Software Accounting Policy

Karen Kittredge, OC, Manager Policy and Business Process
Courtney Hite, FAR, Fixed Asset Manager
Software Accounting Policy (previously Accounting for Internally-Developed Software)

Key Policy Highlights - Download full policy from left sidebar.

Policy Statement
This policy defines when costs for purchased and internally-developed software or cloud-hosting arrangements must be capitalized at the University. If direction differs between this policy and external regulations, sponsor or donor terms, or other internal policy or procedures, the more restrictive instruction will apply.

Reason for Policy
This policy exists to ensure adherence with Generally Accepted Accounting Principles (GAAP) and other regulatory requirements, to promote consistent accounting treatment across the University, and to ensure the operating results of University units are not misstated as a result of capital expenses unrecorded or recorded improperly.

Who Must Comply
All Harvard University schools, units, local and central units, and University-wide initiatives must comply.

Procedures and Key Policy Sections
Agenda

• Consider Software Purchase Restrictions
• Software Types and Rules for Capitalization
  • Purchased Software Applications (Packaged)
  • Internally-Developed Software or Work in Progress (WIP) Projects
  • Purchased Software License Agreements
  • Subscriptions and Data Sets
  • Cloud-Based Computing and Software as a Service
• Specific Rules for Capitalization
• Software’s Useful Life
• Inventory Tracking
• Accounting for Disposition, Retirement and Impairement
• Software Sales
• Pop Quiz!
Software Accounting Policy

Considerations:

• Software Accounting Policy is necessary in order to follow Generally Accepted Accounting Principles (GAAP) and other regulatory requirements, to promote consistent accounting treatment across the University, and to ensure the operating results of University units are not misstated as a result of capital expenses unrecorded or recorded improperly.

• All software purchases and applications may be subject to restrictions based on Harvard’s Enterprise Security Policy and may require other components such as the accessibility standards. Contact your local IT office prior to purchasing software.

• Sales of internally-developed software follow different accounting policies and may be considered taxable income. Contact FAR for further guidance.
Purchased Software Applications (Packaged)

Purchased Software Applications (Packaged) are software applications in which the coding and appearance may be modified and customized by Harvard. Harvard owns the “code,” maintains the software, and is responsible for testing and applying updates to the software application. An example is the Oracle Business Suite.

Follow procedures as outlined for equipment purchases found in the Financial Management of Property, Plant and Equipment Policy (PPE Policy). These include:

- The item must be acquired for use in operations, and not for investment or sale, AND
- The item must have a useful life of one year or more, AND
- The amount must be $5,000 or more per license or user/unit.
- Capitalization of software which is a component of an equipment purchase (i.e., a 3D printer which includes software) would follow the PPE Policy.

Customized software, consulting and implementation costs may be capitalizable and may include the following.

- Costs associated with the design and implementation of a new software
- Consulting costs
- Certain salary and wages as well as benefits charged to a non-sponsored account. See Appendix D: Recommended Tracking Methods

Types of costs that may not be capitalized:

- Upgrades that do not contribute to additional functionality
- Software application annual support or maintenance costs
- Training or specialized testing and data conversion
- Salary and wages as well as benefits cannot be charged to sponsored funds unless they are part of the costs of a service unit or outside vendor. See Appendix D: Recommended Tracking Methods for guidance.
Upgrades (aka Betterments, Enhancements or Modifications)

In some instances, additional costs to capitalizable software may represent an upgrade and may be capitalized as such. Upgrades follow the same guidelines as those for equipment. For costs to be considered an upgrade it must meet the following criteria:

- the individual unit cost must be $5,000 or more, AND
- it must increase the useful life by one year or more, OR
- it must add new or additional functionality to the existing software (additional functionality is defined as an increased range of operations, increase equipment’s useful function or service capacity, or improve the quality of the service(s) delivered through equipment’s use).

- Additional Functionality: an increased range of operations, increase equipment’s useful function or service capacity, or improve the quality of the service(s) delivered through equipment’s use.

Coding for Upgrades

- If there are multiple costs linked to an upgrade, create a new WIP (activity code) to add to the original asset. Use object codes 6811 (Non-Sponsored Work in Progress^Equip >=$5,000) or 6812 (Sponsored Work in Progress^Equip >=$5,000) as appropriate.
- If the purchase is a one-time purchase, use object code 6815 (Software, Non-Sponsored^Equip>= $5,000) or 6816 (Software, Sponsored^Equip>= $5,000), and charge it to the original asset activity code if a WIP with a new subactivity.
- When an upgrade cannot be separated or used separately from the original software, a parent-child relationship must be established between the assets in Oracle Fixed Assets.
Internally-Developed Software (also known as Work in Progress or “WIP” Projects) is software developed for internal use and not resale.

• Internally-Developed Software/WIP must be capitalized if:
  ➢ $500,000 or more in costs incurred (excluding stage 1 costs, training, general and administrative costs, and Research & Development [R&D]); AND
  ➢ an estimated useful life of one year or more.

• Schools and units must expense internally-developed software projects that have less than $500,000 in costs incurred.
  • This is a change from the previous policy which required internally-developed software to be capitalized at $1,000,000 and gave schools and units the option to capitalize equipment between $250,000-$999,999.

• Schools and units must expense all internally-developed Research and Development (R&D) software costs.
  • Research and Development (R&D): scientific inquiry that aims to discover new knowledge and/or translate research findings or other knowledge into a new or improved product or process. If there is inquiry is experimental in nature and will not be used to generate useful results in support of Harvard research, the software is considered R&D.
Software as a Service (SaaS) and Cloud-Based Computing Arrangements (CCA)

CCA and SaaS are instances where the applications are accessible from various client devices. Harvard does not manage or control the underlying cloud infrastructure including network, servers, operating systems, and storage or application capabilities. Concur is an example of a SaaS system.

• Typically, CCA or SaaS arrangements do not include a software license. However, if the CCA or SaaS arrangement includes a software license, the fee attributable to the software license may be capitalized using the same threshold as that of internally-developed software (i.e., the license must be $500,000 or more).

• To determine if the arrangement includes a software license both conditions below must be met:
  - Harvard has the contractual right to take possession of the software at any time during the hosting period without significant penalty (25% or more of the original cost) or having a substantial reduction in program functionality, AND
  - It is feasible for Harvard to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software.

• If the above criteria are not met, the hosting arrangement does not include the purchase of a license agreement and the hosting arrangement must be accounted for as a service contract with the fees expensed as the services are rendered.
Other Types of Purchases

Purchased Software Licenses Agreements

- A software license agreement typically involves a use license for a period of time. The software vendor typically owns the copyright to the software and the University receives a copyright license (i.e., a software license) in order to legally install and use a software application over a specified period of time. The vendor “owns” the coding and releases upgrades or updates to the software. The Microsoft Suite is an example of a software license agreement. In cases where individual software license agreements (i.e., per unit) is $5,000 or more and the license agreement is for 1 year or longer, the license is capitalized using object code 6815 (Software, Non-Sponsored^ Equip>= $5,000) or 6816 (Software, Sponsored^ Equip>= $5,000).

Subscriptions and Data Sets

- Subscriptions to on-line services and systems which offer the use of information and data collected from another party (i.e., datasets) must be expensed. Examples of systems which allow download of raw data include DataQuick, CoreLogic, and Dunn and Bradstreet.

Leased Software

- Leased software must follow the processes documented in the Accounting for Leases Policy.
Other Housekeeping

Useful Life Selection in Oracle Assets
Generally, software is depreciated on a straight-line basis over four years.

➤ Schools and units request a change to the useful life based on the underlying agreement. Contact FAR at
  FAR_Fixed_Assets@harvard.edu with the Asset Number and the appropriate useful life and FAR will update the
  useful life in OFA.

➤ Renewal options may be considered if it is likely that the agreement will be renewed without substantial
  additional costs or modifications. Schools or units may consider additional factors when estimating the useful
  life of the software; including the effects of obsolescence, new technology, and rapid changes occurring in the
  development of similar software products.

Inventory
Capitalized software is not required to be inventoried or tagged but Schools and units are responsible for
accounting for and impairing software in the Oracle Assets System. Schools and units may choose to track software
at their discretion.

Account for Disposition, Retirement and Impairment.
Capitalized software must be disposed of and recorded appropriately in the Oracle Assets System if it is no longer in
service or if any value has been permanently impaired. Refer to the PPE Policy, Appendix D.

Software Sales
If a tub decides to market its internally-developed software when completed, the net proceeds received from the
sale must first be applied against the carrying amount of the asset. No profit may be recognized until the aggregate
net proceeds from sale and amortization have reduced the carrying amount of the software to zero. Subsequent
proceeds may be recognized as revenue is earned. Contact FAR for further guidance.
<table>
<thead>
<tr>
<th>Description</th>
<th>How to Use</th>
<th>Old Object Codes</th>
<th>Object Codes FY19 or 1/1/19 Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Software &lt;$5,000 GENERAL</td>
<td>• Purchases of databases and software with unit cost below the capitalization limit.</td>
<td>6710</td>
<td>6710</td>
</tr>
</tbody>
</table>
| Internal & Data Processing, Data Conversion, Word Processing               | • Expenses for internal/on premise data center hosting services (debit to department using the service).  
• For FEDERAL SPONSORED FUNDS (100000-199999) only services provided by an internal Harvard vendor should be charged here.  
• Data conversion and processing/analysis.                                  | 8071             | 8071                                |
| Cloud Hosting Services (e.g., Fieldglass/HCOM)                            | • Expense for internally-billed cloud customers (debit to department using the service, normally HUIT).  
• Use to pay external vendors for monthly services.                         | 8070,8071,8090,8092,8096,8160,8250 | 8074                                |
| Cloud Hosting Services, Cost of Goods Sold Used by HUIT                    | • Expenses related to support cloud hosting services offered to other departments. HUIT is the primary user of this object code and tracks Amazon Web Services, Microsoft Azure, etc. | 8091             | 8075                                |
| Cloud Hosting Services, INTERTUB^Data Processing + Conversion, Word Processing Svtcs | • Revenue for internally-billed Cloud Customers (credit to HUIT or other department offering a service). | 8252             | 8076                                |
## Summary Table of Software to Capitalize or Expense

<table>
<thead>
<tr>
<th>Cost Type</th>
<th>Service Contract</th>
<th>License Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased Software Applications (Packaged) ≥ $5,000</td>
<td>N/A</td>
<td>Capitalize</td>
</tr>
<tr>
<td>Purchased Software Licenses Agreements ≥ $5,000</td>
<td>N/A</td>
<td>Capitalize</td>
</tr>
<tr>
<td>Subscriptions and Data Sets</td>
<td>Expense</td>
<td>N/A</td>
</tr>
<tr>
<td>Cloud-Based Computing Arrangement &amp; Software as Service</td>
<td>Expense</td>
<td>May capitalize the portion related to a software license if the software license is ≥$500,000</td>
</tr>
<tr>
<td>Requirements Gathering and Selection</td>
<td>Expense</td>
<td>Expense</td>
</tr>
<tr>
<td>Installation, Build and Test</td>
<td>Expense</td>
<td>Capitalize</td>
</tr>
<tr>
<td>Training</td>
<td>Expense</td>
<td>Expense</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Expense (generally included in annual subscription costs)</td>
<td>Expense</td>
</tr>
</tbody>
</table>
**Commonly Used Object Codes**

For capitalized software, all upfront fees (i.e., deposits or prepayment) must be recorded using a WIP object code (6811 – Non-Sponsored Work in Progress≥ $5,000 or 6812 – Sponsored Work in Progress≥$5,000). Once the software has been received and is ready for its intended use, the software needs to be Placed in Service (PIS) using the Notification of Completion of Capital Equipment Fabrication or Debt-Financed Purchase Form.

<table>
<thead>
<tr>
<th>Cost Type</th>
<th>Definition</th>
<th>Expense</th>
<th>Capitalize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internally-Developed Software</td>
<td>Software developed by Harvard for internal use and not resale.</td>
<td>If expenses (excluding stage 2 costs, training, general and administrative, and R&amp;D costs) are:</td>
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<td></td>
<td></td>
<td>• &lt; $500,000 or more, OR</td>
<td>• $500,000 or more, AND</td>
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<td>• Has an estimated useful life of &lt;1 year</td>
<td>• Has an estimated useful life of ≥1 year</td>
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<tr>
<td>Commonly Used Object Codes:</td>
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<tr>
<td>Based on expense type (e.g.,</td>
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<tr>
<td>7910 – Info Tech Professional Svs, Consulting, 8070 – Data Conversion, etc.)</td>
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Commonly Used Object Codes:
- 6811 – Non-Sponsored Work in Progress≥ $5,000
- 6812 – Sponsored Work in Progress≥ $5,000

*Where allowed, salary expenses may credit:
- 6230 – Recovery of Salaries + Wages, Gen.
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<tr>
<td>Purchased Software License Agreements</td>
<td>Typically involves a use license for a period of time. The vendor owns the software copyright and Harvard receives a copyright licensees to install and use software over a period of time.</td>
<td>Expense if:</td>
<td>Capitalize if:</td>
</tr>
<tr>
<td>(e.g., Microsoft Office Suite)</td>
<td></td>
<td>• &lt;$5,000 per license/unit, OR</td>
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<td></td>
<td></td>
<td>• Selected appropriate useful life based on license agreement terms.</td>
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<td>6710 - Computer Software &lt;$5,000</td>
<td>6815 - Software, Non-Sponsored^Equip</td>
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<td></td>
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<td>GENERAL</td>
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<td>Capitalize if: • The item must be acquired for use in operations, and not for investment or sale, AND • Has an estimated useful life of ≥1 year, AND • The amount must be $5,000 or more per license or user/unit.</td>
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Commonly Used Object Codes:

6710 - Computer Software <$5,000 GENERAL

6815 - Software, Non-Sponsored^Equip
6816 - Software, Sponsored^Equip
6811 - Non-Sponsored Work in Progress*
6812 - Sponsored Work in Progress

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Q: A school is processing an invoice for $375,000 for 750 three-year software licenses. This breaks down to $500/license. Should this be capitalized?
A: No. As it is written, each license/unit is less than $5,000. If the purchase was $375,000 for one license which allowed 750 users, it would be capitalizable.

Q: Can you capitalize software if it is less than $5,000 but part of an equipment purchase which is over $5,000?
A: Yes. Software may be capitalized if the software is a component of an equipment purchase where the equipment meets the capitalization threshold and other PPE requirements.

Q: How do I account for depreciation for a software license that cost $10,000 but is for 18 months?
A: Because the software license is $\geq$ $5,000$ is must be capitalized. When added to Oracle Assets, the software will have a defaulted useful life of four years. Contact FAR at FAR_Fixed_Assets@harvard.edu with the Asset Number and the appropriate useful life and FAR will update the useful life to 18 months.

Q: The invoice for a $75,000 three-year software license includes maintenance and training but it isn’t broken out on the invoice. Can I still capitalize the software license?
A: No. If the maintenance and training costs cannot be separated and expensed, the whole invoice must be expensed.

Q: I purchased software for $7,000 that will have implementation costs of $75,000. How and what do I capitalize?
A: What type of software agreement was it? Was it a license or a software package?
This sounds like it would be considered a work in progress and should use WIP object codes 6811 – Non-Sponsored Work in Progress^Equip >= $5,000 or 6812 – Sponsored Work in Progress^Equip >=$5,000). Once the software is ready for its’ intended use, the software needs to be Placed in Service (PIS).
References

Financial Management of Property, Plants, and Equipment (PPE or Capital Assets and Equipment Policy)
Disposal of Equipment Form
Notification to Place in Service Form
Software Accounting Policy
  Appendix A: Summary of Accounting Rules for Internally-Developed Software Costs
  Appendix B: Capitalization versus Expense Examples
  Appendix C: Examples of Accounting for Certain Types of Transactions
  Appendix D: Recommended Tracking Methods

Contact FAR_Fixed_Assets@harvard.edu with questions about the policy or the Oracle Assets System.