows the collection of information about the circumstances of the record's management throughout its active use for business purposes. Provenance maintains information about the record currently responsible for the record custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of previous record keeper(s), if applicable. The significance of a record and the ability to manage it over time depend heavily upon its provenance and attributes populated by this service provide the basic information to meet these requirements.

Record provenance is not limited to information about the record when it was created or received. Record provenance may also include information about the record during its subsequent use, maintenance, and preservation until it is no longer needed for business purposes.

The **Provenance First Update Function** supports both the concept of capturing evidence of provenance across time as well as the hierarchy between an agency and its components (e.g. department, bureau, office). This function allows an agency to evidence down in granularity appropriate and legitimate within their agency environment – a decision that is made by the agency, or its component (sub-part) based upon the agency, agency component (sub-part) mission needs. This supports the business requirement that an individual, position, or office be identified as the record creator. The **Provenance First Update Function** supports the records management activity of updating data contained in provenance attributes to ensure they are current and accurate while simultaneously keeping all previous instances of provenance attributes through the life of the record.

Functional Requirement(s)

- (PS-PFUF-1) The **Provenance Service** shall provide the capability upon the change of the **Agency_Offical_Name_Current**[1] to populate the **Agency_Official_Name_Previous(n)**[2] attribute with data being changed from the **Agency_Official_Name_Current** attribute producing a populated **Agency_Official_Name_Previous(n)** attribute.
- (PS-PFUF-2) The **Provenance Service** shall provide the capability to populate the **Agency_Official_Name_Previous_Date(n)** attribute when the **Agency_Official_Name_Previous(n)** attribute is populated using the date from the **Agency_Official_Name_Current_Date** attribute producing a populated **Agency_Official_ Name_Previous_Date(n)** attribute.
- (PS-PFUF-3) The **Provenance Service** shall provide the capability upon the change of the **Agency_Offical_Name_Current** to populate the first instance of **Agency_Official_Name(superordinate a…∞)_Previous(n)**[3] attribute with data from the **Agency_Official_Name(superordinate a…∞)_Current** attribute producing a populated **Agency_Official_Name(superordinate a…∞)_Previous(n)** attribute.
- (PS-PFUF-4) The **Provenance Service** shall provide the capability to populate a **Agency_Official_Name (superordinate a…∞)_Previous_Date(n)** attribute when a **Agency_Official_Name(superordinate a…∞)_Previous(n)** attribute is populated using the date from a **Agency_Official_Name(superordinate a…∞)_Current_Date** attribute producing a populated **Agency_Official_Name(superordinate a…∞)_Previous_Date(n)** attribute.
- (PS-PFUF-5) The **Provenance Service** shall provide the capability to make available for output all data populating the attributes created by the **Provenance First Update Function**.[4]

[1] This attribute identifies the organizational entity – whether office, position, or person – within the agency directly responsible for the creation, use, and maintenance of the records under Federal law, while transacting public business, or in the course of carrying out official duties. It identifies the juridical person charged with records responsibilities in accordance with 44 U.S.C. § 3301 and 36 CFR §1222.12 (b)(3)(4).
[2] *(n)* indicates the first instance of change in provenance.
[3] The infinity symbol – ∞ – recognizes different agencies will have different policy and procedures for implementing the level of provenance they require to evidence for their records. Allows for the association between any organizational entity (from as granular a level as an individual) to those organizational entities superior to it – example: Individual: Agency: Bureau: Department.
[4] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with populated provenance attributes is available.

Main Flow

1. An Actor becomes aware the provenance attributes of a **MANAGED RECORD** need to be updated for the first time since the provenance of the **MANAGED RECORD** was established.
2. Access **Agency_Official_Name_Current** attribute data.
3. Populate **Agency_Official_Name_Previous(n)**[5] attribute with data from the **Agency_Official_Name_Current** attribute.
4. Populate **Agency_Official_Name_Current** attribute.
5. Access data in **Agency_Official_Name_Current_Date** attribute
6. Populate **Agency_Official_Name_Previous_Date(n)** attribute with data from the **Agency_Official_Name_Current_Date** attribute.
7. Populate **Agency_Official_Name_Current_Date** attribute.
8. A **MANAGED RECORD's** provenance attributes have been updated.
9. Make available all data populating all attributes of the **Provenance First Update Function**.[6]

Sub Flow: Update Super Ordinate Structure

1. After 7 Main Flow
2. Access **Agency_Official_Name(superordinate a…∞)_Current** attribute data.
3. Populate **Agency_Official_Name(superordinate a…∞)_Previous(n)** attribute with data from **Agency_Official_Name(superordinate a…∞)_Current** attribute.
4. Populate **Agency_Official_Name(superordinate a…∞)_Current** attribute.
5. Access **Agency_Official_Name(superordinate a…∞)_Current_Date** attribute data.
6. Populate **Agency_Official_Name(superordinate a…∞)_Previous_Date(n)** attribute with data from **Agency_Official_Name(superordinate a…∞)_Current_Date** attribute.
7. Populate **Agency_Official_Name(superordinate a…∞)_Current_Date** attribute.

[5] (n) indicates the first instance of change in an attribute where the data are required to be kept.
[6] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

8. Repeat 2 through 7 Sub Flow: Update Super Ordinate Structure until all super ordinate information is complete.
9. Return 8 Main Flow.

Alternate Flow: Add Super Ordinate Structure

1. If at 1 Sub Flow: Update Super Ordinate Structure **Agency_Official_Name(superordinate a…z)_Current** does not exist as a populated attribute, then.
2. Populate **Agency_Official_Name(superordinate a…z)_Current** attribute.
3. Populate **Agency_Official_Name(superordinate a…z)_Current_Date** attribute.
4. Repeat 2 and 3 Alternate Flow: Add Super Ordinate Structure until all super ordinate structure is complete.
5. Return 8 Sub Flow: Update Super Ordinate Structure.

Glossary

1. Captured Record – A uniquely identified declared record carrying the date it was initially controlled as a record within an electronic environment along with the record creator identifier. A captured record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.
2. Provenance – Ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record's active use for business purposes. Provenance establishes the person or system and the agency in which the record was created or received, the record keeper responsible for the record custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of subsequent custodians(s), if applicable.
3. Managed Record. A record as set aside by a business owner that has been subject to records management activities.
4. Record Keeper – the administrative entity, unit, office, or person responsible for the custody and ongoing management of the records during their active business use.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf

3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C3I), "The Department of Defense Records Management Function and Information Models," Oct. 6, 1995
5. InterPARES, "Findings on the Preservation of Authentic Electronic records," Final Report to the National Historical Publications and Records Commission, Sept. 2002.
6. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "provenance."
7. International Standards Organization, ISO 15489-1: Information and Documentation - Records Management - Part 1: General, Sept. 15, 2001, 7.2.1
8. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
9. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
10. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
11. 44 U.S.C. § 3101 Records management by agency heads; general duties
12. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
15. 44 U.S.C. § 3301 Definition of records
16. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
17. 36 CFR Part 1220 -- Federal Records; General Subpart B – Agency Records Management Programs: §1220.30 Authority
18. 36 CFR §1220.34 Creation of records
19. 36 CFR §1220.36 Maintenance and use of records (a)
20. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
21. 36 CFR §1222.12 Defining Federal records
22. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
23. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
24. 36 CFR §1234.24 Standards for managing electronic mail records

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RECORD ANNOTATE FIRST UPDATE FUNCTION

PROVENANCE SERVICE – PROVENANCE SUBSEQUENT UPDATE FUNCTION

Purpose

The **Provenance Subsequent Update Function** continues the process of updating attributes of a **MANAGED RECORD** upon the second instance of change in provenance after the initial provenance was established. This service provides continual evidence of the context of use of the **MANAGED RECORD** and to facilitate its management. This service advances the concept that after provenance has been established initially (**Provenance Establish Function**) and the first update of provenance has occurred (**Provenance First Update Function**) there is the capability to document evidence of the change in provenance throughout the its active use for business purposes.

Record provenance is not limited to information about the record when it was created or received. Record provenance may also include information about the record during its subsequent use, maintenance, and preservation until it is no longer needed for business purposes.

The **Provenance Subsequent Update Function** supports both the concept of capturing evidence of provenance across time as well as the hierarchy between an agency and its components (e.g. department, bureau, office). This function allows an agency to evidence down in granularity appropriate and legitimate within their agency environment – a decision that is made by the agency, or its component (sub-part) based upon the agency, agency component (sub-part) mission needs. This supports the business requirement that an individual, position, or office be identified as the record creator. The **Provenance Subsequent Update Function** supports the records management activity of updating data contained in provenance attributes to ensure they are current and accurate while simultaneously keeping all previous instances of provenance attributes through the life of the record.

Functional Requirement(s)

- (PS-PSUF-1) The **Provenance Service** shall provide the capability upon the change of the **Agency_Official_Name_Previous(n)**[1] to populate an **Agency_Official_Name_Previous(n+1)**[2] attribute with data from the **Agency_Official_Name_Previous(n)** attribute producing a populated **Agency_Official _Name_Previous(n+1)** attribute.
- (PS-PSUF-2) The **Provenance Service** shall provide the capability to populate a **Agency_Official_Name_Previous_Date(n+1)** attribute when a

[1] (n) indicates the first instance of change in an attribute where the data are required to be kept.
[2] (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept.

Agency_Official_Name_Previous (n+1)attribute is populated using the date from the **Agency_Official_Name_Previous_Date(n)** attribute producing a populated **Agency_Official_ Name_Previous_Date(n+1)** attribute.

- (PS-PSUF-3) The **Provenance Service** shall provide the capability upon the change of the **Agency_Official_Name(superordinate a… ∞)_Previous(n)**[3] to populate a **Agency_Official_Name(superordinate a…∞)_Previous(n+1)** attribute with data from the **Agency_Official_Name(superordinate a…∞)_Previous(n)** attribute producing a populated **Agency_Official_Name(superordinate a…∞)_Previous(n+1)** attribute.
- (PS-PSUF-4) The **Provenance Service** shall provide the capability to populate a **Agency_Official_Name (superordinate a…∞) _Previous_Date(n+1)** attribute when a **Agency_Official_Name(superordinate a…∞)_Previous(n+1)** attribute is populated using the date from a **Agency_Official_Name(superordinate a…∞)_Previous_Date(n+1)** attribute producing a populated **Agency_Official_ Name(superordinate a…∞)_Previous_Date(n+1)** attribute.
- (PS-PSUF-5) The **Provenance Service** shall provide the capability to make available for output all data populating the attributes created the **Provenance Subsequent Update Function**.[4]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with populated provenance attributes is available.

[3] The infinity symbol – ∞ – recognizes different agencies will have different policy and procedures for implementing the level of provenance they require to evidence for their records. Allows for the association between any organizational entity (from as granular a level as an individual) to those organizational entities superior to it – example: Individual: Agency: Bureau: Department.
[4] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Main Flow

1. An Actor becomes aware the provenance attributes of a **MANAGED RECORD** need to be updated subsequent to the first update of the **MANAGED RECORD's** provenance attributes.
2. Access data in **Agency_Official_Name_Previous (n)** attribute.
3. Populate **Agency_Official_Name_Previous (n+1)** attribute with data from the **Agency_Official_Name_Previous (n)** attribute.
4. Populate **Agency_Official_Name_Previous (n)** attribute.
5. Access data in **Agency_Official_Name_Previous_Date (n)** attribute.
6. Populated **Agency_Official_Name_Previous_Date (n+1)** attribute with data from the **Agency_Official_Name_Previous (n)** attribute.
7. Populate **Agency_Official_Name_Previous_Date (n)** attribute.
8. A **MANAGED RECORD's** provenance attributes have been updated.
9. Make available all data populating all attributes of the **Provenance Subsequent Update Function**.[5]

Sub Flow: Update Superordinate Structure

1. After 7 Main Flow.
2. Access **Agency_Official_Name(superordinate a…∞)_Previous(n)** attribute data.
3. Populate **Agency_Official_Name(superordinate a…∞)_Previous(n+1)** attribute with data from **Agency_Official_Name(superordinate a…∞)_Previous(n)** attribute.
4. Populate **Agency_Official_Name(superordinate a…∞)_Previous (n)** attribute.
5. Access **Agency_Official_Name(superordinate a…∞)_Previous_Date(n)** attribute data.
6. Populate **Agency_Official_Name(superordinate a…∞)_Previous_Date(n+1)** attribute with data from **Agency_Official_Name(superordinate a…∞)_Previous_Date(n)** attribute.
7. Populate **Agency_Official_Name(superordinate a…∞)_Previous_Date(n)** attribute.
8. Repeat 2 through 5 Sub Flow: Update Superordinate Structure until all super ordinate structure is complete.
9. Return 8 Main Flow.

[5] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Alternate Flow: Add Superordinate Structure

1. If at 1 Sub Flow: Update Superordinate Structure **Agency_Official_Name(superordinate a…∞)_Previous(n)** does not exist as a populated attribute, then.
2. Populate **Agency_Official_Name(superordinate a…∞)_Previous(n)** attribute.
3. Populate **Agency_Official_Name(superordinate a…∞)_Populate_Date(n)** attribute.
4. Repeat 2 and 3 Alternate Flow: Add Superordinate Structure until all super ordinate structure is complete.
5. Return 8 Main Flow.

Glossary

1. Provenance – Ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record's active use for business purposes. Provenance establishes the person or system and the agency in which the record was created or received, the record keeper responsible for the record custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of subsequent custodians(s), if applicable.
2. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
3. Record Keeper – the administrative entity, unit, office, or person responsible for the custody and ongoing management of the records during their active business use.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C3I), "The Department of Defense Records Management Function and Information Models," October 6, 1995

5. InterPARES, "Findings on the Preservation of Authentic Electronic records," Final Report to the National Historical Publications and Records Commission, September 2002
6. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "provenance."
7. International Standards Organization, ISO 15489-1: Information and Documentation - Records Management - Part 1: General, September 15, 2001, 7.2.1
8. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
9. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
10. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
11. 44 U.S.C. § 3101 Records management by agency heads; general duties
12. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
15. 44 U.S.C. § 3301 Definition of records
16. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
17. 36 CFR §1220 -- Federal Records; General Subpart B – Agency Records Management Programs: §1220.30 Authority
18. 36 CFR §1220.34 Creation of records
19. 36 CFR §1220.36 Maintenance and use of records (a)
20. 36 CFR §1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
21. 36 CFR §1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements
22. 36 CFR §1222.12 Defining Federal records
23. 36 CFR §1222.50 Records maintenance and storage
24. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
25. 36 CFR §1234.24 Standards for managing electronic mail records

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RECORD ANNOTATE SUBSEQUENT UPDATE FUNCTION

PROVENANCE SERVICE – RECORD KEEPER FIRST UPDATE FUNCTION

Purpose

The **Record Keeper First Update Function** updates attributes of a **MANAGED RECORD** providing continual evidence of provenance at the first instance of change in **RECORD KEEPER** after the initial **RECORD KEEPER** was established. This service advances the concept that after provenance has been established initially (Provenance Establish Function) there is the capability to document evidence of changes.

The **Record Keeper First Update Function** ties the record to the circumstances of its management throughout its active use for business purposes.[1]
Provenance maintains information about the record keeper currently responsible for the record custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of previous record keeper(s), if applicable. The significance of a record and the ability to manage it over time depend heavily upon its provenance and the attributes populated by this service provide the basic information to meet these requirements.

Record provenance is not limited to information about the record when it was created or received. Record provenance may also include information about the record during its subsequent use, maintenance, and preservation until it is no longer needed for business purposes. The **Record Keeper First Update Function** supports the records management activity of updating data contained in provenance attributes to ensure they are current and accurate while simultaneously keeping all previous instances of provenance attributes through the life of the record.

The **Record Keeper First Update Function** supports the concept of capturing evidence of provenance across time. This function supports the business requirement that an individual, position, or office be identified as the record keeper.

[1] Society of American Archivists, glossary entry for "provenance;" ISO 15489-1, 7.2.1; InterPARES, "Findings on the Preservation of Authentic Electronic records," pp. 15-16; U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C3I), "The Department of Defense Records Management Function and Information Models," Oct. 6, 1995, 3.6.1, p. 3-22.

Functional Requirement(s)

- (PS-RKFUF-1) The **Provenance Service** shall provide the capability upon the change of the **Record_Keeper_Current**[2] attribute to populate **Record_Keeper_Previous(n)**[3] attribute with data from the Record_Keeper_Current attribute producing a populated **Record_Keeper_Previous(n)** attribute.
- (PS-RKFUF-2) The **Provenance Service** shall provide the capability upon the change in the **Record_Keeper_Current_Date** attribute to populate the **Record_Keeper_Previous_Date(n)** attribute with data from the **Record_Keeper_Current_Date** attribute producing a populated **Record_Keeper_Previous_Date(n)** attribute.
- (PS-RKFUF-3) The **Provenance Service** shall provide the capability to make available for output all data populating the attributes created by the **Record Keeper First Update Function**.[4]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with populated provenance attributes is available.

Main Flow

1. An Actor becomes aware the **RECORD KEEPER** attributes of a **MANAGED RECORD** need to be updated for the first time since the provenance of the **MANAGED RECORD** was established.
2. Access **Record_Keeper_Current** attribute.
3. Populate **Record_Keeper_Previous(n)** attribute with data from the **Record_Keeper_Current** attribute.
4. Populate **Record_Keeper_Current** attribute.
5. Access **Record_Keeper_Current_Date** attribute

[2] This attribute directly supports 36 CFR §1222.50 (b)(3) which requires the agency to formally specify which officials are responsible for maintenance and disposition of electronic records and which computer systems are used for recordkeeping.
[3] (n) indicates the first instance of change in an attribute where the data are required to be kept.
[4] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

6. Populate **Record_Keeper_Previous_Date(n)** attribute with data from **Record_Keeper_Current_Date** attribute.
7. Populate **Record_Keeper_Current_Date** attribute.
8. A **MANAGED RECORD's RECORD KEEPER** attributes have been updated.
9. Make available all data populating all attributes of the **Record Keeper First Update Function**.[5]

Alternate Flow(s) - None

Sub Flow(s) - None

Glossary

1. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
2. Provenance – Ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record's active use for business purposes. Provenance establishes the person or system and the agency in which the record was created or received, the record keeper responsible for the record custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of subsequent custodians(s), if applicable.
3. Record Keeper – the administrative entity, unit, office, or person responsible for the custody and ongoing management of the records during their active business use.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C3I), "The Department

[5] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

of Defense Records Management Function and Information Models," October 6, 1995
5. InterPARES, "Findings on the Preservation of Authentic Electronic records," Final Report to the National Historical Publications and Records Commission, September 2002
6. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "provenance."
7. International Standards Organization, ISO 15489-1: Information and Documentation - Records Management - Part 1: General, September 15, 2001, 7.2.1
8. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
9. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
10. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
11. 44 U.S.C. § 3101 Records management by agency heads; general duties
12. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
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19. 36 CFR §1220.36 Maintenance and use of records (a)
20. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
21. 36 CFR §1222.12 Defining Federal records
22. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
23. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
24. 36 CFR §1234.24 Standards for managing electronic mail records

PROVENANCE SERVICE – RECORD KEEPER SUBSEQUENT UPDATE FUNCTION

Purpose

The **Record Keeper Subsequent Update Function** continues the process of updating attributes of a **MANAGED RECORD** upon the second instance of change in **RECORD KEEPER** after the initial **RECORD KEEPER** was established. This service provides continual evidence of the context of use of the **MANAGED RECORD** and facilitates its management. This service provides the concept that after **RECORD KEEPER** has been established initially (**Provenance Establish Function**) and the first update of **RECORD KEEPER** has occurred (**Record Keeper First Update Function**) there is the capability to document evidence of the change in **RECORD KEEPER** throughout the **MANAGED RECORD**'s active use for business purposes.

Record provenance is not limited to information about the record when it was created or received. Record provenance may also include information about the record during its subsequent use, maintenance, and preservation until it is no longer needed for business purposes. The **Record Keeper Subsequent Update Function** supports the records management activity of updating data contained in provenance attributes to ensure they are current and accurate while simultaneously keeping all previous instances of provenance attributes through the life of the record.

The **Record Keeper Subsequent Update Function** supports the concept of capturing evidence of provenance across time. This function supports the business requirement that an individual, position, or office be identified as the record keeper.

Functional Requirement(s)

- (PS-RKSUF-1) The **Provenance Service** shall provide the capability upon the change of the **Record_Keeper_Previous(n)**[1] attribute to populate Record_Keeper_Previous (n+1) attribute with data from the **Record_Keeper_Previous(n)** attribute producing a populated **Record_Keeper_Previous(n+1)**[2] attribute.
- (PS-RKSUF-2) The **Provenance Service** shall provide the capability upon the change in the **Record_Keeper_Previous_Date(n)** attribute to populate a **Record_Keeper_Previous_Date(n+1)** attribute with data from the **Record_Keeper_Previous_Date(n)** attribute producing a populated **Record_Keeper_Previous_Date(n+1)** attribute.

[1] (n) indicates the first instance of change in an attribute where the data are required to be kept.
[2] (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept.

- (PS-RKSUF-3) The **Provenance Service** shall provide the capability to make available for output all data populating the attributes created the **Record Keeper Subsequent Update Function**.[3]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with populated record keeper attributes is available.

Main Flow

1. An Actor becomes aware the record keeper attributes of a **MANAGED RECORD** need to be updated subsequent to the first update of the **MANAGED RECORD's RECORD KEEPER** attributes.
2. Access **Record_Keeper_Previous(n)** attribute.
3. Populate **Record_Keeper_Previous(n+1)** attribute.
4. Access **Record_Keeper_Previous_Date(n)** attribute.
5. Populate **Record_Keeper_Previous_Date(n+1)** attribute.
6. A **MANAGED RECORD**'s **RECORD KEEPER** attributes have been updated.
7. Make available all data populating all attributes of the **Record Keeper Subsequent Update Function**.[4]

Alternate Flow(s) - None

Sub Flow(s) - None

Glossary

1. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
2. Provenance – Ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record's active use for business purposes. Provenance establishes the person or system and the agency in which the record was created or received, the record keeper responsible for the

[3] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[4] Ibid.

record custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of subsequent custodians(s), if applicable.

3. Record Keeper – The administrative entity, unit, office, or person responsible for the custody and ongoing management of the records during their active business use.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C3I), "The Department of Defense Records Management Function and Information Models," October 6, 1995
5. InterPARES, "Findings on the Preservation of Authentic Electronic records," Final Report to the National Historical Publications and Records Commission, September 2002
6. Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "provenance."
7. International Standards Organization, ISO 15489-1: Information and Documentation - Records Management - Part 1: General, September 15, 2001, 7.2.1
8. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
9. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
10. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
11. 44 U.S.C. § 3101 Records management by agency heads; general duties
12. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
15. 44 U.S.C. § 3301 Definition of records
16. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency

17. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
18. 36 CFR §1220.34 Creation of records
19. 36 CFR §1220.36 Maintenance and use of records (a)
20. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
21. 36 CFR §1222.12 Defining Federal records
22. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
23. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
24. 36 CFR §1234.24 Standards for managing electronic mail records

CATEGORY SERVICE – CATEGORY ESTABLISH FUNCTION

Purpose

The **Category Establish Function** identifies the connection between one **MANAGED RECORD** that is evidence of a business act, transaction, or process, to one or more previous and subsequent **MANAGED RECORD**s resulting from the same type business act, transaction, or process within a specific time period.

The connection between like records is designated within this service by assignment of a record category – this implements the concept of archival bond. The accumulation of records within a category set provides evidence of the conduct of a business process or activity over time.

This service enables agencies to implement record keeping according to the specific rules and requirements within their business. It allows the keeping of like records together in meaningful groupings or aggregations, whether by type of document, transaction, service, subject, code, etc. The exact mode of designating such groupings, whether by categorization schema, file plan, etc., is determined by business requirements. How the intrinsic elements of the record itself are made up, such as the individual documents within a case file, is not of concern to the **Category Establish Function**. Categorization implements the archival bond between the record and like records within a larger whole or set. Documents could be added to and removed from a case file but that would not affect the bond between the record and the other records of the grouping or set. (Requirements to link intrinsic elements within a record, as in the formation of a case file, are addressed by the **Case File Service** functions).

The **Category Establish Function** supports an agency's ability to implement "store once use many times"[1] within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category (making additional discrete **MANAGED RECORD**s) each with its own provenance, disposition, etc. and requiring each instance be managed separately.

Functional Requirement(s)

- (CS-CEF-1) The **Category Service** shall provide the capability to populate a **Record_Category_Current** attribute producing a populated **Record_Category_Current** attribute.
- (CS-CEF-2) The **Category Service** shall provide the capability to populate a **Record_Category_Current_Date** attribute using the **SYSTEM DATE** when a **Record_Category_Current** attribute is populated producing a populated **Record_Category_Current_Date** attribute.

[1] Caution should be taken when implementing this concept with records containing control annotations such as security classification, Privacy, FOUO, etc.

- (CS-CEF-3) The **Category Service** shall provide the capability to make available for output all data populating the attributes created by the **Category Establish Function**.[2]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** is available.
2. A **CATEGORIZATION SCHEMA** is available.

Main Flow

1. An Actor becomes aware a **MANAGED RECORD** is available to be categorized.
2. Populate the **Record_Category_Current** attribute.
3. Populate the **Record_Category_Current_Date** attribute.
4. A **MANAGED RECORD** with populated **Category Service** attributes is available to be managed.
5. Make available all data populating all attributes of the **Category Establish Function**.[3]

Sub Flow

Support Single Record Multiple Record Categories

1. If at 1 in Main Flow more than one Record Category is to be assigned to a record then:
2. Populate the **Record_Category_Current(b…∞)**.[4]
3. Populate the **Record_Category_Current_Date(b…∞)**.
4. Repeat Sub Flow: Support Single Record Multiple Record Categories until all record categories are assigned to the record.
5. Return to 4 Main Flow.

[2] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records
[3] Ibid.
[4] Where "a" was the first instance in the Main Flow and (b…∞) in the Sub Flow indicates there is no limit to the number of case files a "part" can be associated.

Alternate Flow(s) – None

Glossary

1. Archival bond – The interrelationships between a record and other records resulting from the same business act, transaction, or process, to one or more previous and subsequent records resulting from the same type business act, transaction, or process within a specific time period. Usually accomplished by associating the records to each other through a record category.
2. Categorization Schema – Any scheme developed or used by an agency to organize records. This may include a diagrammatic representation or outline of the descriptive classification assigned to records or records disposition codes.
3. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
4. Record Category – A descriptive term that identifies the relationships between a record and other records resulting from the same business activity; one way of implementing archival bond.
5. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Services Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Service-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Service Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2203 Management and custody of Presidential records (b)
7. 44 U.S.C. § 2207 Vice-Presidential records
8. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
9. 44 U.S.C. § 3101 Records management by agency heads; general duties
10. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
11. 44 U.S.C. § 3104 Certifications and determinations on transferred records

12. 44 U.S.C. § 3106 Unlawful removal, destruction of records
13. 44 U.S.C. § 3301 Definition of records
14. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
15. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
16. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: § 1220.30 Authority
17. 36 CFR § 1220.36 Maintenance and use of records(a)
18. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General § 1222.10 Authority
19. 36 CFR § 1222.12 Defining Federal records
20. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements § 1222.50 Records maintenance and storage
21. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
22. 36 CFR Part 1234 --- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
23. 36 CFR § 1234.24 Standards for managing electronic mail records
24. 36 CFR § 1234.28 Security of electronic records
25. 36 CFR Part 1236 – Management of Vital Records -- §1236.20 Vital records program objectives

CATEGORY SERVICE – CATEGORY FIRST UPDATE FUNCTION

Purpose

The **Category First Update Function** updates attributes showing the connection between a **MANAGED RECORD** that is evidence of a business act, transaction, or process, to one or more previous and subsequent **MANAGED RECORD**s resulting from the same type business act, transaction, or process within a specific time period.

The connection between like records is designated within this service by assignment of a record category– this implements the concept of archival bond. The accumulation of records within a category set provides evidence of the conduct of a business process or activity over time.

This service enables agencies to update attributes that implement record keeping according to the specific rules and requirements within their business. It allows the keeping of like records together in meaningful groupings or aggregations, whether by type of document, transaction, service, subject, code, etc. The exact mode of designating such groupings, whether by categorization schema, file plan, etc., is determined by business requirements. How the intrinsic elements of the record itself are made up, such as the individual documents within a case file, is not of concern to the **Category First Update Function**. Categorization implements the archival bond between the record and like records within a larger whole or set. Documents could be added to and removed from a case file but that would not affect the bond between the record unit and the other record units of the grouping or set. (Requirements to link intrinsic elements within a record, as in the formation of a case file, are addressed by the **Case File Service** functions).

The **Category First Update Function** continues an agency's ability to implement "store once use many times"[1] within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category (making additional discrete **MANAGED RECORD**s) each with its own provenance, disposition, etc. and requiring each instance be managed separately.

Functional Requirements

- (CS-CFUF-1) The **Category Service** shall provide the capability upon the change of data in the **Record_Category_Current** attribute to populate a **Record_Category_Previous(n)**[2] attribute using the data being changed in the **Record_Category_Current** attribute producing a populated **Record_Category_Previous(n)** attribute.

[1] Caution should be taken when implementing this concept with records containing control annotations such as security classification, Privacy, FOUO, etc.
[2] (n) indicates the first instance of change in an attribute where the data are required to be kept.

- (CS-CFUF-2) The **Category Service** shall provide the capability upon the change of data in the **Record_Category_Current_Date** attribute to populate a **Record_Category_Previous_Date(n)** attribute using the data being changed in the **Record_Category_Current_Date** attribute producing a populated **Record_Category_Previous_Date(n)** attribute.
- (CS-CFUF-3) The **Category Service** shall provide the capability to make available for output all data populating the attributes created in the **Category First Update Function**.[3]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **CATEGORIZATION SCHEMA** is available.
2. A **MANAGED RECORD** with populated **RECORD CATEGORY** attributes is available.

Main Flow

1. An Actor becomes aware the category attributes pertaining to a **MANAGED RECORD** need to be updated for the first time since the category of the **MANAGED RECORD** was established.
2. Populate the **Record_Category_Previous(n)**[4] attribute.
3. Populate the **Record_Category_Previous_Date(n)** attribute.
4. A **MANAGED RECORD**'s category attributes have been updated.
5. Make available all data populating all attributes of the **Category First Update Function**.[5]

Sub Flow(s) - None

Alternate Flow(s) - None

[3] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records
[4] Since a record may be associated to more than one record category it is only necessary to annotate the single instance of category update that can be repeated as many times as necessary under the business rules for the one or many categories assigned to a record.
[5] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Glossary

1. Archival Bond – The interrelationships between a record and other records resulting from the same business act, transaction, or process, to one or more previous and subsequent records resulting from the same type business act, transaction, or process within a specific time period. Usually accomplished by associating the records to each other through a record category.
2. Categorization Schema – Any scheme developed or used by an agency to organize records. This may include a diagrammatic representation or outline of the descriptive classification assigned to records or records disposition codes.
3. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
4. Record Category – A descriptive term that identifies the relationships between a record and other records resulting from the same business activity; one way of implementing archival bond.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3101 Records management by agency heads; general duties
8. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
9. 44 U.S.C. § 3106 Unlawful removal, destruction of records
10. 44 U.S.C. § 3107 Authority of Comptroller General
11. 44 U.S.C. § 3301 Definition of records
12. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
13. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)

14. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
15. 36 CFR §1220.34 Creation of records
16. 36 CFR §1220.36 Maintenance and use of records (a)
17. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
18. 36 CFR §1222.12 Defining Federal records
19. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
20. 36 CFR Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
21. 36 CFR 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
22. 36 CFR §1234.24 Standards for managing electronic mail records
23. 36 CFR Part 1236 -- Management of Vital Records -- §1236.20 Vital records program objectives

CATEGORY SERVICE – CATEGORY SUBSEQUENT UPDATE FUNCTION

Purpose

The **Category Subsequent Update Function** continues the process of updating the connection between one **MANAGED RECORD** that is evidence of a business act, transaction, or process, to one or more previous and subsequent **MANAGED RECORD**s resulting from the same type business act, transaction, or process within a specific time period.

The connection between like records is designated within this service by assignment of a record category. The accumulation of records within a category set provides evidence of the conduct of a business process or activity over time.

This service enables agencies to continue to update attributes that implement record keeping according to the specific rules and requirements within their business. It allows the keeping of like records together in meaningful groupings or aggregations, whether by type of document, transaction, service, subject, code, etc. The exact mode of designating such groupings, whether by categorization schema, file plan, etc., is determined by business requirements. How the intrinsic elements of the record itself are made up, such as the individual documents within a case file, is not of concern to the Category Subsequent Update Function. Categorization implements the archival bond between the record and like records within a larger whole or set. Documents could be added to and removed from a case file but that would not affect the bond between the record unit and the other record units of the grouping or set. (Requirements to link intrinsic elements within a record, as in the formation of a case file, are addressed by the **Case File Service** functions).

The **Category Subsequent Update Function** continues an agency's ability to implement "store once use many times"[1] within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category (making additional discrete **MANAGED RECORD**s) each with its own provenance, disposition, etc. and requiring each instance be managed separately.

[1] Caution should be taken when implementing this concept with records containing control annotations such as security classification, Privacy, FOUO, etc.

Functional Requirements

- (CS-CSUF-1) The **Category Service** shall provide the capability upon the change of data in the **Record_Category_Previous(n)**[2] attribute to populate a **Record_Category_Previous(n+1)**[3] attribute using the data being changed in the **Record_Category_Previous(n)** attribute producing a populated **Record_Category_Previous(n+1)** attribute.
- (CS-CSUF-2) The **Category Service** shall provide the capability upon the change of data in the **Record_Category_Previous_Date(n)** attribute to populate a **Record_Category_Previous_Date(n+1)** attribute using the data being changed in the **Record_Category_Previous_Date(n)** attribute producing a populated **Record_Category_Previous_Date(n+1)** attribute.
- (CS-CSUF-3) The **Category Service** shall provide the capability to make available for output all data populating the attributes created in the **Category Subsequent Update Function**.[4]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **CATEGORIZATION SCHEMA** is available.
2. A **MANAGED RECORD** with populated **RECORD CATEGORY** attributes is available.

Main Flow

1. An Actor becomes aware the category attributes of a **MANAGED RECORD** need to be updated subsequent to the first update of the **MANAGED RECORD**'s category attributes.
2. Populate the **Record_Category_Previous(n+1)**[5] attribute.
3. Populate the **Record_Category_Previous_Date(n+1)** attribute.

[2] (n) indicates the first instance of change in an attribute where the data are required to be kept.
[3] (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept.
[4] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[5] Since a record may be associated to more than one record category it is only necessary to annotate the single instance of category update that can be repeated as many times as necessary under the business rules for the one or many categories assigned to a record.

4. A **MANAGED RECORD**'s category attributes have been updated.
5. Make available all data populating all attributes of the **Category Subsequent Update Function**.[6]

Sub Flow(s) - None

Alternate Flow(s) - None

Glossary

1. Categorization Schema – Any scheme developed or used by an agency to organize records. This may include a diagrammatic representation or outline of the descriptive classification assigned to records or records disposition codes.
2. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3101 Records management by agency heads; general duties
8. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
9. 44 U.S.C. § 3106 Unlawful removal, destruction of records
10. 44 U.S.C. § 3107 Authority of Comptroller General
11. 44 U.S.C. § 3301 Definition of records
12. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency

[6] This supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records

13. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
14. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
15. 36 CFR §1220.34 Creation of records
16. 36 CFR §1220.36 Maintenance and use of records (a)
17. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
18. 36 CFR §1222.12 Defining Federal records
19. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
20. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
21. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
22. 36 CFR §1234.24 Standards for managing electronic mail records
23. 36 CFR Part 1236 -- Management of Vital Records -- §1236.20 Vital records program objectives

AUTHENTICITY SERVICE – AUTHENTICITY ESTABLISH FUNCTION

Purpose

The **Authenticity Establish Function** creates an **AUTHENTICATED RECORD** providing the base or benchmark through which all subsequent validations of authenticity are made throughout the entire life cycle of the **MANAGED RECORD**. A new base or benchmark can be introduced throughout the life cycle of the **MANAGED RECORD**, thereby allowing for new authentication methods to be applied to the **MANAGED RECORD**.

A record is considered authentic when it can be proven "that it is what it purports to be and is free from tampering or correction"[1] – in other words, that it retains its original identity as to when and by whom it was created or sent. The capture, creation and maintenance of provenance attributes, without alteration over time, advance a presumption of authenticity. The Authenticity service is meant to provide a check of these or other characteristics from which indicators of persistent integrity can demonstrate authenticity.

Functional Requirements

- (AS-AEF-1) The **Authenticity Service** shall provide the capability to populate an **Authenticity_Base** attribute producing a populated **Authenticity_Base** attribute.
- (AS-AEF-2) The **Authenticity Service** shall provide the capability to populate an **Authenticity_Base_Date** using the **SYSTEM DATE** attribute producing a populated **Authenticity_Base_Date** attribute.
- (AS-AEF-3) The **Authenticity Service** shall provide the capability to make available for output all data populating the attributes created the **Authenticity Establish Function**.[2]

Precondition(s)

1. A **MANAGED RECORD** is available.

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

[1] InterPARES, "Findings on the Preservation of Authentic Electronic records," p. 12.
[2] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Main Flow

1. An Actor becomes aware a **MANAGED RECORD** is available to be authenticated.
2. Populate the **Authenticy_Base** attribute.
3. Populate the **Authenticity_Base_Date** attribute.
4. A **MANAGED RECORD** populated **Authenticity Service** attributes is available to be managed.
5. Make available all data populating all attributes of the **Authenticity Establish Function**.[3]

Alternate Flow(s) - None

Sub Flow(s) - None

Glossary

1. Authenticated Record – A record with a populated authenticity indicator attribute that provides the benchmark for subsequent validation of authenticity during the entire record life cycle.
2. Benchmark – A standard by which something can be judged or measured.
3. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
4. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. InterPARES, "Findings on the Preservation of Authentic Electronic records," Final Report to the National Historical Publications and Records Commission, September 2002, pp. 12-19, *passim*.

[3] Ibid.

5. International Standards Organization, ISO 15489-1: Information and Documentation - Records Management - Part 1: General, September 15, 2001, *s.v.*, "authenticity," 7.2.2
6. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
7. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
8. 44 U.S.C. § 2203 Management and custody of Presidential records (a)
9. 44 U.S.C. § 2207 Vice-Presidential records
10. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
11. 44 U.S.C. § 3101 Records management by agency heads; general duties
12. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
13. 44 U.S.C. § 3104 Certifications and determinations on transferred records
14. 44 U.S.C. § 3105. Safeguards
15. 44 U.S.C. § 3106 Unlawful removal, destruction of records
16. 44 U.S.C. § 3107 Authority of Comptroller General
17. 44 U.S.C. § 3301 Definition of records
18. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
19. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
20. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
21. 36 CFR §1220.36 Maintenance and use of records (a)
22. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
23. 36 CFR §1222.12 Defining Federal records
24. 36 CFR Part 1222 -Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
25. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.24 Standards for managing electronic mail records
26. 36 CFR §1234.28 Security of electronic records

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AUTHENTICITY ESTABLISH FUNCTION

AUTHENTICITY SERVICE – AUTHENTICITY VALIDATE FUNCTION

Purpose

The **Authenticity Validate Function** verifies current authenticity of a **MANAGED RECORD** using the same method that set the base or benchmark of authenticity. This function allows activities used to establish the authenticity to be repeated or a new method to be introduced when authentication of the **MANAGED RECORD** is required.

A record is considered authentic when it can be proven "that it is what it purports to be and is free from tampering or correction"[1] – in other words, that it retains its original identity as to when and by whom it was created or sent. The capture, creation and maintenance of provenance attributes, without alteration over time, advance a presumption of authenticity. The Authenticity service is meant to provide a check of these or other characteristics from which indicators of persistent integrity can demonstrate authenticity.

Functional Requirements

- (AS-AVF-1) The **Authenticity Service** shall provide the capability to populate an **Authenticity_Current** attribute when a record is accessed producing a populated **Authenticity_Current** attribute.
- (AS-AVF-2) The **Authenticity Service** shall provide the capability to populate an **Authenticity_Current** attribute using the same methodology used to populate the **Authenticity_Base** attribute producing a populated **Authenticity_Current** attribute.
- (AS-AVF-3) The **Authenticity Service** shall provide the capability to populate an **Authenticity_Current_Date** attribute using the **SYSTEM DATE** producing a populated **Authenticity_Current_Date** attribute.
- (AS-AVF-4) The **Authenticity Service** shall provide the capability to populate an **Authenticity_Validation** attribute by comparing the data values in the populated **Authenticity_Base** attribute to the **Authenticity_Current** attribute producing a populated **Authenticity_Validation** attribute.
- (AS-AVF-5) The **Authenticity Service** shall provide the capability to populate the **Authenticity_Validation** attribute with the data only "same" or "not same"[2] by comparing the data values in the populated **Authenticity_Base** attribute to the **Authenticity_Current** attribute producing a populated **Authenticity_Validation** attribute.

[1] InterPARES, "Findings on the Preservation of Authentic Electronic records," p. 12.
[2] "same" "not same" are provided as examples – they are not provided as the solution. Other examples of solutions that meet both the literal and conceptual presentation of the requirement are "1" "0" or "1" "null."

- (AS-AVF-6) The **Authenticity Service** shall provide the capability to make available for output all data populating the attributes created the **Authenticity Validate Function**.[3]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** that has been authenticated is available.

Main Flow

1. An Actor becomes aware the authenticity of a **MANAGED RECORD** needs to be validated.
2. Access **Authenticity_Set** attribute data.
3. Populate the **Authenticity_Current** attribute.
4. Compare **Authenticity_ Set** attribute data to **Authenticity_ Current** attribute data.
5. Populate the **Authenticity_Validation** attribute.
6. The **MANAGED RECORD**'s authentication has been validated.
7. Make available all data populating all attributes of the **Authenticity Validate Function**.[4]

Sub Flow(s) – None

Alternate Flow(s) – None

Glossary

1. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
2. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

[3] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[4] Ibid.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. InterPARES, "Findings on the Preservation of Authentic Electronic records," Final Report to the National Historical Publications and Records Commission, September 2002, pp. 12-19, *passim*
5. International Standards Organization, ISO 15489-1: Information and Documentation - Records Management - Part 1: General, September 15, 2001, *s.v.*, "authenticity," 7.2.2
6. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
7. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
8. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
9. 44 U.S.C. § 3101 Records management by agency heads; general duties
10. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
11. 44 U.S.C. § 3104 Certifications and determinations on transferred records
12. 44 U.S.C. § 3106 Unlawful removal, destruction of records
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
15. 44 U.S.C. § 3301 Definition of records
16. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
17. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
18. 36 CFR §1220.36 Maintenance and use of records(a)
19. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
20. 36 CFR §1222.12 Defining Federal records
21. 36 CFR Part 1222 -Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
22. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.24 Standards for managing electronic mail records

23. 36 CFR §1234.28 Security of electronic records

CASE FILE SERVICE – CASE FILE RECORD CAPTURE FUNCTION

Purpose

The purpose of the **CASE FILE SERVICE** is to provide for the capture of case file records, collect records management information about the management of the case file over its life cycle, and to allow for the association and disassociation of case file parts[1] of the case file record during its life cycle.

The **Case File Record Capture Function** populates records management attributes for a **DECLARED CASE FILE RECORD** that provide evidence of a **RECORD CREATOR** and the date it was set aside,[2] and ensures it is uniquely identified in the electronic environment – creating a **CAPTURED CASE FILE RECORD** available to be managed.

The reliability of a record and the ability to manage it over time depend heavily upon capturing evidence about the legitimate user, application or system procedure setting aside the record in the electronic environment at its point of creation and carrying that evidence forward with the record. A record is reliable when created in an electronic environment by a legitimate user, application, or system procedure in accordance with legitimate business rules.[3]

As defined here, the CASE FILE SERVICE allows for the management of several types of aggregating record. Experts from different business domains have different conceptions of an aggregating record, e.g. case file, folder, dossier, project file, transactional file, subject file. The CASE FILE SERVICE allows for the implementation of business rules aligned with these varying conceptions of the aggregating record. What one calls it is less important than the characteristics and behaviors it exhibits. Because of the level of abstraction at which the service is documented, there is no need to attempt defining a complete set of aggregating records or to normalize their definitions. Such definitions are unnecessary for the documentation of functional requirements that can carry out business rules related to an aggregating record at the level of abstraction for these functions. However, business owners at implementation might find it necessary to specify in greater detail the unique characteristics of a specific aggregating record type in accordance with their business rules.

[1] Case File Part is used as a neutral term without engaging in the debate whether items in a Case File are considered documents or records.
[2] A concept in archival theory and Federal law whereby a person (or a system) determines that the evidence of one or more organization, function, policy, decision, procedure, transaction, or activity is complete enough to be maintained and managed as a record, either for the conduct of current business or for future reference.
[3]Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "reliability;" InterPARES, "Findings on the Preservation of Authentic Electronic records," pp. 14-19; ISO 15489-2, 4.3.2.

Among the core characteristics of a case file are the:

- Aggregation of individual parts.
- Actions on any one part during active use in accordance with business rules.
- Management of all parts as a single record.
- Disposition of the whole case file when business rules state the activities in the first two core characteristics are finished and the case file be set aside as evidence of the complete business requirement.

A **MANAGED CASE FILE RECORD** at its point of final aggregation[4] will usually be managed as a single record but may – by business policies or procedures – have different dispositions for each record or part within the **MANAGED CASE FILE RECORD**.

Functional Requirement(s)

- (CFS-CFRCF-1) The **Record Capture Service** shall provide the capability to populate the **Record_Creator_Identifier**[5] attribute when a **DECLARED CASE FILE RECORD** is set aside producing a populated **Record_Creator_Identifier** attribute.
- (CFS-CFRCF-2) The **Case File Service** shall provide the capability to populate the **Case_File_Record_Identifier** attribute when a **DECLARED CASE FILE RECORD** is set aside[6] producing a populated **Case_File_Record_Identifier** attribute.
- (CFS-CFRCF-3) The **Case File Service** shall provide the capability to populate the **Case_File_Record_Capture_Date** attribute using the **SYSTEM DATE** when a **DECLARED CASE FILE RECORD** is set aside producing a populated **Case_File_Record_Capture_Date** attribute.
- (CFS-CFRCF-4) The **Case File Service** shall provide the capability to populate a **Case_File_Record_Description**[7] attribute when a **Case_File_Record_Identifier** attribute is populated producing a populated **Case_File_Record_Description** attribute.

[4] When business rules indicate no more Case File Parts are to be placed in, taken out, or annotated, the case file is then complete and is subject to its disposition as a record.
[5] This attribute supports capturing reliability by providing contemporaneous evidence of the person, application, or system procedure setting aside the record in accordance with the business rules.
[6] A concept in archival theory and Federal law whereby a person (or a system) determines that the evidence of one or more organization, function, policy, decision, procedure, transaction, or activity is complete enough to be maintained and managed as a record, either for the conduct of current business or for future reference.
[7] This requirement supports the business need to provide additional information necessary to manage a Case File.

- (CFS-CFRCF-5) The **Case File Service** shall provide the capability to make available for output all data populating the attributes created by the **Case File Record Capture Function**.[8]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **DELCARED CASE FILE RECORD** is available.

Main Flow

1. An Actor is aware a **DECLARED CASE FILE RECORD** is available.
2. Populate the **Case_File_Record_Identifier** attribute.
3. Populate the **Case_File_Record_Capture_Date** attribute.
4. Populate the **Case_File_Record_Description** attribute.
5. A **MANAGED RECORD** with populated **Case File Service** attributes is available to be managed.
6. Make available all data populating all attributes of the **Case File Record Capture Function**.[9]

Sub Flow(s) – None

Alternate Flow(s) – None

Glossary

1. Captured Case File Record – A uniquely identified declared record carrying the date it was initially controlled as a record within an electronic environment along with the record creator identifier.
2. Case File – An aggregating record composed of one or more parts, managed as a single record relating to a specific action, transaction, event, person, place, project, investigation or other subject.[10]

[8] This requirement supports printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records
[9] Ibid.
[10] Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "case file" – "Syn: subject file; transactional file DF: dossier. Case files are sometimes referred to as a project file or, in Canada, a

3. Declared Case File Record –An electronic document or object that is considered by the business owner to evidence one or more organization, function, policy, decision, procedure, transaction, or activity completely enough to be maintained and managed as a record, either for the conduct of current business or for future reference.[11]
4. Managed Case File Record – A sub class of Managed Record that has been set aside by a business, been subject to records management activities, and where individual case file parts are aggregated according to business rules during its active business use.
5. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
6. Record Creator – An individual, application, or system procedure in an electronic environment specifically designed in accordance with the business rules to carry out the legal authorities of the organization to which the individual, application, or system procedure belongs.
7. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

Reference(s)

1. http://www.dictionary.com
2. http://www.webopedia.com
3. Design Criteria Standard for Electronic records Management Software Applications, June 19, 2002 – DoD 5015.2–STD (Standard)
4. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
5. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
6. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
7. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
8. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
9. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)

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transactional file. Also called dossiers, although that term has a more general sense of file. They are often found in the context of social services agencies (public and private), and Congressional papers."

[11] Meant to be synonymous with Declare Record in Capture Record Service.

10. 44 U.S.C. § 3101 Records management by agency heads; general duties
11. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
12. 44 U.S.C. § 3104 Certifications and determinations on transferred records
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
15. 44 U.S.C. § 3301 Definition of records
16. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
17. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
18. 36 CFR §1220.34 Creation of records
19. 36 CFR §1220.36 Maintenance and use of records (a)
20. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
21. 36 CFR §1222.12 Defining Federal records
22. 36 CFR Part 1222 -Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
23. 36 CFR §1234.24 Standards for managing electronic mail records

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CASE FILE RECORD CAPTURE FUNCTION

CASE FILE SERVICE – CASE FILE PART ASSOCIATE FUNCTION

Purpose

The **Case File Part Associate Function** provides for uniquely identifying relationships between a **MANAGED CASE FILE RECORD** and a **CASE FILE PART**.[1] A **MANAGED CASE FILE RECORD** is usually managed as a single record but may – by business policies or procedures – have different dispositions for each **CASE FILE PART** within the **MANAGED CASE FILE RECORD**. A **MANAGED CASE FILE RECORD** at its point of final aggregation[2] will usually be managed as a single record. The **Case File Part Associate Function** supports the concept of associating a single **CASE FILE PART** to one or more **MANAGED CASE FILE RECORD**.

The **Case File Part Associate Function** provides the ability to link items related because of a business act, transaction, case, investigation, etc. to form a **MANAGED CASE FILE RECORD**.[3] The **Case File Part Associate Function** supports the creation of a **MANAGED CASE FILE RECORD** – the aggregation shows evidence of activities related to a common business activity usually taking place over time. Examples would be personnel file, court case file, medical record, dental record, training record, etc.

Functional Requirement(s)

- (CFS-CFPAF-1) The **Case File Service** shall provide the capability to populate a **Case_File_Part_Associate_Identifier(n)**[4] attribute creating a unique relationship between a **CASE FILE PART** and the **MANAGED CASE FILE RECORD** producing a populated **Case_File_Part_Associate_Identifier(n)** attribute.
- (CFS-CFPAF-2) The **Case File Service** shall provide the capability to populate a **Case_File_Part_Associate_Date(n)** attribute using the **SYSTEM DATE** when a **Case_File_Part_Associate_Identifier(n)** attribute is populated producing a populated **Case_File_Part_Associate_Date(n)** attribute.
- (CFS-CFPAF-3) The **Case File Service** shall provide the capability to de-populate a **Case_File_Part_Associate_Identifier(n)** attribute creating a unique relationship between a **CASE FILE PART** and the **MANAGED CASE FILE**

[1] Case File Part is used as a neutral term without engaging in the debate whether items in a Case File are considered documents or records.
[2] When business rules indicate no more Case File Parts are to be placed in, taken out, or annotated, the case file is then complete and is subject to its disposition as a record.
[3] Not addressed here is the debate whether the items in a case file are to be considered documents or records. The function supports the business activity of handling the case file with all its "parts" under one disposition and if appropriate and in accordance with business rules allows dispositions to be applied to discrete items in the case file.
[4] (n) indicates the first instance of an attribute.

RECORD producing a de-populated **Case_File_Part_Associate_Identifier(n)** attribute.

- (CFS-CFPAF-4) The **Case File Service** shall provide the capability to de-populate a **Case_File_Part_Associate_Date(n)** attribute using the **SYSTEM DATE** when a **Case_File_Part_Associate_Identifier(n)** attribute is de-populated producing a de-populated **Case_File_Part_Associate_Date(n)** attribute.
- (CFS-CFPAF-5) The **Case File Service** shall provide the capability to make a **CASE FILE PART** and its attributes available for destruction when the **Case_File_Part_Associate_Identifer(n)** and the **Case_File_Part_Associate_Date(n)** attributes of the **CASE FILE PART** have been de-populated.
- (CFS-CFPAF-6) The **Case File Service** shall provide the capability to populate a **Case_File_Part_Associate_Identifier(n+1)** [5] attribute creating a unique relationship between a **CASE FILE PART** and the **MANAGED CASE FILE RECORD** producing a populated **Case_File_Part_Associate_Identifier(n+1)** attribute.
- (CFS-CFPAF-7) The **Case File Service** shall provide the capability to populate a **Case_File_Part_Associate_Date(n+1)** attribute using the **SYSTEM DATE** when a **Case_File_Part_Associate_Identifier(n+1)** attribute is populated producing a populated **Case_File_Part_Associate_Date(n+1)** attribute.
- (CFS-CFPAF-8) The **Case File Service** shall provide the capability to de-populate a **Case_File_Part_Associate_Identifier(n+1)** attribute creating a unique relationship between a **CASE FILE PART** and the Case File Record producing a de-populated **Case_File_Part_Associate_Identifier(n+1)** attribute.
- (CFS-CFPAF-9) The **Case File Service** shall provide the capability to de-populate a **Case_File_Part_Associate_Date(n+1)** attribute using the **SYSTEM DATE** when a **Case_File_Part_Associate_Identifier(n+1)** attribute is de-populated producing a de-populated **Case_File_Part_Associate_Date(n+1)** attribute.
- (CFS-CFPAF-10) The **Case File Service** shall provide the capability to make a Case File Part and its attributes available for destruction when the **Case_File_Part_Associate_Identifer(n+1)** and the **Case_File_Part_Associate_Date(n+1)** attributes of the Case File Part have been de-populated.

[5] (n+1) indicates subsequent instances of an attribute after (n) has occurred.

- (CFS-CFPAF-11) The **Case File Service** shall provide the capability to make available for output all data populating the attributes created by the **Case File Part Associate Function**.[6]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED CASE FILE RECORD** with populated **Case File Service** attributes is available.

Main Flow

1. An Actor becomes aware a **Case_File_Part_Associate_Identifier(n)** needs to be created.
2. Populate a **Case_File_Part_Associate_Identifier(n)** attribute.
3. Populate a **Case_File_Part_Associate_Date(n)** attribute.
4. A **MANAGED RECORD** with populated **Case File Service** part associate attributes is available to be managed.
5. Make available all data populating all attributes of the **Case File Part Associate Function**.[7]

Sub Flow(s) – None

Alternate Flow 1: Support Multiple Instances of Case File Part Associate.

1. If at 1 Main Flow (n) first instance has occurred, then:
2. Populate **Case_File_Part_Associate_Identifier(n+1)** attribute.
3. Populate **Case_File_Part_Associate_Date(n+1)** attribute.
4. Repeat 2 and 3 Alternate Flow: Support Multiple Instances of **CASE FILE PART** associate until all required associations are complete.
5. Return to 4 Main Flow.

[6] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[7] Ibid.

Alternate Flow 2: Disassociate First (n) Case File Part

1. If at Main Flow 1: A **CASE FILE PART** (n) is not being created but instead a **CASE FILE PART** (n) needs to be de-associated from the **MANAGED CASE FILE RECORD**.
2. De-Populate the **Case_File_Part_Associate_Identifier(n)** attribute for the **CASE FILE PART**.
3. De-Populate the **Case_File_Part_Associate_Date(n)** attribute for the **CASE FILE PART**.
4. Make the **CASE FILE PART** and its attributes available for disposition.[8]
5. Return to 4 Main Flow.

Alternate Flow 3: Disassociate (n+1) Case File Parts

1. If at Main Flow 1: A **CASE FILE PART** (n+1) is not being created but instead a **CASE FILE PART** (n+1) needs to be de-associated from the **MANAGED CASE FILE RECORD**.
2. De-Populate the **Case_File_Part_Associate_Identifier(n+1)** attribute for the **CASE FILE PART**.
3. De-Populate the **Case_File_Part_Associate_Date(n+1)** attribute for the **CASE FILE PART**.
4. Repeat 2 and 3 Alternate Flow: Disassociation (n+1) Case File Parts until all required disassociations are complete.
5. Make the **CASE FILE PART** and its attributes available for disposition.[9]
6. Return to 4 Main Flow.

Glossary

1. Case File – An aggregating record composed of one or more parts, managed as a single record relating to a specific action, transaction, event, person, place, project, investigation or other subject.[10]
2. Case File Part – An individual item (e.g., document, file, record) that with others makes up the Case File.
3. Case File Record – An electronic document or object that is considered by the business owner to evidence one or more organization, function, policy, decision, procedure, transaction, or activity completely enough to be maintained and

[8] Business rules will dictate whether the null value attribute will be left associated, removed from association, or destroyed.
[9] Business rules will dictate whether the null value attribute will be left associated, removed from association, or destroyed.
[10] Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "case file" – "Syn: subject file; transactional file DF: dossier. Case files are sometimes referred to as a project file or, in Canada, a transactional file. Also called dossiers, although that term has a more general sense of file. They are often found in the context of social services agencies (public and private), and Congressional papers."

managed as a record, either for the conduct of current business or for future reference.[11]

4. Managed Case File Record – A sub class of Managed Record that has been set aside by a business, been subject to records management activities, and where individual case file parts are aggregated according to business rules during its active business use.
5. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
6. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3101 Records management by agency heads; general duties
8. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
9. 44 U.S.C. § 3106 Unlawful removal, destruction of records
10. 44 U.S.C. § 3107 Authority of Comptroller General
11. 44 U.S.C. § 3301 Definition of records
12. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
13. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
14. 36 CFR §1220.36 Maintenance and use of records (a)
15. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
16. 36 CFR §1222.12 Defining Federal records

[11] Meant to be synonymous with Declare Record in Capture Record Service.

17. 36 CFR Part 1222 -Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
18. 36 CFR §1234.24 Standards for managing electronic mail records

DISPOSITION SERVICE – DISPOSITION ESTABLISH FUNCTION

Purpose

The **Disposition Establish Function** identifies and implements the business decision of whether and how long to retain or dispose of a **MANAGED RECORD**. Associating **MANAGED RECORD**s to their **DISPOSITION AUTHORITY** and **DISPOSITION INSTRUCTION** enhances an agencies ability to manage the disposition of **MANAGED RECORD**s by providing a permanent link to the management controls the implement disposition, whether triggered by timing or events. The **Disposition Establish Function** facilitates management of the **MANAGED RECORD** in accordance with the **DISPOSITION INSTRUCTION**.

Functional Requirement(s)

- (DF-DEF-1) The **Disposition Service** shall provide the capability to populate associate a **Disposition_Authority_Current** attribute producing a populated **Disposition_Authority_Current** attribute.[1]
- (DF-DEF-2) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Current_Date** using the **SYSTEM DATE** when a **Disposition_Authority_Current** attribute is populated producing a populated **Disposition_Authority_Current_Date** attribute.
- (DF-DEF-3) The **Disposition Service** shall provide the capability to populate the Disposition_**Instruction_Current** attribute producing a populated **Disposition_Instruction_Current** attribute.
- (DF-DEF-4) The **Disposition Service** shall provide the capability to populate a **Disposition_Instruction_Current_Date** when a **Disposition_Instruction_Current** attribute is populated using the **SYSTEM DATE** producing a populated **Disposition_Instruction_Current_Date** attribute.
- (DF-DEF-5) The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created the **Disposition Establish Function**.[2]

[1] In general, records may be received or created even though an approved disposition authority is not available to the creator. Therefore, it is reasonable to associate and populate the Disposition_Authority_Current attribute with data that indicate the accepted business rules the agency is working under. An example would be to indicate all records are permanent until an approved disposition authority is available.
[2] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. **A MANAGED RECORD** is available.
2. A **DISPOSITION INSTRUCTION** is available.

Main Flow

1. An Actor becomes aware the disposition attributes of a **MANAGED RECORD** need to be populated.
2. Populate the **Disposition_Authority_Current** attribute.
3. Populate the **Disposition_Authority_Current_Date** attribute.
4. Populate the **Disposition_Instruction_Current** attribute.
5. Populate the **Disposition_Instruction_Current_Date** attribute.
6. A **MANAGED RECORD** with populated **Disposition Service** attributes is available to be managed.
7. Make available all data populating all attributes of the **Disposition Establish Function**.[3]

Sub Flow(s) – None

Alternate Flow(s) – None

Glossary

1. Disposition Authority – The legally binding instrument that authorizes the disposition of records, regardless of business environment e.g. for Federal records usually the SF 115 approved by the Archivist, for Presidential records the Presidential Record Act, for the financial records of publicly-held companies the Sarbanes-Oxley Act, etc.
2. Disposition Instruction – Mandatory and specific directions, derived from a Disposition Authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.
3. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

[3] Ibid.

4. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
8. 44 U.S.C. § 3103 Transfer of records to records centers
9. 44 U.S.C. § 3106 Unlawful removal, destruction of records
10. 44 U.S.C. § 3107 Authority of Comptroller General
11. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
12. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
13. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs §1220.36 Maintenance and use of records (a) (b)
14. 36 CFR §1220.38 Disposition of records
15. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
16. 36 CFR Part 1228 -- Disposition of Federal Records Subpart D -- Implementing Schedules §1228.24 Formulation of agency records schedules
17. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
18. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
19. 36 CFR §1234.24 Standards for managing electronic mail records
20. 36 CFR §1234.32 Retention and disposition of electronic records

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DISPOSITION ESTABLISH FUNCTION

DISPOSITION SERVICE – DISPOSITION FIRST UDPATE FUNCTION

Purpose

The **Disposition First Update Function** identifies and implements an updated business decision of whether and how long to retain or dispose of a **MANAGED RECORD**. Associating **MANAGED RECORD**s to their **DISPOSITION AUTHORITY** and **DISPOSITION INSTRUCTION** enhances an agencies ability to manage the disposition of **MANAGED RECORD**s by providing a permanent link to the management controls the implement disposition, whether triggered by timing or events. The **Disposition First Update Function** facilitates continued management of the **MANAGED RECORD** in accordance with the **DISPOSITION INSTRUCTION**.

The **Disposition First Update Function** allows the **DISPOSITION AUTHORITY** and **DISPOSITION INSTRUCTION** information to be kept current and tracks changes.

Functional Requirement(s)

- (DS-DFUF-1) The **Disposition Service** shall provide the capability to populate the **Disposition_Authority_Previous(n)**[1] attribute using data from the **Disposition_Authority_Current** attribute producing a populated **Disposition_Authority_Previous(n)** attribute when the **Disposition_Authority_Current** attribute is changed.
- (DS-DFUF-2) The **Disposition Service** shall provide the capability to populate the **Disposition_Authority_Previous_Date(n)** attribute using data from the **Disposition_Authority_Current_Date** attribute producing a populated **Disposition_Authority_Previous_Date(n)** when the **Disposition_Authority_Current_Date** is changed.
- (DS-DFUF-3) The **Disposition Service** shall provide the capability to populate the **Disposition_Instruction_Previous(n)** attribute using data from the **Disposition_Instruction_Current** attribute producing a populated **Disposition_Instruction_Previous(n)** attribute when the **Disposition_Instruction_Current** attribute is changed.
- (DS-DFUF-4) The **Disposition Service** shall provide the capability to populate the **Disposition_Instruction_Previous_Date(n)** attribute using data from the **Disposition_Instruction_Current_Date** attribute producing a populated **Disposition_Instruction_Previous_Date(n)** when the **Disposition_Instruction_Current_Date** is changed.

[1] (n) indicates the first instance of change in an attribute where the data are required to be kept.

- (DS-DFUF-5) The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition First Update Function**.[2]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with populated **Disposition Service** attributes is available.

Main Flow

1. An Actor becomes aware the disposition attributes pertaining to a **MANAGED RECORD** need to be updated for the first time since the category of the record was established.
2. Access **Disposition_Authoritiy_Current** attribute data.
3. Populate **Disposition_Authority_Previous (n)** attribute with data from the **Disposition_Authority_Current** attribute.
4. Populate **Disposition_Authority_Current** attribute with new data.
5. Access **Disposition_Authoritiy_Current_Date** attribute data.
6. Populate **Disposition_Authority_Previous_Date (n)** attribute with data from the **Disposition_Authority_Current** attribute.
7. Populate **Disposition_Authority_Current_Date** with new data.
8. Access **Disposition_Instruction_Current** attribute data.
9. Populate **Disposition_Instruction_Previous (n)** attribute with data from the **Disposition_Instruction_Current** attribute
10. Populate **Disposition_Instruction_Current** attribute with new data.
11. Access **Disposition_Instruction_Current_Date** attribute data.
12. Populate **Disposition_Instruction_Previous_Date (n)** attribute with data from the **Disposition_Instruction_Current_Date** attribute.
13. Populate **Disposition_Instruction_Current_Date** with new data.
14. A **MANAGED RECORD's** disposition attributes have been updated.
15. Make available all data populating all attributes of the **Disposition First Update Function**.[3]

[2] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records

Sub Flow(s) – None

Alternate Flow(s) – None

Glossary

1. Disposition Authority – The legally binding instrument that authorizes the disposition of records, regardless of business environment e.g. for Federal records usually the SF 115 approved by the Archivist, for Presidential records the Presidential Record Act, for the financial records of publicly-held companies the Sarbanes-Oxley Act, etc.
2. Disposition Instruction – Mandatory and specific directions, derived from an established disposition authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.
3. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
8. 44 U.S.C. § 3103 Transfer of records to records centers
9. 44 U.S.C. § 3106 Unlawful removal, destruction of records
10. 44 U.S.C. § 3107 Authority of Comptroller General
11. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency

[3] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records

12. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
13. 44 U.S.C. § 3311. Destruction of records outside continental United States in time of war or when hostile action seems imminent
14. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs §1220.36 Maintenance and use of records (a) (b)
15. 36 CFR §1220.38 Disposition of records
16. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
17. 36 CFR Part 1228 -- Disposition of Federal Records Subpart D -- Implementing Schedules §1228.24 Formulation of agency records schedules
18. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
19. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
20. 36 CFR §1234.24 Standards for managing electronic mail records
21. 36 CFR §1234.32 Retention and disposition of electronic records

DISPOSITION SERVICE – DISPOSITION SUBSEQUENT UPDATE FUNCTION

Purpose

The **Disposition Subsequent Update Function** identifies and implements an updated business decision of whether and how long to retain or dispose of a **MANAGED RECORD**. Associating **MANAGED RECORD**s to their **DISPOSITION AUTHORITY** and **DISPOSITION INSTRUCTION** enhances an agencies ability to manage the disposition of **MANAGED RECORD**s by providing a permanent link to the management controls the implement disposition, whether triggered by timing or events. The **Disposition Subsequent Update Function** facilitates continued management of the **MANAGED RECORD** in accordance with the **DISPOSITION INSTRUCTION**.

The **Disposition Subsequent Update Function** ensures the **DISPOSITION AUTHORITY** and **DISPOSITION INSTRUCTION** information is current and tracks changes.

Functional Requirement(s)

- (DS-DSUF-1) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Previous(n+1)**[1] attribute using data from the **Disposition_Authority_Previous(n)** attribute producing a populated **Disposition_Authority_Previous(n+1)** attribute when an **Disposition_Authority_Previous(n)** attribute is changed.
- (DS-DSUF-2) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Previous_Date(n+1)** attribute using data from the **Disposition_Authority_Previous_Date(n)** attribute producing a populated **Disposition_Authority_Previous_Date(n+1)** when the **Disposition_Authority_Previous_Date(n)** is changed.
- (DS-DSUF-3) The **Disposition Service** shall provide the capability to populate a **Disposition_Instruction_Previous(n+1)** attribute using data from the **Disposition_Instruction_Previous(n)** attribute producing a populated **Disposition_Instruction_Previous(n+1)** attribute when a **Disposition_Instruction_Previous(n)** attribute is changed.
- (DS-DSUF-4) The **Disposition Service** shall provide the capability to populate a **Disposition_Instruction_Previous_Date(n+1)** attribute using data from the **Disposition_Instruction_Previous_Date(n)** attribute producing a populated **Disposition_Instruction_Previous_Date(n+1)** when a **Disposition_Instruction_Previous_Date(n)** is changed.

[1] (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept

- (DS-DSUF-5) The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created in the **Disposition Subsequent Update Function**.[2]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with populated **Disposition Service** attributes is available.

Main Flow

1. An Actor becomes aware the disposition attributes of a **MANAGED RECORD** need to be updated subsequent to the first update of a **MANAGED RECORD's** disposition attributes.
2. Access **Disposition_Authority_Previous(n)** attribute data.
3. Populate **Disposition_Authority_Previous(n+1)** attribute.
4. Populate **Disposition_Authority_Previous(n)** attribute.
5. Access **Disposition_Authority_Previous_Date(n)** attribute data.
6. Populate **Disposition_Authority_Previous_Date(n+1)** attribute.
7. Populate **Disposition_Authority_Previous_Date(n)** attribute.
8. Access **Disposition_Instruction_Previous(n)** attribute data.
9. Populate **Disposition_Instruction_Previous(n+1)** attribute.
10. Populate **Disposition_Instruction_Previous(n)** attribute.
11. Access **Disposition_Instruction_Previous_Date(n)** attribute data.
12. Populate **Disposition_Instruction_Previous_Date(n+1)** attribute.
13. Populate **Disposition_Instruction_Previous_Date(n)** attribute.
14. A **MANAGED RECORD**'s disposition attributes have been updated.
15. Make available all data populating all attributes of the **Disposition Subsequent Update Function**.[3]

Sub Flow(s) – None

Alternate Flow(s) – None

[2] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[3] Ibid.

Glossary

1. Disposition Authority – The legally binding instrument that authorizes the disposition of records, regardless of business environment i.e., for Federal records usually the SF 115 approved by the Archivist, for Presidential records the Presidential Record Act, for the financial records of publicly-held companies the Sarbanes-Oxley Act, etc.
2. Disposition Instruction – Mandatory and specific directions, derived from an established Disposition Authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.
3. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
8. 44 U.S.C. § 3103 Transfer of records to records centers
9. 44 U.S.C. § 3106 Unlawful removal, destruction of records
10. 44 U.S.C. § 3107 Authority of Comptroller General
11. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
12. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
13. 44 U.S.C. § 3311. Destruction of records outside continental United States in time of war or when hostile action seems imminent
14. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs §1220.36 Maintenance and use of records (a)(b)
15. 36 CFR §1220.38 Disposition of records

16. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
17. 36 CFR Part 1228 -- Disposition of Federal Records Subpart D -- Implementing Schedules §1228.24 Formulation of agency records schedules
18. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
19. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
20. 36 CFR §1234.24 Standards for managing electronic mail records
21. 36 CFR §1234.32 Retention and disposition of electronic records

DISPOSITION SERVICE – DISPOSITION SUSPEND FUNCTION

Purpose

The **Disposition Suspend Function** prevents the execution of a **DISPOSITION INSTRUCTION**. This service is operating in a business context where a **SUSPEND DISPOSITION AUTHORITY** has been issued making any **MANAGED RECORD** affected by it a **SUSPENDED RECORD**.

Functional Requirement(s)

- (DS-DSF-1) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend(n)**[1] attribute producing a populated **Disposition_Authority_Suspend(n)** attribute.
- (DS-DSF-2) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Date(n)** attribute using the **SYSTEM DATE** producing a populated **Disposition_Authority_Suspend_Date(n)** attribute when a **Disposition_Authority_Suspend(n)** attribute is populated.
- (DS-DSF-3) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Identifier(n)** attribute producing a populated **Disposition_Authority_Suspend_Identifier(n)** attribute when a **Disposition_Authority_Suspend(n)** attribute is populated.
- (DS-DSF-4) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Description(n)** attribute producing a populated **Disposition_Authority_Suspend_Description(n)** attribute when a **Disposition_Authority_Suspend(n)** attribute is populated.
- (DS-DSF-5) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend(n+1)**[2] attribute producing a populated **Disposition_Authority_Suspend(n+1)** attribute.
- (DS-DSF-6) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Date(n+1)** attribute using the **SYSTEM DATE** producing a populated **Disposition_Authority_Suspend_Date(n+1)** attribute when a **Disposition_Authority_Suspend(n+1)** attribute is populated.
- (DS-DSF-7) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Identifier(n+1)** attribute producing a populated **Disposition_Authority_Suspend_Identifier(n+1)** attribute when a **Disposition_Authority_Suspend(n+1)** attribute is populated.

[1] (n) indicates the first instance where additional instances during the life cycle of the record can occur.
[2] (n+1) indicates subsequent instances to the first instance of this attribute during the life cycle of the record can occur.

- (DS-DSF-8) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Description(n+1)** attribute producing a populated **Disposition_Authority_Suspend_Description(n+1)** attribute when a **Disposition_Authority_Suspend(n+1)** attribute is populated.
- (DS-DSF-9) The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition Suspend Function**.[3]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** is available.
2. A **SUSPEND DISPOSITION AUTHORITY** is available.

Main Flow

1. An Actor becomes aware a **MANAGED RECORD** is subject to a suspend order.
2. Populate the **Disposition_Authority_Suspend(n)** attribute.
3. Populate the **Disposition_Authority_Suspend_Date(n)** attribute.
4. Populate the **Disposition_Authority_Suspend_Identifier(n)** attribute.
5. Populate the **Disposition_Authority_Suspend_Description(n)** attribute.
6. A **MANAGED RECORD's** disposition has been suspended.
7. Make available all data populating all attributes of the **Disposition Suspend Function**.[4]

Sub Flow(s) – None

[3] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[4] Ibid.

Alternate Flow: Support Multiple Instances of Disposition_Authority_Suspend Attribute

1. If at 2 Main Flow (n) first instance has occurred, then:
2. Populate the **Disposition_Authority_Suspend(n+1)** attribute.
3. Populate the **Disposition_Authority_Suspend_Date(n+1)** attribute.
4. Populate the **Disposition_Authority_Suspend_Identifier(n+1)** attribute.
5. Populate the **Disposition_Authority_Suspend_Description(n+1)** attribute.
6. Repeat 2 through 5 Sub Flow: Support Multiple Instances of **Disposition_Authority_Suspend** Attribute until all required associations of Suspend Disposition Authority for the record are complete.
7. Return 6 Main Flow.

Glossary

1. Disposition Instruction – Mandatory and specific directions, derived from an established disposition authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.
2. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
3. Suspend Disposition Authority – A legally binding order, notice, or freeze on the execution of the established disposition instruction of an established disposition authority.
4. Suspended Record – A **MANAGED RECORD** that is subject to at least one suspend disposition authority.
5. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF

4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 2909 Retention of records
8. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
9. 44 U.S.C. § 3103 Transfer of records to records centers
10. 44 U.S.C. § 3106 Unlawful removal, destruction of records
11. 44 U.S.C. § 3107 Authority of Comptroller General
12. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
13. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
14. 44 U.S.C § 3309. Preservation of claims of Government until settled in General Accounting Office; disposal authorized upon written approval of Comptroller General
15. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs §1220.36 Maintenance and use of records (a)(b)
16. 36 CFR §1220.38 Disposition of records
17. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
18. 36 CFR Part 1228 -- Disposition of Federal Records Subpart D -- Implementing Schedules §1228.24 Formulation of agency records schedules
19. 36 CFR §1228.54 Temporary extension of retention periods
20. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
21. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
22. 36 CFR §1234.24 Standards for managing electronic mail records
23. 36 CFR §1234.32 Retention and disposition of electronic records

DISPOSITION SERVICE – DISPOSITION REINSTATE FUNCTION

Purpose

The **Disposition Reinstate Function** provides for the release of a **SUSPEND DISPOSITION AUTHORITY** by matching the **SUSPEND DISPOSITION AUTHORITY** to a corresponding **REVOCATION ORDER**, enabling the current disposition assigned to the **MANAGED RECORD** to execute. This function supports multiple instances of a suspension order and a corresponding revocation order for a **MANAGED RECORD**.

Functional Requirement(s)

- (DS-DRF-1) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Revocation(n)**[1] attribute producing a populated **Disposition_Authority_Suspend_Revocation(n)**.
- (DS-DRF-2) The **Disposition Service** shall provide the capability to associate a populated **Disposition_Authority_Suspend_Revocation(n)** attribute to its corresponding **Disposition_Authority_Suspend(n)** attribute by producing a populated **Disposition_Authority_Suspend_Revocation_Association(n)**[2] attribute.
- (DS-DRF-3) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Revocation_Date(n)** attribute producing a populated **Disposition_Authority_Suspend_Revocation_Date(n)** of a **Disposition_Authority_Suspend_Revocation(n)** attribute.
- (DS-DRF-4) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Revocation_Identifier(n)** attribute producing a populated **Disposition_Authority_Suspend_Revocation_Identifier(n)** attribute when a **Disposition_Authority_Suspend_Revocation(n)** attribute is populated.
- (DS-DRF-5) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Revocation_Description(n)** attribute producing a populated **Disposition_Authority_Suspend_Revocation_Description(n)** attribute when a **Disposition_Authority_Suspend_Revocation(n)** attribute is populated.

[1] (n) indicates the first instance where additional instances during the life cycle of the record can occur.
[2] This requirement ensures there is a one to one association between a revocation order and a suspense order.

- (DS-DRF-6) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Revocation(n+1)**[3] attribute producing a populated **Disposition_Authority_Suspend_Revocation(n+1)**.
- (DS-DRF-7) The **Disposition Service** shall provide the capability to associate a populated **Disposition_Authority_Suspend_Revocation(n+1)** attribute to its corresponding **Disposition_Authority_Suspend(n+1)** attribute by producing a populated **Disposition_Authority_Suspend_Revocation_Association(n+1)** attribute.
- (DS-DRF-8) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Revocation_Date(n+1)** attribute producing a populated **Disposition_Authority_Suspend_Revocation_Date(n+1)** when a **Disposition_Authority_Suspend_Revocation(n+1)** is populated.
- (DS-DRF-9) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Revocation_Identifier(n+1)** attribute producing a populated **Disposition_Authority_Suspend_Revocation_Identifier(n+1)** attribute when a **Disposition_Authority_Suspend_Revocation(n+1)** attribute is populated.
- (DS-DRF-10) The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend_Revocation_Description(n+1)** attribute producing a populated **Disposition_Authority_Suspend_Revocation_Description(n+1)** attribute when a **Disposition_Authority_Suspend_Revocation(n+1)** attribute is populated.
- (DS-DRF-11) The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition Reinstate Function**.[4]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** with a suspended disposition is available.
2. A **REVOCATION ORDER** is available.

[3] (n+1) indicates subsequent instances to the first instance of this attribute during the life cycle of the record can occur.
[4] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Main Flow

1. An Actor becomes aware a revocation order exists for a **MANAGED RECORD** with a suspended disposition.
2. Populate the **Disposition_Authority_Suspend_Revocation(n)** attribute.
3. Access the corresponding **Disposition_Authority_Suspend(n)** attribute.
4. Populate the **Disposition_Authority_Suspend_Revocation_Association(n)** attribute.
5. Populate the **Disposition_Authority_Suspend_Revocation_Date(n)** attribute.
6. Populate the **Disposition_Authority_Suspend_Revocation_Identifier(n)** attribute.
7. Populate the **Disposition_Authority_Suspend_Revocation_Description(n)** attribute.
8. A **MANAGED RECORD's** suspended disposition has been reinstated.
9. Make available all data populating all attributes of the **Disposition Reinstate Function**.[5]

Sub Flow(s) – None

Alternate Flow: Support Multiple Instances of Disposition Authority Suspend Revocation Attributes

1. If at 2 Main Flow (n) first instance has occurred, then:
2. Populate the **Disposition_Authority_Suspend_Revocation(n+1)** attribute.
3. Access the corresponding **Disposition_Authority_Suspend(n+1)** attribute
4. Populate the **Disposition_Authority_Suspend_Revocation_Association(n+1)** attribute.
5. Populate the **Disposition_Authority_Suspend_Revocation_Date(n+1)** attribute.
6. Populate the **Disposition_Authority_Suspend_Revocation_Identifier(n+1)** attribute.
7. Populate the **Disposition_Authority_Suspend_Revocation_Description(n+1)** attribute.
8. Repeat 2 through 7 Alternate Flow: Support Multiple Instances of **Disposition Authority Suspend Revocation** Attributes until all required associations are complete.
9. Return 8 Main Flow.

Glossary

1. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

[5] Ibid.

2. Revocation Order – A legally binding, or a legitimate order or notice to release a suspend disposition authority.
3. Suspend Disposition Authority – A legally binding order, notice, or freeze on the execution of the established disposition instruction of an established disposition authority.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
8. 44 U.S.C. § 3103 Transfer of records to records centers
9. 44 U.S.C. § 3106 Unlawful removal, destruction of records
10. 44 U.S.C. § 3107 Authority of Comptroller General
11. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
12. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
13. 44 U.S.C § 3309. Preservation of claims of Government until settled in General Accounting Office; disposal authorized upon written approval of Comptroller General
14. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs §1220.36 Maintenance and use of records (a)(b)
15. 36 CFR §1220.38 Disposition of records
16. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
17. 36 CFR Part 1228 -- Disposition of Federal Records Subpart D -- Implementing Schedules §1228.24 Formulation of agency records schedules
18. 36 CFR §1228.54 Temporary extension of retention periods

19. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
20. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
21. 36 CFR §1234.24 Standards for managing electronic mail records
22. 36 CFR §1234.32 Retention and disposition of electronic records

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BACK OF DISPOSITION ESTABLISH FUNCTION

DISPOSITION SERVICE – DISPOSITION ENABLE TRANSFER FUNCTION

Purpose

The **Disposition Enable Transfer Function** provides the capability to make a **MANAGED RECORD** available for transfer in accordance with the **DISPOSITION INSTRUCTION** and tracks events related to the **MANAGED RECORD**'s transfer.[1]

Functional Requirement(s)

- (DS-DETF-1) The **Disposition Service** shall provide the capability to populate a **Disposition_Action** attribute required by the **Disposition_Instruction_Current** attribute producing a populated **Disposition_Action** attribute.
- (DS-DETF-2) The **Disposition Service** shall provide the capability to populate **Disposition_Action_Date** attribute using the **SYSTEM DATE** populating the **Disposition_Action_Date** attribute when a **Disposition_Action** attribute is populated.
- (DS-DETF-3) The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition Enable Transfer Function**.[2]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

[1] This function does not discern between a copy of an electronic record and its attributes or the actual electronic record and its attributes for the activity of transfer. It is acknowledged the implementation, the "how" a transfer of the electronic record with its attributes occurs will be determined based upon many factors, including but not limited to how the record is stored, the medium of storage, the medium of transfer or the mode of transfer.
[2] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Precondition(s)

1. A **DISPOSITION AUTHORITY** is available.
2. A **DISPOSITION INSTRUCTION** is available.
3. A **MANAGED RECORD** is eligible for transfer.
4. For every populated **Disposition_Authority_Suspend** attribute there is a correlating and populated **Disposition_Authority_Suspend_Revocation** attribute evidencing the suspension of the disposition has been released.

Main Flow

1. An Actor becomes aware a **MANAGED RECORD** is eligible for transfer.
2. Access **Disposition_Instruction_Current** attribute.
3. Access **Disposition_Instruction_Current_Date** attribute.
4. Populate the **Disposition_Action** attribute.
5. Populate the **Disposition_Action_Date** attribute.
6. A **MANAGED RECORD** and all its attributes are available for transfer.
7. Make available all data populating all attributes of the **Disposition Enable Transfer Function**.[3]

Sub Flow(s) – None

Alternate Flow(s): Handle Record Destruction After Transfer

1. If at 7 Main Flow a copy of the **MANAGED RECORD** is transferred and instances of the **MANAGED RECORD** and its attributes persist in the electronic environment, then:
2. Initiate **Disposition Service - Disposition Enable Destruction Function**.
3. Return to 8 Main Flow.

Glossary

1. Disposition Authority – The legally binding instrument that authorizes the disposition of records, regardless of business environment i.e., for Federal records usually the SF 115 approved by the Archivist, for Presidential records the Presidential Record Act, for the financial records of publicly-held companies the Sarbanes-Oxley Act, etc.
2. Disposition Instruction – Mandatory and specific directions, derived from a Disposition Authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.
3. Managed Record – A record as set aside by a business owner that has been subject to records management activities.

[3] Ibid.

4. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2107(2)(3)(4) Acceptance of records for historical preservation
6. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
7. 44 U.S.C. § 2118 Records of Congress
8. 44 U.S.C. § 2902(1)(2)(3)(4)(5)(6)(7) Objectives of records management
9. 44 U.S.C. § 3102(1)(2) Establishment of program of management
10. 44 U.S.C. § 3103 Transfer of records to records centers
11. 44 U.S.C. § 3104 Certifications and determinations on transferred records
12. 44 U.S.C. § 3105. Safeguards
13. 44 U.S.C. § 3106 Unlawful removal, destruction of records
14. 44 U.S.C. § 3107 Authority of Comptroller General
15. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
16. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
17. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs §1220.36 Maintenance and use of records (a)(b)
18. 36 CFR §1220.38 Disposition of records
19. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
20. 36 CFR Part 1228 -- Disposition of Federal Records Subpart D -- Implementing Schedules §1228.24 Formulation of agency records schedules
21. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records

22. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
23. 36 CFR §1234.24 Standards for managing electronic mail records
24. 36 CFR §1234.32 Retention and disposition of electronic records

DISPOSITION SERVICE – DISPOSITION ENABLE DESTRUCTION FUNCTION

Purpose

The **Disposition Enable Destruction Function** provides the capability to make a **MANAGED RECORD** available for destruction in accordance with the **DISPOSITION INSTRUCTION** and tracks events related to a **MANAGED RECORD's** destruction.

Functional Requirement(s)

- (DS-DEDF-1) The **Disposition Service** shall provide the capability to populate the **Disposition_Action** attribute required by the **Disposition_Instruction_Current** attribute producing a populated **Disposition_Action** attribute.
- (DS-DEDF-2) The **Disposition Service** shall provide the capability to populate **Disposition_Action_Date** attribute using the **SYSTEM DATE** when the **Disposition_Action** attribute is populated.
- (DS-DEDF-3) The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition Enable Destruction Function**.[1]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **DISPOSITION AUTHORITY** is available.
2. A **DISPOSITION INSTRUCTION** is available.
3. A **MANAGED RECORD** is eligible for destruction.
4. For every populated **Disposition_Authority_Suspend** attribute there is a correlating and populated **Disposition_Authority_Suspend_Revocation** attribute evidencing the suspension of the disposition has been released.

[1] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

Main Flow

1. An Actor becomes aware a **MANAGED RECORD** is eligible for destruction.
2. Access **Disposition_Instruction_Current** attribute.
3. Access **Disposition_Instruction_Current_Date** attribute.
4. Populate the **Disposition_Action** attribute.
5. Populate the **Disposition_Action_Date** attribute.
6. A **MANAGED RECORD** and all its attributes are available for destruction.
7. Make available all data populating all attributes of the **Disposition Enable Destruction Function**.[2]

Sub Flow(s) – None

Alternate Flow(s) – None

Glossary

1. Disposition Authority – The legally binding instrument that authorizes the disposition of records, regardless of business environment i.e., for Federal records usually the SF 115 approved by the Archivist, for Presidential records the Presidential Record Act, for the financial records of publicly-held companies the Sarbanes-Oxley Act, etc.
2. Disposition Instruction – Mandatory and specific directions, derived from a Disposition Authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.
3. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
4. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf

[2] Ibid.

3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2203 Management and custody of Presidential records (c)
7. 44 U.S.C. § 2207 Vice-Presidential records
8. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
9. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
10. 44 U.S.C. § 3103 Transfer of records to records centers
11. 44 U.S.C. § 3105. Safeguards
12. 44 U.S.C. § 3106 Unlawful removal, destruction of records
13. 44 U.S.C. § 3107 Authority of Comptroller General
14. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency
15. 44 U.S.C. § 3303a Examination by Archivist of lists and schedules of records lacking preservation value; disposal of records (b)
16. 44 U.S.C. § 3311 Destruction of records outside continental United States in time of war or when hostile action seems imminent
17. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs §1220.36 Maintenance and use of records (a)(b)
18. 36 CFR §1220.38 Disposition of records
19. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
20. 36 CFR Part 1228 -- Disposition of Federal Records Subpart D -- Implementing Schedules §1228.24 Formulation of agency records schedules
21. 36 CFR §1228.54 Temporary extension of retention periods
22. 36 CFR §1228.58 Destruction of temporary records
23. 36 CFR Part 1228 -- Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
24. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.22 Creation and use of text documents
25. 36 CFR §1234.24 Standards for managing electronic mail records
26. 36 CFR §1234.32 Retention and disposition of electronic records
27. 36 CFR §1234.34 Destruction of electronic records

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DISPOSITION ENABLE DESTRUCTION FUNCTION

REFERENCE SERVICE – REFERENCE ASSOCIATE FUNCTION

Purpose

The **Reference Associate Function** supports linking one or more **MANAGED RECORD**(s) to one or more other **MANAGED RECORD**(s) for various business purposes while maintaining independent management of each **MANAGED RECORD** in the association.

The **Reference Associate Function** provides the ability to link records to other records related because of a business act or transaction. As an example, the **Reference Associate Function** supports linking a request for information with both the record used to respond to the information request and the records used to create the response. Additionally, the function supports linking a redacted record used in a response with its originating record(s), providing context for redaction and allowing for consistent responses to similar requests.

Functional Requirement(s)

- (RS-RAF-1) The **Reference Service** shall provide the capability to create an association between one record and one other record by populating a **Record_Association_Identifier(n)**[1] attribute producing a populated **Record_Association_Identifier(n)** attribute.
- (RS-RAF-2) The **Reference Service** shall provide the capability to populate a **Record_Association_Description(n)** attribute for each instance of **Record_Association_Identifier(n)** when the **Record_Association_Identifier(n)** attribute is populated producing a populated **Record_Association_Description(n)** attribute.
- (RS-RAF-3) The **Reference Service** shall provide the capability to populate a **Record_Association_Date(n)** attribute using the **SYSTEM DATE** for each instance of **Record_Association_Identifier(n)** when the **Record_Association_Identifier(n)** attribute is populated producing a populated **Record_Association_Date(n)** attribute.
- (RS-RAF-4) The **Reference Service** shall provide the capability to create an association between one record and one other record by populating a **Record_Association_Identifier(n+1)**[2] attribute producing a populated **Record_Association_Identifier(n+1)** attribute.
- (RS-RAF-5) The **Reference Service** shall provide the capability to populate a **Record_Association_Description(n+1)** attribute for each instance of **Record_Association_Identifier(n+1)** when the **Record_Association_Identifier**

[1] (n) indicates the first instance of change in an attribute where the data are required to be kept.
[2] (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept

(n+1) attribute is populated producing a populated **Record_Association_Description(n+1)** attribute.

- (RS-RAF-6) The **Reference Service** shall provide the capability to populate a **Record_Association_Date(n+1)** attribute using the **SYSTEM DATE** for each instance of **Record_Association_Identifier(n+1)** when the **Record_Association_Identifier(n+1)** attribute is populated producing a populated **Record_Association_Date(n+1)** attribute.
- (RS-RAF-7) The **Reference Service** shall provide the capability to make available for output all data populating the attributes created by the **Reference Associate Function**.[3]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. Two or more **MANAGED RECORDs** are available.

Main Flow

1. An Actor becomes aware that a **MANAGED RECORD** needs to be associated to another **MANAGED RECORD**.
2. Populate **Record_Association_Identifier** attribute.
3. Populate **Record_Association_Description** attribute.
4. Populate **Record_Association_Date** attribute.
5. A **MANAGED RECORD** is associated to another **MANAGED RECORD**.
6. Make available all data populating all attributes of the **Reference Associate Function**.[4]

Sub Flow(s) – None

[3] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[4] Ibid.

Alternate Flow: Support Multiple Instances of Reference Association.

1. If at 2 Main Flow (n) first instance has occurred, then:
2. Populate **Record_Association_Identifier(n+1)** attribute.
3. Populate **Record_Association_Description(n+1)** attribute.
4. Populate **Record_Association_Date attribute(n+1)** attribute.
5. Repeat 2 through 4 Alternate Flow: Support Multiple Instances of Reference Association until all required associations are complete.
6. Return 5 Main Flow.

Glossary

1. Managed Record – A record as set aside by a business owner that has been subject to records management activities.
2. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3101 Records management by agency heads; general duties
8. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
9. 44 U.S.C. § 3104 Certifications and determinations on transferred records
10. 44 U.S.C. § 3106 Unlawful removal, destruction of records
11. 44 U.S.C. § 3107 Authority of Comptroller General
12. 44 U.S.C. § 3301 Definition of records
13. 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist by head of each Government agency

14. 36 CFR Part 1220 -- Federal Records; General Subpart B -- Agency Records Management Programs: §1220.30 Authority
15. 36 CFR §1220.34 Creation of records
16. 36 CFR §1220.36 Maintenance and use of records (a)
17. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
18. 36 CFR §1222.12 Defining Federal records
19. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
20. 36 CFR Subpart L -- Transfer of Records to the National Archives of the United States § 1228.270 Electronic records
21. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.24 Standards for managing electronic mail records

REFERENCE SERVICE – REFERENCE DISASSOCIATE FUNCTION

Purpose

The **Reference Disassociate Function** provides the ability to un-link a **MANAGED RECORD**(s) from one more other **MANAGED RECORD**(s) related because of a business act, or transaction.

Functional Requirement(s)

- (RS-RDF-1) The **Reference Service** shall provide the capability to change a populated **Record_Association_Identifier(n)**[1] attribute to "null" value upon the termination of the association producing a "null" value **Record_Association_Identifier(n)** attribute.[2]
- (RS-RDF-2) The **Reference Service** shall provide the capability to change a populated **Record_Association_Description(n)** attribute to "null" value upon the change of its associated **Record_Association_Identifier(n)** attribute to "null" value producing a "null" value **Record_Association_Description(n)** attribute.
- (RS-RDF-3) The **Reference Service** shall provide the capability to change a populated **Record_Association_Date(n)** attribute to "null" value upon the change of its associated **Record_Association_Identifier(n)** attribute to "null" value producing a "null" value **Record_Association_Date(n)** attribute.
- (RS-RDF-4) The **Reference Service** shall provide the capability to change a populated **Record_Association_Identifier(n+1)**[3] attribute to "null" value upon the termination of an association producing a "null" value **Record_Association_Identifier(n+1)** attribute.[4]
- (RS-RDF-5) The **Reference Service** shall provide the capability to change a populated **Record_Association_Description(n+1)** attribute to "null" value upon the change of its associated **Record_Association_Identifier(n+1)** attribute to "null" value producing a "null" value **Record_Association_Description(n+1)** attribute.
- (RS-RDF-6) The **Reference Service** shall provide the capability to change a populated **Record_Association_Date(n+1)** attribute to "null" value upon the change of its associated **Record_Association_Identifier(n+1)** attribute to "null" value producing a "null" value **Record_Association_Date(n+1)** attribute.

[1] (n) indicates the first instance of an attribute.
[2] As an example, one of the records in the association has met its disposition and no longer exists.
[3] (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept
[4] As an example, one of the records in the association has met its disposition and no longer exists.

- (RS-RDF-7) The **Reference Service** shall provide the capability to make available for output all data populating the attributes created by the **Reference Disassociate Function**.[5]

Actor(s)

1. User – An individual authorized to use the system.
2. Information System – An organized set of procedures and/or techniques designed to store, retrieve, manipulate, analyze, and display information.
3. Application – A piece of software that performs a function; a computer program.

Precondition(s)

1. A **MANAGED RECORD** is associated to another **MANAGED RECORD**.

Main Flow

1. An Actor becomes aware the association between a **MANAGED RECORD** and another **MANAGED RECORD** is no longer required.
2. Populate **Record_Association_Identifier(n)** attribute with "null" value.
3. Populate **Record_Association_Description(n)** attribute with "null" value.
4. Populate **Record_Association_Date(n)** attribute with "null" value.
5. Make the attribute **Record_Association_Date(n)** with "null" value available for disposition.[6]
6. The association between a **MANAGED RECORD** and another **MANAGED RECORD** no longer exists.
7. Make available all data populating all attributes of the **Reference Disassociate Function**.[7]

Sub Flow(s) – None

Alternate Flow: Support Multiple Instances of Reference Disassociation.

1. If at 2 Main Flow an additional association exists beyond (n), then:
2. Populate **Record_Association_Identifier(n+1)** attribute with "null" value.
3. Populate **Record_Association_Description(n+1)** attribute with "null" value.
4. Populate **Record_Association_Date attribute(n+1)** attribute with "null" value.

[5] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.
[6] Business rules will dictate whether the null value attribute will be left associated, removed from association, or destroyed.
[7] This requirement will support printing, viewing, saving, report writing, audit, etc. and 44 U.S.C. 2115 (a)(b) Reports; correction of violations and 44 U.S.C. 3106 Unlawful removal, destruction of records.

5. Repeat 3 through 4 Alternate Flow: Support Multiple Instances of Reference Disassociation until all required associations are "null" value.
6. Return 6 Main Flow.

Glossary

Managed Record – A record as set aside by a business owner that has been subject to records management activities.

References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf
2. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 – http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures _2.0_FINAL.pdf
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – http://www.whitehouse.gov/omb/egov/documents/CRM.PDF
4. Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," RMSC Program Office Technical Report, July 20, 2005
5. 44 U.S.C. § 2115 Reports; correction of violations (a)(b)
6. 44 U.S.C. § 2902 Objectives of records management (1)(2)(3)(4)(5)(6)(7)
7. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
8. 44 U.S.C. § 3106 Unlawful removal, destruction of records
9. 44 U.S.C. § 3107 Authority of Comptroller General
10. 44 U.S.C. § 3301 Definition of records
11. 36 CFR Part 1222 -- Creation and Maintenance of Federal Records Subpart A -- General §1222.10 Authority
12. 36 CFR §1222.12 Defining Federal records
13. 36 CFR Part 1222 -- Subpart C -- Standards for Agency Recordkeeping Requirements §1222.50 Records maintenance and storage
14. 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, and Disposition of Electronic Records §1234.24 Standards for managing electronic mail records

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REFERENCE ASSOCIATE FUNCTION

APPENDIX A – GLOSSARY

Archival Bond – The interrelationships between a record and other records resulting from the same business act, transaction, or process, to one or more previous and subsequent records resulting from the same type business act, transaction, or process within a specific time period. Usually accomplished by associating the records to each other through a record category.

Authenticated Record – A record with a populated authenticity indicator attribute that provides the benchmark for subsequent validation of authenticity during the entire record life cycle.

Benchmark – A standard by which something can be judged or measured.

Captured Case File Record – A uniquely identified record carrying the date it was initially controlled as a record within an electronic environment.

Captured Record – A uniquely identified declared record carrying the date it was initially controlled as a record within an electronic environment along with the record creator unique identifier. A captured record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.

Captured Records – Plural form of captured record. A uniquely identified declared record carrying the date it was initially controlled as a record within an electronic environment along with the record creator unique identifier. Captured record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.

Case File – A collection of documents (a file) relating to a specific action, transaction, event, person, place, project, investigation or other subject.[1]

Case File Part – An individual item (e.g., document, file, record) that with others makes up the case file.

Categorization Schema – Any scheme developed or used by an agency to organize records. This may include a diagrammatic representation or outline of the descriptive classification assigned to records or records disposition codes.

Declared Case File Record – An electronic document or object that is considered by the business owner to evidence one or more organization, function, policy, decision, procedure,

[1] Society of American Archivists, A Glossary of Archival and Records Terminology, s.v., "case file" – "Syn: subject file; transactional file DF: dossier. Case files are sometimes referred to as a project file or, in Canada, a transactional file. Also called dossiers, although that term has a more general sense of file. They are often found in the context of social services agencies (public and private), and Congressional papers."

transaction, or activity completely enough to be maintained and managed as a record, either for the conduct of current business or for future reference.[2]

Declared Record – An electronic document or object that is considered by the business owner to evidence one or more organization, function, policy, decision, procedure, transaction, or activity completely enough to be maintained and managed as a record, either for the conduct of current business or for future reference.

Disposition Authority – The legally binding instrument that authorizes the disposition of records, regardless of business environment e.g. for Federal records usually the SF 115 approved by the Archivist, for Presidential records the Presidential Record Act, for the financial records of publicly-held companies the Sarbanes-Oxley Act, etc.

Disposition Instruction – Mandatory and specific directions, derived from a disposition authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.

Identifier – The name, position, application or system designation (or concatenation of that data and other data about the actor and/or the environment) differentiating one actor from another.

Identified Record – A record that has a populated attribute differentiating it from all other records within the electronic environment.

Managed Record – A record as set aside by a business owner that has been subject to records management activities.

Provenance – Ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record's active use for business purposes. Provenance establishes the person or system and the agency in which the record was created or received, the record keeper responsible for the record custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of subsequent custodians(s), if applicable.

Provenancial Record – A record for which information about its time and place of its creation has been collected and preserved. This information supports the reliability of the record as evidence of its creator and the activity from which it results.

Record Category – A descriptive term that identifies the relationships between a record and other records resulting from the same business activity; one way of implementing archival bond.

Record Creator – An individual, application, or system procedure in an electronic environment specifically designed in accordance with the business rules to carry out the legal

[2] Meant to be synonymous with Declare Record in Capture Record Service.

authorities of the organization to which the individual, application, or system procedure belongs.

Record Keeper – The administrative entity, unit, office, or person responsible for the custody and ongoing management of the records during their active business use.

Revocation Order – A legally binding, or a legitimate order or notice to release a suspend disposition authority.

Scheduled Record – A record with a disposition instruction (transfer, retention, or destruction) from an established disposition authority.

Suspend Disposition Authority – A legally binding order, notice, or freeze on the execution of the established disposition instruction of an established disposition authority.

Suspended Record – A scheduled record which is subject to at least one suspend disposition authority.

System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

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APPENDIX B – REFERENCES

Architecture and Infrastructure Committee, Federal Chief Information Officers Council, "Service Component-Based Architectures Version 2.0, June 2004"

Executive Office of the President of the United States, FY07 Budget Formulation – "FEA Consolidated Reference Model Document, May 2005"

Interagency Committee on Government Information, "Recommendations for the Effective Management of Government Information on the Internet and Other Electronic Records, December 16, 2004"

International Standards Organization, ISO 15489-1: Information and Documentation - Records Management - Part 1: General, September, 15, 2001

International Standards Organization, ISO/TR 15489-2 Information and Documentation - Records Management - - Part 2: Guidelines, September, 15, 2001

InterPARES, "Findings on the Preservation of Authentic Electronic records," Final Report to the National Historical Publications and Records Commission, September 2002

Object Management Group, Request for Proposal, MDA Models for Electronic Records Management Services, June 30, 2006

Object Management Group, Unified Modeling Language (UML), Version 2.0

Prescott, D.R. and Hawkins, Kenneth, Ph.D., "Functional Requirements and Attributes for Records Management in a Component-Based Architecture, July 20, 2005" U.S. National Archives and Records Administration, Records Management Service Component Program

Prescott, Daryll R. and Hawkins, Kenneth, Ph.D., "Case File Service – Case File Record Capture Use Case And Case File Part Associate Use Case (amended), March 17, 2006, Functional Requirements and Attributes for Records Management Services December 7, 2005" U.S. National Archives and Records Administration, Records Management Service Component Program

Prescott, Daryll R. and Hawkins, Kenneth, Ph.D., "Record Capture Service – Record Annotation Establish Use Case, Record Annotation First Update Use Case, Record Annotation Subsequent Update Use Case, and Record Annotation De-populate Use Case

(ADDITION), June 30, 2006, of the Functional Requirements and Attributes for Records Management Services December 7, 2005" U.S. National Archives and Records Administration, Records Management Service Component Program

U.S. Department of Defense, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C3I), 5015.2-STD, "Design Criteria Standard for Electronic Records Management Applications, June 19, 2002"

U.S. Department of Defense, Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C3I), "The Department of Defense Records Management Function and Information Models," October 6, 1995

U.S. National Archives and Records Administration, Records Management Service Components Program, "Records Management Service Components Requirements Development Project Final Report, March 31, 2005"

U.S. National Archives and Records Administration, Records Management Service Component Program, "Interagency Project Team RMS Requirements Development Project Workshop Report – Session 9, December 7, 2005"

APPENDIX C - RMS UML CLASS MODEL

A UML class model is used to represent the objects or concepts of a domain or system, along with their characteristic attributes, behaviors, and relationships with other objects. Here the domain is Records Management Services. The model uses an industry accepted notation to make explicit classes, their properties, the relationships between classes, and the nature of those relationships (cardinality). Such a model can also be abstract enough to be comprehensible to domain subject matter experts, but precise enough to service as a specification for actual software.

Understanding UML Class Diagram Symbols and Notations

- Classes are an abstraction representing objects in the environment being described including their properties (attributes).
- Classes are depicted by a rectangle divided into compartments. The name of the class appears centered in the upper compartment. Class attributes appear below the class name in the next compartment with operations in the third compartment.
- Class associations are represented by a line connecting one class to one or more other classes.
- Inheritance is the ability of one class (child class) to inherit the identical functionality of another class (super class), and provide new functionality of its own.

Model Cardinality

Indicates an aggregation or "part-of" association between a container class and a member class. This means for the member class to exist the container class must exist.

1 Indicates no more than one.

0..1 Indicates zero or one.

* Indicates many.

1..* Indicates one or many.

Indicates a class inherits functionality of a parent class and adds functionality of its own. This is indicated by a non-filled arrow from the inheriting class to the parent class with the arrow at the parent class.

Indicates a one way association in which the class the arrow comes from knows about the class the arrow is pointing to, but the class the arrow is pointing to does not know about the class the arrow is coming from.

Conventions

Dates

Dates are used frequently in the specification. The word "Date" was maintained on attribute names, but the attribute type used is actually TimeStamp (date and time). This enables the use of Date to provide ordered lists based on entry time. An implied constraint is that no two TimeStamps can be the same for instances of the same class.

Service Packages

- RMS Services are represented by their own Packages (Diagrams)
- There are three ancillary packages supporting shared concepts in the model
    - **Types** – Representing domain specific attribute types used in the model
        - **id** – The concept of a unique instance identifier
        - **TimeStamp** – The concept of a date/time stamp. This type is used everywhere that a "...Date" attribute is specified in the requirements.
        - **RecordAnnotationKind** – Used to specify what "type" an Annotation it is, e.g., "vital record", "security", etc. (note that "type" is a reserved concept in UML, so the word "kind" was used instead. The specific enumeration of RecordAnnotationKind is left blank, presuming that it will be deployment specific.
        - **DispositionKind** – Supports what is described as attributes " Record_Scheduled_Transfer_Available " and "Record_Scheduled_Destruction_Available" in their corresponding UML representations.
    - **Party** – A pattern model commonly accepted in industry to model the concepts of individual, roles, organizations, and their inter-relationships. Subtypes specific to the requirements text have been added for context, i.e., Agency, and Official.
    - **Authority** – abstracts the common concept of "Authority" that occurs in the model. The specific authority context is specified by the role of the relationship to that which the Authority is related. It is a singleton class, Authority, which can be further subtyped as necessary in the future.

Color Coding on Classes

- **Salmon** – used for classes that have their primary definition in the service's diagram.
- **Gray** – used for references to (re-use of) classes that are defined in other services.

- **Yellow** – used in each diagram to highlight the class ManagedRecord since this class represents the central aggregating concept in the specification and provides the "anchor point" in many of the services.

Association Classes versus Associative Classes

UML provides a very rich language to model concepts and their interrelationships. While this notation is widely used for many different types of modeling – system modeling, business process modeling, and etc. – some of the less frequently used aspects are not thoroughly understood. One such aspect is that of Association Classes.

An Association Class (class "C" in Figure 1, below) is defined in UML to be both a Class and an Association and it has the subtle property that there is a unique instance of the Association Class for each link between the instances of the associated classes (classes "A" and "B" in Figure 1, below). Further, from the instance perspective the association has a multiplicity of 1. This means there can be only one link (and one instance of "C") between any particular instance of "A" and an instance of "B". As shown Figure 1 below, "c1" links "a1" and "b1" and there can be no other instances of "C" (and associated links) between "a1" and "b1".

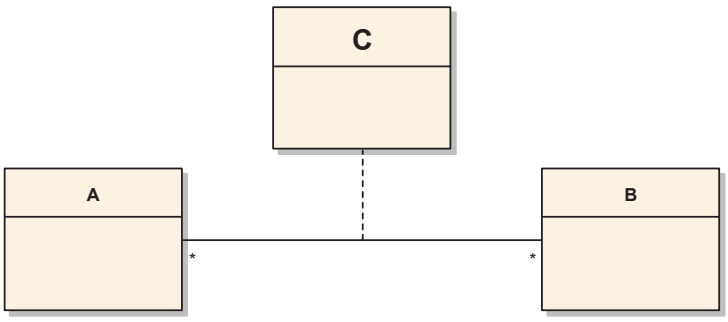


Figure 1 - Association Class Notation

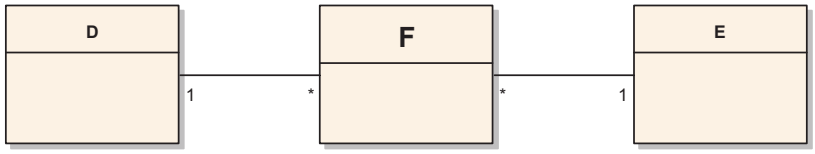


Figure 2 - Associative Class Notation

On the other hand, if we just use a normal class in between two other classes (class “F” in Figure 2, above) we have what is frequently referred to as an “Associative Class”. In this case, due to the “*” multiplicity (0 or more instances of), an instance of class “D” can be linked to any number of instances of class “E” through instances of class “F”. Further, the same instance of “D” can be linked to the same instance of class “E” multiple times through different instances of class “F”. Figure 2 above shows that “d1” is related to “e1” multiple times (through instances “f1” and “f2”). This “multiple linkage” would not be possible as Association Class were used as in Figures 1.

Both of these mechanisms have been used within the RMS models to capture the specific semantics for each situation. For instance, Record Creator is associated to Record through the Association Class Managed Record. This means that there can be only one Record Creator associated with a particular Record in a particular context (the context of the Managed Record). Conversely, there can be many Annotations between a Managed Record and a particular Authority. In this case there we would use an associative class between Managed Record and Authority (Annotation).

Establish-FirstUpdate-SubsequentUpdate Pattern

This pattern is used for many of the attributes that require a history as well as the ability to indicate its current value. This situation generally has the pattern of attributes of:

This pattern is represented in the UML by an Association Class that has a "...Date" (timestamp), or as a many-to-many associating class with a "...Date". As to which is used, depends on the cardinality of the association.

Depending on the cardinality of the association, the pattern employs an Association Class or Associative Class as described above.

In each case there are many instances of an association ordered as a series in time:

- X_Current – is determined by the date on the associating class. The Current has the most recent date. When there is a one to one cardinality, the "Current" may not exist,

and the series indicates applicability to the series of one of the associated classes (the Revocation example below)

- X_Current_Date – a timestamp that orders the instances.
- X_Previous(n) and X_Previous(n+1) – this series is provided by the ordering time stamp of the instances.

As noted in the previous paragraph, there are minor variations on the pattern depending on any additional cardinality constraints.

Example of use of the Association Class for the pattern (taken from the Disposition Service):

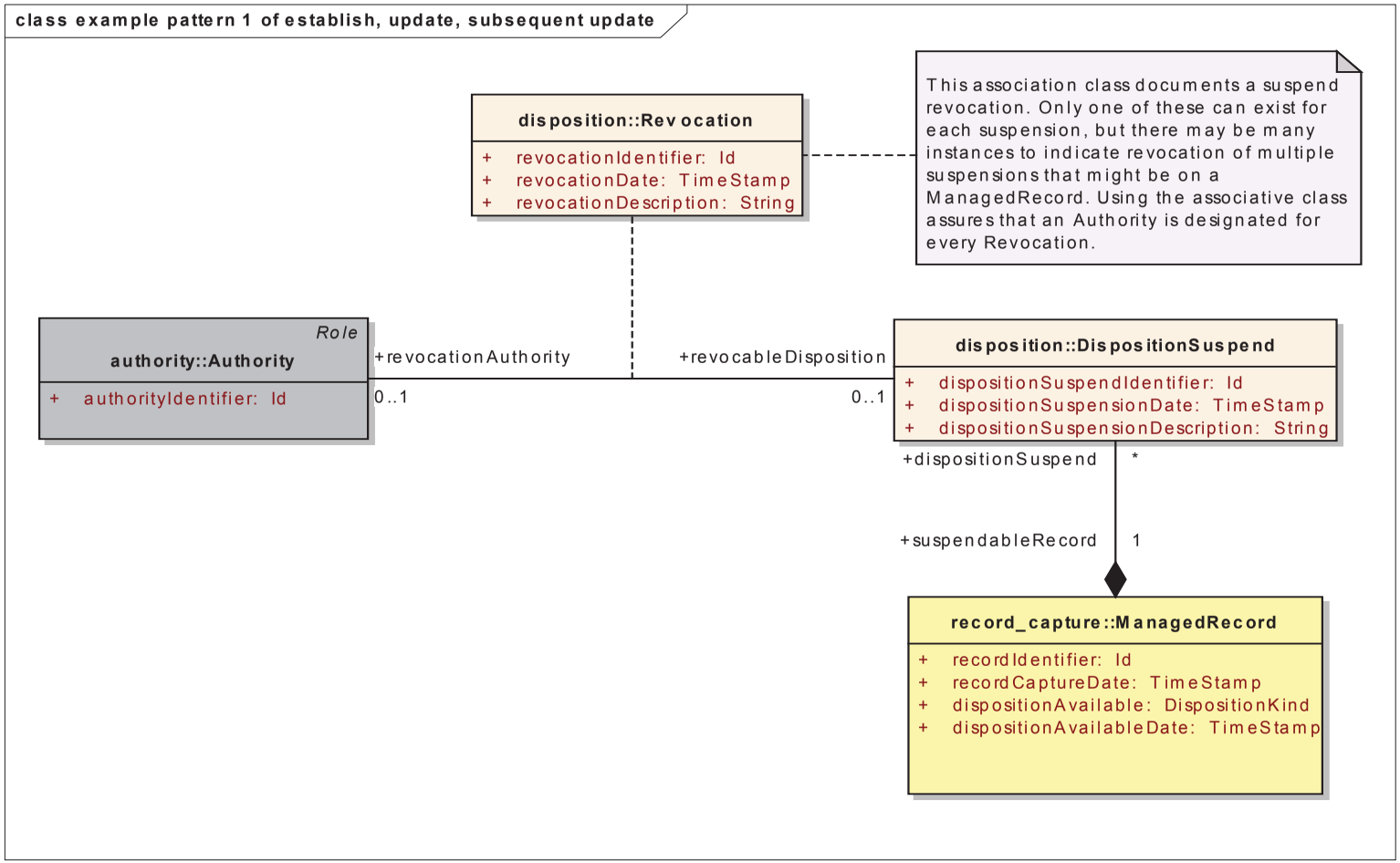


Figure 3 – Class Example Pattern 1 of Establish, Update, Subsequent Update

Note that in Figure 3, above, one of the variations of the pattern due to cardinality is illustrated. Since there is a one-to-one association between Authority and DispositionSuspend, there is no need for "Current", but the series is maintained corresponding to the set of DispositionSuspend that may be on a given ManagedRecord. Active Suspend orders are indicated by the absence of a Revocation.

Figure 4 is an example of use of an Associative Class used for the pattern for many-to-many cardinality (taken from the Disposition Service

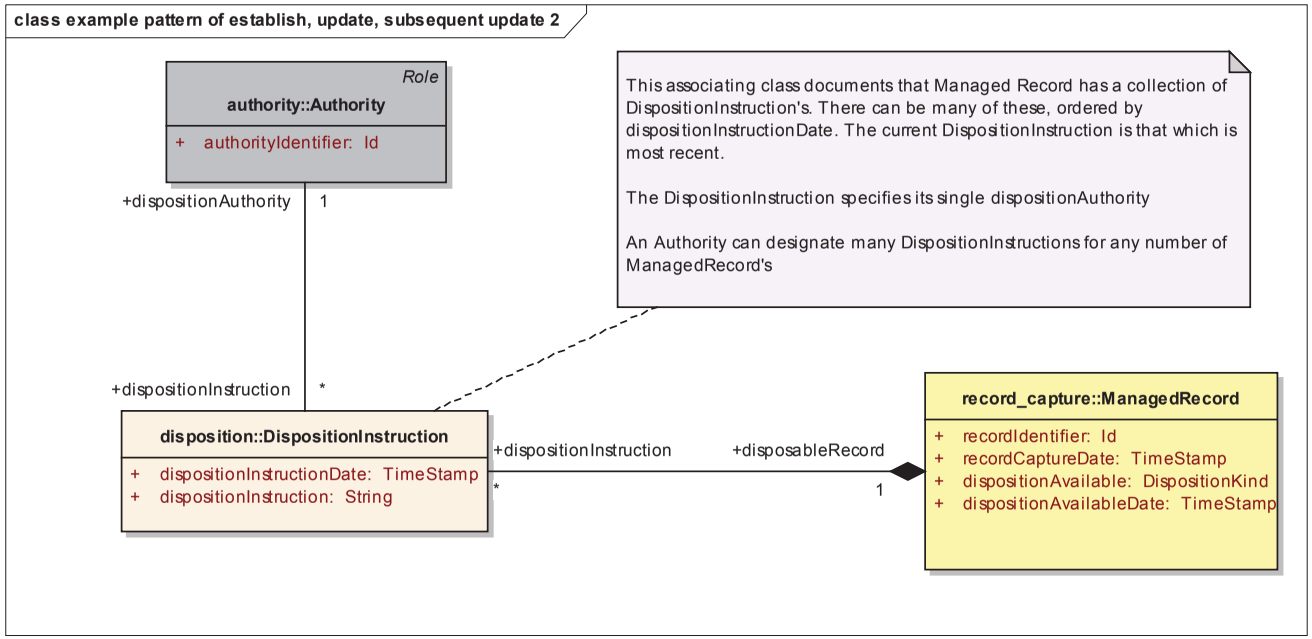
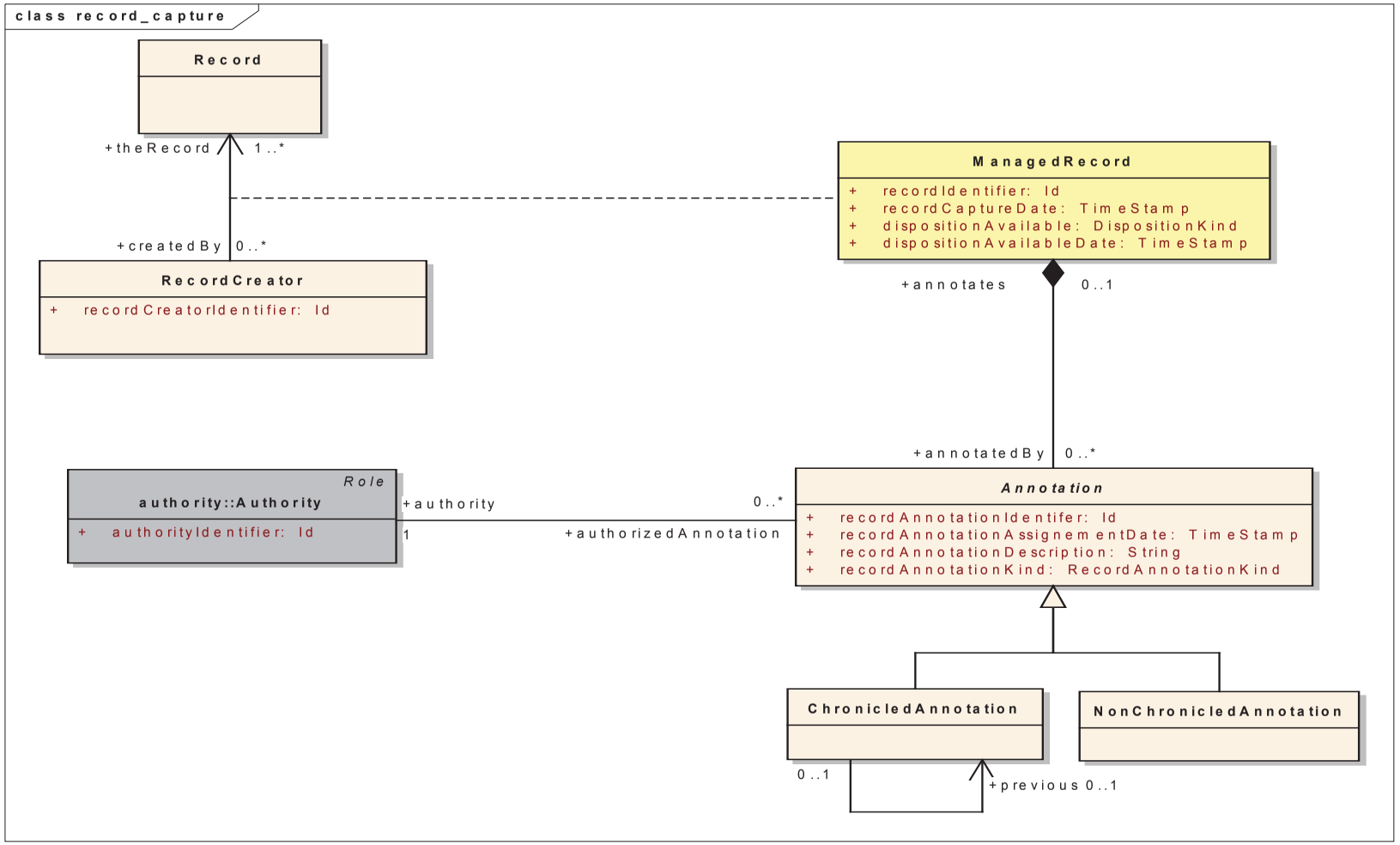


Figure 4 – Class Example Pattern of Establish, Update, Subsequent Update 2

UML to Text Mappings

Each UML diagram for a Service has a mapping of the attributes of that Service that appear in the text to the UML elements of the diagram.

- **Class** – Classes are indicated by the name of the class. Class names begin with a capital letter and each new word in the name is capitalized. There are no spaces. For example, *ManagedRecord* from the Record Capture Service.
- **Class Attribute** – Attributes are indicated by the name of the class followed by a "dot" and the name of the attribute. Attribute names begin with a lower case letter and each new word in the name is capitalized. There are no spaces. For example *ManagedRecord.recordCaptureDate* from the Record Capture Service.
- **Association of a Class to another Class** – Associations are indicated by the name of the class followed by a "dot" and the name of the role of the association to the other class. Association names are formatted the same as Class Attributes. For example *ManagedRecord.theKeeper* from the Provenance Service



Record Capture Service

Figure 5 – Record Capture Service

Overview: Record Capture Service

When a Record is “set aside” into the environment designated for it to be managed as a record, an instance of the ManagedRecord class is created for the Record. ManagedRecord is an association between the Record and its RecordCreator. The association to the Record is "one way" indicated by the open arrow on the association. This implies that the Record has not been modified to be aware of its participation in the management system.

The ManagedRecord is the core concept in the model. It serves as the aggregator for all information concerning the management of the Record. It appears in all of the Service Packages (diagrams), but not the ancillary packages (id, party, and authority).

Annotation is included in the Record Capture Service. ManagedRecord serves as the class that collect many Annotations. A time-series list of each Annotation is maintained. Since there are many annotations, the Establish-FirstUpdate-SubsequentUpdate pattern is not directly applicable. The list for each Annotation is kept through the association in the ChronicledAssociation subtype, ChronicledAnnotation.previous. The other subtype, NonChronicledAssociation, does not have the capability of maintaining a list for the Annotation.

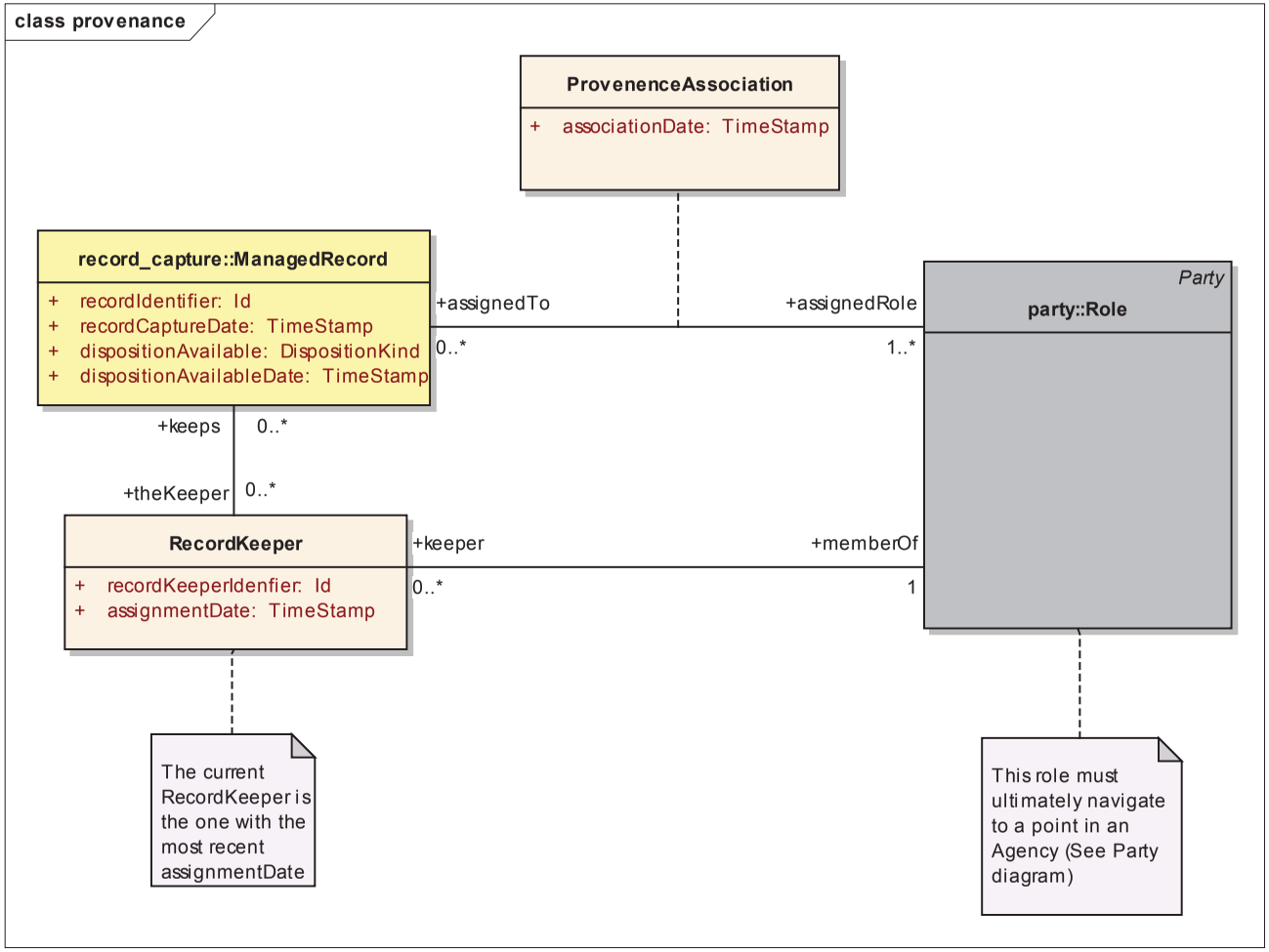
The Authority by which an Annotation is made is recorded in the association Annotation.authority.

Attribute Mapping: Record Capture Service

Attribute Name	UML Elements	Notes
Record_Annotation_Assignment_Date	Annotation Annotation.recordAnnotationAssignmentDate Annotation.previous	Since there may be multiple annotations for a given ManagedRecord, there is an explicit relationship to connote the series (Annotation.previous).
Record_Annotation_Assignment_Date(n)		
Record_Annotation_Assignment_Date(n+1)		
Record_Annotation_Authority	Annotation Authority Annotation.authority	Since there may be multiple annotations for a given ManagedRecord, there is an explicit relationship to connote the series (Annotation.previous).
Record_Annotation_Authority(n)		

Attribute Name	UML Elements	Notes
Record_Annotation_Authority(n+1)	Annotation.previous	connote the series (Annotation.previous). The authority for the annotation is recorded in the association from Annotation to Authority by Annotation.authority
Record_Annotation_Description Record_Annotation_Description(n) Record_Annotation_Description(n+1)	Annotation Annotation.recordAnnotationDescription Annotation.previous	Since there may be multiple annotations for a given ManagedRecord, there is an explicit relationship to connote the series (Annotation.previous).
Record_Annotation_Description_History(n)	Annotation Annotation.recordAnnotationDescription ChronicledAnnotation.previous	No different semantic than Record_Annotation_Description(n), and (n+1)
Record_Annotation_Identifier Record_Annotation_Identifier(n) Record_Annotation_Identifier(n+1)	Annotation Annotation.recordAnnotationIdentifier Annotation.previous	Since there may be multiple annotations for a given ManagedRecord, there is an explicit relationship to connote the series (Annotation.previous).
Record_Capture_Date	ManagedRecord.recordCaptueDate	
Record_Creator_Identifier	Record RecordCreator ManagedRecord.createdBy	The ManagedRecord is created when a record comes under management and is this association between the Record and the RecordCreator
Record_Identifier	ManagedRecord.recordIdentifier	

Provenance Service



Overview: Provenance Service

A ProvenanceAssociation is made between a ManagedRecord and a Role that is filled by some Organization or Person (Party Package). The ordered list of provenance assignments in time is indexed by ProvenanceAssociation.associationDate, the current being the most recent.

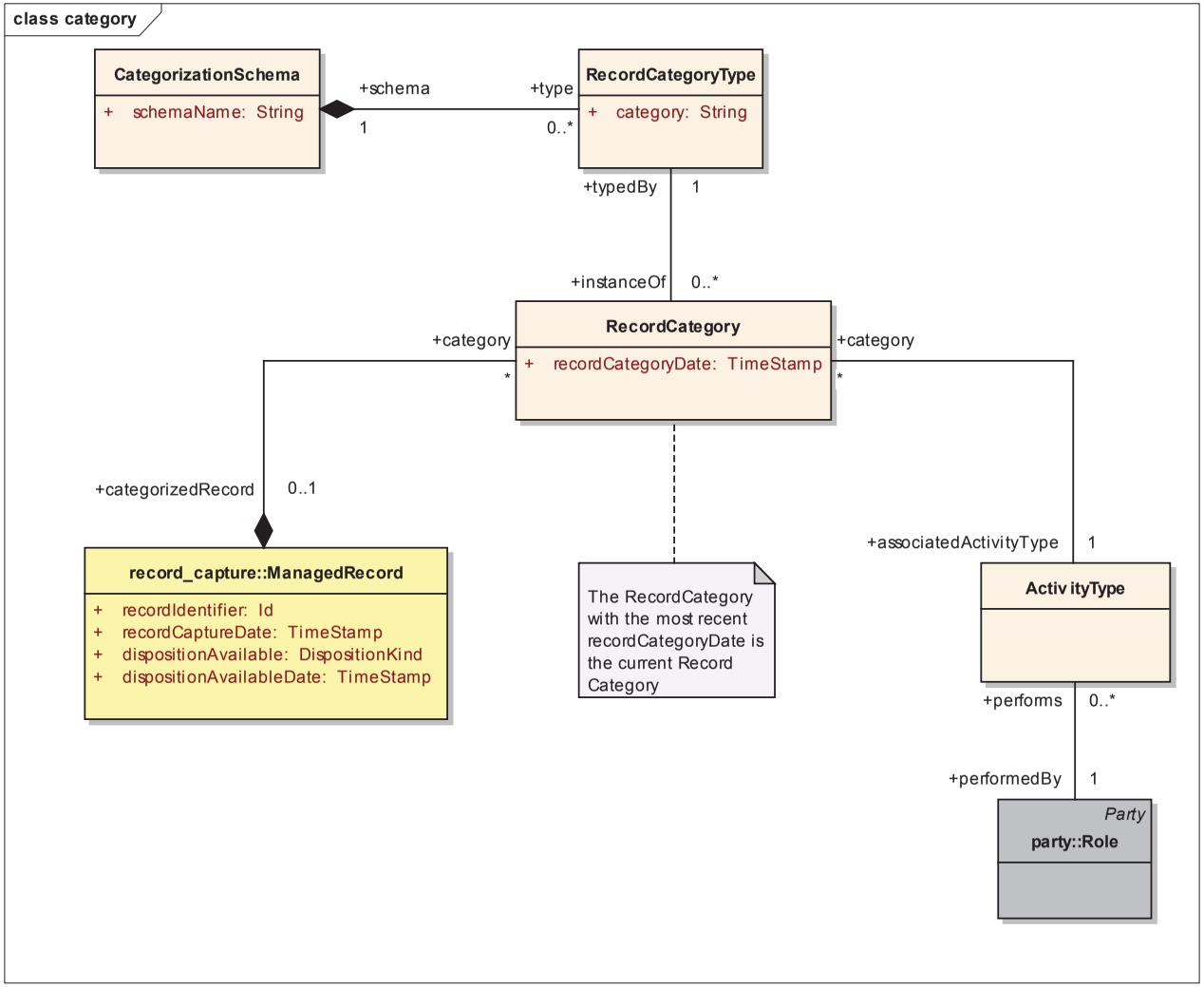
ManagedRecord.theKeeper is the association of the ManagedRecord to its record keeper which is a time ordered list indexed by RecordKeeper.assignmentDate, the current being the most recent. The RecordKeeper is a memberOf a Role which is in the Party model. The organizational structure in which the role resides is modeled there. There is a constraint that the Role's organization structure must ultimately reach an Agency.

Attribute Mapping: Provenance Service

Attribute Name	UML Elements	Notes
Agency_Official_Name		This attribute identifies the organizational entity – whether office, position, or person – within the agency directly responsible for the creation, use, and maintenance of the records under Federal law, while transacting public business, or in the course of carrying out official duties. It identifies the juridical person charged with records responsibilities in accordance with 44 U.S.C. § 3301 and 36 CFR §1222.12 (b)(3)(4).
Agency_Official_Name(superordinate a…∞)_Current	*Establish-FirstUpdate-SubsequentUpdate Pattern* ProvenanceAssociation ProvenanceAssociation.associationDate ManagedRecord.assignedRole Role Role.filledBy Party.officialName Party.superordinate	The provenance is assigned by association of the ManagedRecord to a Role. Role is in the "Party" model and is a subtype of Party which can be a Person or Organization. Organization structure is in this model. A constraint is expressed that the organization structure must ultimately reach an Agency.
Agency_Official_Name(superordinate a…∞)_Current_Date		
Agency_Official_Name(superordinate a…∞)_Previous(n)		
Agency_Official_Name(superordinate a…∞)_Previous_Date(n)		
Agency_Official_Name(superordinate a…∞)_Previous(n+1)		

Attribute Name	UML Elements	Notes
Agency_Official_Name(superordinate a…∞)_Previous_Date(n+1)	Party.superordinate Party.effectiveStartDate Party.effectiveEndDate Organization	structure must ultimately reach an Agency. The Party filling the Role has effective start and end dates to enable tracking the dated evolution of the organization structure.
Agency_Official_Name(superordinate a…z)_Current		A synonym for Agency_Official_Name(superordinate a…∞)_Current for the purposes of a subflow
Agency_Official_Name(superordinate a…z)_Current_Date		A synonym for Agency_Official_Name(superordinate a…∞)_Current_Date for the purposes of a subflow
Agency_Official_Name_Current	*Establish-FirstUpdate-SubsequentUpdate Pattern* ProvenanceAssociation ManagedRecord.assignedRole Role Role.filledBy Party Party.officialName	The official name is found through the Party filling the role assigned to the ProvenanceAssociation for the ManagedRecord.
Agency_Official_Name_Current_Date		
Agency_Official_Name_Previous(n)		
Agency_Official_Name_Previous_Date(n)		
Agency_Official_Name_Previous(n+1)		
Agency_Official_Name_Previous_Date(n+1)		
Record_Keeper_Current	*Establish-FirstUpdate-SubsequentUpdate Pattern* ManagedRecord.theKeeper RecordKeeper.assignmentDate	
Record_Keeper_Current_Date		
Record_Keeper_Previous(n)		
Record_Keeper_Previous_Date(n)		
Record_Keeper_Previous(n+1)		
Record_Keeper_Previous_Date(n+1)		

Category Service



Overview: Category Service

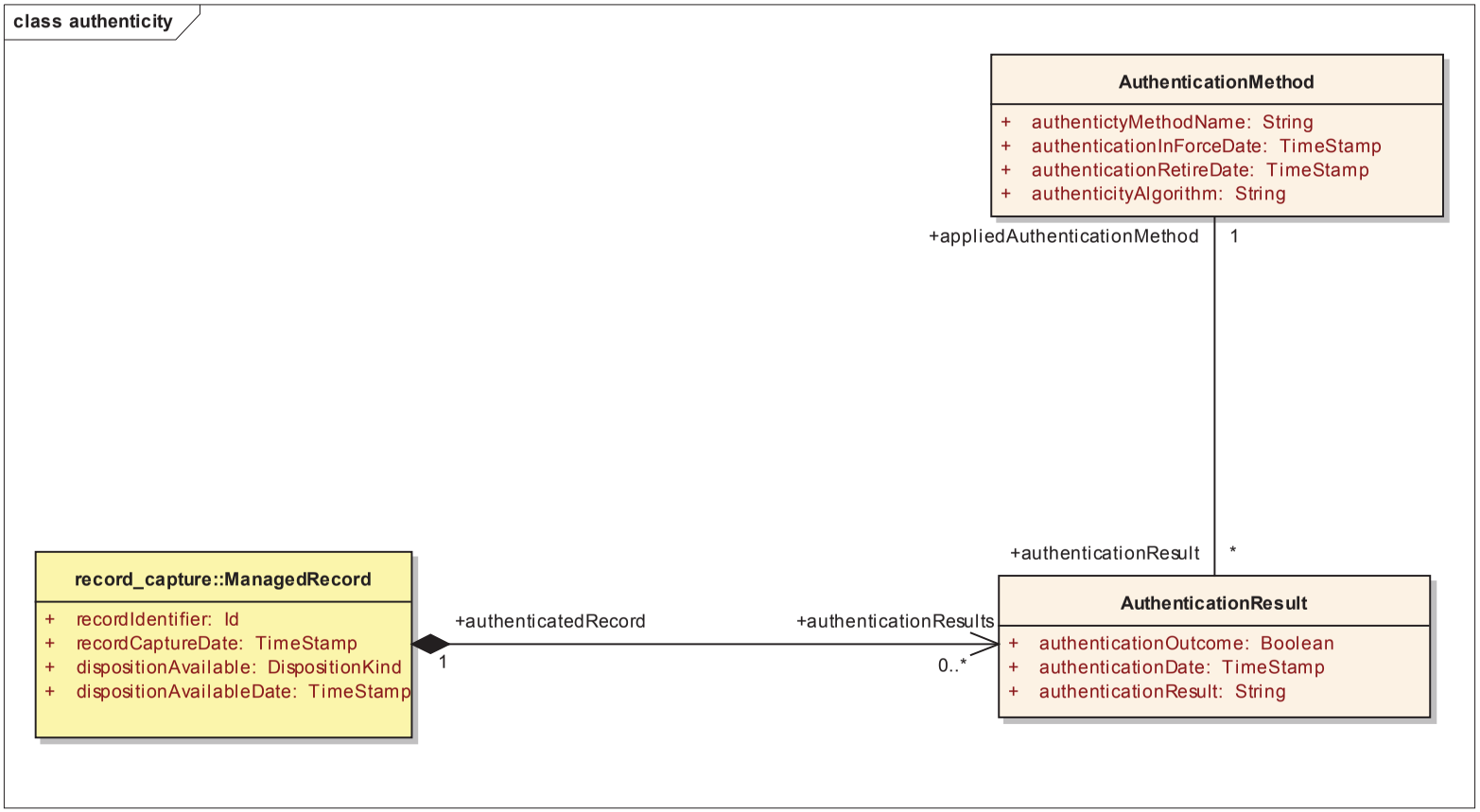
A RecordCategory is an association between a ManagedRecord and an ActivityType designating the activity associated with the Record. There can be multiple RecordCategories for a Record, but only one for a ManagedRecord. To assign an additional RecordCategory an additional ManagedRecord pointing to the same Record must be created.

A RecordCategory is typed by a RecordCategoryType through the RecordCategory.typedBy association. RecordCategoryTypes are pre-established for the record management organization and are aggregated in the CategorizationSchema

Attribute Mapping: Category Service

Attribute Name	UML Elements	Notes
Record_Category_Current	*Establish-FirstUpdate-SubsequentUpdate Pattern* RecordCategory RecordCategory.recordCategoryDate RecordCategory.categorizedRecord RecordCategory.associatedActivityType ActivityType ManagedRecord	
Record_Category_Current_Date		
Record_Category_Previous(n)		
Record_Category_Previous(n+1)		
Record_Category_Previous_Date(n)		
Record_Category_Previous_Date(n+1)		
Record_Category_Current(b…∞)	RecordCategory RecordCategory.recordCategoryDate ManagedRecord	A Record can have multiple categories, but to do so a new ManagedRecord must be created and the additional RecordCategory assigned to it. Although a Record can have multiple Categories, a ManagedRecord can have only one (current).
Record_Category_Current_Date(b…∞)		

Authenticity Service



Overview: Authenticity Service

There are one or more AuthenticationMethods. The one that is currently in use is the one with the latest AuthenticationMethod.authenticationInForceDate. An AuthenticationMethod is not retired until every ManagedRecord is using an AuthenticationMethod with a later AuthenticationMethod.authenticationInForceDate. At this point the AuthenticationMethod.authenticationRetireDate is set.

The base AuthenticationResult to which subsequent Authentications are compared is the earliest AuthenticationResult (as determined by AuthenticationResult.authenticationDate) calculated by the most recent AuthenticationMethod (as determined by AuthenticationMethod.authenticationInForceDate)

AuthenticationResult's are calculated as required. The AuthenticationResult.authenticationResult is compared to that of the base AuthenticationResult. If the same, then the AuthenticationResult.authenticationOutcome is set to "True" otherwise it is set to "False".

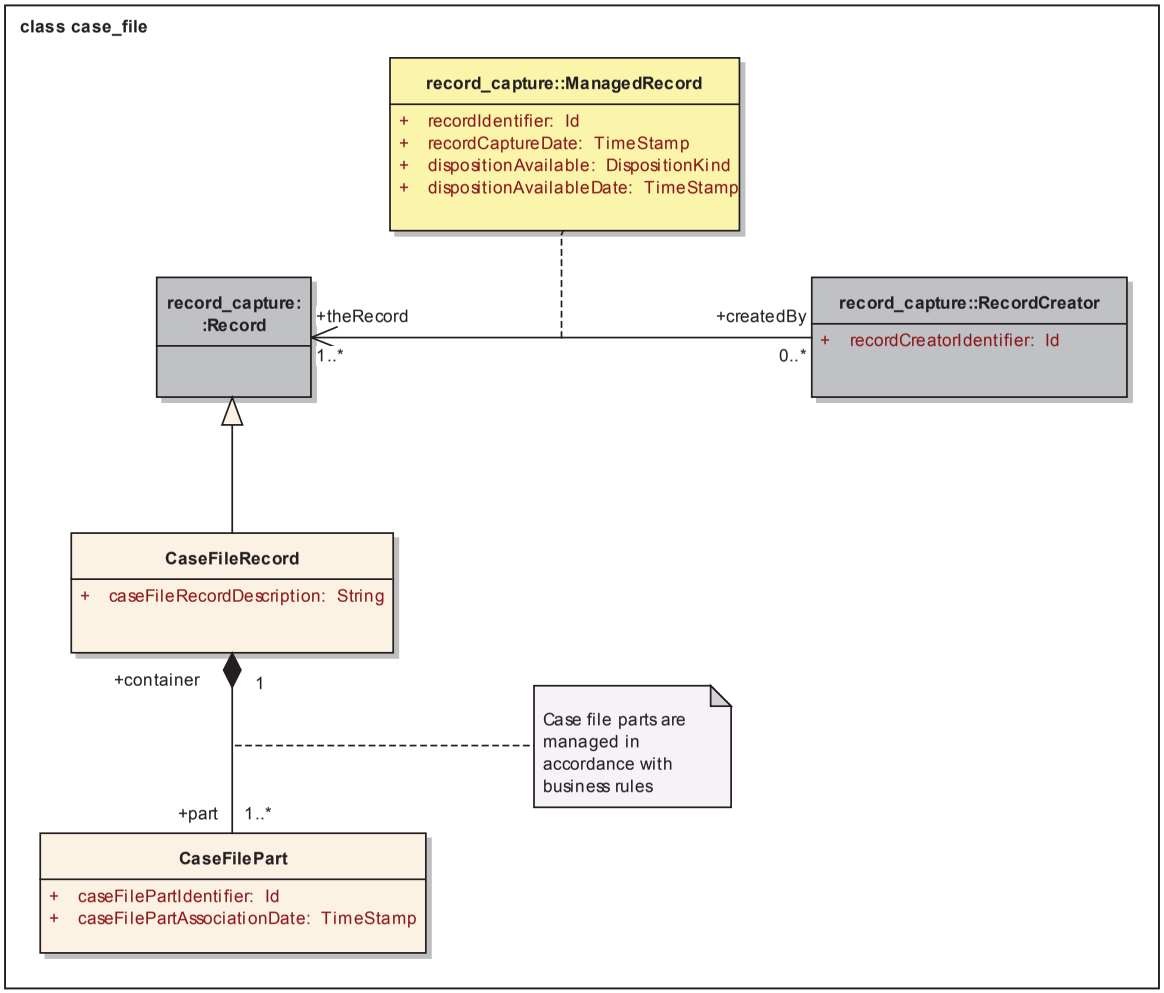
A new AuthenticationMethod can be defined. The next time that a ManagedRecord needs to be authenticated, the ManagedRecord must be authenticated using the last AuthenticationMethod that was used to assure it is an authentic record, and then a new AuthenticationResult is calculated using the latest method. This becomes the new base AuthenticationResult.

When there are no ManagedRecord's with a most recent AuthenticationResult.appliedAuthenticationMethod pointing to a particular AuthenticationMethod, then the AuthenticationMethod is considered retired, and AuthenticationMethod.authenticationRetireDate is set to reflect that.

Attribute Mapping: Authenticity Service

Attribute Name	UML Elements	Notes
Authenticity_Base	AuthenticationResult AuthenticationResult.authenticationResult AuthenticationResult.authenticationDate AuthenticationResult.appliedAuthenticationMethod AuthenticationMethod AuthenticationMethod.authenticationInForceDate	The base AuthenticationResult to which subsequent Authentications are compared is the earliest AuthenticationResult (as determined by AuthenticationResult.authenticationDate) calculated by the most recent AuthenticationMethod (as determined by AuthenticationMethod.authenticationInForceDate) The AuthenticationMethod for any AuthenticationResult is found through AuthenticationResult.appliedAuthenticationMethod
Authenticity_Base_Date	AuthenticationResult.authenticationDate	See Authenticity_Base
Authenticity_Current	AuthenticationResult AuthenticationResult.authenticationResult	Calculated only after the Authentication_Base has been established.
Authenticity_Current_Date	AuthenticationResult.authenticationDate	
Authenticity_Validation	AuthenticationResult.authenticationOutcome	A Boolean value set to "True" if the Authenticity_Current is the same as Authenticity_Base, otherwise it is set to "False"
Authenticity_Set	ManagedRecord.authenticationResults	Defines all results for a given ManagedRecord

Case File Service



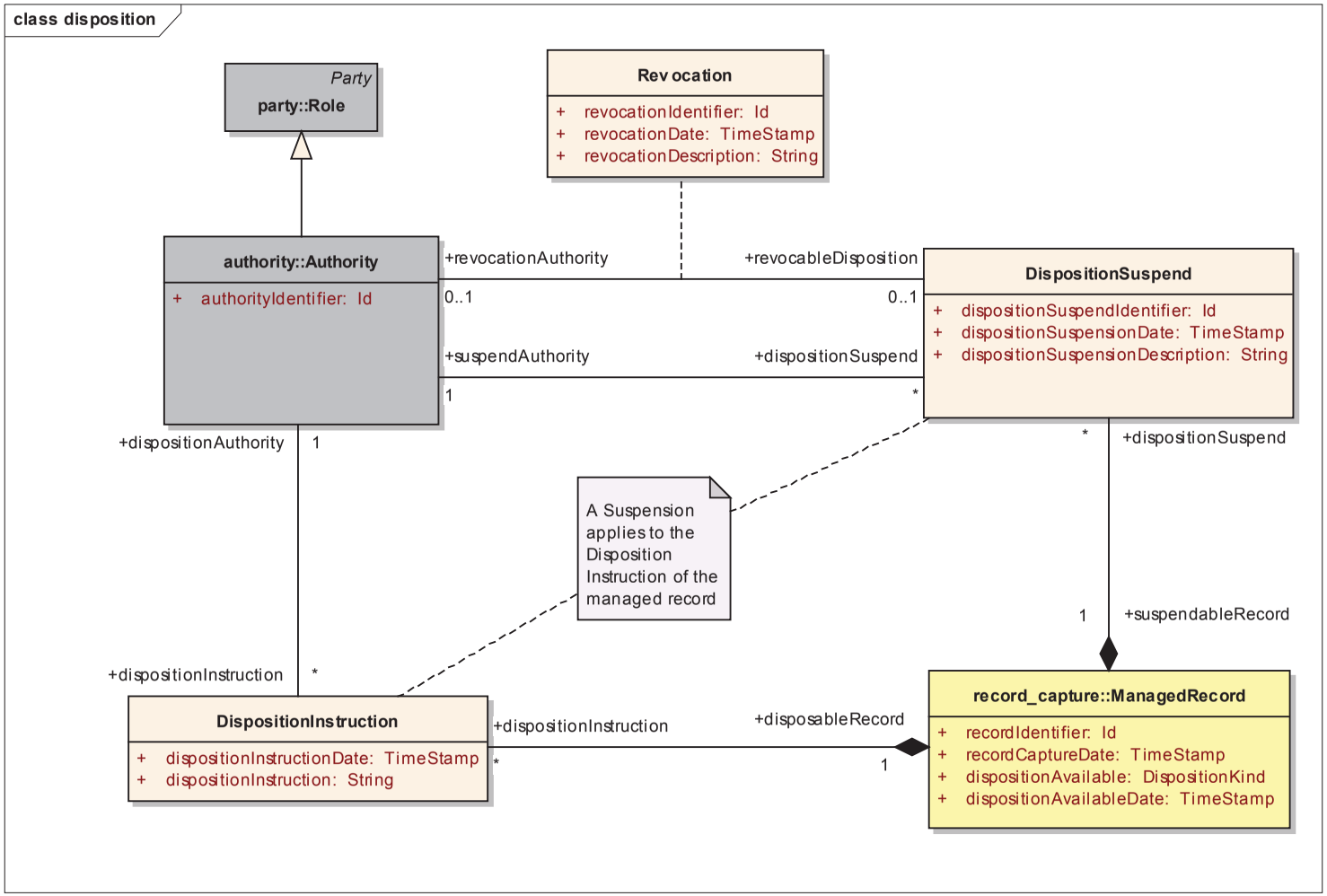
Overview: Case File Service

A subtype of Record is CaseFileRecord. As usual the Record is associated to a RecordCreator through ManagedRecord which documents its identifier and capture date (ManagedRecord.recordIdentifier and ManagedRecord.recordCaptureDate). The CaseFileRecord contains one or more CaseFileParts that are managed in accordance with business rules.

Attribute Mapping: Case File Service

Attribute Name	UML Elements	Notes
Case_File_Record_Identifier	ManagedRecord.recordIdentifier	CaseFileRecord is a subtype of Record. Under management it will have a ManagedRecord entity which carries the identification.
Case_File_Part_Association_Identifier(n)	CaseFileRecord CaseFileRecord.part CaseFilePart CaseFilePart.caseFilePartAssociationDate	The CaseFilePart.caseFilePartAssociationDate serves as an index for the list (n) of CaseFilePart's
Case_File_Part_Association_Date(n)		
Case_File_Part_Association_Identifier(n+1)		
Case_File_Part_Association_Date(n+1)		
Case_File_Record_Capture_Date	ManagedRecord.recordCaptureDate	
Case_File_Record_Description	CaseFileRecord.caseFileRecordDescription	
Record_Creator_Identifier	RecordCreator.recordCreatorIdentifier	Through ManagedRecord

Disposition Service



Overview: Disposition Service

For a ManagedRecord, a time ordered series of DispositionInstruction's are kept through ManagedRecord.dispositionInstruction association. The current instruction is that with the most recent DispositionInstruction.dispositionInstructionDate. Each DistributionInstruction is associated with a single Authority. Any given Authority can be associated with many DispositionInstruction's

The ManagedRecord may have one or more DispositionSuspend orders, each with an Authority through DispositionSuspend.suspendAuthority. A dated list of all suspensions and their corresponding Authority's is maintained through DispositionSuspend.dispositionSuspendDate. The Authority has an implied date series recorded through this date and the DispositionSuspend.suspendAuthority association, since there is one and only one Authority for each instance of DispositionSuspend.

Any DispositionSuspend can be revoked by the creation of a Revocation instance which associates the DispositionSuspend with the Authority revoking it.

The set of active DispositionSuspend instances is comprised of those instances which have no Revocation association.

ManagedRecord.dispositionAvailable is normally set to "not_set". When a transfer or destroy action is to be executed, the attribute is set to "transfer" or "destroy" as appropriate along with the ManagedRecord.dispositionAvailableDate.

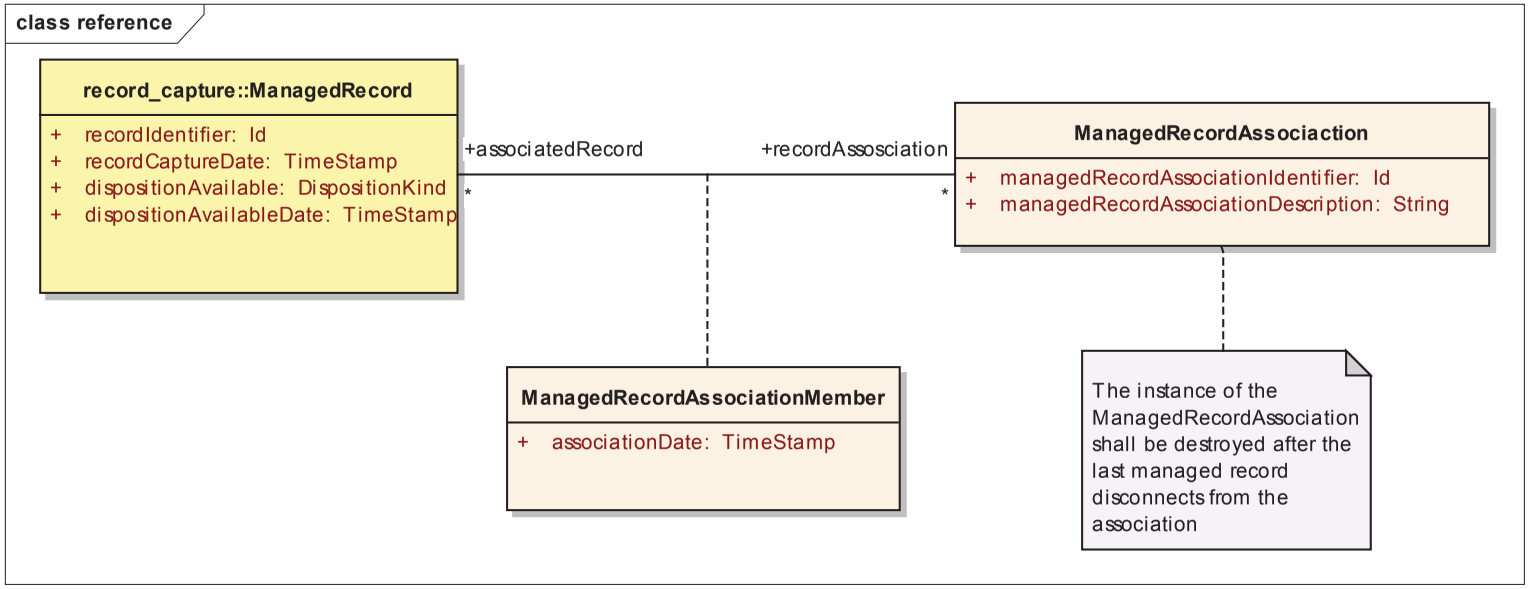
Attribute Mapping: Disposition Service

Attribute Name	UML Elements	Notes
Disposition_Action~~~~	ManagedRecord.dispositionAvailable ManagedRecord.dispositionAvailableDate	When available for disposition, ManagedRecord.DispositionKind is populated with the appropriate disposition from the type class, DispositionKind (transfer or destroy), and the ManagedRecord.dispositionAvailableDate is set. Since this only happens once, it constitutes the record of its

Attribute Name	UML Elements	Notes
		disposition.
Disposition_Action_Date	ManagedRecord.dispositionAvailableDate	The date that the record was made available for disposition.
Disposition_Authority_Current Disposition_Authority_Current_Date Disposition_Authority_Previous(n) Disposition_Authority_Previous_Date(n) Disposition_Authority_Previous(n+1) Disposition_Authority_Previous_Date(n+1)	*Establish-FirstUpdate-SubsequentUpdate Pattern* DispositionInstruction DispositionInstruction.dispositionAuthority DispositionInstruction.dispositionInstructionDate Authority	The association from DispositionInstruction to Authority. DispositionInstruction.dispositionInstructionDate is used to provide a time indexed series. The current Authority is determined by the DispostionInstruction.dispositionAuthority of the DispositionInstruction with the most recent DispositionInstruction.dispositionInstructionDate.
Disposition_Authority_Suspend Disposition_Authority_Suspend(n) Disposition_Authority_Suspend_Date(n) Disposition_Authority_Suspend(n+1) Disposition_Authority_Suspend_Date(n+1)	*Establish-FirstUpdate-SubsequentUpdate Pattern* DispositionSuspend DispositionSuspend.revocationAuthority DispositionSuspend.dispositionSuspensionDate Revocation	In the text, Disposition_Authority_Suspend indicates any of the Disposition_Authority_Suspend attributes [(n) or (n+1)] A variation on the pattern, the time series is maintaied to show that there can be multiple active suspensions, indicating the Authority of each. Active suspensions are indicated by the absence of a Revocation instance.
Disposition_Authority_Suspend_Revocation Disposition_Authority_Suspend_Revocation(n) Disposition_Authority_Suspend_Revocation_Date(n) Disposition_Authority_Suspend_Revocation(n+1) Disposition_Authority_Suspend_Revocation_Date(n+1)	*Establish-FirstUpdate-SubsequentUpdate Pattern* Revocation Revocation.revocationDate	In the text, Disposition_Authority_Suspend_Revocation indicates any of the Disposition_Authority_Suspend_Revocation attributes [(n) or (n+1)] A variation on the pattern, the time series is maintaied to show that there can be multiple revocations, each associated with a single suspension.
Disposition_Authority_Suspend_Revocation_Association(n) Disposition_Authority_Suspend_Revocation_Association(n+1)	Revocation DispositionSuspend DispositionSuspend.revocationAuthority Authority	By representing revocation as an associative class from a suspension to its authority,
Disposition_Instruction_Current	*Establish-FirstUpdate-SubsequentUpdate Pattern*	

Attribute Name	UML Elements	Notes
Disposition_Instruction_Current_Date	DispositionInstruction DispositionInstruction.dispositionInstructionDate DispositionInstruction.dispositionInstruction	
Disposition_Instruction_Previous(n)		
Disposition_Instruction_Previous_Date(n)		
Disposition_Instruction_Previous(n+1)		
Disposition_Instruction_Previous_Date(n+1)		
Record_Scheduled_Destruction_Available	ManagedRecord.dispositionAvailable	
Record_Scheduled_Transfer_Available	ManagedRecord.dispositionAvailable	

Reference Service



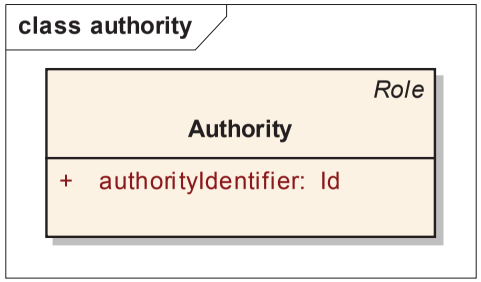
Overview: Reference Service

ManagedRecords are associated with a particular ManagedRecordAssociation through ManagedRecordAssociationMember. The enrollment in the association is time stamped by ManagedRecordAssociationMember.associationDate. Membership of a ManagedRecord in an association is terminatated by deleting the corresponding ManagedRecordAssociationMember instance. When all membershps have been removed from a ManagedRecordAssociation, it is deleted.

Attribute Mapping: Reference Service

Attribute Name	UML Elements	Notes
Record_Association_Identifier	*Establish-FirstUpdate-SubsequentUpdate Pattern* ManagedRecordAssociationMember ManagedRecordAssociationMember.associationDate ManagedRecord ManagedRecordAssociation	In order to create time ordered lists of membership in different groups of associations, the ManagedRecordAssociation was constructed. Neither it nor its attributes have explicit counterparts in the text, but its existence is implicitly required by the semantics and behavior described in the text for associations.
Record_Association_Date		
Record_Association_Description		
Record_Association_Identifier(n)		
Record_Association_Date(n)		
Record_Association_Description(n)		
Record_Association_Identifier(n+1)		
Record_Association_Date(n+1)		
Record_Association_Description(n+1)		

Authority



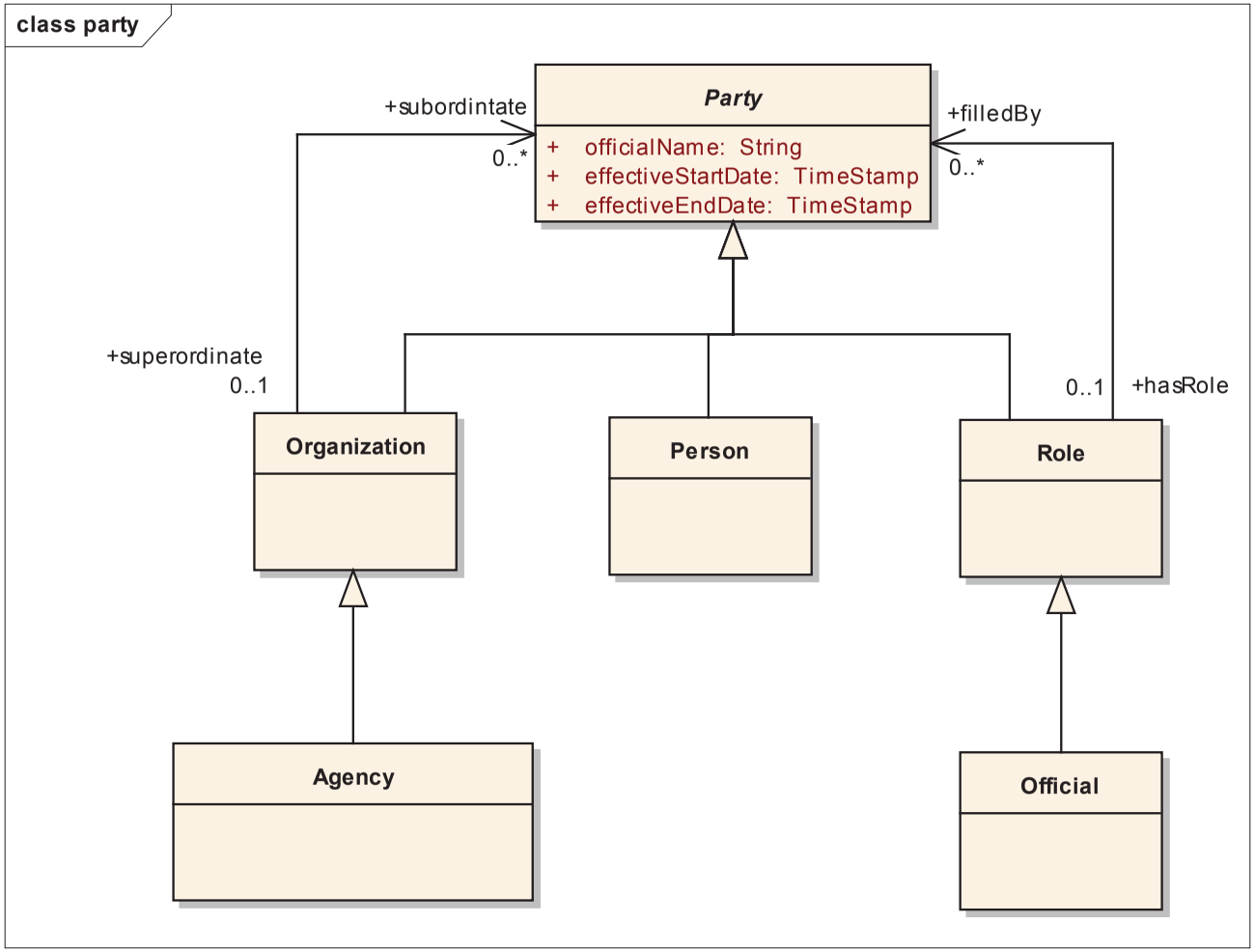
Overview: Authority Package

The Authority Package was created to segregate the re-useable concept of Authority.

Attribute Mapping: Authority Package

Authority.authorityIdentifier is mapped to from numerous packages that require an Authority

Party


class party
Party
+ officialName: String
+ effectiveStartDate: TimeStamp
+ effectiveEndDate: TimeStamp
+subordintate
0..*
+filledBy
0..*
+superordinate
0..1
0..1
+hasRole
Organization
Person
Role
Agency
Official

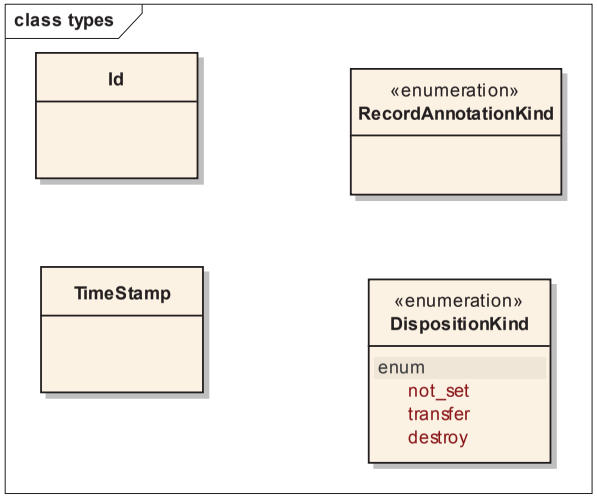
Overview: Party

The Party Model is a widely used pattern of the relationships of Person, Organization, and Roles. A Party can be an Organization, Person, or Role. A Role is filled by a Party (generally an Organization or Person rather than another Role). The Organization has subordinate Party's, implementing an organization structure. The subtypes of Agency and Official were added to give the model a Records Management context.

Attribute Mapping: Party

In support of the Records Management, three attributes were added to Party. Party.officialName provides the name of the Role, Person, or Organization through inheritance. Party.effectiveEndDate and Party.effectiveStartDate were added to implement the dated superordinate modification (organization tree edit) specified in the text.

Types



Overview: Types

Every attribute in the model has a type. These specify types beyond the standard UML attribute types.

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