

Functional Requirements and Attributes  
for  
Records Management  
in a  
Component-Based Architecture

by

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## INTRODUCTION

The Records Management Service Components (RMSC) Program presents its technical report on functional requirements and attributes for records management activities within a component-based architecture. This report is based upon the findings of records management and enterprise architecture experts representing 18 cabinet, executive department, and independent agencies across the Federal government and the National Archives and Records Administration who met in sessions from January to May, 2005, followed by work in the RMSC Program.<sup>1</sup>

The RMSC requirements and attributes were developed and remain within a defined scope and necessary constraints (See **Appendix A RMSC Scope and Constraints**):

**Viewpoint:** *records management activities*

**In Scope:** *from record receipt, identification, capture to record disposition*

**Out of Scope:** *record creation and management of archival record*

This technical report organizes use cases, functional requirements, and attributes around seven RMSCs addressing core records management activities.<sup>2</sup> The number of RMSCs and their level of granularity are for clarity and communication purposes and do not specify the number ultimately necessary to meet the functional requirements. Components when developed and implemented will vary in granularity from a single software element providing a single service up to a set of cooperating services assembled to deliver a solution to a business problem.<sup>3</sup> The RMSC Program recognizes the method by which RMSCs are developed and implemented, how they are grouped and packaged and at what level of granularity, will be determined by the business owners and stakeholders who elect to take these use case and functional requirements to acquisition.

The Use Case presented in this technical report describes the immediate context in which interactions take place between users and RMSCs to meet common records management business requirements. Additionally, RMSCs fit within the broader contexts of the life cycle of Federal records, the provision of services through software components, and the Federal Enterprise Architecture (FEA) (See **Appendix B RMSC Context**).

The FEA, service components-based architecture, and the records life cycle converge in RMSCs to enable a revolutionary method to capture electronic records, attest to their reliability, and ensure their authenticity and accessibility over time. RMSCs will allow the management of records to start at the beginning of the business process. With RMSCs, records management services would be available to users and systems within the agency's enterprise architecture from their point of creation. As independently deployable software modules RMSCs may be developed, implemented, reused, and improved across an enterprise with lower costs and higher quality. This will allow more efficient and effective management of more records throughout their life cycle.

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<sup>1</sup> See Records Management Service Components Requirements Development Project Final Report, March 31, 2005, National Archives and Records Administration, Records Management Service Components Program, compiler.

<sup>2</sup> A records management service component is a piece of software that provides services that support the creation, management, transfer, and destruction of electronic records within a computing environment.

<sup>3</sup> Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004, pp. 5-7, 10.

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## RECORD CAPTURE COMPONENT RECORD CAPTURE USE CASE

### Purpose

The *Record Capture Use Case* populates records management attributes that provide evidence of the Record Creator, the date it was set aside<sup>1</sup>, and ensures the record is uniquely identified (a Uniquely Identified Record) in the electronic environment – creating a Captured Record.

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 when its creation is in accordance with legitimate business rules.<sup>2</sup>

### Functional Requirement(s)

1. The *Record Capture Component* shall provide the capability to populate the Record\_Creator\_Unique\_Identifier<sup>3</sup> attribute when a Declared Record is set aside producing a populated Record\_Creator\_Unique\_Identifier attribute.
2. The *Record Capture Component* 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 Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created by the *Record Capture Use Case*.<sup>4</sup>

### Actor(s)

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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)

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<sup>1</sup> A concept in archival theory whereby a person - or - a system at a predetermined point in the business process determines the evidence of the activities making up the transaction are complete and should be maintained and managed as a record.

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

<sup>3</sup> This attribute supports capturing reliability by providing evidence of the person, application or system procedure setting aside the record in accordance with the business rules.

<sup>4</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

1. A Unique Identifier exists for the Record Creator.
2. A Declared Record is available.

**Main Flow**

1. Populate the Record\_Unique\_Creator\_Identifier attribute.
2. Populate the Record\_Unique\_Identifier attribute.
3. Populate the Record\_Capture\_Date attribute.
4. Make available all data populating all attributes of the *Record Capture Use Case*.<sup>5</sup>

**Sub Flow(s) – None.**

**Alternate Flow(s) – None.**

**Glossary**

1. Captured Record – A uniquely identified Declared Record carrying the date it was initially controlled as a record within an electronic environment. Captured Record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.
2. Declared Record – An electronic document that is considered by the business owner to be complete evidence of a business transaction, set aside to be managed as a record.
3. Record Creator – An individual, application, or system procedure in an electronic environment specifically designed in accordance with the business rules to carry out the legal authorities of the organization to which the individual, application, or system procedure belongs.
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.
5. Unique Identifier – The name, position, application or system designation (or concatenation of that data and other data about the user and/or the environment) differentiating the user.
6. Uniquely Identified Record – A record that has a populated attribute differentiating it from all other records within the electronic environment.

**Reference(s)**

1. <http://www.dictionary.com>
2. <http://www.webopedia.com>
3. [Design Criteria Standard for Electronic records Management Software Applications, June 19, 2002 – DoD 5015.2–STD \(Standard\)](#)
4. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.pdf)

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<sup>5</sup> This supports printing, viewing, saving, report writing, audit, etc.

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](http://www.cio.gov/documents/CIOC_AIC_Service_Component_Based_Architectures_2.0_FINAL.pdf)
6. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – <http://www.whitehouse.gov/omb/egov/documents/CRM.PDF>

## PROVENANCE COMPONENT PROVENANCE ESTABLISH USE CASE

### Purpose

The *Provenance Establish Use Case* populates attributes of a Captured Record providing evidence of the context of creation and facilitates management of the record for business purposes – its Provenance.

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 component 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 cardinality 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)

1. The **Provenance Component** shall provide the capability to populate the Agency\_Official\_Name\_Current<sup>1</sup> attribute producing a populated Agency\_Official\_Name\_Current attribute.
2. The **Provenance Component** 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 Official\_Agency\_Name\_Current\_Date attribute.
3. The **Provenance Component** shall provide the capability to populate the Agency\_Official\_Name\_superordinate a...∞)\_Current<sup>2</sup> attribute producing a populated Agency\_Official\_Name\_(superordinate a...∞)\_Current attribute.
4. The **Provenance Establish Component** 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

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<sup>1</sup> This attribute identifies the administrative entity within an agency directly responsible for the creation, use, and maintenance of the records. This attribute identifies the legal custodian of the records consistent with 44 U.S.C. 3301.

<sup>2</sup> The infinity symbol – ∞ – recognizes different agencies will have different policy and procedures for implementing the level of provenance they require to evidence for their records. Allows for the association between any organizational element (from as granular a level as an individual) to those organizational elements superior to it – example: Individual : Agency : Bureau: Department.

- System Date producing a populated Official\_Agency\_Name(superordinate a...∞)\_Current\_Date attribute.
5. The **Provenance Establish Component** shall provide the capability to populate the Recordkeeper\_Current attribute upon the population of the Agency\_Offical\_Name\_Current attribute producing a populated Recordkeeper\_Current attribute.
  6. The **Provenance Establish Component** 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 Component** shall provide the capability to make available for output all data populating the attributes created by the *Provenance Establish Use Case*.<sup>3</sup>

**Actor(s)**

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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 Captured Record exists.

**Main Flow**

1. Populate Agency\_Official\_Name\_Current attribute.
2. Populate Agency\_Official\_Name\_Current\_Date attribute.
3. Populate Recordkeeper\_Current attribute.
4. Populate Recordkeeper\_Current\_Date attribute.
5. Make available all data populating all attributes of the *Provenance Establish Use Case*.<sup>4</sup>

**Sub Flow(s): Establish Superordinate Structure**

1. After 2 Main Flow:
2. Populate Agency\_Official\_Name(superordinate a...∞)\_Current<sup>5</sup> 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.

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<sup>3</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

<sup>4</sup> This supports printing, viewing, saving, report writing, audit, etc.

<sup>5</sup> The infinity symbol – ∞ – recognizes different agencies will have different policy and procedures for implementing the level of provenance they require to evidence for their records. Allows for the association between any organizational element (from as granular a level as an individual) to those organizational elements superior to it – example: Individual : Agency : Bureau: Department.



5. Make available all data populating all attributes of the *Provenance Establish Use Case*.<sup>6</sup>
6. 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. Captured Record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.
2. Provenance ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record’s active use for business purposes.<sup>7</sup> 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. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

### References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.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](http://www.cio.gov/documents/CIOC_AIC_Service_Component_Based_Architectures_2.0_FINAL.pdf)
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – <http://www.whitehouse.gov/omb/egov/documents/CRM.PDF>
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C<sup>3</sup>I), “The Department of Defense Records Management Function and Information Models,” Oct. 6, 1995.
5. INTERPares, “Findings on the Preservation of Authentic Electronic records,” First Report to the National Historical Publications and Records Commission, Sept. 2002.

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<sup>6</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

<sup>7</sup> 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.

## PROVENANCE COMPONENT PROVENANCE FIRST UPDATE USE CASE

### Purpose

The *Provenance First Update Use Case* updates attributes of a Captured Record providing continual evidence of provenance at the first instance of change in provenance after the initial provenance was established. This component 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 record 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.<sup>1</sup> 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 component 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 cardinality 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)

1. The *Provenance Component* shall provide the capability upon the change of the Agency\_Offical\_Name\_Current to populate the Agency\_Official\_Name\_Previous (n)<sup>2</sup> attribute with data being changed from the Agency\_Official\_Name\_Current attribute producing a populated Agency\_Official\_Name\_Previous (n) attribute.
2. The *Provenance Component* 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

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<sup>1</sup> 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.

<sup>2</sup> (n) indicates the first instance of change in provenance.

- the Agency\_Official\_Name\_Current\_Date attribute producing a populated Agency\_Official\_Name\_Previous\_Date (n) attribute.
3. The **Provenance Component** shall provide the capability upon the change of the Agency\_Official\_Name\_Current to populate the first instance of Agency\_Official\_Name(superordinate a...∞)\_Previous (n)<sup>3</sup> attribute with data from the Agency\_Official\_Name(superordinate a...∞)\_Current attribute producing a populated Agency\_Official\_Name(superordinate a...∞)\_Previous (n) attribute.
  4. The **Provenance Component** shall provide the capability to populate a Agency\_Official\_Name (superordinate a...∞)\_Previous\_Date (n) attribute when a Agency\_Official\_Name(superordinate a...∞)\_Previous (n) attribute is populated using the date from a Agency\_Official\_Name(superordinate a...∞)\_Current\_Date attribute producing a populated Agency\_Official\_Name(superordinate a...∞)\_Previous\_Date (n) attribute.
  5. The **Provenance Component** shall provide the capability to make available for output all data populating the attributes created by the **Provenance First Update Use Case**.<sup>4</sup>

#### Actor(s)

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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. The **Provenance Establish Use Case** has been completed for the record.

#### Main Flow

1. Access Agency\_Official\_Name\_Current attribute data.
2. Populate Agency\_Official\_Name\_Previous (n) attribute with data from the Agency\_Official\_Name\_Current attribute.
3. Populate Agency\_Official\_Name\_Current attribute.
4. Access data in Agency\_Official\_Name\_Current\_Date attribute
5. Populate Agency\_Official\_Name\_Previous\_Date (n) attribute with data from the Agency\_Official\_Name\_Current\_Date attribute.
6. Populate Agency\_Official\_Name\_Current\_Date attribute.
7. Make available all data populating all attributes of the **Provenance First Update Use Case**.<sup>5</sup>

#### Sub Flow: Update Super Ordinate Structure

1. After 6 Main Flow

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<sup>3</sup> The infinity symbol – ∞ – recognizes different agencies will have different policy and procedures for implementing the level of provenance they require to evidence for their records. Allows for the association between any organizational element (from as granular a level as an individual) to those organizational elements superior to it – example: Individual : Agency : Bureau: Department.

<sup>4</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

<sup>5</sup> This supports printing, viewing, saving, report writing, audit, etc.

2. Access Agency\_Official\_Name(superordinate a...∞)\_Current attribute data.
3. Populate Agency\_Official\_Name(superordinate a...∞)\_Previous (n) attribute with data from Agency\_Official\_Name(superordinate a...∞)\_Current attribute.
4. Populate Agency\_Official\_Name(superordinate a...∞)\_Current attribute.
5. Access Agency\_Official\_Name(superordinate a...∞)\_Current\_Date attribute data.
6. Populate Agency\_Official\_Name(superordinate a...∞)\_Previous\_Date (n) attribute with data from \_Official\_Name(superordinate a...∞)\_Current\_Date attribute.
7. Populate Agency\_Official\_Name(superordinate a...∞)\_Current\_Date attribute.
8. Repeat w through 5 Sub Flow: Update Super Ordinate Structure until all super ordinate information is complete.
9. Make available all data populating all attributes of the *Provenance First Update Use Case*.<sup>6</sup>
10. Return 7 Main Flow.

#### **Alternate Flow: Add Super Ordinate Structure**

1. If at 2 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. Make available all data populating all attributes of the *Provenance First Update Use Case*.<sup>7</sup>
6. Return 7 Sub Flow: Update Super Ordinate Structure

#### **Glossary**

1. Captured Record – A uniquely identified Declared Record carrying the date it was initially controlled as a record within an electronic environment. Captured Record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.
2. Provenance ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record's active use for business purposes.<sup>8</sup> 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.

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<sup>6</sup> This supports printing, viewing, saving, report writing, audit, etc.

<sup>7</sup> Ibid.

<sup>8</sup> 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.

## References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures_2.0_FINAL.pdf)
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – <http://www.whitehouse.gov/omb/egov/documents/CRM.PDF>
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C<sup>3</sup>I), “The Department of Defense Records Management Function and Information Models,” Oct. 6, 1995.
5. INTERPares, “Findings on the Preservation of Authentic Electronic records,” First Report to the National Historical Publications and Records Commission, Sept. 2002.

## PROVENANCE USE CASE PROVENANCE SUBSEQUENT UPDATE USE CASE

### Purpose

The *Provenance Subsequent Update Use Case* continues the process of updating attributes of a Captured Record upon the second instance of change in provenance after the initial provenance was established. This component provides continual evidence of the context of use of the record and to facilitate management of the record. This component provides 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 document evidence of the change in provenance throughout the records 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 cardinality 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)

1. The *Provenance Component* shall provide the capability upon the change of the Agency\_Official\_Name\_Previous (n)<sup>1</sup> to populate an Agency\_Official\_Name\_Previous (n+1)<sup>2</sup> attribute with data from the Agency\_Official\_Name\_Previous (n) attribute producing a populated Official\_Agency\_Name\_Previous (n+1) attribute.
2. The *Provenance Component* 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 Component* shall provide the capability upon the change of the Agency\_Official\_Name(superordinate a...∞)\_Previous (n)<sup>3</sup> to populate a Agency\_Official\_Name(superordinate a...∞)\_Previous (n+1) attribute with data from the Agency\_Official\_Name(superordinate a...∞)\_Previous (n) attribute

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

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

<sup>3</sup> The infinity symbol – ∞ – recognizes different agencies will have different policy and procedures for implementing the level of provenance they require to evidence for their records. Allows for the association between any organizational element (from as granular a level as an individual) to those organizational elements superior to it – example: Individual : Agency : Bureau: Department.

producing a populated Agency\_Official\_Name(superordinate a...∞)\_Previous (n+1) attribute.

4. The **Provenance Component** 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 Component** shall provide the capability to make available for output all data populating the attributes created the **Provenance Subsequent Update Use Case**.<sup>4</sup>

#### Actor(s)

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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. The **Provenance Establish Use Case** has been completed for the record.
2. The **Provenance First Update Use Case** has been completed for the record.

#### Main Flow

1. Access data in Agency\_Official\_Name\_Previous (n) attribute.
2. Populate Agency\_Official\_Name\_Previous (n+1) attribute with data from the Agency\_Official\_Name\_Previous (n) attribute.
3. Populate Agency\_Official\_Name\_Previous (n) attribute.
4. Access data in Agency\_Official\_Name\_Previous\_Date (n) attribute.
5. Populated Agency\_Official\_Name\_Previous\_Date (n+1) attribute with data from the Agency\_Official\_Name\_Previous (n) attribute.
6. Populate Agency\_Official\_Name\_Previous\_Date (n) attribute.
7. Make available all data populating all attributes of the **Provenance Subsequent Update Use Case**.<sup>5</sup>

#### Sub Flow: Update Superordinate Structure

1. After 6 Main Flow.
2. Access Agency\_Official\_Name(superordinate a...∞)\_Previous (n) attribute data.
3. Populate Agency\_Official\_Name(superordinate a...∞)\_Previous (n+1) attribute with data from Agency\_Official\_Name(superordinate a...∞)\_Previous (n) attribute.
4. Populate Agency\_Official\_Name(superordinate a...∞)\_Previous (n) attribute.
5. Access Agency\_Official\_Name(superordinate a...∞)\_Previous\_Date (n) attribute data.

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<sup>4</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

<sup>5</sup> This supports printing, viewing, saving, report writing, audit, etc.

6. Populate Agency\_Official\_Name(superordinate a...∞)\_Previous\_Date (n+1) attribute with data from \_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. Make available all data populating all attributes of the *Provenance Subsequent Update Use Case*.<sup>6</sup>
10. Return 7 Main Flow.

#### **Alternate Flow: Add Superordinate Structure**

1. If at 2 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. Make available all data populating all attributes of the *Provenance Subsequent Update Use Case*.<sup>7</sup>
6. Return 7 Sub Flow: Update Superordinate Structure.

#### **Glossary**

1. Captured Record – A uniquely identified Declared Record carrying the date it was initially controlled as a record within an electronic environment. Captured Record is to be considered synonymous with other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.
2. Provenance ties the record to the circumstances of its creation at the time of its creation and maintains this information throughout the record's active use for business purposes.<sup>8</sup> 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.

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<sup>6</sup> This supports printing, viewing, saving, report writing, audit, etc.

<sup>7</sup> Ibid.

<sup>8</sup> 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.



## References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.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](http://www.cio.gov/documents/CIOC_AIC_Service_Component_Based_Architectures_2.0_FINAL.pdf)
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – <http://www.whitehouse.gov/omb/egov/documents/CRM.PDF>
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C<sup>3</sup>I), “The Department of Defense Records Management Function and Information Models,” Oct. 6, 1995.
5. INTERPares, “Findings on the Preservation of Authentic Electronic records,” First Report to the National Historical Publications and Records Commission, Sept. 2002.

## PROVENANCE COMPONENT PROVENANCE RECORD KEEPER FIRST UPDATE USE CASE

### Purpose

The *Provenance Record Keeper First Update Use Case* updates attributes of a Captured Record providing continual evidence of provenance at the first instance of change in Record Keeper after the initial Record Keeper was established. This component provides the concept that after provenance has been established initially (*Provenance Establish Use Case*) there is the capability to document the evidence of the change.

The *Provenance Record Keeper First Update Use Case* ties the record to the circumstances of its management throughout its active use for business purposes.<sup>1</sup> 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 the attributes populated by this component 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 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 Component* shall provide the capability upon the change of the Record\_Keeper\_Current attribute to populate Record\_Keeper\_Previous (n)<sup>2</sup> attribute with data from the Record\_Keeper\_Current attribute producing a populated Record\_Keeper\_Previous (n) attribute.
2. The *Provenance Component* 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.

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<sup>1</sup> 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.

<sup>2</sup> (n) indicates the first instance of change in an attribute where the data are required to be kept.

3. The **Provenance Component** shall provide the capability to make available for output all data populating the attributes created by the **Provenance Record Keeper First Update Use Case**.<sup>3</sup>

**Actor(s)**

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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. The **Provenance Establish Use Case** has been completed for the record.

**Main Flow**

1. Access Record\_Keeper\_Current attribute.
2. Populate Record\_Keeper\_Previous (n) attribute with data from the Record\_Keeper\_Current attribute.
3. Populate Record\_Keeper\_Current attribute.
4. Access Record\_Keeper\_Current\_Date attribute
5. Populate Record\_Keeper\_Previous\_Date (n) attribute with data from Record\_Keeper\_Current\_Date attribute.
6. Populate Record\_Keeper\_Current\_Date attribute.
7. Make available all data populating all attributes of the **Provenance Record Keeper First Update Use Case**.<sup>4</sup>

**Alternate Flow(s) - None**

**Sub Flow(s) - None**

**Glossary**

1. Captured Record - A uniquely identified object carrying the date it was initially controlled as a record within an electronic environment. May include letters, documents, databases, e-mail, digital images, maps and the entire range of records and information.
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.<sup>5</sup> 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

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<sup>3</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

<sup>4</sup> This supports printing, viewing, saving, report writing, audit, etc.

<sup>5</sup> 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.

responsibility, and the identity and chronology of subsequent custodians(s), if applicable.

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

### References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](http://www.cio.gov/documents/CIOC_AIC_Service_Component_Based_Architectures_2.0_FINAL.pdf)
3. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – <http://www.whitehouse.gov/omb/egov/documents/CRM.PDF>
4. U.S. DoD Records Management Task Force, Office of the Deputy Assistant Secretary of Defense (Information Management), OASD (C<sup>3</sup>I), “The Department of Defense Records Management Function and Information Models,” Oct. 6, 1995.
5. INTERPares, “Findings on the Preservation of Authentic Electronic records,” First Report to the National Historical Publications and Records Commission, Sept. 2002.

## PROVENANCE COMPONENT PROVENANCE RECORD KEEPER SUBSEQUENT UPDATE USE CASE

### Purpose

The *Provenance Record Keeper Subsequent Update Use Case* continues the process of updating attributes of a Captured Record upon the second instance of change in Record Keeper after the initial Record Keeper was established. This component provides continual evidence of the context of use of the record and to facilitate management of the record. This component 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 records 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 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 Component* shall provide the capability upon the change of the Record\_Keeper\_Previous (n)<sup>1</sup> attribute to populate Record\_Keeper\_Previous (n+1)<sup>2</sup> attribute with data from the Record\_Keeper\_Previous (n) attribute producing a populated Record\_Keeper\_Previous (n+1) attribute.
2. The *Provenance Component* 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.
3. The *Provenance Component* shall provide the capability to make available for output all data populating the attributes created the *Provenance Record Keeper Subsequent Update Use Case*.<sup>3</sup>

### Actor(s)

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

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

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

<sup>3</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

### Precondition(s)

1. The *Provenance Establish Use Case* has been completed for the record.
2. The *Provenance Record Keeper First Update Use Case* has been completed for the record.

### Main Flow

1. Access Record\_Keeper\_Previous (n) attribute.
2. Populate Record\_Keeper\_Previous (n+1) attribute.
3. Access Record\_Keeper\_Previous\_Date (n) attribute.
4. Populate Record\_Keeper\_Previous\_Date (n+1) attribute.
5. Make available all data populating all attributes of the *Provenance Record Keeper Subsequent Update Use Case*.<sup>4</sup>

### Alternate Flow(s) - None

### Sub Flow(s) - None

### Glossary

1. Captured Record - A uniquely identified object carrying the date it was initially controlled as a record within an electronic environment. May include letters, documents, databases, e-mail, digital images, maps and the entire range of records and information.
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.<sup>5</sup> 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, or office responsible for the custody and ongoing management of the records during their active business use.

### References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.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](http://www.cio.gov/documents/CIOC_AIC_Service_Component_Based_Architectures_2.0_FINAL.pdf)

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<sup>4</sup> This supports printing, viewing, saving, report writing, audit, etc.

<sup>5</sup> 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.

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 (C<sup>3</sup>I), “The Department of Defense Records Management Function and Information Models,” Oct. 6, 1995.
5. INTERPares, “Findings on the Preservation of Authentic Electronic records,” First Report to the National Historical Publications and Records Commission, Sept. 2002.

## ARCHIVAL BOND COMPONENT

### ARCHIVAL BOND ESTABLISH USE CASE

#### Purpose

The *Archival Bond Establish Use Case* identifies the connection between one record that is evidence of a 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. The connection between like records is designated within this component 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 component 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 *Archival Bond Establish Use Case*. Archival bond is between the record unit 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.

The *Archival Bond Establish Use Case* allows an agency to implement “store once use many times” by providing the flexibility to implement agency rules that require one record to be assigned to more than one record category.

#### Functional Requirement(s)

1. The *Archival Bond Component* shall provide the capability to populate a Record\_Category\_Current attribute producing a populated Record\_Category\_Current attribute.
2. The *Archival Bond Component* 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 *Archival Bond Component* shall provide the capability to make available for output all data populating the attributes created by the *Archival Bond Establish Use Case*.<sup>1</sup>

#### Actor(s)

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

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<sup>1</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.



### Precondition(s)

1. A Captured Record is available.
2. A Categorization Schema is available.

### Main Flow

1. Populate the Record\_Category\_Current attribute.
2. Populate the Record\_Category\_Current\_Date attribute.
3. Make available all data populating all attributes of the *Archival Bond Establish Use Case*.

### Sub Flow(s)

Support Single Record Multiple Record Categories

1. If at 2 in Main Flow more than one Record Category is to be assigned to a record then:
2. Populate the Record\_Category\_Current(b...∞)<sup>2</sup>
3. Populate the Record\_Category\_Current\_Date(b...∞)
4. Repeat Sub Flow: Support Single Record Multiple Record Categories until all record categories are assigned to the record.
5. Make available all data populating all attributes of the *Archival Bond Establish Use Case*.
6. Return to 3 Main Flow.

Alternate Flow(s) – None.

### Glossary

1. Archival Bond – The interrelationships between a record and other records resulting from the same business activity, usually accomplished by associating the records to each other through a record category.
2. Captured Record – A uniquely identified Declared Record carrying the date it was initially controlled as a record within an electronic environment. 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.
3. Categorization Schema - Any scheme developed or used by an agency to organize records. This may include a diagrammatic representation or outline of the descriptive classification assigned to records or records disposition codes.
4. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

### References

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<sup>2</sup> Where “a” was the first instance in the Main Flow and (b...∞) in the Sub Flow indicates there is no limit to the number of case files a “part” can be associated.

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](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>

## ARCHIVAL BOND COMPONENT

### ARCHIVAL BOND FIRST UPDATE USE CASE

#### Purpose

The *Archival Bond First Update Use Case* updates attributes showing the connection between a record that is evidence of a 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. The connection between like records is designated within this component 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 component 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 *Archival Bond First Update Use Case*. Archival bond is between the record unit and like records within a larger whole or set. (Requirements to link intrinsic elements within a record, as in the formation of a case file, are addressed by the Associate Record component). 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.

#### Functional Requirements

1. The *Archival Bond Component* shall provide the capability upon the change of data in the Record\_Category\_Current attribute to populate a Record\_Category\_Previous (n)<sup>1</sup> attribute using the data being changed in the Record\_Category\_Current attribute producing a populated Record\_Category\_Previous (n) attribute.
2. The *Archival Bond Component* 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 *Archival Bond Component* shall provide the capability to make available for output all data populating the attributes created the *Archival Bond First Update Use Case*.<sup>2</sup>

#### Actor(s)

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and techniques designed to store, retrieve, manipulate, analyze, and display information.

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<sup>1</sup> (n) indicates the first instance of change in archival bond.

<sup>2</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

3. Application - A piece of software that performs a function; a computer program.

**Precondition(s)**

1. A Categorization Schema is available.
2. The Record\_Category\_Current attribute data are available.
3. The Record\_Category\_Current\_Date attribute data are available.

**Main Flow**

1. Populate the Record\_Category\_Previous (n)<sup>3</sup> attribute.
2. Populate the Record\_Category\_Previous\_Date (n) attribute.
3. Make available all data populating all attributes of the *Archival Bond First Update Use Case*.

**Sub Flow(s) - None**

**Alternate Flow(s) - None**

**Glossary**

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

**References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](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>

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<sup>3</sup> 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.

## ARCHIVAL BOND COMPONENT

### ARCHIVAL BOND SUBSEQUENT UPDATE USE CASE

#### Purpose

The *Archival Bond Subsequent Update Use Case* continues the process of updating the connection between one record that is evidence of a 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. The connection between like records is designated within this component 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 component 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 *Archival Bond Subsequent Update Use Case*. Archival bond is between the record unit and like records within a larger whole or set. (Requirements to link intrinsic elements within a record, as in the formation of a case file, are addressed by the Associate Record component). 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.

#### Functional Requirements

1. The *Archival Bond Component* shall provide the capability upon the change of data in the Record\_Category\_Previous (n) attribute to populate a Record\_Category\_Previous (n+1)<sup>1</sup> attribute using the data being changed in the Record\_Category\_Previous (n) attribute producing a populated Record\_Category\_Previous (n+1) attribute.
2. The *Archival Bond Component* 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 *Archival Bond Component* shall provide the capability to make available for output all data populating the attributes created the *Archival Bond Subsequent Update Use Case*.<sup>2</sup>

#### Actor(s)

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

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<sup>1</sup> (n+1) indicates subsequent instances of change after (n). This allows for the historical tracking of information related to archival bond.

<sup>2</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

2. Information System - An organized set of procedures and 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 must be available.
2. The Record\_Category\_Previous (n) attribute data are available.
3. The Record\_Category\_Previous\_Date (n) attribute data are available.

**Main Flow**

1. Populate the Record\_Category\_Previous (n+1)<sup>3</sup> attribute.
2. Populate the Record\_Category\_Previous\_Date (n+1) attribute.
3. Make available all data populating all attributes of the *Archival Bond Subsequent Update Use Case*.<sup>4</sup>

**Sub Flow(s)** - None

**Alternate Flow(s)** - None

**Glossary**

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

**References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.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](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>

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<sup>3</sup> 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.

<sup>4</sup> This supports printing, viewing, saving, report writing, audit, etc.

## **AUTHENTICITY COMPONENT**

### **AUTHENTICITY ESTABLISH USE CASE**

#### **Purpose**

The *Authenticity Establish Use Case* provides the initial benchmark that creates an Authenticated Record by which all subsequent validations of authenticity are made throughout the entire life cycle of the record.

#### **Functional Requirements**

1. The *Authenticity Component* shall provide the capability to populate an Authenticity\_Original attribute producing a populated Authenticity\_Original attribute.
2. The *Authenticity Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created the *Authenticity Establish Use Case*.<sup>1</sup>

#### **Precondition(s)**

1. A record is available.

#### **Actor(s)**

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

#### **Main Flow**

1. Populate the Authenticity\_Original attribute.
2. Populate the Authenticity\_Original\_Date attribute.
3. Make available all data populating all attributes of the *Authenticity Establish Use Case*.<sup>2</sup>

**Alternate Flow(s)** - None

**Sub Flow(s)** - None

#### **Glossary**

1. Authenticated Record - A record with a populated Authenticity Indicator attribute which provides the benchmark for subsequent validation of authenticity for the entire record life cycle.

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<sup>1</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

<sup>2</sup> This supports printing, viewing, saving, report writing, audit, etc.

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

### **References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.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](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>



## AUTHENTICITY COMPONENT AUTHENTICITY VALIDATE USE CASE

### Purpose

The *Authenticity Validate Use Case* verifies current authenticity of an Authenticated Record using the same method that established the record authenticity. This Use Case requires activities used to establish the record authenticity are repeated each time the record is accessed.

### Functional Requirements

1. The *Authenticity Component* shall provide the capability to populate an Authenticity\_Current attribute when a record is accessed producing a populated Authenticity\_Current attribute.
2. The *Authenticity Component* shall provide the capability to populate an Authenticity\_Current attribute using the same methodology used to populate the Authenticity\_Original attribute.
3. The *Authenticity Component* 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.
4. The *Authenticity Component* shall provide the capability to populate the Authenticity\_Validation attribute with the data only "same" or "not same"<sup>1</sup> 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 Component* shall provide the capability to make available for output all data populating the attributes created the *Authenticity Validate Use Case*.<sup>2</sup>

### Actor(s)

4. User - An individual authorized to use the system.
5. Information System - An organized set of procedures and techniques designed to store, retrieve, manipulate, analyze, and display information.
6. Application - A piece of software that performs a function; a computer program.

### Precondition(s)

1. An Authenticated Record is available.

### Main Flow

1. Access Authenticity\_Original attribute data.
2. Populate the Authenticity\_Current attribute.

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<sup>1</sup> "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."

<sup>2</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

3. Compare Authenticity\_ Original attribute data to Authenticity\_ Current attribute data.
4. Populate the Authenticity\_ Validation attribute.
5. Make available all data populating all attributes of the *Authenticity Validate Use Case*.<sup>3</sup>

**Sub Flow(s)** - None

**Alternate Flow(s)** - None

### **Glossary**

1. Authenticated Record - A record with a populated Authenticity Indicator attribute which provides the benchmark for subsequent validation of authenticity for the entire record life cycle.

### **References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](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>

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<sup>3</sup> This supports printing, viewing, saving, report writing, audit, etc.

## CASE FILE COMPONENT CASE FILE RECORD CAPTURE USE CASE

### Purpose

The *Case File Record Capture Use Case* initiates records management activities for a Declared Case File Record by generating data for records management attributes in order to create a Case File that is a uniquely identifiable within the electronic environment – a Captured Case File Record.

### Functional Requirement(s)

1. The *Case File Component* shall provide the capability to populate the Case\_File\_Record\_Unique\_Identifier attribute when a Declared Record Case File is set aside<sup>1</sup> producing a populated Case\_File\_Record\_Unique\_Identifier attribute.
2. The *Case File Component* 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.
3. The *Case File Component* shall provide the capability to populate a Case\_File\_Record\_Description<sup>2</sup> attribute when a Case\_File\_Record\_Unique\_Identifier attribute is populated producing a populated Case\_File\_Record\_Description attribute.
4. The *Case File Component* shall provide the capability to make available for output all data populating the attributes created by the *Case File Record Capture Use Case*.<sup>3</sup>

### Actor(s)

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

### Precondition(s)

A Declared Case File Record is available.

### Main Flow

1. Populate the Case\_File\_Record\_Unique\_Identifier attribute.
2. Populate the Case\_File\_Record\_Capture\_Date attribute.
3. Populate the Case\_File\_Record\_Description attribute.
4. Make available all data populating all attributes of the *Case File Record Capture Use Case*.<sup>4</sup>

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<sup>1</sup> A concept in archival theory whereby a person - or - a system at a predetermined point in the business process determines the evidence of the activities making up the transaction are complete and should be maintained and managed as a record.

<sup>2</sup> This requirement supports the business need to provide additional information necessary to manage a Case File.

<sup>3</sup> This requirement supports printing, viewing, saving, report writing, audit, etc.

**Sub Flow(s) – None.**

**Alternate Flow(s) – None.**

**Glossary**

1. Captured Case File Record – A uniquely identified record carrying the date it was initially controlled as a record within an electronic environment.
2. Case File - A collection of documents (a file) relating to a specific action, transaction, event, person, place, project, investigation or other subject.<sup>5</sup>
3. Declared Case File Record – An electronic document that is considered by the business owner to be complete evidence of a business transaction, set aside to be managed as record.
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.

**Reference(s)**

1. <http://www.dictionary.com>
2. <http://www.webopedia.com>
3. [Design Criteria Standard for Electronic records Management Software Applications, June 19, 2002 – DoD 5015.2–STD \(Standard\)](#)
4. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsc0305.pdf)
5. Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004 –[http://www.cio.gov/documents/CIOC\\_AIC\\_Service Component Based Architectures\\_2.0\\_FINAL.pdf](http://www.cio.gov/documents/CIOC_AIC_Service Component Based Architectures_2.0_FINAL.pdf)
6. Executive Office of the President of the United States, FY07 Budget Formulation, FEA Consolidated Reference Model Document, May 2005 – <http://www.whitehouse.gov/omb/egov/documents/CRM.PDF>

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<sup>4</sup> This supports printing, viewing, saving, report writing, audit, etc.

<sup>5</sup> Society of American Archivists – “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.”

## CASE FILE COMPONENT

### 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.<sup>1</sup> 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<sup>2</sup> 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 Files.

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.<sup>3</sup> 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 Component* 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 Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created the *Case File Part Associate Use Case*.<sup>4</sup>

#### Actor(s)

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

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<sup>1</sup> 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.

<sup>2</sup> When business rules indicate no more Case File Parts are to be placed in, taken out, or annotated, the case file is then complete evidence of the business transactions for which it exists.

<sup>3</sup> 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.

<sup>4</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

### **Precondition(s)**

1. A Declared Record Case File is available.

### **Main Flow**

1. Populate Case\_File\_Part\_Association\_Unique\_Identifier attribute.
2. Populate Case\_File\_Part\_Association\_Date attribute.
3. Make available all data populating all attributes of the *Case File Part Associate Use Case*.<sup>5</sup>

**Sub Flow(s)** - None

**Alternate Flow(s)** - None

### **Glossary**

1. Case File - A collection of documents (a file) relating to a specific action, transaction, event, person, place, project, investigation or other subject.<sup>6</sup>
2. Case File Part – An individual item (e.g., document, file, record) that with others makes up the Case File.
3. Declared Record Case File<sup>7</sup> – An electronic document that is considered by the business owner to be complete evidence of a business transaction, set aside to be managed as record.
4. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

### **References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](http://www.cio.gov/documents/CIOC_AIC_Service%20Component%20Based%20Architectures_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>

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<sup>5</sup> This will support printing, viewing, saving, report writing, audit, etc.

<sup>6</sup> Society of American Archivists – “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.”

<sup>7</sup> Meant to be synonymous with Declare Record in Capture Record Component.

## **DISPOSITION COMPONENT DISPOSITION ESTABLISH USE CASE**

### **Purpose**

The *Disposition Establish Use Case* ensures a record is associated to a Disposition Instruction and a legitimate Disposition Authority allowing it to become a Scheduled Record. The *Disposition Establish Use Case* facilitates management of the Scheduled Record in accordance with the Disposition Authority.

### **Functional Requirement(s)**

1. The *Disposition Component* shall provide the capability to populate associate a Disposition\_Authority\_Current attribute producing a populated Disposition\_Authority\_Current attribute.<sup>1</sup>
2. The *Disposition Component* shall provide the capability to populate a Disposition\_Authority\_Current\_Date using the System Date when a Disposition\_Authority\_Current attribute is populated producing a populated Disposition\_Authority\_Current\_Date attribute.
3. The *Disposition Component* shall provide the capability to populate the Disposition\_Instruction\_Current attribute producing a populated Disposition\_Instruction\_Current attribute.
4. The *Disposition Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created the *Disposition Establish Use Case*.<sup>2</sup>

### **Actor(s)**

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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 record associated with at least one populated Record\_Category\_Current attribute is available.
2. Disposition Instructions are available.

### **Main Flow**

1. Populate the Disposition\_Authority\_Current attribute.

---

<sup>1</sup> 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.

<sup>2</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

2. Populate the `Disposition_Authority_Current_Date` attribute.
3. Populate the `Disposition_Instruction_Current` attribute.
4. Populate the `Disposition_Instruction_Current_Date` attribute.
5. Make available all data populating all attributes of the *Disposition Establish Use Case*.<sup>3</sup>

**Sub Flow(s) - None**

**Alternate Flow(s) - None**

**Glossary**

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

**References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](http://www.cio.gov/documents/CIOC_AIC_Service%20Component%20Based%20Architectures_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>

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<sup>3</sup> This will support printing, viewing, saving, report writing, audit, etc.



## **DISPOSITION COMPONENT DISPOSITION FIRST UPDATE USE CASE**

### **Purpose**

The *Disposition First Update Use Case* allows the Disposition Authority and Disposition Instruction information to be kept current and tracks historical changes. This Use Case supports the business requirement to allow multiple dispositions to be assigned to a single record.

### **Functional Requirement(s)**

1. The *Disposition Component* shall provide the capability to populate the Disposition\_Authority\_Previous (n)<sup>1</sup> 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 Component* 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 Component* 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 Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created by the *Disposition First Update Use Case*.<sup>2</sup>

### **Actor(s)**

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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. The *Disposition Establish Use Case* has been completed for the record.

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<sup>1</sup> (n) indicates the first instance of change in an attribute where the data are required to be kept for historical reference.

<sup>2</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

## Main Flow

1. Access Disposition\_Authority\_Current attribute data.
2. Populate Disposition\_Authority\_Previous (n) attribute with data from the Disposition\_Authority\_Current attribute.
3. Populate Disposition\_Authority\_Current attribute with new data.
4. Access Disposition\_Authority\_Current\_Date attribute data.
5. Populate Disposition\_Authority\_Previous\_Date (n) attribute with data from the Disposition\_Authority\_Current attribute.
6. Populate Disposition\_Authority\_Current\_Date with new data.
7. Access Disposition\_Instruction\_Current attribute data.
8. Populate Disposition\_Instruction\_Previous (n) attribute with data from the Disposition\_Instruction\_Current attribute.
9. Populate Disposition\_Instruction\_Current attribute with new data.
10. Access Disposition\_Instruction\_Current\_Date attribute data.
11. Populate Disposition\_Instruction\_Previous\_Date (n) attribute with data from the Disposition\_Instruction\_Current\_Date attribute.
12. Populate Disposition\_Instruction\_Current\_Date with new data.
13. Make available all data populating all attributes of the *Disposition First Update Use Case*.<sup>3</sup>

**Sub Flow(s) – None.**

**Alternate Flow(s) – None.**

## Glossary

1. Disposition Authority - The legally binding instrument that authorizes the disposition of records, regardless of business environment e.g. for Federal records usually the SF 115 approved by the Archivist, for Presidential records the Presidential Record Act, for the financial records of publicly-held companies the Sarbanes-Oxley Act, etc.
2. Disposition Instruction - Mandatory and specific directions, derived from an established Disposition Authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.

## References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.pdf)
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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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<sup>3</sup> This will support printing, viewing, saving, report writing, audit, etc.

## DISPOSITION COMPONENT DISPOSITION SUBSEQUENT UPDATE USE CASE

### Purpose

The *Disposition Subsequent Update Use Case* ensures the Disposition Authority and Disposition Instruction information is current and tracks historical changes. This Use Case supports the business requirement to allow multiple dispositions to be assigned to a single record.

### Functional Requirement(s)

1. The *Disposition Component* shall provide the capability to populate a Disposition\_Authority\_Previous (n+1)<sup>1</sup> 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 Component* 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 Component* 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 Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created in the *Disposition Subsequent Update Use Case*.<sup>2</sup>

### Actor(s)

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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. The *Disposition Establish Use Case* has been completed for the record.
2. The *Disposition First Update Use Case* has been completed for the record.

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<sup>1</sup> (n+1) indicates subsequent instances of change after (n). This allows for the historical tracking of information related to archival bond.

<sup>2</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

### **Main Flow**

1. Access Disposition\_Authority\_Previous (n) attribute data.
2. Populate Disposition\_Authority\_Previous (n+1) attribute.
3. Populate Disposition\_Authority\_Previous (n) attribute.
4. Access Disposition\_Authority\_Previous\_Date (n) attribute data.
5. Populate Disposition\_Authority\_Previous\_Date (n+1) attribute.
6. Populate Disposition\_Authority\_Previous\_Date (n) attribute.
7. Access Disposition\_Instruction\_Previous (n) attribute data.
8. Populate Disposition\_Instruction\_Previous (n+1) attribute.
9. Populate Disposition\_Instruction\_Previous (n) attribute.
10. Access Disposition\_Instruction\_Previous\_Date (n) attribute data.
11. Populate Disposition\_Instruction\_Previous\_Date (n+1) attribute.
12. Populate Disposition\_Instruction\_Previous\_Date (n) attribute.
13. Make available all data populating all attributes of the *Disposition Subsequent Update Use Case*.<sup>3</sup>

**Sub Flow(s) – None.**

**Alternate Flow(s) – None.**

### **Glossary**

1. Disposition Authority - The legally binding instrument that authorizes the disposition of records, regardless of business environment e.g. for Federal records usually the SF 115 approved by the Archivist, for Presidential records the Presidential Record Act, for the financial records of publicly-held companies the Sarbanes-Oxley Act, etc.
2. Disposition Instruction - Mandatory and specific directions, derived from an established Disposition Authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.

### **References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](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>

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<sup>3</sup> This will support printing, viewing, saving, report writing, audit, etc.

## DISPOSITION COMPONENT DISPOSITION SUSPEND USE CASE

### Purpose

The *Disposition Suspend Use Case* prevents the execution of a Disposition Instruction. This component is operating in a business context where a Suspend Disposition Authority has been issued making any record affected by it becomes a Suspended Record.

### Functional Requirement(s)

1. The *Disposition Component* shall provide the capability to populate a Disposition\_Authority\_Suspend (n)<sup>1</sup> attribute producing a populated Disposition\_Authority\_Suspend (n) attribute.
2. The *Disposition Component* 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 Component* shall provide the capability to populate a Disposition\_Authority\_Suspend (n+1)<sup>2</sup> attribute producing a populated Disposition\_Authority\_Suspend (n+1) attribute.
4. The *Disposition Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created by the *Disposition Suspend Use Case*.<sup>3</sup>

### Actor(s)

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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 record is available.
2. A Suspend Disposition Authority is available.

### Main Flow

1. Populate the Disposition\_Authority\_Suspend (n) attribute.
2. Populate the Disposition\_Authority\_Suspend\_Date (n) attribute.
3. Make available all data populating all attributes of the *Disposition Suspend Use Case*.<sup>4</sup>

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<sup>1</sup> (n) indicates the first instance of an attribute where the data are required to be kept.

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

<sup>3</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

<sup>4</sup> This will support printing, viewing, saving, report writing, audit, etc.

**Sub Flow(s) – None.**

**Alternate Flow: Support Multiple Instances of Disposition\_Authority\_Suspend Attribute**

1. If at 1 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. Make available all data populating all attributes of the *Disposition Suspend Use Case*.<sup>5</sup>
6. Return 3 Main Flow.

**Glossary**

1. Disposition Instruction - Mandatory and specific directions, derived from an established Disposition Authority, that guide the retention and disposal of a record, including retention periods, dates for action, etc.
2. Suspend Disposition Authority – A legally binding order, notice, or freeze on the execution of the Established Disposition Instruction of an Established Disposition Authority.
3. Suspended Record - A Scheduled Record which is subject to at least one Suspend Disposition Authority.
4. System Date – The calendar date made available within the electronic environment, usually provided as a service by the operating system for use by programs, applications and other executable operations.

**References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](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>

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<sup>5</sup> This will support printing, viewing, saving, report writing, audit, etc.

## DISPOSITION COMPONENT DISPOSITION REINSTATE COMPONENT

### Purpose

The *Disposition Reinstatement 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 Scheduled Record to execute. This Use Case supports multiple instances of a suspension order and a corresponding revocation order for a single record.

### Functional Requirement(s)

1. The *Disposition Component* shall provide the capability to populate a Disposition\_Authority\_Suspend\_Revocation (n)<sup>1</sup> attribute producing a populated Disposition\_Authority\_Suspend\_Revocation (n).
2. The *Disposition Component* 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)<sup>2</sup> attribute.
3. The *Disposition Component* 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 Component* shall provide the capability to populate a Disposition\_Authority\_Suspend\_Revocation (n+1)<sup>3</sup> attribute producing a populated Disposition\_Authority\_Suspend\_Revocation (n+1).
5. The *Disposition Component* 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 Component* 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.
7. The *Disposition Component* shall provide the capability to make available for output all data populating the attributes created the *Disposition Reinstatement Use Case*.<sup>4</sup>

### Actor(s)

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and techniques designed to store, retrieve, manipulate, analyze, and display information.

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<sup>1</sup> (n) indicates the first instance of an attribute where the data are required to be kept.

<sup>2</sup> This requirement ensures there is a one to one association between a revocation order and a suspense order.

<sup>3</sup> (n+1) indicates subsequent instances of an attribute after (n) has occurred and are required to be kept.

<sup>4</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

3. Application - A piece of software that performs a function; a computer program.

**Precondition(s)**

1. A Suspended Record is available.
2. A Revocation Order is available.

**Main Flow**

1. Populate the Disposition\_Authority\_Suspend\_Revocation (n) attribute.
2. Access the corresponding Disposition\_Authority\_Suspend (n) attribute.
3. Populate the Disposition\_Authority\_Suspend\_Revocation\_Association (n) attribute.
4. Populate the Disposition\_Authority\_Suspend\_Revocation\_Date (n) attribute.
5. Make available all data populating all attributes of the *Disposition Reinstate Use Case*.<sup>5</sup>

**Sub Flow(s) – None.**

**Alternate Flow: Support Multiple Instances of Disposition\_Authority\_Suspend\_Revocation Attributes**

1. If at 1 Main Flow (n) first instance has occurred, then:
2. Populate the Disposition\_Authority\_Suspend\_Revocation (n+1) attribute.
3. Access the corresponding Disposition\_Authority\_Suspend (n+1) attribute
4. Populate the Disposition\_Authority\_Suspend\_Revocation\_Association (n+1) attribute.
5. Populate the Disposition\_Authority\_Suspend\_Revocation\_Date (n+1) attribute.
6. Repeat 2 through 5 Alternate Flow: Support Multiple Instances of Disposition\_Authority\_Suspend\_Revocation Attributes until all required associations are complete.
7. Make available all data populating all attributes of the *Disposition Reinstate Use Case*.<sup>6</sup>
8. Return 5 Main Flow.

**Glossary**

1. Revocation Order – A legally binding, or a legitimate order or notice to release a Suspend Disposition Authority.
2. Scheduled Record - A record with a disposition instruction from a Disposition Authority.
3. Suspend Disposition Authority – An legally binding order, notice, or freeze on the execution of the Established Disposition Instruction of an Established Disposition Authority.

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<sup>5</sup> This will support printing, viewing, saving, report writing, audit, etc.

<sup>6</sup> Ibid.



## References

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.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](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>

## **DISPOSITION COMPONENT**

### **DISPOSITION ENABLE TRANSFER USE CASE**

#### **Purpose**

The *Disposition Enable Transfer Use Case* provides the capability to make a Scheduled Record available for transfer in accordance with the Disposition Instruction and tracks events related to records transfer.<sup>1</sup>

#### **Functional Requirement(s)**

1. The *Disposition Component* shall provide the capability to populate a Record\_Scheduled\_Transfer\_Available<sup>2</sup> 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 Component* shall provide the capability to populate a Disposition\_Action\_History attribute upon the transfer of a Scheduled Record<sup>3</sup> producing a populated Disposition\_Action\_History attribute.
3. The *Disposition Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created the *Disposition Enable Transfer Use Case*.<sup>4</sup>

#### **Actor(s)**

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

#### **Precondition(s)**

1. A Disposition Authority is available
2. A Disposition Instruction is available
3. A Scheduled Record is eligible for transfer

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<sup>1</sup> 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.

<sup>2</sup> This attribute provides the indication within the system environment that transfer of the record and its attributes is allowed.

<sup>3</sup> This includes the attributes associated to the record during its management.

<sup>4</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

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. Access Disposition\_Instruction\_Current attribute.
2. Access Disposition\_Instruction\_Current\_Date attribute.
3. Populate the Record\_Scheduled\_Transfer\_Available attribute.
4. Populate the Disposition\_Action\_History attribute.
5. Populate the Disposition\_Action\_History\_Date attribute.
6. Make available all data populating all attributes of the *Disposition Enable Transfer Use Case*.<sup>5</sup>

### **Sub Flow(s) - None**

### **Alternate Flow(s): Handle Record Destruction After Transfer**

1. If at 3 Main Flow a copy of the record is transferred and instances of the record and its attributes persist in the electronic environment, then:
2. Initiate Disposition Enable Destruction Use Case.
3. Make available all data populating all attributes of the Disposition Enable Transfer Use Case.
4. Return to Main Flow.

### **Glossary**

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

### **References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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 –

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<sup>5</sup> This will support printing, viewing, saving, report writing, audit, etc.

[http://www.cio.gov/documents/CIOC\\_AIC\\_Service\\_Component\\_Based\\_Architectures\\_2.0\\_FINAL.pdf](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>

## **DISPOSITION COMPONENT**

### **DISPOSITION ENABLE DESTRUCTION USE CASE**

#### **Purpose**

The *Disposition Enable Destruction Use Case* provides the capability to make a Scheduled Record available for destruction in accordance with the Disposition Instruction and tracks events related to records destruction.

#### **Functional Requirement(s)**

1. The *Disposition Component* shall provide the capability to populate the Record\_Scheduled\_Destruction\_Available<sup>1</sup> 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 Component* shall provide the capability to populate the Disposition\_Action\_History attribute upon the destruction of the Scheduled Record<sup>2</sup> producing a populated Disposition\_Action\_History attribute.
3. The *Disposition Component* 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 Component* shall provide the capability to make available for output all data populating the attributes created the *Disposition Enable Destruction Use Case*.<sup>3</sup>

#### **Actor(s)**

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

#### **Precondition(s)**

1. A Disposition Authority is available.
2. A Disposition Instruction is available.
3. A Scheduled Record is eligible for destruction.
4. For every populated Disposition\_Authority\_Suspend attribute there is a correlating and populated Disposition\_Authority\_Suspend\_Revocation attribute evidencing the suspension of the disposition has been released.

#### **Main Flow**

1. Access Disposition\_Instruction\_Current attribute.
2. Access Disposition\_Instruction\_Current\_Date attribute.
3. Populate the Record\_Scheduled\_Destruction\_Available attribute

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

<sup>2</sup> This includes the attributes associated to the record during its management.

<sup>3</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

4. Populate the Disposition\_Action\_History attribute.
5. Populate the Disposition\_Action\_History\_Date attribute.
6. Make available all data populating all attributes of the *Disposition Enable Destruction Use Case*.<sup>4</sup>

**Sub Flow(s) - None**

**Alternate Flow(s) - None**

**Glossary**

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

**References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsec0305.pdf](http://archives.gov/electronic_records_archives/pdf/rmsec0305.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](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>

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<sup>4</sup> This will support printing, viewing, saving, report writing, audit, etc.

## REFERENCE COMPONENT REFERENCE ASSOCIATE USE CASE

### Purpose

The *Reference Associate Use Case* supports linking a record or records to another or other records for various business purposes while maintaining independent management of each record in the association.

The *Reference Associate Use Case* provides its functionality upon the capture of a record in the electronic environment whether or not the record has been acted upon by the Archival Bond, Provenance, and Disposition activities.

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)

1. The *Reference Component* shall provide the capability to create an association between one record and one other record by populating a Record\_Association\_Identifier (n)<sup>1</sup> attribute producing a populated Record\_Association\_Identifier (n) attribute.
2. The *Reference Component* 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 Component* 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 Component* shall provide the capability to create an association between one record and one other record by populating a Record\_Association\_Identifier (n+1)<sup>2</sup> attribute producing a populated Record\_Association\_Identifier (n+1) attribute.
5. The *Reference Component* 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.

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<sup>1</sup> (n) indicates the first instance of an attribute.

<sup>2</sup> (n+1) indicates subsequent instances of an attribute after (n) has occurred.

6. The **Reference Component** 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 Component** shall provide the capability to make available for output all data populating the attributes created by the **Reference Associate Use Case**.<sup>3</sup>

**Actor(s)**

1. User - An individual authorized to use the system.
2. Information System - An organized set of procedures and 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 Captured Records are available.

**Main Flow**

1. Populate Record\_Association\_Identifier attribute.
2. Populate Record\_Association\_Description attribute.
3. Populate Record\_Association\_Date attribute.
4. Make available all data populating all attributes of the **Reference Associate Use Case**.<sup>4</sup>

**Sub Flow(s) – None.**

**Alternate Flow: Support Multiple Instances of Reference Association.**

1. If at 1 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. Make available all data populating all attributes of the **Reference Associate Use Case**.<sup>5</sup>
7. Return 4 Main Flow.

**Glossary**

1. Captured Records – Plural form of Captured Record. A uniquely identified Declared Record carrying the date it was initially controlled as a record within an electronic environment. Captured Record is to be considered synonymous with

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<sup>3</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

<sup>4</sup> This will support printing, viewing, saving, report writing, audit, etc.

<sup>5</sup> Ibid.



other names used within an electronic environment such as object, electronic object, coherent information, and file, etc.

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

### **References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](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>

## REFERENCE COMPONENT REFERENCE DISASSOCIATE USE CASE

### Purpose

The *Reference Disassociate Use Case* provides the ability to un-link a record or records from another or other records that were related because of a business act, or transaction.

### Functional Requirement(s)

1. The *Reference Component* shall provide the capability to change a populated Record\_Association\_Identifier (n)<sup>1</sup> attribute to “null” value upon the termination of the association producing a “null” value Record\_Association\_Identifier (n) attribute.<sup>2</sup>
2. The *Reference Component* 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 Component* 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 Component* shall provide the capability to change a populated Record\_Association\_Identifier (n+1)<sup>3</sup> attribute to “null” value upon the termination of an association producing a “null” value Record\_Association\_Identifier (n+1) attribute.<sup>4</sup>
5. The *Reference Component* 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 Component* 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.
7. The *Reference Component* shall provide the capability to make available for output all data populating the attributes created by the *Reference Disassociate Use Case*.<sup>5</sup>

### Actor(s)

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

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<sup>1</sup> (n) indicates the first instance of an attribute.

<sup>2</sup> As an example, one of the records in the association has met its disposition and no longer exists.

<sup>3</sup> (n+1) indicates subsequent instances of an attribute after (n) has occurred.

<sup>4</sup> As an example, one of the records in the association has met its disposition and no longer exists.

<sup>5</sup> This requirement will support printing, viewing, saving, report writing, audit, etc.

**Precondition(s)**

1. The *Reference Associate Use Case* is complete for this association.

**Main Flow**

1. Populate Record\_Association\_Identifier (n) attribute with “null” value.
2. Populate Record\_Association\_Description (n) attribute with “null” value.
3. Populate Record\_Association\_Date (n) attribute with “null” value.
4. Make available all data populating all attributes of the *Reference Disassociate Use Case*.<sup>6</sup>

**Sub Flow(s) – None.**

**Alternate Flow: Support Multiple Instances of Reference Disassociation.**

1. If at 1 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. Repeat 2 through 4 Alternate Flow: Support Multiple Instances of Reference Disassociation until all required associations are “null” value.
6. Make available all data populating all attributes of the *Reference Disassociate Use Case*.<sup>7</sup>
7. Return 4 Main Flow.

**Glossary – None.**

**References**

1. Records Management Service Components Requirements Development Project Final Report, March 31, 2005 – [http://archives.gov/electronic\\_records\\_archives/pdf/rmsc0305.pdf](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](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>

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<sup>6</sup> This will support printing, viewing, saving, report writing, audit, etc.

<sup>7</sup> Ibid.

## **Appendix A: RMSC Scope and Constraints**

The RMSC requirements and attributes were developed and remain within a defined scope and necessary constraints. The viewpoint is records management activities and all references to records mean electronic records. In scope activities extend from the receipt, identification, and capture of a record to the disposition of a record. Participants in this effort identified only those records management activities that can be supported with software service components within the context defined by the Federal Enterprise Architecture and developed functional requirements for them within this scope.<sup>1</sup> Not included at this time are several activities and business processes of records management that cannot be supported by software service components, such as document creation, disposition schedule creation and maintenance, and security classification and declassification.<sup>2</sup>

**Viewpoint:** *records management activities*

**In Scope:** *from record receipt, identification, capture to record disposition*

**Out of Scope:** *record creation and management of archival record*

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<sup>1</sup> Other electronic records management analyses and standards are concerned with identical and in some cases broader portions of the records life cycle as this program but they address different topics and were therefore of limited use in the requirements development project. 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 criteria and not functional requirements for RMA's placed near the end of the record life cycle and outside of record creating applications. 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.

<sup>2</sup> Also declared out of scope: format (e.g., pdf, tif, doc, etc.), storage methods and media, systems management, maintenance, backup, recovery, etc., and privacy considerations, regulation, laws, etc.

## Appendix B: RMSC Context

The Use Case presented in this technical report describes the immediate context in which interactions take place between users and RMSCs to meet common records management business requirements. Additionally, RMSCs fit within the broader contexts of the life cycle of Federal records, the provision of services through software components, 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 Federal Enterprise Architecture (FEA). The FEA is both a design framework and decision-making tool for Federal IT investment. Using five reference models it describes the relationship between business functions and the technologies and information that supports them.<sup>1</sup> The Service Component Reference model (SRM) classifies service components integral to the FEA that support business requirements common throughout Federal agencies. RMSCs 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.<sup>2</sup> The OMB plans to assemble a repository of service components and guidance for use by Federal agencies to reduce duplicative IT development, save money, and improve quality. The detailed functional requirements and use case for RMSCs provided in this technical report align with and support the FEA and the SRM and are the first step in submitting working RMSCs to the FEA’s component repository.

The FEA is a components-based architecture.<sup>3</sup> 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 a piece of 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.<sup>4</sup> 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 components-based architecture is a promising development.

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

<sup>2</sup> *Ibid.*, p. 48

<sup>3</sup> See Architecture and Infrastructure Committee, Federal Chief Information Officers Council, Service Component-Based Architectures Version 2.0, June 2004, at <http://www.cio.gov>

<sup>4</sup> 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.

A records management service component is a piece of software that provides services that support the creation, management, transfer, and destruction of electronic records within a computing environment.

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

The FEA, service components-based architecture, and the records life cycle converge in RMSCs to enable a revolutionary method to capture electronic records, attest to their reliability, and ensure their authenticity and accessibility over time. RMSCs 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 are usually implemented at the end of the business or mission process and information critical to records management is only associated with the record after it has left its creating application and context. RMSCs 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. As independently deployable software modules RMSCs may be developed, implemented, reused, and improved across an enterprise with lower costs and higher quality. RMSCs will enable more efficient and effective management of more records throughout their life cycle.

## **Appendix C: References**

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