



Explore API Documentation

SelfService_Estimate_ResourceEmploymentsCalculatedValues

Version 1.1

Last Modified: 11/14/2023

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	3/10/2023	Initial draft	Aaron Cohen
1.1	5/11/2023	Added Replicate view and updated footer	Natalie Takacs

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Overview

The **SelfService_Estimate_ResourceEmploymentsCalculatedValues** API is one of multiple APIs comprising the data contained in the Estimate Resource Employment entity. A Resource Employment is an instance of a Resource as used in the Estimate, is assigned to a Cost Item and contributes to the Estimate when the Cost Items Cost Source is "Detail"

The Estimate Resource Employment entity mainly includes three tables

- *SelfService_Estimate_ResourceEmployments*
- *SelfService_Estimate_ResourceEmploymentsCalculatedValues*
- *SelfService_Estimate_ResourceEmploymentsReferencedData*

The *SelfService_Estimate_ResourceEmployments* table contains Resource Employment records as created and managed within the Estimate application.

The *SelfService_Estimate_ResourceEmploymentsCalculatedValues* table contains Resource Employment data commonly calculated in some way for display purposes in the application and can provide a convenient way to reference data as it appears in the application without needing to transform it for display purposes.

The *SelfService_Estimate_ResourceEmploymentsReferencedData* contains the values of the many foreign key lookup values stored in reference tables and can provide a convenient way to reference data as it appears in the application without needing to lookup the foreign key values from a lookup table.

Monetary values stored in the database are stored in their base currency and corresponding values displayed in the application have been modified based on the conversion factor of the items assigned currency.

Quantity values stored in the database are stored in their base measurement units and corresponding values displayed in the application are potentially modified based on the conversion factor of the items unit of measure.

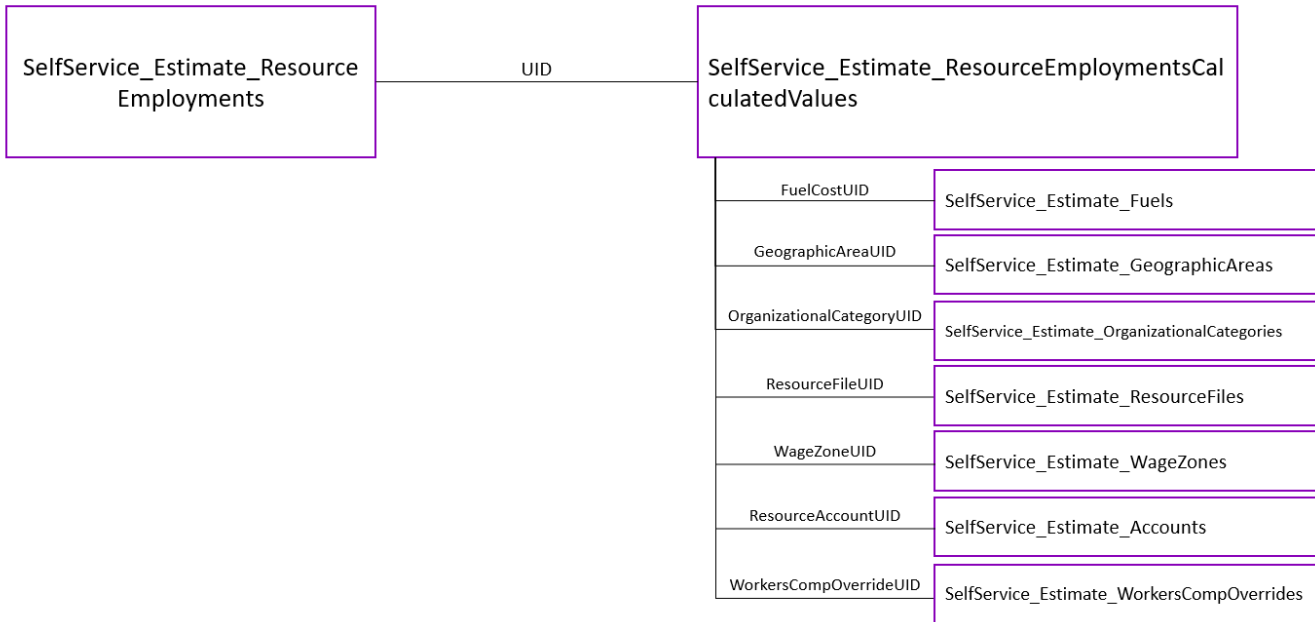
Relationships and Dependencies

From: Table	To: Table	Relationship	Cardinality ¹	Comment
ResourceEmploymentsCalculatedValues (RECV)	ResourceEmployments (RE)	RECV.UID = RE.UID	1:1	
ResourceEmploymentsCalculatedValues (RECV)	Fuels (F)	RECV.FuelCostUID = F.UID	1:M	
ResourceEmploymentsCalculatedValues (RECV)	GeographicAreas (GA)	RECV.GeographicAreaUID = GA.UID	1:M	
ResourceEmploymentsCalculatedValues (RECV)	OrganizationalCategories (OC)	RECV.OrganizationalCategoryUID = OC.UID	1:M	
ResourceEmploymentsCalculatedValues (RECV)	ResourceFiles (RF)	RECV.ResourceFileUID = RF.UID	1:M	
ResourceEmploymentsCalculatedValues (RECV)	WageZones (WZ)	RECV.WageZoneUID = WZ.UID	1:M	
ResourceEmploymentsCalculatedValues (RECV)	Accounts (A)	RECV.ResourceAccountUID = A.UID	1:M	
ResourceEmploymentsCalculatedValues (RECV)	WorkersCompOverrides (WCO)	RECV.WorkersCompOverrideUID = WCO.UID	1:M	

¹ 1:M = One to Many, 1:1 = One to One, M:1 = Many to one



SelfService_Estimate_ResourceEmploymentsCalculatedValues



API Detail

Direction	From Project Suite	
Pagination	50,000 Rows	
Frequency	All Reporting APIs are used by calling a GET method at an interval determined by the customer. InEight suggests using these APIs on an infrequent basis (once per day) to avoid potential performance impact to live systems when the returned data set could be large.	
Trigger Method(s)	All default OData filters are supported	
Average Payload Size	Depends on date range selected	
APIM Name	SelfService_Estimate_ResourceEmploymentsCalculatedValues	
Replicate View	[SelfService].[vwEstimateResourceEmploymentsCalculatedValues]	
Data Refresh/Delta/Incremental Loads		
Project Suite	Starting Version	23.4
	Ending Version	NA

Supported Filters

All default OData filters are supported by this API.

Fields

Name	Type	Char Max Length	Numeric Precision	Date Precision	Product	PK
ResourceEmploymentsCalculatedValuesId	bigint	NULL	19	NULL	Estimate	
ResourceEmploymentsCalculatedValuesUF	uniqueidentifier	NULL	NULL	NULL	Estimate	
UID	uniqueidentifier	NULL	NULL	NULL	Estimate	
AccountDescription	nvarchar	300	NULL	NULL	Estimate	
Code	nvarchar	30	NULL	NULL	Estimate	
EmployedQuantity	float	NULL	53	NULL	Estimate	
FuelAccountDescription	nvarchar	300	NULL	NULL	Estimate	
FuelAccountUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
FuelCostUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
FuelTotalCost	float	NULL	53	NULL	Estimate	
GeographicAreaUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
HasCustomCost	bit	NULL	NULL	NULL	Estimate	
HasPeriodCountMismatch	bit	NULL	NULL	NULL	Estimate	
IsActiveCostSource	bit	NULL	NULL	NULL	Estimate	
IsHourly	bit	NULL	NULL	NULL	Estimate	
OrganizationalCategoryUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
QuantityRollUpDescription	nvarchar	300	NULL	NULL	Estimate	
ResourceAccountUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
ResourceAssemblyRow	int	NULL	10	NULL	Estimate	
ResourceAssemblyString	nvarchar	60	NULL	NULL	Estimate	
ResourceFileUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
ResourceIsAwarded	bit	NULL	NULL	NULL	Estimate	
ResourceTypeString	nvarchar	60	NULL	NULL	Estimate	
UnitOfMeasureFactor	float	NULL	53	NULL	Estimate	
UsesWorkersCompRate	bit	NULL	NULL	NULL	Estimate	
WageZoneUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
WorkersCompOverrideUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
WorkersCompRate	float	NULL	53	NULL	Estimate	
BidMasterJobUID	uniqueidentifier	NULL	NULL	NULL	Estimate	
LastUpdateID	int	NULL	10	NULL	Estimate	
IsActive	bit	NULL	NULL	NULL	Estimate	
CreatedById	bigint	NULL	19	NULL	Estimate	
CreatedDate	datetimeoffset	NULL	NULL	7	Estimate	
ModifiedById	bigint	NULL	19	NULL	Estimate	
ModifiedDate	datetimeoffset	NULL	NULL	7	Estimate	

Field Descriptions

Name	Description	Example
------	-------------	---------



ResourceEmploymentsCalculatedValuesId	Unique identifier assigned to each record in the table	1967
ResourceEmploymentsCalculatedValuesUF	System generated field, for internal use only	6d273217-cdb0-04be-07ab-59efabd91cf6
UID	Unique identifier for the Resource Employment. Not visible in the Interface	037c85ca-72f2-490f-8438-e49746842ad6
AccountDescription	Value of the Resource Employments assigned <i>Account Description</i> . This value can also be obtained using the ResourceEmployments [AccountUID] field in the ResourceEmployments table and joining to the Accounts table	Blended Materials Tanks
Code	Value of the Resource Employments Resource Code Cost. This value can also be obtained using the Resource Employments [ResourceUID] field in the ResourceEmployments table and joining to the Resources table	LL3
EmployedQuantity	Quantity used by the Resource Employment for determining toe employments total cost. For duration driven resource employments, this is the Pay Hours, while for quantity driven resource employments, this is the quantity	48.0
FuelAccountDescription	Field for internal use only	null
FuelAccountUID	Field for internal use only	null
FuelCostUID	Identifier of the Resources assigned <i>Fuel Type</i> from the Fuels table. A null value indicates no Fuel Type is chosen and the OE Fuel cost is not calculated but can be manually entered on the Resource Rate.	null
FuelTotalCost	Calculated Fuel cost when A Fuel Type has been assigned. Calculation is based on the total hours of the resource employment multiplied by the Resources consumption rate and the cost per unit of the assigned fuel type.	0.0

GeographicAreaUID	Identifier of the Resource Rate records assigned <i>Geographic Area</i> from the <i>GeographicAreas</i> table	42088b67-cbf1-4070-a2a5-5fa1fe477954
HasCustomCost	Indicates if the Resource Employment costs per category are different from the employments Resource costs by category. If this value is false, unit costs by category can be derived from the Resources cost values by category, if this value is true, costs by category values are found in the <i>EmploymentCosts</i> table. This value will also be true for ad-hoc resource employments.	false
HasPeriodCountMismatch	For Resource Employments where the Cost Driver is Scheduled Periods, this field indicates if the number of Scheduled Periods is different from the number of periods defined for the resource in the Period Resource Quantities dialog	false
IsActiveCostSource	Indicates if the Resource Employments cost is contributing to the estimate. Suspending the Resource Employments Cost Item sets this field value to false	true
IsHourly	Indicates if the Resource Employment is using a duration driven resource and calculating its total cost from the employments pay hours rather than its quantity	true
OrganizationalCategoryUID	Identifier of the Resource Rate records assigned <i>Organizational Category</i> from the <i>OrganizationalCategories</i> table	72ce6acd-5299-4bd5-896f-8bef18098fac
QuantityRollUpDescription	Value of the Resources assigned Quantity Roll Up Code	null
ResourceAccountUID	Identifier of the Account Code assigned to the Resource used in the Resource Employment. Note, this is not the Account Code assigned to the Resource Employment, which can be different	null



ResourceAssemblyRow	Indicates the Row Number of the Resource Assembly employment	0
ResourceAssemblyString	Resource Assembly Code of the Resource Employment if the employment is part of a Resource Assembly	null
ResourceFileUID	Identifier of the Resource Rate records assigned <i>Resource File</i> from the ResourceFiles table	422a74ea-afe0-41e6-ac46-58762f1d2cc5
ResourceIsAwarded	Indicates if the Resource used in the Resource Employment has been awarded to a quote and if its unit cost is based on the awarded quote amount.	false
ResourceTypeString	Description of the Resource Type of the Resource used by the Resource Employment	Labor Rate
UnitOfMeasureFactor	Value of the Resources assigned Unit of Measure Factor, to be applied to the employment quantity to convert from the as-stored base quantity to the as-entered quantity using the assigned unit of measure	1.0
UsesWorkersCompRate	Indicates if a Workers Comp Override has been assigned on the employments Cost Item and if the Workers Comp Insurance portion of the Employments Labor Burden cost is derived from the specified Override WC rate	false
WageZoneUID	Identifier of the Resource Rate records assigned <i>Wage Zone</i> from the WageZones table	7cc9117c-3a30-4e16-9a86-16d2413ca080
WorkersCompOverrideUID	Identifier of the Resource Rate records assigned <i>Resource File</i> from the ResourceFiles table	null
WorkersCompRate	The Workers Comp Override Rate percentage to be applied to an employments Labor Base if a Workers Comp Override has been assigned on the employments Cost Item	0.0
BidMasterJobUID	Identifier of the Job record from the Jobs table in the BidMaster database. This field is not unique in this table but is unique to an instance of a Job. Not visible in the application.	6e5bb7dd-bf42-4db1-8393-bd78ed5d3620
LastUpdateID	Field for internal use only	11

IsActive	Indicates if record is active. Please note: records will become inactive if a user un-syncs a job from Estimate application	true
CreatedByld	System generated Id, will always represent the system, not actual users. This field is for internal use only	1
CreatedDate	Date/timestamp record is entered	2022-12-23T19:16:28.8656411Z
ModifiedByld	System generated Id, will always represent the system, not actual users. This field is for internal use only	1
ModifiedDate	Date/timestamp record is modified	2022-12-23T19:16:28.8656411Z

Sample

```
{
  "EstimateResourceEmploymentsCalculatedValuesId": 1967,
  "EstimateResourceEmploymentsCalculatedValuesUF": "6d273217-cdb0-04be-07ab-59efabd91cf6",
  "EstimateUID": "037c85ca-72f2-490f-8438-e49746842ad6",
  "AccountDescription": "Blended Materials Tanks",
  "Code": "LL3",
  "EmployedQuantity": 48.0,
  "FuelAccountDescription": null,
  "FuelAccountUID": null,
  "FuelCostUID": null,
  "FuelTotalCost": 0.0,
  "GeographicAreaUID": "42088b67-cbf1-4070-a2a5-5fa1fe477954",
  "HasCustomCost": false,
  "HasPeriodCountMismatch": false,
  "IsActiveCostSource": true,
  "IsHourly": true,
  "OrganizationalCategoryUID": "72ce6acd-5299-4bd5-896f-8bef18098fac",
  "QuantityRollUpDescription": null,
  "ResourceAccountUID": null,
  "ResourceAssemblyRow": 0,
  "ResourceAssemblyString": null,
  "ResourceFileUID": "422a74ea-afe0-41e6-ac46-58762f1d2cc5",
  "ResourceIsAwarded": false,
  "ResourceTypeString": "Labor Rate",
  "UnitOfMeasureFactor": 1.0,
  "UsesWorkersCompRate": false,
  "WageZoneUID": "7cc9117c-3a30-4e16-9a86-16d2413ca080",
  "WorkersCompOverrideUID": null,
}
```



```

"WorkersCompRate": 0.0,
"BidMasterJobUID": "6e5bb7dd-bf42-4db1-8393-bd78ed5d3620",
"LastUpdateID": 11,
"IsActive": true,
"CreatedById": 1,
"CreatedDate": "2022-12-23T19:16:28.8656411Z",
"ModifiedById": 1,
"ModifiedDate": "2022-12-23T19:16:28.8656411Z"
}
    
```

Data Validation

This data can be validated by navigating to a Resource Employment record, the Resource Employment register, or expanding the details of a Resource Employment on a Cost Item in either the Cost Item Record or the CBS Register

Figure 1: Resource Employment register

CBS Position Code	Cost Item Description	Row Number	Code	Cost Curve	Geographic Area	Organizational Category	Wage Zone	Resource File
1.1	Mobilization	1	LT1	Employed ...	Southwest	Truck Driver - Teamster	Wage Zone A	Standard Labor Rate File
1.1	Mobilization	2	ETLT	Description		Truck		Standard Equipment Rate File
1.1	Mobilization	3	ETTT	Back Loaded		Truck		Standard Equipment Rate File
1.2	Clearing & Grubbing	1	LL2	Bell Shaped		Laborer	Wage Zone A	Standard Labor Rate File
1.2	Clearing & Grubbing	2	LO4	Employed Cost Item		Operator	Wage Zone A	Standard Labor Rate File
1.2	Clearing & Grubbing	3	LT1	Front Loaded		Truck Driver - Teamster	Wage Zone A	Standard Labor Rate File
1.2	Clearing & Grubbing	4	LO1	Linear		Operator	Wage Zone A	Standard Labor Rate File
1.2	Clearing & Grubbing	5	ED6			Dozer		Standard Equipment Rate File
1.2	Clearing & Grubbing	6	ETFT			Truck		Standard Equipment Rate File
1.2	Clearing & Grubbing	7	ETDT	Employed Cost Item		Truck		Standard Equipment Rate File
1.2	Clearing & Grubbing	8	EL950	Employed Cost Item		Loader		Standard Equipment Rate File
1.2	Clearing & Grubbing	9	UDUMP	Employed Cost Item		Earthwork		Standard Unique Rate File
1.3.1	Excavation	1	ETWT	Resource Periods		Truck		Standard Equipment Rate File
1.3.1	Excavation	2	D8N-EQW	Employed Cost Item				EQW
1.3.1	Excavation	3	ES623	Employed Cost Item		Scraper		Standard Equipment Rate File
1.3.1	Excavation	4	ECOMP1	Employed Cost Item		Compactor		Standard Equipment Rate File
1.3.1	Excavation	5	ECOMP2	Employed Cost Item		Compactor		Standard Equipment Rate File
1.3.1	Excavation	6	LL2	Employed Cost Item	Southwest	Laborer	Wage Zone A	Standard Labor Rate File
1.3.1	Excavation	7	LO4	Employed Cost Item	Southwest	Operator	Wage Zone A	Standard Labor Rate File
1.3.1	Excavation	8	ES621	Employed Cost Item		Scraper		Standard Equipment Rate File
1.3.1	Excavation	9	EG14G	Employed Cost Item		Grader		Standard Equipment Rate File
1.3.1	Excavation	10	LO1	Employed Cost Item	Southwest	Operator	Wage Zone A	Standard Labor Rate File
1.3.1	Excavation	11	LO2	Employed Cost Item	Southwest	Operator	Wage Zone A	Standard Labor Rate File

Figure 2: Resource Employment record

Training Job - Training Job - Maricopa County No. TM2924 - Estimate

File Setup Estimate Quote Price Execution System Tools Actions

Highlight Unique (Delta) Employment Fields Open Haul Calculator Shift Rate Calculator

Default Data Blocks View Tools

Cost Breakdown Structure (CBS) Register Resource Employment Register Resource Employment Record

Identification

Code: LT1 Total Cost: \$2,449.51
 Type: Labor Rate Currency: U.S. Dollar
 Description: Teamster Quantity (Less Waste):
 Employment Quantity: 1.00 Cost Driver: CI Duration
 Unit of Measure: Each Waste % Add-on:
 Unit Cost: \$30.62 Productivity Factor: 1.00

Properties

Account Code: 1020 Tag 1: Non Union
 Resource Assembly Code: Tag 2: Hourly
 Cost Curve: Employed Cost Item Tag 3:
 Worker's Comp Override: Custom 1:
 Geographic Area: Southwest Custom 2:
 Worker's Comp Override %: Custom 3:
 Quantity Roll-Up Code: Custom 4:
 Organizational Category: Truck Driver - Teamster Custom 5:
 Wage Zone: Wage Zone A
 Resource File: Standard Labor Rate File

Maintenance Labor Cost

Unit Cost: Total Cost:

Pay Rules

Scale 1: Scale 2: Scale 3:
 Composite Wage Scale: 100 0.00 0.00
 For every 8.00 hours worked, pay 8.00 hours

Security

Last Changed By: System
 Last Changed On: 7/19/2021 7:07:55 AM

Resource Employment Breakdown

Cost Category	Scale 1	Scale 2	Scale 3
Total	\$30.62	\$45.93	\$61.24
> Labor	\$30.62	\$45.93	\$61.24
> Owned Equipment	\$0.00	\$0.00	\$0.00
> Rented Equipment	\$0.00	\$0.00	\$0.00
> Supplies	\$0.00	\$0.00	\$0.00
> Materials	\$0.00	\$0.00	\$0.00
> Subcontract	\$0.00	\$0.00	\$0.00
> Fees	\$0.00	\$0.00	\$0.00
> Allowance	\$0.00	\$0.00	\$0.00
Project Overhead	\$0.00	\$0.00	\$0.00
Undefined	\$0.00	\$0.00	\$0.00
Billing Rate	\$42.87	\$64.30	\$85.73
Billing Rate Markup	\$12.25	\$18.37	\$24.50
Billing Rate Markup %	40.00	4...	4...

Resource Employment Breakdown Cost Item Details

OK Cancel < Prev Next >

As-Entered Currency As-Entered Units Training Job - Training Job - Maricopa County No. TM2924 Accrued Costs OFF

Figure 3: Employment Setup datablock of a Cost Item record



Training Job - Training Job - Maricopa County No. TM2924 - Estimate

File Setup Estimate Quote Price Execution System Tools Actions

Split Default Data Blocks Display Parent Information Display Billing Rate Highlight Unique (Delta) Resource Fields Highlight Unique (Delta) Cost Item Fields Insert Subordinate Trench Calculator Edit Resource Periods Shift / Rate Calculator Break Cost Allocation Link

Cost Breakdown Structure (CBS) Register **Cost Item Record**

CBS Code: 1.1 Optional Code: 641 0100 Description: Mobilization Forecast (T/O) Qty: 1.00 Unit of Measure: Lump Sum Unit Cost: \$12,485.51 Total Cost: \$12,485.51 Currency: U.S. Dollar

PI Assignment: 641 0100 PI Line Number: 10 PI Description: Mobilization Cost Segment: Direct Cost Pay Quantity: 1.00 Cost Source: Detail Alternate: BASE

Cget Item Summary Detail: \$12,485.51 Plug: \$500.00 Quote: \$500.00 Allocation

Drag columns here to group Saved views: Previous View

Row Number	Code	Resource Assembly	Description	Quantity (Less Waste)	Waste % Add-on	Quantity	Unit of Meas.
1	LT1		Teamster			1.00	Each
2	ETLT		Lowboy Trailer			1.00	Each
3	EITT		Tractor Truck			1.00	Each

Employment Setup

Identification
Code: LT1 Type: Labor Rate
Description: Teamster
Quantity (Less Waste): Waste % Add-on:
Quantity: 1.00 Productivity Factor: 1.00
Cost Driver: CI Duration

Employment Cost
Unit Cost: \$30.62 Total Cost: \$2,449.51

Maintenance Labor Cost
Unit Cost: Total Cost:

Pay Rules
Scale 1: Scale 2: Scale 3:
Composite Wage Scale: 100.00 0.00 0.00
For every 8.00 hours worked, pay 8.00 hours

Properties
Currency: U.S. Dollar Tag 1: Non Union
Account Code: 1020 Tag 2: Hourly
Cost Curve: Employed Cost Item Tag 3:
Worker's Comp Override: Consumption (UM/Hour):
Geographic Area: Southwest Custom 2:
Worker's Comp Override %: Custom 3:

Employ... Notes Cost It... Produc... Man-H... Resour... Schedule User D... Bench...

OK Cancel < Prev Next >

As-Entered Currency As-Entered Units Training Job - Training Job - Maricopa County No. TM2924 Accrued Costs OFF