Microsoft

The SAM Optimization Model

Control. Optimize. Grow

SAM
SOFTWARE ASSET MANAGEMENT

In an ever-changing global marketplace, your company is looking for every opportunity to gain a competitive advantage and simultaneously grow your revenue, profits, and customer loyalty. Meanwhile, new technology drivers like data management, cloud solutions, and mobile computing are making it more difficult to manage your software assets effectively.

With the adoption of these new technology trends and the added complexity they bring, the role of IT is now a key strategic asset to support optimization, security, and license compliance. On one hand, increasing complexity can make it more difficult—and costly—to manage your company's infrastructure and platform. On the other hand, the promise of the strategic advantages you can achieve through technology is driving new waves of IT investment.

Aligning IT with business strategy

Due to the increased integration and reliance on technology to achieve your company's business goals, it is more important than ever that your technology investments are properly tracked, managed, and licensed. By putting proper management processes in place, your company can save time and money, improve workflow, and increase your competitiveness as you grow in size and maturity.

Unfortunately, many organizations struggle to align business strategy with technology planning and investments. If your company has investments in virtualization, cloud solutions, and development and test environments, or enables your employees to use personal mobile devices, you may find it hard to align the needs of the business and your employees with those of IT, security, and cost management.

The journey toward an optimized infrastructure and platform

Fortunately, resources are available to help you assess the strengths, weaknesses, and potential risks of your existing infrastructure and platform and develop a long-term strategy, with an associated short-term roadmap, to improve your level of IT optimization.

A dynamic system and supporting infrastructure

A dynamic system is the Microsoft vision for what an agile business looks like—where technology and business strategy support one another to meet the demands of your rapidly changing and adaptable business environment—and how it can help businesses like yours enhance the dynamic capability of your people, process, and infrastructure.

An optimized infrastructure and platform

Microsoft has processes and best practices, technology solutions, and training available to help your company start the journey toward a dynamic system. Central to the Microsoft optimization effort is the Infrastructure Optimization (IO) Model. This model helps drive demand for a more secure, well-managed, and dynamic infrastructure, enabling your organization to reduce overall costs, make better use of resources, and support IT as a strategic asset for your business.

Benefits of optimization models

Optimization models, such as the IO Model, provide a methodology for understanding your IT capabilities. These models provide an actionable roadmap to help your organization transition from one optimization level to the next. The models also provide customers, technology partners, and Microsoft with a common terminology to coordinate efforts to help you improve your company's level of IT optimization.

The SAM Optimization Model & ISO SAM

The Software Asset Management (SAM) Optimization Model (SOM) is aligned with the IO Model and provides a framework to evaluate SAM processes, policies, and tools. The IO Model is used to benchmark your organization's current IT infrastructure and help create a more secure and better-managed environment. The primary goals of IO are to help rationalize and reduce your IT costs, reallocate underutilized IT resources, and streamline IT business processes. Implementing SAM, which is an integrated set of policies, processes, people and tools dedicated to the discovery, management, and usage analysis of your hardware and software assets, is necessary so that you can optimize your company's IT assets. IT optimization is a common goal of both the IO Model and the SOM. Therefore, it makes sense for your organization to align these initiatives with a common framework.

Using the IO Model stages of Basic, Standardized, Rationalized, and Dynamic, your Microsoft SAM Partner can conduct a SAM Optimization Model (SOM) Assessment as part of the Microsoft SAM Baseline Review. The SAM Baseline Review is a SAM engagement that provides you with a complete view of your current Microsoft product deployments and licensing position in addition to the SOM analysis. Based on 10 key SAM competencies, the SOM Assessment is a stepping stone to accomplish a complete end-to-end SAM Program as defined within ISO/IEC 19770-1, which outlines the requirements and certifications recommended for a comprehensive SAM program. Adopting both frameworks will help ensure that customers accurately and strategically implement and manage a successful ongoing SAM practice. The end goal of the assessment is to evaluate the SAM optimization level of your organization based on a set of established and objective criteria. Once your organization knows its optimization level, you can work to advance from one optimization level to another, based on guidance from your SAM Partner.

Levels of SAM Optimization

Your SAM Partner will assess your SAM Optimization level and help you advance from one optimization level to the next.

Basic SAM

Ad Hoc

Little control over which IT assets are being used and where.

Lacks policies, procedures, resources, and tools.

Standardized SAM

Tracking Assets

SAM processes exist as well as tool/data repository.

Information may not be complete or accurate and typically not used for decision making.

Rationalized SAM

Active Management

Vision, policies, procedures, and tools are used to manage the software asset lifecycle.

Reliable information used to manage the assets to business targets.

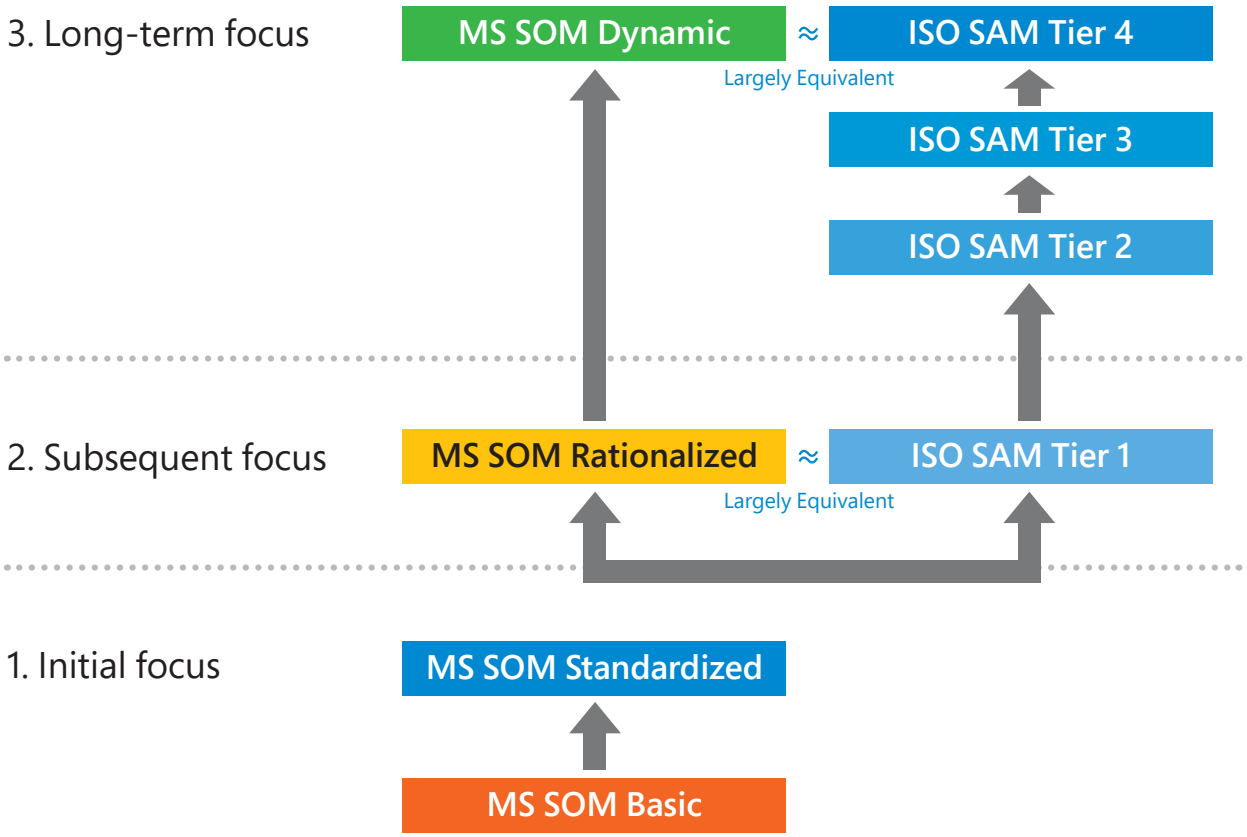
Dynamic SAM

Optimized

Near real-time alignment with changing business needs.

Business competitive advantage through SAM.

The first two levels, Basic and Standardized, should be the initial focus points for your organization. As your organization increases in maturity, you will progress up to Rationalized, with the ultimate long-term goal of arriving at a Dynamic state. The Rationalized level is similar to the ISO SAM Tier 1 in the ISO 19770 model, and the Dynamic level generally corresponds to the ISO SAM Tiers 2, 3, and 4.



For more information on the ISO model, see ISO/IEC 19770-1:2012 - Information technology—Software asset management—Part 1: Processes and tiered assessment of conformance.

SAM maturity levels and key competencies

The SOM Assessment is a systematic approach in which your partner will compare a set of 10 key competencies found within your current environment against a defined model to determine your SAM maturity level. An assessment rating and SAM maturity level are determined based on your answers to SAM policy and procedure questions asked throughout the engagement.

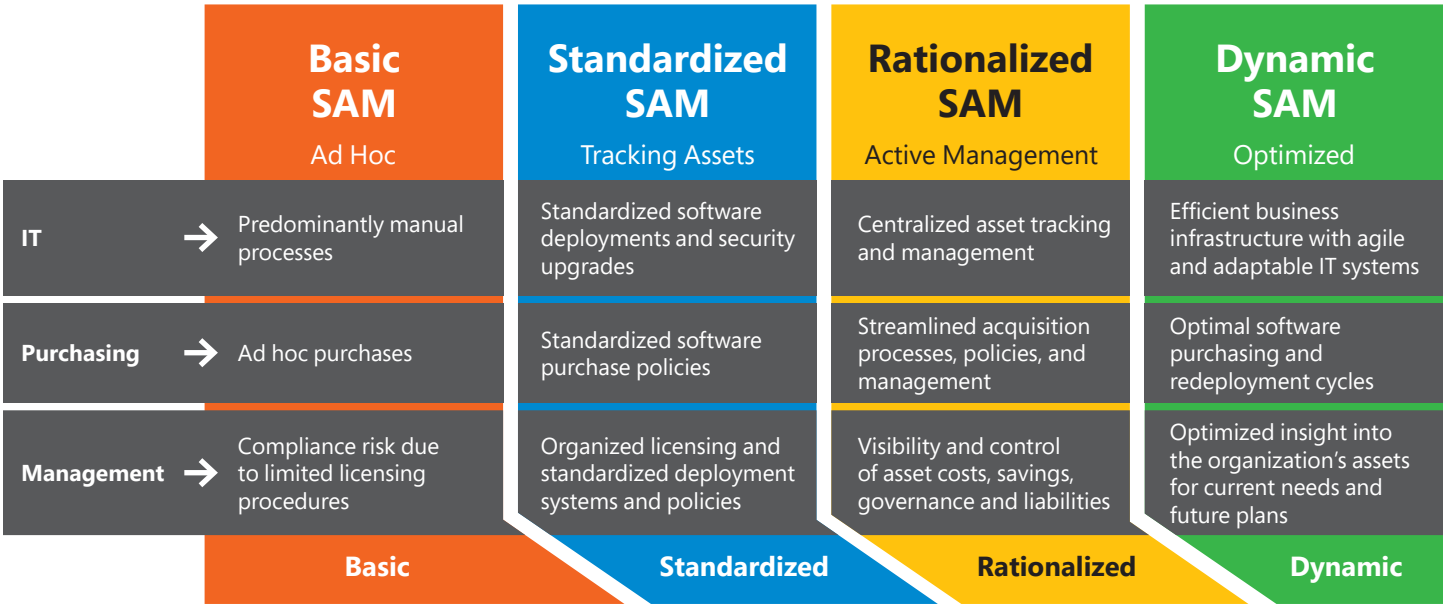
Key competencies

The following table illustrates the key objectives and questions for each competency—with alignment to ISO/IEC 19770-1 certifications—and outlines the requirements for Standardized, Rationalized, and Dynamic maturity levels.

ISO 19770-1 category	Key competency	Competency question
Organizational management	SAM throughout organization	How has software asset management (with documented procedures, roles, responsibilities, and executive sponsorship) been implemented in each infrastructure group?
	SAM improvement plan	Does your organization have an approved SAM improvement plan?
SAM inventory processes	Hardware and software inventory	What percentage of user PCs and servers are included in a centralized software inventory/CMDB (configuration management database); which is populated by a software tracking tool?
	Accuracy of inventory	How often do you reconcile software inventories with other sources to verify the accuracy of assumed license metrics (for example user counts based on HR employee records)?
SAM verification processes	License entitlement records	What percentage of procured software licenses are recorded in a license entitlement inventory (a central repository/tracking of all licenses owned and/or previously acquired)?
	Periodic evaluation	How often do you reconcile software deployments (usage) to software entitlements (purchases)? Software entitlements are software licenses owned or previously acquired.
Operations management and interfaces	Operations management records interfaces	How do the various Operations Management functions (contracts, financial fixed assets, service support, security, networking) use software and hardware inventories in their daily roles?
Lifecycle process interfaces	Acquisition process	What percentage of total software purchases in your organization are made through or are controlled and tracked by centralized procurement?
	Deployment process	What percentage of total software deployed across the organization's PCs and servers (considering all operating systems) is installed through centralized sources or a controlled distribution environment?
	Retirement process	What percentage of retired hardware assets are tracked in a way to enable the software on them to be reused?

SAM by role

Implementing a SAM plan ultimately involves and benefits all departments within your organization. Each area has its unique roles and strategies that can build and support a case for SAM that benefits the entire organization. This chart provides examples of three key roles.



SAM benefits your operational capabilities through standardized procedures and best practices, increases awareness of your company's software purchasing needs, and gives you greater insight into managing your company's assets.

IT	Purchasing	Management
Control security risks that result from the use of unauthorized software and/or a lack of knowledge of available security updates, ultimately reducing support incidents. **Optimize** efficiencies with centralized asset tracking to know what software you have, what could be better used elsewhere, and what types of programs you will need in the future. **Grow** your business infrastructure with flexible and agile IT systems that can easily adapt to your future needs.	Gain centralized **control** and implement/enforce procurement procedures by increasing your understanding of the software licenses that your business needs to succeed. **Optimize** your negotiations and vendor relations by knowing what software your organization needs and uses. **Grow** visibility into short and long-term planning for upcoming software purchases that are necessary to meet your current and future business requirements.	**Control** and limit your company's legal liability through better software and license management. **Optimize** your time-to-market through streamlined software functionality and a thorough knowledge of existing databases. Gain greater insight into your company's assets and needs, helping you make more informed decisions and better plans for the **growth** of the organization, both in the short-term and for the future.

SAM Maturity Model tipping points

SAM provides financial and risk management benefits to your company when implemented correctly. SAM implementation will show both immediate and long-term results that can help your organization have better control over software and hardware costs. The tipping points graphic below shows the SAM policies and processes necessary to move from a Basic SAM to a Standardized SAM level or from Standardized SAM to Rationalized SAM.

Basic SAM
Ad Hoc

- Direct SAM responsibility is identified throughout organization.
- SAM plan is defined and approved.
- Hardware and software inventory contains >68 percent of machines and software title spend.
- Inventory sources are reconciled annually.
- Complete entitlement records exist throughout organization.
- Annual sign-off on SAM reports.
- Operations management manages separate asset inventories.
- Software purchases use approved vendors.
- Only approved software is deployed.
- Software retirement is tracked.

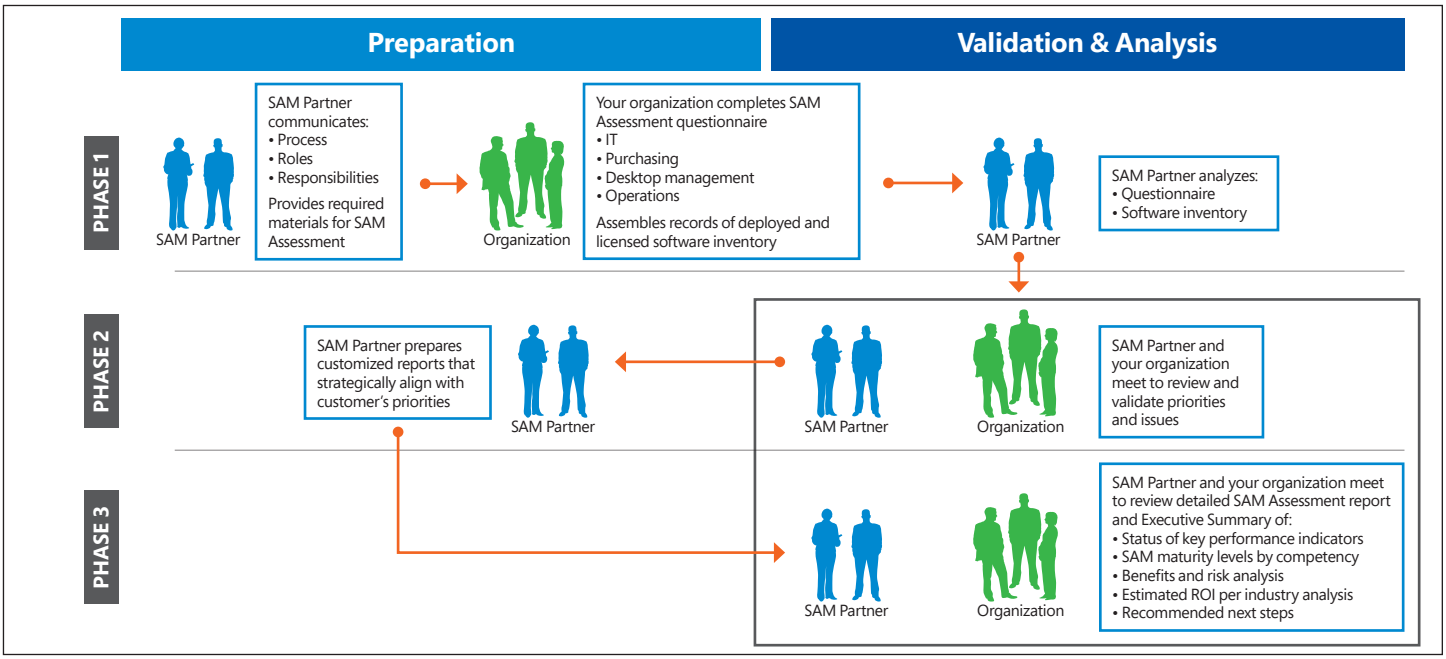
Standardized SAM
Tracking Assets

Rationalized SAM
Active Management

- SAM is actively managed in each group throughout the organization.
- SAM improvement is demonstrated.
- Hardware and software inventory contains >96 percent of machines and software title spend.
- Inventory sources are reconciled quarterly.
- Entitlement records are reconciled with vendor records.
- Quarterly sign-off on SAM reports.
- Operations manages a federated asset inventory.
- Software purchases are based on deployment/entitlement reconciliation.
- Software deployment reports are accessible to stakeholders.
- Centrally controlled inventory of harvested licenses is maintained and available for reuse. Deployment and license records are updated.

The SOM Assessment process

As part of the Microsoft SAM Baseline Review, your SAM Partner will lead you through the SOM Assessment process. There are three phases to the SOM Assessment. The first phase centers around the preparation and analysis of the SAM Assessment questionnaire and licensing records. Phase 2 consists of an on-site review and validation of the customized reports and strategy analysis. In Phase 3, a detailed SAM Assessment and Executive Summary is presented highlighting your organization's SAM maturity levels and recommended next steps. A full SAM Baseline Review will include these phases in addition to a complete inventory of your Microsoft product deployments and license positions, and a review of your SAM policies and procedures.



SAM Optimization – SAM Program improvements

Your SAM Partner will help your organization progress from one SAM Optimization level to the next to realize the full potential of SAM. The chart below shows each SAM key competency and a description of the processes or procedures in effect at each level of SAM Optimization. Using this chart, you can better understand where your organization is currently within each competency, and use it to plan areas for improvement to reach the next level.

Key Competency	Basic	Standardized	Rationalized	Dynamic
SAM throughout organization	Project Manager assigned but SAM roles & responsibilities not defined.	Direct SAM responsibility is identified throughout the organization.	Each functional group actively manages SAM.	SAM responsibilities defined in job descriptions across organization.
SAM improvement plan	No SAM development or communication plan.	SAM plan is defined and approved.	SAM improvement is demonstrated.	SAM goals part of executive scorecard; reviewed regularly.
Hardware and software inventory	No centralized inventory or < 68% assets in central inventory.	Between 68% and 95% of assets in inventory.	Between 96% and 99% of assets in inventory.	> 99% of assets in inventory.
Accuracy of inventory	Manual inventory; no discovery tools.	Inventory sources reconciled annually.	Inventory sources reconciled quarterly.	Dynamic discovery tools provide near real-time deployment details.
License entitlement records	Procurement manages contracts; not accessed by IT managers.	Complete entitlement records exist across organization.	Entitlement records reconciled with vendor records.	SAM entitlement system interfaces with vendor entitlement to track usage.
Periodic evaluation	IT operations managed on an ad-hoc basis.	Annual sign-off on SAM reports.	Quarterly sign-off on SAM reports.	System reconciliations and ITAM report available on demand.
Operations management interfaces	SAM is not considered part of M&A risk plan and company integration.	Operations manage separate asset inventories.	Operations manages associated asset inventory.	All business units follow the same strategy, process, & technology for SAM.
Acquisition process	Assets purchased on a per project basis; without a review of current availability.	Software purchases use approved vendors.	Software purchases based on deployment/entitlement reconciliation.	All purchases are made using a pre-defined asset catalog; based on metered usage.
Deployment process	Assets deployed by end - users in distributed locations; no centralized IT.	Only approved software is deployed.	Software deployment reports are accessible to stakeholders.	Software is dynamically available to users on demand.
Retirement process	Software is retired with hardware and is not harvested or reassigned.	Unused software is harvested (where the license allows) and tracked within a centrally controlled inventory.	Centrally controlled inventory of harvested licenses is maintained and available for reuse. Deployment and license records are updated.	Automated process with centralized control and tracking of all installed software, harvest options, internal reassignment, and disposal.

Frequently Asked Questions

Q. What is the Infrastructure Optimization (IO) Model?

A. The IO Model is used to benchmark your organization's current IT infrastructure and help create a more secure and better-managed environment. The IO Model's primary objectives are to rationalize and reduce IT costs, reallocate underutilized IT resources, and streamline IT business processes. The IO Model assesses an organization's IT infrastructure level as Basic, Standardized, Rationalized, or Dynamic.

Q. What is the SAM Optimization Model?

A. The SAM Optimization Model is the SAM framework aligned with Infrastructure Optimization that allows your partner to evaluate your organization's SAM progress effectively and objectively. Using the IO stages of Basic, Standardized, Rationalized, and Dynamic, your partner conducts a SAM Optimization evaluation based on 10 SAM competencies. These vendor-independent and industry-wide standards are adopted from is ISO/IEC 19770-1:2012 SAM Processes. The end goal of the evaluation is to assess the SAM Optimization level of your organization based on a set of established and objective criteria. Once your organization understands its SAM Optimization level, it can work to advance from one Optimization level to another. The SOM provides the framework to improve the management of software assets and the investments your organization makes in them.

Q. Why is Microsoft implementing the SAM Optimization Model as part of the SAM Baseline Review?

A. Microsoft is implementing this model to provide an established set of objective criteria which partners can follow with customers to provide consistent SAM Assessments. Before a customer can begin to improve their SAM business practice, they need to have a clear picture of where they stand and where they want to be eventually. The new model will provide a clear framework for these assessments.

Q. What are the benefits of the SAM Optimization Model?

A. Benefits to your organization include alignment with the established IO Model that many companies are currently familiar with, guidance on how to get from one SAM Optimization level to another and the related benefits, and the creation of a roadmap to visualize savings at each stage of optimization.

Q. How long does a typical SAM Optimization assessment take?

A. As an average estimate, the SAM Optimization assessment should take between two and five days if the proper preparation work has occurred and the key company contacts for the assessment are available. These could include purchasing, finance, IT, and operations department leads. It is also important to note that the SOM Assessment is part of the larger SAM Baseline Review which typically requires more time to conduct a full inventory and analysis of your environment.

Resources

- Microsoft Software Asset Management (SAM) - http://www.microsoft.com/sam
- SAM Baseline Review - https://www.microsoft.com/en-us/sam/baseline.aspx
- IO Model - http://www.microsoft.com/io
- Find a Microsoft SAM Partner – https://www.microsoft.com/en-us/sam/programs.aspx