Capitalization of Internal-Use Software Costs
Policy and Procedures

**Purpose**

To describe the University Finance policy and procedures related to “Accounting for the Costs of Computer Software Developed or Obtained for Internal-Use” in accordance with Statement of Position (SOP) 98-1 issued by the AICPA on March 4, 1998.

**Introduction and Background**

SOP 98-1, as with most authoritative literature, was issued to clarify and eliminate inconsistencies in the accounting treatment for the costs of developed or obtained software for internal-use. The SOP clarifies the costs of software as either (a) software to be leased, sold, or otherwise marketed (FASB 86); (b) software to be used in research and development (FASB 2); (c) software developed for others under contract accounting standards; or (d) internal-use software which is subject to this SOP.

The University’s Policies and Procedures have incorporated SOP 98-1.

**Policy**

**Capitalization Criteria**

Four criteria must be met before a software project's costs can be capitalized under SOP 98-1 and in accordance with the University’s policy. The criteria are as follows:

1. **Software is for internal-use.** (SOP 98-1, paragraph .12)
   a. The software is acquired, internally developed, or modified solely to meet the entity’s internal needs.
   b. During the software’s development or modification, no substantive plan exists or is being developed to market the software externally.

2. It is probable that the expenditures will result in additional functionality that was not previously available (e.g., from version 1.0 to version 2.0). Development required for routine maintenance or to apply fixes (e.g., going from version 1.0 to version 1.1) does not meet the criteria. (SOP 98-1, paragraph .24)

3. The software being developed and/or implemented has an expected life cycle of two years or greater. (SOP 98-1, paragraphs .36 -.38)

4. The software’s total qualifying costs to capitalize are expected to exceed $500,000. In the event that a project is completed in phases, this materiality...
threshold would apply to each phase. If the project was previously determined to have less than $500,000 in qualifying costs, but then subsequently changes so that future expected costs exceed $500,000 (e.g., a change in project scope), the project costs would then be capitalized on a go-forward basis. The following table illustrates how this concept should be applied under various scenarios. (SOP 98-1, statement on materiality following paragraph .44)

<table>
<thead>
<tr>
<th>Expected Costs at Start of Project</th>
<th>Capitalized Year 1</th>
<th>Capitalized Year 2</th>
<th>Capitalized Year 3</th>
<th>Total Amount Capitalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>$600,000</td>
<td>$300,000</td>
<td>$350,000</td>
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</tr>
<tr>
<td>$600,000</td>
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<td>$250,000</td>
<td>$50,000</td>
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</tr>
<tr>
<td>$400,000</td>
<td>$0, Not Tracked</td>
<td>* $250,000</td>
<td>$230,000</td>
<td>$480,000</td>
</tr>
</tbody>
</table>

* Due to a project scope change at the beginning of year 2, the total estimated costs during years 2-3 were expected to be $520,000.

Stages of Developing or Obtaining Software

As outlined in the memo dated June 27, 2001 included in Appendix A, SOP 98-1 defines the following three stages to developing or obtaining software for “Internal-Use” along with their prescribed accounting treatment as “expensed” or “capitalized”.

- **Preliminary project stage**: All expenses in the preliminary project stage must be expensed. This includes making strategic decisions, determining the performance requirements, and selecting vendors and/or consultants.

- **Application development, design, and implementation stage**: Costs incurred during the application development stage should be capitalized. This does not include training costs. Training costs are not considered software development costs and should be expensed. Data conversion and access costs are generally expensed unless the costs incurred were for the purchase or development of software that allows access or conversion of old data by new systems, then the costs may be capitalized. In addition, costs associated with developing the application’s database are also capitalized. General and Administrative costs and Overhead costs are to be expensed as incurred.

Specific application development costs that may be capitalized include only:

1. External direct costs of materials and services in developing or obtaining internal-use software (e.g., consultant costs), costs of computer software purchased from third parties, and travel expenses of employees incurred in duties directly associated with developing software;

2. Payroll and benefit costs for employees who are directly associated with and devote time to the internal-use computer software project; and

3. Interest costs incurred while developing the software.
• *Post-implementation/operation stage:* Costs during this stage are to be expensed as incurred. Training and maintenance costs must be expensed when they are incurred.

**Capitalization Period**

Capitalization of costs should begin when both of the following occur.

1. Preliminary project stage is completed.
2. Management authorizes and commits to funding a computer software project and it is probable that the project will be completed and the software will be used to perform the function intended. Examples of authorization include the execution of a contract with a third party to develop the software, approval of expenditures related to internal development, or a commitment to obtain the software from a third party.

Capitalization should cease no later than the point at which a computer software project is substantially complete and ready for its intended use. Software is considered "ready for its intended use" after all substantial testing is completed. Software testing by pilot departments is still considered “in progress”, although the testing may occur in the production environment.

The one-year period used by Vanderbilt for capitalizing allowable costs is June 1st through May 31st.

**Amortization**

Vanderbilt’s policy is to amortize the software costs on a straight-line basis over five years.

Amortization will begin when computer software has completed all substantial testing and is ready for its intended use. Amortization begins regardless of whether the software will be placed in service in planned stages that extend beyond a reporting period. In some instances, the functionality of a module or phase may be dependent upon the subsequent development of additional software/modules. In this instance, amortization should begin for the functionally dependent module when the subsequent module is “ready for intended use”.

**Other Considerations**

Impairment (SOP 98-1, paragraph .34)

Internal-Use Computer Software Marketed (SOP 98-1, paragraphs .39 -.40)
Projects and their application development stage expenses should be identified for budget purposes annually, if at all possible, and incorporated in such as approved. Presently, software-development costs are budgeted the same as other expenditures for the applicable departments conducting the development work, notwithstanding that such costs may end up ultimately capitalized for corporate-level reporting.

The department should notify the University Finance department once management has authorized and committed to funding a computer software project and it is probable that the project will be completed and the software will be used to perform the function intended. The following information should be provided to University Finance at this time:

- Detailed description of the project scope in terms of anticipated benefit/purpose and any functional relationship to other current or planned development projects.
- Total estimated costs of project.
- Expected start date for project’s development phase.
- Expected date that software will have completed all substantial testing and be ready for its intended use.

At the beginning of June each year, the following departments are responsible for providing a list of qualifying SOP 98-1 projects, along with the functional department and department contact involved with the project’s development, to the University of Finance.

- Management Information Systems (MIS)
- Information Technology Services (ITS)
- University Finance

Once the lists are received, University Finance will follow up with each functional department identified to determine whether additional functional expenses need to be compiled.

By mid-June, each department (including the three noted above and all functional departments identified) will submit the following information to the University of Finance.
• **Project Documentation** which supports capitalizing the software’s development expenses. Each of the four capitalization criteria should be addressed within the documentation.

• **Project Timeline** which, at a minimum, identifies the beginning and ending of the Development stage.

• **Software Development Costs Schedule** that itemizes the total software development costs for the June 1st through May 31st period. This schedule should include the following information:
  
  o List of projects worked on during the year with their status. All open and completed projects must be included.
  o Labor Hours spent on each project by employee and each employee’s hourly rate. In addition, the center number that each employee’s salary and benefits was charged to must be listed. This will allow the University Finance department to adjust the proper center when preparing the journal entry.
  o Consulting Fees by project with cost center and account number charged.
  o Software Costs by project with cost center and account number charged.
  o An estimate of training and other non-capitalized costs included in the information provided. If training hours are excluded, a statement confirming that fact should be provided.
  o The “Non-Federal Fringe Rate” assigned to each department.

University Finance will provide a template for each department to use in preparing this schedule. See **Appendix B** for a sample schedule.

**University Finance Procedures**

**Note:** The timing for each task shown below is approximated. For detailed timing, please see the Workflow Calendar located within each year’s Software Capitalization binder. These binders are maintained by the Assistant Controller within the University of Finance.

**May - 2nd Week**
An accountant within University Finance will determine whether any accounting guidance was issued during the year pertaining to capitalization of software costs. The accountant will prepare a current year binder, including a detailed workflow calendar. The accountant will schedule a conference call with the Assistant and/or Associated Controller, as well as appropriate departmental personnel (e.g. personnel within MIS, DOF, and ITS).

**May - 3rd Week**
The accountant will facilitate a conference call, at which time the proposed current year workflow calendar will be discussed. The group should reach a consensus on what due
dates the departments will use in submitting their information to University Finance. All other issues and concerns known at this time should also be discussed.

May - 3rd Week
The University Finance accountant will send out email requests for information to MIS and ITS. The email will include two separate “reply by” dates; an earlier date (1st week of June) for providing the list of qualifying projects, along with the functional department and department contact involved with the project’s development, and a later date (mid-June) for providing all remaining information. (See Departmental Procedures for details on what comprises remaining information.)

June - 1st Week
The University Finance accountant receives each department’s list of qualifying projects and then follows up with each functional department identified to determine if there are additional functional expenses to be capitalized.

June - 1st Week
The Controller and/or Associate Controller, Assistant Controller, MIS Director, and the University Finance accountant will discuss each project initially identified to ensure that each qualifies for SOP 98-1 capitalization.

June - 2nd Week
The University Finance accountant receives each department’s Project Documentation, Project Timeline and Software Development Costs Schedule, and begins preparation of the software capitalization journal entries.

June - 3rd Week
The University Finance accountant will send a summary of total expenses by project to each department that will be impacted. This will allow each to review total costs for reasonableness and verify that all qualifying costs have been included in the analysis. In addition, the University Finance accountant will work with University Finance personnel to determine the appropriate cost center(s) for the VUMC costs.

June - 4th Week
Once each department has confirmed their total expenses, the University Finance accountant will prepare the journal entries and forward to the Assistant Controller for review. See Appendix C for sample journal entries.

July - 1st Week
Once the entries are approved, the accountant will submit a JE upload to finance-upload@vanderbilt.edu mailbox for posting to the general ledger. In addition, the accountant will provide a final schedule to OCGA detailing the additions (i.e. completed projects) and disposals (i.e. impairments) for updating the fixed assets system. (Note: OCGA must receive the schedule no later than one week prior to 2nd close.)
Note: OCGA reviews accounts 740XX monthly and reconciles transactions against items capitalized and entered into the Fixed Asset System. Any software purchase identified during the University Finance software capitalization procedures, that was not charged to a 740XX account, should be brought to OCGA’s attention.

July - 1st Week
Once the completed projects have been loaded into the fixed assets system, the University Finance department will verify that all software additions (i.e. completed projects) and disposals (i.e. impaired assets) were properly keyed into the fixed assets system by verifying the asset description, cost, and useful life.

The Medical Center, except VUH/TVC, will prepare capitalization entries quarterly. VUH/TVC will capitalize through monthly accumulations to the plant fund.

Related Documents

See Permanent File for:
- Statement of Position 98-1 Accounting for the Costs of Computer Software Developed or Obtained for Internal-Use
- VU Asset Capitalization Policy Excerpt

See SOP 98-1 Workflow Calendar within work paper binders for the timing of each year’s University Finance procedures

Trustee and Effective Dates

For continued applicability and updating of this policy and procedure:

Trustee: Jana Blick

Effective: Nov 2015                          Last Revised: 12/2/2015
June 27, 2001

TO:         Dr. William Stead, Tim Getsay, Glen Miller
FROM:       Betty Price, J. Richard Wagers
RE:         SOP 98-1 policy guidelines

This memo outlines Vanderbilt’s guidelines for the implementation of SOP 98-1, “Accounting for the Costs of Computer Software Developed or Obtained for Internal Use.”

Several criteria must be met before development activity must be capitalized under SOP 98-1. These criteria are as follows:

♦ The software must provide significant new functionality (e.g., going from version 1.0 to version 2.0) that was not previously available. Development required for routine maintenance or to apply application fixes (e.g., going from version 1.0 to version 1.1) does not meet these criteria.

♦ The software being developed and/or implemented has an expected life cycle of two years or greater.

♦ Application development, design, and implementation costs are expected to exceed $100,000. In the event that a project is completed in phases, this materiality threshold would apply to each phase.

If any of the above criteria are not met, the project development costs must be expensed.

In designating particular costs within a project to be capitalized, SOP 98-1 provides several guidelines. First, SOP 98-1 defines the three stages of an internal-use software project:

♦ Preliminary project stage: All expenses in the preliminary project stage must be expensed. This includes making strategic decisions, determining the performance requirements, and selecting vendors and consultants.

♦ Application development, design, and implementation stage: Costs incurred during the application development stage should be capitalized. This does not include
training costs. Training costs are not considered software development costs and should be expensed. Also, this does not include general and administrative costs or overhead costs. These are to be expensed as incurred.

Specific application development costs that may be capitalized include only:

- External direct costs of materials and services in developing or obtaining internal-use software (e.g., consultant costs), costs of computer software purchased from third parties, and travel expenses of employees incurred in duties directly associated with developing software; and
- Payroll and benefit costs for employees who are directly associated with and devote time to the internal-use computer software project; and
- Interest costs incurred while developing the software.

**Post-implementation/operation stage:** Costs during the post-implementation/operation stage are to be expensed as incurred. Training and maintenance costs must be expensed.

**Capitalized costs will be amortized on a straight-line basis over three years.** In University Central, annualized capitalization will occur at May month end each year. In the Medical Center (except VUH/TVC), capitalization will occur quarterly. In VUH/TVC, capitalization will occur through monthly accumulations to the plant fund. If a project has expected application development stage expenses of $100,000 or more, but accumulated expenses have not reached $100,000 at year-end, expenses to date will be capitalized into Construction in Progress. Amortization will not begin until the application development stage is completed.

Each area within University Central should track their application development stage expenses by project and submit them to the Office of Accounting by **June 15** each year. The figures should be annualized figures and broken out by project and general ledger account numbers. Only those projects with application development stage expenses equal to or greater than $100,000 should be submitted. The Office of Accounting or the Department of Finance will post the appropriate entries to the general ledger.

From an internal fund accounting perspective, these capitalized internal software entries will have no direct impact to the bottom line of individual cost centers. For University Central activity, the salary and benefits, etc. will be reclassed to Capitalized Internal Software Expense within the same cost center. For Medical Center activity, the salary and benefits, etc. will be reclassed to Capitalized Internal Software Expense within the plant fund. As with any other fixed asset, the newly capitalized asset (and subsequent amortization) will be housed in the plant fund.

**Questions Regarding SOP 98-1:**

<table>
<thead>
<tr>
<th>cc:</th>
<th>Michael Pons</th>
<th>322-2847</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warren Beck</td>
<td>Mary Lange</td>
<td>Steve Todd</td>
</tr>
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<td>Charlotte Frey</td>
<td>Karen Nanney</td>
<td>Kevin Walker</td>
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<td>Kay Hommrich</td>
<td>Michael Pons</td>
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<tr>
<td>Dolores Lester</td>
<td>Robert Spencer</td>
<td></td>
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</table>
### Capitalization of Internal-Use Software (002)

#### Appendix B – Sample Schedule

**SOP 90-1: Software Capitalization**

**Software Development Costs**

**Period Covered:** 5/1/07 - 6/30/07

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**Note 1:** This schedule was prepared by Frederick Thompson (IPEX Administrative Officer) and approved by Barack Obama (IPEX Director).

**Note 2:** An estimate of 5% of total time was used for training. Therefore, total time was multiplied by 95% and that number was used to calculate costs that could be capitalized.

**Note 3:** Benefits are based on the 2006/2007 approved fringe rate for Non-Federal University Staff of 25.7%.

<table>
<thead>
<tr>
<th>Gift Processing Re-engineering</th>
<th>Online Giving</th>
<th>ePac 2 and 3</th>
<th>Total Hrs (to exclude training costs)</th>
<th>Hrs Rate</th>
<th>Salary Total</th>
<th>Benefits</th>
<th>Grand Total</th>
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<td>1,571</td>
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<td>690</td>
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<td>Esther Evans</td>
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<td>1430</td>
<td>1,744</td>
<td>3,482</td>
<td>10,163</td>
<td>5,160</td>
<td>34,337</td>
<td>55,726</td>
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</table>

**Total Labor:** 2,220, 1,135, 1,744, 5,659, 4,044, 124,239, 33,437, 157,726

**Consultant Fees**

| Consultant A | 800 | 200 | 1,000 | $10,000 | 100,000 | 100,000 | 100,000 | 1-23-456-7690 | 6,3500 |
| Consultant B | 450 | 450 | 1,000 | $75,000 | 33,750  | 33,750  | 33,750  | 1-23-456-7690 | 6,3500 |
| Consultant C | 1000| 1000| 1,000 | $90,000 | 80,000  | 80,000  | 80,000  | 1-23-456-7690 | 6,3500 |

*All Consulting Fees were charged to account 33500 and are 100% development related.

**Total Consulting:** 213,750

**Software Purchases (shown in dollars, not hours)**

| Software Vendor Company | Corp America | $50,000 | 59,000 | 59,000 |

**Total Software:** $59,000

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Ω - This $50,000 amount was already capitalized this year (center 1-23-456-7390, account 74370). Therefore, this cost should be excluded from this SOP 90-1 capitalization entry.

**Total Labor, Consulting & Purchases:** $421,488

**Amount to be capitalized at 95%:** $371,488
## Appendix C – Sample Journal Entries

### Operating Fund (CY Projects):

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<th>Account</th>
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<th>Debit</th>
<th>Credit</th>
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</thead>
<tbody>
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<td>2,694,933</td>
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<td>Salary Cr Cap Int Software</td>
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<td>Consulting &amp; Mgmt</td>
<td>63500</td>
<td>1-55-120-0000</td>
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To capitalize MIS labor costs and consulting fees related to SOP 98-1 projects with total capitalizable costs equal to or greater than $100,000 per project.

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<th>Center</th>
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<tbody>
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<td>Fringe Cr Cap Int Software</td>
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To capitalize DOF labor costs and consulting fees related to SOP 98-1 projects with total capitalizable costs equal to or greater than $100,000 per project.

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<td>Consulting &amp; Mgmt</td>
<td>63500</td>
<td>1-55-200-0000</td>
<td>216,810</td>
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To capitalize ITS labor costs and consulting fees related to SOP 98-1 projects with total capitalizable costs equal to or greater than $100,000 per project.

<table>
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<tr>
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<tbody>
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<td>Capitalized Internal Software</td>
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To capitalize HR labor costs and consulting fees related to SOP 98-1 projects with total capitalizable costs equal to or greater than $100,000 per project.

<table>
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To capitalize OCGA labor costs and consulting fees related to SOP 98-1 projects with total capitalizable costs equal to or greater than $100,000 per project.
To capitalize DAR labor costs and consulting fees related to SOP 98-1 projects with total capitalizable costs equal to or greater than $100,000 per project.

Capitalize Internal Software 74085 1-44-610-0000 153,481
Salary Cr Cap Int Software 54981 1-44-610-0000 122,101
Fringe Cr Cap Int Software 59981 1-44-610-0000 31,380

To capitalize Registrar labor costs and consulting fees related to SOP 98-1 projects with total capitalizable costs equal to or greater than $100,000 per project.

Capitalize Internal Software 74085 1-50-430-0000 30,977
Salary Cr Cap Int Software 54981 1-50-430-0000 24,644
Fringe Cr Cap Int Software 59981 1-50-430-0000 6,333

Plant Fund (CY Projects):
Internal Software 19085 8-97-985-1005 1,407,332
CIP Internal Software 19055 8-97-985-1005 2,143,472
Expended for Plant 34620 8-97-985-1005 3,550,805

To begin amortizing completed current year projects.

Plant Fund (PY Projects):
Internal Software 19085 8-97-985-1005 348,883.96
CIP Internal Software 19055 8-97-985-1005 348,883.96

To begin amortizing completed 2006 projects.