To get a list of current allocations, go to the HUB , select the "Monitoring apps" stream and select the "License monitor" application

[![Analyze\_Audit\_License\_Allocations\_QMC\_MonitoringApps\_LicenseMonitor.png](images/Analyze\_Audit\_License\_Allocations\_QMC\_MonitoringApps\_LicenseMonitor.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-guide/master/docs/license/images/Analyze\_Audit\_License\_Allocations\_QMC\_MonitoringApps\_LicenseMonitor.png)

From the 'App Overview' select 'New Sheet'

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_App\_Overview\_NewSheet.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_App\_Overview\_NewSheet.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_App\_Overview\_NewSheet.png)

Give the new sheet a title of "Current License Allocations"

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_App\_Overview\_NewSheet\_Title.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_App\_Overview\_NewSheet\_Title.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_App\_Overview\_NewSheet\_Title.png)

Click on the 'Current License Allocations' new sheet and then click the 'Edit' button on the toolbar

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_EditSheet.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_EditSheet.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_EditSheet.png)

Add a table from the chart library onto the empty sheet

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable.png)

Click the 'Add Dimension' button

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_AddDimension.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_AddDimension.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_AddDimension.png)

Select 'User ID'

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_AddUserID.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_AddUserID.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_AddUserID.png)

Next, on the right side, under 'Dimensions' select 'Add Column' and choose 'Allocated Access Type'

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_AllocatedAccessType.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_AllocatedAccessType.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_AllocatedAccessType.png)

Uncheck 'Include Null Values'

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_ExcludeNullValues.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_ExcludeNullValues.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_ExcludeNullValues.png)

Next, on the right, click 'Sorting' and drag the 2nd column 'Allocated Access Type' above the 1st column 'User ID'. This will group the table by 'Allocated Access Type'

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_Resort.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_Resort.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Add\_Resort.png)

A sample result is as follows. You can make additional changes as you see fit to make it clear which userIDs have an allocated access type.

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Resorted.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Resorted.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_AddTable\_Resorted.png)

Click 'Done' on the toolbar

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_Done.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_Done.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_Done.png)

The sample final result is as follows:

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_CurrentLicenseAllocationsCOMPLETE.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_CurrentLicenseAllocationsCOMPLETE.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_CurrentLicenseAllocationsCOMPLETE.png)

### 2 - Add license allocations for users that are being denied access <i class="fas fa-dolly-flatbed fa-xs" title="Shipped | Native Capability"></i>

We can re-use the Qlik Sense "License Monitor' monitoring application for this need by duplicating and customizing the 'UserDetail' sheet.

Go to the HUB , select the 'Monitoring Apps' stream and open the License Monitor

[![Analyze\_Audit\_License\_Allocations\_QMC\_MonitoringApps\_LicenseMonitor.png](images/Analyze\_Audit\_License\_Allocations\_QMC\_MonitoringApps\_LicenseMonitor.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-guide/master/docs/license/images/Analyze\_Audit\_License\_Allocations\_QMC\_MonitoringApps\_LicenseMonitor.png)

Select the 'User Detail' sheet

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_Open\_UserDetail\_Sheet.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_Open\_UserDetail\_Sheet.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_Open\_UserDetail\_Sheet.png)

Press 'Duplicate' in the top right corner to make a copy of the sheet. We can customize the copy to our needs

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate.png)

Delete the highlighted objects below from the copied sheet

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_DeleteObjects.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_DeleteObjects.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_DeleteObjects.png)

Then resize the 'User License Session Summary' object and the 'Unused Access' object as follows. Also, drag a 'Filter Pane' object onto the left side of the sheet

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane.png)

Click 'Add Dimension'

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane\_AddDimension.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane\_AddDimension.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane\_AddDimension.png)

Type in 'User Access Last Used' and select 'User Access Last Used'

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane\_AddDimension\_UserAccessLastUsed.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane\_AddDimension\_UserAccessLastUsed.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_UserDetail\_Sheet\_Duplicate\_ResizeObjects\_AddFilterPane\_AddDimension\_UserAccessLastUsed.png)

As shown below, click in an unused area at the top of the sheet to select the sheet, and then enter 'Inactive License Allocations' for the sheet title

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations.png)

Select the 'Done' button at the top

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_DONE.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_DONE.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_DONE.png)

The 'Unused License Allocations' will show a list of users who have never logged in . These are candidates for license allocation removal.

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_UnusedLicenseAllocations.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_UnusedLicenseAllocations.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_UnusedLicenseAllocations.png)

Use the 'User Access Last Used' filter pane to select old dates . This will filter the 'User License Session Summary' to show users that last logged in some time ago. Pick dates the represent > 6 months ago or > 1 year ago to see whose become inactive. Users that last logged in some time ago are candidates for license allocation removal

[![Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_LastUsedLicenseAllocations.png](images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_LastUsedLicenseAllocations.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_License\_Monitor\_InactiveLicenseAllocations\_LastUsedLicenseAllocations.png)

### 3 - Downgrading Professional allocations to Analyzer allocations for users who are not exercising their 'professional' capabilities <i class="fas fa-dolly-flatbed fa-xs" title="Shipped | Native Capability"></i>

In this section, we import a customized Qlik Sense application that we can reload to reveal which users who have a 'Professional' license allocation that are not currently leveraging the 'Professional' capabilities.

From the QMC, select 'Apps'

[![Optimize\_License\_Allocations\_QMC\_Start\_Apps.png](images/Optimize\_License\_Allocations\_QMC\_Start\_Apps.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_QMC\_Start\_Apps.png)

Select the 'Import' button at the bottom of the page

[![Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import.png](images/Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import.png)

Browse to the 'License Optimization' app and select 'Open'

[![Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import\_LicenseOptimization.png](images/Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import\_LicenseOptimization.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import\_LicenseOptimization.png)

Select 'Import'

[![Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import\_LicenseOptimization\_Import.png](images/Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import\_LicenseOptimization\_Import.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_QMC\_Start\_Apps\_Import\_LicenseOptimization\_Import.png)

Go to the HUB and open the 'License Optimization' app from 'My Work'

[![Optimize\_License\_Allocations\_HUB\_Open\_LicenseOptimization.png](images/Optimize\_License\_Allocations\_HUB\_Open\_LicenseOptimization.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_Open\_LicenseOptimization.png)

From the Compass button menu in the top left, select 'Data Load Editor'

[![Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_DLE.png](images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_DLE.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_DLE.png)

Once the data load editor loads, ensure you have read access to use the following built in Qlik Sense REST Connections from the hub. You may need to add a security rule in the QMC to provide explicit access from the HUB ( by default, access is only granted from the QMC)

[![Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_DataConnections.png](images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_DataConnections.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_DataConnections.png)

Have you deployed ODAG (OnDemand App Generation) in this environment ?

If YES, then enter a comma delimitted list of App IDs of the ODAG Template Apps in the environment. The License Optimization will recommend downgrading a Professional to Analyzer if the only content the professional owns is a ODAG detailed app copied from the template. This is because ODAG can be initiated by Analyzer users.

If NO, please skip this step and go to the next step

[![Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_ODAGApps.png](images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_ODAGApps.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_ODAGApps.png)

Select 'Load Data' in the top right

[![Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_LoadData.png](images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_LoadData.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_LoadData.png)

Once the app reloads, select 'Analysis' at the top

[![Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Analysis.png](images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Analysis.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Analysis.png)

The summary sheet opens first.

It will show candidates for license removal and license downgrade

[![Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Summary.png](images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Summary.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-

guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Summary.png)

As in section 2 above, when filtering on 'User Access Last Used', it will show users who have not logged since the selected time period as well as users with a license allocation who have never logged in

[![Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Summary\_Filtered.png](images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Summary\_Filtered.png)](https://raw.githubusercontent.com/qs-admin-guide/qs-admin-guide/master/docs/license/images/Optimize\_License\_Allocations\_HUB\_LicenseOptimization\_Summary\_Filtered.png)

It also shows professionals who currently do not own any non-ODAG generated Apps or App Objects and could be candidates for license downgrade.