

InEight Estimate

Integration Specification





Changelog

This changelog contains only significant or other notable changes to the document revision. Editorial or minor changes that do not affect the context of the document are not included in the changelog.

Rev.	Date	Description
1.0	10-AUG-2022	Initial Release.
2.0	06-OCT-2022	Added WarehouseAction field to <u>Estimate Jobs</u> . Published revision (Release 22.8)
3.0	10-APR-2023	Added ProjectDisplayId field to <u>Estimate Jobs</u> . Updated field descriptions for <u>Estimate Jobs</u> associated to Platform projects. Published revision (Release 23.2)
4.0	21-APR-2023	Added integrations for <u>Estimate Jobs (Get)</u> and <u>Estimate Jobs (Delete)</u> . Published revision (Release 23.4)
5.0	16-FEB-2024	Revised the Overview description. Relabeled existing Estimate Jobs endpoints to Estimate for consistency with APIM labels. Added integrations for <u>Upsert Pay Items</u> , <u>List Pay Items</u> and <u>Delete Pay Items</u> . Published revision (Release 23.12)
6.0	23-MAY-2024	Revised <u>Upsert Pay Items</u> to account for a refactor of the PayItem API where certain validated fields now use a name-value pair instead of a string field to refer to foreign the appropriate foreign entities. Also added a general description of how to properly use the name-value pair when making foreign entity references.
7.0	20-AUG-2024	Added integrations for <u>List Accounts</u> , <u>List Currencies</u> , <u>List Units of Measure</u> , and <u>List User Tags</u> . Published revision (Release 24.7)
8.0	20-SEP-2024	Added integrations for <u>Upsert Quotes</u> , <u>List Quotes</u> , <u>Delete Quotes</u> , <u>Upsert Quote</u> <u>Items</u> , <u>List Quote Items</u> , <u>Delete Quote Items</u> , <u>Upset Quote Packages</u> , <u>List Quote Packages</u> , and <u>Delete Quote Packages</u> . Published revision (Release 24.9)



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Overview

Estimate integration APIs permit the creation and maintenance of various entities from outside of the applications interface such as Estimate jobs or pay items. Leveraging these APIs, organizations can utilize data and automate workflows by building integrations to third party applications and external data sources. Estimate APIs work with transactional data and do not require locking the job, therefore they can be used while users are in the job, behaving similar to the way multiple users can work in a single job at the same time.

Integrations in this Document

Integration	Description
Upsert Estimates	This integration allows a customer to create newestimates In Eight Estimate application. This supports integrations to external systems such as Bid plan rooms or Customer Relation Management (CRM) systems. Additionally, this integration also permits updating existing estimate data.
List Estimates	This integration allows a customer to retrieve data from existing estimates in the InEight Estimate application.
Delete Estimates	This integration allows a customer to delete estimates that exist in the InEight Estimate application.
Upsert Payltems	This integration permits the creation and/or updating of Pay Item records for a given estimate.
List PayItems	This integration retrieves Pay Item records for a given estimate.
Delete Payltems	This integration allows a customer to delete pay items from a job that exists in InEight Estimate. Passing an array of valid field name and value pairs will delete the corresponding pay items from the indicated job in InEight Estimate.

Using Estimate APIs

Most of the Estimate API's use a common format. The first field in the payload is typically the JobCode, which identifies the Job to be queried or updated, followed by the Entities field, which accepts an array of field names and corresponding values representing a single instance of the entity being referenced.

For example, the following payload will create a new Pay Item in the Training Job with a Pay Item Number of *641* 0100 and a Description of *Mobilization*



For existing data in Estimate, various data entities can be updated using an Upsert API. When updating data, it's important to carefully identify the specific record or records to be updated in order to ensure you get the desired results.

Identifying the appropriate record to update is commonly accomplished using the ObjectRef name/value pair inside of the Entities array.

```
"ObjectRef": [
    {
     "Name": "string",
     "Value": "string"
}]
```

For instance, using the following ObjectRef on the PayItem API would identify the Pay Item with a Pay Item Number of 202 0102 as the Pay Item to be updated.

```
"ObjectRef": [
    {
      "Name": "PayItemID",
      "Value": "XXXX"
    }]
```

To perform an update to the Forecast (T/O) Quantity of Pay Item Number XXXX from 1 to 5 in the following example Training Job

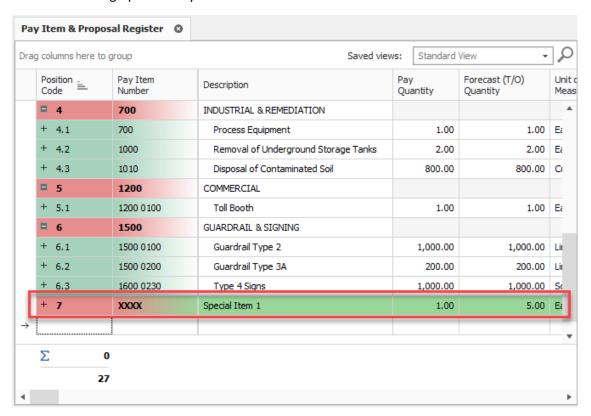
ag columns her	e to group	Saved vie	ws: St	andard	View •	Q
Position =	Pay Item Number	Description	Pay Quantit	:у	Forecast (T/O) Quantity	Unit Mea
4	700	INDUSTRIAL & REMEDIATION				
+ 4.1	700	Process Equipment		1.00	1.00	Ea
+ 4.2	1000	Removal of Underground Storage Tanks		2.00	2.00	Ei
+ 4.3	1010	Disposal of Contaminated Soil	8	300.00	800.00	Cı
□ 5	1200	COMMERCIAL				
+ 5.1	1200 0100	Toll Booth		1.00	1.00	Εŧ
□ 6	1500	GUARDRAIL & SIGNING				
+ 6.1	1500 0100	Guardrail Type 2	1,0	00.00	1,000.00	Lir
+ 6.2	1500 0200	Guardrail Type 3A	- 2	200.00	200.00	Lir
+ 6.3	1600 0230	Type 4 Signs	1,0	00.00	1,000.00	Sc
+ 7	XXXX	Special Item 1		1.00	1.00	Εä

The API call for the update would look as follows

```
{
  "JobCode": "Training Job",
  "Entities": [
```



And the resulting updated Pay Item would look as follows



NOTE:

If you attempt to refer to a valid ObjectRef name/value pair that does not already exist, a new object will be created.

For certain types of objects, there may not be a single field that uniquely identifies the object. In these situations, you may need to use multiple fields to identify the appropriate record you are attempting to update. The ObjectRef accepts an array of name/value pairs and can be used in the following manner.



```
},
    {
     "Name": "Description",
     "Value": "Special Item 2"
     }
     ],
     "OriginalForecastQuantity": 10,
}
```

Many of the Estimate API's let you update validated data, which are foreign entities in Estimate. Within the application, only a valid value can be selected from the list presented to the user. Examples of a validated list values could be Currencies or Units of Measure.

Providing values for these types of foreign entity references may also require the use of a name-value pair. The Name identifies the entity and the Value identifies the value being referenced.

The following example would update the Unit of Measure to Lump Sum on Pay Item XXXX.

Some foreign entity references may not have a natural key that can be used to identify the object. One such example is the Tag fields in Estimate, where the Tag field value is unique for a particular register, but not unique across all the tag field values in the Tags Register. In the following example, the Tag field value of *Bridge* can be found in Tag 2 of the Cost Items Register, Tag 1 of the Pay Items Register and Tag 2 of the Resources Register.



	y Item & Pro	posai Ke	gister	Foundation Se	cup Data Ke	giscei	0		
Account Codes Tags Work Break			down Structures	Quantity Roll-Ups		Quote Group Ta	ags I	Units of Mea	
Dra	g columns here	to group							
	Code			Description	=	Regist	ter	Field	
	Landscaping					Vendo	ors	Tag 1	
	Aggregate B	ase		Aggregate Base		Resou	irces	Tag 1	
\rightarrow	Bridge			Bridge		Cost Items		Tag 2 ▼	
	Bridge			Bridge		Pay Items		Tag 1	
	Bridge			Bridge		Resou	irces	Tag 2	
	Class 250			Class 250		Resou	irces	Tag 2	
	Class III			Class III		Resou	irces	Tag 2	
	Commercial			Commercial Concrete		Pay Items Cost Items Vendors		Tag 1 Tag 2	
	Commercial								
	Concrete							Tag 1	Tag 1
	Concrete			Concrete					
	Concrete			Concrete		Resou	irces	Tag 1	
	Entimator 1			Entimator 1		Cont I	tome	Too 1	toot
	Σ		1						
			44						

In this case, to properly reference the appropriate Tag field value, you need to include the combination of the Tag field code vale and the Tag field register. As an example, the following API call will update the Tag 1 value of Pay Item XXXX in the Pay Item register to *Bridge*.



This integration allows a customer to create new estimates InEight Estimate application. This supports integrations to external systems such as Bid plan rooms or Customer Relation Management (CRM) systems.

This integration can also be used to update data contained in existing estimates. Note any field which is not a required field can be excluded from the JSON. If a field is included in the JSON, the InEight data will be updated even if the field is blank or contains a null value.

Direction		To the InEight cloud platform from an external system.				
Frequency		Determined by external system. Suggested implementation to trigger the creation of an Estimate Job each time a project is created in the customers external system				
Trigger Method(s)		Determined by external system				
API Name		Upsert Estimates				
InEight	Starting Version	22.6				
Estimate	Ending Version					

Fields

Depth	Name	Туре	Precision	Parent	Req.
1	JobCode ¹	String	200		Yes
1	Description	String	300		No
1	ProjectDisplayId	String	200		No
1	SourceJobCode	String	200		No
1	Status	String	200		No
1	WarehouseAction	String	20		No
1	Notes	String	4000		No
1	Location	String	200		No
1	City	String	200		No
1	Country	String	50		No
1	County	String	30		No
1	State	String	50		No
1	Latitude	Number	Float		No
1	Longitude	Number	Float		No
1	Туре	String	200		No
1	ContractDuration	Number	Float		No
1	TimeMeasure	String	50		No



Depth	Name	Туре	Precision	Parent	Req.
1	Start ²	String	Date		No
1	Finish ²	String	Date		No
1	Duration	Number	Float		No
1	BidDate ²	String	Date		No
1	BidTime ²	String	Date		No
1	BidLocation	String	50		No
1	OpeningType	String	50		No
1	ProposalType	String	50		No
1	PlanHolders	Number	Float		No
1	OwnersEstimate	Number	Float		No
1	LiquidatedDamages	Number	Float		No
1	LiqDamagesUM	String	50		No
1	EngineerLastName	String	50		No
1	EngineerFirstName	String	30		No
1	EngineerCompanyName	String	200		No
1	OwnerLastName	String	50		No
1	OwnerFirstName	String	30		No
1	OwnerCompanyName	String	200		No
1	ArchitectLastName	String	50		No
1	ArchitectFirstName	String	30		No
1	ArchitectCompanyName	String	200		No
1	EstimatorLastName	String	50		No
1	EstimatorFirstName	String	30		No
1	EstimatorCompanyName	String	200		No
1	RFQContactLastName	String	50		No
1	RFQContactFirstName	String	30		No
1	RFQContactCompanyName	String	200		No
1	UserTag1	String	50		No
1	UserTag2	String	200		No
1	UserTag3	String	200		No
1	UserTag4	String	200		No
1	UserTag5	String	200		No
1	UserTag6	String	200		No
1	UserTag7	String	200		No



Depth	Name	Туре	Precision	Parent	Req.
1	UserTag8	String	50		No
1	UserTag9	String	50		No
1	UserTag10	String	50		No
1	UserTag11	String	50		No
1	UserTag12	String	50		No
1	UserTag13	String	50		No
1	UserTag14 ²	String	Date		No
1	UserTag15 ²	String	Date		No
1	UserTag16 ²	String	Date		No
1	UserTag17 ²	String	Date		No
1	UserTag18 ²	String	Date		No
1	UserTag19 ²	String	Date		No
1	UserTag20 ²	String	Date		No
1	UserTag21	Number	Float		No
1	UserTag22 ²	String	Date		No
1	UserTag23 ²	String	Date		No
1	UserTag24	String	200		No

^{1 -} Natural Key field.

Field Descriptions

Name	Description	Example
JobCode	The value of this field is provided by the user when a job is created. This value must be unique and cannot be modified after the job has been created. Permissible characters are alpha numeric, spaces, and dashes.	
Description	Free-form text field that is used to provide a description of the project.	Training Job - Maricopa County No. TM2924
ProjectDisplayId	Provide the value of an existing project in InEight Platform to create an association between the Estimate Job and the indicated Platform project. This can be used on the creation of new Estimate Jobs. For an existing Estimate Job that does not already have a Platform project association, a value can be provided here to update an existing Estimate Job by creating the project association.	1000102

² - The data format for Date/Time fields is YYYY-MM-DDTHH:MM:SS \pm hhmm, where hhmm is the time zone offset. If the time is already converted to UTC, then the offset will be \pm 0000.



Name	Description	Example
SourceJobCode	Value of a valid Job Code or Template Code of the job to be used when creating a new job from a source job. Note: This field is not applicable for JobCode_Get.	Sample Template
Status	User defined field for job status. This value should match a value in the Job Status Register. Note: When a Job Status is indicated that does not already exist, it is added to the Job Status Register in Estimate with a job status type of Not Applicable.	Bidding
WarehouseAction	Use to include the Estimate job in the Connected Analytics register. Acceptable values are: None Update Remove EnableAutoUpdate DisableAutoUpdate If this field is not included, no action is taken.	Update
Notes	For Estimate Jobs associated to a project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the Notes field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the free-form text Notes field used for notes about the job.	Use this field to record notes, information, special provisions, unusual conditions
Location	For Estimate Jobs associated to a Project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the Address1 field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the Jobs location as indicated in the Location field on the Cover Sheet tab of the Job Properties form.	I-10 MP 100 to MP 120
City	For Estimate Jobs associated to a Project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the City field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the Name field of the city where the job is located.	Phoenix



Name	Description	Example
Country	For Estimate Jobs associated to a Project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the Country field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the ISO code for the country where the job is located prefixed with @Geo_ and shows as the Jobs country in the Country drop-down list on the Job Properties form. Values are not restricted to list entries. To populate this field with a selection from the list, provide the two-character alphanumeric ISO country code prefixed with @Geo	
County	Name of the county where the job is located.	Maricopa
State	For Estimate Jobs associated to a Project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the State field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the ISO code for the state where the job is located prefixed with @Geo_ and shows as the Jobs state in the State drop-down list on the Job Properties form. Values are not restricted to list entries. To populate this field with a selection from the list, provide the two-character alpha-numeric ISO code for the country, followed by the appropriate alpha-numeric ISO code for the region, prefixed with @Geo	@Geo_US_AZ
Latitude	For Estimate Jobs associated to a Project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the Latitude field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the Latitude of the project location. Allowed values are maximum of 90 and minimum of 90.	42.0039178
Longitude	For Estimate Jobs associated to a Project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the Longitude field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a project in Platform, this is the Longitude of the project location. Allowed values are maximum of 180 and minimum of -180.	-87.9703461
Туре	Free-form text field for description of the job type.	Highway and General Engineering



Name	Description	Example
ContractDuration	Contractual duration of the job in days as permitted under the contract.	160
TimeMeasure	Value selected for the contract duration. Allowed values are:	Calendar Days
Start	For Estimate Jobs associated to a Project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the Forecast Start Date field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the anticipated start date of the job in UTC format as shown in the Forecasted Start field in the UI.	
Finish	For Estimate Jobs associated to a project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the Forecast Completion Date field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the anticipated finish date of the job in UTC format as shown in the Forecasted Finish field in the UI. This field is derived from adding the value of the Duration field to the Forecast Start field in the UI.	2014-06-05
Duration	For Estimate Jobs associated to a project in InEight Platform, this field is read-only in Estimate and shows the corresponding data from the Forecast Duration field in the project. Data used in this field is stored and maintained in the Platform project, not in Estimate. For Estimate Jobs not associated to a Platform project, this is the duration of the job shown as a whole number derived from the difference in days between the Forecast Finish and Forecast Start fields. If the number of duration days is set, the finish date will recalculate. If the start, finish, and duration values provided in the API do not add correctly, then the finish date will be recalculated. If both finish and duration are not provided, then start date will be copied to the finish.	150
BidDate	Bid date of the job in UTC format.	2013-12-23T00:00:00
BidTime	Bid time of the job in UTC format.	2013-12-23T10:30:00
BidLocation	Location where the bid opening will occur for the job.	Engineer's Office



Name	Description	Example
OpeningType	Type of bid submission for the job.	Public
ProposalType	Type of bid proposal for the job.	Unit Price
PlanHolders	Number of plan holders on the job.	5
OwnersEstimate	Owners estimated value of the job.	6000000
LiquidatedDamages	Liquidated damages as indicated by the contract bid documents.	1000
LiqDamagesUM	Value of the unit of measure assigned to the liquidated damages amount. The value provided must match a value found in the Units of Measure tab in Foundation Setup Data Register.	Each
EngineerLastName	Used to identify the last name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the EngineerFirstName and EngineerCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Jones
EngineerFirstName	Used to identify the first name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the EngineerLastName and EngineerCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Fred
EngineerCompanyName	Used to identify the company name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the EngineerFirstName and EngineerLastName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Example Engineer
OwnerLastName	Used to identify the last name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the OwnerFirstName and OwnerCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Slate



Name	Description	Example
OwnerFirstName	Used to identify the first name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the OwnerLastName and OwnerCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Jerry
OwnerCompanyName	Used to identify the company name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the OwnerFirstName and OwnerLastName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Example Owner
ArchitectLastName	Used to identify the last name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the ArchitectFirstName and ArchitectCompanyName attributes to further qualify the selection of the appropriate Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Frost
ArchitectFirstName	Used to identify the First name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the ArchitectLastName and ArchitectCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Robert
ArchitectCompanyName	Used to identify the company name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the ArchitectFirstName and ArchitectLastNameattributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Example Architect
EstimatorLastName	Used to identify the last name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the EstimatorFirstName and EstimatorCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Cross



Name	Description	Example
EstimatorFirstName	Used to identify the first name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the EstimatorLastName and EstimatorCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Tom
EstimatorCompanyName	Used to identify the company name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the EstimatorFirstName and EstimatorLastName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Example Prime Contractor 1
RFQContactLastName	Used to identify the last name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the RFQContactFirstName and EstimatorCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Cross
RFQContactFirstName	Used to identify the first name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the RFQContactLastName and EstimatorCompanyName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Tom
RFQContactCompanyName	Used to identify the company name of a valid Address Book entry in the Estimate Library. Can be used in conjunction with the RFQContactFirstName and EstimatorLastName attributes to further qualify the selection of the applicable Address Book entry. The value must match a value found in the Address Book and will return the first such instance if multiple instances of an Address Book entry exist.	Example Prime Contractor 1
UserTag1	Value that shows in the Tag 1 field in Job Folder Tags. The value provided must match a value in Foundation Setup Data Register > Tags.	Concrete
UserTag2	Free-form text that shows in the Tag 2 field in Job Folder Tags.	Sample Tag Data
UserTag3	Free-form text that shows in the Tag 3 field in Job Folder Tags.	Sample Tag Data



Name	Description	Example
UserTag4	ISO code for the country that shows in the Tag 4 field in Job Folder Tags. Jobs country as shown in the Country drop-down field on the Job Properties form. Values are not restricted to list entries. To populate this field with a selection from the list, provide the two-character alpha-numeric ISO code prefixed with @Geo	United States
UserTag5	Free-form text that shows in the Tag 5 field in Job Folder Tags.	Sample Tag Data
UserTag6	Free-form text that shows in the Tag 6 field in Job Folder Tags.	Sample Tag Data
UserTag7	Free-form text that shows in the Tag 7 field in Job Folder Tags.	Sample Tag Data
UserTag8	Value that shows in the Tag 8 field in Job Folder Tags. The value provided must match a value in Foundation Setup Data Register > Tags.	Concrete
UserTag9	Value that shows in the Tag 9 field in Job Folder Tags. The value provided must match a value in Foundation Setup Data Register > Tags.	Concrete
UserTag10	Value that shows in the Tag 10 field in Job Folder Tags. The value provided must match a value in Foundation Setup Data Register > Tags.	Concrete
UserTag11	Value that shows in the Tag 11 field in Job Folder Tags. The value provided must match a value in Foundation Setup Data Register > Tags.	Concrete
UserTag12	Value that shows in the Tag 12 field in Job Folder Tags. The value provided must match a value in Foundation Setup Data Register >Tags.	Concrete
UserTag13	Value that shows in the Tag 13 field in Job Folder Tags. The value provided must match a value in Foundation Setup Data Register > Tags.	Concrete
UserTag14	Date value that shows in the Tag 14 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00
UserTag15	Date value that shows in the Tag 15 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00
UserTag16	Date value that shows in the Tag 16 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00
UserTag17	Date value that shows in the Tag 17 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00
UserTag18	Date value that shows in the Tag 18 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00
UserTag19	Date value that shows in the Tag 19 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00
UserTag20	Date value that shows in the Tag 20 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00



Name	Description	Example
UserTag21	Numerical value that shows in the Tag 21 field in Job Folder Tags. Only numeric values are acceptable.	1000
UserTag22	Date value that shows in the Tag 22 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00
UserTag23	Date value that shows in the Tag 23 field in Job Folder Tags. Values must be provided in UTC format.	2014-06-05T00:00:00
UserTag24	Free-form text that shows in the Tag 24 field in Job Folder Tags.	Sample Tag Data

Sample JSON

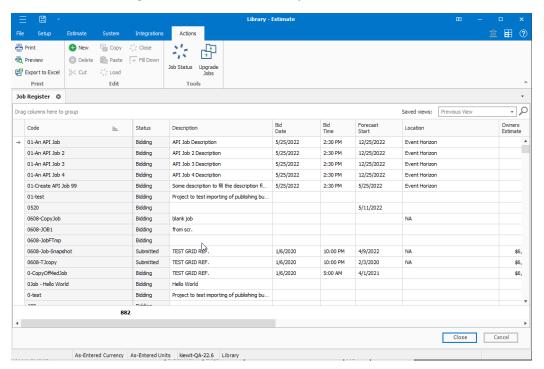
```
"ImportCommand": "ImportJob",
"ImportEntities": [
  "JobCode": "Training Job",
  "Description": "Training Job - Maricopa County No. TM2924",
   "ProjectDisplayId": "1000102",
  "SourceJobCode": "Sample Template",
  "Status": "Bidding",
  "WarehouseAction": "Update",
  "County": "Maricopa",
   "Type": "Highway and General Engineering",
   "ContractDuration": 160,
  "TimeMeasure": "Calendar Days",
  "BidDate": "2013-12-23 00:00:00.000",
  "BidTime": "2013-12-23 12:00:00.000",
  "BidLocation": "Engineer's Office",
  "OpeningType": "Public",
  "ProposalType": "Unit Price",
  "PlanHolders": 5,
  "OwnersEstimate": 6000000,
  "LiquidatedDamages": 1000,
  "LiqDamagesUM": "Each",
  "EngineerLastName": "Jones",
   "EngineerFirstName": "Fred",
   "EngineerCompanyName": "Example Engineer",
   "OwnerLastName": "Slate",
  "OwnerFirstName": "Jerry",
  "OwnerCompanyName": "Example Owner",
  "ArchitectLastName": "Frost",
   "ArchitectFirstName": "Robert",
   "ArchitectCompanyName": "Example Architect",
   "EstimatorLastName": "Cross",
  "EstimatorFirstName": "Tom",
  "EstimatorCompanyName": "Example Prime Contractor 1",
  "RFQContactLastName": "Cross",
  "RFQContactFirstName": "Tom",
  "RFQContactCompanyName": "Example Prime Contractor 1",
   "UserTag1": "Concrete",
   "UserTag2": "Sample Tag Data",
  "UserTag3": "Sample Tag Data",
```



```
"UserTag4": "United States",
"UserTag5": "Sample Tag Data",
"UserTag6": "Sample Tag Data",
"UserTag7": "Sample Tag Data",
"UserTag8": "Concrete",
"UserTag9": "Concrete",
"UserTag10": "Concrete",
"UserTag11": "Concrete",
"UserTag12": "Concrete",
"UserTag13": "Concrete",
"UserTag14": "2014-06-05 00:00:00.000",
"UserTag15": "2014-06-05 00:00:00.000",
"UserTag16": "2014-06-05 00:00:00.000",
"UserTag17": "2014-06-05 00:00:00.000",
"UserTag18": "2014-06-05 00:00:00.000",
"UserTag19": "2014-06-05 00:00:00.000",
"UserTag20": "2014-06-05 00:00:00.000",
"UserTag21": 1000,
"UserTag22": "2014-06-05 00:00:00.000",
"UserTag23": "2014-06-05 00:00:00.000",
"UserTag24": "Sample Tag Data"
```

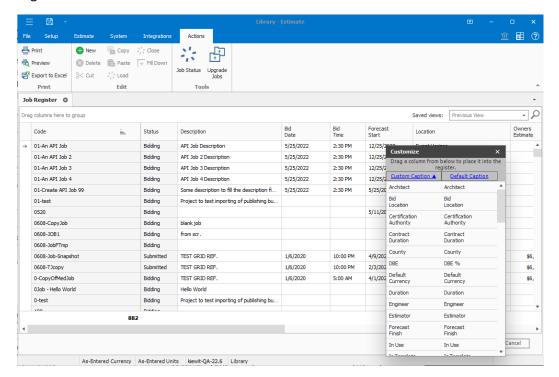
Verification

Go to Jobs > **Jobs Register** to view the list of all jobs.

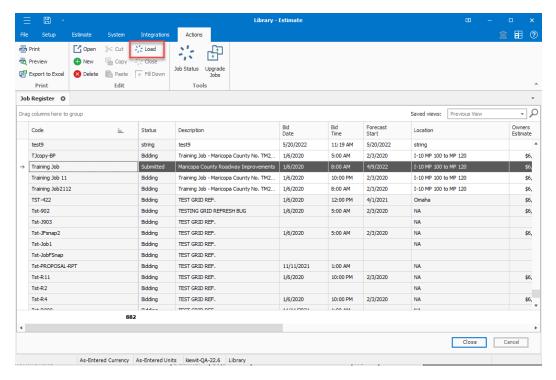




Many of the Job Properties attributes can be seen or added as columns directly in the Jobs Register. To add a column, right click on a column header and choose **Column Chooser**. Drag a column into a position in the register to add it.

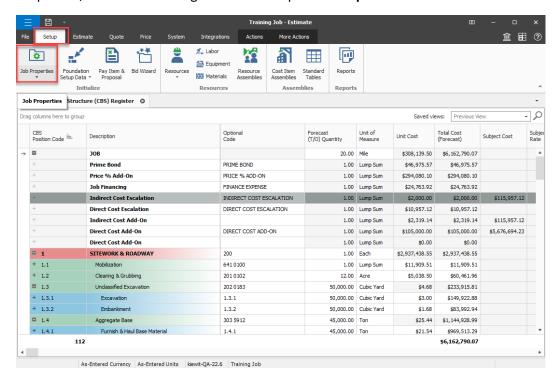


More detailed information on any Job can be found by opening the Job. Select a Job, and then from the Actions menu, click **Load**.

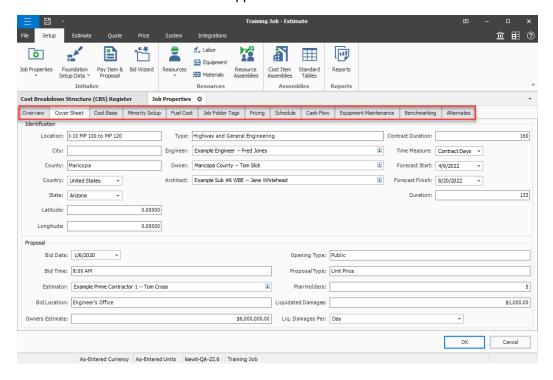




The job typically opens with the CBS Register activated, depending on the users configuration. To view Job Properties, in the ribbon navigation click Setup > **Job Properties**



In the Job Properties form, tabs are used to categorize the Job Properties for a particular project. Click through the tabs to locate and validate the applicable data.





List Estimates

This integration allows a customer to retrieve data from existing estimates in InEight Estimate.

Direction		From InEight
Frequency		Determined by external system
Trigger Met	thod(s)	Determined by external system
API Name		List Estimates
InEight	Starting Version	23.4
Estimate	Ending Version	

Fields

See <u>Upsert Estimates</u>, <u>Fields</u> for detailed information.

Field Descriptions

See <u>Upsert Estimates</u>, <u>Field Descriptions</u> for detailed information.

Verification

See <u>Upsert Estimates</u>, <u>Verification</u> for detailed information.

26 List Estimates



Delete Estimates

This integration allows a customer to delete estimates that exist in InEight Estimate. Passing an array of valid Estimate codes deletes the jobs from the InEight cloud platform.

Direction		From InEight
Frequency		Determined by external system
Trigger Met	thod(s)	Determined by external system
API Name		Delete Estimates
InEight	Starting Version	23.4
Estimate	Ending Version	

Fields

See **Upsert Estimates**, Fields for detailed information.

Field Descriptions

See <u>Upsert Estimates</u>, <u>Field Descriptions</u> for detailed information.

Sample JSON

```
[
"Training Job",
"Training Job 2"
]
```

Verification

See <u>Upsert Estimates</u>, <u>Verification</u> for detailed information.

Delete Estimates 27



List Accounts

The EstimateAccounts integration allows a customer to query the Accounts that exist in an existing estimate in the InEight Estimate application. This may be necessary to ensure an Account exists prior to referencing it in another API which may permit the assignment of a valid Account.

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	:hod(s)	Determined by external system.
API Name		List Accounts
InEight	Starting Version	24.7
Estimate	Ending Version	

Fields

Depth	Name	Туре	Precision	Parent	Req.
1	UID	String	36		No
1	Code	String	50		No
1	Description	String	300		No
1	UnitOfMeasureUID	String	36		No
1	AlternateUnitOfMeasureUID	String	36		No
1	SecondaryUnitOfMeasureUID	String	36		No
1	AlternateSecondaryUnitOfMeasureUID	String	36		No
1	CurrencyUID	String	36		No
1	AccountUID	String	36		No
1	Quantity	String	float		No
1	lsQuantityCalculated	String	NA		No
1	Notes	String	4000		No
1	UserDefined1	String	250		No
1	UserDefined2	String	250		No
1	UserDefined3	String	250		No
1	UserDefined4	String	250		No
1	UserDefined5	String	250		No
1	UserDefined6	String	250		No



Depth	Name	Туре	Precision	Parent	Req.
1	UserDefined7	String	250		No
1	UserDefined8	String	250		No
1	UserDefined9	String	250		No
1	UserDefined10	String	250		No
1	UserTag1UID	String	36		No
1	UserTag2UID	String	36		No
1	UserTag3UID	String	36		No
1	UserTag4UID	String	36		No
1	UserTag5UID	String	36		No
1	UserTag6UID	String	36		No
1	UserTag7UID	String	36		No
1	UserTag8UID	String	36		No
1	UserTag9UID	String	36		No
1	UserTag10UID	String	36		No
1	UserTag11UID	String	36		No
1	UserTag12UID	String	36		No
1	UserTag13UID	String	36		No
1	UserTag14UID	String	36		No
1	UserTag15UID	String	36		No
1	UserTag16UID	String	36		No
1	UserTag17UID	String	36		No
1	UserTag18UID	String	36		No
1	UserTag19UID	String	36		No
1	UserTag20UID	String	36		No

Field Descriptions

Name	Description	Example
UID	Unique identifier of the Account record	f644a1f6-32eb-4f71- afab-c2a855e5276a
Code	Value of the Code field for the Account Code	1240.200
Description	Account Codes Description field value. Found on the Account Code record and Register	Install Asphalt Concrete
UnitOfMeasureUID	Identifier of the Account Codes Unit of Measure.	c985403d-620f-4af0- 96da-3c2df9edac6c



Name	Description	Example
Alternate Unit Of Measure UID	Identifier of an Account Codes Base Unit of Measure for the Accounts selected Unit Of Measure. Each Unit of Measure is related to the systems base Unit of Measure in order to convert between quantities having the same measurement type (Length, Area, Volume, etc.)	368653b4-9b1c-48ad- 8453-f39177660063
SecondaryUnitOfMeasureUID	Identifier of the Account Codes Secondary Quantity Unit of Measure.	
AlternateSecondaryUnitOfMeasureUID	Identifier of an Accounts Secondary Unit of Measure for the Accounts selected Unit Of Measure. Each Unit of Measure is related to the systems base Unit of Measure in order to convert between quantities having the same measurement type (Length, Area, Volume, etc.)	
CurrencyUID	Identifier of the Accounts selected Currency	58687bb8-8107-4b88- ae04-f236c3050e58
AccountUID	Field for internal use only	
Quantity	Quantity field value of the Account	907184.70000000007
IsQuantityCalculated	Flag used to determine if an Account Codes quantity is calculated	false
Notes	Notes field value	
UserDefined1	User Defined 1 field value	
UserDefined2	User Defined 2 field value	
UserDefined3	User Defined 3 field value	
UserDefined4	User Defined 4 field value	
UserDefined5	User Defined 5 field value	
UserDefined6	User Defined 6 field value	
UserDefined7	User Defined 7 field value	
UserDefined8	User Defined 8 field value	
UserDefined9	User Defined 9 field value	
UserDefined10	User Defined 10 field value	
UserTag1UID	User Tag 1 selected field value	
UserTag2UID	User Tag 2 selected field value	
UserTag3UID	User Tag 3 selected field value	
UserTag4UID	User Tag 4 selected field value	
UserTag5UID	User Tag 5 selected field value	
UserTag6UID	User Tag 6 selected field value	
UserTag7UID	User Tag 7 selected field value	
UserTag8UID	User Tag 8 selected field value	



Name	Description	Example
UserTag9UID	User Tag 9 selected field value	
UserTag10UID	User Tag 10 selected field value	
UserTag11UID	User Tag 11 selected field value	
UserTag12UID	User Tag 12 selected field value	
UserTag13UID	User Tag 13 selected field value	
UserTag14UID	User Tag 14 selected field value	
UserTag15UID	User Tag 15 selected field value	
UserTag16UID	User Tag 16 selected field value	
UserTag17UID	User Tag 17 selected field value	
UserTag18UID	User Tag 18 selected field value	
UserTag19UID	User Tag 19 selected field value	
UserTag20UID	User Tag 20 selected field value	

Sample JSON

```
"UID": "f644a1f6-32eb-4f71-afab-c2a855e5276a",
"Code": "1240.200",
"Description": "Install Asphalt Concrete",
"UnitOfMeasureUID": "c985403d-620f-4af0-96da-3c2df9edac6c",
"AlternateUnitOfMeasureUID": "368653b4-9b1c-48ad-8453-f39177660063",
"SecondaryUnitOfMeasureUID": "",
"AlternateSecondaryUnitOfMeasureUID": "",
"CurrencyUID": "58687bb8-8107-4b88-ae04-f236c3050e58", "AccountUID": "",
"Quantity": 907184.7000000007,
"IsQuantityCalculated": false,
"Notes": "",
"UserDefined1": "",
"UserDefined2": "",
"UserDefined3": ""
"UserDefined4": ""
"UserDefined5": ""
"UserDefined6": "",
"UserDefined7": "",
"UserDefined8": "",
"UserDefined9": ""
"UserDefined10": "",
"UserTag1UID": "",
"UserTag2UID": "",
"UserTag3UID": "",
"UserTag4UID": "",
"UserTag5UID": "",
"UserTag6UID": "",
"UserTag7UID": "",
"UserTag8UID": "",
```



```
"UserTag10UID": "",

"UserTag11UID": "",

"UserTag12UID": "",

"UserTag13UID": "",

"UserTag14UID": "",

"UserTag15UID": "",

"UserTag16UID": "",

"UserTag17UID": "",

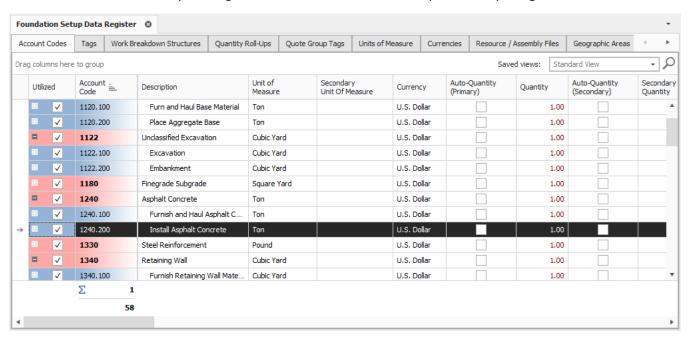
"UserTag18UID": "",

"UserTag19UID": "",

"UserTag20UID": "",
```

Verification

This data can be validated by viewing Accounts in the Foundation Setup Data or opening an Account record.





List Currencies

The EstimateCurrencies integration allows a customer to query the Currencies that exist in an existing estimate in the InEight Estimate application. This may be necessary to ensure a Currency exists prior to referencing it in another API which may require the identification of a valid Currency.

Direction		From an external system to the InEight cloud platform.		
Frequency		betermined by external system. Suggested implementation is to manually trigger the reation of pay items in an Estimate Job each time a project is created in the customer xternal system.		
Trigger Met	:hod(s)	Determined by external system.		
API Name		List Currencies		
InEight Starting Version		24.7		
Estimate	Ending Version			

Fields

Depth	Name	Туре	Precision	Parent	Req.
1	UID	String	36		No
1	Code	String	3		No
1	Name	String	400		No
1	ConversionRate	Number	Double		No
1	IsJobDefault	Number	Boolean		No
1	IsSystemBase	Number	Boolean		No

Field Descriptions

Name	Description	Example
UID	Unique identifier of the Currency record	58687bb8-8107-4b88- ae04-f236c3050e58
Code	For the currency chosen in the Currency Symbol field, the Code is the three character ISO code of the selected Currency	USD
Name	Value of the Currency Name field in the Currencies tab of the Foundation Setup Data Register	U.S. Dollar
ConversionRate	It is the exchange rate used to convert the display value of an amount to the system base currency. Value displayed in the interface is the inverse of the Conversion Rate and can be calculated as follows: $1-((ConversionRate-1) \div ConversionRate)$	1.0

List Currencies 33



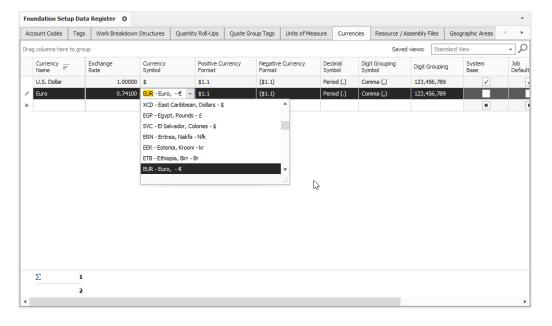
Name	Description	Example
IsJobDefault	Indicates if the Currency has been selected as the Jobs Default Currency	true
IsSystemBase	Indicates if the Currency has been selected as the System Base Currency, which is the Currency all values are stored in the system as.	true

Sample JSON

```
{
  "UID": "58687bb8-8107-4b88-ae04-f236c3050e58",
  "Code": "USD",
  "Name": "U.S. Dollar",
  "ConversionRate": 1.0,
  "IsJobDefault": true,
  "IsSystemBase": true
}
```

Verification

This data can be validated by viewing Currencies in the Foundation Setup Data or opening a Currency record.



34 List Currencies



List Units of Measure

The EstimateUnitsOfMeasure integration allows a customer to query the units of measure that exist in an existing estimate in the InEight Estimate application. This might be necessary to ensure a units of measure exists prior to referencing it in another API, which could require the identification of a valid units of measure.

Direction		From an external system to the InEight cloud platform.		
Frequency		betermined by external system. Suggested implementation is to manually trigger the reation of pay items in an Estimate Job each time a project is created in the customer xternal system.		
Trigger Met	:hod(s)	Determined by external system.		
API Name		List UnitsOfMeasure		
InEight Starting Version		24.7		
Estimate	Ending Version			

Fields

Depth	Name	Туре	Precision	Parent	Req.
1	UID	String	36		Yes
1	Name	String	50		No
1	MeasurementTypeName	String	50		No
1	Factor	Number	Double		No
1	MeasurementSystemName	String	50		No
1	DefaultAlternateUID	String	36		No
1	Agency	String	14		No
1	BaseName	String	50		No
1	UserDefined1	String	250		No
1	UserDefined2	String	250		No
1	UserDefined3	String	250		No

Field Descriptions

Name	Description	Example
UID	Unique identifier of the Unit of Measure record	07e20f49-81da-4d2c- a9d6-03a7f6193d63
	Value of the Unit of Measure Name field in the Units of Measure tab of the Foundation Setup Data Register	Square Yard

List Units of Measure 35



Name	Description	Example
MeasurementTypeName	Measurement Type field value selected for the Unit Of Measure	Area
Factor	Conversion Factor used to convert a quantity value from the value as stored and indicated by Base Unit of Measure, to its displayed value which is indicated by the Unit of Measure Name	
MeasurementSystemName	Measurement System field value selected for the Unit Of Measure	English
DefaultAlternateUID	Unique identifier of the Default Alternate Measurement as indicated for the Unit of Measure	f63f7bae-49c5-446f- 9de0-091ea47e8c6e
Agency	Agency field value	BID
BaseName	Indicates the value of the Base Unit Of Measures for the Unit of Measure as determined by it Measurement Type	Square Meter
UserDefined1	User Defined 1 field value	
UserDefined2	User Defined 2 field value	
UserDefined3	User Defined 3 field value	

Sample JSON

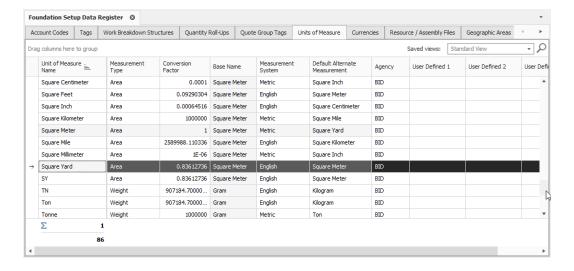
```
"UID": "07e20f49-81da-4d2c-a9d6-03a7f6193d63",
"Name": "Square Yard",
"MeasurementTypeName": "Area",
"Factor": 0.83612736,
"MeasurementSystemName": "English",
"DefaultAlternateUID": "f63f7bae-49c5-446f-9de0-091ea47e8c6e",
"Agency": "BID",
"BaseName": "Square Meter",
"UserDefined1": "",
"UserDefined2": "",
"UserDefined3": ""
```

Verification

This data can be validated by viewing Units Of Measure in the Foundation Setup Data or opening a Unit of Measure record.

36 List Units of Measure





List Units of Measure 37



List User Tags

The EstimateUserTags integration allows a customer to query the Tag field values that exist in an existing estimate in the InEight Estimate application. This might be necessary to ensure a Tag field value exists prior to referencing it in another API, which could permit the assignment of a valid Tag field value.

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	:hod(s)	Determined by external system.
API Name		List UserTags
InEight Starting Version		24.7
Estimate	Ending Version	

Fields

Depth	Name	Туре	Precision	Parent	Req.
1	UID	String	36		No
1	Code	String	260		No
1	Description	String	260		No
1	Register	String	50		No
1	Field	String	2000		No

Field Descriptions

Name	Description	Example
UID	Unique identifier of the UserTag record	03f4fa78-c734-4970- b85f-b6c3495e735d
Code	Code field value of the Tag record	Bridge
Description	Description field value of the Tag record	Bridge
Register	Value of the Register field selected for the Tag. Indicates which register the tag field values will be available for. If this value is null, the tag value will be available in all registers	Cost Items

38 List User Tags



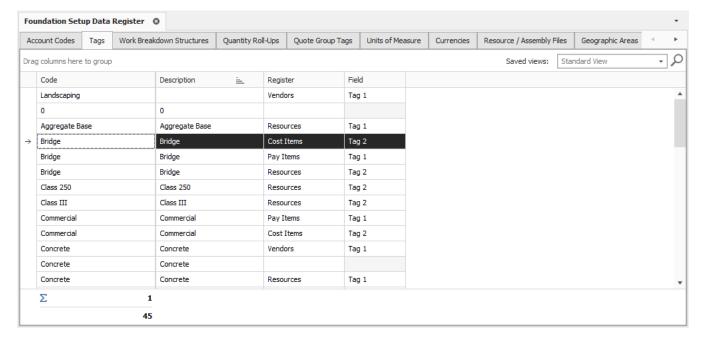
Name	Description	Example
Field	Value of the Field field for the selected Tag. Indicated which User Tag field in the specified register the tag field values will be available for. This field is only updatable in the application if a Register is provided first. If the field is null, the tag value will be available in all tags fields in the register	

Sample JSON

```
{
  "UID": "03f4fa78-c734-4970-b85f-b6c3495e735d",
  "Code": "Bridge",
  "Description": "Bridge",
  "Register": "Cost Items",
  "Field": "UserTag2UID"
}
```

Verification

This data can be validated by viewing Tags in the Foundation Setup Data or opening a Tag record.



List User Tags 39



Upsert Pay Items

This integration allows a customer to create and update pay items to an existing estimate in the InEight Estimate application. This supports automation of workflows such as importing pay items from a Bid Form or Bill of Quantities (BOQ).

Importing pay items into an estimate where the Lock Pay Items to Cost Items option is selected will create corresponding cost items for each pay item. Pay item hierarchy can also be maintained through the API by specifying the pay item position code. To assign a pay item to a new parent, use the ParentPayItemRef to identify the parent pay item position code.

To make updates to existing pay items, use the ObjectRef name/value pair to define the Pay Item to be updated. In the following example, the API will update the pay item description to "Sitework modified by Addendum" for the Pay Item in the "Training Job" where the Pay Item Number (PayItemID) is "200".

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	:hod(s)	Determined by external system.
API Name		Upsert Payltems
InEight	Starting Version	23.10
Estimate	Ending Version	



Fields

Depth	Name	Туре	Precision	Parent	Req.
1	JobCode	String	200		Yes
2	ObjectRef.Name	String	200	JobCode	No
2	ObjectRef.Value	String	200	JobCode	No
2	ParentPayItemRef.Name	String	200	JobCode	No
2	ParentPayItemRef.Value	String	200	JobCode	No
2	UnitOfMeasure Ref. Name	String	100	JobCode	No
2	UnitOfMeasure Ref. Value	String	100	JobCode	No
2	Alternate Unit Of Measure Ref. Name	String	100	JobCode	No
2	Alternate Unit Of Measure Ref. Value	String	100	JobCode	No
2	CurrencyRef.Name	String	800	JobCode	No
2	CurrencyRef.Value	String	800	JobCode	No
2	AccountRef.Name	String	100	JobCode	No
2	AccountRef.Value	String	100	JobCode	No
2	Notes	String	8000	JobCode	No
2	Description	String	4000	JobCode	No
2	UserDefined1	String	500	JobCode	No
2	UserDefined2	String	500	JobCode	No
2	UserDefined3	String	500	JobCode	No
2	UserDefined4	String	500	JobCode	No
2	UserDefined5	String	500	JobCode	No
2	UserDefined6	String	500	JobCode	No
2	UserDefined7	String	500	JobCode	No
2	UserDefined8	String	500	JobCode	No
2	UserDefined9	String	500	JobCode	No
2	UserDefined10	String	500	JobCode	No
2	LineID	String	200	JobCode	No
2	PayItemID	String	200	JobCode	No
2	PositionCode	String	200	JobCode	No
2	RoundingPrecision	Number	double	JobCode	No
2	PaymentMethod	String	100	JobCode	No
2	Proposal Subtotal Description	String	200	JobCode	No



Depth	Name	Туре	Precision	Parent	Req.
2	AlertJobMax	Number	double	JobCode	No
2	AlertJobMin	Number	double	JobCode	No
2	AlertPriceMax	Number	double	JobCode	No
2	AlertPriceMin	Number	double	JobCode	No
2	Margin	Number	double	JobCode	No
2	Original Forecast Quantity	Number	double	JobCode	No
2	OriginalPayQuantity	Number	double	JobCode	No
2	TotalPrice	Number	double	JobCode	No
2	UnitPrice	Number	double	JobCode	No
2	PriceLocked	Number	boolean	JobCode	No
2	ProposalSubtotal	Number	boolean	JobCode	No
2	QuantityLocked	Number	boolean	JobCode	No
2	UseDefaultEarningsRules	Number	boolean	JobCode	No
2	UserTag1Ref.Name	String	520	JobCode	No
2	UserTag1Ref.Value	String	520	JobCode	No
2	UserTag2Ref.Name	String	520	JobCode	No
2	UserTag2Ref.Value	String	520	JobCode	No
2	UserTag3Ref.Name	String	520	JobCode	No
2	UserTag3Ref.Value	String	520	JobCode	No
2	UserTag4Ref.Name	String	520	JobCode	No
2	UserTag4Ref.Value	String	520	JobCode	No
2	UserTag5Ref.Name	String	520	JobCode	No
2	UserTag5Ref.Value	String	520	JobCode	No
2	UserTag6Ref.Name	String	520	JobCode	No
2	UserTag6Ref.Value	String	520	JobCode	No
2	UserTag7Ref.Name	String	520	JobCode	No
2	UserTag7Ref.Value	String	520	JobCode	No
2	UserTag8Ref.Name	String	520	JobCode	No
2	UserTag8Ref.Value	String	520	JobCode	No
2	UserTag9Ref.Name	String	520	JobCode	No
2	UserTag9Ref.Value	String	520	JobCode	No
2	UserTag10Ref.Name	String	520	JobCode	No
2	UserTag10Ref.Value	String	520	JobCode	No



Field Descriptions

Name	Description	Example
JobCode	Identifies the job code of the estimate for which the pay items will be modified.	Training Job
ObjectRef.Name	Identifies the field used to match when updating existing pay items.	PayItemID
ObjectRef.Value	Value in the field defined by ObjectRef.Name when updating existing pay items.	200
Parent Pay Item Ref. Name	Used to insert pay items in a specific location of the Pay Item hierarchy or it can be used to identify the new location when moving a pay item to a different location within the Pay Item hierarchy. ParentPayItemRef.Name is used to identify the name of the field to match.	PositionCode
ParentPayItemRef.Value	Used to insert pay items in a specific location of the Pay Item hierarchy or it can be used to identify the new location when moving a pay item to a different location within the Pay Item hierarchy. ParentPayItemRef.Value is the value to find in the field defined by ParentPayItemRef.Name.	2
UnitOfMeasureRef.Name	Identifies the attribute of a Unit of Measure used to identify the Unit of Measure assigned to the Pay Item.	Name
UnitOfMeasureRef.Value	Identifies the corresponding value of the Unit of Measure assigned to the Pay Item.	Each
Alternate Unit Of Measure Ref. Name	Identifies the attribute of a Unit of Measure used to identify the Base Unit of Measure assigned to the Pay Item.	Name
Alternate Unit Of Measure Ref. Value	Identifies the corresponding value of the Base Unit of Measure assigned to the Pay Item.	Each
CurrencyRef.Name	Identifies the attribute of a Currency used to identify the Currency assigned to the Pay Item.	Name
CurrencyRef.Value	Identifies the corresponding value of the Currency assigned to the Pay Item.	U.S. Dollar
AccountRef.Name	Identifies the attribute of an Account Code used to identify the Account Code assigned to the Pay Item.	Code
AccountRef.Value	Identifies the corresponding value of the Account Code assigned to the Pay Item.	1700
Notes	Multi-line text field for storing notes on the pay item.	Price of the mobilization item cannot exceed 10% of the total value of the contract
Description	Description of the pay item entries in pay item and proposal record and register.	Mobilization



Name	Description	Example
UserDefined1	Value of the User Defined 1 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
UserDefined2	Value of the User Defined 2 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
UserDefined3	Value of the User Defined 3 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
UserDefined4	Value of the User Defined 4 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
UserDefined5	Value of the User Defined 5 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
UserDefined6	Value of the User Defined 6 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
UserDefined7	Value of the User Defined 7 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
UserDefined8	Value of the User Defined 8 text type data field on the Tags/ User Defined fields of the pay item Record.	Sanitary Sewerage Utilities
UserDefined9	Value of the User Defined 9 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
UserDefined10	Value of the User Defined 10 text type data field in the Tags/User Defined fields of the pay item record.	Sanitary Sewerage Utilities
LineID	Line number of the pay item.	130
PayItemID	Pay item number of the pay item.	641 0100
PositionCode	Pay item position code value for the pay item.	2.1
RoundingPrecision	Value indicating the decimal precision applied when rounding off the value of a pay items unit price.	2
PaymentMethod	Payment method of the pay item. Valid values include: Fixed Final Price, Time & Expenses, Unit Price.	Unit Price
Proposal Subtotal Description	Description used for printing on the subtotal row of the proposal when the Proposal Subtotal field is set to <i>true</i> .	
AlertJobMax	Maximum alert/alarm value based on percentage of the job.	100
AlertJobMin	Minimum alert/alarm value based on percentage of the job.	0
AlertPriceMax	Maximum alert/alarm limit value for unit price.	100
AlertPriceMin	Minimum alert/alarm limit value for unit price.	0
Margin	Indicates the pay item prices current margin as a percent of current price to the pay items assigned costs. Setting this value will recalculate the pay items price.	15.803



Name	Description	Example
OriginalForecastQuantity	Value of the pay items Forecast TakeOff Quantity field.	110
OriginalPayQuantity	Value of the pay items Pay Quantity field.	100
TotalPrice	Value of the Total Price (current) field for the pay item.	3400
UnitPrice	Value of the Unit Price (current) field for the pay item.	34
PriceLocked	Indicates if the pay items price is locked, preventing changing of the price by the user or when auto pricing the job	0-False 1-True
ProposalSubtotal	Indicates if the pay item will be a subtotal row when the proposal is printed.	0-False 1-True
QuantityLocked	Indicates if the pay items quantity is locked, preventing changing of the quantity by the user.	0-False 1-True
UseDefaultEarningsRules	Indicates if default earnings rules should be applied to the pay item.	0-False 1-True
UserTag1Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 1 field value assigned to the Pay Item.	Code
UserTag1Ref.Value	Identifies the corresponding value of the Tag 1 field value assigned to the Pay Item.	Bridge
UserTag2Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 2 field value assigned to the Pay Item.	Code
UserTag2Ref.Value	Identifies the corresponding value of the Tag 2 field value assigned to the Pay Item.	Concrete
UserTag3Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 3 field value assigned to the Pay Item.	Code
UserTag3Ref.Value	Identifies the corresponding value of the Tag 3 field value assigned to the Pay Item.	Sample Tag Value
UserTag4Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 4 field value assigned to the Pay Item.	Code
UserTag4Ref.Value	Identifies the corresponding value of the Tag 4 field value assigned to the Pay Item.	Sample Tag Value
UserTag5Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 5 field value assigned to the Pay Item.	Code
UserTag5Ref.Value	Identifies the corresponding value of the Tag 5 field value assigned to the Pay Item.	Sample Tag Value
UserTag6Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 6 field value assigned to the Pay Item.	Code
UserTag6Ref.Value	Identifies the corresponding value of the Tag 6 field value assigned to the Pay Item.	Sample Tag Value
UserTag7Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 7 field value assigned to the Pay Item.	Code



Name	Description	Example
UserTag7Ref.Value	Identifies the corresponding value of the Tag 7 field value assigned to the Pay Item.	Sample Tag Value
UserTag8Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 8 field value assigned to the Pay Item.	Code
UserTag8Ref.Value	Identifies the corresponding value of the Tag 8 field value assigned to the Pay Item.	Sample Tag Value
UserTag9Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 9 field value assigned to the Pay Item.	Code
UserTag9Ref.Value	Identifies the corresponding value of the Tag 9 field value assigned to the Pay Item.	Sample Tag Value
UserTag10Ref.Name	Identifies the attribute of a Tag Field used to identify the Tag 10 field value assigned to the Pay Item.	Code
UserTag10Ref.Value	Identifies the corresponding value of the Tag 10 field value assigned to the Pay Item.	Sample Tag Value

Sample JSON

```
"JobCode": "Training Job",
"Entities": [
  "PositionCode": "1",
  "PayItemID": "200",
  "Description": "SITEWORK & ROADWAY",
} ,
  "PositionCode": "2",
  "PayItemID": "400",
  "Description": "WATER & SEWER",
  "PositionCode": "1.1",
  "PayItemID": "641 0100",
  "Description": "Mobilization",
  "OriginalPayQuantity": 1,
   "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Lump Sum"
      } ]
},
  "PositionCode": "1.2",
  "PayItemID": "201 0102",
  "Description": "Clearing & Grubbing",
  "OriginalPayQuantity": 10,
   "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Acre"
```



```
} ]
} ,
  "PositionCode": "1.3",
  "PayItemID": "202 0183",
  "Description": "Unclassified Excavation",
  "OriginalPayQuantity": 50000,
   "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Cubic Yard"
} ,
  "PositionCode": "1.4",
  "PayItemID": "303 5912",
   "Description": "Aggregate Base",
   "OriginalPayQuantity": 40000,
   "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Ton"
} ,
  "PositionCode": "1.5",
  "PayItemID": "303 4263",
   "Description": "Asphalt Concrete Hot Mix Type A",
   "OriginalPayQuantity": 38000,
   "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Ton"
} ,
  "PositionCode": "2.1",
  "PayItemID": "413(B) 0464",
   "Description": "36 Inch RCP Culvert Class III",
  "OriginalPayQuantity": 1000,
   "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Linear Feet"
      } ]
} ,
  "PositionCode": "2.2",
  "PayItemID": "800 0220",
   "Description": "10 Inch PVC Force Main (SDR21)",
   "OriginalPayQuantity": 12000,
   "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Linear Feet"
      } ]
```



```
"PositionCode": "2.3",
  "PayItemID": "800 0330",
  "Description": "24 Inch PVC Gravity Sewer (SDR35)",
  "OriginalPayQuantity": 3000,
  "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Linear Feet"
} ,
  "PositionCode": "2.4",
  "PayItemID": "800 0400",
  "Description": "4 Foot Diameter Manhole",
  "OriginalPayQuantity": 16,
   "UnitOfMeasureRef": [
      "Name": "Name",
      "Value": "Each"
      } ]
```

Verification

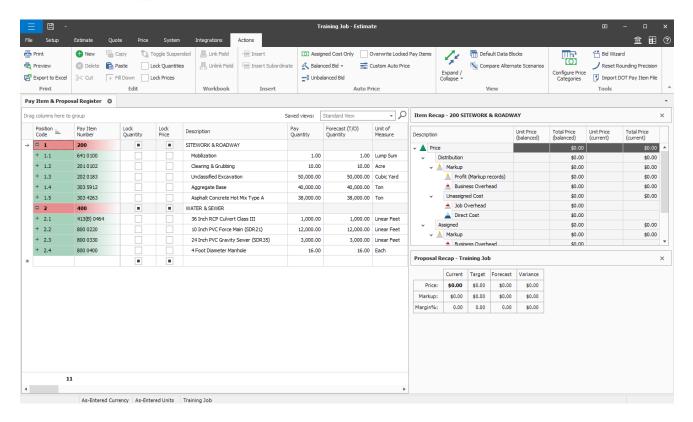
Pay items created or modified through the integration can be verified by navigating to the Pay Item & Proposal Register in the InEight Estimate application.

Open the applicable estimate job. In the main navigation menu, click the Setup tab > Pay Item & Proposal from the Initialize group to open the Pay Item & Proposal Register.



All the jobs pay items are visible in this register.







List Pay Items

This integration allows a customer to query pay items from an existing job in InEight Estimate. The Estimate job is specified by passing a valid job code as parameter in the request. A list of valid job codes can be retrieved using the List Estimates API.

Direction		From InEight
Frequency		Determined by external system
Trigger Met	thod(s)	Determined by external system
API Name		List Payltems
InEight	Starting Version	23.12
Estimate	Ending Version	

Fields

See <u>Upsert Payltems</u>, <u>Fields</u> for detailed information.

Field Descriptions

See Upsert PayItems, Field Descriptions for detailed information.

Verification

See <u>Upsert PayItems</u>, <u>Verification</u> for detailed information.

50 List Pay Items



Delete Pay Items

This integration allows a customer to delete pay items from a job that exists in InEight Estimate. Passing an array of valid field name and value pairs will delete the corresponding pay items from the indicated job in InEight Estimate.

Direction		From InEight
Frequency		Determined by external system
Trigger Met	thod(s)	Determined by external system
API Name		Delete PayItems
Fatimete	Starting Version	23.12
	Ending Version	

Fields

See <u>Upsert PayItems</u>, <u>Fields</u> for detailed information.

Field Descriptions

See Upsert PayItems, Field Descriptions for detailed information.

Sample JSON

```
"JobCode": "Training Job",
"Entities": [{
    "Name": "PayItemID",
    "Value": "800 0400"
    }]
}
```

Verification

See <u>Upsert PayItems</u>, <u>Verification</u> for detailed information.

Delete Pay Items 51



The EstimateQuotes integration allows a customer to create and update Quote records in an existing estimate in the InEight Estimate application. This supports automation of workflows such as importing quotes from an Invitation to Bid solution.

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	:hod(s)	Determined by external system.
API Name		Upsert Quotes
InEight Estimate	Starting Version	24.9
	Ending Version	

Fields

Depth	Name	Туре	Precision	Parent	Req.
1	JobCode	String	200		Yes
2	ObjectRef.Name	String	200	JobCode	No
2	ObjectRef.Value	String	200	JobCode	No
2	Description	String	2000	JobCode	No
2	VendorRef.Name	String	200	JobCode	No
2	VendorRef.Value	String	200	JobCode	No
2	ContactRef.Name	String	200	JobCode	No
2	ContactRef.Value	String	200	JobCode	No
2	QuoteGroupTags	String	50	JobCode	No
3	QuoteGroup	String	50	QuoteGroupTags	No
2	VendorName	String	200	JobCode	No
2	VendorPhone	String	25	JobCode	No
2	ContactFirstName	String	30	JobCode	No
2	ContactLastName	String	50	JobCode	No
2	ContactOffice	String	25	JobCode	No
2	ContactMobile	String	25	JobCode	No
2	ContactEmail	String	100	JobCode	No
2	OptionalCode	String	50	JobCode	No



Depth	Name	Туре	Precision	Parent	Req.
2	Quote Date	String	Date	JobCode	No
2	QuoteSource	String	50	JobCode	No
2	CurrencyRef.Name	String	200	JobCode	No
2	CurrencyRef.Value	String	200	JobCode	No
2	Ignore	Number	Boolean	JobCode	No
2	IgnoreReason	String	50	JobCode	No
2	ExternalRef	String	1000	JobCode	No
2	VendorBonded	Number	Boolean	JobCode	No
2	VendorBondCompany	String	200	JobCode	No
2	VendorBondAgent	String	200	JobCode	No
2	VendorBondAgentPhone	String	25	JobCode	No
2	ApplyBond	Number	Boolean	JobCode	No
2	BondCostPer1000	Number	Double	JobCode	No
2	BondTotal	Number	Double	JobCode	No
2	VendorInsured	Number	Boolean	JobCode	No
2	VendorInsuranceCompany	String	200	JobCode	No
2	VendorInsuranceAgent	String	200	JobCode	No
2	VendorInsurancePhone	String	25	JobCode	No
2	VendorLicensed	Number	Boolean	JobCode	No
2	VendorLicensor	String	200	JobCode	No
2	VendorLicensorClass	String	200	JobCode	No
2	VendorLicensorId	String	200	JobCode	No
2	Taxincluded	Number	Boolean	JobCode	No
2	ApplyQuoteTax	Number	Boolean	JobCode	No
2	VendorTaxRate	Number	Double	JobCode	No
2	TaxTotal	Number	Double	JobCode	No
2	UseAlternateContactName	Number	Boolean	JobCode	No
2	AlternateContactName	String	50	JobCode	No
2	UseAlternateContactEmail	Number	Boolean	JobCode	No
2	AlternateContactEmail	String	50	JobCode	No
2	UseAlternateContactPhone	Number	Boolean	JobCode	No
2	AlternateContactPhone	String	50	JobCode	No
2	UseAlternateContactFax	Number	Boolean	JobCode	No
2	AlternateContactFax	String	20	JobCode	No



Depth	Name	Туре	Precision	Parent	Req.
2	UseAlternateContactMobile	Number	Boolean	JobCode	No
2	AlternateContactMobile	String	20	JobCode	No
2	Vendor Address Notes	String	4000	JobCode	No
2	Note	String	4000	JobCode	No
2	UserTag1Ref.Name	String	200	JobCode	No
2	UserTag1Ref.Value	String	260	JobCode	No
2	UserTag2Ref.Name	String	200	JobCode	No
2	UserTag2Ref.Value	String	260	JobCode	No
2	UserTag3Ref.Name	String	200	JobCode	No
2	UserTag3Ref.Value	String	260	JobCode	No
2	VendorQualifiedMBE	Number	Boolean	JobCode	No
2	DBE	Number	Boolean	JobCode	No
2	DBECertification	String	200	JobCode	No
2	МВЕ	Number	Boolean	JobCode	No
2	MBECertification	String	200	JobCode	No
2	WBE	Number	Boolean	JobCode	No
2	WBECertification	String	200	JobCode	No
2	OBE1	Number	Boolean	JobCode	No
2	OBE1Certification	String	200	JobCode	No
2	OBE2	Number	Boolean	JobCode	No
2	OBE2Certification	String	200	JobCode	No
2	OBE3	Number	Boolean	JobCode	No
2	OBE3Certification	String	200	JobCode	No
2	OBE4	Number	Boolean	JobCode	No
2	OBE4Certification	String	200	JobCode	No
2	OBE5	Number	Boolean	JobCode	No
2	OBE5Certification	String	200	JobCode	No
2	OBE6	Number	Boolean	JobCode	No
2	OBE6Certification	String	200	JobCode	No
2	OBE7	Number	Boolean	JobCode	No
2	OBE7Certification	String	200	JobCode	No



Field Descriptions

Name	Description	Example
JobCode	Identifies the job code of the estimate for which the Quote will be modified.	Training Job
ObjectRef.Name	Identifies the field used to match when updating existing quotes. Excluding the ObjectRef field or referring to a name/value pair that doesn't exist will result in the creation of a new Quote.	OptionalCode
ObjectRef.Value	Value in the field defined by ObjectRef.Name when updating existing quotes.	52834
Description	Description field value on the Quote Record	Guard Rail Items
VendorRef.Name	Identifies the attribute of the Vendorrecord used to identify the Vendor assigned to the Quote.	VendorCode
VendorRef.Value	Identifies the corresponding value of the Vendor assigned to the Quote.	ExSub2
ContactRef.Name	Identifies the attribute of the Contact record used to identify the Contact assigned to the Quote.	LastName
ContactRef.Value	Identifies the corresponding value of the Contact assigned to the Quote.	Blank
QuoteGroupTags	Accepts an array of Quote Group Tags	
QuoteGroup	Identifies the Quote Group Tag or Tags to be used when creating a Quote. Providing a Quote Group Tag when creating a Quote will and automatically create Quote Items for any Cost Items or Resource Employments assigned to the identified Quote Group Tag	Guardrail Work
VendorName	Vendor Name field value on the Quote Record	Example Sub 2
VendorPhone	Vendor Phone field value on the Quote Record	111-222-3232
ContactFirstName	First Name field value on the Quote Record	Mel
ContactLastName	Last Name field value on the Quote Record	Blank
ContactOffice	Contact Office field value on the Quote Record	null
ContactMobile	Contact Mobile field value on the Quote Record	null
ContactEmail	Primary Email field value on the Quote Record	Mel.Blank@gmail.com
OptionalCode	Optional Code field value on the Quote Record	52834
QuoteDate	Date field value on the Quote Record	2024-05-31



Name	Description	Example
QuoteSource	Source field value on the Quote Record. Valid values are as follows None Email Fax Hard Copy Phone Other	Email
CurrencyRef.Name	Identifies the attribute of the Currency record used to identify the Currency assigned to the Quote.	Name
CurrencyRef.Value	Identifies the corresponding value of the Currency assigned to the Quote.	U.S. Dollar
Ignore	Indicates the state of the Ignore checkbox on the Quote Record	false
IgnoreReason	If a Quote is marked as Ignored, provides the field value of the Ignore Reason on the Quote Record	null
ExternalRef	External Ref field value on the Quote Record	null
VendorBonded	State of the Vendor can provide a BOND for all work quoted checkbox field value on the Qualifications Datablock of the Quote Record	false
VendorBondCompany	Bonding Company field value on the Qualifications Datablock of the Quote Record	null
VendorBondAgent	Bonding Agent field value on the Qualifications Datablock of the Quote Record	null
VendorBondAgentPhone	Bonding Phone field value on the Qualifications Datablock of the Quote Record	null
ApplyBond	State of the Add Bond Cost to the Quote checkbox on the Qualifications Datablock of the Quote Record	false
BondCostPer1000	Value of the Rate/\$1,000 field on the Qualifications Datablock of the Quote Record	0.0
BondTotal	Value of the Bond Cost field on the Qualifications Datablock of the Quote Record	0.0
VendorInsured	State of the Vendor is INSURED as required by applicipable law checkbox field value in the Insurance group on the Qualifications Datablock of the Quote Record	false
VendorInsuranceCompany	Insurance Company field value in the Insurance group on the Qualifications Datablock of the Quote Record	null
VendorInsuranceAgent	Insurance Agent field value in the Insurance group on the Qualifications Datablock of the Quote Record	null
VendorInsurancePhone	Insurance Phone field value in the Insurance group on the Qualifications Datablock of the Quote Record	null



Name	Description	Example
VendorLicensed	State of the Vendor is LICENSED to perform all work quoted checkbox field value in the License group on the Qualifications Datablock of the Quote Record	false
VendorLicensor	Licensor field value in the License group on the Qualifications Datablock of the Quote Record	null
VendorLicensorClass	Class field value in the License group on the Qualifications Datablock of the Quote Record	null
VendorLicensorId	ID field value in the License group on the Qualifications Datablock of the Quote Record	null
TaxIncluded	State of the Add Item Taxes to each Item's Price checkbox on the Taxes Datablock of the Quote Record	true
ApplyQuoteTax	State of the Add Taxes to the Quote checkbox on the Taxes Datablock of the Quote Record	false
VendorTaxRate	Value of the Tax Rate field on the Taxes Datablock of the Quote Record	0.0
TaxTotal	Value of the Total Tax field on the Taxes Datablock of the Quote Record	0.0
UseAlternateContactName	Indicates if the Alternate Contact Information Name checkbox is checked on Vendors Profile tab of the Quote record	false
AlternateContactName	Indicates the value of the Alternate Contact Information Name field on the Vendors Profile tab of the Quote record	null
UseAlternateContactEmail	Indicates if the Alternate Contact Information Email checkbox is checked on Vendors Profile tab of the Quote record	false
AlternateContactEmail	Indicates the value of the Alternate Contact Information Email field on the Vendors Profile tab of the Quote record	null
UseAlternateContactPhone	Indicates if the Alternate Contact Information Phone checkbox is checked on Vendors Profile tab of the Quote record	false
AlternateContactPhone	Indicates the value of the Alternate Contact Information Phone field on the Vendors Profile tab of the Quote record	null
UseAlternateContactFax	Indicates if the Alternate Contact Information Fax checkbox is checked on Vendors Profile tab of the Quote record	false
AlternateContactFax	Indicates the value of the Alternate Contact Information Fax field on the Vendors Profile tab of the Quote record	null
UseAlternateContactMobile	Indicates if the Alternate Contact Information Mobile checkbox is checked on Vendors Profile tab of the Quote record	false



Name	Description	Example
AlternateContactMobile	Indicates the value of the Alternate Contact Information Mobile field on the Vendors Profile tab of the Quote record	null
Vendor Address Notes	Address Book Notes field value on the Vendor's Profile Datablock of the Quote Record	null
Note	Notes field value on the Setup Datablock of the Quote Record	null
UserTag1Ref.Name	Identifies the attribute of the Tag field value used to identify the Tag 1 field value assigned to the Quote.	null
UserTag1Ref.Value	Identifies the corresponding value of the Tag 1 field value assigned to the Quote.	null
UserTag2Ref.Name	Identifies the attribute of the Tag field value used to identify the Tag 2 field value assigned to the Quote.	null
UserTag2Ref.Value	Identifies the corresponding value of the Tag 2 field value assigned to the Quote.	null
UserTag3Ref.Name	Identifies the attribute of the Tag field value used to identify the Tag 3 field value assigned to the Quote.	null
UserTag3Ref.Value	Identifies the corresponding value of the Tag 3 field value assigned to the Quote.	null
VendorQualifiedMBE	State of the Vendor qualifies as the following type of MINORITY BUSINESS ENTERPRISE on this job checkbox field value on the Minority Datablock of the Quote Record	false
DBE	Value is true if the DBE option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
DBECertification	DBE Certification field value on the Minority Datablock of the Quote Record	null
MBE	Value is true if the MBE option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
MBECertification	MBE Certification field value on the Minority Datablock of the Quote Record	null
WBE	Value is true if the WBE option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
WBECertification	WBE Certification field value on the Minority Datablock of the Quote Record	null
OBE1	Value is true if the OBE1 option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
OBE1Certification	OBE1 Certification field value on the Minority Datablock of the Quote Record	null



Name	Description	Example
OBE2	Value is true if the OBE2 option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
OBE2Certification	OBE2 Certification field value on the Minority Datablock of the Quote Record	null
OBE3	Value is true if the OBE3 option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
OBE3Certification	OBE3 Certification field value on the Minority Datablock of the Quote Record	null
OBE4	Value is true if the OBE4 option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
OBE4Certification	OBE4 Certification field value on the Minority Datablock of the Quote Record	null
OBE5	Value is true if the OBE5 option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
OBE5Certification	OBE5 Certification field value on the Minority Datablock of the Quote Record	null
OBE6	Value is true if the OBE6 option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
OBE6Certification	OBE6 Certification field value on the Minority Datablock of the Quote Record	null
ОВЕ7	Value is true if the OBE7 option is selected as the Minority Business Enterprise in the Minority Datablock of the Quote Record, otherwise it is false	false
OBE7Certification	OBE7 Certification field value on the Minority Datablock of the Quote Record	null

Sample JSON

```
"UID": "80bee273-f2e0-45f8-a496-36580d0a973d",
"VendorUID": "6782e210-a560-410d-aef8-05a8cfc1033b",
"ContactUID": "4a3cc3b8-9348-4370-8925-85a109dedba5",
"Description": "Guard Rail Items",
"VendorName": "Example Sub 2",
"VendorPhone": "111-222-3232",
"ContactFirstName": "Mel",
"ContactLastName": "Blank",
"ContactOffice": "",
"ContactOffice": "",
"ContactEmail": "Mel.Blank@gmail.com",
"OptionalCode": "52834",
"QuoteSource": "Email",
```

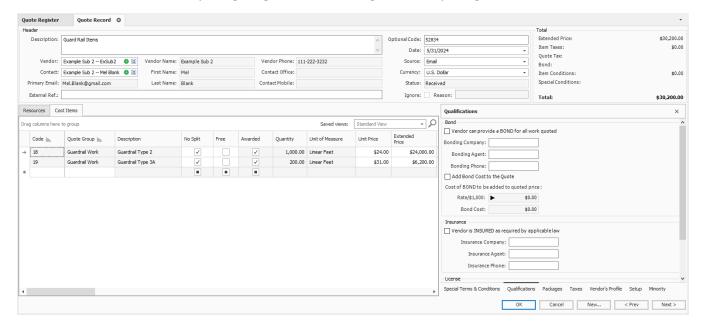


```
"QuoteSourceId": 0,
"CurrencyUID": "58687bb8-8107-4b88-ae04-f236c3050e58",
"Ignore": false,
"IgnoreReason": "",
"IgnoreReasonUID": "",
"ExternalRef": "",
"VendorBonded": false,
"VendorBondCompany": "",
"VendorBondAgent": "",
"VendorBondAgentPhone": "",
"ApplyBond": false,
"BondCostPer1000": 0.0,
"BondTotal": 0.0,
"VendorInsured": false,
"VendorInsuranceCompany": "",
"VendorInsuranceAgent": "",
"VendorInsurancePhone": "",
"VendorLicensed": false,
"VendorLicensor": "",
"VendorLicensorClass": "",
"VendorLicensorId": "",
"TaxIncluded": true,
"ApplyQuoteTax": false,
"UseAlternateContactName": false,
"AlternateContactName": "",
"UseAlternateContactEmail": false,
"AlternateContactEmail": "",
"UseAlternateContactPhone": false,
"AlternateContactPhone": "",
"UseAlternateContactFax": false,
"AlternateContactFax": ""
"AlternateContactMobile": "",
"VendorAddressNotes": "",
"Note": "",
"Tag1UID": "",
"Tag2UID": "",
"Tag3UID": "",
"VendorQualifiedMBE": false,
"DBE": false,
"DBECertification": "",
"MBE": false,
"MBECertification": "",
"WBE": false,
"WBECertification": "",
"OBE1": false,
"OBE1Certification": "",
"OBE2": false,
"OBE2Certification": "",
"OBE3Certification": "",
"OBE4Certification": ""
"OBE5Certification": ""
"OBE 6Certification": "",
"OBE7Certification": ""
```



Verification

Quote data can be validated by navigating to the Quote Register and opening a Quote Record.





List Quotes

This integration allows a customer to query Quotes from an existing job in InEight Estimate. The Estimate job is specified by passing a valid job code as parameter in the request. A list of valid job codes can be retrieved using the <u>List Estimates</u> API.

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	thod(s)	Determined by external system.
API Name		List Quotes
InEight Estimate	Starting Version	24.9
	Ending Version	

Fields

See **Upsert Quotes**, Fields for detailed information.

Field Descriptions

See <u>Upsert Quotes</u>, <u>Field Descriptions</u> for detailed information.

Verification

See <u>Upsert Quotes</u>, <u>Verification</u> for detailed information.

62 List Quotes



Delete Quotes

This integration allows a customer to delete Quotes from a job that exists in InEight Estimate. Passing an array of valid field name and value pairs will delete the corresponding Quotes from the indicated job in InEight Estimate.

Direction		From InEight
Frequency		Determined by external system
Trigger Met	thod(s)	Determined by external system
API Name		Delete Quotes
Estimate	Starting Version	24.9
	Ending Version	

Fields

See **Upsert Quotes**, Fields for detailed information.

Field Descriptions

See <u>Upsert Quotes</u>, <u>Field Descriptions</u> for detailed information.

Sample JSON

```
{
  "JobCode": "Training Job",
  "Entities": [{
      "Name": "Description",
      "Value": "Pipe Materials"
  }]
}
```

Verification

See Upsert Quotes, Verification for detailed information.

Delete Quotes 63



Upsert Quote Items

The EstimateQuoteItems integration allows a customer to create and update QuoteItems on a Quote record in an existing estimate in the InEight Estimate application. This supports automation of workflows such as importing quotes from an Invitation to Bid solution.

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	:hod(s)	Determined by external system.
API Name		Upsert Quoteltems
InEight	Starting Version	24.9
Estimate	Ending Version	

Fields

Depth	Name	Туре	Precision	Parent	Req.
1	JobCode	String	200		Yes
2	QuoteRef.Name	String	200	JobCode	No
2	QuoteRef.Value	String	200	JobCode	
2	QuoteItemsType	String	25	JobCode	
2	QuoteGroupTags	String	50	JobCode	
3	QuoteGroup	String	50	QuoteGroupTags	
3	QuotePackageRef.Name	String	200	QuoteGroupTags	
3	QuotePackageRef.Value	String	200	QuoteGroupTags	
2	Quoteltems	String	200	JobCode	
3	QuoteItemType	String	25	Quoteltems	
3	ObjectRef.Name	String	200	Quoteltems	
3	ObjectRef.Value	String	200	Quoteltems	
3	QuotePackageRef.Name	String	200	QuoteItems	
3	QuotePackageRef.Value	String	200	Quoteltems	
3	QuoteItemObject	String	200	Quoteltems	
4	ObjectRef.Name	String	200	QuoteItemObject	
4	ObjectRef.Value	String	200	QuoteItemObject	
3	NoSplit	Number	Boolean	Quoteltems	



Depth	Name	Туре	Precision	Parent	Req.
3	Free	Number	Boolean	Quoteltems	
3	Duration	Number	Boolean	Quoteltems	
3	ExtendedPrice	Number	Double	Quoteltems	
3	UnitPrice	Number	Double	Quoteltems	
3	TaxRate	Number	Double	Quoteltems	
3	ConditionAmount	Number	Double	Quoteltems	
3	ConditionPercentage	Number	Double	Quoteltems	
3	VendorCondition	String	200	Quoteltems	
3	Note	String	200	Quoteltems	

Field Descriptions

Name	Description	Example
JobCode	Identifies the job code of the estimate for which the Quote Item will be modified.	Training Job
QuoteRef.Name	Identifies the field used to match when updating existing quotes.	OptionalCode
QuoteRef.Value	Value in the field defined by QuoteRef.Name when updating existing quotes.	52834
QuoteItemsType	Indicates the type of Quote Items to be inserted into a Quote using one of the following Cost Item: QuoteCostItem Resource: QuoteResourceItem	QuoteCostItem
QuoteGroupTags	When adding Quote Items to a Quote, specifying one or more Quote Group Tags in this array will create Quote Items using the Cost Items or Resources assigned to the identified Quote Group Tags	
QuoteGroup	The name of the Quote Group Tag	Guardrail Work
QuotePackageRef.Name	When specified in a Quote Group Tag array, the Quote Group Package reference will assign all the Quote Items created from the specified Quote Group Tag to the Package identified by this name/value pair	Code
QuotePackageRef.Value	When specified in a Quote Group Tag array, the Quote Group Package reference will assign all the Quote Items created from the specified Quote Group Tag to the Package identified by this name/value pair	P1
Quoteltems	When inserting or updating Quote Items on a Quote, this array is used to specify the specific quote items to work with	



Name	Description	Example
QuoteItemType	Indicates the type of Quote Items to be updated on an existing Quote using one of the following Cost Item: QuoteCostItem Resource: QuoteResourceItem	QuoteCostItem
ObjectRef.Name	Identifies the field used to match on when updating existing Quote Items. Not including this name/value pair will create a new Quote Item.	Code
ObjectRef.Value	Value in the field defined by ObjectRef.Name when updating existing Quote Items. Not including this name/value pair will create a new Quote Item.	18
QuotePackageRef.Name	When specified in the Quoteltems array of fields, the Quote Group Package reference will assign all the Quote Item to the Package specified by this name/value pair	Code
QuotePackageRef.Value	When specified in the Quoteltems array of fields, the Quote Group Package reference will assign all the Quote Item to the Package specified by this name/value pair	P1
QuoteItemObject	When inserting a Quote Item, the ObjectRef name/value pair in the QuoteItemObject array is used to determine the item to be inserted, either the Cost Item or Resource Code or other identifier as specified in the ObjectRef name/value pair.	
ObjectRef.Name	Identifies the field used to match on when choosing the Resource or Cost Item to use in creating a new Quote Item.	Description
ObjectRef.Value	Value in the field defined by ObjectRef.Name when creating new Resource or Cost Item Quote Items.	Guardrail Type 2
NoSplit	State of the No Split checkbox on the Quote Item	true
Free	State of the Free checkbox on the Quote Item	false
Duration	Duration field value on the Quote Item	1
ExtendedPrice	Extended Price field value on the Quote Item	24000.0
UnitPrice	Unit Price field value on the Quote Item	24.0
TaxRate	Tax Rate field value on the Tax Rate	0.0
ConditionAmount	Condition Adjustment Amount field value on the Quote Item	0.0
ConditionPercentage	Condition Adjustment Percentage field value on the Quote Item	0.0
VendorCondition	Vendor Conditions field value on the Quote Item	null
Note	Note field value on the Quote Item	null



Sample JSON

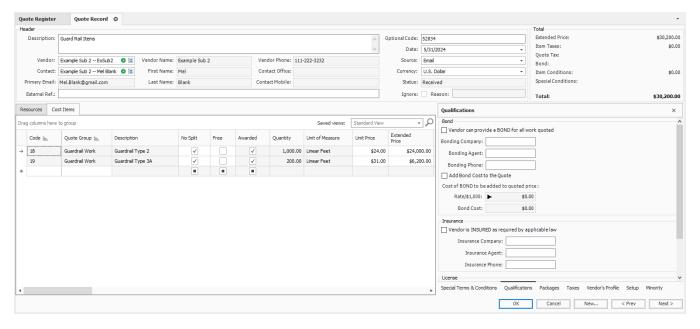
```
"QuoteItemType": "QuoteCostItem",
"UID": "d4306b19-3bc6-405c-90da-2cec5bbb5a94",
"ItemUID": "7a569f50-ddb2-4630-9b2f-368cfdcca647",
"Code": "1500 0100",
"Description": "Guardrail Type 2",
"QuoteUID": "80bee273-f2e0-45f8-a496-36580d0a973d",
"PackageUID": "",
"QuoteGroupUID": "5d414007-89e0-42fd-adb6-e5ace1686a89",
"NoSplit": true,
"Free": false,
"Duration": 1,
"ExtendedPrice": 24000.0,
"UnitPrice": 24.0,
"TaxRate": 0.0,
"ConditionAmount": 0.0,
"ConditionPercentage": 0.0,
"VendorCondition": "",
"Note": "",
"Awarded": true,
"QuoteQuantity": 304.8,
"UnitOfMeasureUID": "4cc74715-9623-46b2-93a3-65e77bacb85e",
"AlternateUnitOfMeasureUID": "210c234e-98a2-4420-b46c-64a2c07a2a79",
"DefaultTaxRate": 0.0,
"UserDefined1": ""
"UserDefined2": ""
"UserDefined3": "",
"UserDefined4": "",
"UserDefined5": "",
"UserDefined6": ""
"UserDefined7": ""
"UserDefined8": ""
"UserDefined9": ""
"UserDefined10": "",
"UserTaq1UID": "c2cebb03-bebe-4375-841d-2b068406d86c",
"UserTag2UID": "ac4d4a7f-f36e-43d9-af77-e430a2f53171",
"UserTag3UID": "",
"UserTaq4UID": "",
"UserTag5UID": ""
"UserTag6UID": "",
"UserTag7UID": "",
"UserTag8UID": "",
"UserTag9UID": "",
"UserTag10UID": ""
"UserTag11UID": ""
"UserTag12UID": ""
"UserTag13UID": ""
"UserTag14UID": "",
"UserTag15UID": "",
"UserTag16UID": "",
"UserTag17UID": "",
"UserTag18UID": "",
"UserTag19UID": "",
"UserTag20UID": "",
```



```
"UserTag21UID": "",
"UserTag22UID": "",
"UserTag23UID": "",
"UserTag24UID": "",
"UserTag25UID": ""
```

Verification

Quote data can be validated by navigating to the Quote Register and opening a Quote Record.





List Quote Items

This integration allows a customer to query QuoteItems from an existing job in InEight Estimate. The Estimate job is specified by passing a valid job code as parameter in the request. A list of valid job codes can be retrieved using the List Estimates API.

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	:hod(s)	Determined by external system.
API Name		List Quoteltems
InEight	Starting Version	24.9
Estimate	Ending Version	

Fields

See <u>Upsert QuoteItems</u>, <u>Fields</u> for detailed information.

Field Descriptions

See <u>Upsert QuoteItems</u>, <u>Field Descriptions</u> for detailed information.

Verification

See <u>Upsert QuoteItems</u>, <u>Verification</u> for detailed information.

List Quote Items 69



Delete Quote Items

This integration allows a customer to delete QuoteItems from a job that exists in InEight Estimate. Passing an array of valid field name and value pairs will delete the corresponding Quotes from the indicated job in InEight Estimate.

Direction		From InEight
Frequency		Determined by external system
Trigger Met	thod(s)	Determined by external system
API Name		Delete Quoteltems
InEight Estimate	Starting Version	24.9
	Ending Version	

Fields

See <u>Upsert QuoteItems</u>, <u>Fields</u> for detailed information.

Field Descriptions

See Upsert QuoteItems, Field Descriptions for detailed information.

Sample JSON

Verification

See <u>Upsert QuoteItems</u>, <u>Verification</u> for detailed information.



Upsert Quote Packages

The EstimateQuotePackages integration allows a customer to create and update Packages prices for Quote Items on a Quote record in an existing estimate in the InEight Estimate application. This supports automation of workflows such as importing quotes from an Invitation to Bid solution.

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	:hod(s)	Determined by external system.
API Name		Upsert QuotePackages
InEight	Starting Version	24.9
Estimate	Ending Version	

Fields

Depth	Name	Туре	Precision	Parent	Req.
1	JobCode	String	200		Yes
2	ObjectRef.Name	String	200	JobCode	No
2	ObjectRef.Value	String	200	JobCode	No
2	Quote Ref. Name	String	200	JobCode	No
2	Quote Ref. Value	String	200	JobCode	No
2	Code	String	3	JobCode	No
2	Description	String	100	JobCode	No
2	Amount	Number	Double	JobCode	No

Field Descriptions

Name	Description	Example
JobCode	Identifies the job code of the estimate for which the Quote Package will be modified.	Training Job
ObjectRef.Name	Identifies the field used to match on when updating existing Quote Packages. Not including this name/value pair will create a new Quote Package.	Code
ObjectRef.Value	Value in the field defined by ObjectRef.Name when updating existing Quote Packages. Not including this name/value pair will create a new Quote Package.	

Upsert Quote Packages 71



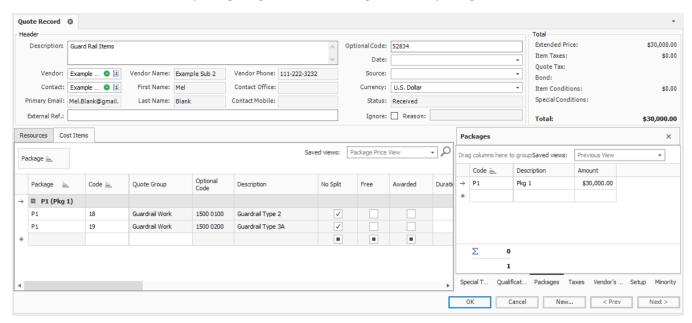
Name	Description	Example
Quote Ref. Name	Identifies the field used to match when referring to an existing quote for creating or updating packages.	
QuoteRef.Value	Value in the field defined by QuoteRef.Name when updating existing quotes.	52834
Code	Code field value on the Quotes Package Item	P1
Description	Description field value on the Quotes Package Item	Pkg 1
Amount	Amount field value on the Quotes Package Item	30000.0

Sample JSON

```
"UID": "93c565a9-5949-43a6-bbe7-389cd9e4c720",
"QuoteUID": "80bee273-f2e0-45f8-a496-36580d0a973d",
    "Code": "P1",
    "Description": "Pkg 1",
    "Amount": 30000.0
}
```

Verification

Quote data can be validated by navigating to the Quote Register and opening a Quote Record.





List Quote Packages

This integration allows a customer to query Packages belonging to Quotes from an existing job in InEight Estimate. The Estimate job is specified by passing a valid job code as parameter in the request. A list of valid job codes can be retrieved using the List Estimates API.

Direction		From an external system to the InEight cloud platform.
Frequency		Determined by external system. Suggested implementation is to manually trigger the creation of pay items in an Estimate Job each time a project is created in the customer's external system.
Trigger Met	:hod(s)	Determined by external system.
API Name		List QuotePackages
InEight	Starting Version	24.9
Estimate	Ending Version	

Fields

See <u>Upsert QuotePackages</u>, <u>Fields</u> for detailed information.

Field Descriptions

See <u>Upsert QuotePackages</u>, <u>Field Descriptions</u> for detailed information.

Verification

See <u>Upsert QuotePackages</u>, <u>Verification</u> for detailed information.

List Quote Packages 73



Delete Quote Packages

This integration allows a customer to delete quote packages from a job that exists in InEight Estimate. Passing an array of valid field name and value pairs will delete the corresponding Quotes from the indicated job in InEight Estimate.

Direction		From InEight
Frequency		Determined by external system
Trigger Method(s)		Determined by external system
API Name		Delete QuotePackages
InEight Estimate	Starting Version	24.9
	Ending Version	

Fields

See <u>Upsert QuotePackages</u>, <u>Fields</u> for detailed information.

Field Descriptions

See Upsert QuotePackages, Field Descriptions for detailed information.

Sample JSON

```
"JobCode": "Training Job",
"Entities": [{
    "Name": "Resource Code",
    "Value": "MMAM"
    }]
```

Verification

See <u>Upsert QuotePackages</u>, <u>Verification</u> for detailed information.