

# Unidentified EXE's

## The Problem - Software Identification Syndrome (SIS)

Today Software Identification Syndrome (SIS) is receiving increasing attention from the Software Asset Management (SAM) industry. Driven by licensing enforcement, federal, state and local regulations (SOX, HIPPA, etc.) and efficient software licensing and maintenance demands, companies can no longer ignore SIS and must find a solution.

Software asset managers, who have not adequately addressed their software identification gaps, should not be blamed. The industry simply has not given them a viable solution. Once Software Identification Syndrome (SIS) is defined and understood, it can be used as a common communications tool to describe its discreet niche in SAM best practices. This allows the industry to create specific, significant solutions for what may be the only remaining gap in SAM.

### What is SIS?

SIS is the persistent, unresolved problem of unidentified EXE files. The typical business computer today contains over 2,500 unique EXE files. Large corporations have millions of unique EXE files in their computer environment, many of them unidentified, representing potential licensing shortages, support issues and undisclosed security risks.

### Examples of why SIS persists

#### False positives

Identifying EXE files outside of the context of their environment (such as "runtime" versions) can result in a belief that you need more licenses than required. This results in over-licensing and the related overpayment of maintenance fees.

#### Publisher header information

Most 32bit EXE files contain "header" information put there by the programmers. Information such as publisher, product name, product version, file version, etc. are available. The problem is that embedded information is inconsistent, inaccurate or insufficient for accurate identification. Microsoft alone has over 100 unique, embedded representations in the publisher field of its EXE files. In addition, 10% or more of the EXE files on any given system do not contain any publisher embedded information.

#### Unique profiles and configurations

In large, multi-national corporations, many individual departments have their own deployment services, policies and procedures. This creates an infinite combination of variables making automated identification based on profiles inaccurate.

#### Application missing from Add/Remove Registry

For example: Business Works, an accounting program, does not make an entry into the Add/Remove Registry. Many other small publishers do not subscribe to the Add/Remove standards dictated by Microsoft. This creates a problem for the tools and service providers that use Windows Add/Remove Registry to determine software installations.

#### Open source, shareware and freeware

Users will install unknown and unique programs that they have used elsewhere. These lesser known programs will not show up on existing standard database libraries.

#### Benefits of SIS resolution

Curing SIS has a cascade of positive results starting with audit simplicity and including:

- Confident negotiations with vendors.
- Better infrastructure control and planning.
- Identification of user installed productivity sapping entertainment applications.



- Regulatory relief from federal, state and local laws.
- Valuable assistance during major corporate events such as mergers and acquisitions.
- Accurate budgeting for system upgrades and migrations.

### **Trade-Offs of the current approaches to SIS**

#### **Do nothing...**

If a company does “nothing” it will avoid creating a new budget item, but the expense of improper SAM still eats away at other budget line items. This hidden cost is sometimes exceeded by the expense of an enforcement audit and the associated costs of potential negative publicity. In corporate events such as mergers and acquisitions, this cost can be measured by delays in negotiations and lowered valuations. These hard metrics can also be matched with loss of productivity because of distraction of IT personnel dealing with these issues.

#### **Develop in-house...**

Another solution is to internally develop a solution. This process generally uses a discovery tool to inventory EXE files then leaves it up to untrained IT staff, with no consistent guidance or rules, to identify software installation based on those inventories of EXE files. This work usually gets a lower priority and is often never completed between scheduled system scans. Although this solution offers internal control of data, the flip side is that the responsibility to complete the task is usually outside of the mission and skill of the organization’s IT and programming staff.

#### **Use a commercially available discovery tool...**

Many organizations start with the commercial discovery tools already in their environments. This approach minimizes disruption to IT departments, but also creates a three foot jump over a six foot ditch. Most discovery tools use a database of known information to identify software installation from EXE files and or other data. This works well for major publishers who comply with add/remove registry and header file standards, but leaves 20% or more EXE files unidentified. The identification of the critical remaining EXE files is often ignored or completed at a significant man power cost. One government agency we know of has a staff of six whose sole job is to identify unknown EXE files. Their work is never completed from one scan to the next. It’s kind of like painting the Golden Gate Bridge, a project that is never ending.

#### **Use of traditional IT...**

Use of traditional consultants offers the confidence of branded third party certification. It also incurs significant costs since much of the unidentified EXE file resolution is completed with crude tools by high priced personnel who don’t specialize in the task of EXE file identification.

#### **SIS specialists...**

As SIS becomes a clear, discreet problem for the SAM industry, we expect to see creative, centralized solutions that avoid the costs of each company re-inventing its own wheel. Centralized SIS solution providers will use trained specialists who can quickly resolve unidentified EXE files. Since SIS specialty firms deal with nothing but SIS, they can afford to build capital intensive software and database solutions that will solve the same issues for every client. They leverage the information learned from one client with the next and so on and so forth.

#### **Costs associated with SIS internal resolution of unknown EXE files**

Let’s do the math for a mid-size company with 5,000 seats. Assuming an average of 2,500 EXE files per workstation, the company will have about 12,500,000 EXE files that need to be identified. Normally, 15% of these files are not identified by standard identification tools such as SMS, Altiris or Eracent, but for this example, let’s assume only 5% of the files are unidentified and need research. Let’s also assume that it takes an average of two minutes to find and confirm the identity of each unknown EXE file. This means over 20,000 man hours are required to accurately and completely secure the unidentified files. Needless to say, if you figure the fully loaded total cost of employment at \$45.00 an hour, the total cost grows to almost a million dollars and becomes a significant expense of funds and man power.

#### **Future trends in SAM and SIS**

The regulatory demands on corporate governance will continue to grow, compromising companies that choose the “do nothing” alternative. Merger and acquisition events will continue in a low interest rate environment, putting pressure on IT personnel to come up with verified third party information on software assets and compliance risks.

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