



Explore API Documentation

Control Actuals Reporting Version 1.2

Last Modified: 11/11/2022

Last Modified By: Natalie Takacs



Change Log

This changelog only contains significant or notable changes to the revision. Any editorial type changes or minor changes are not included.

Revision	Change Date	Description	Modified By
1.0	8/19/2022	Initial draft	Natalie Takacs
1.1	9/29/2022	Added API field names and data types	Natalie Takacs
1.2	11/11/2022	Corrected typo in API naming conventions	

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Overview

Due to architectural changes made in the Control application, the **SelfService_Control_CostItemActual** API will be deprecated in the 22.8 release. The API will still exist in this release, but no data will flow through it. The following new APIs will be replacing the existing API:

- SelfService_Control_ActualsVendorHour
- SelfService_Control_ActualsCost
- SelfService_Control_ActualsManHour
- SelfService_Control_ActualsQuantity

Reporting instructions

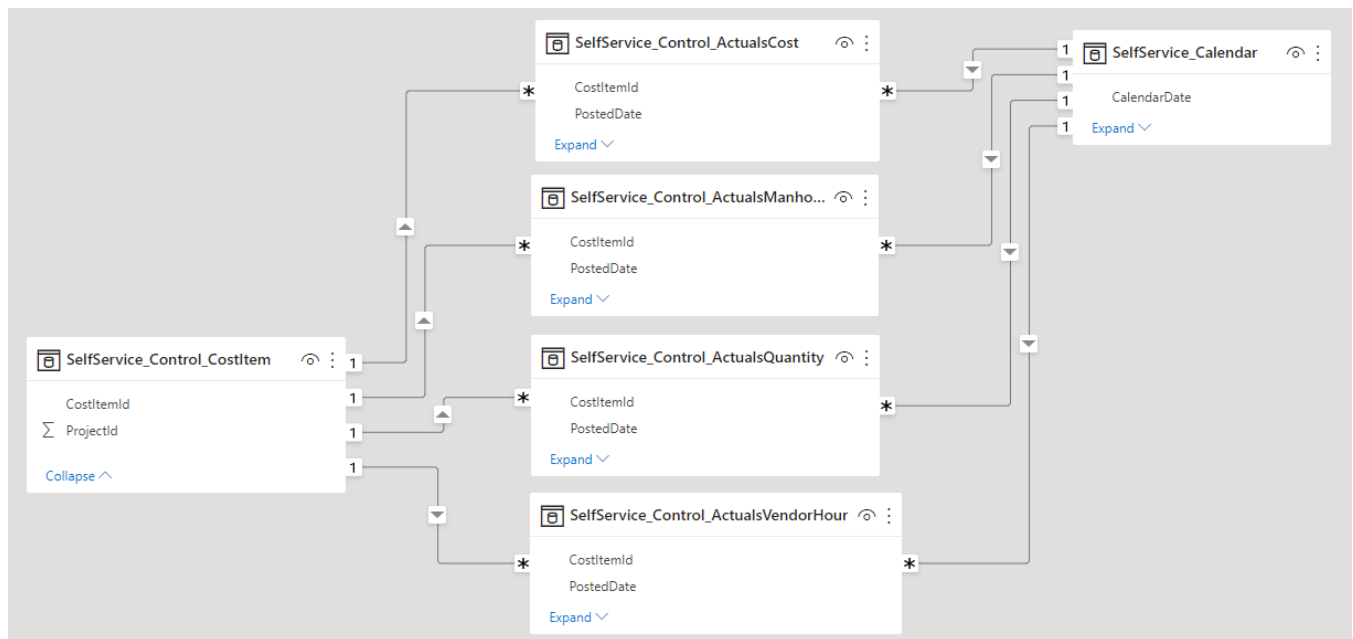
There are two ways to bring this data together in Power BI for reporting. The new APIs can be joined together in the “Model” section in Power BI or, once the APIs have been pulled into the PBIX file they can be appended together into one table in the “Edit Query” mode. For larger data volumes, the “Join Method” may have faster refresh performance. Both methods will allow information to be reported as follows.

CostItemId	CalendarDate	Cost	Quantity	ManHours	ClaimedManHr
	4/24/2018	98.48		2.00	
	4/28/2018	4.80	3.00	0.00	
	5/8/2018	551.62		10.00	
	5/15/2018	310.40		6.00	
	5/26/2018	69.60	7.00	98.50	
	6/5/2018	278.40		6.00	
	6/12/2018	412.56		8.00	
	6/19/2018	46.40		1.00	
	6/26/2018	326.16		6.00	
	6/30/2018	44.00	47.00	1.00	
	7/5/2018	1,643.21		0.00	
	7/9/2018	4,500.00		0.00	
	7/10/2018	162.40		3.50	
	7/17/2018	756.84		11.50	
	7/24/2018	1,743.27		27.00	
	7/28/2018		28.00		
	8/11/2018	422.53		3.50	
	8/18/2018	-17.52		0.00	
	8/25/2018	1,086.15		10.00	
	8/30/2018	5,549.12		0.00	
	9/14/2018	-17,988.42		-97.00	
	9/29/2018		-85.00		
	10/27/2018	309.84		6.00	
	11/6/2018	753.77		12.00	
	11/13/2018	241.76		4.00	
	1/22/2019	793.33		14.00	
Total		77,302.21	7,170,734.57	225.50	

The “Join Method”

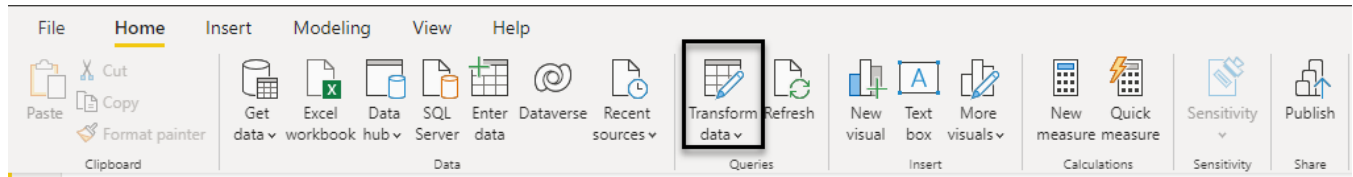
All four of the new APIs will join to the SelfService_Control_CostItem API on the CostItem field. They should also be joined to the SelfService_Calendar table on the PostedDate to the CalendarDate. Please see the table below for the specific join information. Joining to the Cost Item and Calendar APIs create a common reference across the new APIs to the Cost Items and Posted dates.

From: Table	To: Table	Relationship	Cardinality
SelfService_Control_CostItem (CI)	SelfService_Control_ActualsVendorHour (AVH)	CI.CostItem=AVH.CostItem	1:M
SelfService_Control_CostItem (CI)	SelfService_Control_ActualsCost (AC)	CI.CostItem=AC.CostItem	1:M
SelfService_Control_CostItem (CI)	SelfService_Control_ActualsManHour (AMH)	CI.CostItem=AMH.CostItem	1:M
SelfService_Control_CostItem (CI)	SelfService_Control_ActualsQuantity (AQ)	CI.CostItem=AQ.CostItem	1:M
SelfService_Calendar (C)	SelfService_Control_ActualsVendorHour (AVH)	C.CalendarDate=AVH.PostedDate	1:M
SelfService_Calendar (C)	SelfService_Control_ActualsCost (AC)	C.CalendarDate=AC.PostedDate	1:M
SelfService_Calendar (C)	SelfService_Control_ActualsManHour (AMH)	C.CalendarDate=AMH.PostedDate	1:M
SelfService_Calendar (C)	SelfService_Control_ActualsQuantity (AQ)	C.CalendarDate=AQ.PostedDate	1:M

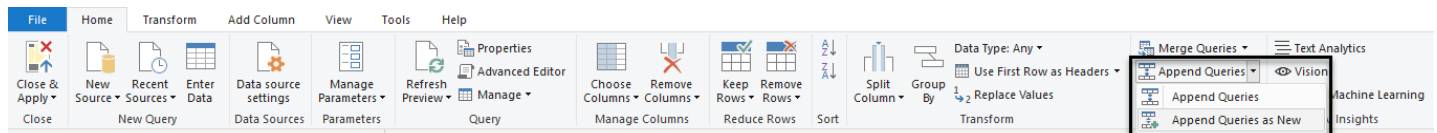


The “Append Method”

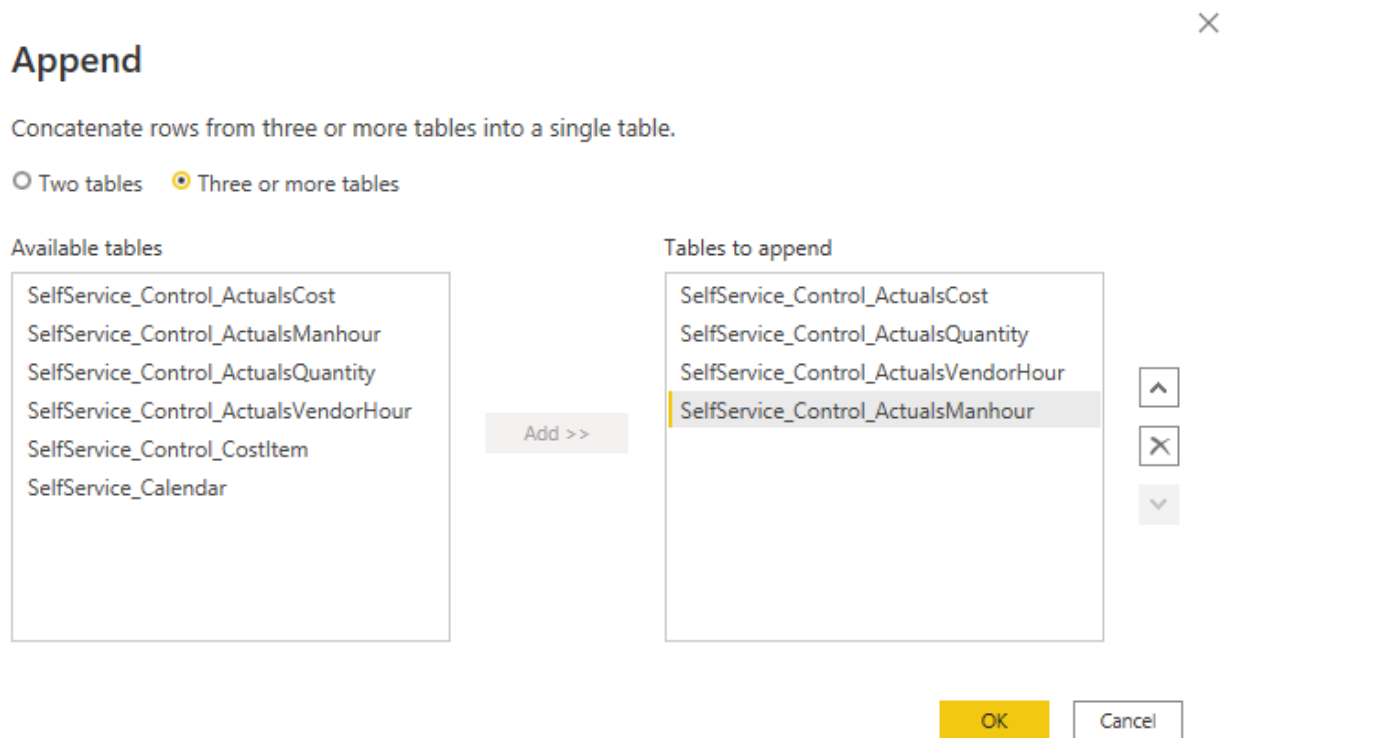
Appending tables in Power BI will combine the results of the four new APIs into one table in PowerQuery by combining data with the same column names into one column, and for columns with unique names, “NULL” values will be filled into rows containing data from the other tables where a value may not exist. To learn more about the Append function, please visit the following link: <https://docs.microsoft.com/en-us/power-query/append-queries>. To Append these APIs in your Power BI file, from your “Report” select the “Transform data” button in the top ribbon.



This will bring you to the “Power Query Editor” otherwise known as “Edit query” mode. In the top ribbon of the new window, select Append Queries > Append Queries as New.



A dialog box will appear, select “Three or more tables” and “Add” the four new API tables.



The new table will appear on the left-hand side as “Append1.” Here, you can rename the table. Then, click “Close & Apply” to apply the changes in your report.

New API Data Types

API Name	ColumnName	Type	CharMaxLength	NumericPrecision	DatePrecision	IsNullable
SelfService_Control_ActualsCost	ActualsCostId	bigint	8	19	0	0
SelfService_Control_ActualsCost	ActualsTypeId	bigint	8	19	0	1
SelfService_Control_ActualsCost	ActualsTypeName	nvarchar	50	0	0	1
SelfService_Control_ActualsCost	Cost	decimal	13	22	11	1
SelfService_Control_ActualsCost	CostCategoryId	bigint	8	19	0	1
SelfService_Control_ActualsCost	CostItemId	bigint	8	19	0	1
SelfService_Control_ActualsCost	CreatedById	bigint	8	19	0	1
SelfService_Control_ActualsCost	CreatedDate	datetime	8	23	3	1
SelfService_Control_ActualsCost	DocumentDate	datetime	8	23	3	1
SelfService_Control_ActualsCost	IncludedInActuals	bit	1	1	0	1
SelfService_Control_ActualsCost	IncludedInSummary	bit	1	1	0	1
SelfService_Control_ActualsCost	IsActive	bit	1	1	0	0
SelfService_Control_ActualsCost	ModifiedById	bigint	8	19	0	1
SelfService_Control_ActualsCost	ModifiedDate	datetime	8	23	3	1
SelfService_Control_ActualsCost	Notes	nvarchar	4000	0	0	1
SelfService_Control_ActualsCost	PostedDate	date	3	10	0	1
SelfService_Control_ActualsCost	PostedFromDate	datetime	8	23	3	1
SelfService_Control_ActualsCost	PostedToDate	datetime	8	23	3	1
SelfService_Control_ActualsCost	ProjectId	bigint	8	19	0	1
SelfService_Control_ActualsCost	Reversal	bit	1	1	0	1
SelfService_Control_ActualsCost	SourceSystemId	nvarchar	50	0	0	1
SelfService_Control_ActualsCost	SourceSystemName	nvarchar	100	0	0	1
SelfService_Control_ActualsCost	TransactionId	nvarchar	50	0	0	1
SelfService_Control_ActualsManHour	ActualsHoursId	bigint	8	19	0	0
SelfService_Control_ActualsManHour	ActualsTypeId	bigint	8	19	0	1

SelfService_Control_ActualsManHour	ActualsTypeName	nvarchar	50	0	0	1
SelfService_Control_ActualsManHour	CostItemId	bigint	8	19	0	1
SelfService_Control_ActualsManHour	CreatedById	bigint	8	19	0	1
SelfService_Control_ActualsManHour	CreatedDate	datetime	8	23	3	1
SelfService_Control_ActualsManHour	DocumentDate	datetime	8	23	3	1
SelfService_Control_ActualsManHour	EquipmentHours	decimal	13	22	11	1
SelfService_Control_ActualsManHour	EquipmentId	bigint	8	19	0	1
SelfService_Control_ActualsManHour	IncludedInSummary	bit	1	1	0	1
SelfService_Control_ActualsManHour	IsActive	bit	1	1	0	0
SelfService_Control_ActualsManHour	ManHours	decimal	13	22	11	1
SelfService_Control_ActualsManHour	ModifiedById	bigint	8	19	0	1
SelfService_Control_ActualsManHour	ModifiedDate	datetime	8	23	3	1
SelfService_Control_ActualsManHour	Notes	nvarchar	4000	0	0	1
SelfService_Control_ActualsManHour	PostedDate	date	3	10	0	1
SelfService_Control_ActualsManHour	PostedFromDate	datetime	8	23	3	1
SelfService_Control_ActualsManHour	PostedToDate	datetime	8	23	3	1
SelfService_Control_ActualsManHour	ProjectId	bigint	8	19	0	1
SelfService_Control_ActualsManHour	Reversal	bit	1	1	0	1
SelfService_Control_ActualsManHour	SourceSystemId	nvarchar	50	0	0	1
SelfService_Control_ActualsManHour	SourceSystemName	nvarchar	100	0	0	1
SelfService_Control_ActualsManHour	TransactionId	nvarchar	50	0	0	1
SelfService_Control_ActualsQuantity	ActualsQuantityId	bigint	8	19	0	0
SelfService_Control_ActualsQuantity	ActualsTypeId	bigint	8	19	0	1
SelfService_Control_ActualsQuantity	ActualsTypeName	nvarchar	50	0	0	1
SelfService_Control_ActualsQuantity	CostItemId	bigint	8	19	0	1
SelfService_Control_ActualsQuantity	CreatedById	bigint	8	19	0	1
SelfService_Control_ActualsQuantity	CreatedDate	datetime	8	23	3	1

SelfService_Control_ActualsQuantity	DocumentDate	datetime	8	23	3	1
SelfService_Control_ActualsQuantity	ForemanId	bigint	8	19	0	1
SelfService_Control_ActualsQuantity	IncludedInSummary	bit	1	1	0	1
SelfService_Control_ActualsQuantity	IsActive	bit	1	1	0	0
SelfService_Control_ActualsQuantity	ModifiedById	bigint	8	19	0	1
SelfService_Control_ActualsQuantity	ModifiedDate	datetime	8	23	3	1
SelfService_Control_ActualsQuantity	Notes	nvarchar	4000	0	0	1
SelfService_Control_ActualsQuantity	PostedDate	date	3	10	0	1
SelfService_Control_ActualsQuantity	PostedFromDate	datetime	8	23	3	1
SelfService_Control_ActualsQuantity	PostedToDate	datetime	8	23	3	1
SelfService_Control_ActualsQuantity	ProjectId	bigint	8	19	0	1
SelfService_Control_ActualsQuantity	Quantity	decimal	13	22	11	1
SelfService_Control_ActualsQuantity	Reversal	bit	1	1	0	1
SelfService_Control_ActualsQuantity	SourceSystemId	nvarchar	50	0	0	1
SelfService_Control_ActualsQuantity	SourceSystemName	nvarchar	100	0	0	1
SelfService_Control_ActualsQuantity	Status	nvarchar	50	0	0	1
SelfService_Control_ActualsQuantity	TransactionId	nvarchar	50	0	0	1
SelfService_Control_ActualsVendorHour	ActualsVendorHoursId	bigint	8	19	0	0
SelfService_Control_ActualsVendorHour	CostItemId	bigint	8	19	0	1
SelfService_Control_ActualsVendorHour	CreatedById	bigint	8	19	0	1
SelfService_Control_ActualsVendorHour	CreatedDate	datetime	8	23	3	1
SelfService_Control_ActualsVendorHour	IncludedInSummary	bit	1	1	0	1
SelfService_Control_ActualsVendorHour	IsActive	bit	1	1	0	0
SelfService_Control_ActualsVendorHour	ModifiedById	bigint	8	19	0	1
SelfService_Control_ActualsVendorHour	ModifiedDate	datetime	8	23	3	1
SelfService_Control_ActualsVendorHour	PostedDate	datetime	8	23	3	1
SelfService_Control_ActualsVendorHour	ProjectId	bigint	8	19	0	1

SelfService_Control_ActualsVendorHour	SourceSystemId	nvarchar	50	0	0	1
SelfService_Control_ActualsVendorHour	SourceSystemName	nvarchar	100	0	0	1
SelfService_Control_ActualsVendorHour	TransactionId	nvarchar	50	0	0	1
SelfService_Control_ActualsVendorHour	VendorHours	decimal	13	22	11	1
SelfService_Control_ActualsVendorHour	VendorId	bigint	8	19	0	1