

DRAFT
Advisory Committee for Central Infrastructure Services (ACCIS)
Software Asset Management (SAM) Task Force Report
27 June 2005

<https://secureweb.scd.ucar.edu/twiki/bin/view/ACCIS/SoftwareManagement>

Problem Statement

In FY04 alone \$2.8M were spent by UCAR on the purchase and maintenance of software products. A survey of divisions and programs identified approximately 200 unique software packages in use within the organization, with only 45 of those being used by more than one entity. At present, processes for the purchase and maintenance of software are inconsistent, and individuals responsible for software purchases are not adequately informed about the licensing agreements for various software packages. Included in these agreements are contractual rights for software vendors to audit UCAR systems for compliance at their discretion. Currently, there is not a defined mechanism within the organization to efficiently track and audit software use and license agreement compliance.

Scope

The ACCIS/SAM task force was charged with evaluating existing policies and processes for acquiring, licensing, maintaining, tracking, and auditing software within UCAR, and where appropriate the task force was to make recommendations to ACCIS for improvements.

Goals

- Identify and evaluate current software policies and processes within the organization and recommend improvements where appropriate.
- Identify potential for cost savings in software processes.
- Identify areas where standards, policies, and procedures should be developed or revised.

Committee

The ACCIS/SAM membership included individuals from across the organization all of whom have current involvement in the software processes. Their experience, ideas, and commitment to improving these processes was a significant contribution to this effort. The committee met every two weeks from November 2004-February 2005 and then as needed through June 2005.

Process Evaluation

The initial meeting of the ACCIS/SAM included a brainstorming session where individual committee members shared information on how the software process cycle was managed within their own group. Within the larger groups the need to centralize these processes had been identified in recent years with some groups already centralizing some of these processes and others moving in that direction. The exchange of information was also a learning process. It became apparent that there is inconsistency in what people know about various software packages, redundancy in efforts, and incomplete knowledge about contractual agreements.

The next step was to identify the software processes to be evaluated.

- Software Purchase
- Software Upgrade
- Software Maintenance
- Site/Volume Licenses
- Software Tracking
- Software Auditing

A separate meeting was devoted to each of these processes with the exception of auditing, as groups are not actively performing this activity. First, a detailed analysis of the steps required in each process from a division and Contracts perspective was completed. Second, the group identified the strengths and weaknesses of the current mechanisms, opportunities that could be realized with change, and the challenges associated with change. Complete details of these analyses can be found in the meeting minutes on the ACCIS/SAM twiki site. Following is a broad summary of these categories that were relevant to all processes.

Strengths

- Divisions have control and flexibility in the software acquisition process.
- Credit cards allow faster turnaround.
- Contracts negotiates pricing.

Weaknesses

- Information on F&A web site is not always current.
- Redundancy and inconsistency exists when contacting vendors directly for pricing.
- Tracking of software licenses is inconsistent.
- Purchase order process is time consuming.
- Tracking of credit card orders is problematic.
- Renewal process is inconsistent.
- User education is not adequate.

- Communication with Contracts/Purchasing is confusing.

Opportunities

- Provide consistency in software processes.
- Develop better communication and coordination between divisions and Contracts.
- Facilitate collaborative environment.
- Able to be proactive in negotiating contracts.
- Provide standardization.
- Develop effective tracking/auditing processes.
- Realize cost savings.
- Reduce risk of contractual liability.

Challenges

- Coordinate across divisions.
- Maintain order expediency.
- Develop tracking/audit process.
- Improve communication.
- Promote buy-in.
- Educate users.
- Provide adequate resources.
- Maintain flexibility.

Following these exercises the task force then reviewed the work done by the Purchasing Reengineering Committee. The diagram of the purchase process they developed was reviewed in detail by the task force so as not to duplicate their efforts. It was determined that it was necessary to develop diagrams of both the software purchase and maintenance processes as they were not sufficiently covered in the purchasing process diagrams (see Appendix).

Software Management

There are two basic strategies for managing the software acquisition and management processes within an organization: centralized and decentralized.

Centralized

- Assumes centralized IT and purchasing departments.
- Provides more control over the software management process.

Decentralized

- Requires organizational standards, policies, and procedures be in place.
- Provides flexibility.

Within UCAR there is a blend of the two strategies, a centralized purchasing department and centralized IT groups within each organizational entity. Regardless of the strategy chosen, strong endorsement from upper management is essential to a successful software management strategy.

There are several benefits of a strong software management strategy.

- Provide consistency in software management processes.
- Maintain accurate records of software assets.
- Educate staff in software licensing agreements.
- Facilitate ability to identify opportunities for volume licensing.
- Realize cost savings through license harvesting.
- Consolidate software maintenance agreements.
- Perform reliable audits of installed software.

Software License Types

There are three types of software purchases: site license, volume purchase, and individual purchase. Site licenses, although incurring larger up front costs, are the easiest to maintain, track, and audit for the life cycle of the package, as they are not assigned to a specific system or end user. Volume purchases allow you to realize a per seat savings and co-termination of maintenance contracts, but need to be tracked by either system or end user. Individual purchases are the most difficult to track and manage over the life cycle of the package.

Software Vendors

Within the scope of software acquisition, there are three types of vendors from which to purchase software, Large Account Resellers (LAR), Value Added Resellers (VAR), and the software publisher. The majority of software purchased within UCAR is purchased through either an LAR or VAR.

An LAR is contractually required to maintain accurate records and report all sales directly to the software publisher. They are also required to abide by the publisher's price structure. In addition, an LAR can facilitate price negotiation directly with the publisher, negotiate co-termination maintenance agreements, and can generally provide better pricing. In the event of an audit, an LAR would be able to provide their records related to our organizational software acquisitions.

A VAR is not required to keep records of sales or report such sales to the software publisher. Pricing provided can be inconsistent for the same package, and they do not always abide by the publisher's designated pricing structure. In some cases it is possible to obtain lower pricing by shopping around to the various VARs, but in the life cycle of a software package the FTE effort becomes more costly than the savings realized.

Tracking/Auditing

Although some groups have developed tools for tracking software to ensure accountability, a centralized organizational process for tracking and auditing software does not exist. This inability to quickly and efficiently account for software assets, which are bound by legal agreements, may put the organization at risk. The task force identified the variables to be tracked to comply with an efficient and effective audit process.

- Account Key
- Software Vendor
- Software Publisher
- Software Name
- Software Version
- Type (License,Media,Both)
- Date of Purchase
- PR#/CC
- Purchaser Name
- End User
- System Name
- Maintenance Renewal Date

For effective tracking of software it is important that standard formats and processes for collecting the data be developed. Currently, no one person is taking responsibility for actively auditing systems to verify installed software packages. For an organization to effectively audit their systems it is important that common software be used in the auditing and reporting process.

Compliance

There are legal and ethical responsibilities associated with the use of software. The following UCAR policies, address and define some of these responsibilities: Access to and Use of Computer and Information Systems 1-1-15, Copyrighted Materials 4-1-5 and Ethical Conduct 1-1-23. Additionally, the company and its employees have contractual obligations, pursuant to the terms of a number of formal agreements with software manufacturers and vendors.

These agreements determine our pricing structure (i.e. educational, government, open market), licensing constraints, and maintenance costs. Failure to comply with these agreements can result in monetary penalties, damage to organizational reputation, and loss of work due to a formal audit. It is important to ensure that both those individuals responsible for software acquisitions and installations as well as end users are reminded of company policies and are accurately and appropriately educated regarding the terms of applicable agreements.

UCAR has contractual obligations with software vendors that give them the right to audit UCAR systems for compliance. In addition, there are government sanctioned compliance organizations that have the right to request an audit at their discretion. In either of these events, discovery of non-compliance could result in considerable expense to the organization. At present, UCAR does not have an efficient, centralized procedure in place to promptly and accurately

respond to such a request. Issues such as decentralization, system security and organizational privacy could further complicate and delay UCAR's response to such an audit request.

Recommendations

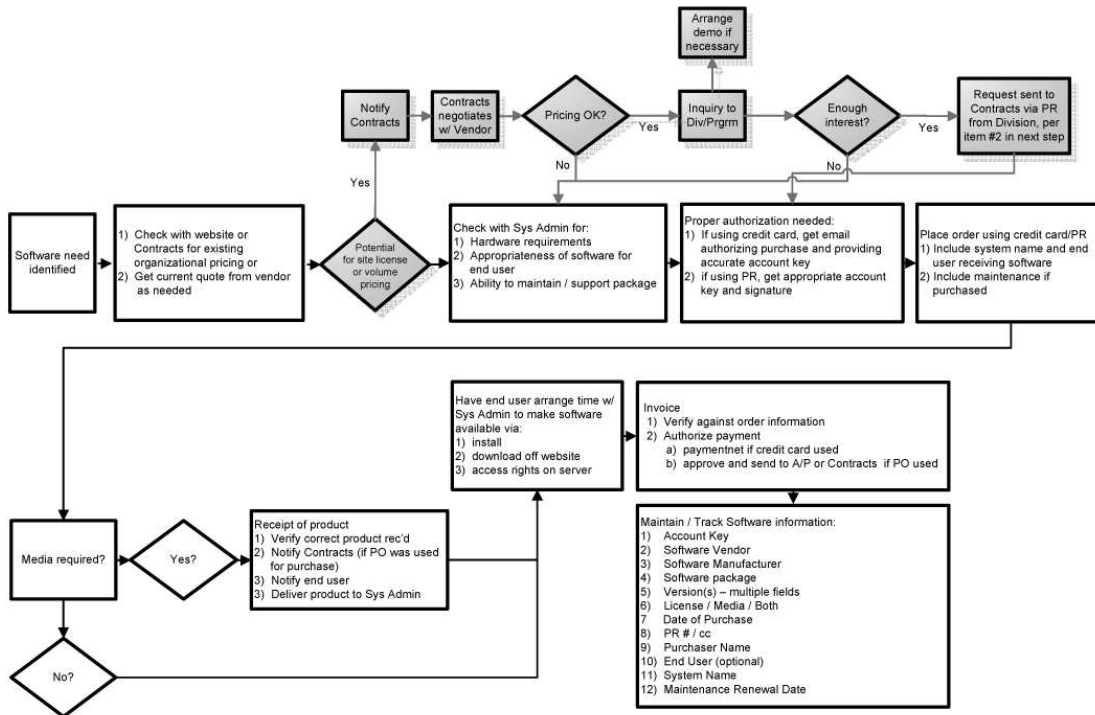
- UCAR procure all software through a primary vendor, with the exception of those packages not available from the primary vendor.
- UCAR implement the following roles to facilitate the acquisition, licensing, maintenance, tracking, and auditing of software assets across the organization, adopting the model used by UCAR Property.
 - Division Software Administrator (DSA)
 - Provide single point of contact within an organizational entity to interact with the CSA.
 - Maintain knowledge about existing software licenses and educate and assist staff with purchases.
 - Maintain accurate records of software assets and maintenance agreements as defined and provide data to CSA when requested.
 - Schedule system software audits as required by the organization.
 - Advise CSA about software that has potential for volume/site license.
 - Corporate Software Administrator (CSA)
 - Coordinate all aspects of software management within the organization. This would require a dedicated position.
 - Negotiate licensing and pricing agreements with vendors.
 - Maintain detailed knowledge of EULAs for each software package and educate DSAs.
 - Process division initiated purchase requisitions for software.
 - Initiate renewals of software maintenance contracts.
 - Initiate upgrade process for volume/site licenses.
 - Compile statistics on UCAR software licenses and analyze for trends.
 - Communicate with and educate division software administrators on aspects of software processes.
- DSAs/CSA implement software purchase and maintenance processes as outlined by ACCIS/SAM.
- Utilize organization's financial management system to facilitate the software record keeping.

- In the interim, recommend that DSA/CSAs use agreed to standards for tracking software assets.
- Develop standards, policies, and procedures for software asset management.
- Research and acquire appropriate software audit tools for organization.
- Develop procedure for promptly and efficiently complying with requests to audit corporate systems for licensing compliance.
- Enhance existing Contracts web site to include the following:
 - Online End User License Agreements with synopsis of basic conditions
 - Current pricing and contact information
 - Current list of software available on the U: drive
 - Information on site/volume licenses
- Ensure those individuals responsible for software acquisitions and installations as well as end users are accurately and appropriately educated regarding company policies and the terms of applicable agreements.

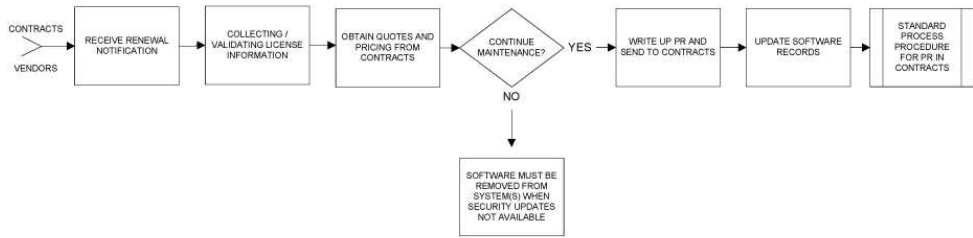
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Software Purchasing Process: Division Level



**SOFTWARE MAINTENANCE PROCESS FOR
THE DIVISION SIDE**



**SOFTWARE MAINTENANCE PROCESS FOR
THE CONTRACTS SIDE**

