


Optimize your SaaS spend
with accurate usage data

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Why is optimizing SaaS spend important?

- Gartner says that at least 25% of purchased SaaS software is un-used.
 - "Shelfware – The CIO's Missing Key Metric and Cost Cutting Imperative" – Gartner, May 2020



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Subscription licensing gives you more control

- User assigned – ability to transfer licenses
- Ability to scale up and down.



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But you need to know actual usage

"Come on Adobe... I get why you don't want us to know when expensive licenses aren't being used because we'll cancel them and you'll lose money... but really! In this day and age I thought transparency was the way to a customer's heart 😊"

Adobe community message board (2022)






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But you need to know actual usage

Computer	User	Company	Product	Edition	Version	Last Used Time (By User)	Last Used Days Ago (By User)
		Adobe Systems	Fireworks	None	CS6	6/6/2016	2127
		Adobe Systems	Edge Animate	None	2015	4/8/2018	1455
		Adobe Systems	Photoshop	None	2015	7/19/2018	1354
		Adobe Systems	Creative Cloud All Apps	Team	2021	9/5/2018	1305
		Adobe Systems	Photoshop	None	CS3	8/10/2018	1299
		Adobe Systems	Premiere Pro	None	2018	10/2/2018	1276
		Adobe Systems	Lightroom Classic	None	7	11/28/2018	1221
		Adobe Systems	Lightroom	None	10805	12/12/2018	1194
		Adobe Systems	Photoshop	None	CS5	2/1/2019	1156
		Adobe Systems	Photoshop	None	CS6	3/12/2019	1118
		Adobe Systems	Premiere Elements	None	14	3/11/2019	1118
		Adobe Systems	Premiere Pro	None	2017	2/26/2019	1115
		Adobe Systems	Creative Cloud All Apps	Team	2022	4/11/2019	1075






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How can usage be tracked today?

- Software publisher portals
- Microsoft Endpoint Manager Configuration Manager (formerly SCCM)
- Single Sign-On (SSO)
- Network traffic
- SAM tools

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Software publisher portals

- Portals accessible by administrators
 - Purchase licenses
 - Assign licenses
- Examples
 - Adobe Admin Console
 - Microsoft Volume Licensing Service Center (VLSC)
 - Microsoft Business Center




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Software publisher portals

- Pros
 - Great if usage data is available, and accurate.
- Cons
 - Usage data may not be provided or detailed enough.
 - Not provided: all Adobe products.
 - Not provided: Microsoft Visio, Project, Visual Studio, Power BI
 - Not provided: many SaaS and local applications
 - Oracle Virtual Box, Java
 - JetBrains
 - Atlassian
 - Etc.




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Microsoft Endpoint Manager Configuration Manager (formerly SCCM)

- Tool used by operations to deploy software and patches
- User must create software metering rules
 - File Name, Original File Name, Version, Language
 - Identify specific .exe to target for usage.
- Run report wait 6, 9, 12 months for results.
- How many applications can be monitored at the same time?




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Microsoft Endpoint Manager Configuration Manager (formerly SCCM)

- Pros
 - Everyone has Microsoft Endpoint Manager Configuration Manager
- Cons
 - Requires set up of discovery rules.
 - Must identify correct file to measure usage for each application.
 - Must wait for 6, 9, 12 months for results.
 - Limited number of files can be monitored at the same time.
 - Rinse and repeat.

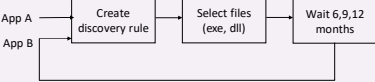



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Microsoft Endpoint Manager Configuration Manager – usage discovery process

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Single Sign-On (SSO)

- Single authentication provides access to multiple applications.
- Use SSO logs to determine application usage.




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Single Sign-On (SSO)

- Pros
 - Many organization are using SSO
- Cons
 - Accuracy & Completeness
 - Does not cover non-SSO apps
 - Logins ≠ Usage
 - No indication of which app is being used if part of a package.
 - M365, Adobe CC




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Network traffic

- Firewalls with Cloud Access Security Broker (CASB) capabilities
- Identifies SaaS applications by analyzing network traffic
 - Application signatures.
 - Application protocols.
 - Heuristics.
- Generally used to allow or block applications.




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Network traffic

- Pros
 - Many organizations are using advanced firewalls with this feature
- Cons
 - Accuracy and completeness
 - Problems in identifying applications based on network traffic
 - Manual effort
 - Viewing and analyzing log files.
 - Mapping signatures to applications.
 - Other subscription licenses not based on network access
 - Adobe, Microsoft, ...




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SAM tool A – agent based

- Identify executable files to monitor
 - “Key files” in an MSI package.
 - Add/Remove programs registry settings.
 - Manual Mapper to create registry entries to identify executables.
- Wait 6, 9, 12 months for results.
 - Data aggregated by week, not by day.
 - Executable may not identify software package use (Adobe, Microsoft)




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SAM tool A – agent based

- Pros
 - ???
- Cons
 - A lot of continual manual efforts.
 - Usage reported on wrong application.
 - Per-user installed software not discovered.
 - Suite applications not reported as used when components used.
 - Usage not tracked for non-key MSI component files.
 - Wait 6, 9, 12 months for results.




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SAM tool B – browser extension

- Software application installed on popular web browsers
 - Chrome, Edge, Firefox
- Discover browsing history




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SAM tool B – browser extension

- Pros
 - SaaS apps which use a web browser.
- Cons
 - Fairly easy to avoid or remove history
 - Incognito mode, Extensions that remove history
 - GDPR requires browser history data be anonymized
 - Possible push-back from employees.
 - Many SaaS apps do not use a web browser.
 - Adobe, Microsoft, ...




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SAM tool C – agent based

- Automated discovery of last used times of all apps
 - No manual set up.
- Results available immediately.
 - No need to wait for 6, 9, 12 months for results.
- Patent (US8473607B2) based on forensic techniques
- Currently applicable to Windows only.



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SAM tool C – agent based

- Pros
 - Automated - no manual set up steps required.
 - Results available immediately – no need to wait for 6, 9, 12 months.
 - Covers all apps which have a footprint on the host machine.
 - Adobe, Microsoft (O 365, Visio, Project, Power BI), Oracle (Java, OVB), JetBrains, Zoom....
- Cons
 - Does not cover apps which have no footprint
 - Avalara, Bloomberg, Capterra, Momentum, ServiceNow, Zoominfo, Zylo....
 - Non-Windows environments.



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SAM tool C – example Adobe usage

Computer	User	Company	Product	Edition	Version	Last Used Time (By User)	Last Used Days Ago (By User)
		Adobe Systems	Fireworks	None	CS6	6/6/2016	2127
		Adobe Systems	Edge Animate	None	2015	4/30/2018	1405
		Adobe Systems	Photoshop	None	2015	7/19/2018	1354
		Adobe Systems	Creative Cloud All Apps	Team	2021	9/5/2018	1305
		Adobe Systems	Photoshop	None	CS3	8/10/2018	1299
		Adobe Systems	Premiere Pro	None	2018	10/2/2018	1276
		Adobe Systems	Lightroom Classic	None	7	11/28/2018	1221
		Adobe Systems	Lightroom	None	10885	12/10/2018	1194
		Adobe Systems	Photoshop	None	CS5	2/1/2019	1154
		Adobe Systems	Photoshop	None	CS6	3/12/2019	1118
		Adobe Systems	Premiere Elements	None	14	3/11/2019	1118
		Adobe Systems	Premiere Pro	None	2017	2/26/2019	1115
		Adobe Systems	Creative Cloud All Apps	Team	2022	4/11/2019	1075



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SAM tool C – example MS Project usage

Computer	User	Product	Edition	Version	License Type	Last Used Time (By User)	Last Used Days Ago (By User)
		Project Online	Professional	2019	cloud user	12/5/2018	1171
		Project Online	Professional	2019	cloud user	1/21/2019	1142
		Project Online	Professional	2019	cloud user	6/10/2019	1022
		Project	Professional	2010	device	12/4/2019	838
		Project Online	Professional	2019	cloud user	12/2/2019	836
		Project Online	Professional	2019	cloud user	12/5/2019	836
		Project	Professional	2019	device	7/15/2020	622
		Project Online	Professional	2019	cloud user	8/17/2020	589
		Project Online	Professional	2019	cloud user	10/19/2020	525
		Project Online	Professional	2019	cloud user	10/29/2020	516
		Project Online	Professional	2019	cloud user	11/5/2020	509
		Project Online	Professional	2019	cloud user	1/21/2021	431



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SAM tool C – example MS Visio usage

Computer	User	Product	Edition	Version	License Type	Last Used Time (By User)	Last Used Days Ago (By User)
		Visio	Premium	2010	device	4/5/2014	2877
		Visio	Premium	2010	device	4/2/2015	2552
		Visio	Professional	2013	device	3/12/2017	1542
		Visio	Standard	2013	device	8/12/2018	1293
		Visio	Premium	2010	device	12/11/2018	1204
		Visio	Professional	2013	device	1/11/2019	1172
		Visio	Professional	2019	device	1/29/2019	1154
		Visio Online	Plan 2	2019	cloud user	1/24/2019	1148
		Visio	Professional	2013	device	5/4/2019	1059
		Visio Online	Plan 2	2019	cloud user	5/12/2019	997
		Visio Online	Plan 2	2019	cloud user	8/17/2019	955
		Visio	Professional	2013	device	8/20/2019	951
		Visio Online	Plan 2	2019	cloud user	8/29/2019	941
		Visio Online	Plan 2	2019	cloud user	11/4/2019	875
		Visio	Premium	2010	device	12/17/2019	832




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SAM tool C – example OVM Extension Pack usage

Computer	User	Company	Product	Version	Last Used Time (By User)	Last Used Days Ago (By User)
Oracle			VM VirtualBox	6	11/24/2021	125
Oracle			VM VirtualBox Extension Pack	6		
Oracle			VM VirtualBox	6	10/20/2021	140
Oracle			VM VirtualBox Extension Pack	6		
Oracle			VM VirtualBox	6	11/5/2020	509
Oracle			VM VirtualBox Extension Pack	6		
Oracle			VM VirtualBox	6	2/13/2020	737
Oracle			VM VirtualBox Extension Pack	6		
Oracle			VM VirtualBox	5	10/12/2021	148
Oracle			VM VirtualBox Extension Pack	5		
Oracle			VM VirtualBox	6	1/7/2021	397
Oracle			VM VirtualBox Extension Pack	6		




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Software usage data is critical

- Significant cost savings by optimizing SaaS software spend.
- Usage is base for optimizing SaaS and other subscription license spend.
- Needs to be automated, accurate, and up to date.
- Single method may not meet all your requirements
 - Software publisher portals
 - Microsoft Endpoint Manager Configuration Manager
 - Single Sign-On (SSO)
 - Network traffic
 - SAM tools



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Belarc company

- Over 1,800 customers worldwide
 - Autodesk, EPA, Federal Aviation Administration, NASA, Patent & Trademark Office, Department of State, Travelers Insurance, US Air Force
 - Many long term >10 years
 - Located in 42 countries
- Eight US and Worldwide Patents
- Founded 1997, privately owned



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Questions and contact us

Request our white paper – “Optimizing your SaaS spend with accurate usage data”

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