

SUBJECT

INFORMATION SYSTEMS PROJECT MANAGEMENT

**SESSION 6 TOPIC: Information Systems Life Cycle management-
case study**

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Information life cycle management (ILM) is a comprehensive approach to managing the flow of an information system's data and associated metadata from creation and initial storage to the time when it becomes obsolete and is deleted.

information life cycle management (ILM) is a comprehensive approach to managing the flow of an information system's data and associated [metadata](#) from creation and initial storage to the time when it becomes obsolete and is deleted. Unlike earlier approaches to data storage management, ILM involves all aspects of dealing with data, starting with user practices, rather than just automating storage procedures, as for example, hierarchical storage management (HSM) does. Also in contrast to older systems, ILM enables more complex criteria for storage management than data age and frequency of access.

ILM products automate the processes involved, typically organizing data into separate tiers according to specified policies, and automating data migration from one tier to another based on those criteria. As a rule, newer data, and data that must be accessed more frequently, is stored on faster, but more expensive storage media, while less critical data is stored on cheaper, but slower media. However, the ILM approach recognizes that the importance of any data does not rely solely on its age or how often it's accessed. Users can specify different policies for data that declines in value at different rates or that retains its value throughout its life span. A path management application, either as a component of ILM software or working in conjunction with it, makes it possible to retrieve any data stored by keeping track of where everything is in the storage cycle.

ILM is often considered a more complex subset of data life cycle management ([DLM](#)). According to Karen Dutch, vice-president of product management at Fujitsu Softek, DLM products deal with general attributes of files, such as their type, size, and age; ILM products have more complex capabilities. For example, a DLM product would allow you to search stored data for a certain file type of a certain age, for example, while an ILM product would let you search various types of stored files for instances of a specific piece of data, such as a customer number.

Data management has become increasingly important as businesses face [compliance](#) issues in the wake of legislation, such as [HIPAA](#) and the [Sarbanes-Oxley Act](#), that regulates how organizations must deal with particular types of data. Data management experts stress that information life cycle management should be an organization-wide enterprise, involving procedures and practices as well as applications.

Information Lifecycle Management

Information Lifecycle Management (sometimes abbreviated **ILM**) refers to a wide-ranging set of strategies for administering [storage systems](#) on [computing](#) devices.

ILM is the practice of applying certain policies to effective information management. This practice has been used by Records and Information Management (RIM) Professionals for over three decades and had its basis in the management of information in paper or other physical forms ([microfilm](#), negatives, photographs, audio or [video recordings](#) and other assets).

ILM includes every phase of a "record" from its beginning to its end. And while it is generally applied to information that rises to the classic definition of a record ([Records management](#)), it applies to any and all informational assets. During its existence, information can become a record by being identified as documenting a business transaction or as satisfying a business need. In this sense ILM has been part of the overall approach of ECM [Enterprise content management](#).

However, in a more general perspective the term "business" must be taken in a broad sense, and not forcibly tied to direct commercial or enterprise contexts. While most records are thought of as having a relationship to enterprise business,

not all do. Much recorded information serves to document an event or a critical point in history. Examples of these are birth, death, medical/health and educational records. [e-Science](#), for example, is an emerging area where ILM has become relevant.

In the year 2004, the [Storage Networking Industry Association](#), on behalf of the information technology (IT) and information storage industries, attempted to assign a new broader definition to Information Lifecycle Management (ILM). The oft-quoted definition that it released that October at the Storage Networking World conference in Orlando, Florida, stated that "ILM is comprised of the policies, processes, practices, and tools used to align the business value of information with the most appropriate and cost effective IT infrastructure from the time information is conceived through its final disposition."^[1] In this view, information is aligned with [business processes](#) through management policies and service levels associated with applications, metadata, information, and data.

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Policy[

ILM policy consists of the overarching storage and information policies that drive management processes. Policies are dictated by business goals and drivers. Therefore, policies generally tie into a framework of overall [IT governance](#) and [management](#); [change control](#) processes; requirements for system availability and recovery times; and [service level agreements](#) (SLAs).

Operational[

Operational aspects of ILM include backup and data protection; [disaster recovery](#), restore, and restart; archiving and long-term retention; data replication; and day-to-day processes and procedures necessary to manage a storage architecture.

Infrastructure

Infrastructure facets of ILM include the [logical](#) and [physical](#) architectures; the [applications](#) dependent upon the storage platforms; [security](#) of storage; and [data center](#) constraints. Within the application realm, the relationship between applications and the production, [test](#), and [development](#) requirements are generally most relevant for ILM.

Functionality

For the purposes of business records, there are five phases identified as being part of the lifecycle continuum along with one exception. These are:

- Creation and Receipt
- Distribution
- Use
- Maintenance
- Disposition

Creation and Receipt deals with records from their point of origination. This could include their creation by a member of an organization at varying levels or receipt of information from an external source. It includes correspondence, forms, reports, drawings, computer input/output, or other sources.

Distribution is the process of managing the information once it has been created or received. This includes both internal and external distribution, as information that leaves an organization becomes a record of a transaction with others.

Use takes place after information is distributed internally, and can generate business decisions, document further actions, or serve other purposes.

Maintenance is the management of information. This can include processes such as filing, retrieval and transfers. While the connotation of 'filing' presumes the placing of information in a prescribed container and leaving it there, there is much more involved. Filing is actually the process of arranging information in a predetermined sequence and creating a system to manage it for its useful existence within an organization. Failure to establish a sound method for filing information makes its retrieval and use nearly impossible. Transferring information refers to the process of responding to requests, retrieval from files and providing access to users authorized by the organization to have access to the information. While removed from the files, the information is tracked by the use of various processes to ensure it is returned and/or available to others who may need access to it.

Disposition is the practice of handling information that is less frequently accessed or has met its assigned retention periods. Less frequently accessed records may be considered for relocation to an 'inactive records facility' until

they have met their assigned retention period. "Although a small percentage of organizational information never loses its value, the value of most information tends to decline over time until it has no further value to anyone for any purpose. The value of nearly all business information is greatest soon after it is created and generally remains active for only a short time --one to three years or so-- after which its importance and usage declines. The record then makes its life cycle transition to a semi-active and finally to an inactive state." [2] Retention periods are based on the creation of an organization-specific retention schedule, based on research of the regulatory, statutory and legal requirements for management of information for the industry in which the organization operates. Additional items to consider when establishing a retention period are any business needs that may exceed those requirements and consideration of the potential historic, intrinsic or enduring value of the information. If the information has met all of these needs and is no longer considered to be valuable, it should be disposed of by means appropriate for the content. This may include ensuring that others cannot obtain access to outdated or obsolete information as well as measures for protection privacy and confidentiality.'

Long-term records are those that are identified to have a continuing value to an organization. Based on the period assigned in the retention schedule, these may be held for periods of 25 years or longer, or may even be assigned a retention period of "indefinite" or "permanent". The term "permanent" is used much less frequently outside of the Federal Government, as it is not feasible to establish a requirement for such a retention period. There is a need to ensure records of a continuing value are managed using methods that ensure they remain persistently accessible for length of the time they are retained. While this is relatively easy to accomplish with paper or microfilm based records by providing appropriate environmental conditions and adequate protection from potential hazards, it is less simple for electronic format records. There are unique concerns related to ensuring the format they are generated/captured in remains viable and the media they are stored on remains accessible. Media is subject to both degradation and obsolescence over its lifespan, and therefore, policies and procedures must be established for the periodic conversion and migration of information stored electronically to ensure it remains accessible for its required retention periods.

Exceptions occur with non-recurring issues outside the normal day to day operations. One example of this is a **legal hold, litigation hold** or **legal freeze** is requested by an attorney. What follows is that the records manager will place a legal hold inside the records management application which will stop the files from being enqueued for disposition.

Life Cycle and Information Management

Click on the individual information technology (IT) life cycle phase to learn about the official records that may be created during that phase, and to find instructions on how long to maintain those records:

- [Concept Exploration](#)
- [Requirements Development](#)
- [Acquisition Planning](#)
- [Source Selection](#)
- [Design](#)
- [Develop & Test](#)
- [Implementation & Integration](#)
- [Operations & Maintenance](#)
- [Disposal](#)

NOTE: These phases are based upon guidance in the *Federal Bureau of Investigation (FBI) Life Cycle Management Directive*.

Background

There are official records created during each phase of an Information Technology (IT) system's life cycles. This web page is intended to guide the reader in the identification of those official records. As defined in the *Information Technology Management Reform Act of 1996* (now known as the Clinger-Cohen Act), "information technology" includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources.

- *Classification 319U - Information Technology Operations and Management Records* provides instructions for handling some, but not all, IT records. Classification 319U does **not** apply to data created on the systems or information content;
- *Classification 242 - Automation Matters* addresses system data and/or content. Program managers are required to contact the Records Disposition Unit, Records Policy and Administration Section, to initiate appraisal action of system data and/or information content.
- *Classification 319Y2 - Executive Committees*. Records of internal FBI committees related to the Bureau's mission, such as the Enterprise Architecture Board (EAB), the IT Policy Review Board (IPRD), the Change Management Board (CMB), the Investment Management/Project Review Board (IMPRB), the Information Sharing Policy Board, (ISPB). The Records Disposition Unit will work with each board to develop appropriate disposition instructions for any files created and/or maintained by the board including agenda, minutes, final reports, and related records documenting accomplishments of the official boards and committees.

- *Other Administrative Records.* In addition, offices with responsibility for IT operations also create administrative records covered by other file classifications. Please visit: http://rmd.fbinet.fbi/rpas/classification_319/ for instructions on the handling of administrative records.

Readers are reminded that the retention and disposition instructions for the file classifications are mandatory not optional. If the retention and disposition instructions will not meet business needs, please contact the Records Disposition Unit, Records Policy and Administration Section to discuss needed changes.

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Life Cycle Phase :Concept Exploration

The Concept Exploration Phase identifies the mission need, develops and evaluates alternate solutions, and develops the business plan for an information technology (IT) system. The files created or obtained during the Concept Exploration Phase may include:

1. Design project plans, showing tasks, responsibilities and timelines,
2. Reports detailing the outcomes of periodic design reviews,
3. Documentation of changes to requirements, signed off by both user and project team representatives,
4. Design descriptions,
5. Data migration plans for the conversion, verification, and validation of existing data and electronic information into another system or systems,
6. System business rules, and
7. Records of oversight boards regarding the proposed system or systems.

There are two primary categories of IT systems that may be addressed during Concept Exploration:

1. IT systems that directly support mission goals, and
2. IT systems that provide basic infrastructure, systems and services.

The files associated with IT systems that directly support mission goals are covered under *Classification 242 - Automation Matters*. Please contact the Records Disposition Unit, Records Policy and Administration Section, to initiate appraisal action.

Basic infrastructure files are covered under *Classification 319U18 - IT Infrastructure and Design Records*. Infrastructure includes the basic systems and services used to supply access to computers and data telecommunications. Infrastructure components include hardware such as printers, desktop computers, network and web servers, routers, hubs, and network cabling, as well as software such as operating systems (e.g., Microsoft Windows and Novell NetWare) and shared applications (e.g., electronic mail, word processing, and database programs). The services necessary to design, implement, test, validate, and maintain such components are also considered part of the Bureau's IT infrastructure.

Handling Instructions for Records Created During the Concept Exploration Phase

<p>CLASSIFICATION 242 - AUTOMATION MATTERS. Concept exploration records for IT systems that will directly support mission goals. Records may include:</p> <ul style="list-style-type: none"> • <i>Mission requirements documents and</i> • <i>Concept of operations documents</i> 	<p>Please contact the Records Disposition Unit, Records Policy and Administration Section, to initiate appraisal action.</p>
<p>Classification 319Y2 - Executive Committees. <i>System Concept Review (SCR)</i> - Documentation of Enterprise Architecture Board (EAB) approval of the mission requirements and concept of operations</p>	<p>Please contact the Records Disposition Unit, Records Policy and Administration Section, to initiate appraisal action.</p>
<p>319U18a. Records for projects that are not implemented.</p>	<p>Destroy/delete 1 year after final decision is made.</p>
<p>319U18b. Records for projects that are implemented.</p>	<p>Destroy/delete 5 years after project is terminated.</p>
<p>319U18c. Installation and testing records.</p>	<p>Destroy/delete 3 years after final decision on acceptance is made.</p>

Life Cycle Phase: Requirements Development

The Requirements Development Phase defines the operational, technical, and test requirements and initiates project planning. The records created or obtained during the Requirements Development Phase may include:

1. System specifications;
2. Diagrams representing system architecture and components;
3. Models representing different system views, such as processes, data flows and data entities;
4. Data migration plans for the conversion, verification, and validation of existing data and electronic information into another system or systems; and,
5. Records of oversight boards regarding the requirements.

Requirements development files for basic infrastructure systems are covered under *Classification 319U18 - IT Infrastructure Design and Implementation*. These files include:

1. *Descriptions of Requirements*. This can include implementation of functions such as maintaining network servers, desktop computers, and other hardware, installing and upgrading network operating systems and shared applications, and providing data telecommunications;
2. *Design and Implementation Files*
3. *Infrastructure development and maintenance information*, such as acceptance/accreditation of infrastructure components, analysis of component options, feasibility, costs and benefits, and work associated with implementation, modification, and troubleshooting;
4. *Models, diagrams, schematics, and technical documentation*;
5. *Data migration plans* for the conversion, verification, and validation of existing data and electronic information into another system or systems; and
6. *Quality assurance reviews and test plans*, data, and results.

Handling Instructions for Records Created During the Requirements Development Phase

CLASSIFICATION 242 - AUTOMATION	Please contact the Records
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<p>MATTERS. Development records related to IT systems that directly support Bureau' mission goals:</p> <ul style="list-style-type: none"> • System Specification documents • External Interface Control documents 	<p>Disposition Unit, Records Policy and Administration Section to initiate appraisal action.</p>
<p>Classification 319Y2 - Executive Committees. Records of the Investment Management/-Project Review Board (IMPRB) documenting the system concept review.</p>	<p>Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.</p>
<p>319O3 - Records Disposition Background Material. Documentation of the definition phase and written notice to the Records Management Division of proposed approach to achieving Electronic Recordkeeping Certification (ERKC).</p>	<p>Destroy 6 years after the related records are destroyed or after the related records are transferred to the National Archives of the United States, whichever is applicable.</p>
<p>319U18a. Records for projects that are not implemented.</p>	<p>Destroy/delete 1 year after final decision is made.</p>
<p>319U18b. Records for projects that are implemented.</p>	<p>Destroy/delete 5 years after project is terminated.</p>
<p>319U18c. Installation and testing records.</p>	<p>Destroy/delete 3 years after final decision on acceptance is made.</p>

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Life Cycle Phase: *Acquisition Planning*

The Acquisition Planning Phase allocates the requirements among development segments, researches and apply lessons learned from previous projects, identifies potential product and service providers, and secures funding. Records associated with the Acquisition Planning Phase may also be covered under:

- *Classification 319B12 - Procurement Approved Bidders*- Lists or card files of acceptable bidders.
- *Classification 319U14 - Financing of IT Resources and Services* - Agreements formalizing performance criteria for quantity and quality of service, including definition of responsibilities, response times and volumes, charging, integrity guarantees, and non-disclosure agreements.
- *Classification 319Y2 - Executive Committees*. Records of the Investment Management/-Project Review Board (IMPRB) documenting the *Acquisition Plan Review (APR)*. Includes documentation of the approval of the systems specification and interface control documents and the approach and resources required to acquire the system as defined in the acquisition plan.
- *Classification 319U15 - IT Contracts with Third Party Providers*- Files related to managing third-party services, including records that document control measures for reviewing and monitoring contracts and procedures for determining their effectiveness and compliance.
- *Classification 319U16 - IT Allocation of Charges and Payment Tracking* - Records generated in IT management and service operations to identify and allocate charges and track payments for computer usage, data processing and other IT services EXCLUDING records that are part of the agency's cost accounting system, which are covered in 319G - *Stores, Plant, and Cost Accounting Records*.

NOTE: Copies of all records needed to support contracts should be in procurement files, which are filed under categories found in 319B - Procurement, Supply, and Grant Records.

Handling Instructions for Records Created During the Acquisition Planning Phase

Classification 319Y2 - Executive Committees. Records of the **Investment Management/-Project Review Board (IMPRB)** documenting the *Acquisition Plan Review (APR)*. Includes documentation of the approval of:

- the systems specification and interface control documents;
- approach and resources required to acquire the system as defined in the acquisition plan;
- Electronic Recordkeeping (ERK) approach to be taken. (High level draft of ERK

Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

requirements for the system.)	
Classification 319B12 - Procurement Approved Bidders- Lists or card files of acceptable bidders.	Destroy when superseded or obsolete.
<i>Classification 319U14 - Financing of IT Resources and Services - Agreements formalizing performance criteria for quantity and quality of service, including definition of responsibilities, response times and volumes, charging, integrity guarantees, and non-disclosure agreements.</i>	Destroy/delete 3 years after agreement is superseded or terminated.
<i>319U15 - IT Contracts with Third Party Providers - Files related to managing third-party services, including records that document control measures for reviewing and monitoring contracts and procedures for determining their effectiveness and compliance.</i>	Destroy/delete 3 years after control measures or procedures are superseded or terminated.
<i>Classification 319U16 - IT Allocation of Charges and Payment Tracking - Records generated in IT management and service operations to identify and allocate charges and track payments for computer usage, data p and other IT services EXCLUDING records that are part of the Bureau's cost accounting system, which are covered in 319B - Procurement, Supply, and Grant Records.</i>	Destroy/delete records with no outstanding payment issues when 3 years old.

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Life Cycle Phase: Source Selection

The Source Selection Phase solicits and evaluates proposals and selects the product and service providers. The records created or obtained during the Source Selection Phase may include:

- *Source Selection Authorization Review*. Documentation of the technical progress review to approve the results of the source selection process and to authorize proceeding with contract negotiations.
- Contract
- Requisition
- Purchase order
- Lease
- Bond and surety records
- Correspondence and related papers pertaining to award, administration, receipt, inspection and payment.
- Procurement or purchase organization copy, and related papers
- Cancelled contract solicitations
- Unopened bids

Handling Instructions for Records Created During the Source Selection Phase

<p><i>Source Selection Authorization Review.</i> Documentation of the technical progress review to approve the results of the source selection process and to authorize proceeding with contract negotiations. Generic lists of approved bidders would be filed under 319B12 - <i>Procurement Approved Bidders.</i></p>	<p>File with the appropriate contract file.</p>
<p>319B4 - Purchases Exceeding the Simplified Acquisition Threshold - Also includes construction contracts exceeding \$2,000* dated on or after July 3, 1995. Contract, requisition, purchase order, lease, and bond and surety records, including correspondence and related papers pertaining to award, administration, receipt, inspection and payment. Procurement or purchase organization copy, and related papers. *This is the effective date of the <i>Federal Acquisition Regulations (FAR)</i> rule defining "simplified acquisition threshold".</p>	<p>Destroy 6 years and 3 months after final payment.</p>

319B5 - Purchases At or Below the Simplified Acquisition Threshold. Also includes construction contracts at or below \$2,000. dated on or after July 3, 1995.

Destroy 7 years after final payment.

[**Note:** This is longer than the General Records Schedule authorizes, but meets the needs of the Inspection Division (INSD) and the Finance Division (FD).]

319B3 - Procurement Matters. Correspondence files of operating procurement units concerning internal operation and administration matters not covered elsewhere in this schedule. Included in this file is information regarding use of the government purchase card program.

Destroy when 2 years old.

319B8 - Unsuccessful Bids Related to Small Purchases. Solicited and unsolicited unsuccessful bids and proposals relating to small purchases as defined in the *Federal Acquisition Regulation*, 48 CFR Part 13.

Destroy 1 year after date of award or final payment, whichever is later.

319B9 - Unsuccessful Bids Above Small Purchase Limitations. Relating to transactions above the small purchase limitations in 48 *CFR Part 13*, when they are filed separately from contract case files.

Destroy when related contract is completed.

319B19 - Canceled Contract Solicitations. Formal solicitations of offers to provide products or services (e.g., Invitations for Bids, Requests for Proposals, Requests for Quotations) which were canceled prior to award of a contract. The files include presolicitation documentation on the requirement, any offers that were opened prior to

Destroy 5 years after date of cancellation.

the cancellation, documentation on any Government action up to the time of cancellation, and evidence of the cancellation.

319B11 - Unopened Bids.

Return to bidder.

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Life Cycle Phase: Design

The Design Phase creates detailed designs for system components, products, and interfaces and initiates test planning. Records associated with the Design Phase may include:

1. Detailed specifications to build or acquire technological components such as software or hardware,
2. File plans,
3. Data migration plans for the conversion, verification, and validation of existing data and electronic information into another system or systems,
4. Plans showing how the design will integrate with existing systems and processes,
5. Initial training and testing plans,
6. A system implementation plan, and
7. *Technical Review Board (TRB) Records*. Includes TRB *Final Design Reviews (FDR)* documenting approvals of the build-to and code-to documentation, associated draft verification procedures, and assurance that the designs presented can be produced and that when built can be expected to meet design-to specification at verification.

Handling Instructions for Records Created During the Design Phase

319U18 - IT Infrastructure Design and Implementation. Records of individual projects designed to provide and support new agency IT infrastructure, systems, and services. Includes records documenting:

1. Requirements for and implementation of functions such as:

Destroy/delete 5 years after project is terminated.

- a. maintaining network servers, desktop computers, and other hardware,
 - b. installing and upgrading network operating systems and shared applications, and
 - c. providing data telecommunications;
2. Infrastructure development and maintenance such as:
 - a. acceptance/ accreditation of infrastructure components,
 - b. analysis of component options, feasibility, costs and benefits, and
 - c. work associated with implementation, modification, and troubleshooting;
 3. Models, diagrams, schematics, and technical documentation; and
 4. Quality assurance reviews and test plans, data, and results.
 5. Final description of the high level electronic recordkeeping requirements for the system.

319U18 - IT Infrastructure Design and Implementation. Records for projects that are **not** implemented.

Records for projects that are not implemented should be destroyed within 1 year after final decision is made.

319U19 - IT Installation and Testing. Records of individual projects designed to provide and support new agency IT infrastructure, systems, and services. Includes records documenting:

Destroy/delete 3 years after final decision on acceptance is made.

1. Requirements for and implementation of functions such as:
 - a. maintaining network servers, desktop

- computers, and other hardware,
 - b. installing and upgrading network operating systems and shared applications, and
 - c. providing data telecommunications;
- 2. Infrastructure development and maintenance such as:
 - a. acceptance/ accreditation of infrastructure components,
 - b. analysis of component options, feasibility, costs and benefits, and
 - c. work associated with implementation, modification, and troubleshooting;
- 3. Models, diagrams, schematics, and technical documentation; and
- 4. Quality assurance reviews and test plans, data, and results.
- 5. Installation and testing records, including test plan for electronic recordkeeping certification.

CLASSIFICATION 242 - AUTOMATION

MATTERS. Design records relating to specific systems that directly support or document mission goals.

Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

CLASSIFICATION 1 - Training Matters. File initial training and testing plans in Classification 1, under Item (5) "0" Administrative Files Opened after 12/31/77

DISPOSAL NOT AUTHORIZED. Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

319U5 - IT System and Application

Destroy/delete 1 year after

Implementation. Records created and retained for asset management, performance and capacity management, system management, configuration and change management, and planning, follow-up, and impact assessment of operational networks and systems. Includes, but is not limited to:

- Data and detailed reports on implementation of systems, applications and modifications;
- Application sizing, resource and demand management;
- Documents identifying, requesting, and analyzing possible changes, authorizing changes, and documenting implementation of changes;
- Documentation of software distribution and release or version management.

Classification 319Y2 - Executive Committees - **Technical Review Board (TRB) Records**. Includes TRB *Final Design Reviews (FDR)* documenting approvals of the build-to and code-to documentation, associated draft verification procedures, and assurance that the designs presented can be produced and that when built can be expected to meet design-to specification at verification.

termination of system.

Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

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Life Cycle Phase: Develop & Test

The Develop & Test Phase produces and tests all system components, assembles and tests all products, and plans for system testing. Records created during the Develop & Test Phase may include:

- *Deployment Readiness Review (DRR)*. Records of the approval of the readiness of the system for deployment in the operational environment.

- *System Test Readiness Review (STRR)*. Records of the verification of readiness to perform official system-wide data gathering verification test for either qualification or acceptance.
- *Operational Readiness Review (ORR)*. Records of the technical progress review between the Project Office and the user and operations and maintenance (O&M) organization to verify readiness for system validation required by the operational readiness plan developed in compliance with the mission requirements and concept of operations document. The decision point for user and O&M organization approval of the Project Office to proceed with system validation.
- *Data migration* records of the conversion, verification, and validation of existing data and electronic information into another system or systems;
- *Change Management Board (CMB) Records*. Records of the CMB approval of the deployment readiness review, and system test readiness review.

Handling Instructions for Records Created During the Develop & Test Phase

319U19 - IT Installation and Testing. Records of individual projects designed to provide and support new agency IT infrastructure, systems, and services. Includes records documenting:

1. Requirements for and implementation of functions such as maintaining network servers, desktop computers, and other hardware, installing and upgrading network operating systems and shared applications, and providing data telecommunications;
2. Infrastructure development and maintenance such as acceptance/ accreditation of infrastructure components, analysis of component options, feasibility, costs and benefits, and work associated with implementation, modification, and troubleshooting;
3. Models, diagrams, schematics, and technical documentation; and
4. Quality assurance reviews and test plans, data, and results.

Destroy/delete 3 years after final decision on acceptance is made.

5. Installation and testing records

CLASSIFICATION 242 - AUTOMATION

MATTERS. Develop and test records relating to specific systems that directly support or document mission goals.

Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

Classification 319Y2 - Executive Committees -

Change Management Board (CMB) Records. Records of the CMB approval of the deployment readiness review, system test readiness review, and test plan for Electronic Recordkeeping Certification.

Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

Life Cycle Phase: Implementation & Integration

The Implementation & Integration Phase executes functional, interface, system, and integration testing, provides user training, and accepts and transitions the product to operations. Records created during the Implementation & Integration Phase may include:

- *Operational Acceptance Review (OAR).* Documentation of the approval of the overall system and product validation by obtaining customer acceptance, and determination as to whether the Operations & Maintenance (O&M) organization agrees to, and has the ability to, support continuous operations of the system. Includes completion of electronic recordkeeping certification testing and completion of a risk mitigation plan (if needed).
- *Data migration* records of the conversion, verification, and validation of existing data and electronic information into another system or systems;
- *Change Management Board (CMB) Records.* Records of the CMB approval of OAR and certification that the system meets electronic recordkeeping requirements.

Handling Instructions for Records Created During the Implementation & Integration Phase

319U19 - IT Installation and Testing. Records of	Destroy/delete 3 years after
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individual projects designed to provide and support new agency IT infrastructure, systems, and services. Includes records documenting:

1. Requirements for and implementation of functions such as:
 - a. maintaining network servers, desktop computers, and other hardware,
 - b. installing and upgrading network operating systems and shared applications, and
 - c. providing data telecommunications;
2. Infrastructure development and maintenance such as:
 - a. acceptance/ accreditation of infrastructure components,
 - b. analysis of component options, feasibility, costs and benefits, and
 - c. work associated with implementation, modification, and troubleshooting;
3. Models, diagrams, schematics, and technical documentation; and
4. Quality assurance reviews and test plans, data, and results.
5. Installation and testing records

CLASSIFICATION 242 - AUTOMATION

MATTERS. Installation and testing records relating to specific systems that directly support or document mission goals, including completion of electronic recordkeeping certification testing and completion of a risk mitigation plan (if needed).

319U13 - IT Operations Reports and Benchmark Indicators. Reports on operations, including:

final decision on acceptance is made.

Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

Destroy/delete when 3

years old.

1. measures of benchmarks, performance indicators, and critical success factors,
2. error and exception reporting,
3. self-assessments, performance monitoring; and
4. management reports.

CLASSIFICATION 1 - Training Matters. File training records in Classification 1, under Item (5) "0" Administrative Files Opened after 12/31/77

DISPOSAL NOT

AUTHORIZED. Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

Classification 319Y2 - Executive Committees -

Change Management Board

(CMB) Records. Records of the CMB approval of OAR and certification that the system meets electronic recordkeeping requirements, including the Electronic Recordkeeping Certification Report.

Please contact the Records Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

Operations & Maintenance

The Operations and Maintenance phase maintains and supports the product, and manages and implements necessary modifications. The records created or obtained during the Operations and Maintenance phase may include:

- **IT Operations Reports and Benchmark Indicators** - IT system and application implementation; analyses of data created and organized to determine whether the system is appropriately supporting the business process; reviews of documentation from earlier phases of the project; observations and random checks of operations; IT workload schedules; IT problem reports; data migrations

- **Customer Service Records** - IT customer service; interviews of management, staff, and stakeholders; surveys conducted; IT automation and access requests
- **IT Facility, Site Management, and Equipment Support** - IT configuration management inventories; IT routine network maintenance; IT electronic media control records
- **Security** - IT systems security and disaster recovery plans, IT systems security risk analyses, Security Certification and Accreditation of IT systems
- **Budget and Finance** - IT financial agreements; IT contracts with third party providers; IT allocation of charges and payment tracking
- **Electronic Recordkeeping Certification** - Reports of the routine, periodic (every three years) reviews of the status of systems granted authority to operate to ensure that such systems continue to meet all electronic recordkeeping criteria.

Handling Instructions for Records Created During the Operations & Maintenance Phase

IT Operations Reports and Benchmark Indicators

319U5 - IT System and Application Implementation

- Records created and retained for asset management, performance and capacity management, system management, configuration and change management, and planning, follow-up, and impact assessment of operational networks and systems. Includes, but is not limited to:

- Data and detailed reports on implementation of systems, applications and modifications;
- Application sizing, resource and demand management;
- Documents identifying, requesting, and analyzing possible changes, authorizing changes, and documenting implementation of changes;
- Documentation of software distribution and release or version management; and,

Destroy/delete 1 year after termination of system.

- Documentation of data migrations conducted during the life of the system, showing: conversion, verification, and validation of existing data and electronic information. Data migration is required in order to maintain access in human readable form for the life of the records contained within the system.

NOTE: The Bureau is required by law to maintain official records for the length of time authorized by the National Archives and Records Administration. Case files typically have a 25 year retention beyond close of case; some case files are permanent historical material. Please contact the Records Management Division to discuss requirements.

319U2 - Other IT Oversight and Compliance

Records. Records in offices with responsibility for managing IT operations relating to compliance with IT policies, directives, and plans including:

- recurring and special reports,
- responses to findings and recommendations, and
- reports of follow-up activities.

All other **oversight and compliance records**, including:

- certification and accreditation of equipment,
- quality assurance reviews and reports,
- reports on implementation of plans,
- compliance reviews, and
- data measuring or estimating impact and compliance.

319U11 - IT Workload Schedules. Workload schedules, run reports, and schedules of maintenance and support activities.

319U12 - IT Problem Reports. Problem reports and

Destroy/delete when 3 years old or 1 year after responsible office determines that there are no unresolved issues, whichever is longer.

Destroy/delete when 1 year old.

Destroy/delete 1 year after

related decision documents relating to the software infrastructure of the network or system.

problem is resolved.

IT Customer Service Records

319U17 - IT Customer Service. Records related to providing help desk information to customers, including pamphlets, responses to "Frequently Asked Questions," and other documents prepared in advance to assist customers.

Destroy/delete 1 year after record is superseded or obsolete.

319X - Program Reviews. Weekly, monthly, semi-annual, bi-annual, or annual reviews of critical areas within programs to evaluate performance and progress in achieving initiatives and goals, including Quality Assurance matters.

DISPOSAL NOT AUTHORIZED.

319O13 - IRM Triennial Review. Reports required by the GSA concerning reviews of information resources management (IRM) practices. Included are associated correspondence, studies, directives, feeder reports, and monitoring surveys and reports.

Destroy when 7 years old.

319U20 - IT Automation and Access Requests. Communications pertaining to automation and access requests. This includes requests for access to FBI computer systems by non-FBI employees, access to the Internet, and related automated systems access requests.

DISPOSAL NOT AUTHORIZED.

IT Facility, Site Management, and Equipment Support

319U4 - IT Configuration Management Inventories. Inventories of IT assets, network circuits, and building or circuitry diagrams, including

Destroy/delete 1 year after completion of the next

equipment control systems such as databases of barcodes affixed to IT physical assets.

inventory.

319U6 - IT Routine Network Maintenance. Records of routine IT maintenance on the network infrastructure documenting preventative, corrective, adaptive and perfective enhancement) maintenance actions, including requests for service, work orders, service histories, and related records.

Destroy/delete when 3 years old or 1 year after termination of system, whichever is sooner.

NOTE: If any maintenance activities have a **major impact** on a system or lead to a **significant change**, those records should be maintained as part of the item *319U5 - IT System and Application Implementation*.

319U7 - IT Electronic Media Control

Records. Electronic media control records including automated files and manual records used to control the location, maintenance, and disposition of magnetic and optical media including list of holdings and control logs.

Destroy/delete when superseded or obsolete.

IT Security

319U8 - IT Systems Security and Disaster Recovery Plans. System Security Plans and Disaster Recovery Plans.

Destroy/delete 1 year after system is superseded.

319U9 - IT Systems Security Risk Analyses. Documents identifying IT risks and analyzing their impact, risk measurements and assessments, actions to mitigate risks, implementation of risk action plan, service test plans, test files and data.

Destroy/delete 1 year after system is superseded.

319U1 - Security Certification & Accreditation

Destroy/delete when 3

Records. Certification and accreditation of equipment, quality assurance reviews and reports, reports on implementation of plans, compliance reviews, and data measuring or estimating impact and compliance.

years old or 1 year after responsible office determines that there are no unresolved issues, whichever is longer.

319U1 - Electronic Recordkeeping Certification

Records. Certification and accreditation of equipment, quality assurance reviews and reports, reports on implementation of plans, compliance reviews, and data measuring or estimating impact and compliance. Includes reports of the routine, periodic (every three years) reviews of the status of systems granted authority to operate to ensure that such systems continue to meet all electronic recordkeeping criteria.

Destroy/delete when 3 years old or 1 year after responsible office determines that there are no unresolved issues, whichever is longer.

IT Budget and Finance

319U14 - IT Financial Agreements. Agreements formalizing performance criteria for quantity and quality of service, including definition of responsibilities, response times and volumes, charging, integrity guarantees, and non-disclosure agreements. **[Note:** Copies of records needed to support contracts should be in procurement files, which are scheduled under *319B - Procurement, Supply, and Grant Records.*]

Destroy/delete 3 years after agreement is superseded or terminated.

319U15 - IT Contracts with Third Party Providers.

Files related to managing third-party services, including records that document control measures for reviewing and monitoring contracts and procedures for determining their effectiveness and compliance.

Destroy/delete 3 years after control measures or procedures are superseded or terminated.

[Note: Copies of records needed to support contracts should be in procurement files, which

are scheduled under 319B - Procurement, Supply, and Grant Records.]

319U16 - IT Allocation of Charges and Payment

Tracking. Records generated in IT management and service operations to identify and allocate charges and track payments for computer usage, data processing and other IT services EXCLUDING records that are part of the Bureau's cost accounting system, which are covered in 319G - Stores, Plant, and Cost Accounting Records.

[**Note:** Copies of records needed to support contracts should be in procurement files, which are scheduled under 319B - Procurement, Supply, and Grant Records.]

Destroy/delete records with no outstanding payment issues when 3 years old.

Life Cycle Phase: Disposal

The Disposal Phase shuts down system operations and arranges for the orderly disposition of system assets. The records created or obtained during the Disposal phase may include:

- *Disposal Review (DR).* Records of the Change Management Board (CMB) authorization to terminate the Operations and Maintenance Phase and dispose of system resources.
- *Records Disposition.* Documentation of disposition of official records associated with the operation and management of the system, and data/documents maintained upon the system:
 - Transfer of permanent historical records to the National Archives and Records Administration;
 - Destruction of temporary records in accordance with records disposition authority; and,
 - Migration of temporary records that have not reached the end of the mandatory retention period.

Handling Instructions for Records Created During the Disposal Phase

Classification 319Y2 - Executive Committees -

Please contact the Records

Change Management Board

(CMB) Records. Records of the CMB approval of the Operational Acceptance Review.

Disposition Unit, Records Policy and Administration Section to initiate appraisal action.

319O3 - Records Disposition Background Material. Descriptive inventories, disposal authorizations, schedules, and reports. Other records.

Destroy 6 years after the related records are destroyed or after the related records are transferred to the National Archives of the United States, whichever is applicable.

319O8 - Records Holdings Other Offices. Statistical reports of agency holdings, including feeder reports from all offices and data on the volume of records disposed of by destruction or transfer. Also includes indexing instructions, filing systems, file plans, consolidation/destruction of files, etc.

Destroy when 1 year old.

319U5 - IT System and Application Implementation - Records created and retained for documentation of data migrations conducted during the life of the system, showing: conversion, verification, and validation of existing data and electronic information. Data migration is required in order to maintain access in human readable form for the life of the records contained within the system.

Destroy/delete 1 year after termination of system.

NOTE: The Bureau is required by law to maintain official records for the length of time authorized by the National Archives and Records Administration. Case files typically have a 25 year retention beyond close of case; some case

files are permanent historical material. Please contact the Records Management Division to discuss requirements.