

# Reclamation Manual

## Directives and Standards

<b>Subject:</b>	Computer Software Costs
<b>Purpose:</b>	Documents the Bureau of Reclamation's accounting requirements for computer software costs. The benefit of this Directive and Standard (D&S) is the Reclamation-wide standardization for recording computer software costs in accordance with generally accepted accounting principles.
<b>Authority:</b>	Financial Accounting Standards Advisory Board (FASAB) <a href="#">Statement of Federal Financial Accounting Standards 10</a> , <i>Accounting for Internal Use Software</i> ; FASAB <a href="#">Technical Release 16</a> <i>Implementation Guidance for Internal Use Software</i> ; Department of the Interior Financial Management Memorandum 2016-031 (Volume IV.B), <i>Department of the Interior's Standard for Capitalizing the Cost of Internal Use Software</i>
<b>Approving Official:</b>	Director, Mission Support Organization (MSO)
<b>Contact:</b>	Finance Policy & Programs Division; Policy, Compliance & Audit (PC&A) (84-27410)

- 1. Introduction.** This D&S provides accounting requirements for the cost of internal use software Reclamation acquires or develops internally. This includes software Reclamation:

  - uses to operate its programs, e.g., financial, administrative, or operational software, including project management,
  - uses to provide goods and services, e.g., water delivery management, and
  - develops or obtains for internal use and subsequently provides to other Federal entities with or without reimbursement.
- 2. Applicability.** This D&S applies to all Reclamation employees who participate in the acquisition, development, approval, management, and recording of internal use software and related costs.
- 3. Integrated Software.** Reclamation considers computer software integrated into and necessary to operate general property, plant, and equipment (G-PP&E), rather than perform an application, as part of the G-PP&E of which it is an integral part (e.g., a software program used to operate a hydroelectric power generation plant). Reclamation capitalizes and depreciates this software accordingly. During development, the region records the cost of integrated software in the expense account general ledger (GL) 6100.XXXXX or 6400.XXXXX and settles the costs to assets under construction (AUC), GL 1720.CIP00. Please see Reclamation Manual (RM) D&S, *Assets Under Construction (AUC)* ([FIN 07-24](#)) for additional information.

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4. **Work Breakdown Structures (WBS) and User Product Code (UPC).** Regional offices and directorates personnel are responsible for the proper recording of information technology costs by establishing WBSs containing the correct designations and using the correct UPCs and commitment items. Refer to [FIN 07-24 Appendix A](#) and RM D&S, *Administrative Cost Tracking: Information Management and Technology (IMT) Cost Tracking in the Financial and Business Management System (FBMS)* ([IRM 03-02](#)).
5. **Criteria for Capitalization.**
  - A. Reclamation capitalizes costs of internal use software when total software development costs are expected to exceed \$100,000, after management authorizes the project, and the estimated useful/service life of the software is 2 years or more. The software owner must maintain documentation supporting this decision.
  - B. To avoid materially distorting period costs and understating asset values, Reclamation bases the capitalization of bulk software purchases on the bulk value not on unit price. To illustrate, if Reclamation purchased ten copies of a software program for \$200,000, it capitalizes the acquired software because the bulk price exceeds Reclamation's capitalization threshold.
6. **Capitalized Costs.**
  - A. **Internally Developed Software.** Capitalized costs include the full cost (direct and indirect costs) Reclamation incurs during the development, testing, and installation of the software. These costs include those for new software, initial training, and documentation manuals. Examples of costs are salaries of programmers, systems analysts, project managers, and administrative personnel; associated employee benefits; outside consultants' fees; rent; and supplies. Limit such costs to costs Reclamation incurs after:
    - (1) management authorizes and commits to a computer software project and believes that Reclamation will more likely than not complete the project, and Reclamation will use the software to perform the intended function with an estimated service life of 2 years or more, and
    - (2) the completion of conceptual formulation, design, and testing of possible software project alternatives (the preliminary design stage).
  - B. **Purchased Software.**
    - (1) **Commercial Off the Shelf (COTS) Software.** Capitalized cost include the amount Reclamation pays to the vendor for the software. Reclamation capitalizes material internal costs it incurs to implement the COTS software and otherwise make it ready for use.

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- (2) **Contractor-Developed Software.** Capitalized costs include the amount Reclamation pays to a contractor to design, program, install, and implement the software. Reclamation capitalizes material internal costs it incurs to implement the contractor-developed software and otherwise make it ready for use.
- C. **Enhancements (Betterments).** Reclamation capitalizes the acquisition cost of enhancements to previously capitalized internal use software when the enhancements are more likely than not to result in significant additional capabilities or functionality. Enhancements normally require new software specifications and may require a change to all or part of the existing software specifications. Reclamation expenses the cost of minor enhancements resulting from ongoing systems maintenance and the purchase of enhanced versions of software for a nominal charge. Reclamation records enhancements as sub-assets in the Financial and Business Management System (FBMS).
- D. **Software License.** Reclamation capitalizes licenses with an upfront cost of \$100,000 or more that allow perpetual use of the software for its entire lifetime. Reclamation evaluates software licenses with terms of 2 or more years and periodic payments to determine whether to capitalize or expense them.
- E. **Cloud Computing Service.** If cloud computing arrangements include perpetual and upfront cost software licenses and Reclamation is the customer, Reclamation capitalizes software licenses costs that meet the capitalization threshold.
- F. **Shared Services.**
- (1) When Reclamation is the customer (receiving the service) and the shared service arrangement includes software licenses, Reclamation capitalizes the software license costs consistent with other software licenses.
  - (2) Costs for intra-departmental shared services are typically shared among the appropriate bureaus within the department.
  - (3) For inter-departmental and commercial share services, the owner (entity receiving the funding and responsible for maintaining the software), capitalizes the software costs; however, the customer will capitalize the costs if:
    - (a) the customer receives the contractual right to take possession of the software without significant penalty, and
    - (b) it is feasible for the customer to run the software on its own hardware or contract with another party to host the software.

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7. **Expensed Costs.** Expense the following costs when Reclamation incurs them:
- A. The cost of minor enhancements resulting from ongoing systems maintenance.
  - B. The purchase of enhanced versions of software for a nominal charge.
  - C. Costs Reclamation incurs solely to repair a design flaw or to perform minor upgrades that may extend the useful life or capacity of the software without adding capabilities.
  - D. Data conversion costs Reclamation incurs for internally developed, contractor-developed, or COTS software including the cost to develop or obtain software that allows for access or conversion of existing data to the new software. Such cost may include the purging or cleansing of existing data, reconciliation or balancing of data, and the creation of new/additional data.
  - E. Costs Reclamation incurs after the completion of the final acceptance test. Where Reclamation installs the software at multiple sites, capitalization ceases at each site after testing is complete at that site.
  - F. Annual license maintenance costs and/or fees.
  - G. Internally developed, COTS, or contractor-developed software which has either a useful/service life of less than 2 years or has a cost that is under \$100,000.
8. **Analysis of Software in Development.** Information Resource Office (IRO) personnel are responsible for informing the Denver/Washington (DO/WO) Finance Office when a plan to develop software is approved.
- A. **Quarterly Review.**
    - (1) The DO/WO Finance Office performs and documents a quarterly review of GL 1832.XXXXXX to determine whether costs occurred in the GL. When 1832.XXXXXX reflects a balance for a region, the DO/WO Finance Office notifies the IRO, the regional financial manager, and the regional finance officer of the respective region. Upon notification from the DO/WO Finance Office, the respective regional finance office assumes the responsibilities for the quarterly review, analysis, and initiation of the transfer for the software in development associated with their region.
    - (2) Each quarter, the regional finance office is responsible for coordinating the review of each software program or module in development in GL 1832.XXXXXX within its region. The regional finance office determines deadlines, but they must complete the review in the current quarter, and they must allow time to meet the deadlines for transfers in [FIN 07-24](#) Paragraph 13.

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- (3) The regional finance office uses the *Software in Development Analysis Form* (Appendix A) to facilitate the analysis. If GL 1832.XXXXXX contains a balance, the regional finance office completes the first three columns on the form, i.e., WBS, Description of Software, and Cost to Date as of the quarter of analysis. After the regional finance office completes the first three columns of the form, it forwards the form to the IRO or regional office software program manager who completes the last four columns, i.e., the Estimated Cost to Complete, the Start Date, the Completion Date, and Status for each software program or module. The regional finance office retains completed *Software in Development Analysis Forms* on file in accordance with document retention requirements.
  - (4) The regional finance office pays special attention to any software program or module that is exhibiting signs it is nearing completion. Factors indicating a software program or module may be approaching completion or may further document the need for transfer to internal use software are:
    - (a) a significant decrease in activity in GL 1832.XXXXXX,
    - (b) prior status on the analysis form stating that completion is drawing near, or
    - (c) the IRO or regional office software program manager indicates the development is complete, the final acceptance testing is complete, or the software is in service.
  - (5) Software in development costs remain in GL 1832.XXXXXX until the IRO or regional office software program manager makes the determination to transfer costs to internal use software, GL 1830.XXXXXX. Appropriate use of the information technology cost tracking WBS schema must be in place to reflect the lifecycle phase of software in development and the transfer to software in use.
- B. Criteria for Transfer.** The key criterion for transferring software in development to internal use software is the completion of successful testing of each module or component of a software project. If the use of a module is dependent on the completion of another module(s), the cost of the first module remains in software in development until the interdependent module(s) have successfully completed testing.
- 9. Process for Transferring Software in Development to Internal Use Software.** The DO/WO Finance Office and the MSO, Property Policy Section (PPS) are responsible for transferring Reclamation-wide software in development. The regional finance office is responsible for transferring software developed for its region.
- A. When the development of software nears completion, IRO and the DO/WO Finance Office, or the respective regional finance office, create a WBS element beginning with RX. Once a program or module has met the criteria for transfer to internal use software, the IRO or regional software program manager completes the *Transfer to*

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*Internal Use Software Form* (Appendix B) to start the transfer process. The offices listed on Appendix B are responsible for routing the form to the appropriate offices to notify them about the transfer and to request they take the appropriate action. In addition, the regional finance and/or property offices complete the *AUC to Plant Spreadsheet* found on the FBMS Operations SharePoint Site > SOPs and Process Guides > Real Property > AUC-to-Plant Process.

- B. PPS creates a temporary asset with an RA WBS within the project using asset class 11CA700 *Capitalized Software*. The creation of the temporary asset automatically creates a settlement rule within the RA WBS. After PPS creates the temporary asset, they update the *AUC to Plant Spreadsheet*. The asset class and UPC derive the useful life of the sub-asset. PPS may use a more accurate useful life provided they retain documentation supporting the change. PPS submits a remedy ticket with the spreadsheet attached to “BOR – Controlling/Project System” requesting capitalization settlement.
- C. PC&A; the Accounting Service Division, Accounts Payable (AP) Financial Specialist or the regional finance office; and PPS must complete the following actions on the same day and must complete the actions at least three days prior to month end.
- (1) PC&A receives the remedy ticket and settles the costs to the new temporary asset with the RA WBS. They update the *AUC to Plant Spreadsheet*. After settling the costs, PC&A emails notification and the spreadsheet to the AP Financial Specialist.
  - (2) If the settlement is for new software, the AP Financial Specialist transfers the temporary asset to the correct accounting string (RX WBS, functional area, fund, and fund center) using the ZASSETTRANSFER transaction. The ZASSETTRANSFER transaction automatically creates a new asset record.
  - (3) If the settlement is for software enhancements, the following actions occur:
    - (a) The AP Financial Specialist transfers the temporary asset to the correct accounting string (RX WBS, functional area, fund & fund center) using the ZASSETTRANSFER transaction. The ZASSETTRANSFER transaction automatically creates a new asset record.
    - (b) Immediately following the transfer of the temporary asset in step (a), PPS creates an asset sub-number using the “Create Asset Subnumber” transaction (AS11). The new asset sub-number is under the main asset number of the existing asset receiving the enhancement cost (e.g., 1XXXXXX - X). PPS must use the correct accounting string (RX WBS, functional area, fund, and fund center) to account for the enhancement and amortization cost.

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- (i) PPS updates the created asset sub-number through the “Acquis. w/Autom. Offsetting Entry” (ABZON) with a transaction type of ZTD “Transfer In from Department of Interior”. Because the transfer is within Reclamation, the trading partner is 1406. If the transfer pertains to the WCF the main account is 4524.
- (ii) The asset class and UPC derive the useful life of the sub-asset. PPS may use a more accurate useful life if they retain documentation supporting the change.
- (c) After PPS processes the ABZON entry, they email notification to the DO/WO Finance Office or the regional finance office to confirm the entry processed correctly.

### 10. Amortization of Capitalized Costs.

- A. Capitalized software amortization is an automated process in FBMS and is contingent on asset record fields.
- B. Reclamation amortizes capitalized software over the estimated useful life of the software. The estimated useful life Reclamation uses for amortization must be consistent with that used for planning the software’s acquisition.
- C. Reclamation treats additions to the book value or changes in useful life prospectively. It accounts for the additions and changes during the period of occurrence and future periods.
- D. The salvage value for all capitalized internal use software is zero.

### 11. Impaired, Terminated, Disposed, or Replaced Software.

#### A. Impaired Post-Implementation/Operational Software.

- (1) Reclamation recognizes and measures impairment of post-implementation/operational software and/or modules when it no longer expects the software to provide substantive service potential and will remove it from service; or the software has a significant reduction in capability, function, or use.
- (2) If the impaired software is to remain in use, Reclamation measures the impairment loss as the difference between the book value and either: (a) the cost to acquire software that would perform functions similar to the remaining unimpaired functions; (b) or if that is not feasible, the portion of the book value attributable to the remaining functional elements of the software. Reclamation recognizes the loss upon impairment and reduces the book value of the asset accordingly. The regional office performs a partial retirement to record the loss

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through the asset module in FBMS. This process automatically updates the loss GL 7210.C0000, *Losses on Disposition of Assets – Other*. If Reclamation cannot determine (a) or (b) above, it continues to amortize the book value over the remaining useful life of the software.

- (3) If Reclamation is removing the impaired software from use, it measures the impairment loss as the difference between the book value and the salvage value, if any. Reclamation recognizes the loss upon impairment and reduces the book value of the asset accordingly.

**B. Terminated Software in Development.** When a manager determines the completion of developmental software (or a module thereof) is no longer probable, the regional finance office expenses the related GL 1832.XXXXX balance using a VA document type journal voucher. Indications of potentially uncompleted software are:

- (1) no current expenditures incurred, or no funds budgeted for the project,
- (2) programming difficulties are not resolved on a timely basis,
- (3) significant cost overruns occur,
- (4) the cost of developing the software will significantly exceed the cost of COTS software available from third-party vendors; hence, management intends to obtain the product from those vendors instead of completing the project,
- (5) newly introduced technologies supersede the developing software product, or
- (6) discontinuation of the responsibility unit that is the end user of the development software.

**C. Disposal and Replacement of Software.** When disposing or replacing existing internal use software with new software, Reclamation records the unamortized cost of the old software as a loss at time of removal of the asset through an asset retirement transaction.

12. **FBMS Reconciliation of Capitalized Costs.** The AP Financial Specialist reconciles the internal use software and accumulated amortization in the FBMS property module to the related balances in the FBMS finance module monthly.

13. **Definitions.**

**A. Cloud Computing Service.** A resource provided over the internet that has the following characteristics: on-demand self-service, broad network access, resource pooling, rapid elasticity, and measured service.



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- B. **Enhancement.** A modification of an existing software application resulting in significant increased capabilities or functionality.
  - C. **Internal Use Software.** Commercial off-the-shelf (COTS) software (purchased from a commercial vendor), contractor-developed (in which Reclamation hires a contractor to substantially develop all of the desired software), and internally developed (in which Reclamation employees develop software internally, with or without a contractor's assistance) obtained to meet Reclamation's internal or operational needs.
  - D. **Preliminary Design Stage.** The stage of software development that includes completion of conceptual formulation, technological feasibility, and testing of possible software project alternatives.
  - E. **Shared Services.** A mission support function provided by one business unit to other business units within or between organizations.
  - F. **Software.** The application and operating system program, procedures, rules, and any associated documentation pertaining to the operation of a computer system.
14. **Review Period.** The originating office will review this release every 4 years.

## RECLAMATION MANUAL TRANSMITTAL SHEET

Effective Date: \_\_\_\_\_

Release No. \_\_\_\_\_

Ensure all employees needing this information are provided a copy of this release.

### Reclamation Manual Release Number and Subject

### Summary of Changes

NOTE: This Reclamation Manual release applies to all Reclamation employees. When an exclusive bargaining unit exists, changes to this release may be subject to the provisions of collective bargaining agreements.

### Filing instructions

Remove Sheets

Insert Sheets

All Reclamation Manual releases are available at <http://www.usbr.gov/recman/>

Filed by: \_\_\_\_\_

Date: \_\_\_\_\_