

# Project Type Guide



# **Decommission**

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### **Project Type Guide**

#### **Summary: Decommission**

The Decommission Project Type Guide describes a decommissioning framework designed to assure that the actions taken at the end of the life of a system/service for the purpose of retiring it are consistent with the requirements of any existing statutes or Department of Housing and Urban Development (HUD) policies. Specifically, the guide provides a tailored approach for using the Project Planning and Management (PPM) Life Cycle while staying consistent with HUD's procedures for inactivation and decommission. As business evolves, organizations often need to upgrade to next-generation applications, consolidate and retire (decommission) applications, and simplify the supporting IT infrastructure to reduce costs.

The following best practices are recommended for developing and executing system/service decommissioning. These practices may be modified, skipped, or augmented depending on the type of asset being retired.

- Create an Accessible Decommission Plan
- o Incorporate Lessons Learned
- o Incorporate Regulations
- Notify Users and Stakeholders
- Determine the Data Disposition Strategy
- o Archive or Transfer Data
- o Archive or Transfer Software Components
- o Archive Life Cycle Deliverables
- o Eliminate System Access
- Dispose of Equipment
- o Shutdown the Asset in an Orderly Manner
- Conduct and Document a Post-Decommission Review

A decommission project may be initiated by various events. For example, a system may lose funding so it needs to be terminated; Congressional mandates require HUD to acquire a new software application, rendering the current system ineffective; or the system is no longer needed for the business to accomplish its mission. The process and steps provided here are based on information gathered from previous successful executions of system/service retirements at HUD.

Any system decommission requires strict adherence to mandates and regulations relating to contract termination, disposition of assets, coordination with the HUD records management (including retention), transition of remaining fiscal management duties, and the placement of staff. If a system/service is terminated due to lack of funding, a project manager should review the Decommission Project Type Guide and templates provided to determine their applicability while considering the fiscal, schedule, and staffing implications. At the end of a system decommission, a post-decommission review is conducted and lessons learned are documented for future consideration by OCIO and other program areas.

A best practice to keep in mind before moving forward with a decommissioning activity is to evaluate the Annual Operational Analysis for the system/service regularly to determine whether program investments are delivering maximum business value. An operational analysis is performed on an annual basis and examines the current performance of an operational (mixed life cycle or operations and maintenance)



solution and measures that performance against an established set of cost, schedule, and performance parameters.

The Annual Operational Analysis evaluates system performance, user satisfaction with the system, adaptability to changing business needs, and new technologies that might improve the system. The results of the Annual Operational Analysis help to determine whether the solution should continue, be modified, or be terminated. Weighing the costs and benefits of each application can help when deciding which applications should be maintained, and which ones should be upgraded, replaced, consolidated, or retired. In many cases, the review, evaluation, and decision process can lead to significant hardware, software, and maintenance cost savings, as well as improved application and operational efficiencies.

Before a decommission project is started, consider these elements:

- 1. Business value of the application, database, platform, or system
- 2. Ways in which the data is used
- **3.** Degree of interoperability and redundancy
- **4.** Costs and risks associated with continued operation
- **5.** Costs and risks associated with migrating, consolidating, or retiring the application, database, platform, or system

# Why Tailor the Project Planning and Management Life Cycle for this Project Type

The PPM Life Cycle is HUD's standard for IT program and project management and governance. Part of the value of this process includes the ability to tailor it when needed to accommodate the various ways of deploying technology solutions. For each project type certain artifacts may become more important or less important, which is where tailoring opportunities exist.

The purpose of decommissioning a system/service is to retire the solution when operational analysis indicates that the solution no longer provides sufficient business value and/or no longer remains cost-effective to operate. In addition, the degree of tailoring will vary based on the amount of vendor resources, services, and tools needed to decommission a system/service. As a result, OCIO has developed specific tailoring recommendations for system/service decommissioning. The decommission project type will have far fewer artifacts than other project types. The outcome of a decommission project is the deliberate and systematic decommissioning of a solution with appropriate consideration of data archiving and security, migration of data or functionality to a new solution(s), and lessons learned over the solution's life cycle.

Communication with key stakeholders and/or segment owners play a major role in a decommissioning project. Several key questions to answer as the inactivation process begins include:

- 1. Why is the system being inactivated?
- 2. Is the system being inactivated in the Inventory of Automated Systems (IAS) and all other authoritative records?
- 3. Have the customer/sponsor and all users and stakeholders been notified?
- **4.** When should user access for the system be removed?
- **5.** How do users access the system?
  - Desktop
  - URL
  - Server



- 6. Have all links and web pages been identified (and removal requested) for the application/system on HUD@work and HUD.GOV?
- 7. Does the system interface (receive or send data) with any other system?
- **8.** For how long does the data need to be archived?

Consolidation and retirement efforts often complement each other. By consolidating data and retiring redundant or legacy systems and applications, an agency can improve operations management and reduce costs across its IT environment, including hardware, software, network infrastructure, staff resources and more. Once data from similar business applications is consolidated and redundant applications are retired, substantial resources are then reclaimed to support the applications that deliver the greatest business value. A Decommission Plan is prepared and executed to address all facets of archiving, transferring, and disposing of the solution's software and hardware components. Particular emphasis is given to proper preservation of the data processed by the solution so that it is effectively migrated to another solution or archived in accordance with applicable records management regulations and policies for potential future access.

The decommissioning activities are planned and executed with input from several stakeholder groups including the solution development team, operations and maintenance, records management, legal counsel, security, enterprise architecture, and interfacing system owners.

The graphic below depicts the high-level decommissioning process:

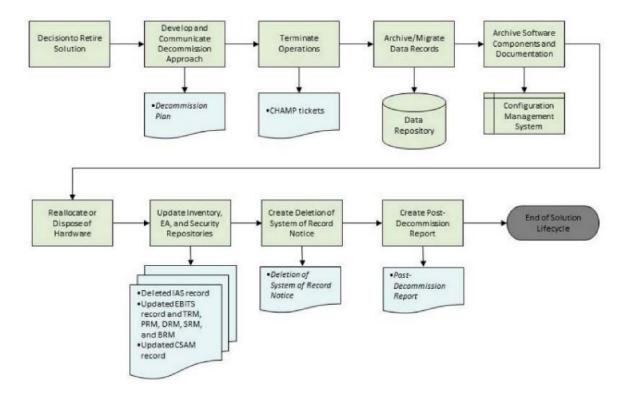


Figure 1: High-Level Decommissioning Process Flow



#### **PPM Guidance and Decommissioning**

IT project governance (like PPM) exists not only to ensure required information is documented and provided to justify financial investment in a project, but to guarantee that sufficient proactive risk management exists throughout the project. Before a decommission project can begin, an operational solution(s) must be selected for retirement. Listed below are important things to keep in mind for decommissioning a system/service.

Decommissioning a System/Service - Things to Keep in Mind

- **1.** The project team should update the total life cycle cost estimate for the system/service being decommissioned to reflect the new status and incorporate impacts to future costs.
- 2. The primary POC will also need to request to make the application's code obsolete in Serena Dimensions and specify a retention time (number of years the code needs to be retained up to 10 years for financial systems and up to 5 years for others) if appropriate for the application. All documentation agreed to in the Project Tailoring Agreement (PTA) for a decommission project must be complete and uploaded to the SharePoint site used by the TRC for control gate reviews before requesting the review.
  - o The Decommission Plan must review the business and/or technical reasons (i.e., older technology, additional maintenance, security risks, etc.) behind the decision to retire the information system. Ensure that a description of how stakeholders and/or end users may be impacted by the loss of functionality from the disposition of the system/service and any proposed workaround solutions is provided (section 3 of the Decommission Plan addresses system disposition details).
  - o Determine if the decommissioned system needs to be updated in HUD's Technical Reference Model (TRM) due to technical obsolescence. Also, consider updates to the Service Component Reference Model (SRM) to ensure that interface relationships related to the decommissioned system are deleted. The Enterprise Architecture (EA) team should also consider any updates to the data architecture layer of the HUD EA by determining what data files are affected by the decommissioned system.
- **3.** In order to inactivate any system code in the IAS, the Technical POC [Primary (Project Leader) or Secondary POC] must provide verification to IAS PM/Administrator that the following inactivation steps have been completed to include completion of the inactivation form:
  - 1. Records Retention Technical POC should not begin the IAS inactivation process unless the required records management backup/retention has been completed. Contact the HUD Record Management Office for data retention requirements. Once this part has been completed, the process to formally inactivate the system code in the IAS begins.
  - 2. Configuration Management (CM) Code Retirement Technical POC will need to request to make the application's code OBSOLETE in Serena Dimensions AND specify a retention time (number of years the code needs to be retained up to 10 years for financial systems and up to 5 for others) if appropriate for the application. Send an e-mail to the Configuration Management mailbox for instructions.
  - 3. Centralized HUD Account Management Process (CHAMP) Notification Technical POC will need to send an e-mail to the <a href="CHAMP@hud.gov">CHAMP@hud.gov</a> advising that the system code (with Acronym and System Name) is being retired on a specific date and provide direct approval to remove the system code from the System Security Administrator web page and the CHAMP system itself.



- 4. Mainframe Applications If the system (or application) is a mainframe (IBM or UNISYS), send an e-mail to Data Center Service Division (DCSD) Mainframe team at <a href="DataCenterServiceDivision@hud.gov">DataCenterServiceDivision@hud.gov</a> to arrange completion of the Retired Requirements Document necessary to finalize the mainframe retirement requirements.
- 5. Removal of All Data/Access Points After the CM, CHAMP and records retention requirements have been completed, Technical POC should submit a Service Desk ticket to REMOVE all data and any URL or access point that allow users to access the system. All data means any data located on production, development, and test servers. If the data already has been removed, the Technical POC must send an e-mail validation of the removal to IAS PM/Administrator or IAS Mailbox.
- 6. Removal of Custom/Unique Software Does the system use unique or custom software? Will the software remain at HUD and be used by another system or will it be removed along with the data/databases? If no other system is going to use the COTS application, Technical POC must provide verification that they have requested the removal of the software and it has been removed. For additional information on the list of identified software/programming used by the application, go to the 'programming and software environment' section in IAS.
- 7. **Removal from Service Desk Workflow** Technical POC will need to create a Service Desk ticket to **REMOVE** all the references in Service Desk workflow.
- 8. Once all inactivation steps (1 7) have been completed, the Technical POC should contact the IAS PM/Administrator to finalize the inactivation process in the IAS.

The following table depicts the tailored PPM approach for decommission projects. This should be used as a starting point and should be modified as needed per the particulars of the project.

Artifact	Rationale/ Comments
Initiation Phase – Project Valida	ation Review
Project Schedule – High Level	The Project Schedule is required for all projects; for this project type a Project Schedule should be submitted outlining key dates throughout the decommissioning process.
Planning Phase – Project Baseli	ne Review
Project Tailoring Agreement (PTA)	This agreement documents which PPM artifacts the project will be completing; the decommission version will be used as the starting point for any additional tailoring opportunities.

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<sup>\*</sup>For additional IAS information visit http://hudatwork.hud.gov/HUD/cio/po/i/it/wkline/ias



#### **Decommission Plan**

The Decommission Plan addresses how the various components of the solution will be handled at the completion of operations, including software, data, hardware, communications, and documentation. The plan also notes any provisions for future access to the solution's components, particularly the data. The plan is forwarded to appropriate management personnel and stakeholders for review and approval.

An important component of the Decommission Plan involves stakeholder notification and communications. It asks for the project to describe the plan for notifying known users of the asset being shut down and other affected parties, such as those responsible for interfacing systems/solutions and operations staff members involved in running the asset. It also asks about procedures for coordinating with solutions and organizations that consume any data or services from the retiring asset or provide data or services to the asset.

At a minimum, contents of the communications should include:

- The rationale for decommissioning the system/service
- The plan to archive data
- The tentative timeline for disposition

#### **Execution & Control Phase - Operational Readiness Review**

#### DPPD Application System Retirement Request or IAS Inactivation Form

The Application System Retirement Request describes the work needed to remove a HUD mainframe application when the application is no longer useful. This document needs to be submitted to the "DPPD Release Request" mailbox when completed.

The IAS Inactivation Form data (request for inactivation) will be entered directly into the IAS application in WebCenter. This form is used to remove a HUD open source application when the application is no longer useful.

## System of Records Notice (SORN) Deletion

\*Note: This requirement may vary depending on the type of information in the system. Privacy IPT members will help determine if this artifact is needed based on the particulars of the application undergoing decommissioning. A System of Records Notice is prepared in accordance with the requirements of the Privacy Act of 1974. This task only applies to those systems with a *System of Records Notice* (SORN) published in the Federal Register. If the records retention schedule requires that the system records be retained for a specified period after the system no longer exists, the SORN may not be deleted until after the records retention schedule has been satisfied. The notice of deletion includes:

- The system identification number/code and name
- The reason for the deleting the SORN from the Federal Register
- If the system is eliminated through replacement or integration, an identification of the successor system or systems
- The effective date of the deletion

#### Close Out Phase - Project Close Out Review



and describes the location of all data, software components, and documentation that were archived. If data, software components, or hardware and peripherals were migrated or integrated into other solutions, the report specifies the disposition details.	documentation that were archived. If data, software components, or hardware and peripherals were migrated or integrated into other solutions,
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