Leveling the License Audit Playing Field

How to save time, aggravation, and millions of dollars with an effective defense for license audits
Introduction

Why Does this Matter?

In a survey conducted at Gartner’s 2010 IT Financial, Procurement and Asset Management Summit, a high number of respondents said they experienced a software audit in the past 12 months. IT asset managers should ensure that their organizations are prepared for an audit.

Summary, Gartner Group Survey Analysis

Many Software Companies are increasing the frequency with which they audit their customers. Even though some of these audits are hidden under the guise of a friendly Software Asset Management (SAM) engagement, an audit is an audit no matter what you call it. The number of audits is increasing dramatically because the SAM process has demonstrated a huge return on investment in terms of increased revenue for the Software Company.

The amount of data required for an audit—in order to determine what licenses you own, what products you have deployed; and how many licenses you actually require—can be overwhelming. Companies that are facing an audit can often be frozen by the complexities and sheer volume of data presented.

Software Companies are becoming experts at this audit game. They train their audit partners to be very conservative in how they view the data and to present the facts in their favor.

As a business, you need to be proactive in managing the audit experience. This book is designed to help you understand what’s involved in an audit and how you can protect your organization’s interests.
# Table of Contents

**Chapter 1: A Typical Audit Scenario** ........................................................................................................................................... 1  
**Chapter 2: I've been selected for an Audit: Now What?** ........................................................................................................... 3  
**Chapter 3: Hold on! This SOW is one-sided to the Auditor!** ....................................................................................................... 6  
**Chapter 4: The Tools of the Audit** ............................................................................................................................................... 9  
**Chapter 5: Your License Position** ............................................................................................................................................. 12  
**Chapter 6: The Estimated License Position** .......................................................................................................................... 15  
**Chapter 7: Negotiating a Settlement** ......................................................................................................................................... 20  
**Chapter 8: Conclusion and Next Steps** .................................................................................................................................... 23  
**About the Author** ........................................................................................................................................................................ 24  
**How We Work** ........................................................................................................................................................................... 25
Chapter 1  
A Typical Audit Scenario

Software Asset Management (SAM) activities by Software Companies have increased in recent months. Most of the revenue generated from a SAM is a direct result of the increasing complexity as Software Companies continue to shift from traditional perpetual licensing models to cloud based licensing models.

Many customers purchase an Enterprise Agreement (EA) as a type of “audit insurance.” In the past, this may have been an effective strategy. The EA protected customers from an audit, unless there was a reason to think something wrong was happening. For example, if your company grew by 30% in a year, but you did not place a single true-up or an order for a net new product, this was seen as a red flag.

This just isn’t the case anymore. When an EA comes up for renewal, organizations are pre-emptively being asked to conduct a SAM engagement. If you don’t place an annual true-up order, a SAM engagement is likely to be requested of you by the Software Company. If you ask questions about how licensing changes such as the new programs or licensing terms will impact you, a SAM engagement may be suggested to help you understand your questions.

Let’s look at what happens when an EA is up for renewal. A customer wants to determine how the new licensing rules impact SQL Server licensing in the future. It is suggested to you that you allow a partner (or your own internal IT Resource) to run a tool such as the Microsoft Assessment and Planning Toolkit (referred to as MAP), to help. The simple process of reviewing your deployment data to help understand the impact of license changes, could turn into a review of your license entitlements and how you are utilizing those entitlements.

Now instead of a simple process to review SQL Server and figure out how best to license it under the new rules, the customer is involved with a SAM engagement on their entire infrastructure.

Many customers are not prepared for this. Most do not have the proper tools, procedures; and perhaps even the people in place to review the data provided. How do you know that what is provided is what is required? How do you actually review what has been generated? How can you accurately defend yourself and your position? How did this happen in the first place?

These are the type of questions this booklet will address. First, however, let’s get back to the Renewal scenario. The customer may decide they really have no choice but to deploy the tool and provide the inventory results. So they choose to allow a partner to access their network, running tools and reports to determine what is deployed there.

At first, the customer tries to push back, telling the vendor that they have a Network Management Tool that is used to perform inventory, and that they would like to use that tool for this engagement. The auditors’ response is often shocking: they are not ok with using your tool (even though nowhere in your contracts does it say you cannot use your own tools). In fact, the engagement now has the auditors using their tools to validate that the
customer’s tool actually does what it is required to do. The customer reluctantly agrees to this, because they are told their own tool does not capture all of the information required, such as the edition; and knowing whether a server is running Standard or Enterprise Edition is required to complete a correct audit.

So the process begins. The auditors run a scan of your Directory, they scan the network, they look at servers and they even ask to run other software vendors scripts (though it’s not really clear why). They collect all this data and a few weeks later the customer receives a document called an Effective License Position (ELP) and, possibly, some form of a License Statement.

The License Statement provides a list of all the licenses that are on record as being purchased for a company and any of its affiliates. It lists all current and past agreements and all the licenses that have been purchased. It often appears to be missing licenses. The customer may be told it is their responsibility to validate the number of licenses, leaving most customers scratching their heads wondering how to actually do that.

The ELP is an Excel document (it is called different things by different Software Companies, but most contain the same type of data) that contains a tab with a summary of the findings for each product. It shows the number of deployments, devices, users; and it contains tens of thousands of rows of data. Most customers really do not know how to make sense of any of it. What may be apparent is that the auditor seems to think the customer has a lot more employees and computers than the customer thought. Odd, considering that companies can get an accurate count of employees from HR – right?

The real shock comes, though, when looking at the tab on the ELP that outlines deployments and compares those to entitlements (licenses owned). This is where we usually see a whole lot of red, indicating that customers are short licenses and are now facing a bill for compliance that will cost millions of dollars.

As a customer, you’re left shaking your head, frustrated because you don’t know what to do to defend yourself. You struggle to balance all the projects that need to get done and the mountain of time needed to fix this problem. The unfortunate thing is that even though you know this is incorrect, you don’t know what to do next. Frustration creeps in as you realize you will likely just pay the bill because you just want it to all go away.

In order to accurately defend yourself and avoid this scenario, it’s important to get a handle on the data provided. This is the key to a good defense and the difference between paying the millions that you are told you owe and potentially not owing anything.

Understand that auditors have taken a very conservative approach to the inventory data and, as a result, they present a position that is likely over-inflated. The real key is to review the data and present it back to the auditors and Software Company in the language they understand. The most important thing is to provide the correct documentation to defend yourself.

---

**Over-Counting Client Access Licenses**

An organization had 8000 employees and 3000 computers. The auditors chose to license them with 8000 named user licenses, even though other license metrics were available that decreased licenses required by 2/3rds.
Chapter 2
I’ve been selected for an Audit: Now What?

Your software vendor may select you for either a full audit or for the “light” version of the audit, which they may refer to as a Software Asset Management Engagement or “SAM.”

In the past, a SAM was, for the most part, a self-audit. Customers were required to go out and perform their own inventory, compare that against license counts, and either place an order for any license shortfalls or have an officer of the company write a letter stating that they in fact had all the licenses required.

Software Companies are changing the way they approach SAM engagements. Many have built small armies of SAM Partners, who are funded to perform these engagements. So even though they are positioned as a free engagement, they are actually paying a partner to do the work.

Why would Software Companies absorb the cost of these, if they are a simple review? The answer is simple. The generated revenue that comes from these engagements in our experience, usually at least a 10:1 return. As a result, SAM Partners now perform the same processes as would be included in a full audit.

The letter sent to audit customers identifies the benefits of a SAM Engagement and may include such things as:

1. Consolidating all your licenses into a single report that compares to your deployments
2. Helping to understand licensing rules and how to apply them to your own deployments
3. Providing information on how to develop an on-going Software Asset Management Process to help minimize the risks of being out of compliance

How does the Software Company make money from an audit?

The “free” SAM engagement is not really free. The Software Company is expecting a return by driving revenue through license purchases to settle any shortfalls that are identified during the audit. How do they know that they will be successful? How do they know that they are going to get a 10:1 return?

Most software licensing programs are very complex. In fact, at the Gartner Symposium/ITxpo 2013 one - very well known - Software Company’s then-CEO even stated that their company had no plans to make its licensing any simpler. This licensing confusion, whether by design or not, drives customers to either purchase more licenses than needed (the better-safe-than-sorry strategy) or to not purchase enough licenses due to the confusion (the pay-later strategy).
How is it that licensing is so confusing?

Every product (and Software Company) has its own rules and method to count for the number of licenses required. In fact, some products have as many as six or seven different ways to license a single product. The Software Company may believe in choice for the consumer, but this choice contributes to the confusion.

Take Microsoft for an example: Microsoft products are divided into three product pools for licensing purposes: Applications, Desktop Operating Systems and Servers. Each product is assigned to one of these pools and general license rules are then assigned to the pool. The way to determine your rights is to review the Product Use Rights (PUR), a 200+ page document published by Microsoft that explains what can and can’t be done with each of their products, first by pool for rights and then by product for exceptions to how you can use that product. Confused yet?

Let’s look at one of the most popular products from Microsoft, Microsoft Office, which falls into the application pool. To determine how to count the number of licenses needed, the first step is to review the PUR and find out that applications are counted based on the number of devices upon which they are installed (we won’t even get into what makes a device, for now we will just assume it’s a desktop or laptop). That seems pretty simple, until we review the specifics for Office to learn that for Office365 there is an exception. Office365 is not licensed by device but instead by user.

Two licensing models for Office seems manageable. However, there are a number of programs that can be used to purchase Office: Select Plus, Open Business, Open Value, Enterprise Agreement, Enterprise Subscription and Office365. Now it becomes apparent how complicated all of this can become.

Now let’s take a look at Oracle. If you consider just the database you need to look at the different license rights that apply for Physical versus Virtual deployments. With Oracle, not all Virtualization technologies are considered equal, for example the rules for virtualizing on VMWare are very different then if you use Oracle’s on virtualization technology. This could have a huge impact on the number of licenses required, since with VMWare you are required to license all the cores in a cluster regardless of how many hosts the database actually will reside upon.

When you dive a level deeper into how you actually purchase licenses, there are many choices. Options include Per CPU, Name Users, Universal Power Units, Concurrent Devices and many other now retired licensing metrics (many of these coming to Oracle licensing as a result of their many acquisitions). Once you figure out what you need to buy and what metric you require, you then review your contract terms to figure out any limitations (e.g. Number of Cores that a processor is allowed to have for licensing purposes).

This is where it’s easy to get caught. With all these options, it’s hard to figure out what to count. (What is a device? Is a contractor a user? What license metric should I use? Are there restrictions on my Named Users?) What comes out is a number that is difficult for you to prove or disprove.

How did we get to this place?

Because of the confusion, customers often have someone internally to keep track of licenses. Most organizations implement a network management tool, such as Microsoft’s SCCM tool or HP’s DDMI tool, and presume they then have what they need. However, it’s usually not that simple.
The Software Company has asked to meet and discuss the audit process, what should I be worried about?

You have been selected for an audit and have accepted that. You are ready to meet with the vendor and with their selected SAM Partner to discuss the process and what is going to happen. It’s important that you know what to expect in this meeting.

At a very high level, the meeting will likely focus on these things:

1. The approach the SAM partner will take and how they will collaborate with you
2. The activities that will be performed (how will they get the data to determine the actual number of installations out there)
3. The tools that will be used to perform the actual inventory
4. The creation of the Estimated License Position (ELP) and the various workbooks that go along with that
5. How they will account for and review any license entitlements you own
6. The timelines for completion
7. The creation of a Statement of Work (SOW) by the SAM Partner

Let’s take a look at these in more detail.
Chapter 3

Hold on! This SOW is one-sided to the Auditor!

Before we start to look at the way that data will be collected, let’s review some of the most common challenges that we find within the SOW provided.

**Issue # 1: What tool will be used to collect inventory data?**

Each of the SAM partners that we have encountered has developed their own tools to perform these audits and they all want to use their own tools, not the tools that you have deployed—the tools that you use to do the counts yourself. It may sound crazy, but even customers that have the Software Companies own tools installed and set up in their environment are told that the auditors will only use some of the data from that tool and that they will supplement this with their own tools.

You may count your devices based on deployment data coming from your tools, but the auditor wants to come in and use tools to pull counts out of your Directory (AD or LDAP). They may look at both desktop/server counts and user counts in your directory. This should definitely be a concern, since most organizations do not have an accurate view inside of their directory services for many reasons (e.g., you may have employees that are no longer with your company still included for compliance and legal retention reasons).

The first step is to negotiate to use your tool instead of the auditor’s tool. If you are pushed back on this request, tell them you’d like to provide the data out of your tool and then have the auditor validate or sample the data against data points that come out of your tools, rather than use the auditor’s tool to perform the whole audit.

**Issue # 2: There is no clear definition of the license metric**

The auditors will look for devices and users that have been on the network within the last 30 to 90 days (depending on the Software Company) to determine the deployments that require licenses. The challenge is they do not define how they will determine this. For instance, we have a client that had devices that had not logged onto the network for over 100 days, but they had a password reset between the device the domain controller occur in 25 days, so this device was counted as an active device (even though when pinging the devices, nothing returned).

The key is that the auditor is looking for reasonableness that the device exists on the network and requires a license. What they are not doing is reviewing your unique scenarios to see if that reasonableness holds true in your organization. That’s why it’s so important that the SOW reflect what is being used to calculate licenses required based on your business, not on the auditor’s reasonableness assumptions. For one of our clients, this reasonableness test increased their device count by 20% and took nine weeks to negotiate back to where it should have been.
Issue # 3: User counts are determined out of your directory

For certain products, license counts can be based on the number of users that are accessing the technology. The problem with this approach is that directories are rarely kept 100% accurate by companies (for many reasons) and often show more users than are actually present. For example, Microsoft contracts define a qualified user:

“Qualified User” means a person (e.g., employee, consultant, contingent staff) who: (1) is a user of a Qualified Device, or (2) accesses any server software requiring an Enterprise Product Client Access License or any Enterprise Online Service. It does not include a person who accesses server software or an Online Service solely under a License identified in the Qualified User exemptions in the Product List.

Source: Microsoft EA Enrollment Contract

The contract does not, however, explain how to count active users. Most clients use an HR count from their HR system, or their audited year-end financial reports as their active user counts (they will typically add in consultants to this count). It’s better to avoid the pain of having to review the user counts that come out of their directory by including in the SOW specifics on the methods that will be used to determine your user counts.

Issue # 4: Your tool does not provide the editions of some products such as SQL Servers

The auditors will make an argument that they cannot use your tools because they do not report product editions (e.g. whether or not a SQL Server is a Standard or Enterprise Edition). Microsoft and their auditors will use this point to use their own tools and/or the Microsoft Assessment and Planning Toolkit (MAP) to perform the audit. Your goal is to convince the auditor to use your tool. You have spent a lot of time and money; and you’ve invested in the people to make that tool a part of your process.

Issue # 5: Virtualization rules are hard to monitor and determine

Many products are subject to different virtualization rules. The Oracle licensing rules for different virtualization technologies was discussed above. Microsoft has a license re-assignment rule referred to as the 90-day rule. Although this refers primarily to when you can re-assign a license from one device to another it does have major implications when it comes to virtualization. Simply put, if a SQL or Windows Server is virtualized and resides on Server 1, but through a technology such as VMWare VMotion moves from Server 1 to Server 2, the license can follow it. That license is now, however, assigned to Server 2 for 90 days.

The auditors will want to see how many of your virtualized servers moved, how many times they moved in a 90 day period, and to what host (physical) servers they have been moved. They will then apply license requirements to this.

The challenge is there are not many tools in the market that can determine this. To our knowledge, Software Companies own tools cannot do this, and neither can those of the auditors. In all of the audits that we have seen, the auditor will rely on scripts from VMWare to do this. Be prepared beforehand by making sure the licenses that you own cover you in this scenario (there are different ways to purchase the server licenses to ensure you have the right to do this).
**Issue #6: The Software Company will not provide a record of what licenses you own**

All software vendors expect you to have an accurate record of all the licenses that you own. For a small client that has not been involved with a merger or acquisition, this may be easy enough. For large, complex organizations that have been involved in at least one merger or acquisition, this can be impossible.

Most Software Companies, have a process to determine your license position and they may even provide you with a statement of those licenses. They research all of your subsidiaries and the contracts that you have purchased against and produce this document. The problem is that in an audit they often do not provide it.

Be sure to request this document. Ensure that you have the ability to review it and supplement it with anything that you may know of that is not already included. Don’t conclude that it is accurate: review all the subsidiaries that are listed for completeness.

Another difficulty is many companies purchased packaged solutions. You purchase an entire solution for an Independent Software Vendor (ISV) that includes software from other 3rd parties such as Adobe, Microsoft or Oracle. The challenge is that many of these licenses do not get recorded by the Software Company and to compound those issues, most companies do not keep accurate records of them either. Finding proof of ownership of these licenses during an audit can be key to reducing any potential exposures.

**Issue #7: The auditor provides you with only 15 days to respond to their findings**

One of our clients was provided an ELP and a license report that collectively had over ONE MILLION rows of data. The auditor was upset when the client did not provide their response to them within 15 days of receiving all that data. For most organizations 15 days is just not enough time. Negotiate something reasonable. It will take the auditors more time than this to put it together so why shouldn’t you have more time to review it?
Chapter 4  
The Tools of the Audit

Now that the audit process has begun, you may be concerned with what's happening. It may appear that this process won't be as friendly as you expected after all. At this point, it's important to know about the tools that the auditor is likely to use.

**Agent-Based vs. Agentless Tools**

There are two types of tools used in the market today: Agent-based, where an “agent” is installed on every device, and agentless, where an IP Range Sweep is performed to receive data. Most of the commercial tools in the market (such as SCCM, HP DDM, Altris, etc.) are agent-based.

For our purposes it's not relevant to debate the benefits of one over the other, because both types are likely to present problems for you in an audit. Many of our most successful results have actually been achieved by stitching together the results from the in-house deployed agent system (e.g. SCCM), with an agentless tool (Block 64 or MAP).

One of the biggest challenges for both types of tools is the remote machine (i.e., remote users – typically laptop users), that rarely connects to the network. With an agentless system, remote users will not be seen unless they are on the network during the “IP Sweep” timeframe. An agent-based system may be able to inventory a remote user if they VPN in; or the remote machine may be captured from the last time it was on the network. This in itself leads to problems of whether or not the remote machine is still an active user.

Typically, during an audit, the devices in the Directory will be compared to the active computers identified by the inventory tool (whether agent-based or agentless) to identify any machines that were not correctly inventoried. This list needs to be compared to determine if there are machines in Directory that should not be counted (since the auditor will count them as active machines).

Below are some of the more common tools used in a Microsoft Audit:

**Microsoft System Center**

During a Microsoft Audit, if you have Microsoft System Center Configuration Manager (SCCM) installed and actively monitoring your desktops and servers, you may think that this tool (since it’s a Microsoft tool) is your best bet to provide an accurate inventory. Maybe not? Here’s how Microsoft’s own website describes SCCM 2012:
Enable users to work anywhere on the device of their choice

With System Center 2012 R2 Configuration Manager, you can keep software up-to-date, set security policies, and monitor status while giving your users access to preferred applications from the devices they choose.

Extend your on-premises Configuration Manager solution to the cloud by integrating Windows Intune to enable remote, mobile, and branch office employees to use the devices that best fit their needs.

(Microsoft SCCM Website)

What is interesting is that there’s no mention of Asset Management or Inventory. This is because inventory is not the primary function of SCCM, which is a network management tool set

The challenge is not that SCCM cannot inventory desktops; it really becomes a question of whether or not SCCM is kept up to date and whether or not it’s accurate. For example, SCCM requires that an agent be installed on the desktop or server that is being inventoried. If the agent is not there or it’s not installed for technical reasons on a critical server, you will not “see” the device to audit (which is why the auditors want to run their tool—to find the devices they see that you do not).

Even if you do have a complete installation of SCCM, the auditors will require that other tools are used for various reasons. One of the most common is that editions are not visible with SQL Server or Exchange Server.

The other critical piece of information for which they will be searching is the mapping of virtual servers to physical hosts. Auditors and Software Companies want to know that Virtual Server 1 resides on Physical Host A, as well as how many times it has moved in a month (Server Mobility). Again, SCCM is not able to provide this data.

One of the benefits of SCCM is that it is an agent-based technology (i.e., the SCCM agent must be installed on all devices that are managed). This avoids many of the difficulties of agentless devices, such as communication challenges with Windows Management Instrumentation (WMI), since the agent is able to ignore WMI completely.

**Microsoft Assessment and Planning Toolkit (MAP)**

MAP is a free tool provided by Microsoft that solves many of the issues with SCCM, such as Virtual to Host Mapping or Editions of SQL Servers. Although it is becoming the tool of choice for Microsoft in many of their engagements, it is far from perfect.

MAP is first and foremost a planning tool. From the Microsoft MAP Website:


– Microsoft Website
Again, even though MAP provides inventory, it is primarily a tool to assist with assessing server workloads for migration. It is a tool developed by Microsoft to help customers upgrade older versions of their products to newly released versions. In order for the tool to work accurately, inventory and many other attributes, such as processor speed, are provided for the purposes of determining the baseline for upgrades.

Although MAP does a fairly accurate job, it also has its faults. Since it is agentless, if WMI or Remote Procedure Calls (RPCs) are not allowed due to security policy, MAP will be able to see a device, but it will not be able to inventory that device since it will not be granted the access to do so. Broken and/or corrupt WMI & RPC connections will also cause significant communication errors, resulting in incomplete or inaccurate inventory results.

A combination of SCCM and MAP will yield the best results, but it may also create a data nightmare, since the result is two data sets that will now include duplicate results (Devices will be inventoried by both SCCM and MAP). You’ll need a good way to compare the results. Method180 uses the tools developed by AssetLabs (www.assetlabs.com) in many of our engagements. Their toolset manages the process of cleaning up the duplication in the data (and provides many other good things).

For all of these reasons, the auditors will want to use a combination of the above approaches along with pulls of data from your Directory through scripts that have been developed by the auditors to validate your tools or not use them at all.

SCCM & MAP: the Best of Both Worlds….. Method180 helps de-mystify it all.

Today, there’s truly no single inventory tool that is a ‘silver bullet’ for SAM. Not only are licensing calculations beyond the scope of many network management products, but even the inventory data may be incomplete. A key driver to this is the edition information you cannot get for products such as SQL Server.

Like Microsoft Office, SQL Server has multiple editions from Express (free) to Enterprise (the most expensive edition). Unfortunately, the specific edition of SQL Server isn’t displayed in the installation title, and as such, the edition isn’t listed in the SCCM inventory. What that means is that your current network management tool probably can’t determine whether SQL Server 2008 is Express or Enterprise. That’s a potentially expensive problem.

Put together, SCCM and MAP are the best of both worlds; SCCM has a ‘copy’ of each device’s inventory (even if it’s not currently on the network) and MAP can get the editions of SQL Server and see the invisible Hosts. If only you could combine the data from these two solutions, then sort, categorize and apply purchase data to determine your effective license position...and this is where Method180 comes in.

To solve these issues, Microsoft offers MAP; it gets the editions of SQL Server as well as the Host’s CPU data. It’s also agentless, which means you can install it on your desktop and quickly inventory your devices. Unfortunately, the agentless approach requires the devices to be ‘on’ at the time of the inventory and is at the mercy of ‘permissions’ and proper configuration every single device.

Method180 uses the data from both tools (and others) in the calculation of usage rights and licenses required. The Product Use Rights (PUR) for each product are then analyzed; and assigned against your entitlements to optimize your licenses.
Chapter 5

Your License Position

It’s important to understand your license position. One of the first steps in creating an Estimated License Position (ELP) and ultimately determining your compliance, is to determine your license position to figure out how many licenses of which specific products and versions you own. The auditors will tell you that this burden is on the customer, meaning that you must go through all your various records, working with your reseller or the Vendors (some provide a site such as the Microsoft Volume License Site – MVLS) and provide them with the counts of licenses that you own.

Your reseller may be able to help you with this process. On the MVLS site for instance, they will show you how to download the Microsoft License Statement (MLS) or they could request your CSI numbers from Oracle and they may even provide records from their systems on what exactly you have purchased. This can potentially create an incomplete picture of your entitlements, however.

Many organizations have made acquisitions or divestitures. If diligence was not done to properly associate the contracts of this M&A activity with the Software Company, you will be missing licenses to which you are entitled. Experience also shows that many divisions in large organizations engage in rogue purchasing on their own through their own local resellers. These licenses may also not show up.

There are also licenses purchased by many organizations that do not show up in the Software Company’s records. These include OEM licenses, licenses purchased through an application vendor (for example, SQL runtime licenses that many organizations purchase from SAP); or licenses where an application vendor has bundled the licenses together with hardware and purchased the licenses on your behalf as part of a complete solution.

Insist that the vendor and the auditor create a License Statement for you. They may have the ability to research their licensing database and provide a more complete License Statement than you can create on your own. Be aware, however, that even this will not be complete, since it will not include OEM or ISV licenses, as mentioned above.

The MLS should be reviewed by your team for accuracy. Microsoft MLS is an Excel workbook that may include many tabs/workbooks. It is important to review these workbooks (and those from other Software Companies).
**Microsoft License Statement (MLS)**

The **Organization Summary Tab**
Review the Organization Summary tab to ensure it represents a complete list of all companies that are owned (or subject to the audit) by you. Ensure that it includes all companies acquired in M&A activity as well. The Software Companies search process may make understanding the names of the companies they are searching for difficult, as this is a list within a cell of Excel. Review the Transaction Summary tab to ensure that divisions that you think have bought licenses on their own show up as actually having purchased licenses.

**License Summary Tab**
The License Summary tab provides a summary of all the licenses found by the Software Company. It outlines any licenses that have active Maintenance on and the total entitlement counts of the version of each product.

The Software Company traces your license entitlements for upgrades based on their records. In other words, they make sure that you have all the underlying licenses for any upgrades that were done in the past, to make a “true” license.
License Agreements Tab

The License Agreements tab lists all the license agreements that have been included in the MLS. Review this in detail to ensure that all agreements that you believe you have purchased against have been included in the MLS.

Transaction Summary Tab

All purchase transactions reported to the Software Company are listed in the Transaction Summary tab. Review this tab to make sure that your resellers have appropriately reported all your purchase orders. In one case, a customer thought they owned more licenses of System Center than were showing in the MLS. They had a purchase order for a Select License that showed a transaction that was not included in the MLS. It turned out that their reseller never placed the order. If Method180 did not review this data, we would never have found the error and the customer would have had no recourse to get this fixed.

Final Thoughts on License Entitlements

The Software Company may think of this as your official receipt for all products purchased. Because it gets populated into the Estimated License Position document, you will want to ensure that it’s accurate. Ensure any licenses that are not identified in the License Statement, such as OEM, are documented (i.e., provide your proof of entitlement), and then include it in the ELP. Note that sometimes the License Statement is created prior to the audit/inventory. If purchases are made after it is created, you’ll need to make sure these are documented and included in the ELP.

Outside of the scope of this document is ongoing license management. Note that keeping the License Statement up to date once it is completed with any net new purchases is a best practice. Method 180 has a service that can assist with this.
Chapter 6

The Estimated License Position

Once the auditors have completed your inventory, the next step is to compile the results. The tool used for this is the Estimated License Position, or ELP for short.

The ELP takes all of the deployment data (Inventory Counts) and provides a view of the number of each product and version deployed then compares that against the number of licenses you own. It will then provide you with a summary of any deltas or overages in license counts.

Microsoft Estimated License Position (ELP)

Depending on the Software Company performing the audit, it may require various tabs or workbooks for every product found during the audit. These workbooks will provide the detailed data behind the inventory, including on which desktop or server a product is installed, details of what users are accessing servers, which management packs are installed, etc. They are very detailed and can contain a large amount of data that needs to be analyzed. One client with whom we recently worked had over 900,000 rows of data in their ELP. And if you didn’t negotiate additional time in the SOW, you only have 15 days to get through all 900,000 line items.

The auditors will provide their summaries within the ELP, but they do not provide any detailed documentation of their findings. This means you are left to determine how they have interrupted your deployment data (an overwhelming task) to validate its accuracy. Experience tells us that the auditors will most likely take a very conservative approach to this.
For example, they may make very high-level assumptions about your use of the technology and your operating environment, and then apply very conservative methodologies to determine the number of licenses required. Here are a few examples that we have recently seen:

- A client that was using SCCM to manage a small subset of their environment had acquired a number of companies over the last three years. One of the companies acquired had been using an old version of SMS that was not used post-acquisition. The old SMS Agent was found on some machines, but was not actively in use. The auditors reported over 5000 devices as requiring licenses that were not actually in use because they found the agent on the desktops.

- An 8,000 person call center company had only 3000 devices, since many employees share desktops. The auditors did not dive deep enough into the data to determine that call center employees did not access servers from anywhere but in the office. They said that 8,000 user licenses were required when a device based licensing model was more cost effective.

- A client purchased a combination of Processor and User licenses from their database vendor. They had analyzed their requirements to determine what was most cost-effective. Since the auditors were not able to show how many users accessed a server, the ELP was presented as if they needed all Processor Licenses—overstating their compliance exposure by 95%.

What’s common in each of these examples is that the client knew that the ELP was wrong, told the auditors this, but they were unable to get them to change the ELP to reflect reality.

Method180’s experience is that the auditors take a very conservative approach to creating the ELP. The call center client above explained that they have 2500 call center agents who only access systems while at work and 500 knowledge workers that have the ability to access from anywhere including their smart phones. In this case the auditors agreed that this was likely, but said the data didn’t provide enough proof for them to make the change. The client was at a loss. The issue was going to cost them almost half a million dollars and they didn’t know what to do.

Many software contracts are trust based. The Software Company trusts that you are licensing their products in accordance with their rules. You are given the right to license software under the assumption that you are acting in good faith. So when negotiating the purchase with the Software Company the call center client purchased licenses on that basis without doing any further investigation.

Under the auspice of an audit, the trust is no longer assumed and the client is bound to provide proof of their claims. This is very difficult to do considering that most clients have never had to do this so they have not documented their usage in any meaningful way to map against how they purchased licenses.

The call center mentioned earlier was only successful at winning their argument after engaging with Method180 to build the proof required by the auditors. Method180 reviewed their Directory and demonstrated how group policy was set up to restrict the access of call center employees. This was not easy to do and took a fair amount of time, as well as a number of iterations with the auditors to prove. In the end, though, not having to pay half a million dollars in audit settlement fees was worth it.

When engaged by an Audit or SAM partner, ensure that you have a Non-Disclosure Agreement (NDA) between the auditor and your organization. You want to ensure that the SAM partner cannot share the results of your ELP with the Software Company until you have reviewed and agreed to the contents of the ELP. Your goal is to ensure that any incorrect assumptions have been adjusted prior to the Software Company seeing the results.
The Estimated License Position

The ELP (or as Oracle calls it, the Server Worksheet) shows all the products installed, the number of installations, the licenses that are owed, and, at the very end, the delta for each product and version. The different parts of the ELP are typically color coded (for instance, grey for licenses, yellow for deployments, blue for adjustments and green for the licensing deltas).

Where the ELP tab gets complicated is usually the blue section for adjustments. Each Software Company uses slightly different versions, so each one may be a bit different, but here are the typical main adjustments:

1. License downgrade rights
2. Virtualization adjustments
3. Adjustments for obsolete or discontinued products
4. License metric changes (for instance, NUP to Processor for Oracle Licenses)

License Downgrade Rights

An example of this is how Microsoft products typically allow for downgrade rights. For example, an Office Professional 2013 license could be used for an Office Professional 2013 installation for or a previous version (e.g., 2007) of Office Professional. Many customers will have entitlements for newer versions that need to be downgraded to cover for older editions installed.

Virtualization Adjustments

Some licenses come with associated virtualization rights. For example, if using Oracle’s Virtualization technology you only require licenses for the host that Oracle is located on, whereas if using VMWare’s virtualization technology all processors for all hosts in the cluster need to be licensed. Virtualization adjustments may be made based on these rights.

Adjustments for Obsolete or Discontinued Products

Some products which may be found on the ELP are no longer commercially available. Adobe has made many acquisitions over the years, so many of these products are no longer available (e.g. Macromedia).

License Metric Changes (e.g., Processor to Cores with SQL Server)

If there’s been a change of license, metric adjustments may be made to adjust the counts based on the new way of licensing. A client that was licensing SQL Server based on the processor metric, may find adjustments to change the way any shortfalls are counted, based on the new licensing metric of cores.

Notes Section

Before the ELP is handed off to the Software Company, it’s important to ensure that you make detailed notes here for any license deltas with which you do not agree. Note why you disagree with the auditor’s findings. When the Software Company receives an ELP without any notes, they may automatically assume that you agree with all the findings within, making it very difficult to negotiate. Much too often, we find clients have not made notes of their disagreements when they had the opportunity to do so.
**ELP Product Workbooks**

Most ELPs created by auditors will have workbooks for every product (although we have come across a few that had no workbooks provided). There will be a great amount of data in the product-specific workbooks—which is how the number of row items for clients reaches hundreds of thousands very quickly. Each product tab will list the device or user associated with the product, the name of the PC/Server, its state (is it active?) and may even go as far to measure when it was last logged onto the network.

It is important to review every single one of these workbooks in detail, make sure that you agree with the findings and check that there are no errors. Since there are so many Software Companies and so many products, we can’t go into the details of each product here, but here are a few high-level pointers Method180 has found to be the most common causes of errors.

*See how licenses are assigned in each product*

In the product tab, one of the columns will identify how many licenses are assigned for a product to that particular server or desktop. Review this and understand the rights for that particular product. It is common for the auditors to not apply rules such as downgrade rights or secondary use rights. Remember the auditor will be very conservative, so it is up to you to point out where they make these errors and to correct them.

*Ensure development and test servers need licenses*

Development and test servers quite often do not need to be licensed the same way as production devices. For instance, since they will likely be covered under the use rights of products such as MSDN, you may not need licenses; or with Oracle, a Named User Model may be more effective than buying processors. Method180 has often found that test and development servers have had licenses applied to them in the ELP by the auditors.

*Watch for duplicate machines or users within the data set*

For even smaller clients, Method180 has found duplicate machines and users included in the user lists or device lists. The auditors quite often overlook these and incorrectly apply two licenses to that user or device. Review these lists and ensure this is not happening.

*Have virtualization rules been optimally applied?*

In the inventory pulls, the auditors will attempt to match a virtual server to the physical host upon which it resides. They will then group all virtual sessions on the same host together. Look at the version of each virtual server and determine what license is most optimal to apply to that server. It’s important to note that different versions of a product will have different virtualization rights associated with a license entitlement (for example, SQL Server 2008R2, 2008, 2005 and 2000 all have different virtualization rules).

*User vs. Device Licenses*

Watch to make sure the license counts have been applied based on the correct licensing metric. For example, Method180 frequently sees products that are licensed by user being counted by device when it is actually licensed by user.
**Non-Licensable Entities Included in Counts**

When reviewing the user lists and device lists for a product, make sure that only licensable entities have been included in the count. Method180 has seen too many ELPs where Meeting Rooms, Mailing Lists, Test Accounts, etc. have been included in the counts.
Chapter 7

Negotiating a Settlement

Now that an ELP has been created, after you’ve made as many corrections as possible with comments in the notes section on areas where you have challenges - your audit partner will hand the ELP off to the Software Company. As difficult as the journey has been to this point, the hardest part is perhaps about to begin.

Let’s make an assumption that the ELP shows a deficiency in licenses, which means you owe money. Let’s also assume that you agree you owe some money but you do not agree with the total amount: you think you owe significantly less than they say. You’ve been frustrated by not being able to come to an agreement with the auditors on a couple of key points.

At this point, when it may seem like weeks have gone by with no changes in the ELP from the auditors, it can feel like a stalemate in a hard fought chess match. You’ve come to the conclusion that the auditors cannot make a decision on the issue and you decide that it is time to engage with the Software Company.

Let’s use the Call Center client we discussed earlier as an example. They agreed that they were short licenses, but they felt it was perhaps just a couple hundred licenses, not thousands of licenses. The auditor’s position was they did not have enough proof to say that the client could license a mix of device and user licenses. The client made notes in the ELP as to why they felt the license shortfall was overstated, and they were feeling pretty good about the outcome.

Their vendor, on the other hand, had other ideas. When the client explained why they felt this was wrong, the vendor agreed with the auditors and held to the finding that the shortfall was thousands of licenses.

After a few weeks and multiple discussions, it appeared that the vendor had heard them. The client was told this needed to be discussed internally with the vendor’s compliance group, since they could not make the decision. It felt like stalemate all over again.

This is what the Call Center Company thought as well until Method180 coached them about the language in their contract. At first they thought we were wrong, but as we continued to explain it to them it became clear.
Let’s explain. In an audit there are multiple participants from the vendor. These include:

- The License Compliance Team
- Technical resources (responsible for selling various product)
- Licensing or contract group (who may not be licensing experts, but are responsible for selling licenses)
- The Sales Team (including your Account Manager and maybe their sales management team)
- Legal (the lawyers)

This means there are multiple different organizations who may have an interest in the findings of the audit, each reporting to a separate manager and many of whom do not report into even the same group.

It is also reasonable to assume that each of these different organizations has a different compensation plan, and that they all get paid differently. Some of them are likely paid based on the revenue that they obtain, others on how happy you are, and still others on business objectives that may be undefined to you (things like deployment levels, product utilization stats, etc.).

So any time a vendor says they need to obtain internal approvals, it’s important to know from whom they are likely going to get that approval. This is because you want to make sure your request is worded in the language of the person to whom they are going to talk.

Our Call Center example revolved around the vendor wanting to base the license requirement on the number of employees. For the client it was simple: they have more than 2x the number of employees as devices, why pay for twice the number of licenses?

It is easy to imagine what types of conversations are going on inside of the vendor. Perhaps, those individuals that speak in terms of revenue hear, “My revenue is being cut dramatically because they aren’t going to buy twice the number of licenses.” Someone who views this in terms of the licensing terms says, “Hold on. Why are we insisting that they purchase something that they don’t need in order to be legal?” And the last group, paid based on client satisfaction, asks, “Why are we making them upset over revenue? Can’t they license how they are asking?”

For the Call Center client, Method180 planned very specific messages that were designed to resonate with each of the different motivations of the members of the audit team. This ensured that any message received would resonate and that we would have the greatest chance for success in getting a counterproposal accepted.
All this planning is key.

**Tips for Negotiating a Settlement**

Stay calm. Know that you followed the steps outlined in this white paper so you are prepared and have all the information that you require.

Do not be pressured into timelines. Your goal is to have a fair and adequate ELP created that reflects your actual use and license requirements. Do not be forced into a settlement that is not accurate due to monthly sales pressures or tactics.

Be prepared. Be ready to research the licensing terms and other claims the vendor makes to provide backup documentation of your claims.

Leverage. Be willing to leverage senior executives within your company.

A well-timed call to the right person at the vendor can be very effective to unblock a stalemate in the process.

Stay focused. Your goal is to purchase only what you need.
Chapter 8

Conclusion and Next Steps

Software Vendors are becoming experts at the audit game. The revenue that comes from these audits is significant. They’re not going to stop.

The number of resources outside of the SAM team that your vendor presents to you can be overwhelming. When you add the fact that each individual may be motivated by a different agenda, companies facing an audit seem to be in a no-win situation.

The best path to success is to level the playing field by engaging an outside expert like Method180. We have the experience, the know-how and the proven ability to speak the language of the vendor to represent your interests in the best, most effective way possible. You need someone like Method180 on your side in order to be successful in defending yourself and to ensure you do not overpay millions of dollars just to settle.

You should also be prepared to invest the time necessary to analyze the vast quantities of data and build valid proof for all of your claims. With a Method180 licensing expert on your team, the burden of work to be done is shared. Let us expertly manage the audit process to achieve the best results, for you!
About the Author

Mike Austin has more than 15 years of experience with enterprise software licensing. He has assisted a wide range of companies, from the Fortune 500 to organizations with as few as 500 employees, with negotiations of Enterprise Agreements (EA), Premier Support Contracts, and Select Agreements. Mike’s extensive experience crosses multiple industries, including financial services, high tech, manufacturing, media, health care, government and retail.

In addition to helping negotiate contracts, Mike assists clients with creating and implementing software asset management processes to prevent over-purchasing of licenses and ensure that terms and conditions reflect actual usage. Through his unique 3-step process, his clients regularly realize savings of 20-40% of their license expenses.

Some of his more recent successes include:

• Helped a global retail company decrease its annual spend by 35% and avoid more than $3M of true-ups by structuring a new site license agreement for server infrastructure

• Saved more than $5M for a global manufacturer by redefining the definition of “qualified desktop” and helping structure a profile-based EA

• Achieved a 50% reduction in the costs associated with a 65,000-seat EA for a global banking client

• Helped a major insurance company save $10M or 35% on their EA agreement by providing a structured negotiation framework

Mike regularly assisted customers in understanding their technology deployments and determining best licensing solutions/pricing options to meet their requirements.
How We Work

Many of our most successful clients have established a retainer agreement with Method 180. This fixed fee allows them to get answers to their day-to-day questions on the complexity of Microsoft licensing in a cost effective manner without having a “meter” running.

Retainer clients have priority access to Method 180’s analyst. They work together to optimize their investment. Since Method 180 maintains familiarity with the licensing requirements of the business, there’s no need for continual reeducation, planning is more effective, and ROI is maximized.

For more information and a free consultation, contact Method 180 at 1-888-978-5129 or info@method180.com