

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



This report is published pursuant to the "Interagency Project Team, RMS Requirements Development Project Workshop Report – Session 9, December 7, 2005," the "Records Management Service Components Requirements Development Project Final Report, March 31, 2005," and the November 2004 Memorandum of Understandings between the Managing Partner Agency (NARA) and the Contributing Partner Agencies.



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Records Management Services (RMS) Requirements Development Project

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Housing and Urban Development

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EXECUTIVE SUMMARY

On December 7, 2005, 12 of 18 Interagency Project Team (IPT) members representing the Contributing Partner Agencies and the National Archives and Records Administration (NARA), Records Management Services Requirements Development Project, met and reviewed a technical report "Functional Requirements and Attributes for Records Management Services, November 15, 2005." The IPT agreed the functional requirements and attributes had attained a level of detail needed to describe records management services for inclusion in the Federal Enterprise Architecture (FEA) Component Organization and Registration Environment (CORE.gov).

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.

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 and Attributes for Records Management Services, December 7, 2005," with 22 use case, two Integration for Definition Function Modeling (IDEF0) function diagrams, and eight Unified Modeling Language (UML) class diagrams.

Interagency Project Team / Contributing Partner Agencies January – December 2005

Department of Agriculture
Department of Commerce
Department of Defense
Department of Defense
Department of Energy
Department of Health and Human Services
Department of Homeland Security
Department of the Treasury
Department of Transportation
Department of Veterans Affairs
Environmental Protection Agency
General Services Administration
Housing and Urban Development

Department of Justice

National Aeronautics & Space Administration

National Archives and Records Administration

Social Social

Department of State Social Security Administration

Department of the Interior

The agencies recommend NARA submit "Functional Requirements and Attributes for Records Management Services, December 7, 2005" to the Architecture and Infrastructure Subcommittee of the CIO Council for inclusion in the FEA's CORE.gov in support of their mission requirements.

RMS Requirements Development Project



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INTRODUCTION

On December 7, 2005 representatives from 13 Federal 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 Federal Enterprise Architecture (FEA) Component Organization and Registration Environment (CORE.gov). The approved functional requirements and attributes for records management services are presented here.

The process leading to this publication was the result of a year-long effort by representatives of 18 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 two phases. In the first phase, participants attended facilitated meetings from January to March 2005, and identified and described eight proposed records management activities supportable 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).

The participants then began the second phase of activities: a sub-set of their group, along with NARA Subject Matter Experts (SME), would meet with the RMSC Program Office and produce a set of functional requirements and attributes in use case format derived from their work documented in the March 31, 2005 report. 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

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¹ Interagency Project Team, RMS Requirements Development Project Workshop Report – Session 9, December 7, 2005.



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.

As a community of interest, the representatives have 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.

FORWARD

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

This report organizes use cases, functional requirements, and attributes around seven records management services addressing core records management activities. The seven records management services are those records management activities agencies determined to be most appropriate for development in support of the Federal Enterprise Architecture (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. 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. 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 services described in the use cases 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 use cases 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 Federal Enterprise Architecture (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. 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. 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.⁴ This means that 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 and portable, designed to be used by many applications requiring similar services.⁵ 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

² Executive Office of the President of the United States, <u>FY07 Budget Formulation - FEA Consolidated Reference Model Document</u>, May 2005, at http://www.whitehouse.gov/omb/egov/a-1-fea.html ³ Ibid., p. 48.

⁴ See Architecture and Infrastructure Committee, Federal Chief Information Officers Council, <u>Service Component-Based Architectures Version 2.0</u>, June 2004, at http://www.cio.gov

⁵ 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.



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.

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 USE CASE

Purpose

The **Record Capture Use Case** 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)

- 1. The Record Capture Service shall provide the capability to populate the Record_Creator_Unique_Identifier³ attribute when a DECLARED RECORD is set aside producing a populated Record_Creator_Unique_Identifier attribute.
- 2. The **Record Capture Service** shall provide the capability to populate the **Record_Unique_Identifier** attribute when a **DECLARED RECORD** is set aside producing a populated **Record Unique Identifier** attribute.
- 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.
- 4. The Record Capture Service shall provide the capability to make available for output all data populating the attributes created by the Record Capture Use Case.⁴

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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.

²Society of American Archivists, <u>A Glossary of Archival and Records Terminology</u>, s.v., "reliability;"

InterPARES, "Findings on the Preservation of Authentic Electronic records," pp. 14-19; ISO 15489-2, 4.3.2.

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.

RMS Requirements Development Project Record Capture Service – Record Capture Use Case



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. A Unique Identifier exists for the **RECORD CREATOR**.

Main Flow

- 1. An Actor is aware a **DECLARED RECORD** is available.
- 2. Populate the Record Creator Unique Identifier attribute.
- 3. Populate the **Record Unique 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 Use Case.⁵

Sub Flow(s) – None

Alternate Flow(s) – None

Glossarv

- 1. <u>Captured Record</u> 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.
- 2. <u>Declared Record</u> 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. <u>Managed Record</u> 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.

RMS Requirements Development Project Record Capture Service – Record Capture Use Case



- 4. <u>Record Creator</u> 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.
- 5. <u>System Date</u> 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.
- 6. <u>Unique Identifier</u> 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.

Reference(s)

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- 4. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 http://archives.gov/electronic records archives/pdf/rmsc0305.pdf
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- 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," <u>RMSC Program Office Technical</u> 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

RMS Requirements Development Project Record Capture Service – Record Capture Use Case



- 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



PROVENANCE SERVICE – PROVENANCE ESTABLISH USE CASE

Purpose

The **Provenance Establish Use Case** 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 Use Case** ties the record to the circumstances of its creation at the time of creation. The use case 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 Use Case** 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 Use case 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)

 The Provenance Establish Service shall provide the capability to populate the Agency_Official_Name_Current¹ attribute producing a populated Agency_Official_Name_Current attribute.

- 2. The Provenance Establish 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.
- 3. The **Provenance Establish Service** shall provide the capability to populate the **Agency_Official_Name_superordinate** a...∞)_Current² 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 $-\infty$ – 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



- 4. The Provenance Establish 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 Official Agency Name(superordinate a...∞) Current Date attribute.
- 5. The Provenance Establish Service shall provide the capability to populate the Recordkeeper_Current³ attribute upon the population of the Agency_Offical_Name_Current attribute producing a populated Recordkeeper_Current attribute.
- 6. The Provenance Establish 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.
- 7. The **Provenance Establish Service** shall provide the capability to make available for output all data populating the attributes created by the **Provenance Establish Use**Case 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 is available

between any organizational entity (from as granular a level as an individual) to those organizational entities superior to it – example: Individual: Agency: Bureau: Department.

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.



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 Establish Service attributes is available to be managed.
- 7. Make available all data populating all attributes of the **Provenance Establish Use** Case 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 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.
- 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 custody, the date upon which that record keeper assumed that responsibility, and the identity and chronology of subsequent custodians(s), if applicable.

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.



- 4. <u>Provenancial Record</u> 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. <u>Record Keeper</u> The administrative entity, unit, office, or person responsible for the custody and ongoing management of the records during their active business use.
- 6. <u>System Date</u> 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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- 7. International Standards Organization, ISO 15489-1: Information and Documentation Records Management Part 1: General, Sept. 15, 2001, 7.2.1
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- 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



PROVENANCE SERVICE – PROVENANCE FIRST UPDATE USE CASE

Purpose

The Provenance First Update Use Case 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 Use Case) there is the capability to document the evidence of any changes in provenance.

The **Provenance First Update Use Case** 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 Use Case** 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 Use case 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 Use Case** 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)

- 1. The **Provenance Service** shall provide the capability upon the change of the Agency Offical Name Current¹ 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.
- 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.
- 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...\infty) Previous(n) attribute.
- 4. The **Provenance Service** shall provide the capability to populate a Agency Official Name (superordinate a...\infty) Previous Date(n) attribute when a Agency Official Name(superordinate a...\infty) Previous(n) attribute is populated using the date from a Agency Official Name(superordinate a...\infty) Current Date attribute producing a populated Agency Official Name(superordinate a...∞) Previous Date(n) attribute.
- 5. The Provenance Service shall provide the capability to make available for output all data populating the attributes created by the Provenance First Update Use Case.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 $-\infty$ – 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

- 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**Use Case.⁶

Sub Flow: Update Super Ordinate Structure

- 1. After 7 Main Flow
- 2. Access Agency Official Name(superordinate a...\infty) 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. <u>Captured Record</u> 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.
- 2. <u>Provenance</u> 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. <u>Managed Record</u>. A record as set aside by a business owner that has been subject to records management activities.
- 4. <u>Record Keeper</u> the administrative entity, unit, office, or person responsible for the custody and ongoing management of the records during their active business use.

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- 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, <u>A Glossary of Archival and Records Terminology</u>, 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," <u>RMSC Program Office Technical Report</u>, 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



PROVENANCE SERVICE – PROVENANCE SUBSEQUENT UPDATE USE CASE

Purpose

The **Provenance Subsequent Update Use Case** 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 Use Case**) and the first update of provenance has occurred (**Provenance First Update Use Case**) 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 Use Case** 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 Use case 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 Use Case** 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)

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 Official_Agency_Name_Previous(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.



- The Provenance Service shall provide the capability to populate a
 Agency_Official_Name_Previous_Date(n+1) attribute when a
 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.
- 3. The Provenance Service shall provide the capability upon the change of the Agency_Official_Name(superordinate a... \infty)_Previous(n)^3 to populate a Agency_Official_Name(superordinate a... \infty)_Previous(n+1) attribute with data from the Agency_Official_Name(superordinate a... \infty)_Previous(n) attribute producing a populated Agency_Official_Name(superordinate a... \infty)_Previous(n+1) attribute.
- 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.
- 5. The **Provenance Service** shall provide the capability to make available for output all data populating the attributes created the **Provenance Subsequent Update Use**Case.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.

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.

³ The infinity symbol $-\infty$ – 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.



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 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 Use Case.⁵

Sub Flow: Update Superordinate Structure

- 1. After 7 Main Flow.
- 2. Access Agency Official Name(superordinate a...\infty) 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.

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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. <u>Managed Record</u> 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.

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- 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
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- 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)
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- 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



PROVENANCE SERVICE – PROVENANCE RECORD KEEPER FIRST UPDATE USE CASE

Purpose

The **Provenance Record Keeper First Update Use Case** 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 Use case) there is the capability to document evidence of changes.

The **Provenance Record Keeper First Update Use Case** ties the record to the circumstances of its management throughout its active use for business purposes. 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 **Provenance Record Keeper First Update Use Case** 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 **Provenance Record Keeper First Update Use Case** supports the concept of capturing evidence of provenance across time. This Use case 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)

- 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.
- 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.
- 3. The **Provenance Service** shall provide the capability to make available for output all data populating the attributes created by the **Provenance Record Keeper First Update Use Case.**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

 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 **Provenance Record** Keeper First Update Use Case.⁵

Alternate Flow(s) - None

Sub Flow(s) - None

Glossary

- 1. <u>Managed Record</u> 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.

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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.



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- 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 – PROVENANCE RECORD KEEPER SUBSEQUENT UPDATE USE CASE

Purpose

The Provenance Record Keeper Subsequent Update Use Case 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 Use Case) and the first update of RECORD KEEPER has occurred (Provenance Record Keeper First Update Use Case) 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 **Provenance Record Keeper Subsequent Update Use Case** 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 **Provenance Record Keeper Subsequent Update Use Case** supports the concept of capturing evidence of provenance across time. This Use case supports the business requirement that an individual, position, or office be identified as the record keeper.

Functional Requirement(s)

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.

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.

² (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept.

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



3. The **Provenance Service** shall provide the capability to make available for output all data populating the attributes created the Provenance Record Keeper Subsequent Update Use Case.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.
- A MANAGED RECORD's RECORD KEEPER attributes have been updated. 6.
- 7. Make available all data populating all attributes of the Provenance Record **Keeper Subsequent Update Use Case.** 4

Alternate Flow(s) - None

Sub Flow(s) - None

Glossarv

- Managed Record A record as set aside by a business owner that has been 1. 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

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.



- 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

- Records Management Service Components Requirements Development Project 1. 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
- U.S. DoD Records Management Task Force, Office of the Deputy Assistant 4. 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."
- International Standards Organization, ISO 15489-1: Information and 7. 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

RMS Requirements Development Project



Provenance Service - Provenance Record Keeper Subsequent Update Use Case

- 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 USE CASE

Purpose

The Category Establish Use Case 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 RECORDs 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 Use Case**. 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** use cases).

The Category Establish Use Case supports an agency's ability to implement "store once use many times" within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category and more than one disposition – each being a single instance tied to a specific business transaction.

Functional Requirement(s)

- 1. The Category Service shall provide the capability to populate a Record_Category_Current attribute producing a populated Record_Category_Current attribute.
- 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.



3. The Category Service shall provide the capability to make available for output all data populating the attributes created by the Category Establish Use Case. 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** 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 Use Case.²

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... ∞).
- 3. Populate the Record Category Current Date($b...\infty$).
- 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.

Alternate Flow(s) - None

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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 Ihid

³ Where "a" was the first instance in the Main Flow and $(b...\infty)$ in the Sub Flow indicates there is no limit to the number of case files a "part" can be associated.



Glossary

- 1. <u>Archival bond</u> 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. <u>Categorization Schema</u> 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. <u>Managed Record</u> 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. <u>System Date</u> 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," <u>RMSC Program Office</u> 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
- 44 U.S.C. § 3303 Lists and schedules of records to be submitted to the Archivist 14. 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 USE CASE

Purpose

The Category First Update Use Case 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 RECORDs 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 Use Case**. 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** use cases).

The Category First Update Use Case continues an agency's ability to implement "store once use many times" within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category and more than one disposition – each being a single instance tied to a specific business transaction.

Functional Requirements

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) attribute using the data being changed in the Record_Category_Current attribute producing a populated Record_Category_Previous(n) attribute.

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



- 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.
- 3. The Category Service shall provide the capability to make available for output all data populating the attributes created in the Category First Update Use Case.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 **CATEGORIZATION SCHEMA** is available.
- 2. A MANAGED RECORD with populated RECORD CATEGORY attributes is available.

Main Flow

- 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)**³ 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 Use Case.⁴

Sub Flow(s) - None

Alternate Flow(s) - None

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 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 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. <u>Archival Bond</u> 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. <u>Categorization Schema</u> 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. <u>Managed Record</u> 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," <u>RMSC Program Office Technical Report</u>, 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 USE CASE

Purpose

The Category Subsequent Update Use Case 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 RECORDs 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 Use case. 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 use cases).

The Category Subsequent Update Use Case continues an agency's ability to implement "store once use many times" within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category and more than one disposition – each being a single instance tied to a specific business transaction.

Functional Requirements

1. The Category Service shall provide the capability upon the change of data in the Record_Category_Previous(n)¹ attribute to populate a Record_Category_Previous(n+1)² attribute using the data being changed in the Record_Category_Previous(n) attribute producing a populated Record_Category_Previous(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.



- 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.
- 3. The Category Service shall provide the capability to make available for output all data populating the attributes created in the Category Subsequent Update Use Case.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 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)⁴ attribute.
- 3. Populate the **Record_Category_Previous_Date(n+1)** attribute.
- 4. A MANAGED RECORD's category attributes have been updated.
- 5. Make available all data populating all attributes of the Category Subsequent Update Use Case.⁵

Sub Flow(s) - None

Alternate Flow(s) - None

3

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 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. <u>Categorization Schema</u> 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. <u>Managed Record</u> 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," <u>RMSC Program Office Technical Report</u>, 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 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 USE CASE

Purpose

The **Authenticity Establish Use Case** creates an **AUTHENTICATED RECORD** providing the initial benchmark through which all subsequent validations of authenticity are made throughout the entire life cycle of 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" – 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

- 1. The **Authenticity Service** shall provide the capability to populate an **Authenticity_Original** attribute producing a populated **Authenticity_Original** attribute.
- 2. The **Authenticity Service** shall provide the capability to populate an **Authenticity_Original_Date** using the **SYSTEM DATE** attribute producing a populated **Authenticity Original Date** attribute.
- 3. The **Authenticity Service** shall provide the capability to make available for output all data populating the attributes created the **Authenticity Establish Use**Case 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 Original** attribute.
- 3. Populate the **Authenticity Original 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 Use Case ³

Alternate Flow(s) - None

Sub Flow(s) - None

Glossary

- Authenticated Record A record with a populated authenticity indicator attribute 1. 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.

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- 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," <u>RMSC Program Office</u> Technical Report, July 20, 2005
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- 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



AUTHENTICITY SERVICE – AUTHENTICITY VALIDATE USE CASE

Purpose

The **Authenticity Validate Use Case** verifies current authenticity of a **MANAGED RECORD** using the same method that established the authenticity. This use case requires activities used to establish the authenticity be repeated each time the **MANAGED RECORD** is accessed.

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" – 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

- 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.
- 2. The Authenticity Service shall provide the capability to populate an Authenticity_Current attribute using the same methodology used to populate the Authenticity_Original attribute producing a populated Authenticity_Current attribute.
- 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.
- 4. The **Authenticity Service** shall provide the capability to populate an **Authenticity_Validation** attribute by comparing the data values in the populated **Authenticity_Original** attribute to the **Authenticity_Current** attribute producing a populated **Authenticity_Validation** attribute.
- 5. The Authenticity Service shall provide the capability to populate the Authenticity_Validation attribute with the data only "same" or "not same" by comparing the data values in the populated Authenticity_Original 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."



6. The **Authenticity Service** shall provide the capability to make available for output all data populating the attributes created the **Authenticity Validate Use**Case.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 Original attribute data.
- 3. Populate the **Authenticity Current** attribute.
- 4. Compare **Authenticity_ Original** 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 Use**Case. 4

Sub Flow(s) – None

Alternate Flow(s) – None

Glossary

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- 1. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.
- 2. <u>System Date</u> 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.



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- 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
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- 10. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
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- 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
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- 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 USE CASE

Purpose

The Case File Record Capture Use Case populates records management attributes for a **DECLARED CASE FILE RECORD** that provide evidence of a **RECORD CREATOR** and the date it was set aside, ¹ and ensures it is uniquely identified in the electronic environment – creating a **CAPTURED CASE FILE RECORD** available to be managed.²

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

A CASE FILE at its point of final aggregation⁴ 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 CASE FILE.

Functional Requirement(s)

1. The Record Capture Service shall provide the capability to populate the Record_Creator_Unique_Identifier⁵ attribute when a Declared Record is set aside producing a populated Record Creator Unique Identifier attribute.

2. The Case File Service shall provide the capability to populate the Case_File_Record_Unique_Identifier attribute when a Declared Record Case File is set aside⁶ producing a populated Case_File_Record_Unique_Identifier attribute.

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, <u>A Glossary of Archival and Records Terminology</u>, s.v., "reliability;" InterPARES, "Findings on the Preservation of Authentic Electronic records," pp. 14-19; ISO 15489-2, 4.3.2. ³Society of American Archivists, <u>A Glossary of Archival and Records Terminology</u>, s.v., "reliability;" InterPARES, "Findings on the Preservation of Authentic Electronic records," pp. 14-19; ISO 15489-2, 4.3.2.

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 enough to be set aside and managed 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.



- 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 Record Case File is set aside producing a populated Case File Record Capture Date attribute.
- 4. The Case File Service shall provide the capability to populate a Case_File_Record_Description⁷ attribute when a Case_File_Record_Unique_Identifier attribute is populated producing a populated Case File Record_Description attribute.
- 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 Use Case. 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 Unique 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 Use Case 9

Sub Flow(s) - None

Alternate Flow(s) – None

⁷ This requirement supports the business need to provide additional information necessary to manage a Case File.

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.



Glossary

- 1. <u>Captured Case File Record</u> 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..
- 2. <u>Case File</u> A collection of documents (a file) relating to a specific action, transaction, event, person, place, project, investigation or other subject. ¹⁰
- 3. <u>Declared Case File Record</u> –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. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.
- 5. <u>Record Creator</u> 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. <u>System Date</u> 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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- 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

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

¹⁰ Society of American Archivists, <u>A Glossary of Archival and Records Terminology</u>, 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."



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- 11. 44 U.S.C. § 3102 Establishment of program of management (1)(2)
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- 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

RMS Requirements Development Project Case File Service – Case File Part Associate Use Case



CASE FILE SERVICE – CASE FILE PART ASSOCIATE USE CASE

Purpose

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

The Case File Part Associate Use Case provides the ability to link items related because of a business act, transaction, case, investigation, etc. to form a CASE FILE.³ The Case File Part Associate Use Case supports the creation of a Case File – 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)

- 1. The Case File Service shall provide the capability to populate a Case_File_Part_Association_Unique_Identifier attribute creating a unique relationship between a Case File Part and the Case File producing a populated Case_File_Part_Association_Unique_Identifier attribute.
- 2. The Case File Service shall provide the capability to populate a Case_File_Part_Association_Date attribute using the SYSTEM DATE when a Case_File_Part_Association_Unique_Identifier attribute is populated producing a populated Case_File_Part_Association_Date attribute.
- 3. The Case File Service shall provide the capability to de-populate a

 Case_File_Part_Association_Unique_Identifier attribute creating a unique
 relationship between a Case File Part and the Case File producing a de-populated
 Case File Part Association Unique Identifier attribute.

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 enough to be set aside and managed 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 use case 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.

RMS Requirements Development Project Case File Service – Case File Part Associate Use Case



- 4. The Case File Service shall provide the capability to de-populate a Case_File_Part_Association_Date attribute using the SYSTEM DATE when a Case_File_Part_Association_Unique_Identifier attribute is populated producing a de-populated Case_File_Part_Association_Date attribute.
- 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_Unique_Identifer and the Case_File_Part_Association_Date attributes of the Case File Part have been depopulated.
- 6. The Case File Service shall provide the capability to make available for output all data populating the attributes created the Case File Part Associate Use Case.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 Case File Service attributes is available.

Main Flow

- 1. An Actor becomes aware a **Case_File_Part_Association_Unique_Identifier** needs to be created.
- 2. Populate a Case File Part Association Unique Identifier attribute.
- 3. Populate a Case File Part Association Date attribute.
- 4. A **MANAGED RECORD** with populated **Case File Service** part association attributes is available to be managed.
- 5. Make available all data populating all attributes of the Case File Part Associate Use Case.⁵

Sub Flow(s) - None

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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 ⁵ Ibid.

RMS Requirements Development Project Case File Service – Case File Part Associate Use Case



Alternate Flow(s): Disassociate a Case File Part

- If at Main Flow 1: A CASE FILE PART is not being created but instead a currently associated CASE FILE PART needs to be de-associated from the MANAGED RECORD.
- 2. De-Populate the Case_File_Part_Association_Unique_Identifier attribute for the Case File Part.
- 3. De-Populate the Case_File_Part_Association_Date attribute for the CASE FILE PART.
- 4. Make the CASE FILE PART and its attributes available for disposition.⁶
- 5. Return to 4 Main Flow.

Glossary

- 1. <u>Case File</u> A collection of documents (a file) relating to a specific action, transaction, event, person, place, project, investigation or other subject.⁷
- 2. <u>Case File Part</u> An individual item (e.g., document, file, record) that with others makes up the Case File.
- 3. <u>Declared Case File Record</u> 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.
- 4. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.
- 5. <u>System Date</u> 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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⁶ Business rules will dictate whether the null value attribute will be left associated, removed from association, or destroyed.

⁷ Society of American Archivists, <u>A Glossary of Archival and Records Terminology</u>, 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."

⁸ Meant to be synonymous with Declare Record in Capture Record Service.

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- 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
- 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

RMS Requirements Development Project Disposition Service – Disposition Establish Use Case



DISPOSITION SERVICE – DISPOSITION ESTABLISH USE CASE

Purpose

The Disposition Establish Use Case ensures a MANAGED RECORD is associated to a DISPOSITION INSTRUCTION and a DISPOSITION AUTHORITY. The Disposition Establish Use Case facilitates management of the MANAGED RECORD in accordance with the DISPOSITION INSTRUCTION.

The **Disposition Establish Use Case** supports an agency's ability to implement "store once use many times" within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category and more than one disposition – each being a single instance tied to a specific business transaction.

Functional Requirement(s)

- 1. The **Disposition Service** shall provide the capability to populate associate a **Disposition_Authority_Current** attribute producing a populated **Disposition_Authority_Current** attribute.¹
- 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 **Disposition Authority Current Date** attribute.
- 3. The **Disposition Service** shall provide the capability to populate the Disposition_**Instruction_Current** attribute producing a populated **Disposition Instruction Current** attribute.
- 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.
- 5. The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created the **Disposition Establish Use Case**.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

RMS Requirements Development Project Disposition Service – Disposition Establish Use Case



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 Use** Case.³

Sub Flow(s) - None

Alternate Flow(s) - None

Glossary

- 1. <u>Disposition Authority</u> 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. <u>Disposition Instruction</u> 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. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.

³ Ibid.			

RMS Requirements Development Project Disposition Service – Disposition Establish Use Case



4. <u>System Date</u> – 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
- Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," <u>RMSC Program Office</u> <u>Technical Report</u>, 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

RMS Requirements Development Project Disposition Service – Disposition Establish Use Case



- 19. 36 CFR §1234.24 Standards for managing electronic mail records
- 20. 36 CFR §1234.32 Retention and disposition of electronic records

RMS Requirements Development Project Disposition Service – Disposition First Update Use Case



DISPOSITION SERVICE – DISPOSITION FIRST UDPATE USE CASE

Purpose

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

The **Disposition First Update Use Case** continues an agency's ability to implement "store once use many times" within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category and more than one disposition – each being a single instance tied to a specific business transaction.

Functional Requirement(s)

- 1. The **Disposition Service** shall provide the capability to populate the **Disposition_Authority_Previous(n)** 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.
- 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.
- 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.
- 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.
- 5. The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition First Update Use**Case ²

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

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 with populated Disposition Service attributes is available.

Main Flow

- 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 Authority 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 Authority 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**Use Case.³

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

RMS Requirements Development Project Disposition Service – Disposition First Update Use Case



Sub Flow(s) – None

Alternate Flow(s) - None

Glossary

- 1. <u>Disposition Authority</u> 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. <u>Disposition Instruction</u> 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. <u>Managed Record</u> 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," <u>RMSC Program Office</u> 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)

RMS Requirements Development Project Disposition Service – Disposition First Update Use Case



- 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

RMS Requirements Development Project Disposition Service – Disposition Subsequent Update Use Case



DISPOSITION SERVICE – DISPOSITION SUBSEQUENT UPDATE USE CASE

Purpose

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

The **Disposition Subsequent Update Use Case** continues an agency's ability to implement "store once use many times" within its electronic environment. A record can represent more than one business transaction therefore it can be assigned more than one category and more than one disposition – each being a single instance tied to a specific business transaction.

Functional Requirement(s)

- 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.
- 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.
- 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.
- 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.
- 5. The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created in the **Disposition Subsequent Update**Use Case.²

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

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** 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 Use Case**. ³

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Alternate Flow(s) - None

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³ Ibid.			



Glossary

- 1. <u>Disposition Authority</u> 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. <u>Disposition Instruction</u> 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. <u>Managed Record</u> 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," <u>RMSC Program Office Technical Report</u>, 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)

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Disposition Service - Disposition Subsequent Update Use Case

- 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 USE CASE

Purpose

The **Disposition Suspend Use Case** 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)

- 1. The **Disposition Service** shall provide the capability to populate a **Disposition_Authority_Suspend(n)** attribute producing a populated **Disposition Authority Suspend(n)** attribute.
- 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.
- 3. 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.
- 4. 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.
- 5. The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition Suspend Use Case**.³

Actor(s)

1.

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 (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.

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.



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. A MANAGED RECORD's disposition has been suspended.
- 5. Make available all data populating all attributes of the **Disposition Suspend Use**Case. 4

Sub Flow(s) – None

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. Repeat 2 and 3 Sub Flow: Support Multiple Instances of Disposition_Authority_Suspend Attribute until all required associations of Suspend Disposition Authority for the record are complete.
- 5. Return 4 Main Flow.

Glossary

- 1. <u>Disposition Instruction</u> 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. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.
- 3. <u>Suspend Disposition Authority</u> A legally binding order, notice, or freeze on the execution of the established disposition instruction of an established disposition authority.
- 4. <u>Suspended Record</u> A **MANAGED RECORD** that is subject to at least one suspend disposition authority.
- 5. <u>System Date</u> 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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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
- Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," <u>RMSC Program Office</u> <u>Technical Report</u>, 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



- 36 CFR Part 1234 -- Subpart C -- Standards for the Creation, Use, Preservation, 21. 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 USE CASE

Purpose

The **Disposition Reinstate Use Case** 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 use case supports multiple instances of a suspension order and a corresponding revocation order for a **MANAGED RECORD**.

Functional Requirement(s)

- 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)**.
- 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)** attribute.
- 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.
- 4. 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)**.
- 5. 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.
- 6. 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.

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.

³ (n+1) indicates subsequent instances to the first instance of this attribute during the life cycle of the record can occur.



7. The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition Reinstate Use Case**. 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.

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. A **MANAGED RECORD's** suspended disposition has been reinstated.
- 7. Make available all data populating all attributes of the **Disposition Reinstate Use**Case. 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.

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. ⁵ Ibid.



- 6. Repeat 2 through 5 Alternate Flow: Support Multiple Instances of **Disposition Authority Suspend Revocation** Attributes until all required associations are complete.
- 7. Return 6 Main Flow.

Glossary

- 1. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.
- 2. <u>Revocation Order</u> A legally binding, or a legitimate order or notice to release a suspend disposition authority.
- 3. <u>Suspend Disposition Authority</u> 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," <u>RMSC Program Office</u> 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



DISPOSITION SERVICE – DISPOSITION ENABLE TRANSFER USE CASE

Purpose

The Disposition Enable Transfer Use Case 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)

- The **Disposition Service** shall provide the capability to populate a 1. Record_Scheduled_Transfer_Available² attribute when the populated Disposition Instruction Established Current and **Disposition Instruction Established Current Date** attributes indicate a transfer action is to be executed producing a populated Record Scheduled Transfer Available attribute.
- 2. The **Disposition Service** shall provide the capability to populate a **Disposition Action History** attribute upon the transfer of a Scheduled Record³ producing a populated **Disposition Action History** attribute.
- 3. The **Disposition Service** shall provide the capability to populate **Disposition Action History Date** attribute using the **SYSTEM DATE** populating the Disposition Action History Date attribute when a **Disposition Action History** attribute is populated.
- 4. The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the Disposition Enable Transfer Use Case 4

Actor(s)

User – An individual authorized to use the system. 1.

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

¹ This use case 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 attribute provides the indication within the system environment that transfer of the record and its attributes is allowed.

³ This includes the attributes associated to the record during its management.

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.



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 **Record Scheduled Transfer Available** attribute.
- 5. Populate the **Disposition Action History** attribute.
- 6. Populate the **Disposition Action History Date** attribute.
- 7. A **MANAGED RECORD** and all its attributes are available for transfer.
- 8. Make available all data populating all attributes of the **Disposition Enable**Transfer Use Case. 5

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 Enable Destruction Use Case.
- 3. Return to 8 Main Flow.

Glossary

- 1. <u>Disposition Authority</u> 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. <u>Disposition Instruction</u> 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. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.

Ibid.			



4. <u>System Date</u> – 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
- Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," <u>RMSC Program Office</u> <u>Technical Report</u>, 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 USE CASE

Purpose

The **Disposition Enable Destruction Use Case** 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)

- 1. The Disposition Service shall provide the capability to populate the Record_Scheduled_Destruction_Available¹ attribute when the populated Disposition_Instruction_Current and Disposition_Instruction_Current_Date attributes indicate a destruction action is required producing a populated Record Scheduled Destruction Available attribute.
- 2. The **Disposition Service** shall provide the capability to populate the **Disposition_Action_History** attribute upon the destruction of the Scheduled Record² producing a populated **Disposition_Action_History** attribute.
- 3. The **Disposition Service** shall provide the capability to populate **Disposition_Action_History_Date** attribute using the **SYSTEM DATE** when the **Disposition Action History** attribute is populated.
- 4. The **Disposition Service** shall provide the capability to make available for output all data populating the attributes created by the **Disposition Enable Destruction**Use Case.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 D

- 1. A **DISPOSITION AUTHORITY** is available.
- 2. A **DISPOSITION INSTRUCTION** is available.
- 3. A **MANAGED RECORD** is eligible for destruction.

¹ This attribute provides the indication within the system environment that destruction of the record and its attributes is allowed.

² This includes the attributes associated to the record during its management.

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. 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 destruction.
- 2. Access **Disposition Instruction Current** attribute.
- 3. Access **Disposition Instruction Current Date** attribute.
- 4. Populate the **Record Scheduled Destruction Available** attribute
- 5. Populate the **Disposition Action History** attribute.
- 6. Populate the **Disposition Action History Date** attribute.
- 7. A MANAGED RECORD and all its attributes are available for destruction.
- 8. Make available all data populating all attributes of the **Disposition Enable Destruction Use Case.** 4

Sub Flow(s) - None

Alternate Flow(s) - None

Glossary

- 1. <u>Disposition Authority</u> 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. <u>Disposition Instruction</u> 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. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.
- 4. <u>System Date</u> 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

⁴ Ibid.



- 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
- Prescott, Hawkins, "Functional Requirements and Attributes for Records Management in a Component-Based Architecture," <u>RMSC Program Office</u> <u>Technical Report</u>, 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



REFERENCE SERVICE – REFERENCE ASSOCIATE USE CASE

Purpose

The Reference Associate Use Case 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 Use Case** provides the ability to link records to other records related because of a business act or transaction. As an example, the **Reference Associate Use Case** 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 Use Case 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)

- 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.
- 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.
- 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.
- 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.

² (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept

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



- 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 (n+1) attribute is populated producing a populated Record_Association_Description(n+1) attribute.
- 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.
- 7. The **Reference Service** shall provide the capability to make available for output all data populating the attributes created by the **Reference Associate Use Case**.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 Use**Case. 4

Sub Flow(s) - None

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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).
- 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. <u>Managed Record</u> A record as set aside by a business owner that has been subject to records management activities.
- 2. <u>System Date</u> 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," <u>RMSC Program Office</u> 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
- 36 CFR Subpart L -- Transfer of Records to the National Archives of the United 20. 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 USE CASE

Purpose

The **Reference Disassociate Use Case** 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)

- 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
- 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.
- 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.
- 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
- 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.
- 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.



7. The **Reference Service** shall provide the capability to make available for output all data populating the attributes created by the **Reference Disassociate Use**Case.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**Use Case.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

<u>Managed Record</u> – 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," <u>RMSC Program Office Technical Report</u>, 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



APPENDIX A – GLOSSARY

<u>Archival Bond</u> – 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.

<u>Authenticated Record</u> – 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.

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

<u>Captured Record</u> – 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.

<u>Captured Records</u> – 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.

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

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

<u>Categorization Schema</u> – 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.

¹ Society of American Archivists, <u>A Glossary of Archival and Records Terminology</u>, 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."



<u>Declared Case File Record</u> – 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.²

<u>Declared Record</u> – 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.

<u>Disposition Authority</u> – 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.

<u>Disposition Instruction</u> – 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.

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

<u>Provenance</u> – 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.

<u>Provenancial Record</u> – 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.

<u>Record Category</u> – 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.

<u>Record Creator</u> – 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.

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

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

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

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

<u>Suspend Disposition Authority</u> – A legally binding order, notice, or freeze on the execution of the Established Disposition Instruction of an Established Disposition Authority.

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

<u>System Date</u> – 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.

<u>Unique Identifier</u> – 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.

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



APPENDIX B – REFERENCES

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

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

- 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"
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- U.S. National Archives and Records Administration, Records Management Service Components Program, "Records Management Service Components Requirements Development Project Final Report, March 31, 2005"
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APPENDIX C - RMS IDEF0 FUNCTION MODEL

Understanding Integration for Definition Function Modeling (IDEF0).

IDEF0 models are simplified graphical depictions of functions from a specified viewpoint. IDEF0 identifies what functions are performed and what is needed to perform those functions.

In December 1993, the National Institute of Standards and Technology (NIST) released IDEF0 as a standard for Function Modeling for the Federal government in FIPS Publication 183.

The basic components of IDEF0 modeling are:

A-0 Diagram: The special case of a one-box IDEF0 context diagram, containing the top-level function being modeled and its inputs, controls, outputs and mechanisms, along with statements of model purpose and viewpoint.

Box: A rectangle, containing a name and number, used to represent a function or activity. Box Name: The verb or verb phrase placed inside an IDEF0 box to describe the modeled function.

Control Arrow: The class of arrows that express IDEF0 Control, i.e., conditions required to produce correct output. Data or objects modeled as controls may be transformed by the function, creating output. Control arrows are associated with the top side of an IDEF0 box.

Input Arrow: The class of arrows that express IDEF0 Input, i.e., the data or objects that are transformed by the function into output. Input arrows are associated with the left side of an IDEF0 box.

Mechanism Arrow: The class of arrows that express IDEF0 Mechanism, i.e., the means used to perform a function. Mechanism arrows are associated with the bottom side of an IDEF0 box.

Output Arrow: The class of arrows that express IDEF0 Output, i.e., the data or objects produced by a function. Output arrows are associated with the right side of an IDEF0 box.

The top level in an IDEF0 model is the "Context Diagram." It describes the most general activity (there is only one activity named at the top level of the model), inputs, controls, outputs, and mechanisms of the model.

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An activity is the transformation of inputs into outputs, performed by the mechanisms under the constraints set by controls. The context diagram is "read" as Inputs are transformed into Outputs by Mechanisms under the guidance of Controls.

As an example, in the Context Diagram below developed by the IPT working group in the December 7, 2005 session is "read" as:

A Declared Record, Valid Managed Record Authenticity Attribute, and Updatable Managed Record Attribute are transformed into a Managed Record and Record Management Information by a Set Aside Agent and Records Management Services under the guidance of Statutes, Regulations, and a Categorization Schema.

Model abbreviations:

[Attr.] = Attribute

[C] = Create

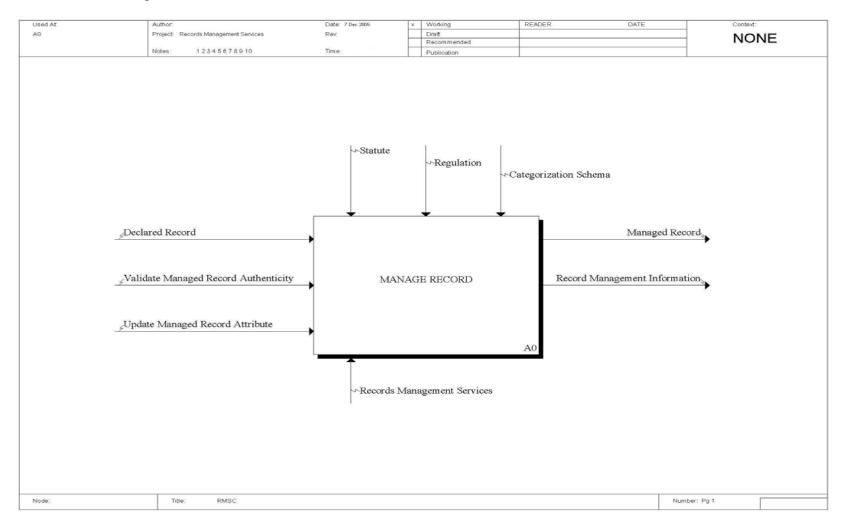
[P] = Previous

[P+n] = Previous +n

[Pop.] = Populate

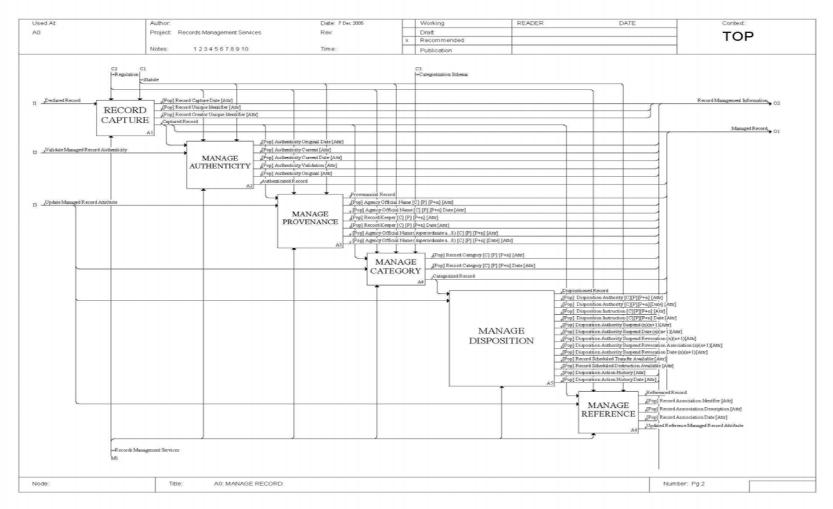


A-0 RMS Context Diagram





A0 – RMS Diagram





APPENDIX D - RMS UML CLASS MODEL

A UML class model is used to formalize a domain derived from a set of use case – 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

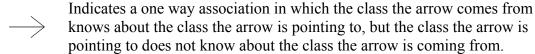


Indicates an aggregation or "part-of" association between a parent class and a child class. This is indicated by an unfilled diamond at the parent class. This means the child class is not required for the parent class to exist.

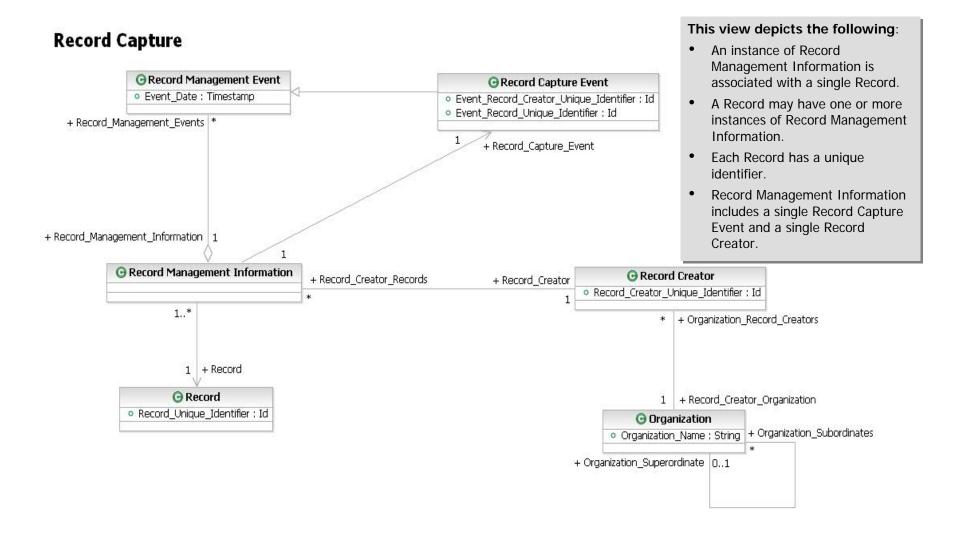
- 1 Indicates no more than one.
- 0..1 Indicates zero or one.
- * Indicates many.
- 0..* Indicated zero or many.
- 1..* Indicates one or many.



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.

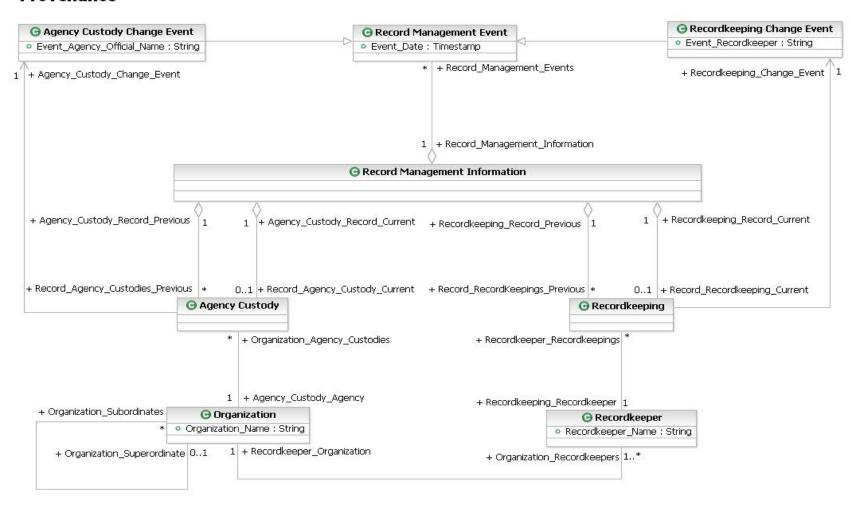






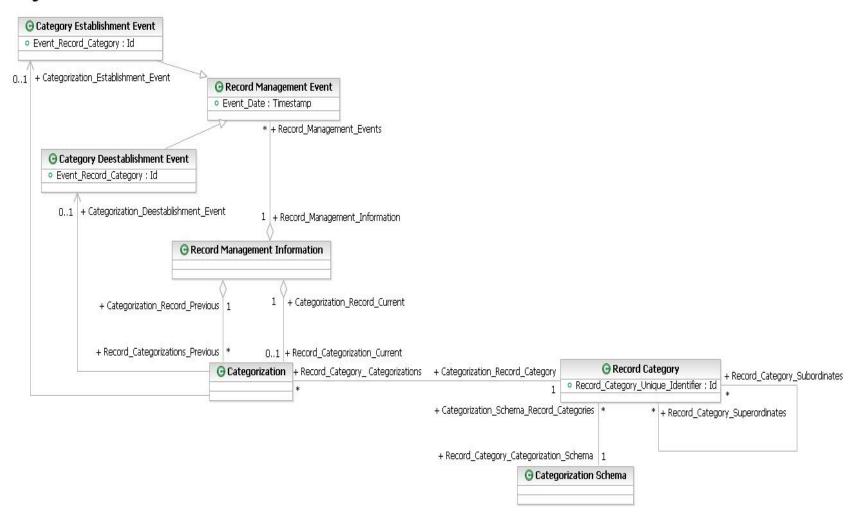


Provenance

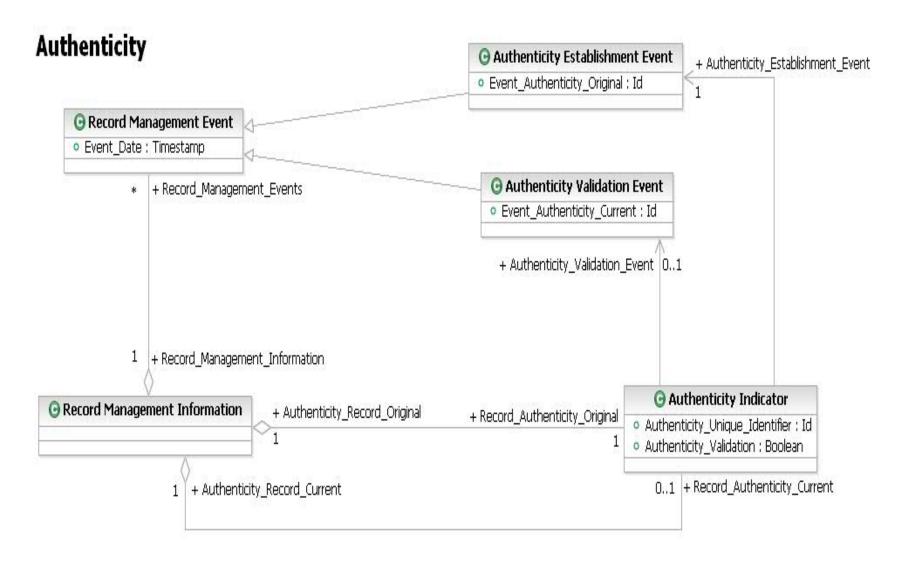




Categorize Record









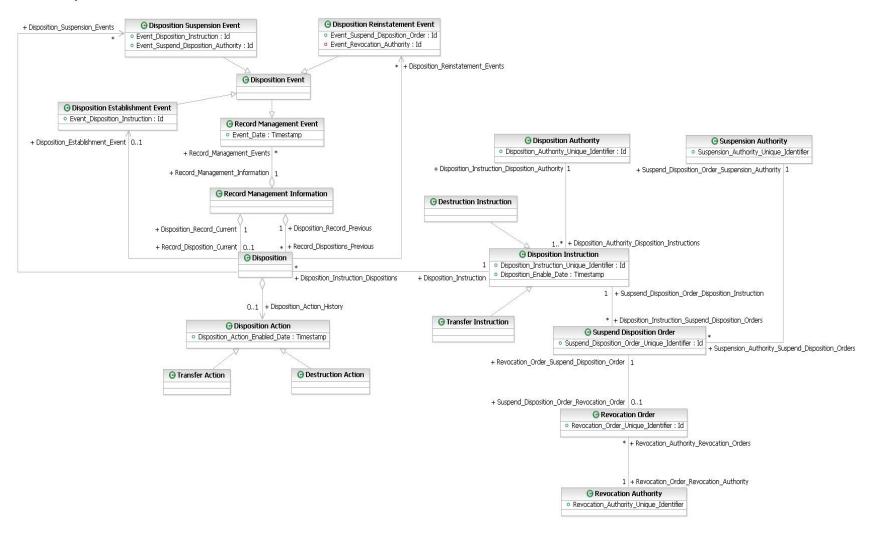
Case File Record G Case File Record Capture Event + Case_File_Record_Capture_Event • Event_Case_File_Record_Description : String (Case File Record **@** Record **G** Record Capture Event · Record_Unique_Identifier : Id • Event_Record_Set_Aside_Agent_Unique_Identifier : Id · Event_Record_Unique_Identifier: Id 1 + Record 1..* @ Record Management Event G Record Management Information + Record_Management_Events G Case File Record Management Information + Record_Management_Information • Event_Date : Timestamp • Case_File_Record_Description : String 1 + Case_File_Part_Association_Case_File_Record_Previous 1 1 + Case_File_Part_Association_Case_File_Record_Current 1..* + Case_File_Record_Case_File_Part_Associations_Current + Case_File_Record_Case_File_Part_Associations_Previous G Case File Part **G** Case File Part Association Event G Case File Part Association + Case_File_Part_Case_File_Association + Case File_Part_Association_Case_File_Part o Case_File_Part_Unique_Identifier : Id • Event_Case_File_Part_Association_Unique_Identifier + Case_File_Part_Association_Event | 0..1 Gase File Part Disassociation Event + Case_File_Part_Disassociation_Event

Event_Case_File_Part_Association_Unique_Identifier : Id

0..1



Record Disposition





Record Category Disposition

