|  |  |
| --- | --- |
|  | School of Communication & Information |
|  |  |
| 4/1/2015 | Department of Information Technology Services Software Management Proposal |
|  | Kristin Lepping  Master of Library and Information Science Field Placement  Spring 2015 |

School of Communication & Information

Department of Information Technology Services Software Management Proposal

# Software asset and license management

Like organizations worldwide in 2015, the Rutgers School of Communication and Information’s (SCI) Information Technology Services (ITS) department is in need of a system for organizing, tracking, and maintaining its software assets. Though SCI ITS handles four general types of software, categorized as computer lab, faculty, IT/departmental, and web-based, it is the faculty software that is often most troublesome to track. Because these software purchases are not made at a consistent time of year, tracking the licenses is complex and, to date, the department has not been able to dedicate the resources to implement a system with standards and protocols.

“Software install, usage, license procurement and compliance data is of paramount importance for every SAM [Software Asset Management] program – it’s the foundation. However, collecting, consolidating and reconciling this data is time consuming and leaves… IT teams with little time to focus on what really makes the difference: strategic thinking and implementing proactive processes, policies and optimization exercises, [which] save an organization money and make[s] their departments more effective” (License Dashboard).

While Software Asset Management is the practice of managing the full life cycle of an organization’s software, from purchasing through deployment, use, maintenance and disposal, the SCI ITS seems to need a system that is closely related but focuses specifically on the “procurement, management and optimization of an organization’s software licenses,” known as License Management. This process is at the core of Software Asset Management and “its goal is to ensure that an organization is neither overspending nor under spending on software” (License Dashboard). One could argue that the expenditure is just as important in financial terms as it is in other crucial department resources.

# Why do we need it?

Whatever we call it, implementation of a supportive and sustainable process to consistently track the software assets of the School of Communication & Information is necessary for many notable reasons, including:

* Budget
  + Effectiveness – Make the most of dollars spent the first time.
  + Constraints – Eliminate wasted dollars in the future, eliminate over-buying and over-spending
* Simplification of the ITS team’s life!
  + Automate the system to improve administrative efficiency for managers and operational efficiency for IT staff
  + Improve department standards – A properly implemented and maintained SAM should be an integral part of the expected and established standards of the department, which will lead to:
    - A written, but malleable Knowledge Base of training manuals which will save training time for a student staff that turns over consistently and in the short-term
    - Elimination of the need to perform an internal software audit on a large scale again in the near future after the completion of this project
  + Organize the department, establishing SCI ITS as a unit of authority and knowledge in the School
    - Knowing where things are when you need them and having the answers when people come asking, is POWER!

# What is the cost of doing nothing?

Besides the regular frustration felt by the ITS department managers related to software asset tracking, the cost of doing nothing is… pretty much everything opposite of the bulleted list above, including:

* Lack of control over annual software spend
  + Over-buying
  + Unbudgeted expense
* High operational, administrative, and managerial resource cost
* Lack of transparency surrounding software assets through the School (Flexera)

# What is the goal?

The SCI Information Technology Services department managers have expressed a desire to implement a new system for software tracking that allows them to compile and easily maintain up-to-date data from both an inventory and procurement perspective. We have spent the past few months searching for the best solution.

“The problem is that getting to this point is time consuming. Not only do the transactional tasks… bog teams down, they also leave little time to evaluate the intelligence and take action before it’s time to repeat the whole exercise again… Having your software usage and procurement data in order is of paramount importance, no question about that, but… the value comes when you use your license intelligence to reduce spend, optimize your assets and make informed decisions that makes a SAM program effective” (License Dashboard Limited, 2015).

Ideally, that best solution will be a comprehensive and up-to-date database of all software obtained by SCI ITS since July 2012, sortable and searchable by multiple fields. A cursory but complete version of this database is already in existence, having been compiled this semester from various purchasing and other documents. It is ready for the next phase of being implemented into a proper software tracking solution that goes beyond the simple Excel sheet it currently consists of.

Primary fields that are desirable to sort by include:

* purpose of purchase/”type” of software as categorized by the department (for faculty, student labs, IT/departmental, or web-based)
* faculty member name or NetID
* purchasing information such as PO or requisition number
* license date

In addition, the system should be easily, perhaps even automatically, maintained as part of the standards of the department moving forward. And finally, an important expectation of this project will be the seeds of a Knowledge Base, holding all pertinent documentation related to the new software tracking system including this proposal, training manuals, forms and/or templates, and possibly relevant literature or articles.

# What are the options we’re exploring?

Several possible types of solutions have been discussed and explored, including:

* Installed/executable software
* Web-based software or service (License Management as a Service)
* Open source or freeware
* Design and production of a system internally by the team
* Database built into other software for licensing

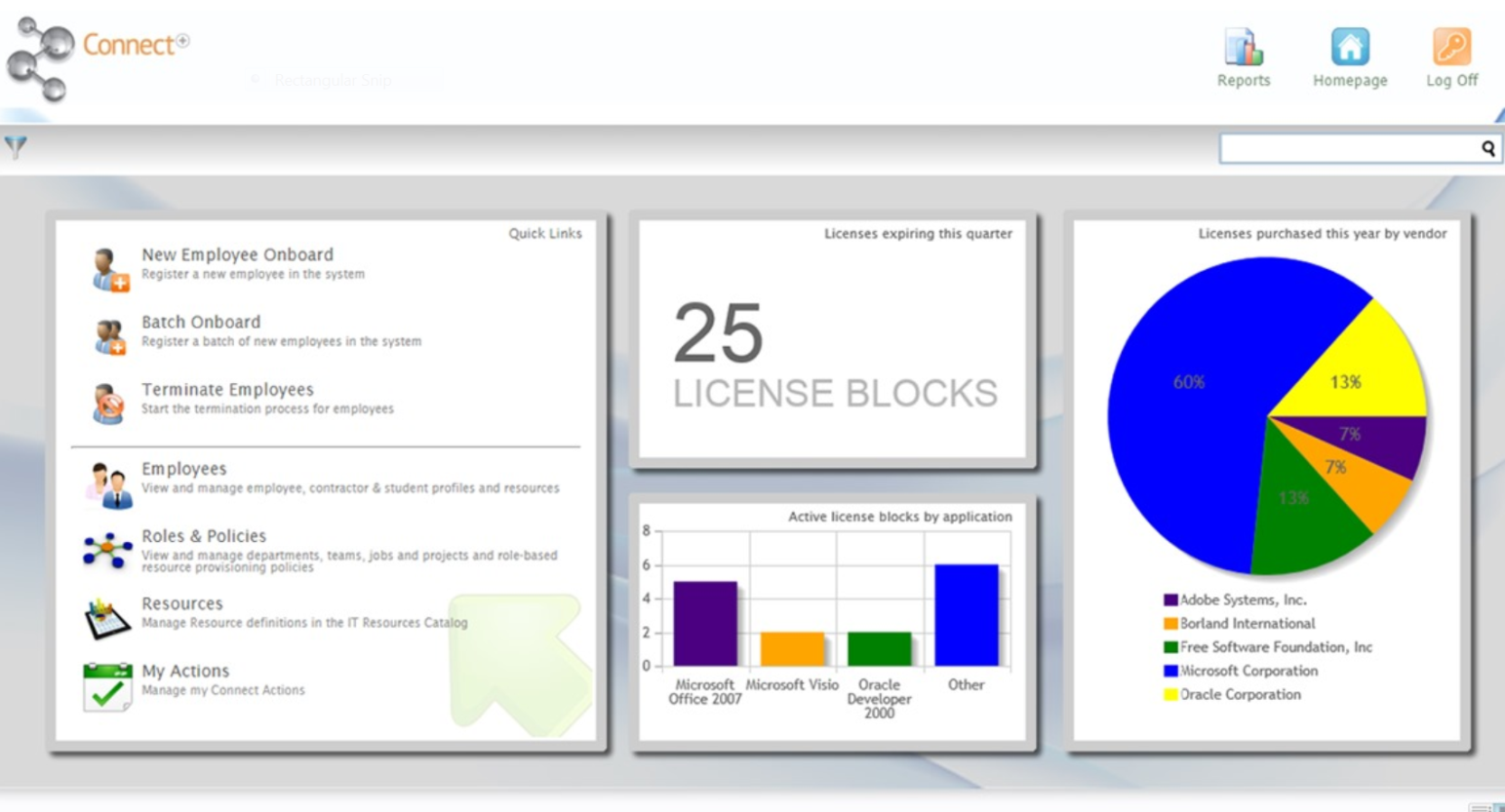
In all, twelve pre-existing options were identified online, eight of which have been successfully tested to date. The results of those tests, along with preliminary recommendations for further exploration, are listed below in order of desirability.

|  |  |  |
| --- | --- | --- |
| 5  Types of software | 12  Systems identified | 8  Systems tested |

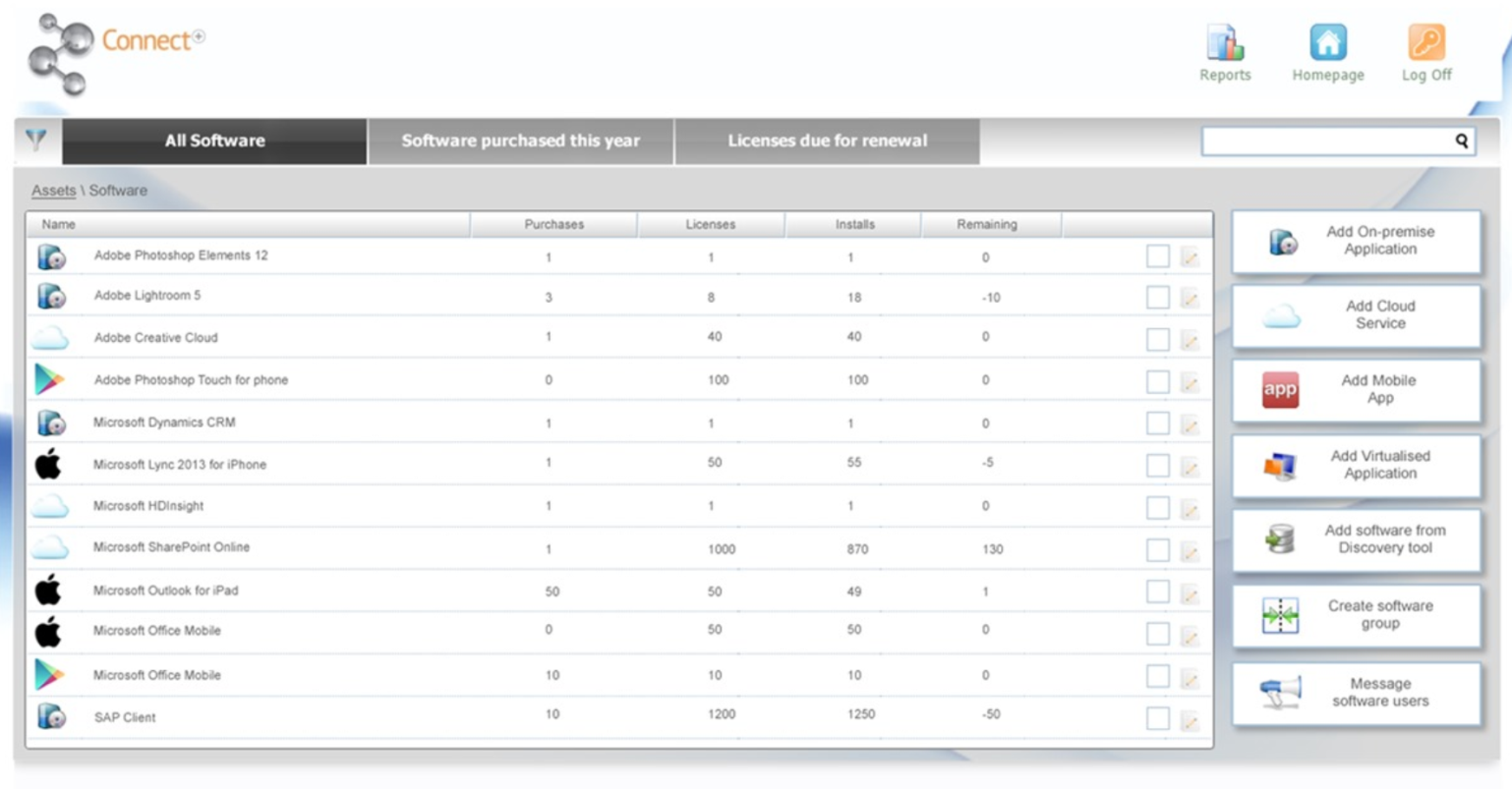
# Primary recommendations, Vector and invgate:

1) [Vector](https://lm.vector-networks.com/action/software-license-manager8.html?utm_expid=1521458-4.kObUtcNtSlyIGKlx34sPgw.1&utm_referrer=http%3A%2F%2Fwww.capterra.com%2Flicense-management-software%2F) – Total rating 4/5 (loses one point for cost)

* + Web-based, can be hosted in Cloud or server-based



* + Pros:
    - Can attach emails and other documents for enhanced reference and tracking of each piece of software we list in the database (show thread of request from faculty member, upgrade, training, or license key info from vendor, etc.)
    - Attractive reports and overall interface
    - Status menu to mark lifecycle stage – If end of contract date is included with metadata, stage will change to “terminated” automatically
    - Can run reports by users and search by all fields; can add custom fields and tabs

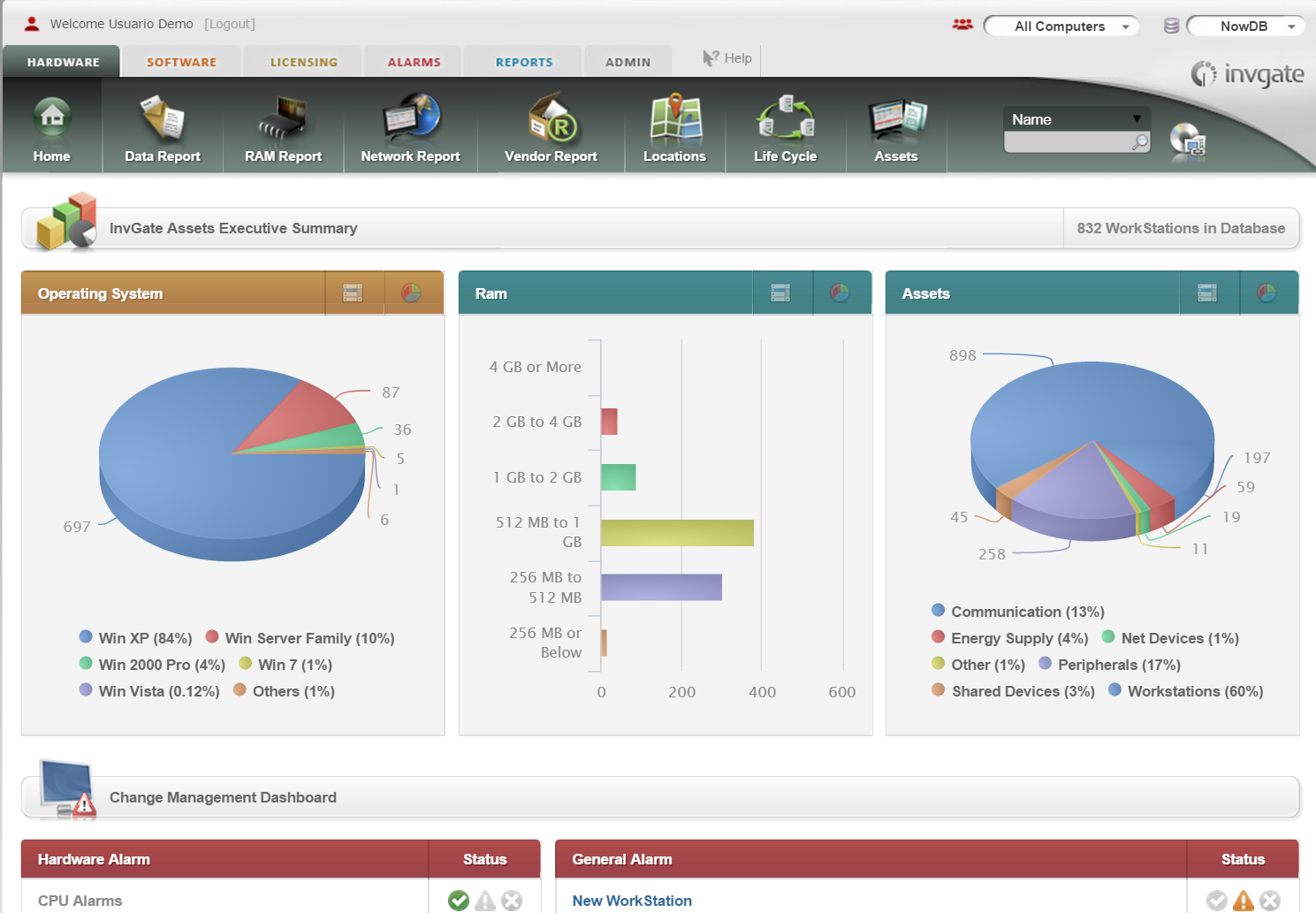


* + Basic package: License Manager Administration (central repository, work flows for approvals, renewal notifications, allocations) costs $6.50/end-user/year ($1650 for 250 machines) and includes: maintenance (unlimited support & any new versions). Plus the start-up fee ($500), which includes import from current Excel list to pre-populate the tool, 4 hours of initial functional training, initial configurations , etc. to get up and running.
  + Highest level package is called License Manager Optimization, which includes the onboarding component, with role definitions, and a bigger focus on who has what. There is also a component of software monitoring, which allows “optimizing the software assets” (who needs what). Cost for this package is $16/employee/year at the 250 employee level. (LM Optimization can be added as a 2nd phase when & if desired, and the fee paid for the Administration part would be deduced and pro-rated. This way you can validate that Vector is a good partner for you before undertaking the 2nd phase.)
  + Bulk rate applies; price/user changes dependent upon total number of users.
  + Sign-in info if you wish to test:

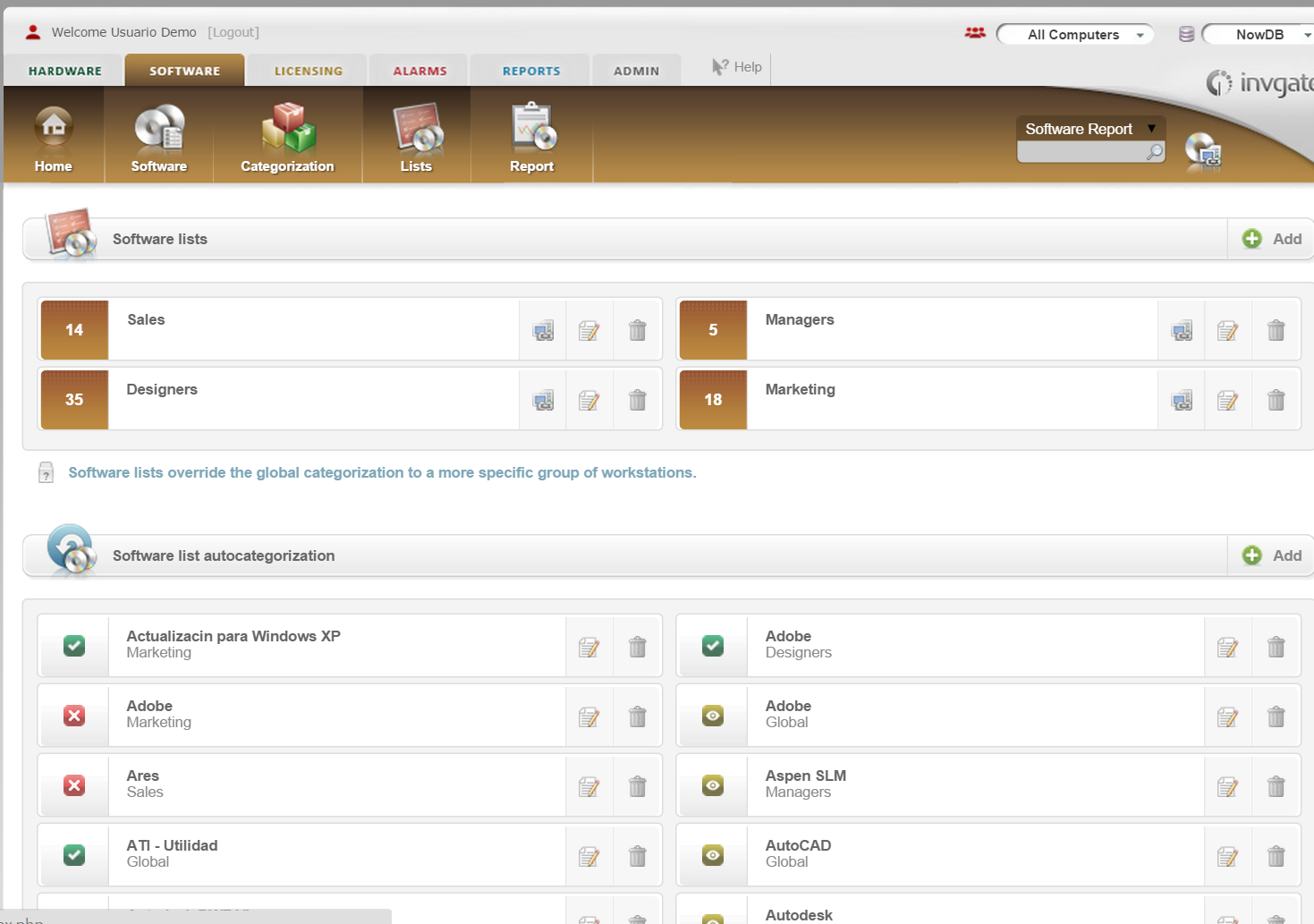
[https://lm.vector-networks.com/vit/](https://ssw-mail.rutgers.edu/owa/redir.aspx?C=3076b62fa0414e54907996d6970b3427&URL=https%3a%2f%2flm.vector-networks.com%2fvit%2f)   
User name: **kristin.lepping**   
Password:**klvector12**

2) [InvGate](http://www.invgate.com/en/assets/licensing-management/) – Total rating 4/5 (on par with Vector)

* Server-based (MySQL or SQL)
  + Pros:
    - Interface is attractive



* + - Can categorize/filter/group software with “lists”, so there could be one each for faculty (as a group), lab, and IT, plus each faculty member could have their own group so you could see - by person - who has what software:



* + - If you click on a user name from the software lists, you can get a full (detailed) report regarding their workstation and hardware, in addition to details regarding what software is on that machine, the software’s status, it’s license info, and how often it is being used (pretty nice feature)
    - There are reports/charts on software metering, updates that are due or installed (all of this per person/user), licenses per user, financial info (appears to be mostly related to the hardware), and tools for updating software remotely for the user through InvGate
    - Can export software lists to Excel, and there are multiple charts/ tables/reports that can be run; can also import assets from CSV
* ***Waiting for a quote… Like Vector, they want to charge by “scannable” machine:*** “For Assets Manager pricing, all I will need to know is how many **Nodes** you have and which license plan you prefer.  What is a node?

**Nodes** = Agent-scanned workstations & servers.  Other assets discovered via our agent-less SNMP scans, Active Directory integration, or manually entered assets are **unlimited** in number and **do not count against the licensing number**.

We offer two **On-Premise options** with Assets Manager:

1.  **Annual licensing** is an annual service plan installed ***on-premise*** with a repetitive annual fee that covers product license usage, future product releases, and technical support during the active plan.

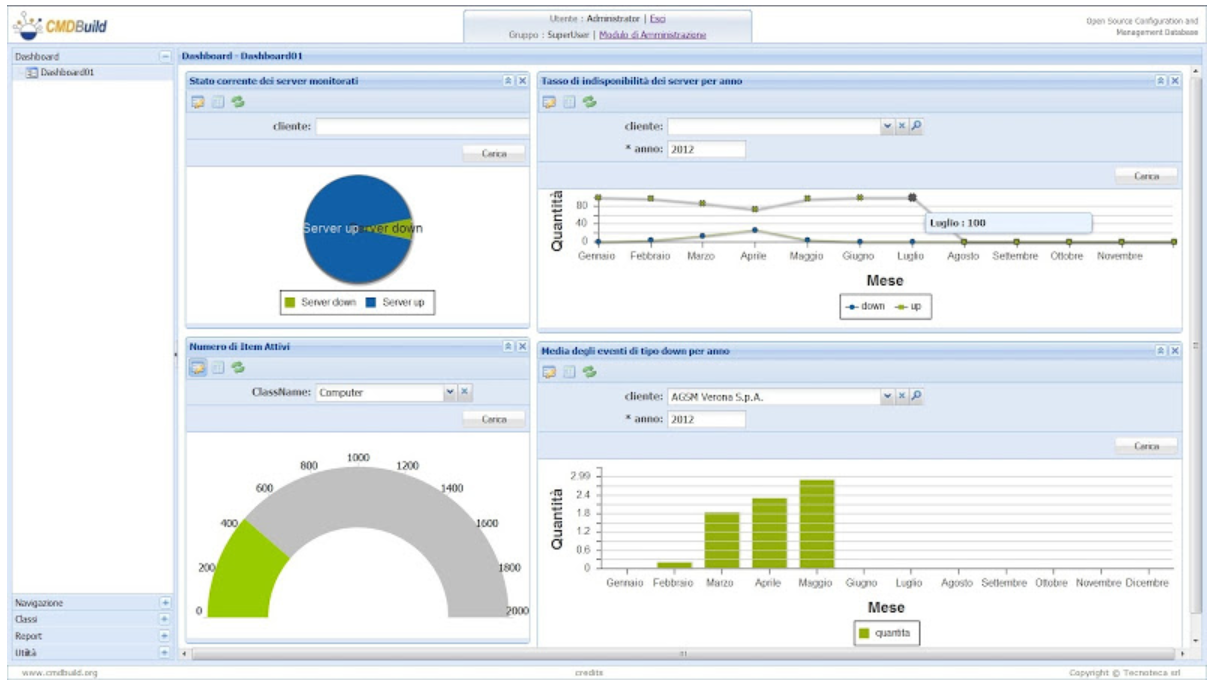
2.  **Perpetual licensing** is an ***on-premise*** model comprised of a one-time fee for a non-expiring license, with a 20% annual maintenance fee on subsequent years for future product releases and technical support during that maintenance year.”

* + Sign-in to test online demo:
    - <http://demo.as.invgate.net/login.php>

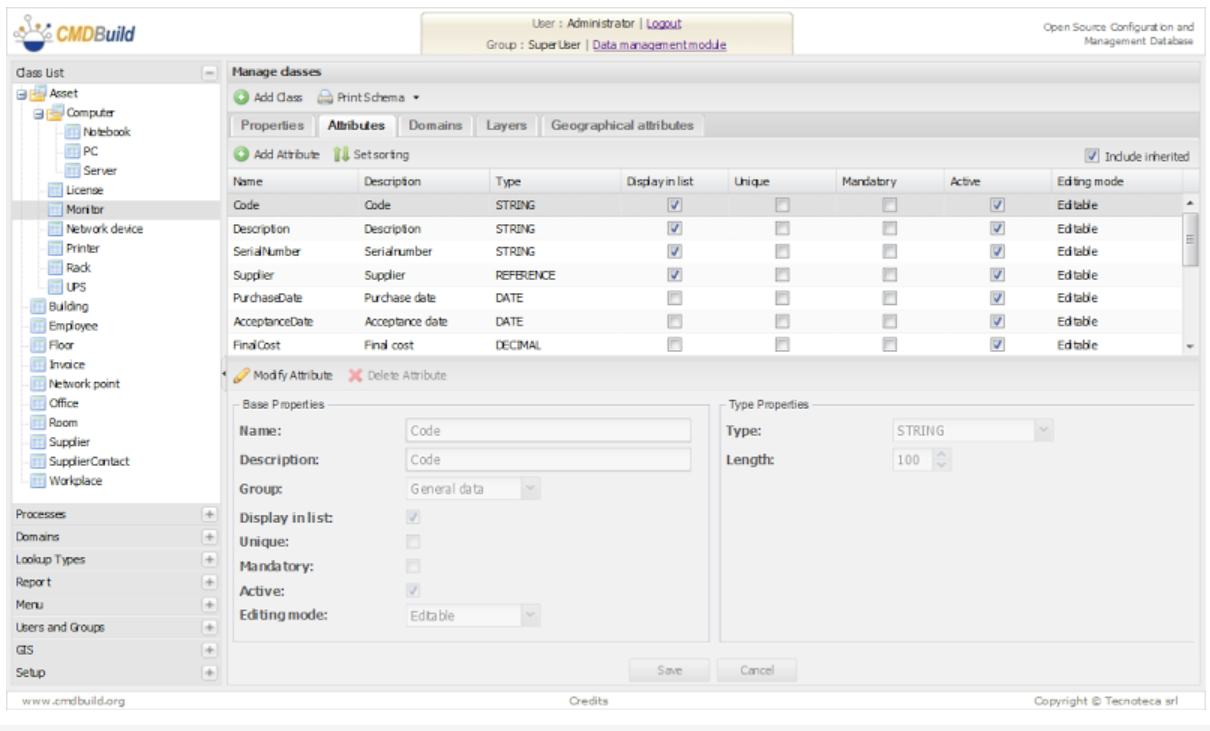
# other solutions that could work with customization:

3) [CMDBuild](http://www.cmdbuild.org/en) – Overall rating: 3.5/5

* An open source “configuration and management database system”; “…a **configurable** web application to model and manage a database containing assets and handle related workflow operations. The aim is to let the operators have **full control** of the assets used, knowing exactly composition, position, functional relations and history. **CMDBuild®** is a centralized management module working with databases and external applications: automatic inventory, documents management, text processing, directory services, e-mail, monitoring systems, intranet portals and other information systems. **CMDBuild®** is a **flexible** and **user-upgradeable** system and uses the best practices defined by [ITIL](http://www.cmdbuild.org/en/progetto/itil) (IT Information Library). **CMDBuild®** is released with [AGPL license](http://www.cmdbuild.org/en/progetto/licenza)” (CMDBuild website).
* Pros:
  + - This solution may be something that Ben would like if he had the time to make it his own - it has multiple useful functions built in, but would require a certain amount of customization in order to really make it the right tool for SCI ITS; out of the box, it has a good framework and it’s…
    - FREE!!!!!!!!

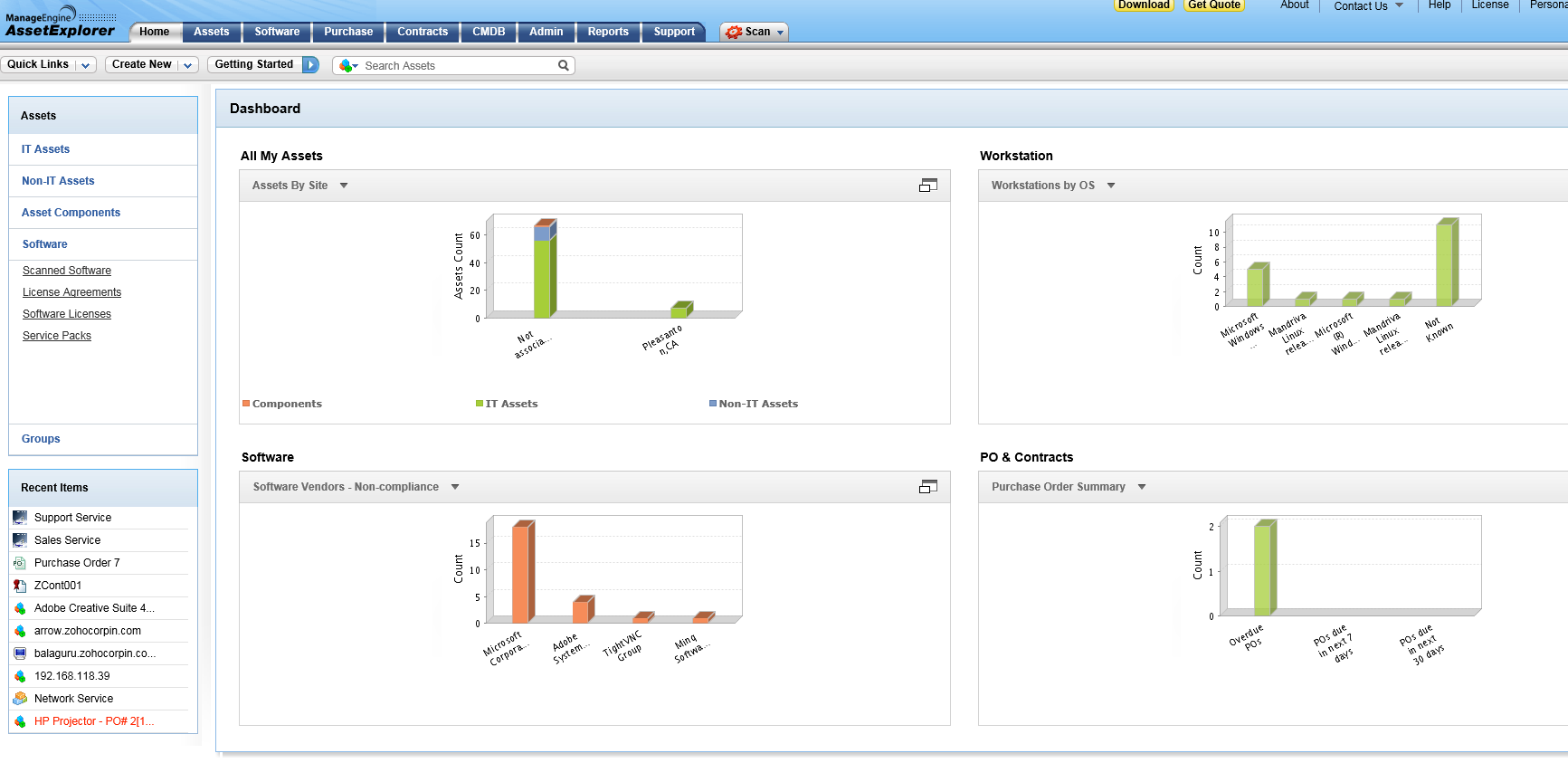


* + - Can import CSV files but it’s for licenses (or other predetermined asset tags)
    - Can do more (like add a software class) in the administrative mode



4) [ManageEngine Asset Explorer](https://www.manageengine.com/products/asset-explorer/) – Overall rating: 3/5

* + Web-based solution that offers both a free and a pro edition



* + Cons:
    - The License Key field cannot be left empty and I know we don’t have the License Key info for every piece of software readily available at this time; you can make it say “unknown” but that just goes to show how much emphasis they put on it.
    - In order to “allocate a license” or assign it to a faculty member officially the way the program is designed (not just in the Notes text field), it has to be specifically connected to a machine/hardware; again, it can be gotten around but the program is obviously designed with other purposes in mind and not so much flexibility on the surface
    - They tell you right out that the first and most important step is scanning of assets. Then you link assets to users, THEN you can manage all workstations, software, and licenses.
  + Off the shelf quote: “250 IT assets = $795 subscription model”
  + The trial is downloaded on the virtual machine desktop; you can trial it by signing in as an administrator.
  + Contact, should you ever wish to use it: Harish Raghu, [harish.raghu@zohocorp.com](mailto:harish.raghu@zohocorp.com)

# Do not recommend:

5) [Snipe-IT](http://snipeitapp.com/) – Overall rating 2/5

* + Web-based open source, heavy on the hardware assets
  + Cons:
    - Limited sort and display capabilities as far as I can tell; can’t change which labels are shown for software list/report and cannot search by other fields, so for example, cannot see at a glance or search by a faculty members name
    - Each asset will need to be hand-entered, no capability to batch load from our existing metadata

6) [Total Network Inventory](http://www.softinventive.com/software-asset-management/) – Overall rating 1/5

* Open source software - heavy on the hardware inventory and scanning tools
* Cons:
  + - This software has an unattractive interface and is not user friendly; we would need to do considerable work to get it to do what we need it to do
    - Pre-loaded assets and classification tools refer to hardware only
    - It is very heavy on the hardware scanning and limits the classification of software to licenses (as a primary heading!); there is little flexibility
    - $90.00

7) [SpiceWorks](http://lepping-pc/wizard/startup) – Overall rating 0/5

* Open source, web-based
* Cons:
  + Doesn’t seem to do what we want. It’s really meant for other things: managing mobile devices, discovery/monitoring of hardware, and Help Desk (which we already have and are about to do away with)

8) Siwel Consulting (LMaaS) – Overall rating 0/5

* Consulting service that receives horrible online reviews from former employees stating they are mostly a “call center” and are substandard in the technology world

Flexera is going to send me a video to watch (they have no live demo), no word from License Dashboard sales guy (seems like a bad sign regarding Cutomer Service) or DeskCenter yet, and still no luck with Aspera access (which does not bode well).

# other possibilities still in need of possible testing:

1) [Flexera](http://www.flexerasoftware.com/enterprise/) –

* + They have multiple software products; appears we would benefit most from the FlexNet Manager Suite for Enterprises
  + Unfortunately, they have no online live demo or trial download

2) [License Dashboard](http://www.licensedashboard.com/) - License Management as a Service (LMaaS)

* Website is gorgeous, very polished and professional but…
* Their salesman dropped off the face of the earth after our first preliminary contact two weeks ago.

3) [Aspera Smarttrack](http://www.aspera.com/en/product/smarttrack/st-module/)

* Software package - no free trial available but they do have an online demo with limited features and a lack of long-term memory, but it still looks promising
  + Unfortunately, the access link for the live demo which was sent to me does not work and I’ve been playing phone tag with the engineer; my gut says if the link to the technology doesn’t work after a week of trying and they are very difficult to communicate with, it’s not a good solution.

4) [DeskCenter](http://www.deskcenter.com/en-US/Homepage.aspx) –

* + Web-based, not free
  + After signing up for a free trial, I was sent Log-in Credentials which do not work. I followed their emailed directions and at the point where you’re supposed to download the trial, the option has been removed. The user is forced to push a button saying “Yes, I want to try Version 10” and then they say they’ll contact you soon. Several days later and I have not heard from them. Again, I feel this will not be successful.