

SAM Monthly Best Practices Webinars

*Session 17: Allocations and Exemptions
for Optimal License Consumption*

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Agenda

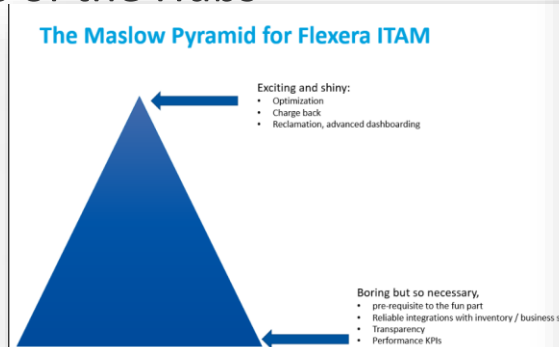
1. Last session's pointers and answers to questions
2. News
 1. Updates in the Best Practice Hub
 2. ITAM / FNMS 2022R2.1
3. Allocations and Exemptions for Optimal License Consumption
 1. Business context
 2. License priorities
 3. Allocations / Exemption design
 4. Use cases: Adobe subscriptions (from AD), Windows Server Optimization
 5. Tips and tricks
 6. To come: Intelligent License Allocations and Exemptions

Last Session: Windows Server and CIS Optimal License Position in in 1 hour!

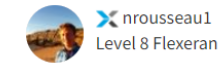
- Useful pointers
 - Recording and PowerPoint: [here](#)
- Answers to questions:
 - Would it be possible to adjust the optimized number for VMs in a VM Host to determine whether we should use CIS standard or datacenter? sorry if I missed this.
 - I insisted at the beginning of the demo of the “Price Per right (per core)” of the licenses. The report has default values (that contain the typical price ratios that will influence the thresholds). The license computes “references licenses” (see how they are computed in the doc). You can then set overridden price if you want to force the price.
 - Is there any way for the report to reflect a TIME element to the costs?
 - For example, if our underlying purchase for a CIS license covers 3 years, then the USD amounts in the report is reflecting cost over 3 years. For another product or license, the underlying purchase might be structured based on 1 year, so in that case, the report would be reflecting the cost for 1 year. So is there any kind of logic to build into any cost reporting that would take situations like this into account and "normalize" across the cost across a standard unit of time?
 - I would use a yearly price (like for TCO: subreption cost or perpetual license cost / 4 + yearly maintenance
 - Will the report for CIS be canned or will it be documented for us to build? To include how to create the restriction rule?
 - The Windows Server Optimization reports are present in 2022R1 and 2022R2 (flat) have extensive documentation. The [pptx documentation](#) describes in detail the 3 approaches, finally, the [Windows Server and SQL Server Optimization reports KB](#) (for on prem customers) contains now the per VM licensing and a SQL script for automated allocations. Upgrade to 2022R2 to enjoy intelligent restrictions, SAM Optimization Hub and all reports!

News

- ITAM 2022 R2.1 Released 25th / Feb 1st
 - Creation of a new “allocation reason”
 - Enhancement of the VMs Inventory Gaps From vCenter report (last known state, VM type, device name columns)
 - Recognition of JBoss by 2022R2.1 agent
- ITAM 2022 R2.2
 - 03/01
 - Will include
 - The Trends for the SAM Optimization Hub
 - More reports of the Operations Hub
 - Is Server column in inventory screens, Cluster in Apply allocations... screen
- The “[Best practice Hub](#)” gives many pointers to existing best practice and visibility on the 3 coming Hubs. New link to SAM Best practices calls, new refreshed information and screenshots of the Hubs
- Please check if you received the
 - Flexera November ITAM Newsletter



Flexera ITAM Best practice information available in Flexera Community



13 14 3,390

Apr 19, 2022 02:40 AM

This is all about sharing and applying best practices

You may have seen here and there interesting KB articles, using the powerful customizations possibilities of FNMS to provide extensions to the out of the box value for reporting or automations... The issue is that the articles are spread and unless you know what you look for you may miss some interesting information.

The purpose of this post, that will be extended over the time, is to provide you with a "SAM Best Practices Hub", a single pane of glass to understand and use the published solutions and the coming features: SAM Optimization Hub in 2022 Q3, SAM Operations Transparency Hub in Q4 2022, a SAM Data Transparency Hub in 2023... where these best practices will be progressively incorporated.

The solutions are addressing both ends of the "SAM Maslow Pyramid" (from bottom to top) and are anticipating where Flexera goes with SAM:

Towards a SAM Operations Hub: transparency and KPIs on operations (*Planned for 2022 Q4*)

Let's start with the foundation: there are key questions that any SAM Manager must have answers to before even thinking about compliance or optimization... This structure anticipates the *SAM Operations Hub* that will provide KPIs and answers to these questions

Can I trust my inventory?

Are my inventory import system tasks successful?

This should be the first check of the day. [The system tasks](#) screen (*Out of the box*) (Only show last run = Yes, Status = failed) will give the right data and the logs.

Are my beacons reporting correctly?

Beacons are key components of the ITAM architecture that transfer all inventory and discovery files run inventory tasks, schedule business imports, upload logs... A beacon could stop reporting due to the Beacon Engine Service being stopped, the upload scheduled task disabled, authentication issues (agents can't connect to the Beacon inventory web service and upload NDI files...).

The [Beacons](#) screen (*Out of the box*) gives the list of beacons with status, pending upload files data. Each beacon detail record gives detailed upload status.

Is my inventory exhaustive? Does vCenter report VMs that are not inventoried?

[Virtual Machines Inventory Gaps from vCenter](#) report catches the VMs reported by vCenter imports but not inventoried with an agent.



Allocations & Exemptions for Optimal License Position

Agenda

1. Business context
2. License priorities
3. Allocations / Exemption design
4. Use cases: Adobe subscriptions (from AD), Windows Server Optimization
5. Tips and tricks
6. To come: Intelligent License Allocations and Exemptions

Business Context: SAM is complicated!

- Licensing is reach in complexities
 - Overlapping Licenses
 - Multiple ways of licensing applications on devices (Oracle NUP / Proc, SQL Server-CAL / Cores, IBM DB2 for test servers...)
 - Multi server bundles
 - The bundling doesn't work across servers (would be too dangerous)
 - Complex licensing / optimization rules
 - Non prod servers when accessed only by users with MSDN subscriptions for Microsoft applications
 - Optimization based on VM densities on hosts (Windows Server) or clusters (RHEL)
- Need to help the Reconciliation algorithm, influence
 - With allocation **or** exemptions



Licenses / License Management / All Licenses

License Properties

 Windows Server Datacenter Core with SA

<input type="checkbox"/>	Device	Device role	Exemption reason	Allocation reason
<input type="checkbox"/>	azure-01	Production	Covered by AHB	None
<input type="checkbox"/>	azure-02	Production	Covered by AHB	
<input type="checkbox"/>	azure-04	Production	Covered by AHB	
<input type="checkbox"/>	Cluster167139			
<input type="checkbox"/>	VMHost0022	Development		
<input checked="" type="checkbox"/>	VirtualMachine004765	Production	Covered by MSDN	
<input type="checkbox"/>	VMHost003525	Production		High Density Clust
<input type="checkbox"/>	VirtualMachine004690	Production		High Density Clust

License Priorities

- Documented in the [License Consumption Priorities](#) section
 - Allocations and exemptions are on top

The following table summarizes the default priorities for license consumption:

Note: The restrictions defined on the license (on the **Restrictions** tab of the license properties) are always checked, before consuming any license entitlement.

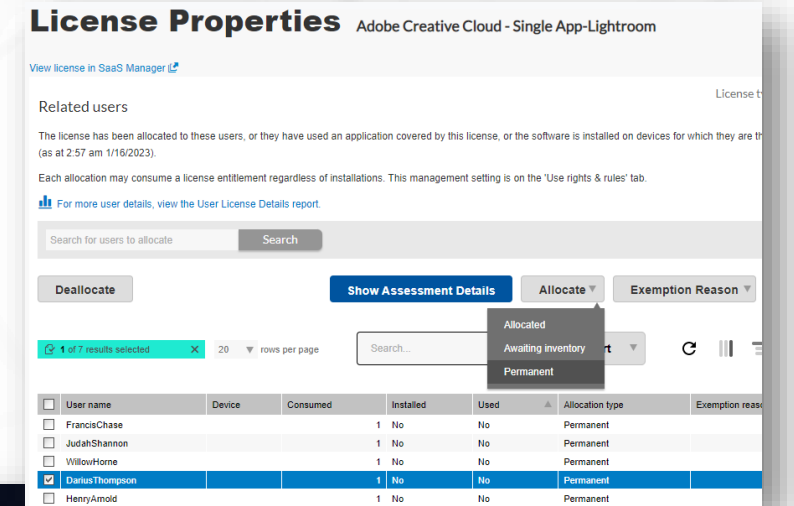
Priority	Description	Comments
1	Allocations	The individual allocations to inventory devices (on the Consumption tab of the license properties)
2	Group assignments for multi-product licenses	<p>The group assignments defined on the license (on the Group assignment tab of the license properties).</p> <p>Example: If you have assigned the <i>IBM WebSphere Application Server Liberty Core</i> multi-product license (which includes <i>IBM WebSphere Application Server</i> and <i>IBM DB2 Workgroup Server</i> products) to the <i>Quality Control</i> group, there are two effects when both of these applications are installed on the same computer:</p> <ul style="list-style-type: none">▪ The users or devices that belong to this group consume the entitlements of the <i>IBM WebSphere Application Server Liberty Core</i> multi-product license ahead of any other user (that is, typical group assignment prioritization to resolve competition for a given license).▪ With the default priorities listed here, the users or devices that belong to the assigned group consume the multi-product license instead of two single-product licenses — even when there are also overlapping group assignments to those single-product licenses. <p>For more information on multi-product licenses, see Multi-Product License.</p>
3	Multi-product licenses	<p>A multi-product license, for which one or more <i>primary</i> products match the installation records for a device (or user, depending on license types), by default is consumed in preference to several single-product licenses covering the same set of products.</p> <p>When there is a choice of multi-product licenses that could apply to multiple products installed on a device, IT Asset Management consumes the license with the matching number of primary products and then the least difference between:</p> <ul style="list-style-type: none">▪ The number of products in the multi-product license definition, and▪ the number of products installed on the target device.

Allocations and Exemptions Design

- Allocation forces the link between a device and the consumed license
- An allocation can be
 - Allocated (cso triggered if device is installed for the license)
 - Permanent (always consumes)
 - Awaiting inventory (sort of “license reservation”)
- You can force the consumption while allocating (overridden consumption) at the “level where consumption sits”. (host, device etc.)
- A new “Allocation reason” column exists (2022R2.1)
- Not available in all license types
- An exemption is an allocation that consumes 0

Setting up Allocations and Exemptions

- From Screens (License consumption tab or Device / user License tab)
 - + Exemption By Role
- From the “Apply allocation and exemptions” (very powerful)-Demo
- With the Business Adapter Studio
 - Use the data translation



License Properties Adobe Creative Cloud - Single App-Lightroom

View license in SaaS Manager

Related users

The license has been allocated to these users, or they have used an application covered by this license, or the software is installed on devices for which they are the user (as at 2:57 am 1/16/2023).

Each allocation may consume a license entitlement regardless of installations. This management setting is on the 'Use rights & rules' tab.

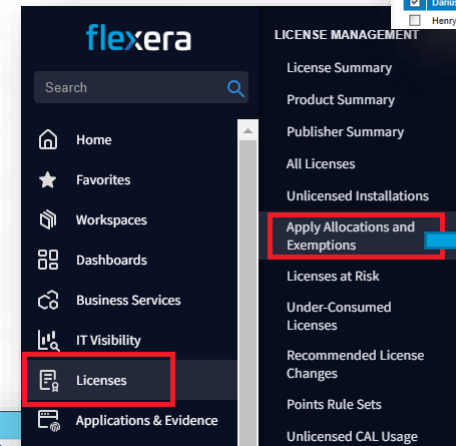
For more user details, view the User License Details report.

Search for users to allocate Search

Deallocate Show Assessment Details Allocate Exemption Reason

1 of 7 results selected 20 rows per page Search...

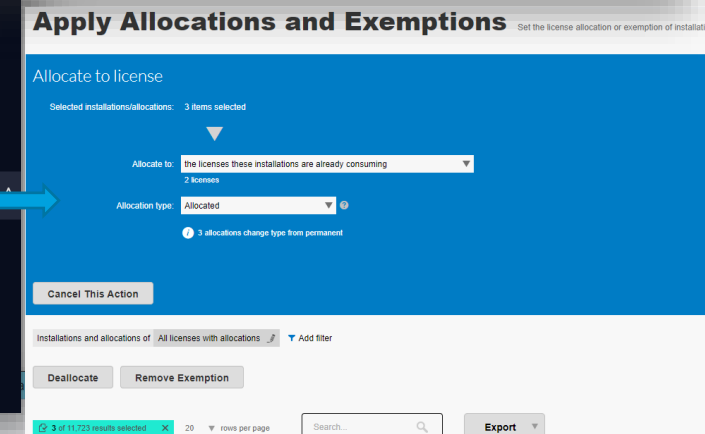
User name	Device	Consumed	Installed	Used	Allocation type	Exemption reason
FrancisChase			1 No	No	Permanent	
JudahShannon			1 No	No	Permanent	
WillowHorne			1 No	No	Permanent	
DariusThompson			1 No	No	Permanent	
HenryArnold			1 No	No	Permanent	



flexera LICENSE MANAGEMENT

- License Summary
- Product Summary
- Publisher Summary
- All Licenses
- Unlicensed Installations
- Apply Allocations and Exemptions**
- Licenses at Risk
- Under-Consumed Licenses
- Recommended License Changes
- Points Rule Sets
- Unlicensed CAL Usage

Home Favorites Workspaces Dashboards Business Services IT Visibility Licenses Applications & Evidence



Apply Allocations and Exemptions Set the license allocation or exemption of installations

Allocate to license

Selected installations/allocations: 3 items selected

Allocate to: the licenses these installations are already consuming 2 licenses

Allocation type: Allocated

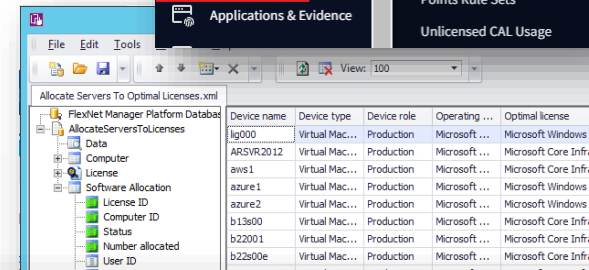
3 allocations change type from permanent

Cancel This Action

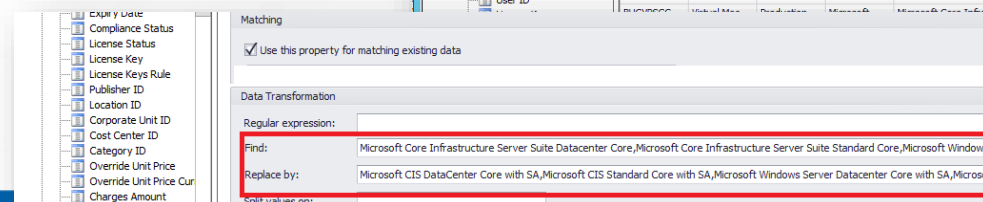
Installations and allocations of: All licenses with allocations Add filter

Deallocate Remove Exemption

3 of 11,223 results selected 20 rows per page Search... Export



Device name	Device type	Device role	Operating ...	Optimal license
fig000	Virtual Mac...	Production	Microsoft ...	Microsoft Windows Serve
ARSVR2012	Virtual Mac...	Production	Microsoft ...	Microsoft Core Infrastruc
aws1	Virtual Mac...	Production	Microsoft ...	Microsoft Core Infrastruc
azure1	Virtual Mac...	Production	Microsoft ...	Microsoft Windows Serve
azure2	Virtual Mac...	Production	Microsoft ...	Microsoft Windows Server Stand
b13a00	Virtual Mac...	Production	Microsoft ...	Microsoft Core Infrastructure Se
b22001	Virtual Mac...	Production	Microsoft ...	Microsoft Core Infrastructure Se
b22s00e	Virtual Mac...	Production	Microsoft ...	Microsoft Core Infrastructure Se



Matching

Use this property for matching existing data

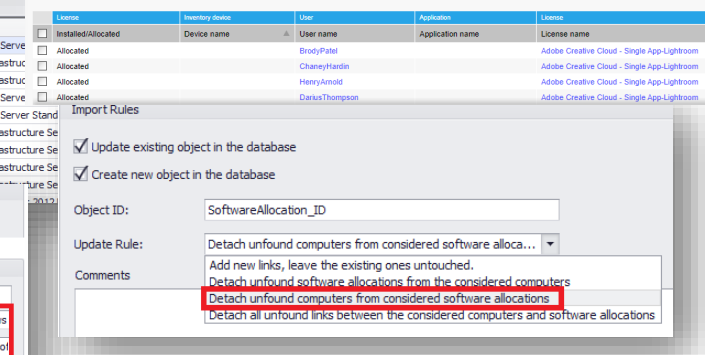
Data Transformation

Regular expression:

Find: Microsoft Core Infrastructure Server Suite Datacenter Core,Microsoft Core Infrastructure Server Suite Standard Core,Microsoft Windows

Replace by: Microsoft CIS DataCenter Core with SA,Microsoft CIS Standard Core with SA,Microsoft Windows Server Datacenter Core with SA,Microsoft

Split values on:



Import Rules

Update existing object in the database

Create new object in the database

Object ID: SoftwareAllocation_ID

Update Rule: Detach unfound computers from considered software alloca...

Comments: Add new links, leave the existing ones untouched. Detach unfound software allocations from the considered computers. Detach unfound computers from considered software allocations. Detach all unfound links between the considered computers and software allocations.

Use Cases (demo)

- **Any** named user license
 - Case of [Adobe Subscriptions](#)
- MSDN
 - Current design of SKU is questionable (will be stopped by March)
 - Create MSDN covering Visual Studio (+ eventually Office Pro Plus)
 - Create Microsoft Server licenses with the exemption by role (if ALL non prod servers are accessed by users with subscriptions)
 - Eventually, create a license covering all products using the intelligent restriction on non prod server of eligible data centers
- Cross server bundle (SQL Server for SCCM database or DB2 for ILMT)
 - Exempt db the servers
 - Or allocate sever with supplementary application to the license that will cover it even in absence of primary product.
- Windows Server Optimization. See January [SAM Best Practice Webinar](#) (approach 2)

Tips and tricks

- Avoid conflicting allocations or allocations and exemptions!
 - You will be back to a “random coverage across licenses” situation
 - Exemptions will always win, the “other license” will never consume
- In case of “100% of devices need to be allocated”, use the “Intelligent restriction” introduced in 2022R2
 - Prod / non prod (IBM, Tibco)
 - Proc / NUP (Oracle)
- Prefer the Business Adapter approach, use REST APIs calls => Update through Business Adapters if you are Cloud
- Prefer the “Permanent” allocations to the “Allocations always consume” license option
- Document and justify what you do!

Coming Next: Intelligent Allocations and Exemptions

- Same approach as Intelligent License Restriction
 - Use of a report (device or user) to define a target
 - Target is assessed for each reconciliation
- Will combine with addition of the Active Directory Groups to reporting
 - Allows to report on license consumptions based on authorization groups
 - Opens to great possibilities for application users' licenses

Thank you!

About Flexera

Flexera delivers SaaS-based IT management solutions that enable enterprises to accelerate digital transformation and multiply the value of their technology investments. We help organizations ***inform their IT*** with definitive visibility into complex hybrid IT ecosystems, providing unparalleled IT insights that allow them to seize technology opportunities. And we help them ***transform their IT*** with tools that deliver actionable intelligence across an ever-increasing range of dimensions to effectively manage, govern and optimize their hybrid IT estate.

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