

Bronze Sponsor



Advanced Studio Project Administration: Mastering Calc Explorer and Lineage

Your Guides:
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Part I: Introduction

<Descriptor>



Agenda

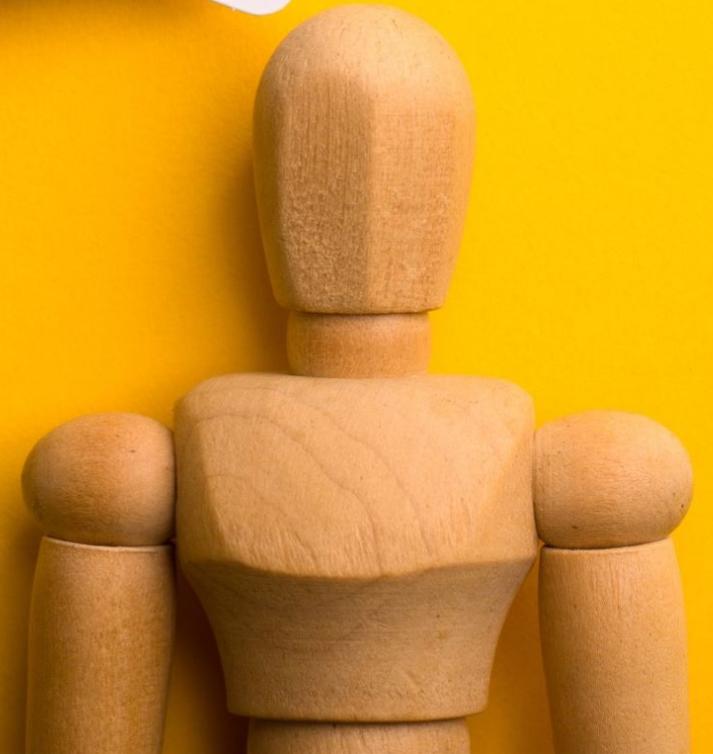
- Calculation Explorer
 - What is Calc Explorer?
 - Use Cases
 - Explanation of Interface
 - Definitions
 - Walkthrough of Views
- Lineage
 - What is Lineage?
 - Use Cases
 - Access
 - Color Key
- Live Demo

Introductions

- Take 5 Minutes
- Turn to a Person Near You
- Introduce Yourself
- Business Cards

Quick Poll

- Who here has used the Calc Explorer?
- Have you found it helpful?
- What insights have you gained from it?



Apptio Studio - Calc Explorer

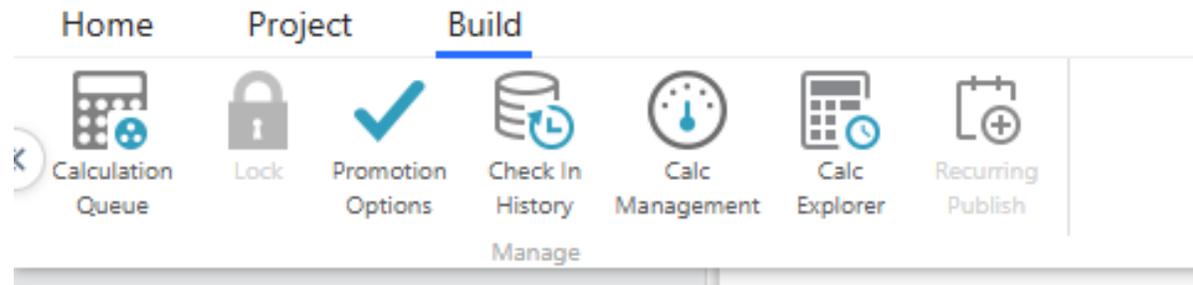
What is Calc Explorer?

[Calc Explorer Help Center Documentation](#)

Calc Explorer is a tool within TBM Studio that allows administrators to review the calculation times of Builds and the documents within the builds.

Where is Calc Explorer used?

Calc Explorer is located on the Build tab of TBM Studio



Calc Explorer Use Cases

- Performance Reviews
- Impact of configuration changes on calculation times
- Track calculation duration over time
- Understand changes impacting calculation

Calc Explorer Interface

Build	Build Type	Calc Type	Started	Build Duration (hh:mm:ss)	Build Duration (Min)	Number of Timeperiods	Number of Queries	Change Set	Changes
12138	Staging	Partial	Mar 02, 2025, 01:31 AM PST	00:21:54	22	48	5832		
12138	Development	All	Mar 01, 2025, 08:51 PM PST	00:01:07	1	48	13584		
12133	Staging	All	Mar 01, 2025, 05:56 PM PST	00:10:02	10	48	19968		
12137	Development	Partial	Dec 12, 2024, 09:21 AM PST	00:01:42	2	48	2304	1 SaveTableTransform	(eric.self@regoconsulting.com) this is a test
12136	Development	None	Dec 04, 2024, 12:53 PM PST	00:00:00	0	0	0	2 SaveTableTransforms	(patrick.graham@regoconsulting.com) (patrick.graham@regoconsulting.com)
12136	Staging	None	Dec 04, 2024, 12:52 PM PST	00:00:00	0	0	0	2 SaveTableTransforms	(patrick.graham@regoconsulting.com) (patrick.graham@regoconsulting.com)
12134	Staging	Partial	Dec 04, 2024, 11:46 AM PST	00:13:42	14	48	72	1 SaveTableTransform	(patrick.graham@regoconsulting.com) Deleting schedule
12134	Development	Partial	Dec 04, 2024, 11:45 AM PST	00:00:36	1	48	48	1 SaveTableTransform	(patrick.graham@regoconsulting.com) Deleting schedule
12128	Staging	Partial	Nov 14, 2024, 12:56 PM PST	00:15:30	16	24	24	1 SaveReport	(jeff.blackman@regoconsulting.com)
12128	Development	None	Nov 14, 2024, 12:55 PM PST	00:00:00	0	0	0	1 SaveReport	(jeff.blackman@regoconsulting.com)
12124	Staging	Partial	Nov 08, 2024, 08:37 AM PST	00:22:45	23	48	18840	4 SaveTableTransforms 1 SaveProjectSettings	(patrick.graham@regoconsulting.com) Turning on Apex UI/Recurri...
12124	Development	Partial	Nov 08, 2024, 08:35 AM PST	00:02:37	3	48	13248	4 SaveTableTransforms 1 SaveProjectSettings	(patrick.graham@regoconsulting.com) Turning on Apex UI/Recurri...
12123	Development	None	Nov 08, 2024, 08:30 AM PST	00:00:00	0	0	0	1 Other	(patrick.graham@regoconsulting.com) Showing IT Financials collecti...
12123	Staging	All	Nov 08, 2024, 08:30 AM PST	00:05:22	5	48	19944	1 Other	(patrick.graham@regoconsulting.com) Showing IT Financials collecti...

Definitions

Definitions

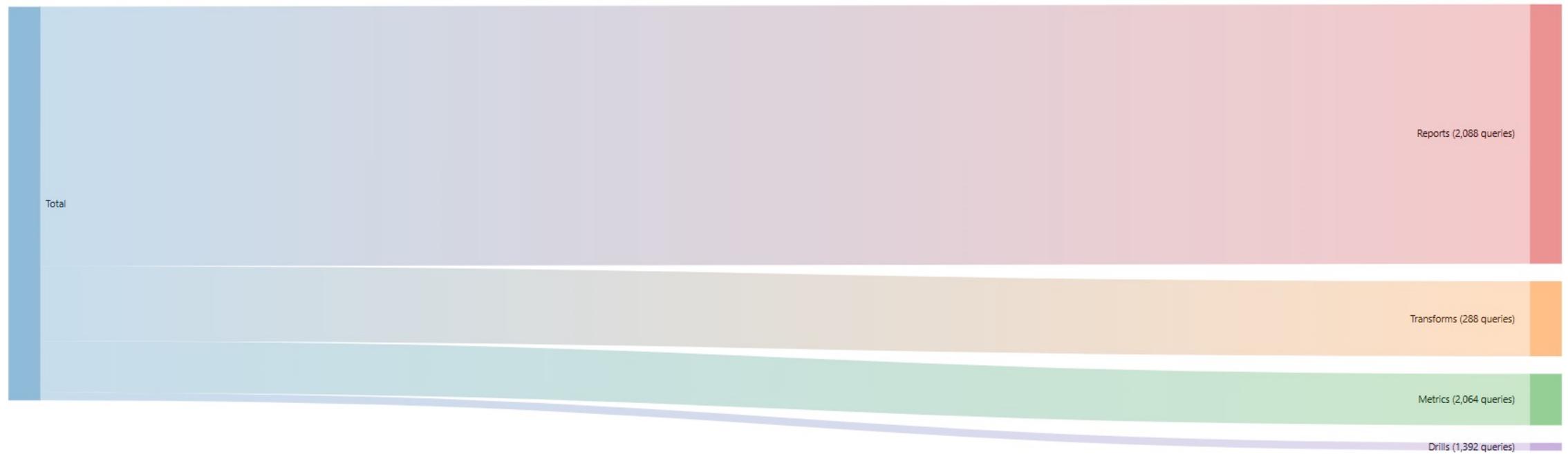
Field	Description
Build	A specific point in the progression of Check Ins that can be calculated for display in Flagship.
Calc	A calculation of a specific build.
Entity	A component of a project (e.g. Transforms, Metrics, Reports).
Calc Type	<p>A description of the number of entities calculated compared to the entire project.</p> <ul style="list-style-type: none"> • All - A calc that requires all entities to be fully calculated. Example: <ul style="list-style-type: none"> • A build that is triggered after cache clear or upgrade. • A material change is checked in, such as a Project Time setting where additional time periods are added. • Partial - A calc that requires the calculation of entities that are dependent on the change set. Example: A build that is triggered after a data upload or config change. • None - A calc that requires no entities be calculated. Example: A non-material change is made to project such as disabling a report.
Query	The smallest unit of a calc, typically an entity for a specific time period.
Build Duration	Time taken by the build - in hh:mm:ss and in mins. You can search for the biggest or shortest build by specifying the range, like <5, >70, and so on.
Max Timeperiods	Shows the maximum number of time periods for the build.
Number of Queries	Shows all the queries in a build, in table form. You can search and sort for particular entities. The list of calculated time periods can also be brought up.
Change Set	What project changes were made since the previous build.
Changes	What Check Ins have been made since the previous build.
Calculation Effort	A measure of the resources needed to complete a particular query, expressed as a number in a simplified format. Example, 3.2M instead of 3,200,000.
Transform	A Table with all of its associate transform steps typically based off a raw data source.
Number of Columns	The number of columns in the output step of a Transform, displayed in a simplified format. Example, 2.50L instead of 2,50,000.
Number of Rows	The number of rows in the output step of a Transform, displayed in a simplified format. Example, 2.50L instead of 2,50,000.
Report	Report that contains a collection of KPIs, graphs, charts, and tables.
Report Component	A single KPI, graph, chart or table that is part of report.

Calc Explorer Build Drilldown

Staging Build #12138 of Project "CT Demo"

Started on Mar 02, 2025, 01:31 AM PST
Duration 00:21:54
5,832 queries
48 timeperiods calculated
24 report timeperiods calculated
Calc Type: Partial

Show: ↑ Calculation Effort



Calc Explorer Build Drilldown (Continued)

Staging Build #12138 of Project "CT Demo"

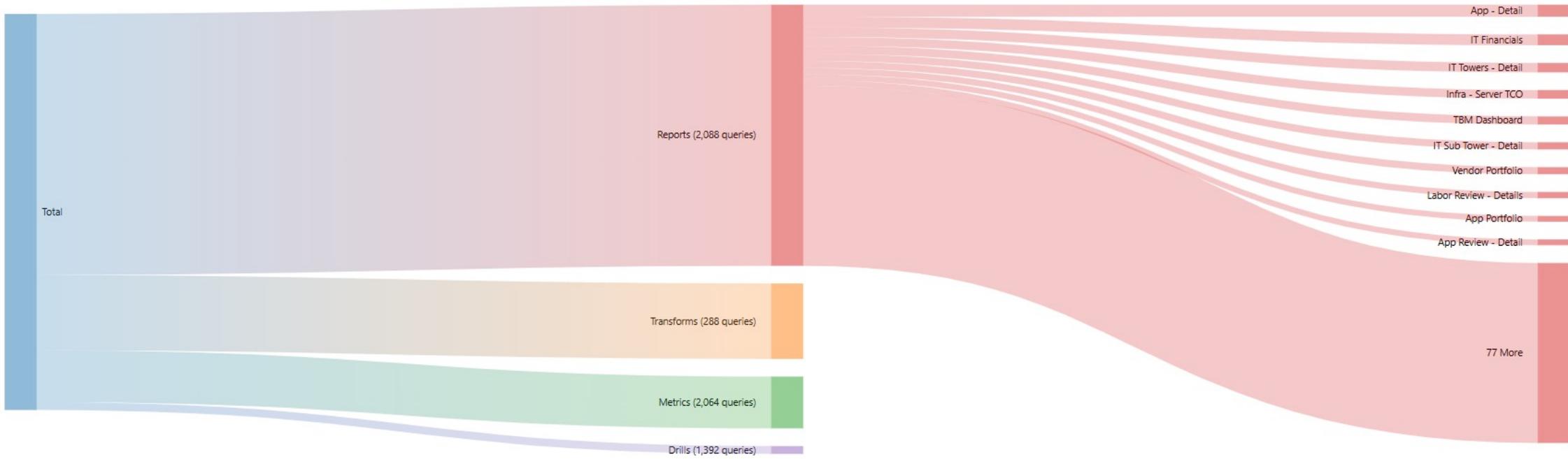
Started on Mar 02, 2025, 01:31 AM PST
Duration 00:21:54
5,832 queries
48 timeperiods calculated
24 report timeperiods calculated
Calc Type: Partial

Show: Calculation Effort

Search

Last Tier:

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Queries for Build

Queries for Build #12138 ✕

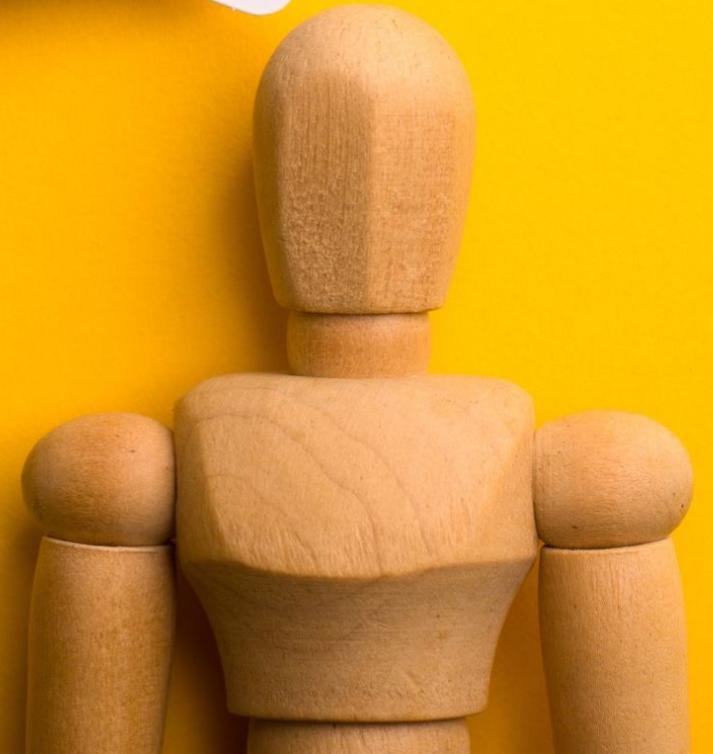
Entity	Type	Calculation Effort ↓	Number of Timeperiods
Time Tracking Master Data	Transform	74.72K	48
Labor Master Data	Transform	74.45K	48
Acme Time Tracking Data	Transform	71.4K	48
Acme Labor to Tower Mapping	Transform	70.84K	48
Custom Data Expiration Table	Transform	69.38K	48
Cost Center Owners ET Test	Transform	69.38K	48
App - Detail	Report	68.86K	24
IT Financials	Report	61.66K	24
IT Towers - Detail	Report	53.47K	24
Infra - Server TCO	Report	49.3K	24
TBM Dashboard	Report	46.17K	24
IT Sub Tower - Detail	Report	41.05K	24
Vendor Portfolio	Report	40.33K	24
Cost	Metric	40.16K	48
Budget	Metric	39.28K	48
CapEx	Metric	39.21K	48
CapEx Budget	Metric	38.23K	48
CapEx Forecast	Metric	35.91K	48
Labor Review - Details	Report	35.78K	24
Total		2.26M	5832

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[Close](#)

Quick Poll

- Have you used the lineage feature?
- Do you have a full understanding of the lineage UI?



Apptio Studio - Lineage

What is Lineage?

Data lineage is the process of tracking the flow of data over time, providing a clear understanding of where the data originated, how it has changed, and its ultimate destination within the data pipeline.

Where is Lineage used?

Lineage reporting is available in the Data Pipeline, Modelling Views, and on Reports

Apptio Studio – Lineage Use Cases

Lineage Use Cases

- Show immediately what is 'used by' a particular entity (downstream dependencies) or what is that entity depending upon (upstream dependencies).
- Identify the project impact, if you modify or change an entity such as a column or what if you remove a table.
- Clean up the project complexity that grows over time, by identifying and removing orphan tables or unused calculated metrics.
- Remediate data privacy information by identifying exactly where data exists and where it is exposed.

Apptio Studio – Lineage Access and Navigation

Accessing Lineage Views

From the Project Explorer: <right-click> on the document you want to trace and select **Trace Lineage for this document**. This also works when you <right-click> on a navigation tab at the bottom of the Studio display

From within an open Table you can <right-click> on a specific column and get the Lineage information for that column.

From the Studio Ribbon Project Tab, the Unused Documents button will display any documents that do not currently map to a Report

Apptio Studio – Lineage Color Key and Terms

Gray represents raw data.

Green represents standard tables and columns.

Brown represents editable tables and columns.

Blue represents model objects and metrics.

Tan represents reports and report components.

Depth	We always start with the depth of 1 which extends the scope of the relationships from the selected entity. As the project can get very complex, you will get more depth to drill down the relationships. Move the slider to increase the depth and deep dive into the level of dependencies.
Show documents that	You also have the ability to switch between downstream dependencies which is by default if you pick something like a table, or upstream dependencies which would be default if you pick a report. Select to see documents that Depend on the focused entity (downstream dependency) or for The focused entity depends on (upstream dependency).
Only cycles	Select this check box to view only cycle
Search Text box	Enter the keyword(s) that you want to exclude (-) or include (+) in the search results. For more info on Lineage Search. Click here.
Added keys	Displays all the entities that have the keywords added in the search text box
Excluded keys	Displays all the entities that the keyword removed in the search text box
Toggle sub types	Select this to toggle between check/uncheck all the subtypes in one go together.
Toggle bulk remove	Removes all entities included in the Added Keys or Hidden Keys
Apply	Select this button to apply changes made in this panel.

Apptio Studio – Demonstration



Surveys

Please take a few moments to fill out the class survey.
Your feedback is extremely important for future events.



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Instructions for PMI credits

- Access your account at pmi.org
- Click on **Certifications**
- Click on **Maintain My Certification**
- Click on **Visit CCR's** button under the **Report PDU's**
- Click on **Report PDU's**
- Click on **Course or Training**
- Class Provider = **Rego Consulting**
- Class Name = **regoUniversity**
- Course **Description**
- Date Started = **Today's Date**
- Date Completed = **Today's Date**
- Hours Completed = **1 PDU per hour of class time**
- Training classes = **Technical**
- Click on **I agree** and **Submit**



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