

Global Aviva Anaplan Centre of Excellence

Model size Analysis Report and online backups

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INTRODUCTION

While developing different scalable applications, I came across a series of challenges :

- Model size was fluctuating quite a lot during design and implementation and when scaling up application. Model size can have a big impact over the running costs and it became evident this area had to be looked further.
- Some estimated model sizes are over 20Gb (this means up to 60Gb across environments, if they were all up and running). [Note: we have 3 environments: Dev, Test and Prod]
- Due to requirements/design, some models have over 80 modules. Keeping multiple live copies of the model as backup/reference wasn't an option, particularly during the first phase of development
- Sometimes we had to look back on archived models to retrieve specific formula on specific modules, comparing them or restoring them back.
- Often the model owners (contributors, not model builders) do not appreciate the impact of model size increase as model size analysis isn't available (only the total size is available)
- A dynamic report that can be published on a dashboard could highlight opportunities to reduce model size and optimise model sparsity

THE IDEA

Model size Reports

- Model size Dashboard created
- Developers & Administrator able to easily report on model size, by date and module
- Intuitive graphical layout

Model size Analysis

- Easily compare and analyse increase in size
- Identify trends/spikes
- Identify area of improvements
- Set and report model size threshold/allowance vs Current usage

Live backups, Comparison & Assessment

- Highlight vital health checks (eg unused/unrequired modules)
- Facilitate formula/settings comparison over time periods
- Facilitate restore of specific settings without the need of rolling back/affecting data or having to refer to full backups

Further opportunities & Developments

- Syncing process is very easy and straightforward, but can be further automated
- Provide additional features eg what-if scenarios on key lists predicting model size increase/de-crease
- Easily deploy as a standard “add-on” across all applications
- Utilise HL MI in central model (eg use to retrieve charging info?)

Model size Dashboard Screen

High level analysis/comparison on dates eg model growth in Gb and %

Export/Import to .csv and .xls (for admins and developers)

Full module report ordered by size

Model Size Report

NOTE: Dashboard instructions at the bottom of the page

	Parent	CODE
11 Feb 2018	KU	
08 Feb 2018	AU	
24 Jan 2018	KU	
All		

Select data for model size comparison:

Day A selection: 08 Feb 2018

Day B selection: 11 Feb 2018

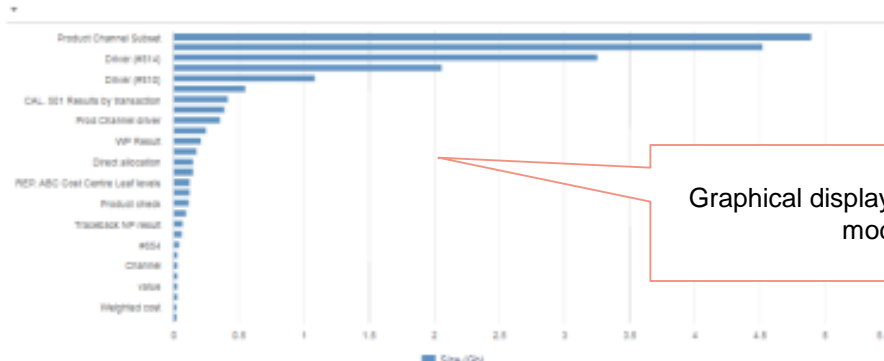
Variance analysis

Change in size (Gb): 0.78

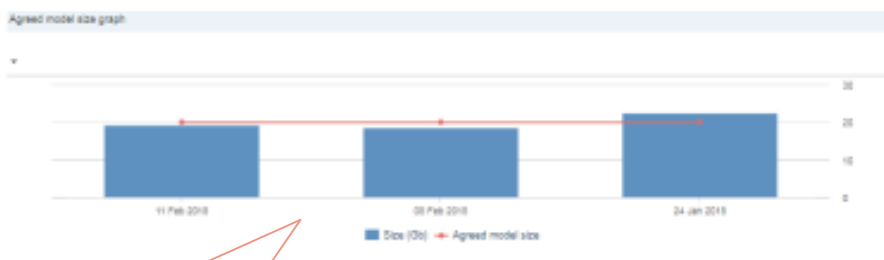
Change in size (%): 4.05%

Select date to Report on: 11 Feb 2018

Module	is Referenced by	Size (Gb)
CAL_210 Product subset allocation to Leaf	CAL_210 Aggregated allocation result	4.99919 Gb
CAL_301 Transaction result CRT	ALD_102 Allocation to Activities - ALD 1	3.420899 Gb
CAL_210 Aggregated allocation result	ALD_102 CC by ACT after reallocation	3.250899 Gb
CAL_205 Fund allocation to Leaf	CAL_210 Aggregated allocation result	2.652755 Gb
CAL_210 Product CH subset allocation to Leaf	CAL_210 Aggregated allocation result	1.927999 Gb
CAL_202 P1 allocation to leaf	CAL_210 Aggregated allocation result	0.832873 Gb
CAL_210 Allocation to all leaf	CAL_210 Aggregated allocation result	0.413503 Gb
CAL_204 Bilty allocation to Leaf	CAL_210 Aggregated allocation result	0.392899 Gb
CAL_201 Direct Drivers	CAL_201 Direct allocation to leaf	0.361699 Gb
CAL_201 P2 allocation to leaf	CAL_210 Aggregated allocation result	0.254332 Gb
CAL_201 Channel allocation to Leaf	CAL_210 Aggregated allocation result	0.192347 Gb
CAL_202 Channel allocation to Leaf	CAL_210 Aggregated allocation result	0.212327 Gb
CAL_202 Direct allocation to leaf	CAL_210 Aggregated allocation result	0.192347 Gb
SUB_101 Product Subset map	SUB_102 Product Subset Driver Master	0.182027 Gb
SUB_102 Product Subset Driver Master	CAL_210 Product subset allocation to L	0.181819 Gb
SUB_103 Product Channel Subset map	SUB_104 Product CH Subset Driver Master	0.127088 Gb
CAL_206 P0 allocation to Leaf	CAL_210 Aggregated allocation result	0.125959 Gb
SUB_104 Product CH Subset Driver Master	CAL_210 Product CH subset allocation	0.122704 Gb
CAL_205A P0 by channel allocation to Leaf	CAL_210 Aggregated allocation result	0.097367 Gb
CAL_205 P4 allocation to Leaf	CAL_210 Aggregated allocation result	0.079270 Gb
CAL_202 Drivers	SUB_101 Product Subset map - SUB 10	0.068632 Gb
CAL_301 All NWRP result - CRT	ALD_102 CC by ACT after reallocation	0.048602 Gb
CAL_205A P0 by channel allocation to leaf	CAL_210 Aggregated allocation result	0.032288 Gb
CAL_205A P0 by channel allocation to Leaf	CAL_210 Aggregated allocation result	0.032288 Gb
ALD_102 Reallocation Driver production	ALD_102 Reallocation Driver Master	0.032143 Gb
CAL_211 Year Region allocation	CAL_210 Aggregated allocation result	0.031304 Gb
ALD_102 Reallocation Driver Master	ALD_102 Reallocation Assignment - ALD	0.030213 Gb
DDP INR 103 Drivers for testing		0.029987 Gb
NR-103 Drivers	CAL_202 Drivers - CAL_201 Direct Dri	0.027495 Gb
CAL_212 Admin re-allocation	CAL_210 Aggregated allocation result	0.018997 Gb
CAL_108 Product Subset allocation	CAL_210 Product subset allocation to L	0.013055 Gb
CAL_301 NWRP split - CC ACT	CAL_210 Aggregated allocation result	0.012804 Gb
CAL_109 Product Channel subset allocation	CAL_210 Product CH subset allocation	0.012880 Gb
CAL_100 Assignment to Product Channel Fund	CAL_101 P1 allocation - CAL_102 P2 al	0.012084 Gb
CAL_109 P0 allocation	CAL_201 P0 allocation to Leaf - CAL_2	0.007999 Gb
ALD_102 Reallocation to CC	ALD_102 CC by ACT after reallocation	0.007367 Gb
CAL_107 P4 allocation	CAL_202 P4 allocation to Leaf - CAL_2	0.003954 Gb
ALD_102 CC ACT feedback		0.003959 Gb
CAL_108 Channel allocation	CAL_201 Channel allocation to Leaf	0.003764 Gb
ALD_101 Allocation to Activities	ALD_102 Expense - ALD_102 Retainin	0.003748 Gb



Graphical display of top 20 heavier modules



Graphical display of total size vs agreed/expected model allowance

Features - Zoom in 1

- End user and/or administrator to easily sync the dashboard content and extract to .csv and .xls

Model Size Report

NOTE : Dashboard instructions at the bottom of the page

Refresh model size date

+Export Modules/Line Item grid [.csv]

+Export Modules/Line Item grid [.xls]

Import/Refresh Modules list

	Parent	Code
11 Feb 2018	All	
08 Feb 2018	All	
24 Jan 2018	All	
All		

Features - Zoom in 2

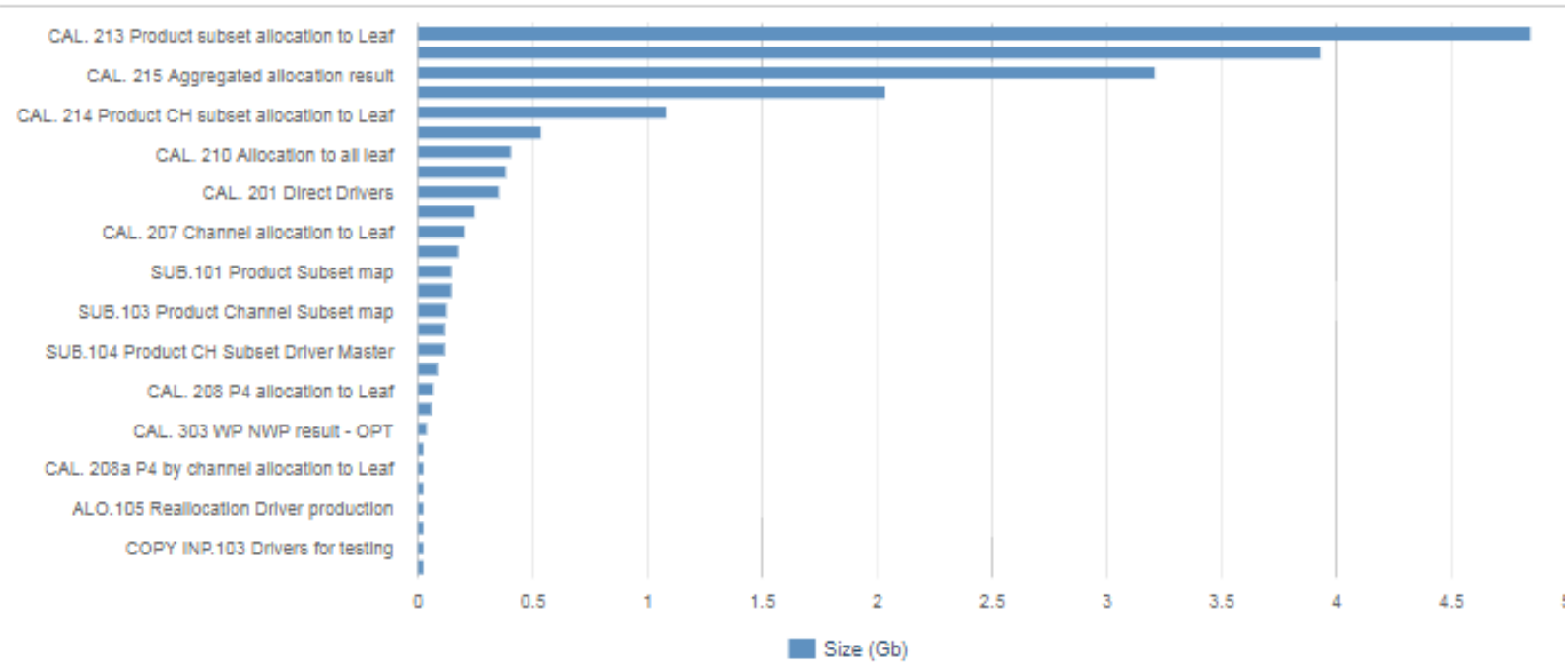
- End user and/or administrator to easily check full list of modules, ordered by size, highlighting anything that is above a specific threshold.
- Perform quick assessment on unused modules that could/should be deleted
- Support/Developers can easily use the report to compare specific settings and formula across multiple dates. This allow to restore specific portions of a model and/or quickly identify/assess changes

Select date to Report on : 08 Feb 2018 ▼

Module	Is Referenced by	Size (Gb)
		18,715,540 Gb
CAL_213 Product subset allocation to Leaf	CAL_215 Aggregated allocation result	4,849,761 Gb
CAL_401 Traceback result OPT	ALO.101 Allocation to Activities', 'ALO.1	3,933,520 Gb
CAL_215 Aggregated allocation result	ALO.108 CC by ACT after reallocation',	3,212,976 Gb
CAL_205 Fund allocation to Leaf	CAL_215 Aggregated allocation result	2,037,600 Gb
CAL_214 Product CH subset allocation to Leaf	CAL_215 Aggregated allocation result	1,087,616 Gb
CAL_202 P1 allocation to leaf	CAL_215 Aggregated allocation result	0,543,248 Gb
CAL_210 Allocation to all leaf	CAL_215 Aggregated allocation result	0,413,093 Gb
CAL_204 Entity allocation to Leaf	CAL_215 Aggregated allocation result	0,388,975 Gb
CAL_201 Direct Drivers	CAL_209 Direct allocation to leaf	0,356,981 Gb
CAL_203 P2 allocation to leaf	CAL_215 Aggregated allocation result	0,250,466 Gb
CAL_207 Channel allocation to Leaf	CAL_215 Aggregated allocation result	0,207,422 Gb
CAL_209 Direct allocation to leaf	CAL_215 Aggregated allocation result	0,179,827 Gb
SUB.101 Product Subset map	SUB.102 Product Subset Driver Master	0,152,037 Gb
SUB.102 Product Subset Driver Master	CAL_213 Product subset allocation to L	0,151,919 Gb
SUB.103 Product Channel Subset map	SUB.104 Product CH Subset Driver Mas	0,127,088 Gb
CAL_206 P5 allocation to Leaf	CAL_215 Aggregated allocation result	0,124,419 Gb
SUB.104 Product CH Subset Driver Master	CAL_214 Product CH subset allocation	0,122,704 Gb
CAL_206a P5 by channel allocation to Leaf	CAL_215 Aggregated allocation result	0,097,288 Gb
CAL_208 P4 allocation to Leaf	CAL_215 Aggregated allocation result	0,069,952 Gb
CAL_200 Drivers	SUB.101 Product Subset map', 'SUB.10	0,061,908 Gb
CAL_303 WP NWP result - OPT	ALO.108 CC by ACT after reallocation'	0,046,263 Gb
CAL_203a P2 by channel allocation to leaf	CAL_215 Aggregated allocation result	0,032,179 Gb
CAL_208a P4 by channel allocation to Leaf	CAL_215 Aggregated allocation result	0,032,179 Gb
CAL_211 Test Region allocation	CAL_215 Aggregated allocation result	0,031,304 Gb
ALO.105 Reallocation Driver production	ALO.106 Reallocation Driver Master	0,031,063 Gb
ALO.106 Reallocation Driver Master	ALO.102 Rellocation Assignment', 'ALO	0,029,216 Gb
COPY INP.103 Drivers for testing		0,027,700 Gb
INP.103 Drivers	CAL_200 Drivers', 'CAL_201 Direct Driv	0,025,721 Gb
CAL_212 Admin re allocation	CAL_215 Aggregated allocation result	0,016,624 Gb
CAL_108 Product Subset allocation	CAL_213 Product subset allocation to L	0,012,877 Gb
CAL_301 WP NWP split - CC ACT	CAL_215 Aggregated allocation result',	0,011,641 Gb
CAL.109 Product Channel Subset allocation	CAL_214 Product CH subset allocation	0,010,404 Gb
CAL.100 Assignment to Product Channel Fund	CAL.101 P1 allocation', 'CAL.102 P2 ali	0,009,929 Gb
CAL.105 P5 allocation	CAL_206 P5 allocation to Leaf', 'CAL. 2i	0,007,779 Gb
ALO.107 Reallocation to CC	ALO.108 CC by ACT after reallocation',	0,007,153 Gb
CAL.107 P4 allocation	CAL_208 P4 allocation to Leaf', 'CAL. 2i	0,003,899 Gb
ALO.109 CC ACT traceback		0,003,576 Gb
CAL.106 Channel allocation	CAL_207 Channel allocation to Leaf	0,001,769 Gb
ALO.101 Allocation to Activities	ALO.100 Expense', 'ALO.102 Rellocatio	0,000,736 Gb

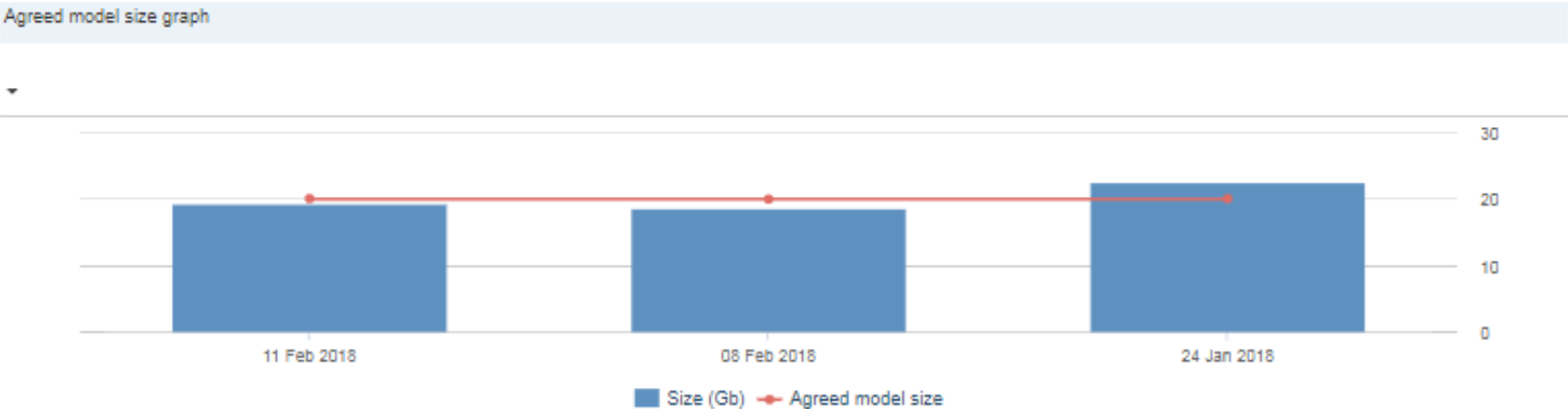
Features - Zoom in 3

- Visual display of top xx (eg 20) modules to highlight potential abnormalities/model size opportunities



Features - Zoom in 4

- Visual display of model size growth over time vs agreed/expected model size (based on threshold that can be set as required eg 20Gb)



Questions

&

Answers

TECHNICAL DETAILS

This section is only relevant to Model Builders and provides :

- Technical Instructions to create/enable this functionality
- Demo app which can be used as guidance/reference/quick analysis : DEV DEMO Model Size Report [Alessio]

Technical implementation details

Create the following functional area :

- MNT. Model Maintenance

Create the following lists (tagging them as Production data):

- Standard list *Refresh model size date* (with value All as top parent)
- Numbered list *Line Item ID#* (with Total as Top Level) and create property called *Module Description*, TEXT type

Create the following modules :

- | | |
|---------------------------------|---|
| • MNT. 101 Model size | Dimensions : Refresh model size date, Line Item ID# |
| • MNT. 102 Model size Agreement | Dimensions : Refresh model size date |
| • MNT. 103 Model size Checks | Dimensions : |
| • REP. Model Sanity Checks | Dimensions : |

And assign them to the above functional area

Consider the use of subsets on *Refresh model size date* to keep MNT. 101 small or delete old/unrequired extracts

Module REP. Model Sanity Checks

Purpose : this module is used to monitor the model size threshold level. eg usually this could be the expected size provided in the Business Case (eg 20Gb)

Create a line item called *Agreed Model size*, number formatted with custom unit Suffix “Gb”

Module MNT. 101

Purpose : This is the key module which holds all the information used in the main report.

Create the module referencing the attached LIs and Blueprint files.

Note : Currently it's not possible to import the full blueprint from an extract, do not attempt doing this as it could lead to module corruption.

An enhancement request has been logged with Anaplan so that it will be possible to import an entire module structure via Blueprint.

Currently the recommendation, for larger modules is to Import the full list of LIs and then CTRL+C and CTRL+V Formulas and properties from the blueprint in .csv into the Anaplan Blueprint



MNT.101 LIs



MNT.101
Blueprint

Module MNT. 102

Purpose : This module was intended to be used to highlight the contracted workspace size, by date (not actively used and might/might not be used in the future for recharging purposes)

Create the following LIS :

Fixed standard size

Agreed model size

Module MNT. 103

Purpose : This module is mainly used to provide comparison/stats on model size between two dates
The creation process is very similar to MNT.101, please reference the LIs and Blueprint with formula and Settings.

Set model size threshold as required (eg 20Gb) and Day B selection to any values.



MNT.103 LIs



MNT.103
Blueprint

Note: due to an Anaplan bug the exported format of this blueprint is not showing the right settings for :

Day A selection

Day B selection

Which should be set to Type: List selecting list : Refresh model size date

Please set these manually to avoid errors

Create Main Export Process

Purpose : This process is going to export the entire list of modules and line items, which is what needs to be imported back and analysed.

Select Modules > Line Items > Export

Make sure the correct File Type is selected, tick save Export Definition with Export Name : *+Export Modules/Line Item grid [.csv]*

In the Labels tab, ensure the box Include row Label headers is selected

Layout Labels

Export Format

File Type

Comma Separated Values for Excel (.csv)

Save Export Definition

Export Name: +Export Modules/Line Item grid [.csv]

Set as default file for: Myself (keep private)

Run Export Cancel

Layout Labels

Labels

Include Row Label Headers

Save Export Definition

Export Name: +Export Modules/Line Item grid [.csv]

Set as default file for: Myself (keep private)

Run Export Cancel

Your extract will look similar to this sample



Sample_Extract_S
anitised

Create a process called “+Export Modules/Line item grid [.csv]” which runs the above export action.

Create Main Import Process

Purpose : This process is going to import back what's been extracted, before it can be analysed in the main module.

NOTE1 : A small manual process is required to create the Line Item ID# counter. This will be documented later in the dashboard, but for the creation of the import process it needs to be done once.

- Open the extract
- Add a column in Column A called "Line Item ID#" and amend each record so that it will have a counter(eg #1, #2, #3, etc)

Create the import process by opening MNT. 101 in Regular view > Select Data > Import

Everything should be mapped, except Refresh model size date which must be set to “Ask each time import is run”. This will therefore be a user selection.

The mapping should therefore look like the following

Import: MNT. 101 Model size from Sample_extract - edited.csv

The screenshot shows the 'Import' configuration interface. At the top, there are tabs for 'Mapping', 'Refresh model size date', 'Line Item ID#', and 'MNT. 101 Model size Line Items'. The 'Mapping' tab is active, showing a 'Source' and 'Target' section. The 'Source' section has three dropdown menus: 'Ask each time import is run' (highlighted with a red box), 'Column 1: Line Item ID#' (highlighted with a green box), and '(Column Headers)'. The 'Target' section has three corresponding dropdown menus: 'Refresh model size date (Day 1, Day 2, Day 3, ...)', 'Line Item ID# (#1, #2, #3, ...)', and 'MNT. 101 Model size Line Items (Modules with Line Items, Formula, Parent, ...)'. On the right side, there are two radio buttons: 'Clear target prior to import' (selected) and 'Only update imported cells'. Below the mapping section is a table with the following data:

Line Item ID#	Modules with Line Items	Formula	Parent	Is Summary	Format
#1	MNT. 101 Model size				
#2	Modules with Line Items			FALSE	{'textType':"GENERAL",'dataType':"TEXT"}
#3	Formula			FALSE	{'textType':"GENERAL",'dataType':"TEXT"}
#4	Parent			FALSE	{'textType':"GENERAL",'dataType':"TEXT"}

Create Main Import Process - Continued

NOTE2 : Please note that this process could be impacted by further Anaplan releases. As such the execution could display some alerts, which are likely to relate to new properties released by Anaplan. As these would appear as new columns, the import will reject these.

The solution would be to either ignore these new columns, or create relevant new LIs in the target module.

Example : in Q1 2018 release Anaplan added : Time range, Read Access Driver, Write Access Driver, Data Tags, Notes, Code.

In the DEMO app, the process has been created to ignore these so that the import completes without any warnings (recommended approach).

This is to be done in the LI tab, example below

The screenshot shows the 'Mapping' tab in the Anaplan interface. At the top, there are tabs for 'Mapping', 'Refresh model size date', 'Line Item ID#', and 'MNT: 101 Model size Line Items'. Below the tabs, there are two radio buttons: 'Match on names or codes' (unselected) and 'Map items manually' (selected). A tooltip box says 'Click on the source item, then click on the item in the target list to define the mapping'. To the right, there is a section 'Which target items to clear prior to import?' with three radio buttons: 'Mapped items in source' (selected), 'All mapped items' (unselected), and 'All items' (unselected). Below this is a table with two columns: 'Source Items' and 'Mapped To'. The 'Mapped To' column has buttons for 'Match', 'Ignore', 'Clear', and 'Clear All'. The table lists the following mappings:

Source Items	Mapped To
Formula Scope	→ Formula Scope
Use Switchover	→ Use Switchover
Breakback	→ Breakback
Style	→ Style
Code	→ Code
Read Access Driver	→ (ignored)
Write Access Driver	→ (ignored)
Data Tags	→ (ignored)
Cell Count	→ Cell Count
Notes	→ (ignored)
Referenced By	→ Referenced by

On the right side of the table, there is a list of 'Target Items' including: Modules with Line Items, Formula, Parent, Is Summary, Format, Applies To, Time Scale, Versions, Start of Section, Brought-Forward, and Summary.

Open the Actions tab and rename this new import action to : “+Import/Refresh Modules list”

Complete Line Item ID# setup

Purpose : Line Item ID# is a numbered list and requires a final setup in order to display the required descriptions in both the list and the module.

Open List *Line Item ID#* , edit *Module Description* Formula to:

'MNT. 101 Model size'.Modules with Line Items[LOOKUP: 'MNT. 103 Model size Checks'.Day B selection]

Open List from General list and set Model Description as Display Name Property

Create Saved and Default Views for the Dashboards

Purpose : We now need to create some default/saved views/graphs that will be used in the reporting dashboard

- Open MNT. 101 and Pivot the module :

Pages :	Refresh model size
Columns :	Line Items
Rows :	Line Item ID#

- In the columns show only : Module, Is Referenced by and Size (Gb)
- Create filter by Selecting Size (Gb), clicking on the filter icon and selecting “Greater than” 0.001 (amend as required)
- Set LIs order Highest to Lowest, select both levels with Group at start
- Create Color coding rule with :
 - LI to format : Size (Gb)
 - Based on the values : same as LI to format
 - Values and colors : 3 colors scale, green, white, red (min. 0, mid-point 0.1, max 0.5)

Create Saved and Default Views - Continued

The report will look like the below.

Note : Filters and colour coding could be amended to fit the expected model size. Module size could also be amended to calculate and display in Mb, if it makes more sense

MNT. 101 Model size		11 Feb 2018 *	
	Module	Is Referenced by	Size (Gb)
Total			10.474053 Gb
Allocation to P	CAL 213 Product subset allocation to Leaf	'CAL 215 Aggregated allocation result'	4.506074 Gb
Realloc CC N	CAL 401 Traceback result OPT	'ALO 101 Allocation to Activities', 'ALO 1	4.520783 Gb
Cost Centre	CAL 215 Aggregated allocation result	'ALO 108 CC by ACT after reallocation'	3.206095 Gb
Driver value	CAL 205 Fund allocation to Leaf	'CAL 215 Aggregated allocation result'	2.065798 Gb
Admin Re Adj	CAL 214 Product CH subset allocation to Leaf	'CAL 215 Aggregated allocation result'	1.067099 Gb
P2 Driver Ent	CAL 202 P1 allocation to leaf	'CAL 215 Aggregated allocation result'	0.850070 Gb
CAL 214 Pro	CAL 210 Allocation to all leaf	'CAL 215 Aggregated allocation result'	0.418000 Gb
P5 Entity sale	CAL 204 Entity allocation to Leaf	'CAL 215 Aggregated allocation result'	0.394388 Gb
Product Entity	CAL 201 Direct Drivers	'CAL 200 Direct allocation to leaf'	0.381069 Gb
P2 Driver Ent	CAL 203 P2 allocation to leaf	'CAL 215 Aggregated allocation result'	0.284322 Gb
Driver value	CAL 207 Channel allocation to Leaf	'CAL 215 Aggregated allocation result'	0.210287 Gb
Subset cost to	CAL 209 Direct allocation to leaf	'CAL 215 Aggregated allocation result'	0.182347 Gb
Description	SUB 101 Product Subset map	'SUB 102 Product Subset Driver Master'	0.152037 Gb
GP Bus Sol 0	SUB 102 Product Subset Driver Master	'CAL 213 Product subset allocation to L	0.151919 Gb
IFA All NB	SUB 103 Product Channel Subset map	'SUB 104 Product CH Subset Driver Mas	0.127066 Gb
P5 Driver Ent	CAL 206 P5 allocation to Leaf	'CAL 215 Aggregated allocation result'	0.125069 Gb
GP Bus Sol 0	SUB 104 Product CH Subset Driver Master	'CAL 214 Product CH subset allocation	0.122704 Gb
Driver	CAL 205a P5 by channel allocation to Leaf	'CAL 215 Aggregated allocation result'	0.097367 Gb
P4 Driver Ent	CAL 208 P4 allocation to Leaf	'CAL 215 Aggregated allocation result'	0.070270 Gb
P2	CAL 200 Drivers	'SUB 101 Product Subset map', 'SUB 10	0.066062 Gb
Reallocation P	CAL 303 WP NWP result - OPT	'ALO 108 CC by ACT after reallocation'	0.046902 Gb
Driver	CAL 203a P2 by channel allocation to leaf	'CAL 215 Aggregated allocation result'	0.032388 Gb
Direct cost all	CAL 205a P4 by channel allocation to Leaf	'CAL 215 Aggregated allocation result'	0.032289 Gb
SIEM Security	ALO 106 Reallocation Driver production	'ALO 106 Reallocation Driver Master'	0.032153 Gb
P1 result	CAL 211 Test Region allocation	'CAL 215 Aggregated allocation result'	0.031304 Gb
ALO 106 CC	ALO 106 Reallocation Driver Master	'ALO 102 Reallocation Assignment', 'ALO	0.030243 Gb
Activity	CDPV (NP) 103 Drivers for testing		0.029587 Gb
Channel	NP 103 Drivers	'CAL 200 Drivers', 'CAL 201 Direct Drs	0.029446 Gb

For this specific application it made more sense :

- Report in Gb
- Set Size (Gb) to 6 decimal places, with Zero format set to Zero
- Set the filter to display anything greater than 0.000001

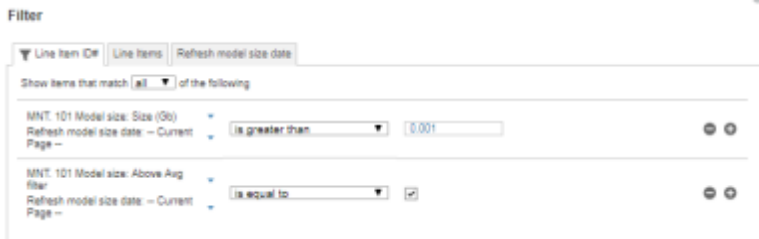
Add : Check/report on is Referenced by as potentially unrequired module ?

Save this view as Default view and always open on current page.

Create Saved and Default Views

As an additional example, this demo app is also going to display a bar chart reporting all modules with size above average. This is for demo only and might not apply to other builds, where other visualisations are likely to be more appropriate.

- 1) A view has been created and saved as “MNT. 101 Modules_above_avg”. Using the default view as a starting point a further filter has been applied filtering data based on the LI filter



- 2) Another view has been created and saved as “Model_size_Growth_Graph” to monitor model size growth over time.

	Size (Gb)	Agreed model si
LATEST	25.730849 Gb	20 Gb
09 Mar 2018	25.115123 Gb	20 Gb
08 Mar 2018	19.681273 Gb	20 Gb
28 Feb 2018	19.207125 Gb	20 Gb
11 Feb 2018	19.474658 Gb	20 Gb
06 Feb 2018	18.715540 Gb	20 Gb
24 Jan 2018	22.671035 Gb	20 Gb

Create Final dashboard

The final step in the process is to create the final dashboard called “MNT.000.D Model Size Report” which includes the following key objects :

- Import and Export processes
- Refresh model size date and selection for variance analysis
- Selection Date for table/graphs (Page selector : Refresh model size date)
- Create and publish charts based on previously saved views “MNT. 101 Modules_above_avg” and “Model_size_Growth_Graph” [amend as required]



Thank you