What is IT Asset Management – Best Practices

Introduction
As a life cycle asset management company, Data Vista strives to enable our customers to obtain the most value from their technology investment. Regardless of company size, type of industry, or IT infrastructure, Data Vista offers products, services, and develops programs to meet the business goals of our customers. Data Vista supports best practices for Asset Management. This document identifies what is meant by asset management and the best means to implement those processes and procedures.

Definition of Asset Management
IT asset management (ITAM) is a set of business practices that join financial, contractual, and inventory functions to support life cycle management and strategic decision making for the IT environment.

The fact that the IT infrastructure is changing each day is probably undeniable. Each day new users are being added, deleted, or moving and those changes affect the IT assets – hardware and software. Usually it’s the responsibility of system admins to track and manage these assets. Potential IT issues could be resolved quickly, efficiently, and with better IT administration support, if there is good to excellent visibility into all the IT assets that exist in the organizational IT landscape – network, data center, remote sites, user workstations, etc.

Hardware Asset Management
Hardware asset management is the process of tracking and managing the physical components of computers and computer networks, from acquisition through disposal. The goals of hardware asset management are to account for all hardware assets on the IT infrastructure to provide comprehensive inventory visibility. Other objectives are to help with vendor contract and lease management, and to assist in making budgetary forecasts based on the stock of assets and business requirement.

Software Asset Management
Software asset management is similar to hardware asset management, but focuses on software assets, including licenses, versions, and installed endpoints. The Information Technology Infrastructure Library (ITIL) practices states that the goals of software asset management are to reduce IT costs and limit business, legal and security risks related to the ownership and use of computer software, while maximizing IT responsiveness and end-user productivity.

Benefits of Asset Management
To better appreciate the value of asset management is to understand how managing IT assets allows an organization to get maximum value from the use of the assets, right-size IT inventory, and optimize inventory purchase decisions and strategies. IT asset management provides the means to achieve complete visibility into the IT infrastructure inventory, helping you gain an in-depth understanding of:

- What systems and equipment exist
- Where components reside
- How they are used
- What they cost
- When added to the inventory
- Whether they have an expiry date
- Impact IT and business services

This level of visibility into asset details will help organizations improve infrastructure efficiency and performance, and minimize related overhead expenses. All organizations, in one way or the other, perform ITAM. It’s important to implement ITAM practices intelligently, in order to achieve IT operational efficiency, financial accountability of asset purchase, simpler auditing and compliance, and long-term asset manageability and maintenance.
What is IT Asset Management

- **Gain Control Over IT Inventory**
The implementation of effective asset management practices for the organization assists in gaining deeper visibility into hardware and software assets. Therefore, IT Admins and support personnel should look further into viewing and managing asset details of the end-user system. Asset management provides the ability to easily view the hardware and software components of a computer, server, or any other network infrastructure. Traceability of assets across the IT landscape enables better IT administration control and accountability.

Using an automated asset discovery and management functionality, along with server and application monitoring tool will allow an organization to see the computer inventory details, all while actually troubleshooting a server crash or application performance issue. Detection of an employee’s unauthorized and non-compliant use of hardware or software on their enterprise workstation, can also be assessed.

- **Asset Lifecycle Management**
Regardless if hardware or software, there's bound to be a disposal or replacement date. Asset management allows an organization to keep track of when hardware is purchased, how long has it been used, whether there's a lease expiring on the component, etc. For system administrators, it's important to know what version of software and how long the end-users have been running this software on their system, and whether their OS is current. This is actionable data IT teams utilize to decide if they should replace an old or faulty hardware, uninstall or patch a vulnerable application, or update the firmware on the system. Vendor contract management personnel should familiarize themselves with asset information. In turn, they will know when to extend or renew a contract with a vendor or hardware/software provider based on contract, purchase order, and expiry information fed into the asset management system. Among the many components of hardware or software life cycle management issues to be determined are as follows:

  o **Drivers**
  o **Firmware**
  o **Graphics and Audio**
  o **Hard Drives**
  o **Hosted Virtual Machines**
  o **Logical Volumes**
  o **Memory**
  o **Network Interfaces**
  o **Operating Systems Updates Applied**

  o **Out of Band Management**
  o **Peripherals**
  o **Ports and USB Controllers**
  o **Processors**
  o **Removable Media**
  o **Software Inventory**
  o **Storage Controllers**
  o **System Information**
  o **OS Updated Information**

- **Strategic Inventory Planning & Procurement Forecast**
When keeping track of inventory in the IT infrastructure, it becomes easier to plan for future spending on assets. Without knowing what currently exists in end-user systems – both hardware and software – it is very difficult to plan on procurement budget. An organization may end up procuring more assets than needed, assets which are not required. Centralized and streamlined asset management permits an organization to scan an entire network and list which hardware and software is being using. Being able to collectively view inventory data with storage capacity of end-user systems is useful for storage utilization analysis and budget planning. This information becomes critical for charting out financial planning, allowing advance planning for future asset needs, maximizing existing asset utilization, and eliminating unnecessary expenditure.
What is IT Asset Management

- **Increased Accountability to Ensure Compliance**
  Keeping track of your IT inventory and automatically updating it using asset management systems will help to monitor hardware and software components of network computers, and identify whether unapproved or harmful software or hardware is installed. Ensuring compliance with corporate security policies and desktop standards is a must for organizations, and efficient asset management of IT inventory will help to accomplish those goals. By allowing system administrators to quickly isolate vulnerabilities, such as illegal/unauthorized software, outdated software, games and unauthorized/malicious downloads, ITAM system makes it easier to see where potential risks may exist, so they can be prevented before major problems arise. Keeping systems and assets compliant will provide IT inventory reports for compliance auditing.

- **Automated Asset Discovery & Tracking**
  Many companies manage their IT asset inventory using manual, paper-intensive processes, which drain resources and are highly prone to inaccuracies and inconsistencies. Spreadsheets are used by many IT teams to manually enter details of the assets and then they constantly have to modify assets as they update. With the introduction of IT asset management solutions and asset management integrations with systems and network monitoring tools, this process has been made amazingly simpler and quicker. ITAM systems perform automated device discovery on the enterprise LAN. For example, if there are Windows® servers and operating systems on the network, then using a Windows ITAM tool can discover the Windows nodes and fetch all hardware and software asset information. With the pace that enterprise networks are growing and IT systems are getting updated, an automated asset management method is a must to constantly keep abreast of asset updates and changes. Automated ITAM considerably saves manual effort and time, and results in lesser errors and personnel overheads.

**IT Asset Management Methodology**

The major goal of ITAM is to establish a centralized asset repository that accounts for the presence and purchase of all hardware and software inventory. To achieve this, ITAM methodology comprises the following steps:

- **Asset discovery, data capture and storage** – Discovering all hardware and software components of IT inventory on the IT infrastructure and capturing their details, such as the type of asset, make, specification, etc., and storing it in an asset repository
- **Asset tracking** – Being able to identify and track change in the location of assets, increase or decrease the number of assets, track assignment status and user information
- **Asset lifecycle management** – Being able to capture the asset lifecycle data right from acquisitioning, purchase and assignment, to expiry and decommissioning
- **Asset reporting and alerting** – Being able to generate asset inventory reporting, and receive alerts on asset warranty and lease expiration

Centralized organization-wide ITAM process and asset repository will also help to support various ITIL functions such as configuration management, incident management, problem management, and service level management. While we are looking to build a centralized asset repository, it’s important to understand the difference between asset repository and configuration management database (CMDB). The CMDB is an evolution of the asset repository which is part of the ITIL framework. Beyond the scope of asset discovery and tracking, the CMDB is integrated with service desk functions and is part of IT service management and change management.
Implementing IT Asset Management

- **Asset Management with Server & Application Management System**
  For IT admins, application performance management (APM) is key to ensuring undisrupted business service through high availability and performance of applications and server infrastructure. Incorporating asset management as part of the APM solution will help to identify the right server assets, what's installed in the server, whether the server has an expiring lease and warranty, or has enough storage capacity, etc. while enabling troubleshooting to remediate application or server hardware health issues.

- **Asset Management with IT Help Desk**
  It makes a lot of sense to incorporate asset management into the IT help desk. IT is ultimately the hardware and software assets being utilized for running company functions and for which trouble tickets and service requests are created when those assets fail. Being able to capture the entire asset data of the IT inventory including purchase order, parts and billing information will be really useful to improve help desk support. It'll be even more beneficial if the help desk is able to associate and tag trouble tickets with specific assets to track the history of service requests. Integrating asset management with help desk results in more efficient ITIL support, change management and overall service request fulfillment.

- **Asset Management with Patch Management & Software Distribution**
  A patch management solution scans systems for critical and vulnerable software and third-party applications that need to be updated to mitigate security risks. Once the systems with vulnerable apps, and the apps themselves are identified, then the system admin will patch them with the latest version of the software or operating system. Asset management plays a crucial role here as all the servers, workstations and notebook assets on the IT environment have to be discovered first and then their software inventoried.

- **Asset Management with Network Configuration & Change Management (NCCM)**
  The application of asset management is a little different with NCCM as it applies more to network devices, such as routers, switches and firewalls. As network administrators use network configuration & change management tools to manage device configurations, it’s also important to the management of network device inventory. NCCM solutions offer a device end-of-life (EOL) management feature that helps to manage the lifecycle of network assets, who the manufacturer is, and when the product will be end of life. This will help in preparing budget forecasts for product maintenance renewal and device replacement planning.

**Conclusion**

Asset management is not an option for IT teams. ITAM spans across the entire company by simplifying IT operations, improving resource productivity, supporting compliance, and asset procurement planning. Regardless if a company is small, mid-size, or large enterprise, IT asset management is something that should definitely be implemented. Simplified, centralized and automated asset management is a key to improving the overall IT administration’s operational efficiency. Take control of the IT asset inventory; ensure that it stays updated with changes in the IT environment!

Reference: Parts of this document were excerpted from an article written by SolarWinds.