



Explore API Documentation

SelfService_Contract_LineItem

Version 1.0

Last Modified: 12/22/2022



Change Log

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

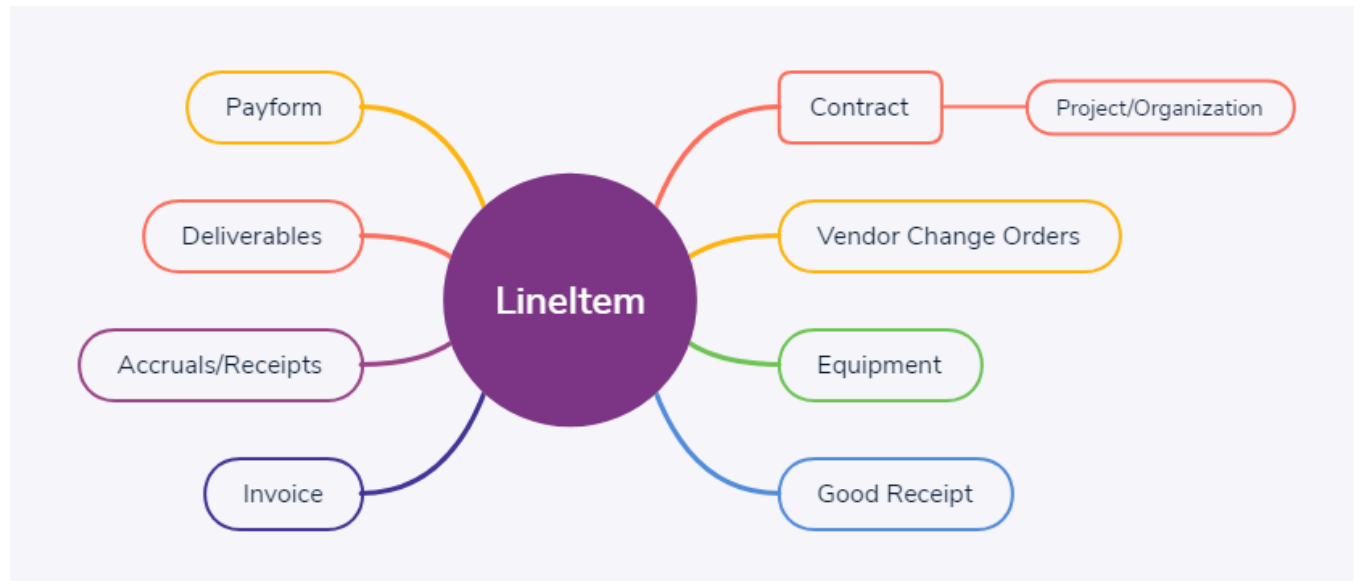
Revision	Change Date	Description	Modified By
1.0	5/30/2019	Initial draft	Swadesh Subedi
1.1	8/16/2022	Updated API refresh times	Litzy Mora
1.2	12/22/2022	Updated pagination	Litzy Mora

Contents

Change Log.....	2
Overview.....	4
Relationships and Dependencies.....	4
API Detail.....	5
Supported Filters.....	5
Fields.....	6
Field Descriptions.....	7
Sample.....	9
Data Validation.....	9

Overview

The **SelfService_Contract_LineItem** API provides an authorized user to get details at line item level. Each record shows the quantity, unit price and total amount . It also provides information about contract, project, and organization that the line item is associated with. Additionally, summarized data is available for vendor change order count/qty/amount, invoiced qty/amount, payform submitted qty/amount, accruals/receipts, deliverables count and assignment of equipment.



Relationships and Dependencies

From: Table	To: Table	Relationship	Cardinality	Comment
ContractDetail (CD)	Contract (C)	CD.ContractID = C.ContractId	M:1	Contract Id
ContractDetail (CD)	UnitOfMeasure(UOM)	CD.UOMId = UOM.UOMId	M:1	Unit of Measure
Contract (C)	Project (P)	C.ProjectId = P.ProjectId	M:1	Project Id, Project display, Project name.
ContractDetail (CD)	ContractDetailEquipment (CDE)	CD.ContractDetailId = CDE.ContractDetailId	1:1	If a contractDetailId exists in the CDE table, it means an equipment is assigned to the line item.
ContractDetail (CD)	DeliveryScheduleItem(DSI)	CD.ContractDetailId = DSI.ContractDetailId	1:M	Count of Deliverables
ContractDetail (CD)	ContractApplicationDetail (CAD)	CD.ContractDetailId = CAD.ContractDetailId	1:M	Accruals/Receipt – Submitted/Draft accrual amount and quantity.
ContractDetail (CD)	PaymentRequestContractDetail (PRCD)	CD.ContractDetailId = PRCD.ContractDetailId	1:M	Payform - Submitted/Draft payform amount, quantity and retention.
ContractDetail (CD)	InvoiceReceiptItem (IRI)	CD.ContractId = IRI.ContractId AND CD.LineItemCode = IRI.LineItemCode	1:M	Invoiced quantity, amount and retained to date amount.

ContractDetail (CD)	GoodsReceiptItem (GDI)	CD.ContractId = GDI.ContractId AND CD.LineItemCode = GDI.LineItemCode	1:M	Quantity received and Goods received amount.
ContractDetail (CD)	ContractChangeOrder ContractDetail (CCOCD)	CD.ContractDetailId = CCOCD.ContractDetailId	1:M	Bridge to ContractChangeOrder (Vendor Change Orders)
ContractChangeOrder (CCO)	ContractChangeOrder ContractDetail (CCOCD)	CCO.ContractChangeOrderId = CCOCD.ContractChangeOrderId	1:M	Bridge to ContractDetail (Line Item). Count/Qty/Amount of change orders.
ContractApplicationDetail (CAD)	ContractApplication(CA)	CA.ContractApplicationId = CAD.ContractApplicationId	M:1	Accrual/Receipt type Type 1 = Accrual Type 2 = Receipt Published 1 = Submitted Published 0 = Draft

API Detail

Direction	From Project Suite	
Pagination	5,000 Rows	
Frequency	All Reporting APIs are used by calling a GET method at an interval determined by the customer. InEight suggests using these APIs on an infrequent basis (once per day) to avoid potential performance impact to live systems when the returned data set could be large.	
Trigger Method(s)	All default OData filters are supported	
Average Payload Size	Depends on date range selected	
APIM Name	SelfService_Contract_LineItem	
API URL (QA)	https://t01in8-qa-191-sea.hds.ineight.com/ReportWebServices/OData/SelfService_Contract_LineItem	
Data Refresh/Delta/Incremental Loads	This API must be run as a full refresh each time; the data in this API refreshes every 15-20 minutes	
Project Suite	Starting Version	V1.0
	Ending Version	

Supported Filters

All default OData filters are supported by this API.

Fields

Column Name	Data Type	Char Max Length	Numeric Precision	Numeric Scale	Date Precision	Is Nullable	PK
ContractDetailId	BIGINT	NULL	19	0	NULL	0	X
LineItemCode	NVARCHAR	50	NULL	NULL	NULL	1	
LineItemDescription	NVARCHAR	500	NULL	NULL	NULL	1	
Type	NVARCHAR	50	NULL	NULL	NULL	1	
ContractId	BIGINT	NULL	19	0	NULL	0	
ProjectId	BIGINT	NULL	19	0	NULL	0	
ProjectDisplay	NVARCHAR	200	NULL	NULL	NULL	1	
ProjectName	NVARCHAR	300	NULL	NULL	NULL	1	
OrganizationId	BIGINT	NULL	19	0	NULL	1	
ProductCategory	NVARCHAR	353	NULL	NULL	NULL	1	
Quantity	DECIMAL	NULL	16	5	NULL	1	
UnitOfMeasure	NVARCHAR	255	NULL	NULL	NULL	1	
UnitPrice	DECIMAL	NULL	16	5	NULL	1	
UnitsPerPrice	INT	NULL	10	0	NULL	1	
NetPrice	DECIMAL	NULL	16	5	NULL	0	
TaxAmount	DECIMAL	NULL	16	5	NULL	0	
GrossAmount	DECIMAL	NULL	17	5	NULL	1	
ValidFrom	DATETIME OFFSET	NULL	NULL	NULL	7	1	
ValidThrough	DATETIME OFFSET	NULL	NULL	NULL	7	1	
RetentionPercent	DECIMAL	NULL	16	5	NULL	1	
RetentionHeld	DECIMAL	NULL	16	5	NULL	1	
TotalVCOCount	INT	NULL	10	0	NULL	0	
PotentialVCOCount	INT	NULL	10	0	NULL	0	
PotentialVCOQty	DECIMAL	NULL	38	5	NULL	0	
PotentialVCOAmount	DECIMAL	NULL	38	5	NULL	0	
ExecutedVCOCount	INT	NULL	10	0	NULL	0	
ExecutedVCOAdjustedQty	DECIMAL	NULL	38	5	NULL	0	
ExecutedVCOAdjustedAmount	DECIMAL	NULL	38	5	NULL	0	
QuantityReceived	DECIMAL	NULL	38	5	NULL	0	
GoodsReceivedAmount	DECIMAL	NULL	38	5	NULL	0	
QuantityInvoiced	DECIMAL	NULL	38	5	NULL	0	
InvoiceReceivedAmount	DECIMAL	NULL	38	5	NULL	0	
ProposedAccrual	DECIMAL	NULL	38	5	NULL	1	
RetainedToDate	DECIMAL	NULL	38	5	NULL	0	
PayFormCount	INT	NULL	10	0	NULL	0	
SubmittedQty	DECIMAL	NULL	38	5	NULL	0	
SubmittedNetAmount	DECIMAL	NULL	38	5	NULL	0	
SubmittedRetention	DECIMAL	NULL	38	5	NULL	0	
DraftQty	DECIMAL	NULL	38	5	NULL	0	
DraftAmount	DECIMAL	NULL	38	5	NULL	0	
DraftRetention	DECIMAL	NULL	38	5	NULL	0	
NumberOfAccruals	INT	NULL	10	0	NULL	0	
SubmittedAccrualAmount	DECIMAL	NULL	38	5	NULL	0	
DraftAccrualAmount	DECIMAL	NULL	38	5	NULL	0	
NumberOfReceipts	INT	NULL	10	0	NULL	0	
SubmittedReceiptQty	DECIMAL	NULL	38	5	NULL	0	
SubmittedReceiptAmount	DECIMAL	NULL	38	5	NULL	0	
DraftReceiptQty	DECIMAL	NULL	38	5	NULL	0	
DraftReceiptAmount	DECIMAL	NULL	38	5	NULL	0	
DeliverablesCount	INT	NULL	10	0	NULL	0	

Equipment	VARCHAR	3	NULL	NULL	NULL	0	
IsDeleted	BIT	NULL	NULL	NULL	NULL	1	
IsActive	BIT	NULL	NULL	NULL	NULL	0	
CreatedDate	DATETIME OFFSET	NULL	NULL	NULL	7	0	
IsMasterPurchaseAgreementContractDetail	BIT	NULL	NULL	NULL	NULL	0	
MasterPurchaseAgreementContractDetailId	BIGINT	NULL	NULL	NULL	NULL	1	
MaterialGroupDescription	NVARCHAR	250	NULL	NULL	NULL	1	
MaterialAttributes	NVARCHAR	4000	NULL	NULL	NULL	1	
ModifiedDate	DATETIME OFFSET	NULL	NULL	NULL	7	1	

Field Descriptions

Column Name	Description	Example
ContractDetailId	Unique identifier of a line item.	116
LineItemCode	Line item code. Starts with 001 for each Contract.	001
LineItemDescription	Line item title.	Hazardous Material Abatement
Type	Line item type	Material
ContractId	Contract Id to which the line item belongs.	7200000011
ProjectId	Project Id of the contract.	40
ProjectDisplay	Project display number.	103541
ProjectName	Name of the project	Market Station
OrganizationId	Organization Id of the project	2
ProductCategory	Product category.	MCC - SUB,GRADING&SITEWORK,FURNISH&INSTALL
Quantity	Total line item quantity	11807
UnitOfMeasure	Unit of Measurement	Ea
UnitPrice	Unit price for the quantity	11807
UnitsPerPrice	Number of quantity included in a unit price	1
NetPrice	Quantity x Unit Price	11,807
TaxAmount	Total tax for the line	1,100
GrossAmount	Net price + Tax Amount	12,907
ValidFrom	Date line item is valid from.	2018-11-14 00:00:00.0000000 +00:00
ValidThrough	Date till which line item is valid.	2018-12-18 00:00:00.0000000 +00:00
RetentionPercent	Percentage of amount to be retained.	5
RetentionHeld	Total amount to be retained.	590.35
TotalVCOCCount	Total number of vendor change orders on the line item excluding dropped and disputed	7
PotentialVCOCCount	Total potential vendor change orders excluding dropped and disputed	4
PotentialVCOQty	Total potential vendor change order adjusted qty excluding dropped and disputed	4732

PotentialVCOAmount	Total amount of all potential vendor change orders	4732
ExecutedVCOCount	Total executed vendor change orders	3
ExecutedVCOAdjustedQty	Total executed vendor change order adjusted qty	2054
ExecutedVCOAdjustedAmount	Total amount of all executed vendor change orders	2054
QuantityReceived	Total quantity received	7043
GoodsReceivedAmount	Total amount for received quantity	9328.53
QuantityInvoiced	Total quantity invoiced	8147
InvoiceReceivedAmount	Total amount for invoiced quantity	10438.88
ProposedAccrual	Total goods received amount – Total invoiced amount	1110.35
RetainedToDate	Total amount retained from invoices	4779.31
PayFormCount	Total number of payforms in which the line item is included.	10
SubmittedQty	Total submitted quantity in all payforms. Payment form status = submitted	6484
SubmittedNetAmount	Total submitted amount in all payforms. Payment form status = submitted	6741
SubmittedRetention	Total retained amount for payforms in “Submitted” status	2596.90
DraftQty	Total draft quantity in all payforms. Payment form status = In Review	3117.45
DraftAmount	Total draft amount in all payforms. Payment form status = In Review	2248.87
DraftRetention	Total retained amount for payforms in “In Review” status	248.74
NumberOfAccruals	Total number of accruals	2
SubmittedAccrualAmount	Total amount for submitted accruals. Published = submitted.	463.98
DraftAccrualAmount	Total amount for draft accruals. Draft = Not published.	225
NumberofReceipts	Total number of receipts	1
SubmittedReceiptQty	Total quantity for submitted receipts. Published = submitted.	110
SubmittedReceiptAmount	Total amount for submitted accruals. Published = submitted.	156
DraftReceiptQty	Total quantity for draft receipts. Draft = Not published.	50
DraftReceiptAmount	Total amount for submitted accruals. Draft = Not published.	55
DeliverablesCount	Number of deliverables on this line item.	12
Equipment	Whether an equipment has been assigned to the line item or not.	Yes – if equipment assigned.
IsDeleted	Indicates whether a line item has been deleted or not	1 = Deleted 0 = Not deleted
IsActive	Indicates if the record is active or has been soft deleted	1 = Active 0 = Inactive
CreatedDate	Line item created date	2018-10-16 07:33:07.4866667 +00:00
IsMasterPurchaseAgreementContractDetail	Flag for MasterPurchaseAgreementContractDetail	1
MasterPurchaseAgreementContractDetailId	Unique identifier of MasterPurchaseAgreementContractDetail	317899

MaterialGroupDescription	Description for MaterialGroup	PIPE PIPING/PIPE FITTINGS
MaterialAttributes	Attributes	Supply and Install Black Rebar
ModifiedDate	Last modified date from all fields	2018-10-16 07:33:07.4866667 +00:00

Sample






```
{
"ContractDetailId":55,"LineItemCode":"0007","LineItemDescription":"OCS/Lighting/Electrical","ContractId":7200000006,"ProjectId":29,"ProjectDisplay":"103505","ProjectName":"MECT - LACMTA Blue Line Signal Sys Rehab","OrganizationId":64,"ProductCategory":"MTD - SUB,SPECIALTY WORK,PROFESSIONAL SERVICE","Quantity":615648.00000,"UnitOfMeasure":"Ea","UnitPrice":1.00000,"UnitsPerPrice":1,"NetPrice":615648.00000,"TaxAmount":0.00000,"GrossAmount":615648.00000,"ValidFrom":"2017-02-15T00:00:00Z","ValidThrough":null,"RetentionPercent":5.00000,"RetentionHeld":30782.40000,"TotalVCOCount":0,"PotentialVCOCount":0,"PotentialVCOQty":0.00000,"PotentialVCOAmount":0.00000,"ExecutedVCOCount":0,"ExecutedVCOAdjustedQty":0.00000,"ExecutedVCOAdjustedAmount":0.00000,"QuantityReceived":435652.00000,"GoodsReceivedAmount":0.00000,"QuantityInvoiced":411026.00000,"InvoiceReceivedAmount":411026.00000,"ProposedAccrual":0.00000,"RetainedToDate":20551.30000,"PayFormCount":6,"SubmittedQty":411026.00000,"SubmittedNetAmount":411026.00000,"SubmittedRetention":20551.30000,"DraftQty":0.00000,"DraftAmount":0.00000,"DraftRetention":0.00000,"NumberOfAccruals":0,"SubmittedAccrualAmount":0.00000,"DraftAccrualAmount":0.00000,"NumberOfReceipts":0,"SubmittedReceiptQty":0.00000,"SubmittedReceiptAmount":0.00000,"DraftReceiptQty":0.00000,"DraftReceiptAmount":0.00000,"DeliverablesCount":0,"Equipment":"No","IsDeleted":false,"IsActive":true,"CreatedDate":"2017-12-06T00:05:47.7244582Z", "IsMasterPurchaseAgreementContractDetail":"1", "MasterPurchaseAgreementContractDetailId":"317899", "MaterialGroupDescription":"SUB,CIVIL UTILITY,OTHER", "MaterialAttributes":"1 Fresh water tank filled twice/week", "ModifiedDate":"2018-05-26T05:15:40.57885Z"
}
```

Data Validation

The Line Item tab for a contract shows the summary data for all line items within that contract. Details of a line item can be viewed by clicking on an individual line item.

Contracts > 720000013 - Electric Company of Omaha / Independent Investors Inc.

Actions ▾ HEADER **LINE ITEMS** VENDOR CHANGE ORDER LOG BACK CHARGES PAYMENT FORMS PAYMENT PROGRESS

Line Item ID	Type	Material ID	Description	Product cat...	Quantity	UoM	Unit price	Per	Net amount
0001	Material		Electrical- ...	MPA - SUB,BUI...	2,114,521.270	Ea	\$1.00	1	\$2,114,521.27
0002	Material		Electrical- ...	MPA - SUB,BUI...	232,598.080	Ea	\$1.00	1	\$232,598.08
0003	Material		Electrical- ...	MPA - SUB,BUI...	84,580.205	Ea	\$1.00	1	\$84,580.21
0004	Material	000000016...	FEE,BOND	NFA - FINC SE...	22,650.000	Ea	\$1.00	1	\$22,650.00

Figure 1: Line Item Summary

- The View dropdown on top right corner allows viewing of summarization of data based on different categories. Each view allows viewing of further detail by clicking on each row.

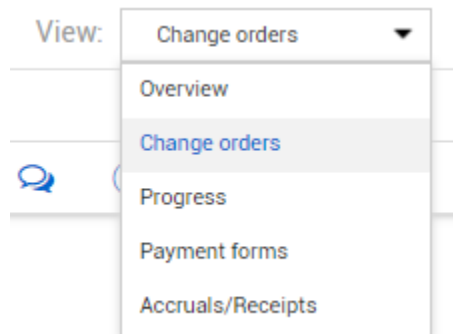


Figure 2: View dropdown

- The “Change orders” view shows all potential and executed vendor change order counts/quantities/amount.

Change orders					
Number of ...	Potential ch...	Potential ch...	Number of c...	Executed qu...	Executed ne...
0	0.00	\$0.00	1	269,255.27	\$269,255.27
0	0.00	\$0.00	1	29,618.08	\$29,618.08
0	0.00	\$0.00	1	10,770.21	\$10,770.21
0	0.00	\$0.00	1	0.00	\$0.00

Figure 3: Change orders view

- The “Progress” view shows all good received quantity/amount and invoiced quantity/received with retention amount.

Progress					
Quantity re...	Goods rece...	Quantity in...	Invoice rec...	Proposed a...	Retention ...
<u>20,058.00</u>	<u>\$0.00</u>	<u>20,058.00</u>	<u>\$20,058.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
<u>2,104,328.43</u>	<u>\$0.00</u>	<u>2,045,513.43</u>	<u>\$2,045,513.43</u>	<u>\$0.00</u>	<u>\$0.00</u>
<u>231,478.08</u>	<u>\$0.00</u>	<u>225,008.08</u>	<u>\$225,009.31</u>	<u>\$0.00</u>	<u>\$0.00</u>
<u>84,173.54</u>	<u>\$0.00</u>	<u>81,820.26</u>	<u>\$81,819.90</u>	<u>\$0.00</u>	<u>\$81,819.90</u>

Figure 4: Progress view

- The “Payment forms” view shows count of all payforms that include the line item along with total submitted and draft quantity/amount/retention.

Payment forms						
Number of ...	Submitted q...	Submitted n...	Submitted r...	Draft quantity	Draft net a...	Draft retenti...
<u>9</u>	<u>20,058.000</u>	<u>\$20,058.00</u>	<u>\$0.00</u>	<u>0.000</u>	<u>\$0.00</u>	<u>\$0.00</u>
<u>11</u>	<u>2,045,513.430</u>	<u>\$2,045,513.43</u>	<u>\$0.00</u>	<u>0.000</u>	<u>\$0.00</u>	<u>\$0.00</u>
<u>10</u>	<u>225,009.310</u>	<u>\$225,009.31</u>	<u>\$0.00</u>	<u>0.000</u>	<u>\$0.00</u>	<u>\$0.00</u>
<u>10</u>	<u>81,819.900</u>	<u>\$81,819.90</u>	<u>\$81,819.90</u>	<u>0.000</u>	<u>\$0.00</u>	<u>\$0.00</u>

Figure 5: Payform view

- The “Accruals/Receipts” view shows all accruals and receipts count/quantity/amount.

Accruals/Receipts							
Number o...	Submitte...	Draft accr...	Number o...	Submitte...	Submitte...	Draft rece...	Draft rece...
<u>1</u>	<u>\$0.00</u>	<u>\$20,000.00</u>	<u>0</u>	<u>0.000</u>	<u>\$0.00</u>	<u>0.000</u>	<u>\$0.00</u>
<u>1</u>	<u>\$0.00</u>	<u>\$690.00</u>	<u>0</u>	<u>0.000</u>	<u>\$0.00</u>	<u>0.000</u>	<u>\$0.00</u>
<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>0</u>	<u>0.000</u>	<u>\$0.00</u>	<u>0.000</u>	<u>\$0.00</u>
<u>0</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>0</u>	<u>0.000</u>	<u>\$0.00</u>	<u>0.000</u>	<u>\$0.00</u>

Figure 6: Accruals/Receipts view