SAM Monthly Best Practices Webinars

Session 4: Metering and usage in In Flexera One / FNMS

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Agenda

- Last session pointers and answers to questions
- News
- Managing Metering and Usage in FlexNet Manager Suite
  - Various types of usage
  - How usage is collected and stored
  - What is needed to have reliable usage
  - How usage can be used: optimization reports and reclamation
  - Examples of extensions usage collection or license keys collection

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Last Session: Everything about Oracle in FNMS!

- **Useful pointers**
  - Recording and PowerPoint:
    - https://community.flexera.com/t5/Events-and-Webinars/Recording-and-Presentation-of-the-October-Monthly-SAM-Best/ba-p/210587/jump-to/first-unread-message
- **Answers to questions:**
  - Can the new Agent (2021r1) be used within an FNMS on prem 2020r2 - or do you see compatibility problems?
    - Backward compatibility is always tricky and not official
    - That said, the way the agent works is that in generates NDIs that augment with more features (Oracle Middleware data for instance). The backend cannot ingest the data but the importers don't include it. Recent agent on older backend generally works but must be tested
  - wrt Oracle soft partitioning, FNMS calculates on the vcenter 5 rule. Is that going to change to the vcenter 6 rule or at least allow control by a configuration setting
    - The Oracle Optimization reports include what if analysis on soft partitioning rules
    - Most customer actually use the old rules in their consumption counts
    - There is no short-term plan to allow in the license configuration to pick up a soft partitioning level
  - Those oracle reports are already with the release 2020r2 or is it only with the 2021 release ?
    - They have been released in 2021R1 and 2021R1.1 will be present in 2022R1 in April 2022
    - However, reports have been released in the community
      - https://community.flexera.com/t5/FlexNet-Manager-Knowledge-Base/FNMS-Oracle-Optimization-Reports-and-vCenter-Soft-Partitinonng/ta-p/163149
      - https://community.flexera.com/t5/FlexNet-Manager-Knowledge-Base/Oracle-Inventory-Quality-Troubleshooting-Custom-Report/ta-p/185205
  - Would it be possible to receive the slideshow, when i click the slide option it comes back blank: presentations are posted after the session
  - I may have missed this. When are the report to be available for on premise customers
    - On premise can download the solution from the community (see above)

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News

- **Flexera One 2021 R1.3 planned for early December (SQL Optimization reports)**
- **FNMS on Premise: next release: 2022 R1 in April 2022**
- **Java recognition on Unix in ARL (with FNMS 2021 agent): November 19th 2021**

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Introduction to metering / usage

- Interesting blog post: https://community.flexera.com/t5/FlexNet-Manager-Blog/Application-usage-metering-using-the-FlexNet-inventory-agent/bc-p/146047#M216
- What metering is
  - Last used date
  - More sophisticated (hours per week / month etc.)
  - … on Windows
- Where metering comes from
  - SCCM
  - FlexNet Inventory (usage agent, Oracle inventory)
  - Office 365 Portal (online usage)
- What metering do we need?
  - Last used date is enough
  - Desktops and Oracle options… otherwise, not sure of the interest for server applications
- Metering and Recognition…
- Extending metering (on premise)

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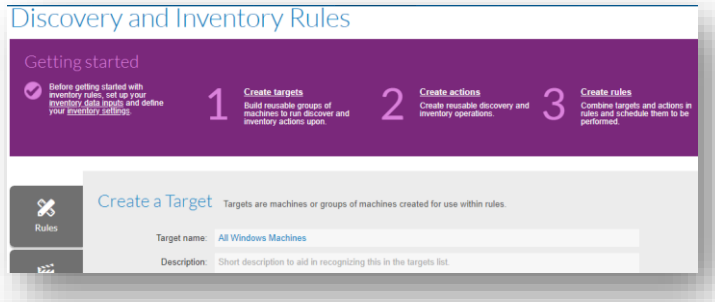
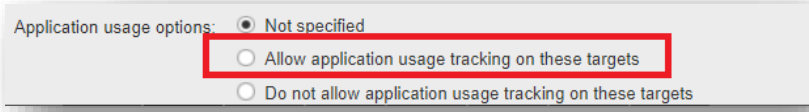
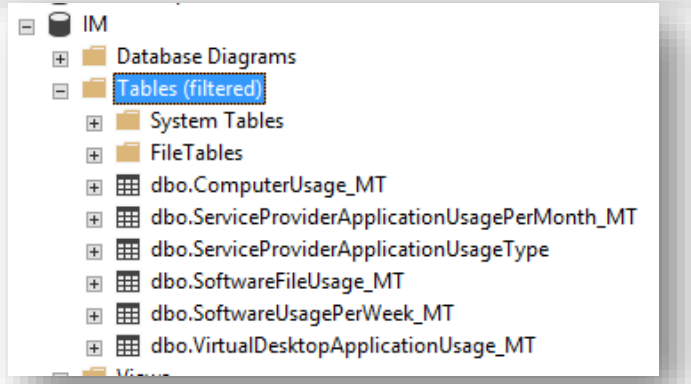
Installed application usage and pre-requisites

Where metering comes from: Flexera agent

- Needs to be activated for metering (either in a target or in mgssetup.ini)
- Can collect on Windows and Unix (MacOS for instance)
- Last used date, sessions, in focus sessions (last used date is the easiest)
- A metering agent monitors all executables (installed through WMI packages only) and installer evidences usage (must be activated prior to the 2020R1 version)
- Usage information is imported into Inventory Manager Database (aggregated per week, per month for file and installer)
- Inventory Import into FNMSCompliance updates the existing records
  - Update of existing records to avoid creating too many records (importedInstalledFileEvindenceUsage and ImportedInstalledInstallerEvidencesUsage tables). These are aggregated usage again
  - The installation will build Last Used Date will be the latest of last used dates
- Limitations
  - For performance reasons, not all files are monitored, all file monitoring can be activated (see embedded document below)
  - InstallerEvidences usage can be misleading if the installed applications did not register correctly their installation path in registry







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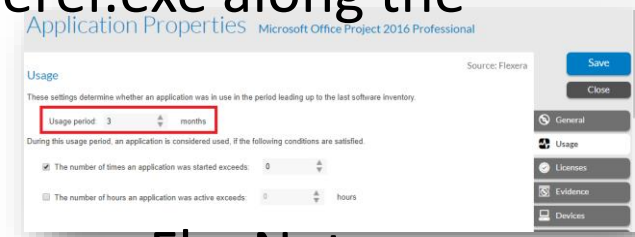
Where metering comes from: SCCM

- Catches last used date most of the time
- Usage metering (to get sessions details) must be set application per application
- The “RecentlyUsedApps” table contains the aggregated rows of usage containing installer and file information on the same records with last used date, number of sessions
- The SCCM import will create both file and installer evidences from these rows. Notice that some usage record contain sometimes inconsistent data (iexploerer.exe along the “Microsoft Project” installer evidence information.
- SCCM seems to retain forever the usage data
- SCCM data is imported into the FNMSCompliance tables the same way as FlexNet Inventory Manager data
  - However, only the last 3 months are imported by default, or the “usage period” set in the Application details usage tab. At the beginning of a project, could be extended
  - However, the installation last used date in FNMS keeps being updated: a last used date in FNMS can be 10 years old…



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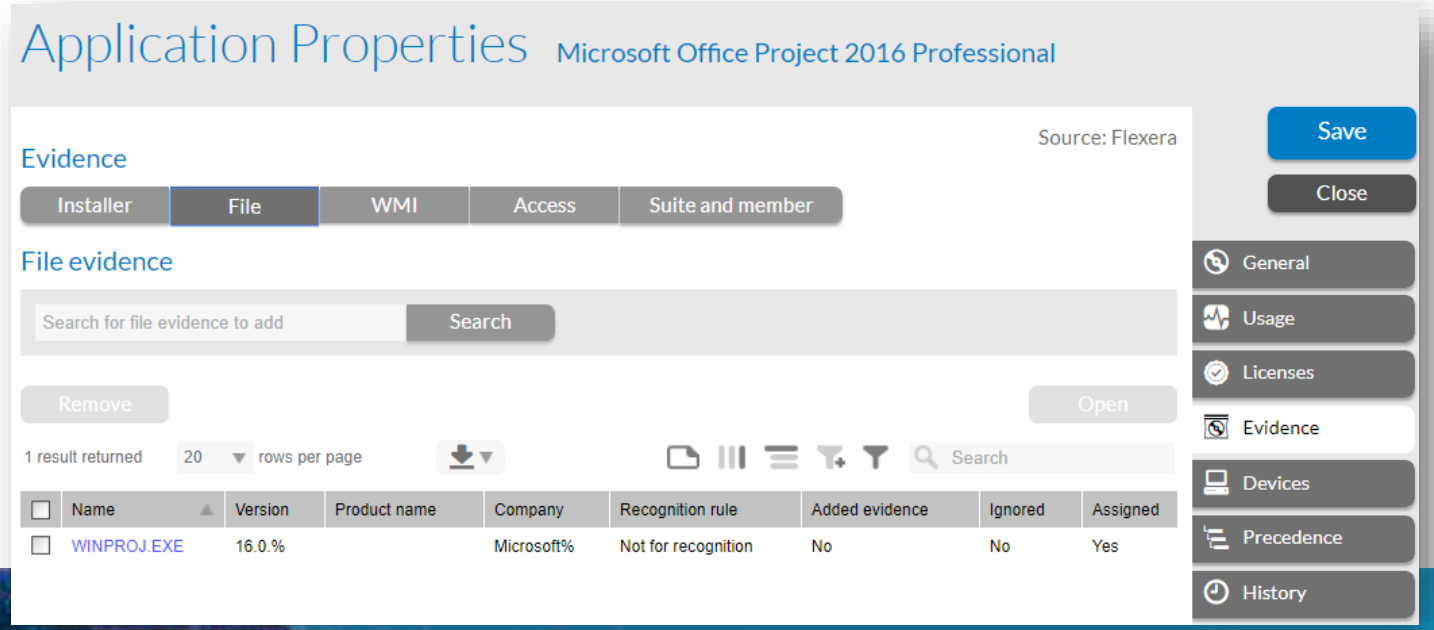
Metering and file evidences in Application recognition

- Applications are recognized in FNMS through file AND installer evidences
- 90% of the time in Windows, the installer evidences only is used… the file is « not for recognition »… just here for metering
- In below case:
  - Winproj.exe does not contain edition
  - If the « Microsoft Project Professional 2016 » installer evidences is installed AND winproj.exe has a last used date of yesterday, FNMS will set yesterday as a last used date
  - Side effect: IF only file usage comes in and the application is not linked to any file evidence, no usage will be captured



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Limitations

- File usage is collected for a subset of the files
  - WMI packages
  - Excludes C:\Windows (file excluded by default)
- It is however possible to extend (with risk of augmenting the usage data generation). See “possible extensions” slide.
- Installer Evidence was not collected by default before FNMS 2020R1
- An installer evidence only recognized application will not use any file usage
- Before FNMS 2020R1, 64 bits system installer evidence usage was not correctly collected
- Conclusion: while usage is extremely useful (and correctly managed in FNMS) and can help deciding on applications removal or subscriptions downgrades, it must be carefully assessed at the beginning of a project. Test it to trust it!

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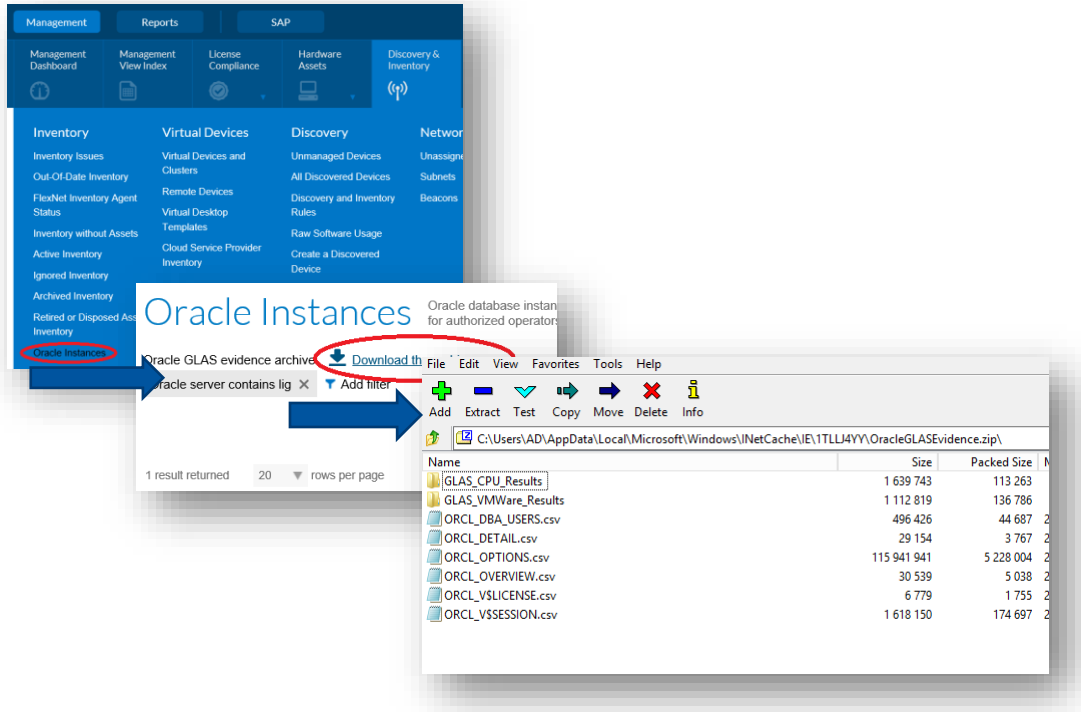
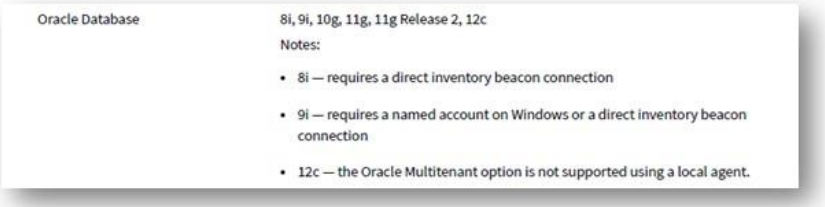
Other types of usage

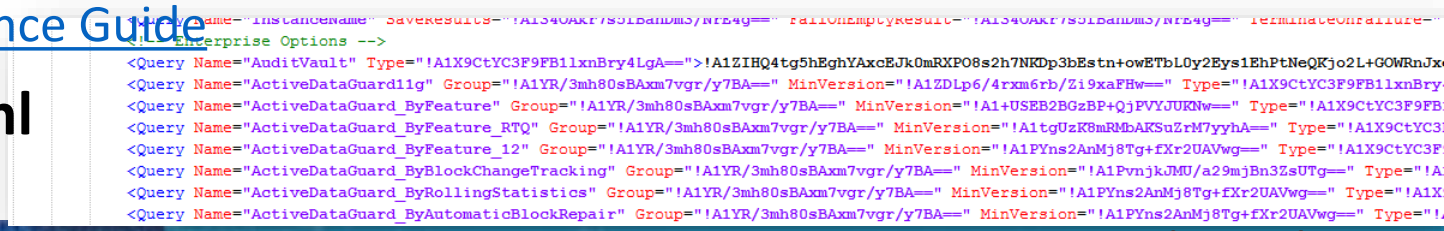
Oracle Options usage

(agent / beacon)

- **Oracle LMS (GLAS) Verified:**
  - The raw inventory collection is verified
  - Data in the zip file you can fine in the Oracle Instances screen (let's have a look)
- **Various types of inventories**
  - By Beacon:
    - servers through listeners or **AWS RDS instances**
  - Agent. Agent recommended for on prem and PaaS
- **Prerequisites**
  - Beacon: adapted to old versions (8i, 9i)
  - Windows Server:
    - OS Authentication must be enabled
    - LocalSystem account part of the Ora_dba group
  - More information in the System Reference Guide
- **The query is in InventorySettings.xml**
  - The rules can be updated by content







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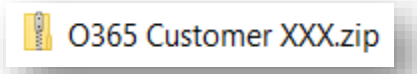
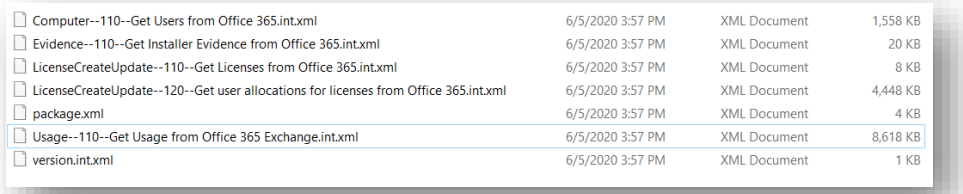
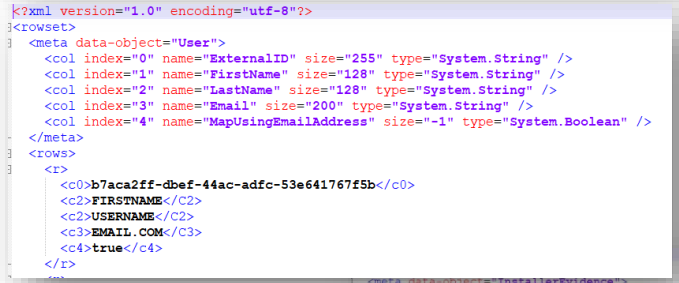
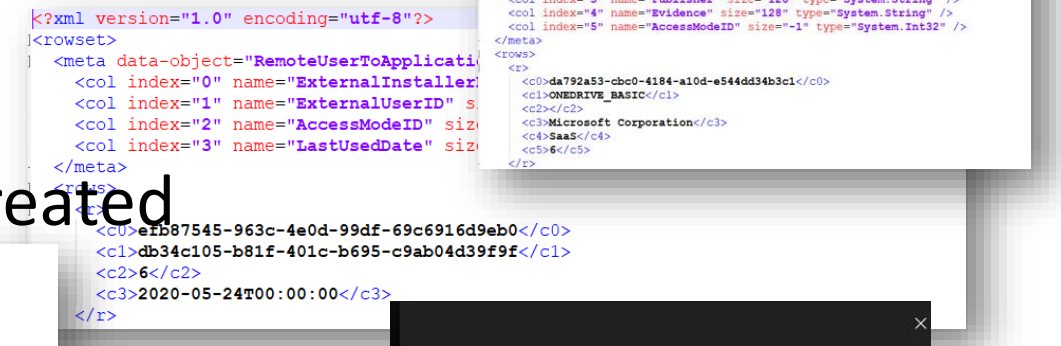
Microsoft 365 Usage

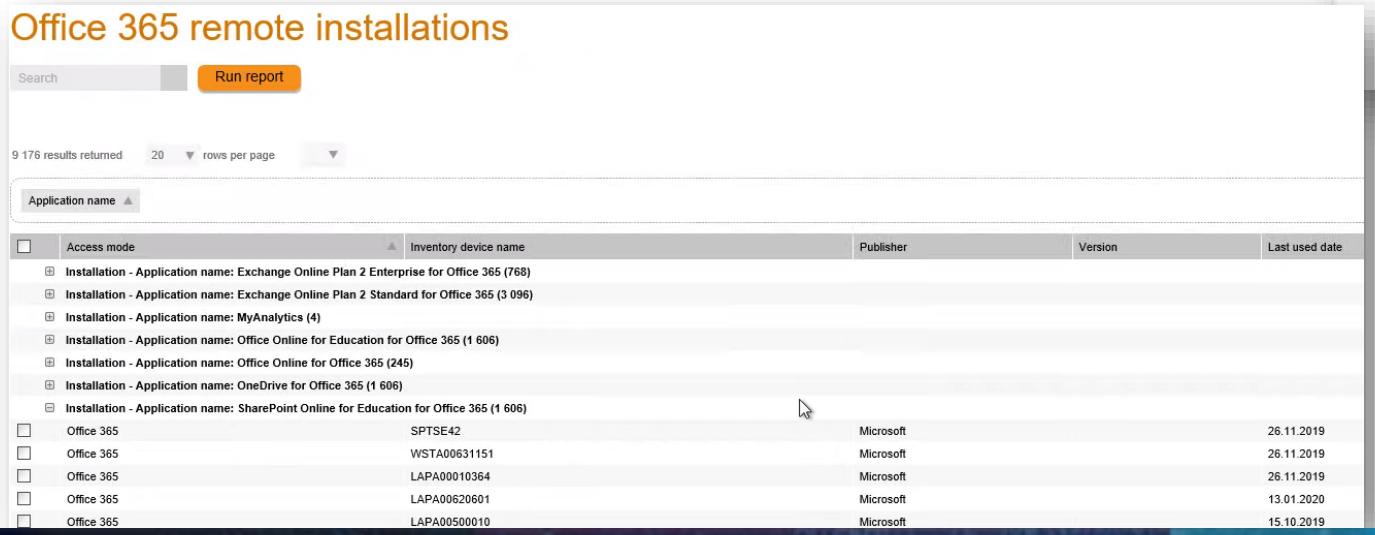
- Various files are generated (logic.ps1)
- Get Usage From Office 365
  - Accessed (Online) application evidence
  - By Which User
  - When
- Make sure user data is not obfuscated!
- Installed applications with usage will be created











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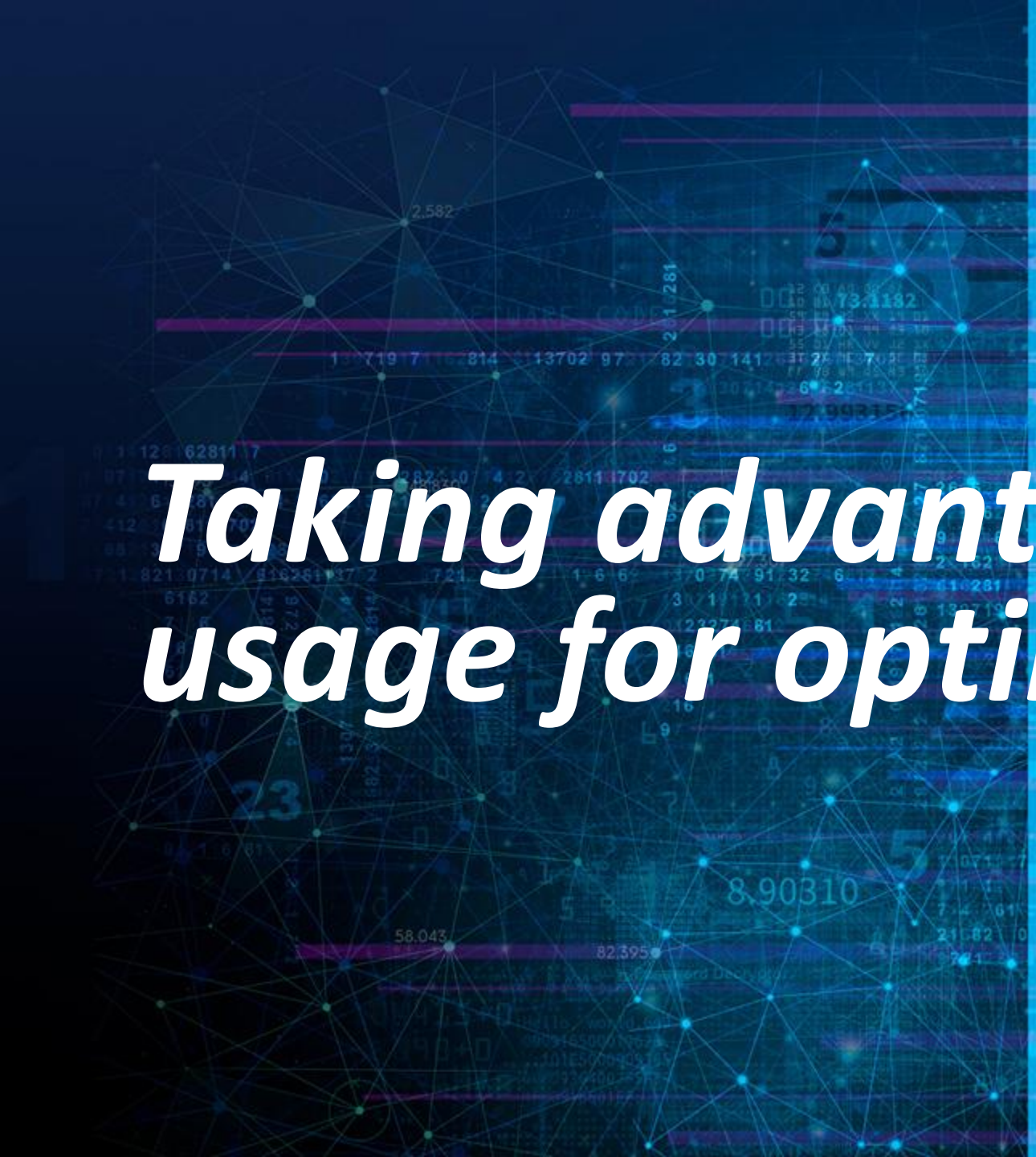

Taking advantage of usage for optimization

Once you trust usage… it is useful!

- Unused application will trigger a decision for uninstallation / subscription downgrade
- Screens and out of the box reports showing usage
- Optimization reports (SQL Report for on prem customers)
  - Adobe optimization report
  - Microsoft 365 Optimization
- Integration for automated removal
  - Native integration with App Broker (reclaimation)
  - Custom integrations with SCCM

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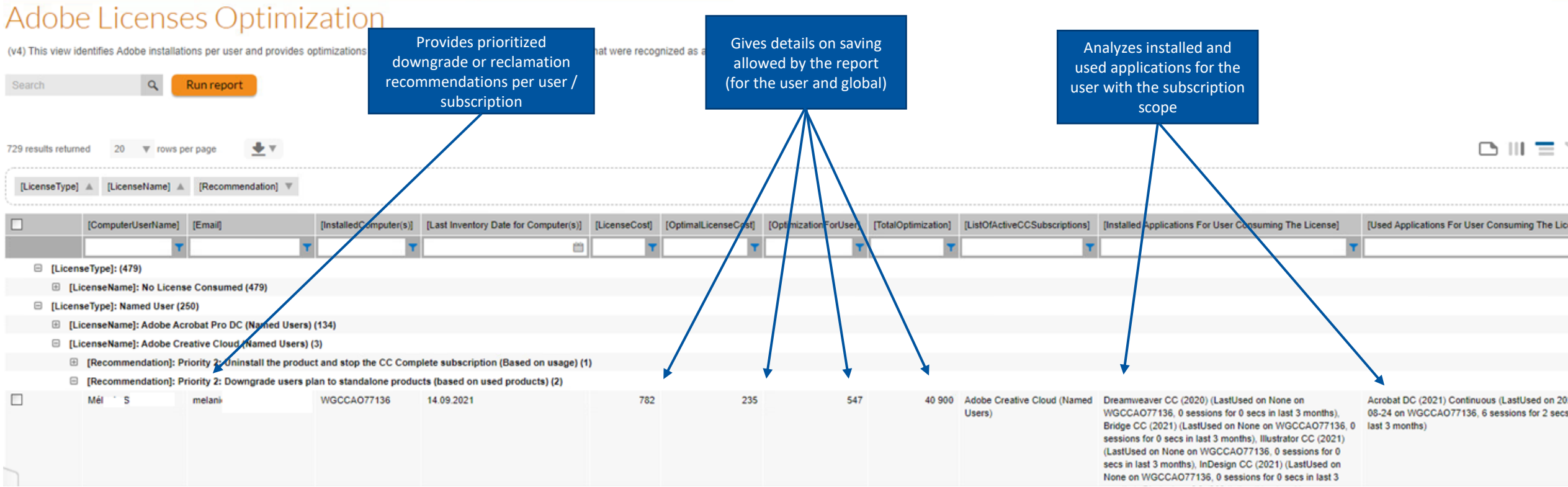
Adobe Optimization and importers

- On Creative Cloud, you can save money
  - Automate import of Creative Cloud Subscriptions: see Adobe Subscriptions Optimization Report & Adobe Portal Users importer
  - Use the Adobe optimization report to downgrade users or stop subscriptions



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Office Optimization report

Microsoft - Office Licenses Optimization

(v3) This view identifies Office installations per user and provides optimizations recommendations. It also identified the products that were recognized as a suite.

Search | Run report

107 results returned | 20 rows per page

[ComputerUserName]	[LicenseName]	[LicenseCost]	[OptimalLicenseCost]	[OptimizationForUser]	[TotalOptimization]	[LicenseType]	[Recommendation]	[ListOfActiveMicrosoftSubscriptions]	[Location]	[Coporate Unit]	[Cost Center]	[Installed Applications For User Consuming The License]	[Used Applications For User Consuming The License]
Adria Wiley	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5)	APAC/Tokyo, Japan	Technical Support	3000 - Engineering and Support	Office 365 2013 Professional Plus (Computer006965)	Office 365 2013 Professional Plus (LastUsed on 2020-09-16 on Computer006965)
Roanna Reese	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5), Visual Studio Enterprise MSDN with SA	USA/Itasca, IL	Technical Support	3000 - Engineering and Support	Office 365 2013 Professional Plus (Computer007146), Office 365 2016 Professional Plus (Computer007146)	Office 365 2013 Professional Plus (LastUsed on 2020-09-16 on Computer007146), Office 365 2016 Professional Plus (LastUsed on 2020-09-16 on Computer007146)
Cameron Clayton	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5), Visual Studio Enterprise MSDN with SA	APAC/Tokyo, Japan	Technical Support	3000 - Engineering and Support	Office 2010 Professional Plus (VMHost00986), Office 365 2016 Professional Plus (Computer006984)	Office 2010 Professional Plus (LastUsed on 2020-09-16 on VMHost00986), Office 365 2016 Professional Plus (LastUsed on 2020-09-16 on Computer006984)
Ray Long	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5)	USA/Itasca, IL	Technical Support	3000 - Engineering and Support	Office 365 2016 Professional Plus (Computer0012009)	Office 365 2016 Professional Plus (LastUsed on 2020-09-16 on Computer0012009)
Louis Burt	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5)	USA/Itasca, IL	Solution Engineering	2000 - Sales	Office 365 2016 Professional Plus (Computer007090), Office OneNote 2016 (Computer007090)	Office 365 2016 Professional Plus (LastUsed on 2020-09-16 on Computer007090), Office OneNote 2016 (LastUsed on 2020-09-16 on Computer007090)
Kylie Robertsen	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5)	EMEA/Maidenhead, UK	IT	1000 - Corporate	Office 365 2016 Professional Plus (VMHost004517)	Office 365 2016 Professional Plus (LastUsed on 2020-09-16 on VMHost004517)
Albert Duran	AcmePortal Office 365 (Plan E1)	80.4				Named User		AcmePortal Office 365 (Plan E1)	USA/Itasca, IL	IT	1000 - Corporate	Office Online for Office 365 (WIN10-END)	
Rhoda Watkins	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5)	APAC/Bangalore, India	Engineering and QA	3000 - Engineering and Support	Office OneNote 2016 (Computer008180), Office 365 2016 Professional Plus (Computer008180)	Office OneNote 2016 (LastUsed on 2020-09-16 on Computer008180), Office 365 2016 Professional Plus (LastUsed on 2020-09-16 on Computer008180)
Angelica Campbell	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5), Visual Studio Enterprise MSDN with SA	APAC/Bangalore, India	Engineering and QA	3000 - Engineering and Support	Office OneNote 2016 (Computer008310), Office 365 2016 Professional Plus (Computer008310)	Office OneNote 2016 (LastUsed on 2020-09-16 on Computer008310), Office 365 2016 Professional Plus (LastUsed on 2020-09-16 on Computer008310)
Madeson Ratliff	AcmePortal Office 365 (Plan E5)	700	380	320	30,340	Named User	Downgrade to E3: Power BI is not installed	AcmePortal Office 365 (Plan E5), Visio Pro 365 Online (Plan 3)	USA/Itasca, IL	IT	1000 - Corporate	Office 365 2016 Professional Plus (Computer008557)	Office 365 2016 Professional Plus (LastUsed on 2020-09-16 on Computer008557)
Patience Medina	AcmePortal Office 365 (Plan E5)	700	80	620	30,340	Named User	Downgrade to E1: only E1 applications used	AcmePortal Office 365 (Plan E5)	USA/Itasca, IL	IT	1000 - Corporate	Office Online for Office 365 (VirtualMachine0011288)	

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Extending usage collection and WMI info collection

Details on usage collection and possible extensions

Extending FNIM Usage Collection

- The attached document
  - Introduces the metering in FNMS
  - Explains how to extend the usage data collection to include
    - All files
    - Installer evidences
- A similar approach can be used for Registry key collection (future session)
  - The attached solution explains how to collect Autocad license keys and build a report that shows the registry keys on computers (it queries the Inventory Manager database)

Autodesk license keys collection

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