

InEight Control

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	23-MAY-2019	Initial Release.
		Minor updates to clarify wording and concepts. Added Actual Quantities integration. Revised all information about Cost Items (Generic) integration to trim down the field requirements and make the use of the integration easier to understand.
		Updated configuration entities for Cost Breakdown Structure , Budget , Actual Cost and Man Hours (Request) , and Actual Quantity to match changes in the UI. Deleted rows in API tables for Supports Bulk Upsert and Supports Delta. Published release.
		Clarified information about the LogToken between synchronized integrations and the confirmation message.
		Added 19.9 configuration information for Actuals (Generic) . Added new non-breaking fields for Cost Breakdown Structure . Added new fields (Tag12 and UserDefined10) in the Cost Item API .
2.0	23-AUG-2019	Published revision.
3.0	21-JAN-2020	Added integrations that include: Push Billed Revenue , Get Billed Revenue (Request) , Get Billed Revenue (Response) , Billed Revenue (Generic) , and Push Time Phased Forecast . Published revision (Release 19.11).
	23-MAR-2020	Added Committed Cost (Request) and Committed Cost (Response) integrations.
4.0	31-MAR-2020	Updated APIM Name in Committed Cost (Response) , Get Billed Revenue (Response) , and Billed Revenue (Generic) integrations. Published revision (Release 20.2).
5.0	31-AUG-2020	Removed reference and description of the ActualQuantity_GET API from Actual Cost and Man Hours (Response) . This API along with ResourceCategoryCosts_Import and CostItemResources_Import were deprecated from APIM. Published revision. (Release 20.5)
6.0	15-SEP-2020	Added integration for Committed Cost (Generic) . Published revision. (Release 20.7)
7.0	06-OCT-2020	Added Logger array, associated fields, and sample error messages in Control Confirmation , Actual Cost and Man Hours (Response) , Committed Cost (Response) , Get Billed Revenue (Response) . Updated Field Descriptions in Cost Breakdown Structure for Start, Finish, ActualStart, ActualFinish, EarlyStart, EarlyFinish, LateStart, LateFinish. Added the 13, 14 fields in Push Time Phased Forecast for ForecastManhours and ForecastQuantity. Corrected ProjectNumber field description in Cost Item (Generic) . Published revision. (Release 20.9)

8.0	15-JAN-2021	Added Pay Items, Push Billed Revenue, and Forecast Revenue to Control Confirmations. Added integration Push Forecast Revenue. Added PayItemNumber, PayItemDescription, PayItemSourceSystemId fields to Cost Breakdown Structure. Added SourceSystemId field to Pay Items. Added Count field to Actual Quantities. Added PayItemSourceSystemId field to Push Billed Revenue, Get Billed Revenue (Response), and Billed Revenue (Generic). PayItemSourceSystemId is required in response as the matching identifier, was previously PayItemNumber. Published revision (20.11)
9.0	03-MAR-2021	Added integration Push Time Phased Budget. Published revision (Release 21.1)
10.0	13-APR-2021	Added IssueName, IssuedId, ChangeId fields in Cost Breakdown Structure. Published revision (Release 21.3)
11.0	02-JUL-2021	Added integration Sales Order. Updated Integration Status validation section in Cost Item. Added fields for original pay item data in Pay Items. Added UnapprovedRevenue fields in Push Forecast Revenue. Published revision (Release 21.5)
12.0	17-SEP-2021	Added LiveForecastCost array and fields in Push Time Phased Forecast sync. Added integration Multiple Project Actuals. Published revision (Release 21.7)
13.0	25-OCT-2021	Added PayItemPosition and IsTerminal fields in Pay Items. Added error messages for Get Billed Revenue (Response) and Billed Revenue (Generic). See Verifying Integration Events in InEight Control for error messaging. Published revision (Release 21.10)
14.0	13-JAN-2022	Added ChangeOrderSourceSystemId, ChangeOrderNumber, and ChangeOrderDescription fields in Push Billed Revenue. Added details for reponse options in Actual Cost and Man Hours (Response). Updated PayItemSourceSystemId description in Get Billed Revenue (Response) and Billed Revenue (Generic). Published revision (Release 21.12)
15.0	04-MAR-2022	Added RetentionWithHeld and BilledRevenueNet fields in Push Billed Revenue, Get Billed Revenue (Response), and Billed Revenue (Generic). Added RetainagePercentage, RetentionWithHeld, and NetBilledRevenue fields in Pay items. Updated for clarification ProjectId, ProjectDisplay, ProjectDisplayId, and ProjectDisplayNumber field descriptions. Updated InterfaceType field description in Control Confirmation. Published revision (Release 22.2)
16.0	12-JUL-2022	Added EnabledForecastMethod field and descriptions for ForecastManhours and ForecastQuantity fields to Push Time Phased Forecast. Added Integration Status to Actuals (Generic) for options to receive integration status automatically. Added recommendations for payloads in Actuals (Generic), Cost Item (Generic), Multiple Project Actuals (Generic). Published revision (Release 22.4)

17.0	23-SEP-2022	Added DirectPayitemNumberAssigned and DirectPayitemSourceSystemIDAssigned fields to Cost Breakdown Structure . Added message formatting and error codes to Integration Status in Actuals (Generic) . Published revision (Release 22.8)
18.0	03-NOV-2022	Added Integration Status information for the Location field and the URI in the header to Actual Cost and Man Hours (Response) , Billed Revenue (Generic) , and Multiple Project Actuals (Generic) . Published revision (Release 22.10)
19.0	23-JAN-2023	Added Unit of Measure section for clarification. Added AveragePerformanceSetting field to Forecast . Added ForecastManhours, ForecastQuantity, AveragePerformanceSetting, and the 16 fields to Push Time Phased Forecast . Published revision (Release 22.12)
20.0	16-MAR-2023	Added ContributingUnapprovedRevenue field to Push Forecast Revenue . Added an overview to Actual Quantities . Published revision (Release 23.2)
21.0	23-MAY-2023	Added Get integrations Cost Item (Generic) , Budget (Generic) , Forecast (Generic) , Time Phased Budget (Generic) , and Time Phased Forecast (Generic) . Added Post integration for Live Forecast (Generic) . Added Segment1, Segment2, Segment3, and Segment4 fields to Cost Item in Cost Breakdown Structure . Published revision (Release 23.4)
22.0	22-AUG-2023	Added Post integration for Time Phased Forecast (Generic) . Published revision (Release 23.6)
23.0	31-OCT-2023	Added new version (V1) of the Cost Item (Generic) - Post (V1) . Added Exclude Summary option in Cost Item (Generic) – Post (V0). Published revision (Release 23.8)
24.0	22-DEC-2023	Updated API names to match APIM portal. Added Configuration option to Actual Cost and Man Hours (Request). Published revision (Release 23.10)
25.0	05-FEB-2024	Added Get integration for Change Order (Generic) . Published revision (Release 23.12)
26.0	04-JUN-2024	Added Integration Status and Error Codes sections to Get Billed Revenue (Response) – Sync . Added a Get integration for Actuals (Generic) . Published revision (Release 24.5)
26.1	20-AUG-2024	Added NOTE to CBSPosition in Cost Item (Generic) - Post (V1) for when the field is required and not required. Published update
27.0	20-SEP-2024	Added ActualsUserDefined fields and EstimateResource fields to Actual Cost and Man Hours (Response) - Sync , Actual Quantity - Sync , Create Actuals Generic , Create MultiProject Actuals Generic , and List Actuals . Published revision (Release 24.9)
28.0	21-APR-2025	Changed CostItemDetails field to required in Cost Item (Generic) .
29.0	29-MAY-2025	Made updates and changes for clarification throughout the specification.



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Appendix A: Cost Categories253

Overview

This document groups integrations used primarily with InEight Control for operating and accounting of a project.

Integrations in this Document

Integration	Description
Cost Breakdown (CBS) Structure - Sync	This integration ensures that the setup and configuration of cost items, including cost item attributes and their hierarchy, are synchronized between InEight and the Enterprise Resource Planning (ERP) or financial system of the InEight customer. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions.
Budget - Sync	This integration allows InEight customers to send Amount, Quantity, and Man Hours for Original Budget, Current Budget, and Current Estimate for all cost items in a project from InEight Control to an external Enterprise Resource Planning (ERP) or other financial system. Cost amounts are broken down by Cost Categories within this integration. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions. Each time the Budget sync is executed by a user in Control, the Cost Item Structure integration is initiated first, and a Success message is required to be returned before the Budget data is sent.
Forecast – Sync	This integration sends current Quantities, Values, and Amounts for cost items that have forecast values in a project from the Control application to an external ERP or financial system. Forecast values are broken down by Cost Categories within this integration. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions. Each time the Forecast integration is executed by a user in Control, the Cost Item Structure integration is initiated first, and a Success message is required to be returned before the Forecast data is sent.
Control Confirmations	This integration is used to provide a required response to the receipt of data from the Cost Breakdown Structure, Budget, Forecast, Pay Items, Actual Quantities, Push Billed Revenue, and Push Forecast Revenue.
Actual Cost and Man-hours (Request) – Sync	This integration brings man-hours, equipment hours and cost by Cost Category as recorded by the external ERP or financial system into InEight Control. Use of this integration assumes that the customer considers their ERP or financial system to be the official system of record for all financial information, so that system can be used to true-up or provide additional data for project cost management in Control. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions. This integration is comprised of two separate components. First, a request for data is made from Control to the external system. Then, all the data matching the request from Control is sent in a response from the external system.
Actual Cost and Man-hours (Response) – Sync	See Actual Cost and Man-Hours (Request).

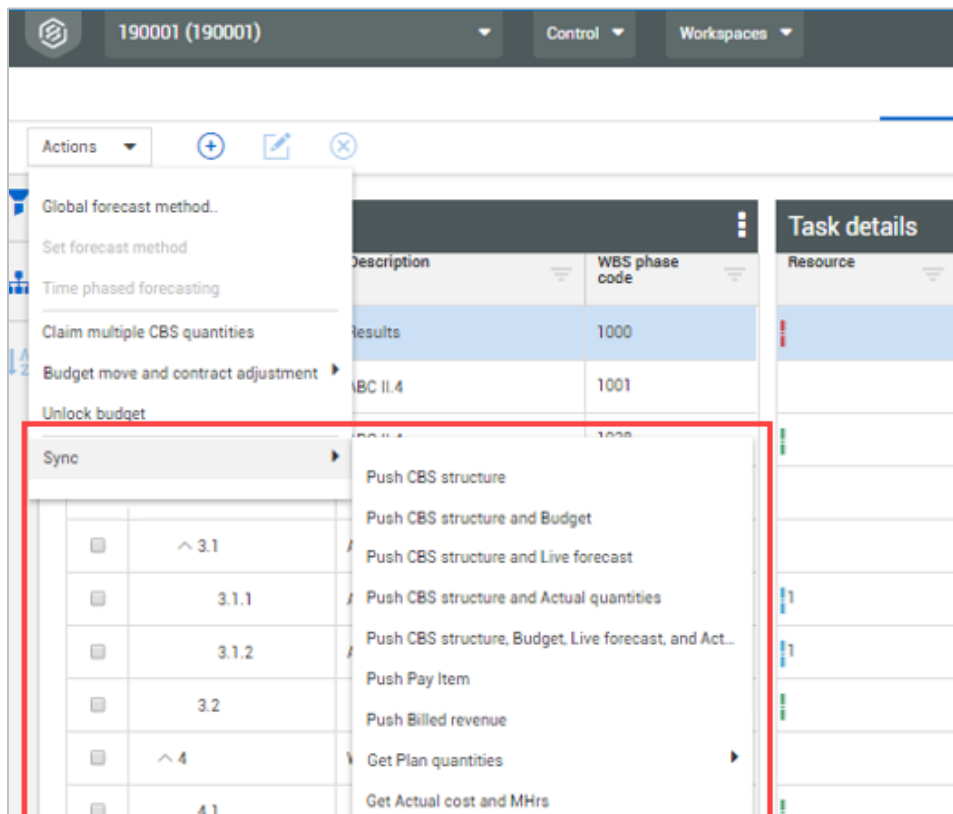
Integration	Description
Committed Cost (Request) – Sync	This integration brings total commitment and open commitment cost by Cost Category as recorded by the external ERP or financial system into InEight Control. Use of this integration assumes that the customer considers their ERP or financial system to be the official system of record for all financial information, so that system can be used to true-up or provide additional data for project cost management in Control. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions. This integration is comprised of two separate components. First, a request for data is made from Control to the external system. Then, all the data matching the request from Control is sent in a response from the external system.
Committed Cost (Response) - Sync	See Committed Cost (Request).
Committed Cost Post (Generic)	This integration brings total commitment and open commitment cost by Cost Category as recorded by the external ERP or financial system into InEight Control. Use of this integration assumes that the customer considers their ERP or financial system to be the official system of record for all financial information, so that system can be used to true-up or provide additional data for project cost management in Control. This option is not initiated by a user within the Control UI it is initiated from an external source.
Actuals Post (Generic)	This integration is a publicly available API that can be used to provide actual Cost by Cost Category, Quantity, Equipment Hours and Man-Hours to be associated to a Cost Item. This differs from the Actual Cost and Man-hours integration by allowing external systems to post actuals at any time without a request being initiated from Control first. This option is not initiated by a user within the Control UI it is initiated from an external source.
Cost Item (Generic) - Post (V0)	NOTE: This integration will be deprecated in a future release and should not be used for new implementations, please utilize Cost Item (Generic) – Post (V1)
Cost Item (Generic) - Post (V1)	This is the most current option to create or update cost items, attributes and current estimate cost.
Pay Items - Sync	This integration provides the list of, and information about, contractual pay items that have been defined within InEight Control. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions.
Actual Quantities – Sync	This integration allows a delta value of quantities claimed against cost items in InEight, from the last time the integration was executed Successfully, to be provided to an external system such as an ERP or accounting system. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions.
Push Billed Revenue – Sync	This integration allows the billed revenue that has been created from the last time the integration was executed, to be provided to an external system such as an ERP or accounting system. This includes information such as the pay item, project, billed revenue, cost category, billed quantity, and billing date. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions.
Get Billed Revenue (Request) – Sync	This integration allows the billed revenue to be brought in from an external system such as an ERP. The Get Billed Revenue sends a date range from the last time the integration was executed, and it would be expected that the ERP sends back the information that occurred between the specified dates. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions.
Get Billed Revenue (Response) – Sync	See Get Billed Revenue (Request).

Integration	Description
Billed Revenue (Generic)	This integration is a publicly available API that can be used to provide billed revenue by cost category or billed quantity associated to a pay item and a cost item that is associated to that pay item. This differs from the Get Billed Revenue integration in that it allows external systems to post billed revenue at any time without a request first being initiated from Control. This option is not initiated by a user within the Control UI it is initiated from an external source.
Time Phased Forecast – Sync	This integration sends time phased forecast information to an ERP. This integration is initiated everytime the Live Forecast integration is initiated. The information in the Time Phased Forecast integration includes forecast amounts by fiscal months, by cost category, and by cost item. It also includes information for forecast quantity and manhours by fiscal month, and by cost item. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions.
Forecast Revenue – Sync	This integration sends forecasted revenue by pay item to an ERP.. A confirmation is required to be sent back from the ERP that the data was received and either processed successfully or failed on the ERP side. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions.
Time Phased Budget – Sync	This integration sends time phased budget information to an ERP. This integration is initiated every time the Budget integration is initiated. The information in the Time Phased Budget integration includes budget amounts by fiscal months, by cost category, or by cost item. This integration is available on demand through the Actions > Sync menu for a user with the applicable permissions.
Sales Order Post	This integration allows sales order and sales order description to be brought in from an external system such as an ERP. This option is not initiated by a user within the Control UI it is initiated from an external source.
Multiple Project Actuals (Generic)	This integration allows actual cost, quantity, equipment hours and man-hours to be associated to a cost item based on the joining criteria of WBS phase code or CBS position for up to 15 different projects. This option is not initiated by a user within the Control UI it is initiated from an external source.
Cost Item (Generic) - Get	This integration allows a customer to retrieve cost item attributes for a project through the location field in a JSON format. This option is not initiated by a user within the Control UI it is initiated from an external source.
Budget (Generic) - Get	This integration allows a customer to retrieve from the InEight cloud platform current estimate, current budget, and original budget information by cost item and at the cost category level for a project through the location field in a JSON format. This option is not initiated by a user within the Control UI it is initiated from an external source.
Live Forecast (Generic) - Get	This integration allows a customer to retrieve from the InEight cloud platform live forecast information by cost item and to the cost category level for a project through the location field in a JSON format. This option is not initiated by a user within the Control UI it is initiated from an external source.
Time Phased Budget (Generic) - Get	This integration allows a customer to retrieve from the InEight cloud platform the time phased budget information for a project through the location field in a JSON format. This option is not initiated by a user within the Control UI it is initiated from an external source.
Time Phased Forecast (Generic) - Get	This integration allows a customer to retrieve from the InEight cloud platform the time phased forecast information for a project through the location field in a JSON format. This option is not initiated by a user within the Control UI it is initiated from an external source.

Integration	Description
Live Forecast (Generic) - Post	This integration allows a customer to update InEight Control from their external ERP for a project's live forecast for a cost item for live forecast cost, manhours, and notes. This option is not initiated by a user within the Control UI it is initiated from an external source.
Time phase Forecast (Generic) - Post	This integration allows a customer to update InEight Control from their external ERP for a project's time phased forecast for a cost item for live forecast cost, manhours, and notes. This option is not initiated by a user within the Control UI it is initiated from an external source.
Change order (Generic) - Get	This integration allows a customer to retrieve information about contract adjustments, budget moves for a project through the location field in a JSON format. This option is not initiated by a user within the Control UI it is initiated from an external source.
Actuals (Generic) – Get	This integration allows a customer to retrieve information about actuals (cost, manhours, quantity, equipment hours) for a project through the location field in a JSON format. This option is not initiated by a user within the Control UI it is initiated from an external source.

Triggering Control Sync Options

You can manually initiate most of the integrations included in this document within the InEight Control application. To initiate a Control integration, go to **Workspaces**, select **Actions > Sync**, and then select the integration you want to initiate from the list.



Unit of Measure

All UOM references use the code shown in Master data libraries > Unit of measure > SKF ID field. If the SKF ID field is not populated in the UI, a message shows that the unit of measure is not valid.

Relationships and Dependencies

Cost Breakdown Structure (CBS), Budget, and Forecast

The Cost Breakdown Structure integration provides the foundation for how cost is managed within the InEight Control application. The data transmitted represents the hierarchy of cost items and their details about how cost will be captured.

This integration is typically used at the start of a new project in InEight to communicate the structure to external accounting or ERP systems, and then is used periodically, on demand by users of Control, to keep the cost structure synchronized between Control and external systems. For instance, when a user initiates either the Budget or Forecast integrations, the Cost Breakdown Structure integration is sent first, and confirmation must be received before either of the integrations is sent. This ensures that all cost items within the Budget and Forecast integrations are known by the external system prior to the transmission of their data.

Cost Category Structure

Within InEight, each cost item contains a hierarchy of cost categories that provide the detailed breakdown of the Original Budget (OB), Current Budget (CB) and Current Estimate (CE) totals. As of this release, there are four possible levels to the cost category structure with each branch of the structure using different numbers of the levels, as shown in the following example.

- Labor
 - Labor Base
 - Labor Burden
 - Labor Fringes
 - Travel
 - Premium
 - Undefined Labor Fringes
 - Labor Insurance
 - Workers Compensation
 - Undefined Labor Insurance
 - Undefined Labor

In the example, note that all levels have an Undefined... category. When a dollar value is not placed at the lowest level, or terminal (level), cost category it is automatically assigned to the Undefined... category at the next level down. For example, \$5,000 in budget placed on Travel would remain on Travel because it is a terminal cost category. However, \$3,000 in budget placed on Labor Insurance would be assigned to Undefined Labor Insurance because Labor Insurance is not a terminal cost category. Just as a budget value of \$17,500 placed directly on Labor would be assigned to Undefined Labor for the same reason.

When cost category values are reported through an integration, all cost categories that contain a value are reported, including the summary values at all parent levels. The following JSON shows how the example values for labor from above would be reported within any Original Budget portion of an integration.

```
"OriginalBudgetQuantity": 654.000000000000,
"OriginalBudgetUnitOfMeasure": "MWK",
"OriginalBudgetManHours": 0.000000000000,
"OriginalBudgetTotalCost": 20100.000000000000, (*Note that this value reflects all
Cost Categories, not just the Labor example.)
"OriginalBudgetCostCategory": [
  {
    "Name": "Labor",
    "Cost": 25500.000000000000, (*Total of all children of Labor)
    "IsTerminalCostCategory": false
  }, {
    "Name": "Labor Burden",
    "Cost": 8000.000000000000, (*Total of all children of Labor Burden)
    "IsTerminalCostCategory": false
  }, {
    "Name": "Labor Fringes",
    "Cost": 5000.000000000000, (*Total of all children of Labor Fringes)
    "IsTerminalCostCategory": false
  }, {
    "Name": "Travel",
    "Cost": 5000.000000000000, (*Terminal Cost Category)
    "IsTerminalCostCategory": true
  }, {
    "Name": "Labor Insurance",
    "Cost": 3000.000000000000, (*Total of all children of Labor Insurance)
    "IsTerminalCostCategory": false
  }, {
    "Name": "Undefined Labor Insurance",
    "Cost": 3000.000000000000, (*Terminal Cost Category)
    "IsTerminalCostCategory": true
  }, {
    "Name": "Undefined Labor",
    "Cost": 17500.000000000000, (*Terminal Cost Category)
    "IsTerminalCostCategory": true
  }, {
```

NOTE:

Labor Base is not reported in the JSON because the example values did not include a budget for that cost category, and therefore did not contain a value.

IsTerminalCostCategory

For customers with systems that do not support multiple hierarchy levels for cost categorization and need to capture information only at the terminal levels, the IsTerminalCostCategory field is included with each cost category record so that parent levels can be ignored.

Fixed Cost Category List

Cost categories are a fixed list of options and hierarchical structure that matches options available in InEight Estimate. At this time, both the list or the structure cannot be altered by customers. The full list of all cost categories and how they fit within the hierarchy is available in [Appendix A](#).

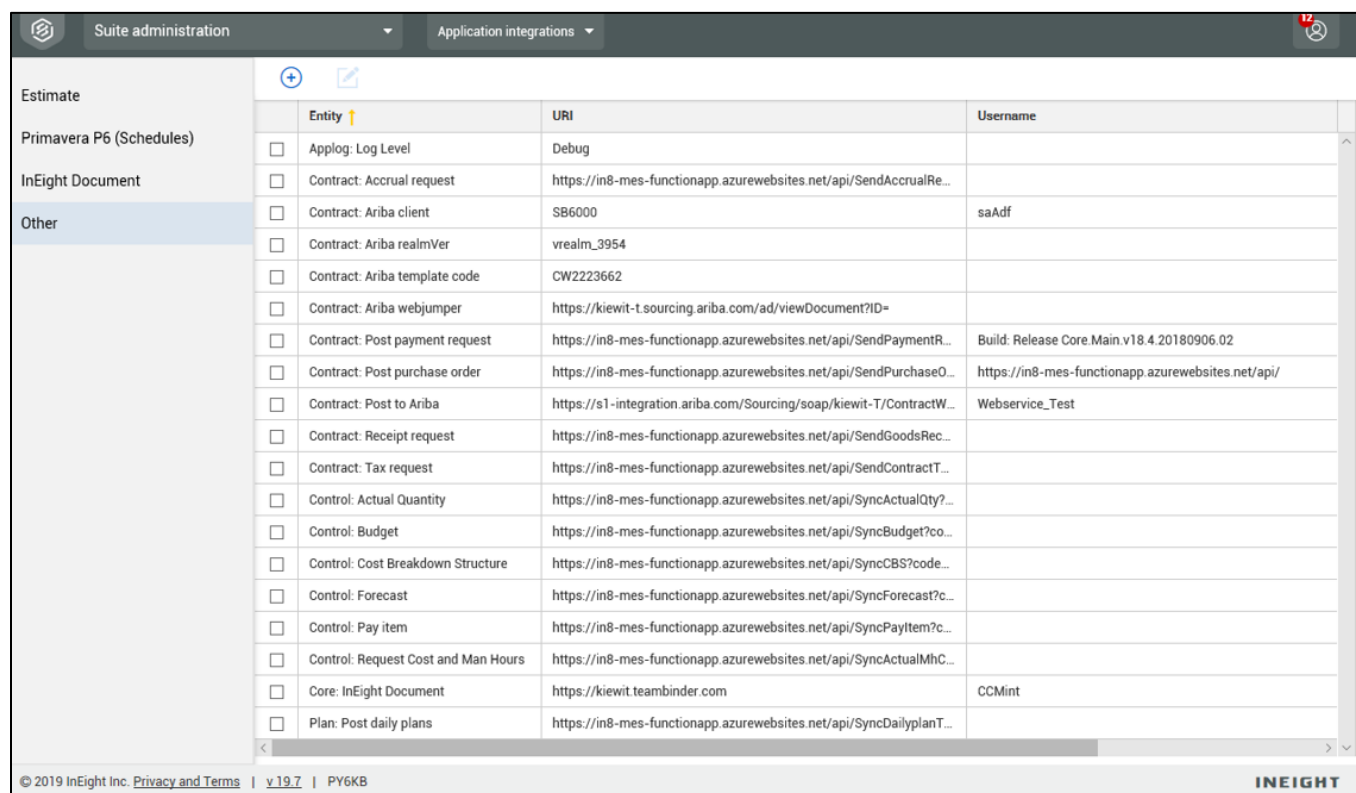
SourceSystemId

When sending updates for values within a cost category, use SourceSystemId to reference the cost category. Do not use the name of the cost category as it can be different than the SourceSystemId. Refer to [Appendix A: Cost Categories](#).

Control Sync Integration Configuration

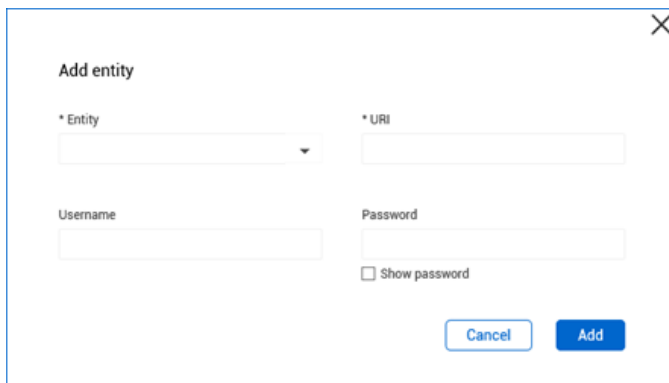
Integrations that involve passing data from the InEight cloud platform to an external system are typically triggered by a user action while they are in an application, which then causes a web service to collect and send data to a preconfigured destination using stored credentials. All configurations are managed through the menu item Suite administration > **Application integrations**.

On the Application integrations page, the **Other** tab shows a list of all the currently configured web service integrations.



Entity	URI	Username
☐ Applog: Log Level	Debug	
☐ Contract: Accrual request	https://in8-mes-functionapp.azurewebsites.net/api/SendAccrualRe...	
☐ Contract: Ariba client	SB6000	saAdf
☐ Contract: Ariba realmVer	vrealm_3954	
☐ Contract: Ariba template code	CW2223662	
☐ Contract: Ariba webjumper	https://kiewit-t.sourcing.ariba.com/ad/viewDocument?ID=	
☐ Contract: Post payment request	https://in8-mes-functionapp.azurewebsites.net/api/SendPaymentR...	Build: Release Core.Main.v18.4.20180906.02
☐ Contract: Post purchase order	https://in8-mes-functionapp.azurewebsites.net/api/SendPurchaseO...	https://in8-mes-functionapp.azurewebsites.net/api/
☐ Contract: Post to Ariba	https://s1-integration.ariba.com/Sourcing/soap/kiewit-T/ContractW...	WebService_Test
☐ Contract: Receipt request	https://in8-mes-functionapp.azurewebsites.net/api/SendGoodsRec...	
☐ Contract: Tax request	https://in8-mes-functionapp.azurewebsites.net/api/SendContractT...	
☐ Control: Actual Quantity	https://in8-mes-functionapp.azurewebsites.net/api/SyncActualQty?...	
☐ Control: Budget	https://in8-mes-functionapp.azurewebsites.net/api/SyncBudget?co...	
☐ Control: Cost Breakdown Structure	https://in8-mes-functionapp.azurewebsites.net/api/SyncCBS?code...	
☐ Control: Forecast	https://in8-mes-functionapp.azurewebsites.net/api/SyncForecast?c...	
☐ Control: Pay item	https://in8-mes-functionapp.azurewebsites.net/api/SyncPayItem?c...	
☐ Control: Request Cost and Man Hours	https://in8-mes-functionapp.azurewebsites.net/api/SyncActualMhC...	
☐ Core: InEight Document	https://kiewit.teambinder.com	CCMint
☐ Plan: Post daily plans	https://in8-mes-functionapp.azurewebsites.net/api/SyncDailyplanT...	

The configuration information is entered via the InEight cloud platform UI. From the Application integrations page, add an entity to show the configuration options.



The 'Add entity' dialog box contains the following fields and controls:

- * Entity:** A dropdown menu.
- * URI:** A text input field.
- Username:** A text input field.
- Password:** A text input field.
- Show password:** A checkbox.
- Buttons:** 'Cancel' and 'Add' buttons at the bottom right.

Configuration Option	Description	Example	Req.
Entity	A list of integrations that have a web service option are contained in this field. The name of the Entity to select when configuring an integration is provided within the overview table of each integration specification.	Control: Actual quantity	Yes
URI	Full endpoint URL destination path for the external system where data is sent.	<a href="https://<address>/controlactualquantity">https://<address>/controlactualquantity	Yes
Username	Security credential for username expected by the receiving system.	InEightControlActualsIntegrations	No
Password	Security credential for password expected by the receiving system.	Password123	No

Verifying Sync Integration Status in InEight Control

In the Control application, you can view the status of syncs that were initiated through the Actions menu in the UI.

To view integration events and the statuses, go to the **Workspaces** module in Control, click the **AUDIT LOG** tab, and then in the Actions panel select **Integration**.

103361 (The Bentway Project) Control Workspaces									
JS ACS PAY ITEMS CHANGE REGISTER AUDIT LOG Actions Filter 1/2 Close Print Refresh Search									
	Audit ID	Interface	Status	Processing details	Start	Finish	User name	Log Handle	
CBS	☐	63696	ActualQty	Succeeded	4 of 4	05/31/2019 04:36 AM	05/31/2019 04:38 AM	Radhika Kurup	d4ec654a-2a97-4f51-a...
ACS	☐	63695	LiveForecast	Succeeded	4 of 4	05/31/2019 04:36 AM	05/31/2019 04:37 AM	Radhika Kurup	e9591c4b-1ff3-41c6-b...
Pay items	☐	63694	Budget	Succeeded	4 of 4	05/31/2019 04:36 AM	05/31/2019 04:37 AM	Radhika Kurup	ceeee155-cadb-41bf-9...
Integration	☐	63693	CBS	Succeeded	4 of 4	05/31/2019 04:36 AM	05/31/2019 04:37 AM	Radhika Kurup	0fd9f14-c911-43f8-a...
Import history	☐	63686	ActualQty	Succeeded	4 of 4	05/31/2019 04:29 AM	05/31/2019 04:33 AM	Radhika Kurup	c9c3b1d1-efd9-4c30-9...
	☐	63685	LiveForecast	Succeeded	4 of 4	05/31/2019 04:29 AM	05/31/2019 04:33 AM	Radhika Kurup	76261397-945d-4103-...
	☐	63684	Budget	Succeeded	4 of 4	05/31/2019 04:29 AM	05/31/2019 04:32 AM	Radhika Kurup	d359f27e-f804-4630-8...
	☐	63683	CBS	Succeeded	4 of 4	05/31/2019 04:29 AM	05/31/2019 04:32 AM	Radhika Kurup	611e7ab4-3d65-446a-...
	☐	63602	ActualQty	Succeeded	4 of 4	05/28/2019 10:38 AM	05/28/2019 10:40 AM	Kamal Venkatesh	cd8ebba9-b9f8-44db-9...
	☐	63601	LiveForecast	Succeeded	4 of 4	05/28/2019 10:38 AM	05/28/2019 10:39 AM	Kamal Venkatesh	d615a02e-c83f-4cd2-9...
	☐	63600	Budget	Succeeded	4 of 4	05/28/2019 10:38 AM	05/28/2019 10:39 AM	Kamal Venkatesh	bdc81bbc-dbc7-422e-...
	☐	63599	CBS	Succeeded	4 of 4	05/28/2019 10:38 AM	05/28/2019 10:39 AM	Kamal Venkatesh	f2a9f3f6-d856-4c3a-b...
	☐	63598	CBS	Suspended	Suspended at 3	05/28/2019 10:38 AM	05/28/2019 10:38 AM	Kamal Venkatesh	63de1b67-7aee-4e77-...
	☐	63536	CBS	Failed	Failed at 2	05/21/2019 03:49 AM	05/21/2019 03:49 AM	paramita maity	e010b5d5-2a06-42c7-...

Verifying Generic API Integration Events in InEight Control

In the Control application, you can view the status a generic Create API initiated through an external source.

To view integration events and the statuses, go to the **Workspaces** module in Control, click the **AUDIT LOG** tab, and then in the Actions panel select **Import history**.

Cost Breakdown Structure - Sync

Direction		From InEight Control to External (ERP or Finance).
Frequency		Preceding all Budget and Forecast integrations.
Trigger Methods		Manually triggered by user within Control UI.
Average Payload Size		The potential is hundreds to thousands of records. Details for all cost items within a project are sent.
APIM Name		Not available through APIM.
InEight Control	Starting Version	18.1
	Ending Version	
Configuration Entity Name		Control: Cost Breakdown Structure

Fields

Depth	Name	Type	Precision	Parent
1	CostBreakdownStructure	Array		
2	CostItem	Array		CostBreakdownStructure
3	ProjectId	String	8	CostItem
3	PhaseCode ¹	String	50	CostItem
3	WBSDescription	String	250	CostItem
3	CostItemId	String	10	CostItem
3	AllowAsBuilt	String	50	CostItem
3	ParentCostItemReference	String	10	CostItem
3	ChildCostItemReferences	Array	NA	CostItem
4	CostItemId	String	10	ChildCostItemReference
3	PreviousSiblingReference	String	10	CostItem
3	NextSiblingReference	String	10	CostItem
3	Level	String	100	CostItem
3	Start ²	String	25	CostItem
3	Finish ²	String	25	CostItem
3	ActualStart ²	String	25	CostItem
3	ActualFinish ²	String	25	CostItem
3	EarlyStart ²	String	25	CostItem
3	EarlyFinish ²	String	25	CostItem

Depth	Name	Type	Precision	Parent
3	LateStart ²	String	25	CostItem
3	LateFinish ²	String	25	CostItem
3	AccountCode	String	15	CostItem
3	AccountDescription	String	250	CostItem
3	Characteristic1	String	250	CostItem
3	Characteristic2	String	250	CostItem
3	Characteristic3	String	250	CostItem
3	Characteristic4	String	250	CostItem
3	Characteristic5	String	250	CostItem
3	Characteristic6	String	250	CostItem
3	Characteristic7	String	250	CostItem
3	Characteristic8	String	250	CostItem
3	Characteristic9	String	250	CostItem
3	Characteristic10	String	250	CostItem
3	Characteristic11	String	250	CostItem
3	Characteristic12	String	250	CostItem
3	Characteristic13	String	250	CostItem
3	Characteristic14	String	250	CostItem
3	Characteristic15	String	250	CostItem
3	Characteristic16	String	250	CostItem
3	Characteristic17	String	250	CostItem
3	Characteristic18	String	250	CostItem
3	Characteristic19	String	250	CostItem
3	Characteristic20	String	250	CostItem
3	Characteristic21	String	250	CostItem
3	Characteristic22	String	250	CostItem
3	Characteristic23	String	250	CostItem
3	Characteristic24	String	250	CostItem
3	Characteristic25	String	250	CostItem
3	Characteristic26	String	250	CostItem
3	Characteristic27	String	250	CostItem
3	Characteristic28	String	250	CostItem
3	Characteristic29	String	250	CostItem
3	Characteristic30	String	250	CostItem

Depth	Name	Type	Precision	Parent
3	Characteristic31	String	250	CostItem
3	Characteristic32	String	250	CostItem
3	Suspend	Boolean	NA	CostItem
3	PayItemNumber	String	100	CostItem
3	PayItemDescription	String	500	CostItem
3	PayItemSourceSystemId	String	150	CostItem
3	IssueName	String	500	CostItem
3	IssueID	String	100	CostItem
3	ChangeID	Number	Integer	CostItem
3	DirectPayItemNumberAssigned	String	100	CostItem
3	DirectPayItemSourceSystemIDAssigned	String	150	CostItem
3	Segment1	String	50	CostItem
3	Segment2	String	50	CostItem
3	Segment3	String	50	CostItem
3	Segment4	String	50	CostItem
2	ErrorHandlingToken	String	50	CostBreakdownStructure

1 – Natural Key field.

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

Field Descriptions

NOTE:

Characteristics are used to provide customizable free-text fields for cost items. In current releases, the names of these fields in the UI appear different than they do in integrations. The description for each characteristic field in this document shows the name of the field as it appears in the UI.

Name	Description	Example
CostBreakdownStructure	Object	
CostItem	Array	
ProjectId	Unique identifier for the project. The Project Display as shown in the UI.	103466
PhaseCode	WBS phase code for cost item.	1000
WBSDescription	User-defined description of the cost item.	Financial Results
CostItemId	Internal ID with primary key constraint, Unique ID.	92122
AllowAsBuilt	Defines whether the system allows for tracking of cost, quantity, man-hours, and equipment hours.	None
ParentCostItemReference	CostItemId of the parent cost item.	92127

Name	Description	Example
ChildCostItemReferences	Array representing all the children of the current cost item.	
CostItemId	Unique identifier of the child cost item. This field is repeated for all child cost item records.	93231
PreviousSiblingReference	CostItemID of the previous sibling cost item.	92217
NextSiblingReference	CostItemID of the next sibling cost item.	92222
Level	CBS position of the cost item.	1.1.1.3.3
Start	Start date of the cost item	10/31/2020
Finish	Finish date of the cost item	10/31/2020
ActualStart	Actual start date of the cost item	10/31/2020
ActualFinish	Actual finish date of the cost item	10/31/2020
EarlyStart	Early start date of the cost item	10/31/2020
EarlyFinish	Early finish date of the cost item	10/31/2020
LateStart	Late start date of the cost item	10/31/2020
LateFinish	Late finish date of the cost item	10/31/2020
AccountCode	Account code assigned to the cost item.	10.10.0.1
AccountDescription	Description of the account code.	Bonds
Characteristic1	Content from CBS tag 1.	Any text
Characteristic2	Content from CBS tag 2.	Any text
Characteristic3	Content from CBS tag 3.	Any text
Characteristic4	Content from CBS tag 4.	Any text
Characteristic5	Content from CBS tag 5.	Any text
Characteristic6	Content from CBS tag 6.	Any text
Characteristic7	Content from CBS tag 7.	Any text
Characteristic8	Content from CBS tag 8.	Any text
Characteristic9	Content from CBS tag 9.	High
Characteristic10	Content from CBS tag 10.	Any text
Characteristic11	Content from CBS tag 11.	Executed
Characteristic12	Content from As-Built Lock field.	Locked
Characteristic13	Content from CBS tag 13.	Any text
Characteristic14	Content from CBS tag 14.	Any text
Characteristic15	Content from CBS tag 15.	Any text
Characteristic16	Content from CBS tag 16.	Any text
Characteristic17	Content from CBS tag 17.	Any text

Name	Description	Example
Characteristic18	Content from CBS tag 18.	Any text
Characteristic19	Content from CBS tag 19.	Any text
Characteristic20	Content from CBS tag 20.	Compare
Characteristic21	Content from CBS user defined 1.	Any text
Characteristic22	Content from CBS user defined 2.	Any text
Characteristic23	Content from CBS user defined 3.	Any text
Characteristic24	Content from CBS user defined 4.	Any text
Characteristic25	Content from CBS user defined 5.	Any text
Characteristic26	Content from CBS user defined 6.	Any text
Characteristic27	Content from CBS user defined 7.	Any text
Characteristic28	Content from CBS user defined 8.	Any text
Characteristic29	Content from CBS user defined 9.	Any text
Characteristic30	Content from Hide in Plan and Progress field.	False
Characteristic31	Content from CBS tag 12.	Any text
Characteristic32	Content from CBS user defined 10.	Any text
Suspend	Determines when the cost item is suspended (true). If suspended, the cost item is removed from impacting financials and causes the system to zero out cost, quantity, man-hours, and disallows tracking.	False
PayItemNumber	Pay item number entered in the UI by a user.	
PayItemDescription	Pay item description entered in the UI by a user.	
PayItemSourceSystemId	Pay item source system ID that is generated, which cannot be changed by a user.	
IssueName	Name of the issue shown in InEight Change.	Issue 1
IssueID	ID of the issue shown in InEight Change.	1
ChangeID	ID of the issue generated in InEight Change.	1
DirectPayitemNumberAssigned	Pay item number where there is a direct assignment of a pay item.	3
DirectPayitemSourceSystemIDAssigned	Pay item source system ID where there is a direct assignment of a pay item.	13239.3
Segment1	Configurable based on the organization setting of budget segment to what this field represents.	varies
Segment2	Configurable based on the organization setting of budget segment to what this field represents.	varies
Segment3	Configurable based on the organization setting of budget segment to what this field represents.	varies

Name	Description	Example
Segment4	Configurable based on the organization setting of budget segment to what this field represents.	varies
ErrorHandlingtoken	The value sent in this field corresponds to the LogToken field in the confirmation message. It is important to ensure the LogToken sent in this field is matched correctly to the request that is being confirmed. InEight uses the log token in the confirmation to flag data as having been synchronized with the external system.	8f46cc1e-a42a-423e-a1b8-6d63dfd493a7

Sample JSON

```
{
  "CostBreakdownStructure": {
    "CostItem": [
      {
        "ProjectId": "190009",
        "PhaseCode": "1",
        "WBSDescription": "Cost item 1",
        "CostItemId": 2208600,
        "AllowAsBuilt": "None",
        "ParentCostItemReference": null,
        "ChildCostItemReferences": [
          {
            "CostItemId": 2208601
          }
        ],
        "PreviousSiblingReference": null,
        "NextSiblingReference": 2208602,
        "Level": "1",
        "Start": "01/01/2025",
        "Finish": "12/25/2025",
        "ActualStart": "",
        "ActualFinish": "",
        "EarlyStart": "01/01/2025",
        "EarlyFinish": "12/25/2025",
        "LateStart": "",
        "LateFinish": "",
        "AccountCode": "",
        "AccountDescription": "",
        "Characteristic1": "",
        "Characteristic2": "",
        "Characteristic3": "",
        "Characteristic4": "",
        "Characteristic5": "",
        "Characteristic6": "",
        "Characteristic7": "",
        "Characteristic8": "",
        "Characteristic9": "",
        "Characteristic10": "",
        "Characteristic11": "",
        "Characteristic12": "",
        "Characteristic13": ""
      }
    ]
  }
}
```



```
"Characteristic14": "",
"Characteristic15": "",
"Characteristic16": "",
"Characteristic17": "",
"Characteristic18": "",
"Characteristic19": "",
"Characteristic20": "",
"Characteristic21": "",
"Characteristic22": "",
"Characteristic23": "",
"Characteristic24": "",
"Characteristic25": "",
"Characteristic26": "",
"Characteristic27": "",
"Characteristic28": "",
"Characteristic29": "",
"Characteristic30": "False",
"Characteristic31": "",
"Characteristic32": "",
"Suspend": false,
"PayItemNumber": "",
"PayItemDescription": "",
"PayItemSourceSystemId": "",
"IssueName": "",
"IssueID": "",
"ChangeID": 0,
"DirectPayItemNumberAssigned": "",
"DirectPayItemSourceSystemIDAssigned": "",
"Segment1": "1",
"Segment2": "190009",
"Segment3": "",
"Segment4": ""
},
{
  "ProjectId": "190009",
  "PhaseCode": "2",
  "WBSDescription": "Cost item 2",
  "CostItemId": 2208601,
  "AllowAsBuilt": "All",
  "ParentCostItemReference": 2208600,
  "ChildCostItemReferences": [],
  "PreviousSiblingReference": null,
  "NextSiblingReference": null,
  "Level": "1.1",
  "Start": "01/01/2025",
  "Finish": "12/25/2025",
  "ActualStart": "",
  "ActualFinish": "",
  "EarlyStart": "01/01/2025",
  "EarlyFinish": "12/25/2025",
  "LateStart": "",
  "LateFinish": "",
  "AccountCode": "",
  "AccountDescription": "",
  "Characteristic1": "Tag 1",
  "Characteristic2": "tag 2",
  "Characteristic3": "",
```

```

    "Characteristic4": "Tag 4",
    "Characteristic5": "Tag 5",
    "Characteristic6": "Tag 6",
    "Characteristic7": "",
    "Characteristic8": "tag 8",
    "Characteristic9": "",
    "Characteristic10": "Tag 10",
    "Characteristic11": "Tag_Eleven",
    "Characteristic12": "",
    "Characteristic13": "",
    "Characteristic14": "",
    "Characteristic15": "tag 15",
    "Characteristic16": "tag 16",
    "Characteristic17": "tag 17",
    "Characteristic18": "",
    "Characteristic19": "",
    "Characteristic20": "Walls - Stone",
    "Characteristic21": "",
    "Characteristic22": "",
    "Characteristic23": "",
    "Characteristic24": "",
    "Characteristic25": "",
    "Characteristic26": "",
    "Characteristic27": "",
    "Characteristic28": "",
    "Characteristic29": "",
    "Characteristic30": "False",
    "Characteristic31": "12-12-12",
    "Characteristic32": "",
    "Suspend": false,
    "PayItemNumber": "",
    "PayItemDescription": "",
    "PayItemSourceSystemId": "",
    "IssueName": "",
    "IssueID": "",
    "ChangeID": 0,
    "DirectPayitemNumberAssigned": "",
    "DirectPayitemSourceSystemIDAssigned": "",
    "Segment1": "2",
    "Segment2": "190009",
    "Segment3": "",
    "Segment4": ""
  },
  {
    "ProjectId": "190009",
    "PhaseCode": "3a",
    "WBSDescription": "Cost item 3",
    "CostItemId": 2208602,
    "AllowAsBuilt": "All",
    "ParentCostItemReference": null,
    "ChildCostItemReferences": [],
    "PreviousSiblingReference": 2208600,
    "NextSiblingReference": null,
    "Level": "2",
    "Start": "05/01/2025",
    "Finish": "07/20/2025",
    "ActualStart": "",

```

```

        "ActualFinish": "",
        "EarlyStart": "05/01/2025",
        "EarlyFinish": "07/20/2025",
        "LateStart": "",
        "LateFinish": "",
        "AccountCode": "",
        "AccountDescription": "",
        "Characteristic1": "",
        "Characteristic2": "",
        "Characteristic3": "",
        "Characteristic4": "",
        "Characteristic5": "",
        "Characteristic6": "",
        "Characteristic7": "",
        "Characteristic8": "",
        "Characteristic9": "",
        "Characteristic10": "",
        "Characteristic11": "",
        "Characteristic12": "",
        "Characteristic13": "",
        "Characteristic14": "",
        "Characteristic15": "",
        "Characteristic16": "",
        "Characteristic17": "",
        "Characteristic18": "",
        "Characteristic19": "",
        "Characteristic20": "",
        "Characteristic21": "1",
        "Characteristic22": "2",
        "Characteristic23": "3",
        "Characteristic24": "4",
        "Characteristic25": "5",
        "Characteristic26": "6",
        "Characteristic27": "7",
        "Characteristic28": "8",
        "Characteristic29": "9",
        "Characteristic30": "False",
        "Characteristic31": "",
        "Characteristic32": "10",
        "Suspend": false,
        "PayItemNumber": "",
        "PayItemDescription": "",
        "PayItemSourceSystemId": "",
        "IssueName": "",
        "IssueID": "",
        "ChangeID": 0,
        "DirectPayitemNumberAssigned": "",
        "DirectPayitemSourceSystemIDAssigned": "",
        "Segment1": "3a",
        "Segment2": "190009",
        "Segment3": "",
        "Segment4": ""
    },
    "Errorhandlingtoken": "38615c4b-d3cb-453f-b4ec-64a6db795865"
}

```

Status Codes

There are no integration status codes.

Budget – Sync

Direction		From InEight Control to External (ERP or Finance).
Frequency		On-demand from users of Control. Most uses will be based on the financial periods of the customer.
Trigger Methods		Manually triggered by user within Control UI.
Average Payload Size		Potentially hundreds to thousands of records. Details for all cost items within a project are sent, which can also contain sub-records.
APIM Name		Not available through APIM.
InEight Control	Starting Version	18.1
	Ending Version	
Configuration Entity Name		Control: Budget

Fields

Depth	Name	Type	Precision ¹	Parent
1	data	Array	NA	
2	OriginalBudgetQuantity	Number	22,11	data
2	OriginalBudgetUnitOfMeasure	String	50	data
2	OriginalBudgetManHours	Number	22,11	Data
2	OriginalBudgetTotalCost	Number	22,11	data
2	OriginalBudgetCostCategory	Array	NA	data
3	Name	String	50	OriginalBudgetCostCategory
3	Cost	Number	22,11	OriginalBudgetCostCategory
3	IsTerminalCostCategory	Boolean	NA	OriginalBudgetCostCategory
2	CurrentBudgetQuantity	Number	22,11	data
2	CurrentBudgetUnitOfMeasure	String	50	data
2	CurrentBudgetManHours	Number	22,11	data
2	CurrentBudgetTotalCost	Number	22,11	data
2	CurrentBudgetCostCategory	Array	NA	data
3	Name	String	50	CurrentBudgetCostCategory
3	Cost	Number	22,11	CurrentBudgetCostCategory
3	IsTerminalCostCategory	Boolean	NA	CurrentBudgetCostCategory
2	CurrentEstimateQuantity	Number	22,11	data

Depth	Name	Type	Precision ¹	Parent
2	CurrentEstimateUnitOfMeasure	String	50	data
2	CurrentEstimateManHours	Number	22,11	data
2	CurrentEstimateTotalCost	Number	22,11	data
2	CurrentEstimateCostCategory	Array	NA	data
3	Name	String	50	CurrentEstimateCostCategory
3	Cost	Number	22,11	CurrentEstimateCostCategory
3	IsTerminalCostCategory	Boolean	NA	CurrentEstimateCostCategory
2	ProjectId	String	50	data
2	PhaseCode	String	50	data
2	IsTerminal	Boolean	NA	data
2	CBSPosition	String	100	data
2	IsActive	Boolean	NA	data
2	Suspend	Boolean	NA	data
2	IsBudgetLocked	Boolean	NA	data
2	LogToken	String	50	data

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
OriginalBudgetQuantity	Original Budget quantity for a cost item.	25.000000000000
OriginalBudgetUnitOfMeasure	Original Budget unit of measure for a cost item.	Ton
OriginalBudgetManHours	Original Budget man-hours for a cost item.	100.000000000000
OriginalBudgetTotalCost	Original Budget total cost for a cost item.	500.000000000000
OriginalBudgetCostCategory	Array header for the cost category breakdown of the OriginalBudgetTotalCost for a cost item.	
Name	Source system ID of the cost category. (See Cost Category Structure and Appendix A for more information.)	Labor
Cost	Amount of the Original Budget total cost for the cost category. (See Cost Category Structure for more information.)	100
IsTerminalCostCategory	Determines if the cost category represents a terminal item within the cost category hierarchical structure. (See Cost Category Structure for more information.)	false

Name	Description	Example
CurrentBudgetQuantity	Current Budget quantity for a cost item.	23456.000000000000
CurrentBudgetUnitOfMeasure	Current Budget unit of measure for a cost item.	CY
CurrentBudgetManHours	Current Budget man-hours for a cost item.	0.000000000000
CurrentBudgetTotalCost	Current Budget total cost for a cost item.	75000.000000000000
CurrentBudgetCostCategory	Array header for the cost category breakdown of the CurrentBudgetTotalCost.	
Name	Source system ID of the cost category. (See Cost Category Structure and Appendix A for more information.)	Undefined Labor
Cost	Amount of the Current Budget total cost for the cost category. (See Cost Category Structure for more information.)	5000.000000000000
IsTerminalCostCategory	Determines if the cost category represents a terminal item within the cost category hierarchical structure. (See Cost Category Structure for more information.)	true
CurrentEstimateQuantity	Current Estimate quantity for a cost item.	700.000000000000
CurrentEstimateUnitOfMeasure	Current Estimate unit of measure for a cost item.	LF
CurrentEstimateManHours	Current Estimate man-hours for a cost item.	0.000000000000
CurrentEstimateTotalCost	Current Estimate total cost for a cost item.	25700.000000000000
CurrentEstimateCostCategory	Array header for the cost category breakdown of the CurrentEstimateTotalCost for a cost item.	
Name	Source system ID of the cost category. (See Cost Category Structure and Appendix A for more information.)	Fees
Cost	Amount of the Current Estimate total cost for the cost category. (See Cost Category Structure for more information.)	1000.000000000000
IsTerminalCostCategory	Determines if the cost category represents a terminal item within the cost category hierarchical structure. (See Cost Category Structure for more information.)	false
ProjectId	Identifies the project associated with budget data. The Project Display as shown in the UI, which unique to a project.	103466
PhaseCode	WBS Phase code of the cost item for each set of Original Budget, Current Budget and Current Estimate data.	1000
IsTerminal	Indicates if the cost item is at the terminal level of the cost item hierarchical structure.	True
CBSPosition	Position of the cost item in the CBS register.	1.1.1
IsActive	Determines if the cost item is active in the project or has been deleted.	True

Name	Description	Example
Suspend	Determines when the cost item is suspended (<i>true</i>). If suspended, the cost item is removed from impacting financials and causes the system to zero out cost, quantity, man-hours, and disallows tracking.	False
IsBudgetLocked	Determines if the budget of a cost item is locked.	True
LogToken	The value sent in this field corresponds to the LogToken field in the confirmation message. It is important to ensure the LogToken sent in this field is matched correctly to the request that is being confirmed. InEight uses the log token in the confirmation to flag data as having been synchronized with the external system.	8f46cc1e-a42a-423e-a1b8-6d63dfd493a7

Sample JSON

```
{
  "data": [
    {
      "OriginalBudgetQuantity": 0.0,
      "OriginalBudgetUnitOfMeasure": "PLS",
      "OriginalBudgetManHours": 1000.0,
      "OriginalBudgetTotalCost": 50000.0,
      "OriginalBudgetCostCategory": [
        {
          "Name": "Total",
          "Cost": 50000.0,
          "IsTerminalCostCategory": false
        },
        {
          "Name": "Labor",
          "Cost": 50000.0,
          "IsTerminalCostCategory": false
        },
        {
          "Name": "Undefined Total",
          "Cost": 0.0,
          "IsTerminalCostCategory": true
        },
        {
          "Name": "Undefined Labor",
          "Cost": 50000.0,
          "IsTerminalCostCategory": true
        }
      ],
      "CurrentBudgetQuantity": 0.0,
      "CurrentBudgetUnitOfMeasure": "PLS",
      "CurrentBudgetManHours": 1000.0,
      "CurrentBudgetTotalCost": 50000.0,
      "CurrentBudgetCostCategory": [
        {

```



```

        "Name": "Total",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Undefined Total",
        "Cost": 0.0,
        "IsTerminalCostCategory": true
    },
    {
        "Name": "Undefined Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": true
    }
],
"CurrentEstimateQuantity": 1.0,
"CurrentEstimateUnitOfMeasure": "PLS",
"CurrentEstimateManHours": 1000.0,
"CurrentEstimateTotalCost": 50000.0,
"CurrentEstimateCostCategory": [
    {
        "Name": "Total",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Undefined Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": true
    }
],
"ProjectId": "190009",
"PhaseCode": "1",
"IsTerminal": false,
"CBSPosition": "1",
"IsActive": true,
"Suspend": false,
"IsBudgetLocked": false
},
{
    "OriginalBudgetQuantity": 100.0,
    "OriginalBudgetUnitOfMeasure": "EA",
    "OriginalBudgetManHours": 1000.0,
    "OriginalBudgetTotalCost": 50000.0,
    "OriginalBudgetCostCategory": [
        {
            "Name": "Total",

```

```

        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Undefined Total",
        "Cost": 0.0,
        "IsTerminalCostCategory": true
    },
    {
        "Name": "Undefined Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": true
    }
],
"CurrentBudgetQuantity": 100.0,
"CurrentBudgetUnitOfMeasure": "EA",
"CurrentBudgetManHours": 1000.0,
"CurrentBudgetTotalCost": 50000.0,
"CurrentBudgetCostCategory": [
    {
        "Name": "Total",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Undefined Total",
        "Cost": 0.0,
        "IsTerminalCostCategory": true
    },
    {
        "Name": "Undefined Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": true
    }
],
"CurrentEstimateQuantity": 100.0,
"CurrentEstimateUnitOfMeasure": "EA",
"CurrentEstimateManHours": 1000.0,
"CurrentEstimateTotalCost": 50000.0,
"CurrentEstimateCostCategory": [
    {
        "Name": "Undefined Total",
        "Cost": 0.0,
        "IsTerminalCostCategory": true
    },
    {
        "Name": "Undefined Labor",

```

```
        "Cost": 50000.0,
        "IsTerminalCostCategory": true
    },
    {
        "Name": "Total",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    },
    {
        "Name": "Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
    }
],
"ProjectId": "190009",
"PhaseCode": "2",
"IsTerminal": true,
"CBSPosition": "1.1",
"IsActive": true,
"Suspend": false,
"IsBudgetLocked": true
},
{
    "OriginalBudgetQuantity": 150.0,
    "OriginalBudgetUnitOfMeasure": "H",
    "OriginalBudgetManHours": 0.0,
    "OriginalBudgetTotalCost": 12000.0,
    "OriginalBudgetCostCategory": [
        {
            "Name": "Total",
            "Cost": 12000.0,
            "IsTerminalCostCategory": false
        },
        {
            "Name": "Materials",
            "Cost": 2000.0,
            "IsTerminalCostCategory": false
        },
        {
            "Name": "Undefined Total",
            "Cost": 0.0,
            "IsTerminalCostCategory": true
        },
        {
            "Name": "Supplies",
            "Cost": 10000.0,
            "IsTerminalCostCategory": false
        },
        {
            "Name": "Undefined Materials",
            "Cost": 2000.0,
            "IsTerminalCostCategory": true
        },
        {
            "Name": "Undefined Supplies",
            "Cost": 10000.0,
            "IsTerminalCostCategory": true
        }
    ]
}
```

```

    }
  ],
  "CurrentBudgetQuantity": 150.0,
  "CurrentBudgetUnitOfMeasure": "H",
  "CurrentBudgetManHours": 0.0,
  "CurrentBudgetTotalCost": 12000.0,
  "CurrentBudgetCostCategory": [
    {
      "Name": "Total",
      "Cost": 12000.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Materials",
      "Cost": 2000.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Undefined Total",
      "Cost": 0.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Supplies",
      "Cost": 10000.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Undefined Materials",
      "Cost": 2000.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Undefined Supplies",
      "Cost": 10000.0,
      "IsTerminalCostCategory": true
    }
  ],
  "CurrentEstimateQuantity": 150.0,
  "CurrentEstimateUnitOfMeasure": "H",
  "CurrentEstimateManHours": 0.0,
  "CurrentEstimateTotalCost": 12000.0,
  "CurrentEstimateCostCategory": [
    {
      "Name": "Undefined Total",
      "Cost": 0.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Undefined Supplies",
      "Cost": 10000.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Total",
      "Cost": 12000.0,
      "IsTerminalCostCategory": false
    }
  ]
}

```

```
    },
    {
      "Name": "Supplies",
      "Cost": 10000.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Undefined Materials",
      "Cost": 2000.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Materials",
      "Cost": 2000.0,
      "IsTerminalCostCategory": false
    }
  ],
  "ProjectId": "190009",
  "PhaseCode": "3a",
  "IsTerminal": true,
  "CBSPosition": "2",
  "IsActive": true,
  "Suspend": false,
  "IsBudgetLocked": true
},
"LogToken": "f01bec26-5c0f-4afd-b9c4-9b91d6c80bad"
}
```

Status Codes

There are no integration status codes.

Forecast – Sync

Direction	From InEight Control to External (ERP or Finance).	
Frequency	On-demand from users of Control. Most uses will be based on the financial periods of the customer.	
Trigger Methods	Manually triggered by user within Control UI.	
Average Payload Size	Potentially hundreds to thousands of records. Details for all cost items within a project are sent, which can also contain sub-records. The cost category break down for a cost item will only be sent if forecasting against that cost item. If it is a Rollup or None forecast method it will not be sent.	
APIM Name	Not available through APIM.	
InEight Control	Starting Version	18.1
	Ending Version	
Configuration Entity Name	Control: Forecast	

Fields

Depth	Name	Type	Precision ¹	Parent
1	ForecastValues	Object		
2	Forecast	Array		ForecastValues
3	Suspend	Boolean	NA	Forecast
3	PlannedQuantity	Number	22,11	Forecast
3	UnitOfMeasure	String	25	Forecast
3	LaborHours	Number	22,11	Forecast
3	ProjectId	String	25	Forecast
3	PhaseCode	String	50	Forecast
3	ForecastMethod	String	50	Forecast
3	ForecastMethodChangeNotes	String	500	Forecast
3	IsActive	Boolean	NA	Forecast
3	ForecastCostCategory	Array	NA	Forecast
4	Name	String	50	ForecastCostCategory
4	Amount	String	22,11	ForecastCostCategory
4	IsTerminalCostCategory	Boolean	NA	ForecastCostCategory
3	AveragePerformanceSetting	String	100	
3	LogToken	String	50	

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
Suspend	Determines when the cost item is suspended (<i>true</i>). If suspended, the cost item is removed from impacting financials and causes the system to zero out cost, quantity, man-hours, and disallows tracking.	False
PlannedQuantity	Forecast T/O quantity for a cost item.	2.00000
UnitOfMeasure	Forecast unit of measure for a cost item.	EA
LaborHours	Forecasted labor hours for a cost item.	5.60000
ProjectId	Unique identifier of the project that the forecast is being reported. The Project Display as shown in the UI.	405033
PhaseCode	WBS Phase code of a cost item.	5139
ForecastMethod	Forecast method of the cost item.	Current Estimate
ForecastMethodChangeNotes	Free-form text field a user to enter any forecast notes.	187028
IsActive	Determines if the cost item is active in the project or has been deleted.	True
ForecastCostCategory	Array header for the cost category breakdowns for the forecast cost of a cost item.	
Name	Source system ID of the cost category. (Refer to Appendix A for more details).	Undefined Labor
Amount	Amount of the Forecast cost for the cost category. (See Cost Category Structure for more information.)	2234.57
IsTerminalCostCategory	Determines if the cost category represents a terminal item within the cost category hierarchical structure. (See Cost Category Structure for more information.)	False
AveragePerformanceSetting	Provides additional information on the Average Performance date range if that forecast method is being used for the cost item.	To date
LogToken	The value sent in this field corresponds to the LogToken field in the confirmation message. It is important to ensure the LogToken sent in this field is matched correctly to the request that is being confirmed. InEight uses the log token in the confirmation to flag data as having been synchronized with the external system.	702a27d8-b84a-4fac-a81d-01551ec46b7f"

Sample JSON

```
{
  "ForecastValues": {
    "Forecast": [
      {
        "Suspend": false,
        "PlannedQuantity": 1.0,
        "UnitOfMeasure": "PLS",
        "LaborHours": 0.0,
        "ProjectId": "190009",
        "PhaseCode": "1",
        "ForecastMethod": "Manual (EAC)",
        "ForecastMethodChangeNotes": "",
        "IsActive": "True",
        "ForecastCostCategory": [
          {
            "Name": "Total",
            "Amount": 23000.0,
            "IsTerminalCostCategory": false
          },
          {
            "Name": "Undefined Total",
            "Amount": 23000.0,
            "IsTerminalCostCategory": true
          }
        ]
      },
      {
        "AveragePerformanceSetting": ""
      },
      {
        "Suspend": false,
        "PlannedQuantity": 100.0,
        "UnitOfMeasure": "EA",
        "LaborHours": 0.0,
        "ProjectId": "190009",
        "PhaseCode": "2",
        "ForecastMethod": "None",
        "ForecastMethodChangeNotes": "",
        "IsActive": "True",
        "ForecastCostCategory": [],
        "AveragePerformanceSetting": ""
      },
      {
        "Suspend": false,
        "PlannedQuantity": 150.0,
        "UnitOfMeasure": "H",
        "LaborHours": 0.0,
        "ProjectId": "190009",
        "PhaseCode": "3a",
        "ForecastMethod": "Current budget",
        "ForecastMethodChangeNotes": "",
        "IsActive": "True",
        "ForecastCostCategory": [
          {
            "Name": "Total",
            "Amount": 11999.999999,

```



```
        "IsTerminalCostCategory": false
      },
      {
        "Name": "Materials",
        "Amount": 2000.0,
        "IsTerminalCostCategory": false
      },
      {
        "Name": "Undefined Materials",
        "Amount": 2000.0,
        "IsTerminalCostCategory": true
      },
      {
        "Name": "Supplies",
        "Amount": 9999.999999,
        "IsTerminalCostCategory": false
      },
      {
        "Name": "Undefined Supplies",
        "Amount": 9999.999999,
        "IsTerminalCostCategory": true
      }
    ],
    "AveragePerformanceSetting": ""
  },
  "LogToken": "f6829f08-f4c0-4b6f-9c28-4f60616eb916"
}
```

Status Codes

There are no integration status codes.

Control Confirmation

This API is used to send confirmation of the receipt and successful processing of multiple syncs from InEight Control, which creates an asynchronous response to the CBS integration. If a response is not received, the changes made to the cost structure in Control are not released for use in the Control business process or for use by other applications. The API is also required to confirm receipt and successful processing for Budget, Forecast, Quantity, Pay item, Forecast Revenue, Billed Revenue integrations. Unless positive confirmation is received within each step of the synchronization process, further steps are not taken.

Direction		To the InEight cloud platform.
Frequency		A message to this API is required for the specified syncs Cost Breakdown Structure, Budget, Forecast, Pay Items, Actual Quantities integrations, Push Billed Revenue, and Forecast Revenue.
Trigger Methods		Determined by external system.
Average Payload Size		Small payload with tens of records.
APIM Name		Upsert Confirmation
InEight Control	Starting Version	18.1
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Req.
1	ProjectId	String	25		Yes
1	InterfaceType	String	50		Yes
1	Status	String	15		Yes
1	LogToken	String	50		Yes
1	Logger	Array	N/A		No
2	LogDate	Date/Time		Logger	No
2	LogLevel	String	20	Logger	No
2	LogMessage	String	4000	Logger	No
2	LogSource	String	100	Logger	No

Field Descriptions

Name	Description	Example
ProjectId	Identifies the project associated with the original message request that was received. The ID is unique to a project. Value in this field must match the ProjectDisplayId for an existing project.	1023773
InterfaceType	Determines the message type that was originally received by the external system which is being confirmed. Allowed values are: - Forecast: Used with the Forecast sync. - Budget: Used with the Budget sync. - CBS: Used with the Cost Breakdown Structure sync. - ActualQty: Used with the Quantity sync. - PayItem: Used with the Push Pay item sync. - ForecastRevenue: Used with the Push forecast revenue sync. - TPB: Used with Time phased budget sync. - TPF: Used with time phased forecast sync.	Forecast
Status	Determines whether the received data was successfully processed. Allowed values are: - SUCCESS - FAIL	SUCCESS
LogToken	LogToken provided within the JSON of the original message that is being confirmed. In the CBS integration, this is called the 'ErrorHandlingToken'. It is important to ensure the LogToken sent in this field is matched properly to the request that is being confirmed. InEight will use the log token in the confirmation to flag data as having been synchronized with the external system.	9eb69b8d-03f7-4f0c-9c9a-f2705fecfd13
Logger	Array header of LogErrors for integration. Fields within this array can be repeated for multiple errors that may have occurred in the ERP.	
LogDate	Date and time that the log error message was created in the external system.	2020-07-28T04:43:56.2210625+00:00
LogLevel	Is Error for the type of log.	Error
LogMessage	Message that is shown for the reason the failure occurred.	Unable to process CBS
LogSource	Area where the log occurred.	ERP

Sample JSON

Sample 1: Forecast

```
{
  "ProjectId": "190000",
  "InterfaceType": "Forecast",
  "Status": "SUCCESS",
  "LogToken": "9eb69b8d-03f7-4f0c-9c9a-f2705fecfd13",
  "Logger": ""
}
```

Sample 2: Quantities

```
{
  "ProjectId": "190000",
  "InterfaceType": "ActualQty",
  "Status": "SUCCESS",
  "LogToken": "31fca2ff-556d-440f-a026-34a9a51734c4",
  "Logger": ""
}
```

Sample 3: Budget

```
{
  "ProjectId": "190000",
  "InterfaceType": "Budget",
  "Status": "SUCCESS",
  "LogToken": "4d59e065-e662-4a57-8599-8ee721761d4d",
  "Logger": ""
}
```

Sample 4: Cost Breakdown Structure

```
{
  "ProjectId": "190000",
  "InterfaceType": "CBS",
  "Status": "SUCCESS",
  "LogToken": "355a1fde-6cb6-4538-b583-a0c1cd2072b8",
  "Logger": ""
}
```

Sample 5: Error Message

```
{
  "ProjectId": "10000",
  "InterfaceType": "CBS",
  "Status": "Failure",
  "LogToken": "355a1fde-6cb6-4538-b583-a0c1cd2072b8",
  "Logger": [
    {
      "LogDate": "2020-07-28T04:43:56.2210625+00:00",
      "LogLevel": "Error",
      "LogMessage": "Unable to process CBS with correlation f7f4b303-0d06-4766-bcec-ae25b833ab03.",
      "LogSource": "External system"
    },
    {
      "LogDate": "2020-07-28T04:43:56.2210625+00:00",
      "LogLevel": "Error",
      "LogMessage": "CBS FAILED.",
      "LogSource": "External system"
    }
  ]
}
```

Status Codes

API/Entity Logic	Condition	Code	Message
API Validation	Failure	500	
API Validation	Valid Payload	202	

Verification

Success and failure records of confirmations are available in the InEight Control product Workspaces module. To see the records, go to Audit Log, and then select **Integration**. To see detailed information of a (failed) record, click the link provided in the **Processing details** column.

PAY ITEMS CHANGE REGISTER AUDIT LOG									
Actions Filter Sort Reset Help Settings Search									
	Audit ID	Interface	Status	Processing details	Start	Finish	User name	Log Handle	
CBS	☐	61862	LiveForecast	Succeeded	4 of 4	11/12/2018 01:2...	11/12/2018 01:2...	Purushotham Re...	50ff4dc9-7d54-4...
ACS	☐	61861	Budget	Succeeded	4 of 4	11/12/2018 01:2...	11/12/2018 01:2...	Purushotham Re...	03a8ceab-cbe5-...
Pay items	☐	61860	CBS	Succeeded	4 of 4	11/12/2018 01:2...	11/12/2018 01:2...	Purushotham Re...	ce3ea80a-192b-...
Integration	☐	61859	Budget	Succeeded	4 of 4	11/12/2018 01:2...	11/12/2018 01:2...	Purushotham Re...	fec2b620-d783-...
Import history	☐	61858	CBS	Succeeded	4 of 4	11/12/2018 01:2...	11/12/2018 01:2...	Purushotham Re...	cf816afd-1bb3-4...
	☐	61857	CBS	Succeeded	4 of 4	11/12/2018 01:2...	11/12/2018 01:2...	Purushotham Re...	08323f1d-d346-...
	☐	61856	CBS	Succeeded	4 of 4	11/12/2018 01:2...	11/12/2018 01:2...	Purushotham Re...	992f2c76-bdbe-...
	☐	61855	ActualQty	Cancelled	Cancelled at 3	11/11/2018 10:5...	11/11/2018 10:5...	Babu Velu	8d332b6e-9e3f-...
	☐	61854	LiveForecast	Cancelled	Cancelled at 3	11/11/2018 10:5...	11/11/2018 10:5...	Babu Velu	1d20c6f4-0c0a-...
	☐	61853	Budget	Cancelled	Cancelled at 4	11/11/2018 10:5...	11/11/2018 10:5...	Babu Velu	7f400dfc-6828-4...
	☐	61852	CBS	Succeeded	4 of 4	11/11/2018 10:5...	11/11/2018 10:5...	Babu Velu	e9c7d7ed-2499-...

Actual Cost and Man Hours (Request) - Sync

This integration represents the request made by a user in InEight Control to obtain actuals that have been recorded in an ERP or other customer system. The request determines the time frame of the information that is being requested but does not determine the grouping of the data that will be sent back. See [Actual Cost and Man Hours \(Response\)](#) for more details.

Direction		From InEight Control
Frequency		On-demand from users of Control.
Trigger Methods		Manually triggered by user within Control UI.
Average Payload Size		Small payload with details for assembling the requested data.
APIM Name		Not available through APIM.
InEight Control	Starting Version	18.1
	Ending Version	
Configuration Entity Name		Control: Request Cost and Man Hours

Request Date Range

The Date/Time From and Date/Time To fields in this request are automatically populated when a user requests to initiate a synchronization of actuals from InEight Control. The Date/Time From is set based on the last time the actuals request was initiated and successful and the Date/Time To field is based on the current time the request is made. When this request is executed for the first time, the date and time from the request period is set to the project start date. An error occurs if the project does not have a start date set.

To verify a start date is set for the project, from All projects & organizations select a project, and then click to edit the project. The Project Details page opens to show the project start date and end date.

Project details



Add project image

* Project ID

* External project ID

* Name

* Status

* Organization

Start date



JANUARY 2019

Su	Mo	Tu	We	Th	Fr	Sa
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

End date



Configuration option

In *organization* > Settings > Control > **Sync integrations** the option, Actual Cost and Mhr Sync Options allows a customer to determine if they want more than one request for a fiscal period. The default is set to *Off*, which allows Control to send more than one request per fiscal period that the sync has not been successful.

PROJECT TRACKING

FORECAST

ESTIMATE RESOURCES

SCHEDULE

SYNC INTEGRATIONS

OTHERS

Actual Cost and Mhr Sync Options

Send one request

If you change the setting to *On*, Control will send only one request for one fiscal period if the customer has not synced successfully for more than one fiscal period.

Fields

Depth	Name	Type	Precision	Parent
1	LoadActualCostHours_HDS	Object		
2	ProjectId ¹	String	30	LoadActualCostHours_HDS
2	DateFrom	String	25	LoadActualCostHours_HDS
2	TimeFrom	String	25	LoadActualCostHours_HDS
2	DateTo	String	25	LoadActualCostHours_HDS
2	TimeTo	String	25	LoadActualCostHours_HDS
2	LogToken	String	50	LoadActualCostHours_HDS

¹ – Natural Key field.

Field Descriptions

Name	Description	Example
ProjectId	Identifies the project associated with actuals data being requested by the ERP. The ID is unique to a project. The value in this field must match the ProjectDisplay field in the UI of an existing project.	10346
DateFrom	Beginning date for all actuals to return. The date is determined by InEight based on the last date the integration was executed and successful or the start date of the project.	2017-09-01
TimeFrom	Starting time for all actuals to return.	15:08:25
DateTo	Ending date of actuals to return.	2017-09-01
TimeTo	Ending time of actuals to return.	15:09:06
LogToken	Unique identifier (GUID) that can be used when viewing or obtaining error records in InEight error logging for each integration request. This field will need be returned in the response JSON for the sync to be completed.	Ca30fd02-5078-43c3-9ff0-97d30d2e6824

Sample JSON

```
{
  "LoadActualCostHours_HDS": {
    "ProjectId": "105508",
    "DateFrom": "2018-03-13",
    "TimeFrom": "00:00:00",
    "DateTo": "2018-03-15",
    "TimeTo": "12:00:00",
    "LogToken": "079DD6B2-DFB4-4615-BCBB-0E509D3E2444"
  }
}
```

Status Codes

There are no integration status codes.

Actual Cost and Man Hours (Response) - Sync

Customers can decide how the data is returned from their ERP to InEight Control, for example:

- WBS by posting date: A record for one posted date by WBS that can have multiple transactions grouped.
- WBS by financial period: One record for each WBS and each Financial Period when postings occurred that can have multiple transactions grouped.
- WBS summary: One record for each WBS. All transactions that occurred for a WBS are sent back to Control as one record, regardless of the posted date or fiscal period.
- Detailed transactions: A one to one match of a record in the ERP to a record posted in Control. If the ERP stores to a very small level of granularity this option is not recommended.

Control expects the values that are sent by the ERP to represent transactional totals within the date range given in the request. Values should not represent job-to-date entries.

Direction		To the InEight cloud platform.
Frequency		On demand, as a response to Actuals Request.
Trigger Methods		In response to Actuals Request.
Average Payload Size		Varies depending on the method chosen by the customer to summarize data. Refer to examples of different options provided above.
APIM Name		Create Actuals Sync
InEight Control	Starting Version	18.1
	Ending Version	

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectId ²	String	24	
1	Actuals	Array	NA	
2	PhaseCode	String	24	Actuals
2	LaborHours	Number	22,11	Actuals
2	EquipmentHours	Number	22,11	Actuals
2	IsActive	Boolean	NA	Actuals
2	Cost	Object	NA	Actuals
3	CostCategories	Array	NA	Cost
4	Name	String	30	CostCategories
4	Amount	Number	30	CostCategories
2	PeriodStart	String	25	Actuals

Depth	Name	Type	Precision ¹	Parent
2	PeriodEnd	String	25	Actuals
2	Duration	Number	22,11	Actuals
2	TotalAmount	Number	22,11	Actuals
2	ActualsUserDefined1	String	25	Actuals
2	ActualsUserDefined2	String	25	Actuals
2	ActualsUserDefined3	String	250	Actuals
2	ActualsUserDefined4	String	250	Actuals
2	ActualsUserDefined5	String	250	Actuals
2	ActualsUserDefined6	String	250	Actuals
2	EstimateResource	String	250	Actuals
1	LogToken	String	50	
1	Logger	Array		
2	LogDate	Date/Time		Logger
2	LogLevel	String	20	Logger
2	LogMessage	String	4000	Logger
2	LogSource	String	100	Logger

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

2 – Natural Key field.

Field Descriptions

Name	Description	Example
ProjectId	Identifies the project associated with the Actuals request that was received. The ID is unique to a project. The value in this field must match the Project Display in the UI of an existing Project.	10346
PhaseCode	WBS phase code associated with the cost item for the actuals record.	1288
LaborHours	Labor hours for the cost item and date range in the array. Context of this value is determined by the grouping/summarization method chosen for the response (See description at the top of this integration).	0.000
EquipmentHours	Equipment hours for the cost item and date range in the array. Context of this value is determined by the grouping/summarization method chosen for the response (See description at the top of this integration).	0.000

Name	Description	Example
IsActive	Legacy functionality. Values sent in this field are not used.	True
Name	Source system ID of the cost category for the actual cost transaction. (Refer to and Appendix A for more details).	Supplies
Amount	Amount of the Actual cost for the cost category. (See Cost Category Structure for more information.)	200.00
PeriodStart	Beginning date of the values represented by the record: - Posting Date: Use the posting date for which transactions were summarized for the record. - Financial Period: Use the starting date of the financial period requested. - Detailed: Use the posting date of the individual transaction. - Values sent in this field are used in the Audit Log as the Period Start.	2024-09-09
PeriodEnd	Ending date of the values represented by the record: - Posting Date: Use the posting date for which transactions were summarized for the record. - Financial Period: Use the ending date of the financial period requested. - Detailed: Use the posting date of the individual transaction. - Values sent in this field are used in the ActualsHistory as the Posting Date and Audit Log for the Period End.	2024-09-09
Duration	Values sent in this field are not used.	0.000
TotalAmount	Values in this field are not used. The Total is calculated by the sum of all Amount fields sent in the CostCategories array for a Cost Item.	200.00
ActualsUserDefined1	A date field associated to the actual transaction.	2024-09-09
ActualsUserDefined2	A date field associated to the actual transaction.	2024-09-09
ActualsUserDefined3	A free-form text field associated to the actual transaction.	User defined 3
ActualsUserDefined4	A free-form text field associated to the actual transaction.	User defined 4
ActualsUserDefined5	A free-form text field associated to the actual transaction.	User defined 5
ActualsUserDefined6	A free-form text field associated to the actual transaction.	User defined 6
EstimateResource	An estimate resource code associated to the actual transaction.	Labor1
LogToken	Unique identifier (GUID) that can be used when viewing or obtaining error records in InEight error logging for each integration request. It is important to ensure the LogToken sent in this field is matched correctly to the request that is being confirmed. InEight uses the log token in the confirmation to flag data as having been synchronized with the external system.	B314c786-50f2-4b0b-a396-ccc8dbf09217
Logger	Array header of LogErrors for integration. Fields within this array can be repeated for multiple errors that may have occurred in the ERP.	

Name	Description	Example
LogDate	Date and time that the log error message was created in the external system	2020-09-24T19:07:57.102185+00:00
LogLevel	Is Error for the type of log.	Error
LogMessage	Message that is shown for the reason the failure occurred.	Unable to process Actual cost and manhours
LogSource	Area where the log occurred.	ERP

Sample JSON

```
[
  {
    "ProjectId": "190001",
    "Actuals": [
      {
        "PhaseCode": "1003",
        "LaborHours": 36.0,
        "EquipmentHours": 36.0,
        "IsActive": true,
        "Cost": {
          "CostCategories": [
            {
              "Name": "Undefined Labor Burden",
              "Amount": 871.0
            }
          ]
        },
        "PeriodStart": "5/20/2025 12:00:00 AM",
        "PeriodEnd": "5/21/2025 12:00:00 AM",
        "Duration": 1.0,
        "TotalAmount": 871.0,
        "ActualsUserDefined1": null,
        "ActualsUserDefined2": null,
        "ActualsUserDefined3": null,
        "ActualsUserDefined4": null,
        "ActualsUserDefined5": null,
        "ActualsUserDefined6": null,
        "EstimateResource": null
      },
      {
        "PhaseCode": "1003",
        "LaborHours": 36.0,
        "EquipmentHours": 36.0,
        "IsActive": true,
        "Cost": {
          "CostCategories": [
            {
              "Name": "Undefined Labor Burden",
              "Amount": 4980.0
            }
          ]
        }
      }
    ]
  },
]
```

```
        "PeriodStart": "5/21/2025 12:00:00 AM",
        "PeriodEnd": "5/22/2025 12:00:00 AM",
        "Duration": 1.0,
        "TotalAmount": 4980.0,
        "ActualsUserDefined1": null,
        "ActualsUserDefined2": null,
        "ActualsUserDefined3": null,
        "ActualsUserDefined4": null,
        "ActualsUserDefined5": null,
        "ActualsUserDefined6": null,
        "EstimateResource": null
      }
    ],
    "LogToken": "83b2a2c0-84ef-4083-95d8-385e8098f34c",
    "Logger": [
      null
    ]
  ]
}
```

Sample Error Message

```
[
{
  "ProjectId": "10000",
  "Actuals": [],
  "LogToken": "eb838a9d-3c48-4af3-a3f9-efb0b2188a51",
  "Logger": [
    {
      "LogDate": "2020-09-24T19:07:57.102185+00:00",
      "LogLevel": "Error",
      "LogMessage": "Unable to process Actual Mh Cost with correlation eb838a9d-3c48-4af3-a3f9-efb0b2188a51.",
      "LogSource": "ERP"
    },
    {
      "LogDate": "2020-09-24T19:07:57.102185+00:00",
      "LogLevel": "Error",
      "LogMessage": "ACTUALMH COST FAILED.",
      "LogSource": "ERP"
    }
  ]
}
]
```

Verification

View Actuals

After the actual details are posted to Control, you can view them on the **Actuals History** tab in the **View Actuals details** slide-out panel. The posting date, quantity, cost, man-hours and equipment hours are based on the details mentioned against the highlighted cost item (or WBS phase code), in the response JSON. To open the slide-out panel, right-click the cost item, and then select **View Actuals details** in the menu.

Control

Range: OH KTG Get Work Build Work 110083 View: CE + CB

Actions CBS ACS PAY ITEMS CHANGE REGISTER AUDIT LOG

Tasks

CBS position	Description
1.1.1.1.1.5	OCC
1.1.1.1.1.5.1	OCC (Business)
1.1.1.1.1.5.2	OCC (IM) (Contractors)
1.1.1.1.1.5.3	OCC Projects
1.1.1.1.1.5.3.1	OCC KieTrac
1.1.1.1.1.5.3.2	OCC KiewitSafe
1.1.1.1.1.5.3.3	OCC Reporting
Subtotals	213 (1 rows selected)

CLAIM ACTUALS ACTUALS HISTORY

Posting date	Quantity	Cost	Man hours	Equipment hours
3/28/2015	0	\$ 43,188.80	556.5	0
4/25/2015	0	\$ 30,973.71	416.5	0
5/30/2015	0	\$ 125,070.32	371	0
6/27/2015	0	(\$ 24,053.82)	297	0
7/25/2015	0	\$ 18,315.31	257	0

View more

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These actual details also update the cost category details for the same cost item, which you can view by opening the **Cost Item details** slide-out panel. To open the slide-out panel, right-click the cost item, and then select **Cost Item details** in the menu.

Control

Range: OH KTG Get Work Build Work 110083 View: CE + CB

Actions CBS ACS PAY ITEMS CHANGE REGISTER AUDIT LOG

Tasks

CBS position	Description
1.1.1.1.1.5	OCC
1.1.1.1.1.5.1	OCC (Business)
1.1.1.1.1.5.2	OCC (IM) (Contractors)
1.1.1.1.1.5.3	OCC Projects
1.1.1.1.1.5.3.1	OCC KieTrac
1.1.1.1.1.5.3.2	OCC KiewitSafe
1.1.1.1.1.5.3.3	OCC Reporting
Subtotals	213 (1 rows selected)

DETAILS ATTRIBUTES COST CATEGORIES RESOURCES

1.1.1.1.1.5.2 - OCC (IM) (Contractors)

Cost category	Current budget	Total cost (to date)	Current estimate	Low forecast	Forecast remaining cost
Total	\$ 161,950.00	\$ 321,865.11	\$ 161,950.00	\$ 321,865.11	\$ 0.00
Labor	\$ 161,950.00	\$ 282,860.86	\$ 161,950.00	\$ 282,860.86	\$ 0.00
Labor Base	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Labor Burden	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Undefined Labor	\$ 161,950.00	\$ 282,860.86	\$ 161,950.00	\$ 282,860.86	\$ 0.00
Construction Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

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Integration Status

There are multiple ways to get the status associated with the Actual cost and manhour sync depending on how the customer wants to view the status of the integration.

- Results are available via the Integration tab in the Audit log, which includes status and processing details including any errors.
- A location field is available in the results in the response header.

Sample:

Location <https://qa.hds.ineight.com/ExternalSystem//Messages/Status?messageId=772d849e-4739-4e34-9467-0da05b9434e0>

A system must be able to go to that URI and see if the API was successful or failed.

Sample:

Success

```
{
  "Status": "Success",
  "CorrelationID": "fd058d5f-d22f-4056-8c72-6c25265707f0",
  "ProjectDisplay": "103093",
  "ErrorDetails": []
}
```

Failure

```
{
  "Status": "Failed",
  "CorrelationID": "de068edb-b9ac-4281-8a08-7926ae2fe316",
  "ProjectDisplay": "GoldenSnapshot26072022180836",
  "ErrorDetails": [
    {
      "ErrorCode": 12002,
      "ErrorDescription": "In order to claim man hours 'Allow as built' value within Control must be set to 'All' or 'Cost'",
      "CostItemList": [
        {
          "Code": "1007"
        }
      ]
    }
  ]
}
```

Status Codes

API/Entity Logic	Condition	Code	Message
API Validation	Failure	500	
API Validation	Valid Payload	202	
API Validation	Invalid payload	417	Expectation failure

Entity Logic Validation Errors

12001	In order to claim hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
12002	In order to claim equipment hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
12003	In order to claim cost 'Allow as built' value within Control must be set to 'All' or 'Cost'
10001	WBS phase code or CBS position code is required
10002	WBS Phase code in external system exceeds the maximum character limit of 50
10003	WBS phase code match not found
10004	CBS position code in external system exceeds the maximum character limit of 100
10005	CBS position code match not found
10012	Man-hours in external system must be a numeric value
10013	Man hours in external system exceeds the maximum character limit of 11 before decimal place
10015	Equipment-hours in external system must be a numeric value
10016	Equipment hours in external system exceeds the maximum character limit of 11 before decimal place
10019	Cost category in external system is required to claim cost
10020	Cost category in external system exceeds the maximum character limit of 50
10021	Cost Category match not found
10022	Cost in external system must be a numeric value
10023	Cost in external system exceeds the maximum character limit of 11 before decimal place
10026	Posting date from external system is required
10029	System Error. Kindly Try again later
10031	<field> has more than 250 characters
10032	Estimate resource code is not available in this project
10033	<field> is not formatted as a date (MM/DD/YYYY)

Committed Cost (Request) - Sync

This integration is initiated through a user in InEight Control by running the Sync menu Actuals Cost and MH. The request determines the time frame of the information that is being requested, see [Committed Cost \(Response\)](#) for more details.

Direction		From InEight Control
Frequency		On-demand from users of Control.
Trigger Methods		Manually triggered by user within Control UI.
Average Payload Size		Small payload with details for assembling the requested data.
APIM Name		Not available through APIM.
InEight Control	Starting Version	20.2
	Ending Version	
Configuration Entity Name		Control: Committed Cost

Request Date Range

The Current Date/Time fields in this request are automatically populated when a user requests to initiate a synchronization of commitments from InEight Control. Because Committed cost is not a transactional field, the expectation is that full total commitment and open commitment will be sent back to Control.

Fields

Depth	Name	Type	Precision	Parent
1	LoadCommittedCost_HDS	Array		
2	ProjectId ¹	String	30	LoadCommittedCost_HDS
2	CurrentDate	String	25	LoadCommittedCost_HDS
2	CurrentTime	String	25	LoadCommittedCost_HDS
2	LogToken	String	50	LoadCommittedCost_HDS

¹ – Natural Key field.

Field Descriptions

Name	Description	Example
ProjectId	Identifies the project associated with actuals and commitment data being requested by the ERP. The ID is unique to a project. The value in this field must match the Project Display field in the UI of an existing project.	10346
DateCurrent	Current date for all commitments to return.	2017-09-01
TimeCurrent	Starting time for all commitments to return.	15:08:25
LogToken	Unique identifier (GUID) that can be used when viewing or obtaining error records in InEight error logging for each integration request.	Ca30fd02-5078-43c3-9ff0-97d30d2e6824

Sample JSON

```
{
  "LoadCommittedCost_HDS": {
    "CurrentDate": "2020-02-28",
    "CurrentTime": "20:48:08",
    "LogToken": "15b867e4-172b-48d2-b0a9-882fed3bd2c4",
    "ProjectId": "190000"
  }
}
```

Status Codes

There are no integration status codes.

Committed Cost (Response) - Sync

InEight Control expects the values that are sent by the ERP to represent the total amount of committed cost and open commitment for a cost item.

Direction		To the InEight cloud platform.
Frequency		On demand, as a response to Committed Cost Request.
Trigger Methods		In response to Actuals Request.
Average Payload Size		Varies depending on the amount of cost items in the project and how many have committed cost
APIM Name		Upsert Committed Cost Sync
InEight Control	Starting Version	20.2
	Ending Version	

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectDisplay	String	24	
1	CommittedCost	Array	NA	
2	PhaseCode	String	24	CommittedCost
2	CBSPosition	Boolean	NA	CommittedCost
2	OpenCommitment	Array	NA	CommittedCost
3	CostCategories	Array	NA	OpenCommitment
4	Name	String	30	CostCategories
4	Amount	Number	22,11	CostCategories
2	TotalCommitment	Array	NA	CommittedCost
3	CostCategories	Array	NA	TotalCommitment
4	Name	String	30	CostCategories
4	Amount	Number	22,11	CostCategories
1	SourceSystemId	String	50	
1	SourceSystemName	String	50	
1	LogToken	String	50	
1	Logger	Array		
2	LogDate	Date/Time		Logger
2	LogLevel	String	20	Logger

Depth	Name	Type	Precision ¹	Parent
2	LogMessage	String	4000	Logger
2	LogSource	String	100	Logger

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ProjectDisplay	Identifies the project associated with the Actuals/Commitment request that was received. The ID is unique to a project. The value in this field must match the Project Display field in the UI of an existing project.	10346
CommittedCost	Array header of the cost item records for commitment. All fields within this array can be repeated for each cost item that has data.	
PhaseCode	WBS phase code associated with the cost item for the commitment record. NOTE: If CBSPosition is sent, then PhaseCode is not required.	1288
CBSPosition	CBS Position associated with the cost item for the commitment record. NOTE: If PhaseCode is sent, then CBSPosition is not required.	1.1.1
OpenCommitment	Array header for the open commitment for the cost item records. All fields within this array can be repeated for each cost item that has data. NOTE: Open commitment is referred to as Remaining commitment within the Control UI.	
CostCategories	Array header of cost categories for the cost item record. Fields within this array can be repeated for each cost category that contains a value.	0.000
Name	Source system ID of the cost category for the open commitment. (Refer to and Appendix A for more details).	Supplies
Amount	The amount for the cost category record.	200.00
TotalCommitment	Array header for the open commitment for the cost item records. All fields within this array can be repeated for each cost item that has data.	
CostCategories	Array header of cost categories for the cost item record. Fields within this array can be repeated for each cost category that contains a value.	
Name	Source system ID of the cost category for the total commitment. (Refer to and Appendix A for more details).	Supplies
Amount	Amount for the cost category record.	200.00

Name	Description	Example
SourceSystemId	Not used	
SourceSystemName	Not used	
LogToken	Unique identifier (GUID) that can be used when viewing or obtaining error records in InEight error logging for each integration request. It is important to ensure the LogToken sent in this field is matched correctly to the request that is being confirmed. InEight uses the log token in the confirmation to flag data as having been synchronized with the external system.	B314c786-50f2-4b0b-a396-ccc8dbf09217
Logger	Array header of LogErrors for integration. Fields within this array can be repeated for multiple errors that may have occurred in the ERP.	
LogDate	Date and time that the log error message was created in the external system.	2020-09-24T19:07:57.102185+00:00
LogLevel	Is Error for the type of log.	Error
LogMessage	Message that is shown for the reason the failure occurred.	Unable to process Committed Cost
LogSource	Area where the log occurred.	ERP

Sample JSON

```
[
  {
    "ProjectDisplay": "190001",
    "CommittedCost": [
      {
        "PhaseCode": "1003",
        "CBSPosition": null,
        "OpenCommitment": {
          "CostCategories": [
            {
              "Name": "OE Overhaul Parts",
              "Amount": "8798"
            }
          ]
        },
        "TotalCommitment": {
          "CostCategories": [
            {
              "Name": "OE Overhaul Parts",
              "Amount": "8798"
            }
          ]
        }
      },
      {
        "PhaseCode": "1007",
        "CBSPosition": null,
```

```

    "OpenCommitment": {
      "CostCategories": [
        {
          "Name": "OE Overhaul Parts",
          "Amount": "665"
        }
      ]
    },
    "TotalCommitment": {
      "CostCategories": [
        {
          "Name": "OE Overhaul Parts",
          "Amount": "665"
        }
      ]
    }
  },
  "LogToken": "04b7df68-9751-4d7e-a81e-35f9df48ff40",
  "SourceSystemId": null,
  "SourceSystemName": null,
  "Logger": []
}
]

```

Sample Error Message

```

[
{
  "ProjectDisplay": "10000",
  "CommittedCost": [],
  "LogToken": "74c87ff5-caf4-4e30-a124-a9b13562d1e1",
  "SourceSystemId": "",
  "SourceSystemName": "",
  "Logger": [
    {
      "LogDate": "2020-09-24T19:07:57.0240776+00:00",
      "LogLevel": "Error",
      "LogMessage": "Unable to process Committed Cost with correlation 74c87ff5-caf4-4e30-a124-a9b13562d1e1.",
      "LogSource": "ERP"
    },
    {
      "LogDate": "2020-09-24T19:07:57.0240776+00:00",
      "LogLevel": "Error",
      "LogMessage": "COMMITTEDCOST FAILED.",
      "LogSource": "ERP"
    }
  ]
}
]

```


Verification

View Committed Cost

After the committed cost values are posted to Control, you can view them on the **Commitments** tab in the **View Actuals details** slide-out panel. To open the slide-out panel, right-click on the cost item, and then select **View Actuals details** in the menu.

1006
1.1.1.1.1.1 MB Saw cut and hand demo

CLAIM ACTUALSACTUALS HISTORYCOMMITMENTS

Open committed cost
\$ 16,534.00

Total committed cost
\$ 16,534.00

Cost category	Open committed cost adjustment	New open committed cost	Total committed cost adjustment	New total committed cost
^ Total	\$ 0.00	\$ 16,534.00	\$ 0.00	\$ 16,534.00
v Labor	\$ 0.00	\$ 11,812.00	\$ 0.00	\$ 11,812.00
v Construction Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v FOM Rented Equipment	\$ 0.00	\$ 4,722.00	\$ 0.00	\$ 4,722.00
v Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Materials	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Subcontract	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Fees	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Allowance	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
G & A	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Undefined	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

CancelApply

These commitments by cost category for the same cost item, can be viewed by opening the **Cost Item details** slide-out panel. To open the slide-out panel, right-click the cost item, and then select **Cost Item details** in the menu. These new columns are available through the column chooser.

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MB Saw cut and hand demo

DETAILS

ATTRIBUTES

COST CATEGORIES

RESOURCES

1.1.1.1.1.1 - MB Saw cut and hand demo

02/18/2020

Cost category	Current budget	Total cost (to date)	Current estimate	★ Live forecast	Open committed cost	Total committed cost
^ Total	\$ 86,790.41	\$ 12,000.00	\$ 86,790.41	\$ 28,534.00	\$ 16,534.00	\$ 16,534.00
v Labor	\$ 86,790.41	\$ 12,000.00	\$ 86,790.41	\$ 23,812.00	\$ 11,812.00	\$ 11,812.00
v Construction...	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v FOM Rented ...	\$ 0.00	\$ 0.00	\$ 0.00	\$ 4,722.00	\$ 4,722.00	\$ 4,722.00
v Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Materials	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Subcontract	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Fees	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Allowance	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
G & A	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Undefined	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Man hours	864.00	0.00	864.00	0.00		

Status Codes

API/Entity Logic	Condition	Code	Message
API Validation	Failure	500	
API Validation	Valid Payload	202	
API Validation	Invalid Payload	417	Expectation failure

The location url will be available and the content will be empty.

Validation

Entity Logic Validation Errors

WBS phase code match not found
CBS Position code match not found
WBS phase code or the CBS Position is required
Cost Category does not match
Only numerical values accepted
Value exceeds maximum size
Allow as-built must be All or Cost
Duplicate entries for the same cost item and cost category exist
System Error. Kindly Try again later

Committed Cost (Generic) - Post

InEight Control expects the values that are sent by the ERP to represent the total amount of committed cost and open commitment for a cost item.

Direction		To the InEight cloud platform.
Frequency		On demand.
Trigger Methods		External
Average Payload Size		Varies depending on the amount of cost items in the project and how many have committed cost
APIM Name		Upsert Committed Cost Generic
InEight Control	Starting Version	20.7
	Ending Version	

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectDisplay	String	24	
1	CommittedCost	Array	NA	
2	PhaseCode	String	24	CommittedCost
2	CBSPosition	Boolean	NA	CommittedCost
2	OpenCommitment	Array	NA	CommittedCost
3	CostCategories	Array	NA	OpenCommitment
4	Name	String	30	CostCategories
4	Amount	Number	22,11	CostCategories
2	TotalCommitment	Array	NA	CommittedCost
3	CostCategories	Array	NA	TotalCommitment
4	Name	String	30	CostCategories
4	Amount	Number	22,11	CostCategories
1	SourceSystemId	String	50	
1	SourceSystemName	String	50	
1	Logtoken	String	50	

¹ – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ProjectDisplay	Identifies the project associated with the Actuals request that was received. The ID is unique to a project. The value in this field must match the external Project ID field in the UI of an existing project.	10346
CommittedCost	Array header of the cost item records for commitment. All fields within this array can be repeated for each cost item that has data.	
PhaseCode	WBS phase code associated with the cost item for the commitment record. NOTE: If CBSPosition is sent, then PhaseCode is not required.	1288
CBSPosition	CBS Position associated with the cost item for the commitment record. NOTE: If PhaseCode is sent, then CBSPosition is not required.	1.1.1
OpenCommitment	Array header for the open commitment for the cost item records. All fields within this array can be repeated for each cost item that has data.	
CostCategories	Array header of cost categories for the cost item record. Fields within this array can be repeated for each cost category that contains a value.	0.000
Name	Source system ID of the cost category for the open commitment. (Refer to and Appendix A for more details).	Supplies
Amount	The amount for the cost category record.	200.00
TotalCommitment	Array header for the open commitment for the cost item records. All fields within this array can be repeated for each cost item that has data.	
CostCategories	Array header of cost categories for the cost item record. Fields within this array can be repeated for each cost category that contains a value.	
Name	Source system ID of the cost category for the total commitment. (Refer to and Appendix A for more details).	Supplies
Amount	Amount for the cost category record.	200.00
SourceSystemId	Not used	
SourceSystemName	Not used	
Logtoken	Not used	

Sample JSON

```
[
  {
    "ProjectDisplay": "190000"
    "CommittedCost": [
```

```

{
  "PhaseCode": "1012",
  "CBSPosition": "",
  "OpenCommitment": {
    "CostCategories": [
      {
        "Name": "Job Insurance",
        "Amount": "686"
      }
    ]
  },
  "TotalCommitment": {
    "CostCategories": [
      {
        "Name": "Job Insurance",
        "Amount": "686"
      }
    ]
  }
},
{
  "PhaseCode": "1335",
  "CBSPosition": "",
  "OpenCommitment": {
    "CostCategories": [
      {
        "Name": "OE LicenseOE Taxes",
        "Amount": "6327"
      }
    ]
  },
  "TotalCommitment": {
    "CostCategories": [
      {
        "Name": "OE LicenseOE Taxes",
        "Amount": "6327"
      }
    ]
  }
},
{
  "PhaseCode": "1334",
  "CBSPosition": "",
  "OpenCommitment": {
    "CostCategories": [
      {
        "Name": "OE Undefined Ownership1",
        "Amount": "7967"
      }
    ]
  },
  "TotalCommitment": {
    "CostCategories": [
      {
        "Name": "OE Undefined Ownership1",
        "Amount": "7967"
      }
    ]
  }
}
],
"SourceSystemId": "81de2acd1cf74401bfdd04e1db9b3944",
"SourceSystemName": "External System",

```

```
}
]
```

Verification

View Committed Cost import status and failures

Example of a successful import:

190001 (190001) Control Workspaces GA25.7 CDD											
CBS ACS PAY ITEMS CHANGE REGISTER AUDIT LOG											
File name	Status	Processing Details	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date	Last edited by	Last edited date
Committed Cost from External System	Complete		1	0	1	0	0	Service Account	07/16/2020 10:25 PM	Service Account	07/16/2020 10:25 PM

Example of a failed import:

190001 (190001) Control Workspaces GA25.7 CDD											
CBS ACS PAY ITEMS CHANGE REGISTER AUDIT LOG											
File name	Status	Processing Details	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date	Last edited by	Last edited date
Committed Cost from External System	Failed with errors		1	1	0	0	0	Service Account	07/16/2020 10:25 PM	Service Account	07/16/2020 10:25 PM

There is an available file to download to help with errors.

View Committed Cost

After the committed cost values are posted to Control, you can view them on the **Commitments** tab in the **View Actuals details** slide-out panel. To open the slide-out panel, right-click on the cost item, and then select **View Actuals details** in the menu.

1606 1.1.1.1.1.1.1 MB Saw cut and hand demo CLAIM ACTUALS ACTUALS HISTORY COMMITMENTS					
Open committed cost		Total committed cost			
\$ 16,534.00		\$ 16,534.00			
Cost category	Open committed cost adjustment	New open committed cost	Total committed cost adjustment	New total committed cost	
^ Total	\$ 0.00	\$ 16,534.00	\$ 0.00	\$ 16,534.00	
Labor	\$ 0.00	\$ 11,812.00	\$ 0.00	\$ 11,812.00	
Construction Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
FOM Rented Equipment	\$ 0.00	\$ 4,722.00	\$ 0.00	\$ 4,722.00	
Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
Materials	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
Subcontract	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
Fees	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
Allowance	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
G & A	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	
Undefined	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	

These commitments by cost category for the same cost item, can be viewed by opening the **Cost Item details** slide-out panel. To open the slide-out panel, right-click the cost item, and then select **Cost Item details** in the menu. These new columns are available through the column chooser.

1006

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DETAILS

ATTRIBUTES

COST CATEGORIES

RESOURCES

1.1.1.1.1.1 - MB Saw cut and hand demo

02/18/2020

Cost category	Current budget	Total cost (to date)	Current estimate	★ Live forecast	Open committed cost	Total committed cost
^ Total	\$ 86,790.41	\$ 12,000.00	\$ 86,790.41	\$ 28,534.00	\$ 16,534.00	\$ 16,534.00
v Labor	\$ 86,790.41	\$ 12,000.00	\$ 86,790.41	\$ 23,812.00	\$ 11,812.00	\$ 11,812.00
v Construction...	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v FOM Rented ...	\$ 0.00	\$ 0.00	\$ 0.00	\$ 4,722.00	\$ 4,722.00	\$ 4,722.00
v Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Materials	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Subcontract	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Fees	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Allowance	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
G & A	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Undefined	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Man hours	864.00	0.00	864.00	0.00		

Status Codes

API/Entity Logic	Condition	Code	Message
API Validation	Project Display cannot be blank.	400	ProjectDisplay is required.
API Validation	Project Display must have a valid project number in InEight.	400	ProjectDisplay match not found.
API Validation	Number of records	400	The file size exceeds the maximum record limit
API Validation	Invalid format	400	Bad request
API Validation		417	Expectation failed
API Validation	Failure	500	
API Validation	Valid Payload	200	

The location url will be available and the content will be empty.

Entity Logic Validation Errors

WBS phase code match not found
CBS Position code match not found
WBS phase code or the CBS Position is required
Cost Category does not match
Only numerical values accepted
Value exceeds maximum size
Allow as-built must be All or Cost
Duplicate entries for the same cost item and cost category exist
System Error. Kindly Try again later

Actuals (Generic) - Post

The actuals (generic) allows actual cost, quantity, equipment hours and man-hours to be associated to a cost item based on the joining criteria of WBS phase code or CBS position for a project. InEight Control expects the values that are sent by the ERP to represent transactional totals from the last time actuals were sent to Control. The values should not represent job "to-date" entries.

Direction		External system to the InEight cloud platform.
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Entire entity –thousands of records. Recommended: • Maximum number of transactions is 10,000. • Group transactions on a project, do not send individual transactions in a payload one by one. • If group exceeds 10,000 transactions and requires more than one payload, allow five minutes between payloads. • A project will process the payloads received one at a time; it will not process multiple payloads in parallel. However, multiple projects can be processed at the same time.
APIM Name		Create Actuals Generic
InEight Control	Starting Version	18.2
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Req.
1	ProjectDisplay	String	50		Yes
1	Actuals	Array	NA		Yes
2	PhaseCode	String	24	Actuals	No ¹
2	CBSPositionCode	String	50	Actuals	No ¹
2	PostingDate	String	25	Actuals	Yes
2	Notes	String	250	Actuals	No
2	Quantity	String	NA	Actuals	No
2	ManHours	String	22	Actuals	No
2	EquipmentHours	String	22	Actuals	No
2	Cost	Array	NA	Actuals	No
3	CostCategories	Array	NA	Cost	No
4	Name	String	30	CostCategories	No

Depth	Name	Type	Precision	Parent	Req.
4	Amount	String	30	CostCategories	No
2	ActualsUserDefined1	String	25	Actuals	No
2	ActualsUserDefined2	String	25	Actuals	No
2	ActualsUserDefined3	String	250	Actuals	No
2	ActualsUserDefined4	String	250	Actuals	No
2	ActualsUserDefined5	String	250	Actuals	No
2	ActualsUserDefined6	String	250	Actuals	No
2	EstimateResource	String	50	Actuals	No
2	SourceSystemName	String	50	Actuals	No
2	SourceSystemId	String	50	Actuals	No

1 – See NOTE in Field Descriptions section for additional field requirements information.

Field Descriptions

Name	Description	Example
ProjectDisplay	Identifies the project associated with the Actuals request that was received. The external project ID is unique to a project.	TestProject
Actuals	Array header of the cost item records for Actuals. All fields within this array can be repeated for each cost item that has data.	
PhaseCode	WBS phase code associated with the cost item for the Actuals record. NOTE: Although stated as not required, either PhaseCode or CBSPositionCode must be provided.	1002
CBSPositionCode	CBS Position Code associated with the cost item for the Actuals record. NOTE: Although stated as not required, either CBSPositionCode or PhaseCode must be provided.	1.1
PostingDate	Date that indicates which financial period the cost, man-hours, equipment hours or quantities will be associated.	10/18/2018
Notes	Any additional information about the transaction.	Maintenance
Quantity	Claimed amount of operational quantity for the cost item.	5
ManHours	Claimed number of man-hours for the cost item.	4
EquipmentHours	Claimed number of equipment-hours for the cost item.	5
Cost	Array header of the cost records for cost categories.	5000

Name	Description	Example
CostCategories	Array header of the cost categories records. All fields within this array can be repeated for each cost item that has data.	
Name	Source system ID of the cost category for the actuals transaction. (Refer to and Appendix A for more details)	RE Repair Labor
Amount	Claimed amount of cost for that cost category.	5000
ActualsUserDefined1	A date field associated with the actual transaction.	09/09/2024
ActualsUserDefined2	A date field associated with the actual transaction.	09/09/2024
ActualsUserDefined3	A free-form text field associated with the actual transaction.	User defined 3
ActualsUserDefined4	A free-form text field associated with the actual transaction.	User defined 4
ActualsUserDefined5	A free-form text field associated with the actual transaction.	User defined 5
ActualsUserDefined6	A free-form text field associated with the actual transaction.	User defined 6
EstimateResource	An estimate resource code associated with the actual transaction.	Labor1
SourceSystemName	Not stored	
SourceSystemId	Not stored	

Error Messages

The following error messages are generated by the InEight cloud platform and products for this integration. Errors in the table below are distinguished by the process that checks for the error.

- API validation errors are basic record validations that will be returned to the API request message and cause the entire payload to fail.
- Entity logic errors are performed internally within the InEight cloud platform and products to look for specific business rule or data integrity issues record-by-record. Failures with entity logic validations only cause the individual record to cease processing and are written to internal logging.

NOTE: See [Verification](#) for more error messages that can be generated from the business logic process.

Sample JSON

```
{
  "ProjectDisplay": "TestProject",
  "Actuals": [{
    "PhaseCode": "1005",
    "CBSPositionCode": "1.2",
```

```

"PostingDate": "06/12/2024",
"Notes": "Maintenance",
"Quantity": "5",
"ManHours": "4",
"EquipmentHours": "5",
"ActualsUserDefined1": "06/12/2024",
"ActualsUserDefined2": "06/12/2024",
"ActualsUserDefined3": "udf3",
"ActualsUserDefined4": "udf4",
"ActualsUserDefined5": "udf5",
"ActualsUserDefined6": "udf6",
"EstimateResource": "1-Labor",
"Cost": {
  "CostCategories": [{
    "Name": "RE Repair Labor",
    "Amount": "5000"
  }]
},
},
},
"SourceSystemId": "1",
"SourceSystemName": "External System"
}

```

Verification

Additional error messaging is available through the Integrations log.

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Control

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182402

Actions

▼

CBS

ACS

PAY ITEMS

CHANGE REGISTER

AUDIT LOG

Q

CBS AUDIT LOG

ACS AUDIT LOG

PAY ITEM AUDIT LOG

SYNC AUDIT LOG

IMPORT HISTORY

Import history log

Source	Status	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date	Last edited by	Last edited date
Actuals from External...	✔ Complete	1		1	0	0	Service Account	12/04/2018 01:44 PM	Service Account	12/04/2018 01:44 PM
Actuals from External...	✖ Failed with er. 	1	1	0	0	0	Service Account	12/04/2018 01:43 PM	Service Account	12/04/2018 01:43 PM

The following table lists the error messaging available in the Integrations log file.

Message
WBS phase code match not found
SAP status control value within Control must be blank
At least one among WBS phase code or CBS position code is require
CBS position code match not found
Posting date from external system is required

Message
Posting date format within external system should be MM/DD/YYYY
Posting date in external system must be valid
Posting date in external system must be equal to or less than today's date
Notes in external system exceeds the maximum character limit of 250
Quantities in external system must be a numeric value
Allow-as-built value within Control must be set to 'All' or 'Quantity'
Hide in plan and progress ' value within Control must be set to 'Checked'
Man-hours in external system must be a numeric value
In order to claim man-hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
Equipment-hours in external system must be a numeric value
In order to claim equipment hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
Cost in external system must be a numeric value
In order to claim cost 'Allow as built' value within Control must be set to 'All' or 'Cost'
Cost category in external system is required to claim cost
Cost Category match not found
ProjectDisplay in external system exceeds the maximum character limit of 200
CBS position code in external system exceeds the maximum character limit of 100
Quantity in external system exceeds the maximum character limit of 11 before decimal place
Man-hours in external system exceeds the maximum character limit of 11 before decimal place
Equipment hours in external system exceeds the maximum character limit of 11 before decimal place
Cost in external system exceeds the maximum character limit of 11 before decimal place
Cost category in external system exceeds the maximum character limit of 50
ActualsUserDefined1 has Invalid Date
ActualsUserDefined1 has an invalid format. The Date Format should be MM/dd/yyyy
ActualsUserDefined2 has Invalid Date
ActualsUserDefined2 has an invalid format. The Date Format should be MM/dd/yyyy
ActualsUserDefined3 has more than 250 characters
ActualsUserDefined4 has more than 250 characters
ActualsUserDefined5 has more than 250 characters
ActualsUserDefined6 has more than 250 characters
Estimate resource code <code> is not available in this project

Status Codes

API/Entity Logic	Condition	Code	Message
API	Project Display cannot be blank.	400	ProjectDisplay is required.
API	Project Display must have a valid project number in InEight.	400	ProjectDisplay match not found.
API	Number of records	400	The file size exceeds the maximum record limit 65000
API	Invalid format	400	Bad request
API		417	Expectation failed
API Validation	Failure	500	
API Validation	Successful	200	

The location url will be available and the content will be provided as below.

Integration Status

There are multiple ways to get the status associated with the Actuals API (generic) API, depending on the issue or how a customer wants to view the status of the integration.

- Results are available through the import history screen, which includes error messaging in a downloadable file.
- A location field is available in the results in the response header.

Sample:

Location <https://qa.hds.ineight.com/ExternalSystem//Messages/Status?messageId=772d849e-4739-4e34-9467-0da05b9434e0>

A system must be able to go to that URI and see if the API was successful or failed.

Sample:

Success

```
{
  "Status": "Success",
  "CorrelationID": "fd058d5f-d22f-4056-8c72-6c25265707f0",
  "ProjectDisplay": "103093",
  "ErrorDetails": []
}
```

Failure

```
{
  "Status": "Failed",
  "CorrelationID": "de068edb-b9ac-4281-8a08-7926ae2fe316",
}
```

```

"ProjectDisplay": "GoldenSnapshot26072022180836",
"ErrorDetails": [
  {
    "ErrorCode": 10014,
    "ErrorDescription": "In order to claim man hours 'Allow as built' value
within Control must be set to 'All' or 'Cost'",
    "CostItemList": [
      {
        "Code": "1007"
      }
    ]
  }
]
}

```

Entity Logic Validation Errors

10001	WBS phase code or CBS position code is required
10002	WBS Phase code in external system exceeds the maximum character limit of 50
10003	WBS phase code match not found
10004	CBS position code in external system exceeds the maximum character limit of 100
10005	CBS position code match not found
10006	Notes in external system exceeds the maximum character limit of 4000
10007	As-built lock value within Control must be False
10008	Quantities in external system must be a numeric value
10009	Quantity in external system exceeds the maximum character limit of 11 before decimal place
10010	In order to claim quantities 'Allow as built' value within Control must be set to 'All' or 'Quantity'
10011	In order to claim quantities 'Hide in plan and progress' value within Control must be set to 'Checked'
10012	Man-hours in external system must be a numeric value
10013	Man-hours in external system exceeds the maximum character limit of 11 before decimal place
10014	In order to claim man hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
10015	Equipment-hours in external system must be a numeric value
10016	Equipment hours in external system exceeds the maximum character limit of 11 before decimal place
10017	In order to claim equipment hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
10018	In order to claim cost 'Allow as built' value within Control must be set to 'All' or 'Cost'
10019	Cost category in external system is required to claim cost
10020	Cost category in external system exceeds the maximum character limit of 50
10021	Cost Category match not found
10022	Cost in external system must be a numeric value
10023	Cost in external system exceeds the maximum character limit of 11 before decimal place
10024	Value exceeds character limit
10025	Posting date in external system must be equal to or less than today's date
10026	Posting date from external system is required
10027	Posting date in external system must be valid
10028	Posting date format within external system should be MM/DD/YYYY
10029	System Error. Kindly try again later

10031	<field> has more than 250 characters
10032	Estimate resource code is not available in this project
10033	<field> is not formatted as a date (MM/DD/YYYY)
10034	Actual cost, manhours or quantity are required for an actual posting

Cost Item (Generic) - Post (V1)

Direction		External system to the InEight cloud platform.
Frequency		Varies based on the customer
Trigger Methods		Triggered by external system
Average Payload Size		The potential is hundredsto thousands of records. Depending on the number of cost items and the details that might need to be created or updated for a project .
APIM Name		Upsert Cost Item
InEight Control	Starting Version	23.8
	Ending Version	

Fields

Depth	Name	Type	Precision ¹	Parent	Req.
1	Includedcolumns	Array	N/A		No
1	ExcludedColumns	Array	N/A		No
1	CostItems	Array	N/A		No
2	CostItemDetails			CostItems	Yes
3	DetailCostCategories	Array	N/A	CostItemDetails	No
4	SourceSystemId	String	50	CostItemDetails	No
4	Category	String	50	DetailCostCategories	No
4	Cost	Decimal	11,11	DetailCostCategories	No
4	IsActive	Boolean	N/A	DetailCostCategories	No
3	SourceSystemId	String	50	CostItemDetails	No
3	Scale1	Decimal	11,11	CostItemDetails	No
3	Scale2	Decimal	11,11	CostItemDetails	No
3	Scale3	Decimal	11,11	CostItemDetails	No
3	Manhours	Decimal	11,11	CostItemDetails	No
3	TakeOffQuantity	Decimal	11,11	CostItemDetails	No
3	UnitofMeasure	String	50	CostItemDetails	No
3	SecondaryUnitofMeasure	String	50	CostItemDetails	No
3	Currency	String	10	CostItemDetails	No
3	EquipHours	Decimal	11,11	CostItemDetails	No
2	Accountcode	String	50	CostItems	No
2	PayItemSourceSystemId	String	50	CostItems	No

Depth	Name	Type	Precision ¹	Parent	Req.
2	ProjectNumber ²	String	50	CostItems	Yes
2	SourceSystemId ²	String	50	CostItems	Yes
2	CBSPosition	String	50	CostItems	Yes/ No ⁴
2	OptionalCode	String	50	CostItems	No
2	Description	String	250	CostItems	No
2	PhaseCode	String	50	CostItems	No
2	AsBuiltLock	String	50	CostItems	No
2	AllowAsBuilt	String	50	CostItems	No
2	IsTerminal	Boolean	N/A	CostItems	No
2	CostSource	String	50	CostItems	No
2	CostSegment	String	50	CostItems	No
2	QuantityDriver	String	50	CostItems	No
2	CostCurve	String	50	CostItems	No
2	HideInPlanProgress	String	10	CostItems	No
2	Rework	String	10	CostItems	No
2	Tag1	String	100	CostItems	No
2	Tag2	String	100	CostItems	No
2	Tag3	String	100	CostItems	No
2	Tag4	String	100	CostItems	No
2	Tag5	String	100	CostItems	No
2	Tag6	String	100	CostItems	No
2	Tag7	String	100	CostItems	No
2	Tag8	String	100	CostItems	No
2	Tag9	String	100	CostItems	No
2	Tag10	String	100	CostItems	No
2	Tag11	String	100	CostItems	No
2	Tag12	String	100	CostItems	No
2	Tag13	String	100	CostItems	No
2	Tag14	String	100	CostItems	No
2	Tag15	String	100	CostItems	No
2	Tag16	String	100	CostItems	No
2	Tag17	String	100	CostItems	No
2	Tag18	String	100	CostItems	No

Depth	Name	Type	Precision ¹	Parent	Req.
2	Tag19	String	100	CostItems	No
2	Tag20	String	100	CostItems	No
2	Tag21	String	100	CostItems	No
2	Tag22	String	100	CostItems	No
2	Tag23	String	100	CostItems	No
2	Tag24	String	100	CostItems	No
2	Tag25	String	100	CostItems	No
2	UserDefined1	String	250	CostItems	No
2	UserDefined2	String	250	CostItems	No
2	UserDefined3	String	250	CostItems	No
2	UserDefined4	String	250	CostItems	No
2	UserDefined5	String	250	CostItems	No
2	UserDefined6	String	250	CostItems	No
2	UserDefined7	String	250	CostItems	No
2	UserDefined8	String	250	CostItems	No
2	UserDefined9	String	250	CostItems	No
2	UserDefined10	String	250	CostItems	No
2	UserDefined11	String	250	CostItems	No
2	UserDefined12	String	250	CostItems	No
2	UserDefined13	String	250	CostItems	No
2	UserDefined14	String	250	CostItems	No
2	UserDefined15	String	250	CostItems	No
2	ContributePrimaryToPrimaryQuantity	Boolean	N/A	CostItems	No
2	ContributePrimaryToSecondaryQuantity	Boolean	N/A	CostItems	No
2	ContributeSecondaryToSecondaryQuantity	Boolean	N/A	CostItems	No
2	Segment1	String	250	CostItems	No
2	Segment2	String	250	CostItems	No
2	Segment3	String	250	CostItems	No
2	Segment4	String	250	CostItems	No
2	Scheduled	Boolean	N/A	CostItems	No
2	RollUpSchedule	Boolean	N/A	CostItems	No
2	Start ³	String	25	CostItems	No
2	Finish ³	String	25	CostItems	No
2	EarlyStart ³	String	25	CostItems	No

Depth	Name	Type	Precision ¹	Parent	Req.
2	EarlyFinish ³	String	25	CostItems	No
2	LateStart ³	String	25	CostItems	No
2	LateFinish ³	String	25	CostItems	No
2	ActualStart ³	String	25	CostItems	No
2	ActualFinish ³	String	25	CostItems	No
2	ScheduleId	String	50	CostItems	No
2	SchedulePlugDays	Boolean	N/A	CostItems	No
2	PlugDays	Decimal	11,11	CostItems	No
2	ScheduleWBS	Boolean	N/A	CostItems	No
2	SourceSystemName	String	50	CostItems	No
2	Notes	String	250	CostItems	No

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

2 – Matching Key field.

3 – The data format for Date/Time fields is MM/DD/YYYY

4 – See NOTE in Field Descriptions section for additional field requirements information.

Field Descriptions

Name	Description	Example
Includedcolumns	A string array that allows a customer to specify only those fields to be read in the JSON. These strings must match the spelling and case of the field specified. If a list is provided here, the ExcludedColumns array cannot be populated.	UnitofMeasure
ExcludedColumns	A string array that allows a customer to specify fields that will not be read in the JSON. These strings must match the spelling, and case of the field specified. If a list is provided here, the Includedcolumns array cannot be populated.	TakeOffQuantity
CostItems	Array of cost items.	
CostItemDetails	Cost item details. Can be an empty list but is required.	
DetailCostCategories	Array of Current estimate cost categories.	
SourceSystemId	<i>Reserved for future use.</i>	
Category	Cost Category of the amount for the cost item. This must match the source system ID of the cost category (see Appendix A).	Undefined Total
Cost	Amount of current estimate cost for the cost category and cost item specified.	10000

Name	Description	Example
IsActive	<i>Reserved for future use.</i>	
SourceSystemId	<i>Reserved for future use.</i>	
Scale1	Scale1 of the cost item.	90
Scale2	Scale2 of the cost item.	5
Scale3	Scale3 of the cost item.	5
ManHours	Current Estimate Manhours of the cost item.	2
TakeOffQuantity	Forecast take off quantity of the cost item.	100
UnitofMeasure	Unit of measure of the cost item.	PLS
SecondaryUnitofMeasure	Secondary unit of measure of the cost item.	Ea
Currency	Currency of the cost item.	USD
EquipHours	Current Estimate Equipment Hours for the cost item.	4
Accountcode	Account code on the cost item.	00.00
PayItemSourceSystemId	Pay item source system ID for the assignment of pay item to the cost item.	19000.1
ProjectNumber ¹	Project external ID for the cost items being updated or created.	19000
SourceSystemId ¹	External unique identifier of the cost item for updates of cost items this is the matching identifier.	19000.1000
CBSPosition	CBS position of the cost item, where it will be placed in the structure. NOTE: CBSPosition is required only when creating new cost items. When updating existing cost items, CBSPosition is not a required field.	1.1
OptionalCode	Free-form text field on the cost item.	Area 1
Description	Description of the cost item.	Description
PhaseCode	WBS phase code of the cost item. If this field is populated it must be unique for the project.	1000
AsBuiltLock	Field used to determine if the cost item is available for actual postings. The options to set the field is Locked = checked and blank = unchecked.	Locked
AllowAsBuilt	Field used to determine if the cost item is allowed for different types of actuals postings.	All
IsTerminal	Determines if the cost item is terminal or not.	True
CostSource	Cost source of a cost item.	Plug
CostSegment	Cost segment of a cost item.	Job Overhead
QuantityDriver	Quantity driver of a cost item.	Fixed
CostCurve	Cost curve of a cost item.	Linear
HideInPlanProgress	Hide in Plan and Progress applications of a cost item.	true

Name	Description	Example
Rework	Rework attribute on the cost item.	true
Tag1	Tag 1 of the cost item.	Validated list option
Tag2	Tag 2 of the cost item.	Validated list option
Tag3	Tag 3 of the cost item.	Validated list option
Tag4	Tag 4 of the cost item.	Validated list option
Tag5	Tag 5 of the cost item.	Validated list option
Tag6	Tag 6 of the cost item.	Validated list option
Tag7	Tag 7 of the cost item.	Validated list option
Tag8	Tag 8 of the cost item.	Validated list option
Tag9	Tag 9 of the cost item.	Validated list option
Tag10	Tag 10 of the cost item.	Validated list option
Tag11	Tag 11 of the cost item.	Validated list option
Tag12	Tag 12 of the cost item.	Validated list option
Tag13	Tag 13 of the cost item.	Validated list option
Tag14	Tag 14 of the cost item.	Validated list option
Tag15	Tag 15 of the cost item.	Validated list option
Tag16	Tag 16 of the cost item.	Validated list option
Tag17	Tag 17 of the cost item.	Validated list option
Tag18	Tag 18 of the cost item.	Validated list option
Tag19	Tag 19 of the cost item.	Validated list option
Tag20	Tag 20 of the cost item.	Validated list option
Tag21	Tag 21 of the cost item.	Validated list option
Tag22	Tag 22 of the cost item.	Validated list option
Tag23	Tag 23 of the cost item.	Validated list option
Tag24	Tag 24 of the cost item.	Validated list option
Tag25	Tag 25 of the cost item.	Validated list option
UserDefined1	User defined 1 of the cost item.	Free text
UserDefined2	User defined 2 of the cost item.	Free text
UserDefined3	User defined 3 of the cost item.	Free text
UserDefined4	User defined 4 of the cost item.	Free text
UserDefined5	User defined 5 of the cost item.	Free text
UserDefined6	User defined 6 of the cost item.	Free text
UserDefined7	User defined 7 of the cost item.	Free text
UserDefined8	User defined 8 of the cost item.	Free text

Name	Description	Example
UserDefined9	User defined 9 of the cost item.	Free text
UserDefined10	User defined 10 of the cost item.	Free text
UserDefined11	User defined 11 of the cost item.	Free text
UserDefined12	User defined 12 of the cost item.	Free text
UserDefined13	User defined 13 of the cost item.	Free text
UserDefined14	User defined 14 of the cost item.	Free text
UserDefined15	User defined 15 of the cost item.	Free text
ContributePrimaryToPrimaryQuantity	Cost item Contribute Primary to Primary Quantity indicator.	true
ContributePrimaryToSecondaryQuantity	Cost item Contribute Primary to Secondary Quantity indicator.	False
ContributeSecondaryToSecondaryQuantity	Cost item Contribute Secondary to Primary Quantity indicator.	False
Segment1	Budget segment 1 of the cost item.	Free text
Segment2	Budget segment 2 of the cost item.	Free text
Segment3	Budget segment 3 of the cost item.	Free text
Segment4	Budget segment 4 of the cost item.	Free text
Scheduled	Cost items Scheduled field.	False
RollUpSchedule	Cost items Roll Up Schedule field.	False
Start ²	Cost item Start Date.	11/30/2022
Finish ²	Cost item Finish Date.	02/02/2023
EarlyStart ²	Cost item Early Start.	11/30/2022
EarlyFinish ²	Cost item Early Finish.	02/02/2023
LateStart ²	Cost item Late Start.	12/30/2022
LateFinish ²	Cost item Late Finish.	03/02/2023
ActualStart ²	Cost item Actual Start.	11/30/2022
ActualFinish ²	Cost item Actual Finish.	02/02/2023
ScheduleId	Cost item Schedule ID.	True
SchedulePlugDays	Cost item Schedule Plug Days.	True
PlugDays	Cost item Plug Days.	5
ScheduleWBS	Cost item Schedule WBS.	False
SourceSystemName	Cost item source system name.	ERP
Notes	Cost item Notes.	Note

Sample JSON

```
{
  "IncludedColumns": [],
  "ExcludedColumns": [],
  "CostItems": [
    {
      "CostItemDetails": {
        "Scale1": 10,
        "Scale2": 20,
        "Scale3": 70,
        "TakeOffQuantity": 1020,
        "UnitOfMeasure": "PLS",
        "SecondaryUnitOfMeasure": "PLS",
        "Currency": "USD",
        "DetailCostCategories": [
          {
            "Category": "Labor",
            "Cost": 100,
            "IsActive": true
          },
          {
            "Category": "Supplies",
            "Cost": 150,
            "IsActive": true
          }
        ]
      },
      "AccountCode": "00",
      "PayItemSourceSystemId": "",
      "ProjectNumber": "190009",
      "SourceSystemId": "190009.5",
      "CBSPosition": "1",
      "OptionalCode": "ZYG",
      "Description": "3",
      "PhaseCode": "6",
      "AsBuiltLock": "Locked",
      "AllowAsBuilt": "All",
      "IsTerminal": true,
      "CostSource": "Plug",
      "CostSegment": "Job Overhead",
      "QuantityDriver": "Fixed",
      "CostCurve": "Bell Shaped",
      "HideinPlanProgress": "true",
      "Rework": "true",
      "Tag1": "",
      "Tag2": "",
      "Tag3": "",
      "Tag4": "",
      "Tag5": "",
      "Tag6": "",
      "Tag7": "",
      "Tag8": "",
      "Tag9": ""
    }
  ]
}
```

```

    "Tag10": "",
    "Tag11": "",
    "Tag12": "",
    "Tag13": "",
    "Tag14": "",
    "Tag15": "",
    "Tag16": "",
    "Tag17": "",
    "Tag18": "",
    "Tag19": "",
    "Tag20": "",
    "Tag21": "",
    "Tag22": "",
    "Tag23": "",
    "Tag24": "",
    "Tag25": "",
    "UserDefined1": "UDF 1",
    "UserDefined2": "UDF 2",
    "UserDefined3": "UDF 3",
    "UserDefined4": "UDF 4",
    "UserDefined5": "UDF 5",
    "UserDefined6": "UDF 6",
    "UserDefined7": "UDF 7",
    "UserDefined8": "UDF 8",
    "UserDefined9": "UDF 9",
    "UserDefined10": "UDF 10",
    "UserDefined11": "UDF 11",
    "UserDefined12": "UDF 12",
    "UserDefined13": "UDF 13",
    "UserDefined14": "UDF 14",
    "UserDefined15": "UDF 15",
    "ContributePrimaryToPrimaryQuantity": false,
    "ContributePrimaryToSecondaryQuantity": false,
    "ContributeSecondaryToSecondaryQuantity": false,
    "Segment1": "1",
    "Segment2": "2",
    "Segment3": "3",
    "Segment4": "4",
    "Scheduled": true,
    "RollUpSchedule": true,
    "Start": "02/01/2020",
    "Finish": "12/20/2023",
    "EarlyStart": "01/01/2020",
    "EarlyFinish": "10/20/2021",
    "LateStart": "02/09/2023",
    "LateFinish": "10/20/2025",
    "ActualStart": "01/20/2022",
    "ActualFinish": "12/25/2023",
    "ScheduleId": "1",
    "SchedulePlugDays": true,
    "PlugDays": 5,
    "ScheduleWbs": "true",
    "SourceSystemName": "",
    "Notes": "A"
  }
]
}

```

Summary

This integration includes an option that can be sent in the header of the JSON submitted as X-ExcludeSummary. If the header field X-ExcludeSummary value is *True*, then summary calculations will not be completed in the JSON that is sent. Examples of fields that would not have the summary calculations are Forecast take off quantity, CE total cost, CE total manhours, and other such fields that are numeric.

Integration Status

There are multiple ways to get the status associated with the Cost Item (Generic) (V1) API, depending on the issue or how the customer wants to view the status of the integration.

- Results are available through the import history screen, which includes error messaging in a downloadable file.
- A location field is available in the results in the response header.

Sample

Location <https://qa.hds.ineight.com/ExternalSystem//Messages/Status?messageId=772d849e-4739-4e34-9467-0da05b9434e0>

Sample

Success

```
{
  "Status": "Success",
  "CorrelationID": "fd058d5f-d22f-4056-8c72-6c25265707f0",
  "ProjectDisplay": "190001",
  "ErrorDetails": []
}
```

Failure

```
{
  "Status": "Failed",
  "CorrelationID": "de068edb-b9ac-4281-8a08-7926ae2fe316",
  "ProjectDisplay": "190001",
  "ErrorDetails": [
    {
      "ErrorCode": 10029,
      "ErrorDescription": "Import Failed due to Validation.",
      "CostItemList": [
        {
          "Code": "1007"
        }
      ]
    }
  ]
}
```

Status Codes

API/Entity Logic	Condition	Code	Message
API	Project Display must have a valid project number in InEight.	400	ProjectDisplay match not found.
API	Invalid format	400	Bad request
API Validation	Failure	500	
API Validation	Successful	200	

The location url will be available and the content will be provided as below.

Entity Logic Validation Errors

10029	Import Failed due to Validation
-------	---------------------------------

Cost Item (Generic) – Post (V0)

IMPORTANT: This is a legacy API that will be deprecated in a future release therefore, all new implementations need to utilize the [Cost Item \(Generic\) – Post \(V1\) API](#).

Direction		To the InEight cloud platform.
Frequency		Infrequent. Large update when a new Project is added, and incremental adjustments on a periodic basis (< 10 per month). Multiple updates monthly with thousands of records each time.
Trigger Methods		Determined by external system.
Average Payload Size		Entire entity – thousands of records Entity delta – thousands of records Recommended: - No more than 5000 cost items per batch. - Group entries, do not send individual cost items in a payload.
APIM Name		Upsert Cost Item
InEight Control	Starting Version	18.2
	Ending Version	

Fields

NOTE:

Some of the fields in this marked NA in the field description and other columns appear in the JSON schema for the API but are only usable in a specific context that is not available for standard integration use cases. These fields should be ignored for any purpose other than understanding the full JSON schema.

Depth	Name	Type	Precision ¹	Parent	Req.
1	ObjId	String	36		No
1	ParentObjId	String	36		No
1	CbCostItemDetails	Array	NA	NA	Note ⁴
2	CEDetailCostCategories	NA	NA	NA	NA
3	SourceSystemId	NA	NA	NA	NA
3	Category	NA	NA	NA	NA
3	Cost	NA	NA	NA	NA
3	CostItemGroup	NA	NA	NA	NA
2	CBDetailCostCategories	NA	NA	NA	NA
3	SourceSystemId	NA	NA	NA	NA
3	Category	NA	NA	NA	NA

Depth	Name	Type	Precision ¹	Parent	Req.
3	Cost	NA	NA	NA	NA
3	CostItemGroup	NA	NA	NA	NA
2	OBDetailCostCategories	NA	NA	NA	NA
3	SourceSystemId	NA	NA	NA	NA
3	Category	NA	NA	NA	NA
3	Cost	NA	NA	NA	NA
3	CostItemGroup	NA	NA	NA	NA
2	SourceSystemId	NA	NA	NA	NA
2	CostItemGroup	String	2	cbCostItemDetails	Note ⁴
2	ManHoursDurationDriven	NA	NA	NA	NA
2	ManHoursNonDurationDriven	NA	NA	NA	NA
2	ManHoursMaintenance	NA	NA	NA	NA
2	ShiftsDurationDriven	NA	NA	NA	NA
2	ShiftsNonDurationDriven	NA	NA	NA	NA
2	ManCount	NA	NA	NA	NA
2	Scale1	NA	NA	NA	NA
2	Scale2	NA	NA	NA	NA
2	Scale3	NA	NA	NA	NA
2	WorkHoursRules	NA	NA	NA	NA
2	Quantity	NA	NA	NA	NA
2	SecondaryQuantity	NA	NA	NA	NA
2	ManHours	NA	NA	NA	NA
2	TakeOffQuantity	NA	NA	NA	NA
2	UnitOfMeasure	String	250	CbCostItemDetails	Note ⁴
2	SecondaryUnitOfMeasure	NA	NA	NA	NA
2	Currency	NA	NA	NA	NA
2	Notes	NA	NA	NA	NA
2	EquipHours	NA	NA	NA	NA
2	EquipHoursQuantity	NA	NA	NA	NA
1	CeCostItemDetails	Array	NA	NA	NA
2	CEDetailCostCategories	Array	NA	CeCostItemDetails	NA
3	SourceSystemId	String	50	CEDetailCostCategories	Yes
3	Category	String	250	CEDetailCostCategories	Yes
3	Cost	Number	22,11	CEDetailCostCategories	Yes

Depth	Name	Type	Precision ¹	Parent	Req.
3	CostItemGroup	String	50	CEDetailCostCategories	Yes
2	CBDetailCostCategories	NA	NA	NA	NA
3	SourceSystemId	NA	NA	NA	NA
3	Category	NA	NA	NA	NA
3	Cost	NA	NA	NA	NA
3	CostItemGroup	NA	NA	NA	NA
2	OBDetailCostCategories	NA	NA	NA	NA
3	SourceSystemId	NA	NA	NA	NA
3	Category	NA	NA	NA	NA
3	Cost	NA	NA	NA	NA
3	CostItemGroup	NA	NA	NA	NA
2	SourceSystemId	String	50	CeCostItemDetails	Yes
2	CostItemGroup	String	50	CeCostItemDetails	No
2	ManHoursDurationDriven	Number	22,11	CeCostItemDetails	No
2	ManHoursNonDurationDriven	Number	22,11	CeCostItemDetails	No
2	ManHoursMaintenance	NA	NA	NA	NA
2	ShiftsDurationDriven	Number	22,11	CeCostItemDetails	No
2	ShiftsNonDurationDriven	Number	22,11	CeCostItemDetails	No
2	ManCount	Number	10,0	CeCostItemDetails	No
2	Scale1	Number	22,11	CeCostItemDetails	No
2	Scale2	Number	22,11	CeCostItemDetails	No
2	Scale3	Number	22,11	CeCostItemDetails	No
2	WorkHoursRules	Number	22,11	CeCostItemDetails	No
2	Quantity	Number	22,11	CeCostItemDetails	No
2	SecondaryQuantity	Number	22,11	CeCostItemDetails	No
2	ManHours	Number	22,11	CeCostItemDetails	No
2	TakeOffQuantity	Number	22,11	CeCostItemDetails	No
2	UnitOfMeasure	String	10	CeCostItemDetails	Yes
2	SecondaryUnitOfMeasure	String	10	CeCostItemDetails	No
2	Currency	String	10	CeCostItemDetails	Yes
2	Notes	String	4000	CeCostItemDetails	No
2	EquipHours	Number	22,11	CeCostItemDetails	No
2	EquipHoursQuantity	Number	22,11	CeCostItemDetails	No
1	ObCostItemDetails	NA	NA	NA	NA

Depth	Name	Type	Precision ¹	Parent	Req.
2	CEDetailCostCategories	NA	NA	NA	NA
3	SourceSystemId	NA	NA	NA	NA
3	Category	NA	NA	NA	NA
3	Cost	NA	NA	NA	NA
3	CostItemGroup	NA	NA	NA	NA
2	CBDetailCostCategories	NA	NA	NA	NA
3	SourceSystemId	NA	NA	NA	NA
3	Category	NA	NA	NA	NA
3	Cost	NA	NA	NA	NA
3	CostItemGroup	NA	NA	NA	NA
2	OBDetailCostCategories	NA	NA	NA	NA
3	SourceSystemId	NA	NA	NA	NA
3	Category	NA	NA	NA	NA
3	Cost	NA	NA	NA	NA
3	CostItemGroup	NA	NA	NA	NA
2	SourceSystemId	NA	NA	NA	NA
2	CostItemGroup	String	2	ObCostItemDetails	Note ⁴
2	ManHoursDurationDriven	NA	NA	NA	NA
2	ManHoursNonDurationDriven	NA	NA	NA	NA
2	ManHoursMaintenance	NA	NA	NA	NA
2	ShiftsDurationDriven	NA	NA	NA	NA
2	ShiftsNonDurationDriven	NA	NA	NA	NA
2	ManCount	NA	NA	NA	NA
2	Scale1	NA	NA	NA	NA
2	Scale2	NA	NA	NA	NA
2	Scale3	NA	NA	NA	NA
2	WorkHoursRules	NA	NA	NA	NA
2	Quantity	NA	NA	NA	NA
2	SecondaryQuantity	NA	NA	NA	NA
2	ManHours	NA	NA	NA	NA
2	TakeOffQuantity	NA	NA	NA	NA
2	UnitOfMeasure	String	250	ObCostItemDetails	Note ⁴
2	SecondaryUnitOfMeasure	NA	NA	NA	NA
2	Currency	NA	NA	NA	NA

Depth	Name	Type	Precision ¹	Parent	Req.
2	Notes	NA	NA	NA	NA
2	EquipHours	NA	NA	NA	NA
2	EquipHoursQuantity	NA	NA	NA	NA
1	AccountCode	String	50		No
1	PayItemSourceSystemId	String	50		No
1	ProjectNumber	String	50		Yes
1	SourceSystemId ²	String	50		Yes
1	CBSPosition	String	50		Yes
1	OptionalCode	NA	NA		NA
1	Description	String	50		Yes
1	PhaseCode	String	50		Yes
1	CurrencyCode	String	10		Yes
1	ScheduleId	String	50		No
1	SchedulePlugDays	Boolean	NA		No
1	PlugDays	NA	NA		NA
1	ScheduleWbs	Boolean	NA		No
1	IsTerminal	Boolean	NA		Yes
1	PlannedQuantity	Number	22,11		No
1	WorkHoursPerShift	Number	22,11		No
1	Scale1	Number	22,11		No
1	Scale2	Number	22,11		No
1	Scale3	Number	22,11		No
1	WorkHoursRules	Number	22,11		No
1	Start ³	String	25		No
1	Finish ³	String	25		No
1	CostSource	String	50		No
1	CostSegment	String	50		No
1	QuantityDriver	String	50		No
1	CostCurve	String	50		No
1	QuoteGroup	String	50		No
1	Area	String	50		No
1	WorkType	String	50		No
1	Estimator	String	50		No
1	EstimateTag1	String	50		No

Depth	Name	Type	Precision ¹	Parent	Req.
1	EstimateTag2	String	50		No
1	D_Group	String	50		No
1	Tag8	String	50		No
1	RiskLevel	String	50		No
1	IssueNumber	String	50		No
1	CCO	String	50		No
1	SAPStatusControl	String	50		No
1	WBSCClientCode1	String	50		No
1	WBSCClientCode2	String	50		No
1	Rework	String	50		No
1	DistrictSpecificTag16	String	50		No
1	Tag17	String	50		No
1	Tag18	String	50		No
1	DistrictSpecificTag19	String	50		No
1	Tag21	String	50		No
1	Tag22	String	50		No
1	Tag23	String	50		No
1	Tag24	String	50		No
1	Tag25	String	50		No
1	RiskDescription	String	50		No
1	Superintendent	String	50		No
1	DistrictSpecificUserDefined3	String	50		No
1	UserDefined4	String	50		No
1	UserDefined5	String	50		No
1	UserDefined6	String	50		No
1	UserDefined7	String	50		No
1	UserDefined8	String	50		No
1	WorkPlanId	String	50		No
1	HideInProgress	Boolean	NA		Yes
1	UserDefined11	String	50		No
1	UserDefined12	String	50		No
1	UserDefined13	String	50		No
1	UserDefined14	String	50		No
1	UserDefined15	String	50		No

Depth	Name	Type	Precision ¹	Parent	Req.
1	DataSource	String	50		No
1	ReferenceNumber	String	50		No
1	AllowAsBuiltChoice	String	50		No
1	QuantityCheck	Boolean	NA		No
1	QuantityWarning	Boolean	NA		No
1	Suspend	Boolean	NA		No
1	SourceSystemName	String	50		No
1	IsActive	Boolean	NA		Yes
1	ExternalSystemConfirmation	Number	10,0		Yes
1	ContributePrimaryToPrimaryQuantity	Boolean	NA		No
1	ContributePrimaryToSecondaryQuantity	Boolean	NA		No
1	ContributeSecondaryToSecondaryQuantity	Boolean	NA		No
1	Segment1	String	50		No
1	Segment2	String	50		No
1	Segment3	String	50		No
1	Segment4	String	50		No
1	Tag12	String	50		No
1	UserDefined10	String	50		No

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

2 – Natural Key field.

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

4 – See Field Description to determine if this field is required.

Field Descriptions

NOTE:

Fields names with an asterisk (*) are validated against a customer-defined list of allowed values for the field within the project. If the value provided in the integration cannot be validated, the provided value is ignored.

Name	Description	Example
CbCostItemDetails	If your business model includes locking your budget to see real budget values populated within Control, include this array and those fields not marked as Not Applicable within the JSON. If your business process does not include Locking your budget, this entire array can be ignored.	

Name	Description	Example
CEDetailCostCategories	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
Category	<i>Not used. Reserved for future functionality.</i>	Not applicable
Cost	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	<i>Not used. Reserved for future functionality.</i>	Not applicable
CBDetailCostCategories	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
Category	<i>Not used. Reserved for future functionality.</i>	Not applicable
Cost	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	<i>Not used. Reserved for future functionality.</i>	Not applicable
OBDetailCostCategories	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
Category	<i>Not used. Reserved for future functionality.</i>	Not applicable
Cost	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	If your business model includes locking your budget to see real budget values populated within Control, send a value of CB to indicate a Current Budget. If your business process does not include locking your budget, this field can be ignored. Always send a value of CB to indicate Current Budget.	CB
ManHoursDurationDriven	<i>Not used. Reserved for future functionality.</i>	Not applicable
ManHoursNonDurationDriven	<i>Not used. Reserved for future functionality.</i>	Not applicable
ManHoursMaintenance	<i>Not used. Reserved for future functionality.</i>	Not applicable
ShiftsDurationDriven	<i>Not used. Reserved for future functionality.</i>	Not applicable
ShiftsNonDurationDriven	<i>Not used. Reserved for future functionality.</i>	Not applicable
ManCount	<i>Not used. Reserved for future functionality.</i>	Not applicable
Scale1	<i>Not used. Reserved for future functionality.</i>	Not applicable
Scale2	<i>Not used. Reserved for future functionality.</i>	Not applicable
Scale3	<i>Not used. Reserved for future functionality.</i>	Not applicable
WorkHoursRules	<i>Not used. Reserved for future functionality.</i>	Not applicable
Quantity	<i>Not used. Reserved for future functionality.</i>	Not applicable
SecondaryQuantity	<i>Not used. Reserved for future functionality.</i>	Not applicable
ManHours	<i>Not used. Reserved for future functionality.</i>	Not applicable

Name	Description	Example
TakeOffQuantity	<i>Not used. Reserved for future functionality.</i>	Not applicable
UnitOfMeasure	If your business model includes locking your budget to see real budget values populated within Control, send the applicable unit of measure name for the cost item being referenced. If your business process does not include locking your budget, this field can be ignored. The value sent in this field must match a valid Unit of Measure Name that exists within InEight.	PLS
SecondaryUnitOfMeasure	<i>Not used. Reserved for future functionality.</i>	Not applicable
Currency	<i>Not used. Reserved for future functionality.</i>	Not applicable
Notes	<i>Not used. Reserved for future functionality.</i>	Not applicable
EquipHours	<i>Not used. Reserved for future functionality.</i>	Not applicable
EquipHoursQuantity	<i>Not used. Reserved for future functionality.</i>	Not applicable
CeCostItemDetails	Array header of Current Estimate of the cost item details.	NA
CEDetailCostCategories	Array header of how Current Estimate value of the cost item has been assigned across cost categories.	NA
SourceSystemId	Unique identifier of Current Estimate cost category.	8390fb998f5d425b89b4bce9819a36b9
Category	Current Estimate cost category.	Undefined Labor
Cost	Current Estimate cost.	3752.17
CostItemGroup	Current Estimate cost item group.	CE
CBDetailCostCategories	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
Category	<i>Not used. Reserved for future functionality.</i>	Not applicable
Cost	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	<i>Not used. Reserved for future functionality.</i>	Not applicable
OBDetailCostCategories	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
Category	<i>Not used. Reserved for future functionality.</i>	Not applicable
Cost	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	Unique identifier of Current Estimate cost category.	6390fb998f5d425b89b4bce9819a36b9
CostItemGroup	Current Estimate cost item group.	CE
ManHoursDurationDriven	Current Estimate man-hours.	50.0
ManHoursNonDurationDriven	Current Estimate man-hours non-duration.	50.0

Name	Description	Example
ManHoursMaintenance	<i>Not used. Reserved for future functionality.</i>	Not applicable
ShiftsDurationDriven	Current Estimate shift duration driven.	50.0
ShiftsNonDurationDriven	Current Estimate shift non-duration driven.	50.0
ManCount	Current Estimate man-hours.	50
Scale1	Current Estimate scale one.	70
Scale2	Current Estimate scale two.	20
Scale3	Current Estimate scale three.	10
WorkHoursRules	Current Estimate work hours rules.	0.0
Quantity	Current Estimate quantity.	225.0
SecondaryQuantity	Current Estimate secondary quantity.	0.0
ManHours	Current Estimate man-hours.	50.0
TakeOffQuantity	Current Estimate takeoff quantity.	1.0
UnitOfMeasure	Current Estimate unit of measurement.	LF
SecondaryUnitOfMeasure	Current Estimate secondary unit of measurement.	PLS
Currency	Current Estimate currency.	USD
Notes	Current Estimate notes entered by user.	Sample Notes
EquipHours	Current Estimate equipment hours.	0.0
EquipHoursQuantity	Current Estimate equipment hours quantity.	0.0
ObCostItemDetails	If your business model includes locking your original budget to see real budget values populated within Control, include this array and the fields not marked as Not Applicable within the JSON. If your business process does not include locking your original budget, this entire array can be ignored.	
CEDetailCostCategories	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
Category	<i>Not used. Reserved for future functionality.</i>	Not applicable
Cost	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	<i>Not used. Reserved for future functionality.</i>	Not applicable
CBDetailCostCategories	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
Category	<i>Not used. Reserved for future functionality.</i>	Not applicable
Cost	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	<i>Not used. Reserved for future functionality.</i>	Not applicable
OBDetailCostCategories	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable

Name	Description	Example
Category	<i>Not used. Reserved for future functionality.</i>	Not applicable
Cost	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	<i>Not used. Reserved for future functionality.</i>	Not applicable
SourceSystemId	<i>Not used. Reserved for future functionality.</i>	Not applicable
CostItemGroup	If your business model includes locking your original budget to see real budget values populated within Control, send a value of "OB" to indicate an Original Budget. If your business process does not include locking your original budget, this field can be ignored. Always send a value of OB to indicate Original Budget	OB
ManHoursDurationDriven	<i>Not used. Reserved for future functionality.</i>	Not applicable
ManHoursNonDurationDriven	<i>Not used. Reserved for future functionality.</i>	Not applicable
ManHoursMaintenance	<i>Not used. Reserved for future functionality.</i>	Not applicable
ShiftsDurationDriven	<i>Not used. Reserved for future functionality.</i>	Not applicable
ShiftsNonDurationDriven	<i>Not used. Reserved for future functionality.</i>	Not applicable
ManCount	<i>Not used. Reserved for future functionality.</i>	Not applicable
Scale1	<i>Not used. Reserved for future functionality.</i>	Not applicable
Scale2	<i>Not used. Reserved for future functionality.</i>	Not applicable
Scale3	<i>Not used. Reserved for future functionality.</i>	Not applicable
WorkHoursRules	<i>Not used. Reserved for future functionality.</i>	Not applicable
Quantity	<i>Not used. Reserved for future functionality.</i>	Not applicable
SecondaryQuantity	<i>Not used. Reserved for future functionality.</i>	Not applicable
ManHours	<i>Not used. Reserved for future functionality.</i>	Not applicable
TakeOffQuantity	<i>Not used. Reserved for future functionality.</i>	Not applicable
UnitOfMeasure	If your business model includes locking your original budget to see real budget values populated within Control, send the applicable Unit of Measure Name for the Cost Item being referenced. If your business process does not include locking your original budget, this field can be ignored. The value sent in this field must match a valid Unit of Measure Name that exists within InEight.	PLS
SecondaryUnitOfMeasure	<i>Not used. Reserved for future functionality.</i>	Not applicable
Currency	<i>Not used. Reserved for future functionality.</i>	Not applicable
Notes	<i>Not used. Reserved for future functionality.</i>	Not applicable
EquipHours	<i>Not used. Reserved for future functionality.</i>	Not applicable
EquipHoursQuantity	<i>Not used. Reserved for future functionality.</i>	Not applicable
AccountCode	Account code value provided in this field must match a valid account code in the Master Data.	50.03.16.000.04

Name	Description	Example
PayItemSourceSystemId	Pay item sources system ID	223421943
ProjectNumber	External project ID of the project.	Inglestad
SourceSystemId	Unique identifier created by the system of record used as the primary method of specifying a unique record.	1390fb998f5d425b89b4bce9819a36b9
CBSPosition	Cost item position	1.1.1.1.1.2
OptionalCode	<i>Not used. Reserved for future functionality.</i>	Not applicable
Description	Cost item description	Remove Chain Link Fence
PhaseCode	Cost items phase code	1216
CurrencyCode	Currency code for the cost item Detail	CAD
ScheduleId	Schedule ID for external system	HD.0000197
SchedulePlugDays	Scheduled plug days or not	true
PlugDays	<i>Not used. Reserved for future functionality.</i>	Not applicable
ScheduleWbs	Scheduled WBS or not	false
IsTerminal	Is terminal cost items status	true
PlannedQuantity	Planned Quantity	0.0
WorkHoursPerShift	Work hours	8.0
Scale1	Cost items scale info	100.0
Scale2	Cost items scale2 info	0.0
Scale3	Cost items scale3 info	0.0
WorkHoursRules	Work hours	8.0
Start	Schedule start day	0001-01-01T00:00:00+00:00
Finish	Schedule finish day	0001-01-01T00:00:00+00:00
CostSource	Cost sources	Detail
CostSegment	Cost segments	Job Overhead
QuantityDriver	Quantity drivers	Superior CI
CostCurve	Cost Curve	Linear
QuoteGroup*	Quote group	16602-Panelboards
Area*	Tag Area	Get/Build Work Functional
WorkType*	Work Type	Eastern District Owned
Estimator*	Estimator Name	TBD2

Name	Description	Example
EstimateTag1*	Estimator Tag 1	002-Mechanical & Electrical Demolition
EstimateTag2*	Estimator Tag 2	005-Bush/Prep Concrete
D_Group*	Discipline Group	050- Removals & Demolition
Tag8*	Open list field	NO REAL LABOR
RiskLevel*	Risk level	Low
IssueNumber*	Issue number	0100
CCO*	Status of a Contract Change Order	Executed
SAPStatusControl*	Determines if the cost item is locked for further claiming of actuals with the possible values of true or false. (This reflects the field in the UI of As-built lock.)	True
WBSClientCode1*	WBS Client Code 1	PHASE 1
WBSClientCode2*	WBS Client Code 2	PHASE 2
Rework*	Determines if the cost item represents rework. The possible values are Yes or No.	Yes
DistrictSpecificTag16*	Open list field	CH/TB
Tag17*	Open list field	Project Controls
Tag18*	Open list field	OneIM FTE
DistrictSpecificTag19*	Open list field	AG Electrical
Tag21*	Open list field	Temporary Excavation Support
Tag22*	Open list field	SBE Participation
Tag23*	Open list field	00 Template
Tag24*	Open list field	Earthworks Code
Tag25*	Open list field	Spread 3
RiskDescription	Risk description	Moderate
Superintendent	Superintendent name	SHIELDS
DistrictSpecificUserDefined3	Free-form text field.	Account Code Revision Sept 2015
UserDefined4	Free-form text field.	7.01.004– Transmission Line Construction
UserDefined5	Free-form text field.	6.LVA.15 Pile Driving
UserDefined6	Free-form text field.	6.LVA.16 Pumps
UserDefined7	Free-form text field.	6.LVA.11 Generators
UserDefined8	Free-form text field.	Unbilled Equipment
WorkPlanId	Work Plan ID	001

Name	Description	Example
HideInProgress	Determines if the cost item is visible to InEight Plan and Progress applications and is used to prevent work planning against the cost item. Use true to hide the cost item from work planning of false to make visible.	False
UserDefined11	Free-form text field.	6.LVA.30 Survey
UserDefined12	Free-form text field.	6.LVA.31 Communication
UserDefined13	Free-form text field.	16200-600V 1/C Wire
UserDefined14	Free-form text field.	16207-Specialty Cable
UserDefined15	Free-form text field.	16200-600V 1/C Wire
DataSource	Name of the external system that is using the integration. Collaborate with InEight to identify a specific value to use in this field.	HD
ReferenceNumber	Reference Number	AB001572
AllowAsBuiltChoice	Allow As-Built values for quantity claiming.	All
QuantityCheck	Quantity Check	false
QuantityWarning	Quantity Warning	false
Suspend	Suspend status	false
SourceSystemName	Name of the external system that is using the integration. Work with InEight to provision a unique value for this field.	D365
IsActive	Sending a value of <i>False</i> in this field causes the record to be soft deleted from the InEight cloud platform. If a value is not provided, the default value <i>True</i> is used.	True
ExternalSystemConfirmation	Used to identify if the imported cost item is confirmed as part of the Confirmation workflow. The possible values are: - Confirmed - Pending Confirmation - Pending, will be auto-confirmed subsequently	1
ContributePrimaryToPrimaryQuantity	Determines if the cost item contributes its Primary Quantity to its parent cost item's Primary Quantity when calculating rolled up values.	True
ContributePrimaryToSecondaryQuantity	Determines whether the cost item contributes its Primary Quantity to its parent cost item's Secondary Quantity when calculating rolled up values.	False
ContributeSecondaryToSecondaryQuantity	Determines whether the cost item contributes its Secondary Quantity to its parent cost item's Secondary Quantity when calculating rolled up values.	True
Segment1	Configurable based on the organization setting of budget segment to what this field represents.	varies

Name	Description	Example
Segment2	Configurable based on the organization setting of budget segment to what this field represents.	varies
Segment3	Configurable based on the organization setting of budget segment to what this field represents.	varies
Segment4	Configurable based on the organization setting of budget segment to what this field represents.	varies
Tag12*	Free-form text field	Free text
UserDefined10	Free-form text field	Free text

Exclude Summary

This integration includes an option that can be sent in the header of the JSON submitted as X-ExcludeSummary. If in the header field X-ExcludeSummary value is *True*, then summary calculations will not be completed in the JSON that is sent. Examples of fields that would not have the summary calculations are Forecast take off quantity, CE total cost, CE total manhours, and other such fields that are numeric.

Integration Status

There are multiple ways to get the status associated with the Cost Item API, depending on the issue or how the customer wants to view the status of the integration.

- Results are available through the import history, which includes error messaging in a downloadable file.
- Sending a URL within the header of the JSON the variable X-TaskCompleteCallbackURI sends the results back to that provided URL. The results include the project, status, and any reasons for failure.
- Results can be retrieved from the standard API request message as shown in the table below.

API/Entity Logic	Condition	Code	Message
API validation	Project Number provided does not exist.	400	Project Number [Project Number] is not available
API Validation	Empty payload	400	"Project Number is not available", "FieldName": "Project Number"
API validation	Payload has more than one record with the same Project Number.	400	More than one ProjectNumber is provided in Payload.
API Validation	Required Fields are not Provided. [Field Name] options are: • AllowAsBuiltChoice • QuantityDriver • CostSegment • CostSource • CBSPosition	400	"Project: [Project Number], Phase Code: [Phase Code] has Invalid Value: (Value is not Provided)", "FieldName": "[Field Name]"
API Validation	Valid Payload	200	

Sample JSON

```
{
  "CostItem": {
    "CbCostItemDetails": [{
      "CEDetailCostCategories": [],
      "CBDetailCostCategories": [{
        "SourceSystemId": "8390fb998f5d425b89b4bce9819a36b9:30",
        "Category": "Undefined Labor",
        "Cost": 3752.17,
        "CostItemGroup": "CB"
      }],
      "OBDetailCostCategories": [],
      "SourceSystemId": "8390fb998f5d425b89b4bce9819a36b9",
      "CostItemGroup": "CB",
      "ManHoursDurationDriven": 50.0,
      "ManHoursNonDurationDriven": 0.0,
      "ManHoursMaintenance": 0.0,
      "ShiftsDurationDriven": 0.0,
      "ShiftsNonDurationDriven": 0.0,
      "ManCount": 0,
      "Scale1": 0.0,
      "Scale2": 0.0,
      "Scale3": 0.0,
      "WorkHoursRules": 0.0,
      "Quantity": 225.0,
      "SecondaryQuantity": 0.0,
      "ManHours": 50.0,
      "TakeOffQuantity": 0.0,
      "UnitOfMeasure": "LF",
      "SecondaryUnitOfMeasure": "",
      "Currency": "USD",
      "Notes": "",
      "EquipHours": 0.0,
      "EquipHoursQuantity": 0.0
    }],
    "CeCostItemDetails": [{
      "CEDetailCostCategories": [{
        "SourceSystemId": "8390fb998f5d425b89b4bce9819a36b9:30",
        "Category": "Undefined Labor",
        "Cost": 3752.17,
        "CostItemGroup": "CE"
      }],
      "CBDetailCostCategories": [],
      "OBDetailCostCategories": [],
      "SourceSystemId": "8390fb998f5d425b89b4bce9819a36b9",
      "CostItemGroup": "CE",
      "ManHoursDurationDriven": 50.0,
      "ManHoursNonDurationDriven": 0.0,
      "ManHoursMaintenance": 0.0,
      "ShiftsDurationDriven": 0.0,
      "ShiftsNonDurationDriven": 0.0,
      "ManCount": 0,
      "Scale1": 0.0,
      "Scale2": 0.0,
      "Scale3": 0.0,

```

```

    "WorkHoursRules": 0.0,
    "Quantity": 0.0,
    "SecondaryQuantity": 0.0,
    "ManHours": 50.0,
    "TakeOffQuantity": 225.0,
    "UnitOfMeasure": "LF",
    "SecondaryUnitOfMeasure": "",
    "Currency": "USD",
    "Notes": "",
    "EquipHours": 0.0,
    "EquipHoursQuantity": 0.0
  ],
  "ObCostItemDetails": [{
    "CEDetailCostCategories": [],
    "CBDetailCostCategories": [],
    "OBDetailCostCategories": [{
      "SourceSystemId": "8390fb998f5d425b89b4bce9819a36b9:30",
      "Category": "Undefined Labor",
      "Cost": 3752.17,
      "CostItemGroup": "OB"
    }],
    "SourceSystemId": "8390fb998f5d425b89b4bce9819a36b9",
    "CostItemGroup": "OB",
    "ManHoursDurationDriven": 50.0,
    "ManHoursNonDurationDriven": 0.0,
    "ManHoursMaintenance": 0.0,
    "ShiftsDurationDriven": 0.0,
    "ShiftsNonDurationDriven": 0.0,
    "ManCount": 0,
    "Scale1": 0.0,
    "Scale2": 0.0,
    "Scale3": 0.0,
    "WorkHoursRules": 0.0,
    "Quantity": 225.0,
    "SecondaryQuantity": 0.0,
    "ManHours": 50.0,
    "TakeOffQuantity": 0.0,
    "UnitOfMeasure": "LF",
    "SecondaryUnitOfMeasure": "",
    "Currency": "USD",
    "Notes": "",
    "EquipHours": 0.0,
    "EquipHoursQuantity": 0.0
  ],
  "AccountCode": "50.03.16.000.04",
  "PayItemSourceSystemId": "00000000000000000000000000000000",
  "ProjectNumber": "IngleStad",
  "SourceSystemId": "8390fb998f5d425b89b4bce9819a36b9",
  "CBSPosition": "1.1.1.1.2",
  "OptionalCode": "",
  "Description": "Remove Chain Link Fence",
  "PhaseCode": "1216",
  "CurrencyCode": "USD",
  "ScheduleId": "HD.0000197",
  "SchedulePlugDays": true,
  "PlugDays": 2.05,
  "ScheduleWbs": false,

```

```

"IsTerminal": true,
"PlannedQuantity": 0.0,
"WorkHoursPerShift": 8.0,
"Scale1": 0.0,
"Scale2": 0.0,
"Scale3": 0.0,
"WorkHoursRules": 8.0,
"Start": "0001-01-01T00:00:00+00:00",
"Finish": "0001-01-01T00:00:00+00:00",
"CostSource": "Detail",
"CostSegment": "Job Overhead",
"QuantityDriver": "Superior CI",
"CostCurve": "Linear",
"QuoteGroup": "",
"Area": "",
"WorkType": "",
"Estimator": "",
"EstimateTag1": "",
"EstimateTag2": "",
"D_Group": "050- Removals & Demolition",
"Tag8": "",
"RiskLevel": "",
"IssueNumber": "",
"CCO": "",
"SAPStatusControl": "",
"WBSClientCode1": "",
"WBSClientCode2": "",
"Rework": "",
"DistrictSpecificTag16": "",
"Tag17": "",
"Tag18": "",
"DistrictSpecificTag19": "",
"Tag21": "",
"Tag22": "",
"Tag23": "",
"Tag24": "",
"Tag25": "",
"RiskDescription": "",
"Superintendent": "SHIELDS",
"DistrictSpecificUserDefined3": "",
"UserDefined4": "",
"UserDefined5": "",
"UserDefined6": "",
"UserDefined7": "",
"UserDefined8": "Unbilled Equipment",
"WorkPlanId": "",
"HideInProgress": "",
"UserDefined11": "",
"UserDefined12": "",
"UserDefined13": "",
"UserDefined14": "",
"UserDefined15": "",
"DataSource": "",
"ReferenceNumber": "",
"AllowAsBuiltChoice": "All",
"QuantityCheck": false,
"QuantityWarning": false,

```

```
"Suspend": false,  
"SourceSystemName": "ConformedBudget",  
"IsActive": true,  
"ExternalSystemConfirmation": 1,  
"ContributePrimaryToPrimaryQuantity": true,  
"ContributePrimaryToSecondaryQuantity": false,  
"ContributeSecondaryToSecondaryQuantity": true,  
"Segment1": "",  
"Segment2": "",  
"Segment3": "",  
"Segment4": "",  
"Tag12": "",  
"UserDefined10": ""  
}  
}
```

Pay Items - Sync

Direction		From InEight Control
Frequency		On-demand from users of Control.
Trigger Methods		Manually triggered by user within Control UI.
Average Payload Size		Entire entity – Tens of thousands of records.
APIM Name		Not available through APIM.
InEight Control	Starting Version	19.1
	Ending Version	
Configuration Entity Name		Control: Pay Item

Fields

Depth	Name	Type	Precision ¹	Parent
1	PayItems	Object	NA	
2	PayItem	Array	NA	PayItems
3	ProjectDisplayNumber	String	50	PayItem
3	PayItemNumber	String	100	PayItem
3	Description	String	250	PayItem
3	LineNumber	Number	Integer	PayItem
3	RowNumber	Number	Integer	PayItem
3	TotalPrice	Decimal	11,11	PayItem
3	UnitPrice	Decimal	11,11	PayItem
3	PayQuantity	Decimal	11,11	PayItem
3	ForecastTakeOffQuantity	Decimal	11,11	PayItem
3	UOM	String	255	PayItem
3	IsBilled	Boolean	NA	PayItem
3	BillingMethod	String	50	PayItem
3	ChangeOrderCount	Number	25	PayItem
3	SalesOrder	String	250	PayItem
3	PayItemTag1	String	255	PayItem
3	PayItemTag2	String	255	PayItem
3	PayItemTag3	String	255	PayItem

Depth	Name	Type	Precision ¹	Parent
3	PayItemTag4	String	255	PayItem
3	PayItemTag5	String	255	PayItem
3	PayItemTag6	String	255	PayItem
3	PayItemTag7	String	255	PayItem
3	PayItemTag8	String	255	PayItem
3	PayItemTag9	String	255	PayItem
3	PayItemTag10	String	255	PayItem
3	PayItemUserDefined1	String	250	PayItem
3	PayItemUserDefined2	String	250	PayItem
3	PayItemUserDefined3	String	250	PayItem
3	PayItemUserDefined4	String	250	PayItem
3	PayItemUserDefined5	String	250	PayItem
3	PayItemUserDefined6	String	250	PayItem
3	PayItemUserDefined7	String	250	PayItem
3	PayItemUserDefined8	String	250	PayItem
3	PayItemUserDefined9	String	250	PayItem
3	PayItemUserDefined10	String	250	PayItem
3	SourceSystemId	String	150	PayItem
3	OriginalPrice	Decimal	11,11	PayItem
3	OriginalPayQuantity	Decimal	11,11	PayItem
3	OriginalUnitPrice	Decimal	11,11	PayItem
3	OriginalBillingMethod	String	50	PayItem
3	OriginalForecastTakeOffQuantity	Decimal	11,11	PayItem
3	IsPayItemLocked	Boolean	N/A	PayItem
3	PayItemPosition	String	100	PayItem
3	IsTerminal	Boolean	N/A	PayItem
3	RetainagePercentage	Decimal	11,11	PayItem
3	RetentionWithHeld	Decimal	11,11	PayItem
3	NetBilledRevenue	Decimal	11,11	PayItem
1	LogToken	String	50	

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
PayItems	Array of pay items.	
PayItem	Array of the pay item records. All fields within this array can be repeated for each pay item that has data.	
ProjectDisplayNumber	Identifies the associated project. Project Display is unique to a project.	TestProject
PayItemNumber	Unique identifier of the pay item.	Pay Item 1
Description	Description of the pay item.	Pay Item 1
LineNumber	Line in the pay structure that will show.	1
RowNumber	Row in which this pay item can be displayed in the order of the pay items.	1
TotalPrice	Amount of payment expected from the owner.	100000
UnitPrice	Amount of payment that is expected per quantity.	1.00
PayQuantity	Amount of quantity that will be paid for by the owner.	100000
ForecastTakeOffQuantity	Quantity that is used to forecast how much quantity this pay item will take to complete.	1
UOM	Unit of measure for the pay item.	K\$
IsBilled	Indicator if the pay item has been billed.	False
BillingMethod	Method in which the owner pays for the work. The value that appears in this field is from a standard list available in Control and represents a specific option chosen for the Pay Item record.	Fixed Final Price
ChangeOrderCount	Number of change orders that occurred on this pay item.	2
SalesOrder	Overall document that is associated with the pay item.	510000001
PayItemTag1	Customer/Project specific list of options to help filter	
PayItemTag2	Customer/Project specific list of options to help filter	
PayItemTag3	Customer/Project specific list of options to help filter	
PayItemTag4	Customer/Project specific list of options to help filter	
PayItemTag5	Customer/Project specific list of options to help filter	
PayItemTag6	Customer/Project specific list of options to help filter	
PayItemTag7	Customer/Project specific list of options to help filter	
PayItemTag8	Customer/Project specific list of options to help filter	
PayItemTag9	Customer/Project specific list of options to help filter	
PayItemTag10	Customer/Project specific list of options to help filter	
PayItemUserDefined1	Free-form text field provided to give more categorizing and filter capabilities for the project.	

Name	Description	Example
PayItemUserDefined2	Free-form text field provided to give more categorizing and filter capabilities for the project.	
PayItemUserDefined3	Free-form text field provided to give more categorizing and filter capabilities for the project.	
PayItemUserDefined4	Free-form text field provided to give more categorizing and filter capabilities for the project.	
PayItemUserDefined5	Free-form text field provided to give more categorizing and filter capabilities for the project.	
PayItemUserDefined6	Free-form text field provided to give more categorizing and filter capabilities for the project.	
PayItemUserDefined7	Free-form text field provided to give more categorizing and filter capabilities for the project.	
PayItemUserDefined8	Free-form text field provided to give more categorizing and filter capabilities for the project.	
PayItemUserDefined9	Free-form text field provided to give more categorizing and filter capabilities for the project.	
PayItemUserDefined10	Free-form text field provided to give more categorizing and filter capabilities for the project.	
SourceSystemId	External unique identifier of the pay item for updates of cost items this is the matching identifier.	363.1
OriginalPrice	Original price of the pay item.	100000
OriginalPayQuantity	Original quantity of the pay item.	100000
OriginalUnitPrice	Original unit Price of the pay item.	1
OriginalBillingMethod	Original billing method of the pay item.	Fixed Final Price
OriginalForecastTakeOffQuantity	Original forecast take off quantity of the pay item.	100000
IsPayItemLocked	Indicates if the price of the pay item is locked.	False
PayItemPosition	Indicates the location of the pay item in the hierarchy.	1.1.3
IsTerminal	Indicates whether the pay item is terminal or not.	True
RetainagePercentage	Percent that is to be retained on each bill for that pay item.	10.0
RetentionWithHeld	Sum of all the retention that is withheld for a pay item.	10
NetBilledRevenue	Sum of all the net billed revenue amounts on a pay item.	90
LogToken	Unique identifier (GUID) that can be used when viewing or obtaining error records in InEight error logging for each integration request. It is important to ensure the LogToken sent in this field is matched correctly to the request that is being confirmed. InEight uses the log token in the confirmation to flag data as having been synchronized with the external system.	Cb68a7a1-31c8-430f-8a3c-43572b84f830

Sample JSON

```
{
  "PayItems": {
    "PayItem": [
      {
        "ProjectDisplayNumber": "190009",
        "PayItemNumber": "1",
        "Description": "1",
        "LineNumber": 1,
        "RowNumber": 1,
        "TotalPrice": 1234500.0,
        "UnitPrice": 123400.0,
        "PayQuantity": 10.00405186386,
        "ForecastTakeOffQuantity": 0.0,
        "UOM": "PLS",
        "IsBilled": false,
        "BillingMethod": "Fixed Final Price",
        "ChangeOrderCount": 0,
        "SalesOrder": "",
        "PayItemTag1": "",
        "PayItemTag2": "",
        "PayItemTag3": "",
        "PayItemTag4": "",
        "PayItemTag5": "",
        "PayItemTag6": "",
        "PayItemTag7": "",
        "PayItemTag8": "",
        "PayItemTag9": "",
        "PayItemTag10": "",
        "PayItemUserDefined1": "",
        "PayItemUserDefined2": "",
        "PayItemUserDefined3": "",
        "PayItemUserDefined4": "",
        "PayItemUserDefined5": "",
        "PayItemUserDefined6": "",
        "PayItemUserDefined7": "",
        "PayItemUserDefined8": "",
        "PayItemUserDefined9": "",
        "PayItemUserDefined10": "",
        "SourceSystemId": "14991.a67fe9e4-d1fa-4f90-91e5-fc63dd62ff80",
        "OriginalPrice": 0.0,
        "OriginalPayQuantity": 0.0,
        "OriginalUnitPrice": 0.0,
        "OriginalBillingMethod": "",
        "OriginalForecastTakeOffQuantity": 0.0,
        "IsPayItemLocked": false,
        "PayItemPosition": "1",
        "IsTerminal": true,
        "RetainagePercentage": 0.0,
        "RetentionWithHeld": 0.0,
        "NetBilledRevenue": 0.0
      },
      {
        "ProjectDisplayNumber": "190009",
        "PayItemNumber": "2",
```

```
    "Description": "2",
    "LineNumber": 2,
    "RowNumber": 2,
    "TotalPrice": 240000.0,
    "UnitPrice": 20.0,
    "PayQuantity": 12000.0,
    "ForecastTakeOffQuantity": 0.0,
    "UOM": "PLS",
    "IsBilled": false,
    "BillingMethod": "Unit Price",
    "ChangeOrderCount": 0,
    "SalesOrder": "",
    "PayItemTag1": "",
    "PayItemTag2": "",
    "PayItemTag3": "",
    "PayItemTag4": "",
    "PayItemTag5": "",
    "PayItemTag6": "",
    "PayItemTag7": "",
    "PayItemTag8": "",
    "PayItemTag9": "",
    "PayItemTag10": "",
    "PayItemUserDefined1": "",
    "PayItemUserDefined2": "",
    "PayItemUserDefined3": "",
    "PayItemUserDefined4": "",
    "PayItemUserDefined5": "",
    "PayItemUserDefined6": "",
    "PayItemUserDefined7": "",
    "PayItemUserDefined8": "",
    "PayItemUserDefined9": "",
    "PayItemUserDefined10": "",
    "SourceSystemId": "14991.1809a2cb-5480-4d60-980e-86f47a572a83",
    "OriginalPrice": 240000.0,
    "OriginalPayQuantity": 12000.0,
    "OriginalUnitPrice": 20.0,
    "OriginalBillingMethod": "Unit Price",
    "OriginalForecastTakeOffQuantity": 0.0,
    "IsPayItemLocked": true,
    "PayItemPosition": "2",
    "IsTerminal": true,
    "RetainagePercentage": 0.0,
    "RetentionWithHeld": 0.0,
    "NetBilledRevenue": 0.0
  },
  "LogToken": "8a8ddf48-a2b1-4b3c-b082-c2064fda49c5"
}
```

Verification

Pay items that are pushed with this integration are shown in the InEight Control product Workspaces module on the Pay Items tab.



190002 (190002)

Control

Workspaces

 173

<

CS

PAY ITEMS

CHANGE REGISTER

AUDIT LOG

>

Actions





Drag a column header and drop it here to group by that column

	Pay item	Dr	Line number	Row number	Total price	Unit price	Pay quantity	Forecast (T/O) Qty	UoM	Is billed	Billing method	Change order
☐	001	Main ...	1	1	\$ 16,957,000.00	\$ 16,957,000.00	1.00	1.00	PLS	☐	Unit Price	
☒	1	Chan...	1	1	\$ 0.00	\$ 0.00	0.00	1.00	Each	☐	Unit Price	

Status Codes

There are no integration status codes.

Actual Quantities - Sync

The Actuals quantities push sends actual quantities at the transaction level to the ERP. When the actual quantity has been processed successfully by a previous sync, then the quantity will not be resent in the next sync. If the sync is not successful, then the quantity will be resent on the next sync.

Direction		From InEight Control
Frequency		Initiated at any time by a user in the Control application
Trigger Methods		Manually initiated in the UI
Average Payload Size		Dependent on frequency of integration and size of project. For a large project that initiates updates weekly, there are potentially thousands of records.
APIM Name		Not available through APIM.
InEight Control	Starting Version	18.1
	Ending Version	
Configuration Entity Name		Control: Actual Quantity

Fields

Depth	Name	Type	Precision	Parent
1	ActualClaimedQuantities_HDS	Object		
2	CostItemDetail	Array		ActualClaimedQuantities_HDS
3	ProjectId	String	50	CostItemDetail
3	PhaseCode	String	50	CostItemDetail
3	InstalledQuantity	String	22	CostItemDetail
3	UnitOfMeasure	String	50	CostItemDetail
3	PostingDate ¹	String	25	CostItemDetail
3	DocumentDate ¹	String	25	CostItemDetail
3	Notes	String	500	CostItemDetail
3	ActualsUserDefined1	String	25	CostItemDetail
3	ActualsUserDefined2	String	25	CostItemDetail
3	ActualsUserDefined3	String	250	CostItemDetail
3	ActualsUserDefined4	String	250	CostItemDetail
3	ActualsUserDefined5	String	250	CostItemDetail
3	ActualsUserDefined6	String	250	CostItemDetail
3	EstimateResource	String	50	CostItemDetail
1	Count	Number	Integer	ActualClaimedQuantities_HDS

Depth	Name	Type	Precision	Parent
1	LogToken	String	50	ActualClaimedQuantities_HDS

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

Field Descriptions

Name	Description	Example
ProjectId	Project Display as shown in the UI, which unique to a project.	10000
PhaseCode	Phase code of the cost item.	1586
InstalledQuantity	Quantity that has been claimed against the cost item.	-6902.000000000000
UnitOfMeasure	Unit of measure for the installed quantity.	CY
PostingDate	Date on which the claim was posted into the system. If there are several transactions for the same phase code across different posting dates, each phase code/posting date combination will have a separate record in the JSON.	2019-02-05T15:41:29+00:00
DocumentDate	Date on which the integration has been executed.	2019-02-05T15:41:29+00:00
Notes	Any notes that have been applied to the cost item.	A note would go here
Count	A count of the number of transactions that is included in the JSON.	2
ActualsUserDefined1	A date field associated with the actual transaction.	2024-09-09
ActualsUserDefined2	A date field associated with the actual transaction.	2024-09-09
ActualsUserDefined3	A free-form text field associated with the actual transaction.	User defined 3
ActualsUserDefined4	A free-form text field associated with the actual transaction.	User defined 4
ActualsUserDefined5	A free-form text field associated with the actual transaction.	User defined 5
ActualsUserDefined6	A free-form text field associated with the actual transaction.	User defined 6
EstimateResource	An estimate resource code associated with the actual transaction.	Labor1
LogToken	The value sent in this field corresponds to the LogToken field in the Confirmation message. It is important to ensure the LogToken sent in this field is matched correctly to the request that is being confirmed. InEight uses the log token in the confirmation to flag data as having been synchronized with the external system.	8f46cc1e-a42a-423e-a1b8-6d63dfd493a7

Sample JSON

```
{
  "ActualClaimedQuantities_HDS": {
    "CostItemDetail": [
      {
        "ProjectId": "190002",
        "PhaseCode": "1000",
        "InstalledQuantity": "0.5000000000000000",
        "UnitOfMeasure": "PLS",
        "PostingDate": "2024-09-11",
        "DocumentDate": "2024-09-11T16:25:35+00:00",
        "Notes": "Notes",
        "ActualsUserDefined1": "2024-09-09",
        "ActualsUserDefined2": "2024-09-12",
        "ActualsUserDefined3": "3",
        "ActualsUserDefined4": "4",
        "ActualsUserDefined5": "5",
        "ActualsUserDefined6": "6",
        "EstimateResource": "Labor1"
      },
      {
        "ProjectId": "190002",
        "PhaseCode": "1001",
        "InstalledQuantity": "0.5000000000000000",
        "UnitOfMeasure": "PLS",
        "PostingDate": "2024-09-11",
        "DocumentDate": "2024-09-11T16:27:09+00:00",
        "Notes": "",
        "ActualsUserDefined1": "",
        "ActualsUserDefined2": "",
        "ActualsUserDefined3": "",
        "ActualsUserDefined4": "",
        "ActualsUserDefined5": "",
        "ActualsUserDefined6": "",
        "EstimateResource": ""
      }
    ],
    "LogToken": "549fa437-b352-444e-b733-df393427531a",
    "Count": 2
  }
}
```

Status Codes

There are no integration status codes.

Push Billed Revenue - Sync

Direction		From InEight Control
Frequency		Initiated at any time by a user in the Control application.
Trigger Methods		Manually initiated in the UI.
Average Payload Size		Dependent on frequency of integration and size of project. For a large project that initiates updates weekly, there are potentially thousands of records.
APIM Name		Not available through APIM.
InEight Control	Starting Version	19.11
	Ending Version	
<u>Configuration Entity Name</u>		Control: Push Billed Revenue

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectDisplayId	String	50	
1	LogToken	String	50	
1	BilledRevenue	Array	NA	
2	PayItemId	String	100	BilledRevenue
2	PayItemDescription	String	500	BilledRevenue
2	BilledRevenue	Decimal	11,11	BilledRevenue
2	BilledQuantity	Decimal	11,11	BilledRevenue
2	CostCategory	String	25	BilledRevenue
2	BilledDate ²	String	50	BilledRevenue
2	CBSPosition	String	100	BilledRevenue
2	WBSPHaseCode	String	50	BilledRevenue
2	Notes	String	250	BilledRevenue
2	SourceSystemId	String	50	BilledRevenue
2	SalesOrder	String	50	BilledRevenue
2	PayItemSourceSystemId	String	50	BilledRevenue
2	ChangeOrderSourceSystemId	String	50	BilledRevenue
2	ChangeOrderNumber	String	50	BilledRevenue
2	ChangeOrderDescription	String	50	BilledRevenue

Depth	Name	Type	Precision ¹	Parent
2	RetentionWithHeld	Decimal	11,11	BilledRevenue
2	NetBilledRevenue	Decimal	11,11	BilledRevenue

1 - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

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

Field Descriptions

Name	Description	Example
ProjectDisplayId	Project Display as shown in the UI, which unique to a project.	10000
LogToken	It is important to ensure the LogToken sent in this field is matched correctly to the request that is being confirmed. InEight uses the log token in the confirmation to flag data as having been synchronized with the external system.	cb68a7a1-31c8-430f-8a3c-43572b84f830
BilledRevenue	Array of the billed revenue transactions.	N/A
PayItemId	Pay item number.	001
PayItemDescription	Pay item description.	Primary Contract
BilledRevenue	Billed revenue amount.	100.00
BilledQuantity	Billed quantity amount.	0.5
CostCategory	Source system id of the cost category that is associated with the billed revenue. Refer to Appendix A for the list of available cost categories.	Undefined Total
BilledDate	Date that associated with the billed revenue and billed quantity.	2019-11-26 00:00:00.0000000 +00:00
CBSPosition	CBS position of the cost item that can be associated with the billed amount and/or billed quantity.	3.1
WBSPHaseCode	WBS phase code of the cost item that can be associated with the billed amount and/or billed quantity.	1234
Notes	Notes that are associated with the bill.	Billed amount through 11/26/2019
SourceSystemId	Unique external ID for the bill	
SalesOrder	Sales Order associated with the pay item.	510000001
PayItemSourceSystemId	External id for the pay item that does not change.	363.1
ChangeOrderSourceSystemId	A unique value for the change order.	
ChangeOrderNumber	Change order number that is shown in the UI on the Control Change tab.	1

Name	Description	Example
ChangeOrderDescription	Description of the change order description.	Client change order 1
RetentionWithHeld	Retained amount on a bill.	1
NetBilledRevenue	Amount of Billed Revenue minus Retention Withheld on a bill.	99

Sample JSON

```
{
  "BilledRevenue": [
    {
      "PayItemId": "001",
      "PayItemDescription": "",
      "BilledRevenue": 100.0,
      "BilledQuantity": 50.0,
      "CostCategory": "Undefined Total",
      "BilledDate": "2019-11-26 00:00:00.0000000 +00:00",
      "CBSPosition": "3.1",
      "WBSPhaseCode": "1003",
      "Notes": "",
      "SourceSystemId": "",
      "SalesOrder": "510000001",
      "PayItemSourceSystemId": "363.2",
      "ChangeOrderSourceSystemId": "",
      "ChangeOrderNumber": "1",
      "ChangeOrderDescription": "",
      "RetentionWithHeld": 0.0,
      "NetBilledRevenue": 10.0
    },
    {
      "PayItemId": "001",
      "PayItemDescription": "Pay Item 1",
      "BilledRevenue": 100.0,
      "BilledQuantity": 1,
      "CostCategory": "Undefined Materials",
      "BilledDate": "2019-11-26 00:00:00.0000000 +00:00",
      "CBSPosition": "8",
      "WBSPhaseCode": "1019",
      "Notes": "Billed amount through 11/26/2019",
      "SourceSystemId": "",
      "SalesOrder": "510000001",
      "PayItemSourceSystemId": "363.1",
      "ChangeOrderSourceSystemId": "",
      "ChangeOrderNumber": "2",
      "ChangeOrderDescription": "",
      "RetentionWithHeld": 0.0,
      "NetBilledRevenue": 10.0
    }
  ],
  "LogToken": "58a0658d-6cbe-49ce-8c19-f75e0a3726ba",
  "ProjectDisplayId": "190001"
}
```

Status Codes

There are no integration status codes.

Get Billed Revenue (Request) - Sync

Direction		From InEight Control
Frequency		Initiated at any time by a user in the Control application.
Trigger Methods		Manually initiated in the UI.
Average Payload Size		Dependent on frequency of integration and size of project. For a large project that initiates updates weekly, there are potentially thousands of records.
APIM Name		Not available through APIM.
InEight Control	Starting Version	19.11
	Ending Version	
<u>Configuration Entity Name</u>		Control: Get Billed Revenue

Fields

Depth	Name	Type	Precision	Parent
1	ProjectDisplay	String	50	
1	FromDate ¹	String	25	
1	FromTime ¹	String	25	
1	ToDate ¹	String	25	
1	ToTime ¹	String	25	
1	LogToken	String	50	

¹ - The data format for Date/Time fields is YYYY-MM-DDTHH:MM:SS+hhmm, where hhmm is the time zone offset. If the time is already converted to UTC, then the offset will be +0000.

Field Descriptions

Name	Description	Example
ProjectDisplay	Project Display as shown in the UI, which unique to a project.	10346
FromDate	Beginning date for all bills to return. Starting date is determined by InEight, based on the last date the integration was executed.	2017-09-01
FromTime	Starting time for all bills to return.	15:08:25
ToDate	Ending date of bills to return.	2017-09-01
ToTime	Ending time of bills to return.	15:09:06

Name	Description	Example
Logtoken	Guid associated with the sync and will need to be returned in the response.	

Sample JSON

```
{
  "ProjectDisplay": "190001",
  "FromDate": "2019-11-27",
  "FromTime": "02:06:23",
  "ToDate": "2019-12-10",
  "ToTime": "02:03:53",
  "LogToken": "3d26d64d-a5cb-4627-9ec2-fdf5b5a2f045"
}
```

Status Codes

There are no integration status codes.

Get Billed Revenue (Response) - Sync

Direction		To InEight Control
Frequency		When the user initiates a request, a response is required.
Trigger Methods		Manually initiated in the UI.
Average Payload Size		Dependent on frequency of integration and size of project. For a large project that initiates updates weekly, there are potentially thousands of records.
APIM Name		Create Billed Revenue Sync
InEight Control	Starting Version	19.11
	Ending Version	
<u>Configuration Entity Name</u>		Control: Get Billed Revenue

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectDisplay	String	50	
1	BilledRevenues	Array	NA	
2	PayItemId	String	100	BilledRevenues
2	BilledRevenue	Decimal	11,11	BilledRevenues
2	BilledQuantity	Decimal	11,11	BilledRevenues
2	CostCategory	String	25	BilledRevenues
2	BilledDate	String	50	BilledRevenues
2	CBSPosition	String	100	BilledRevenues
2	WBSPHasecode	String	50	BilledRevenues
2	Notes	String	250	BilledRevenues
2	SourceSystemId	String	50	BilledRevenues
2	SourceSystemName	String	50	BilledRevenues
2	PayItemSourceSystemId	String	150	BilledRevenues
2	RetentionWithHeld	String	25	BilledRevenues
2	NetBilledRevenue	String	25	BilledRevenues
1	LogToken	String	50	
1	Logger	Array	NA	Logger
2	LogDate	Date/Time		Logger
2	LogLevel	String	20	Logger

Depth	Name	Type	Precision ¹	Parent
2	LogMessage	String	4000	Logger
2	LogSource	String	100	Logger

1 - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ProjectDisplay	Project Display as shown in the UI, which unique to a project.	100000
BilledRevenues	Array	
PayItemId	Pay item number	
BilledRevenue	Amount of billed revenue.	100
BilledQuantity	Amount of billed quantity.	0.5
CostCategory	Cost category that is associated with the billed revenue. Refer to Appendix A for the list of available cost categories.	Undefined Total
BilledDate	Date that you want to associate with the billed revenue and billed quantity.	11/26/2019
CBSPosition	CBS position of the cost item that can be associated with the billed amount and/or billed quantity.	3.1
WBSPHasecode	WBS phase code of the cost item that can be associated with the billed amount and/or billed quantity.	1234
Notes	Notes that are associated with the bill.	Billed amount through 11/26/2019
SourceSystemId	Unique external ID for the bill.	
SourceSystemName	Name of the system from where the information was originated.	ERP
PayItemSourceSystemId	Unique External ID for the pay item that does not change. The criteria is used to match the pay item to the associated bill. If the ID does not match or find the pay item to associate in the bill, the sync will fail.	363.1
RetentionWithHeld	Retained amount on a bill.	1
NetBilledRevenue	Amount of Billed Revenue minus Retention With Held on a bill.	99
LogToken	GUID from the request and will need to be returned in the response.	ca30fd02-5078-43c3-9ff0-97d30d2e6824

Name	Description	Example
Logger	Array header of LogErrors for integration. Fields within this array can be repeated for multiple errors that may have occurred in the ERP.	
LogDate	Date and time that the log error message was created in the external system	2020-07-28T04:43:56.2210625+00:00
LogLevel	Is Error for the type of log.	Error
LogMessage	Message that is shown for the reason the failure occurred.	Unable to Process Billed Revenue
LogSource	Area where the log occurred.	ERP

Sample JSON

```
{
  "ProjectDisplay": "100000",
  "BilledRevenues": [
    {
      "PayItemId": "711-05.723",
      "BilledRevenue": "3",
      "BilledQuantity": "6",
      "CostCategory": "Vacation",
      "BilledDate": "12/08/2019",
      "CBSPosition": "1.7.9.1.2",
      "WBSPhasecode": "1000",
      "Notes": "",
      "SourceSystemId": "188eac59-1a2c-49de-b3f4-e2499b77501d",
      "SourceSystemName": "ERP",
      "PayItemSourceSystemId": "363.1",
      "RetentionWithHeld": "0.5",
      "NetBilledRevenue": "2.5"
    }
  ],
  "LogToken": "81de2acd1cf74401bfdd04e1db9b3944"
}
```

Sample Error Message

```
[
  {
    "ProjectDisplay": "100000",
    "BilledRevenues": [],
    "LogToken": "4a308d50-3cc9-4a39-9240-ce20e1241d62",
    "Logger": [
      {
        "LogDate": "2020-09-24T18:50:32.9738103+00:00",
        "LogLevel": "Error",
        "LogMessage": "Unable to process Billed Revenue with correlation 4a308d50-3cc9-4a39-9240-ce20e1241d62.",
        "LogSource": "ERP"
      },
      {
        "LogDate": "2020-09-24T18:50:32.9738103+00:00",

```

```
    "LogLevel": "Error",  
    "LogMessage": "BILLEDREVENUE FAILED.",  
    "LogSource": "ERP"  
  }  
]  
}
```

Integration Status

There are multiple ways to get the status associated with the Billed revenue sync, depending on the issue or how a customer wants to view the status of the integration.

- Results are available through Audit Log > Integration, which includes error messaging and status.
- A location field is available in the results in the response header.

Sample:

Location <https://qa.hds.ineight.com/ExternalSystem//Messages/Status?messageId=772d849e-4739-4e34-9467-0da05b9434e0>

A system must be able to go to that URI and see if the API was successful or failed.

Sample:

Success

```
{  
  "Status": "Success",  
  "CorrelationID": "fd058d5f-d22f-4056-8c72-6c25265707f0",  
  "ProjectDisplay": "103093",  
  "ErrorDetails": []  
}
```

Failure

```
{  
  "Status": "Failed",  
  "CorrelationID": "de068edb-b9ac-4281-8a08-7926ae2fe316",  
  "ProjectDisplay": "GoldenSnapshot26072022180836",  
  "ErrorDetails": [  
    {  
      "ErrorCode": 10014,  
      "ErrorDescription": "In order to claim man hours 'Allow as built' value  
within Control must be set to 'All' or 'Cost'",  
      "CostItemList": [  
        {  
          "Code": "1007"  
        }  
      ]  
    }  
  ]  
}
```

Entity Logic Validation Errors

11001	The pay item identifier has not been sent by the ERP
11002	Pay item identifier match not found
11003	Either Billed revenue or Billed quantity is required
11004	Billed revenue cannot be 0
11005	Billed revenue cannot exceed the maximum limit of 11,11
11006	Billed revenue must be a numeric value
11007	Billed quantity cannot be 0
11008	Billed quantity cannot exceed the maximum limit of 11,11
11009	Billed quantity must be a numeric value
11010	Cost category is required when Billed revenue is not null
11011	Cost Category match not found
11012	Billed date is required
11013	Billed date format should be MM/DD/YYYY
11014	Billed date must be valid
11015	Billed date must be equal to or less than today's date
11016	WBS phase code match not found
11017	CBS position code match not found
11018	Notes cannot exceed the maximum character limit of 250
11019	WBS phase code is not associated with Pay item
11020	CBS position code is not associated with Pay item
10029	Time out or other system errors - System Error. Kindly Try again later

Status Codes

API/Entity Logic	Condition	Code	Message
API Validation	Failure	500	
API Validation	Successful	200	

The location url will be available and the content will be provided as above.

Billed Revenue (Generic) - Post

Direction		To InEight Control
Frequency		As determined by the customer
Trigger Methods		From an external system.
Average Payload Size		Dependent on frequency of integration and size of project. For a large project that initiates updates weekly, there are potentially thousands of records.
APIM Name		Create Billed Revenue Generic
InEight Control	Starting Version	19.11
	Ending Version	

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectDisplay	String	50	
1	BilledRevenue	Array	NA	
2	PayItemId	String	100	BilledRevenues
2	BilledRevenue	Decimal	11,11	BilledRevenues
2	BilledQuantity	Decimal	11,11	BilledRevenues
2	CostCategory	String	25	BilledRevenues
2	BilledDate	String	50	BilledRevenues
2	CBSPosition	String	100	BilledRevenues
2	WBSPHasecode	String	50	BilledRevenues
2	Notes	String	250	BilledRevenues
2	PayItemSourceSystemId	String	150	BilledRevenue
2	SourceSystemId	String	50	BilledRevenues
2	SourceSystemName	String	50	BilledRevenues
2	RetentionWithHeld	String	25	BilledRevenues
2	NetBilledRevenue	String	25	BilledRevenues

¹ - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ProjectDisplay	External Project ID, which is unique to a project.	10000
BilledRevenue	Array	
PayItemId	Pay item number.	`
BilledRevenue	Billed revenue amount.	100
BilledQuantity	Billed quantity amount.	0.5
CostCategory	Cost category that is associated with the billed revenue. Refer to Appendix A for the list of available cost categories.	Undefined Total
BilledDate	Date that you want to associate with the billed revenue and billed quantity.	11/26/2019
CBSPosition	CBS position of the cost item that can be associated with the billed amount and/or billed quantity.	3.1
WBSPHasecode	WBS phase code of the cost item that can be associated with the billed amount and/or billed quantity.	1234
Notes	Notes that are associated with the bill.	Billed amount through 11/26/2019
PayItemSourceSystemId	Unique External ID for the pay item that does not change. The criteria is used to match the pay item to the associated bill. If the ID does not match or find the pay item to associate in the bill, the import will fail.	
SourceSystemId	Unique external id for the bill	
SourceSystemName	Name of the system from where the information was originated.	ERP
RetentionWithHeld	Retained amount on a bill.	1
NetBilledRevenue	Amount of Billed Revenue minus Retention Withheld on a bill.	99

Sample JSON

```
{
  "ProjectDisplay": "190001-1",
  "BilledRevenue": [{
    "PayItemID": "1",
    "BilledRevenue": "1.1",
    "BilledQuantity": "",
    "BilledDate": "09/01/2019",
    "WBSPhaseCode": "1004",
    "CBSPosition": "",
    "CostCategory": "Custom Category1",
    "PayItemSourceSystemId": "363.001",
    "Notes": "",
    "SourceSystemId": "001.1",
    "SourceSystemName": "ExternalSystem",
    "RetentionWithHeld": "0.1",
    "NetBilledRevenue": "1"
  }]
}
```

Integration Status

There are multiple ways to get the status associated with the Build Revenue (generic) API, depending on the issue or how the customer wants to view the status of the integration.

- Results are available through the import history screen, which includes error messaging in a downloadable file.
- A location field is available in the results in the response header.

Sample:

Location <https://qa.hds.ineight.com/ExternalSystem//Messages/Status?messageId=772d849e-4739-4e34-9467-0da05b9434e0>

A system must be able to go to that URI and see if the API was successful or failed.

Sample:

Success

```
{
  "Status": "Success",
  "CorrelationID": "fd058d5f-d22f-4056-8c72-6c25265707f0",
  "ProjectDisplay": "103093",
  "ErrorDetails": []
}
```

Failure

```
{
  "Status": "Failed",
  "CorrelationID": "de068edb-b9ac-4281-8a08-7926ae2fe316",
  "ProjectDisplay": "GoldenSnapshot26072022180836",
  "ErrorDetails": [
    {

```

```

    "ErrorCode": 11018,
    "ErrorDescription": "Notes cannot exceed the maximum character limit of 250",
    "BillingListList": [
      {
        "PayItem": "1"
      }
    ]
  }
}

```

Entity Logic Validation Errors

11001	The pay item identifier has not been sent by the ERP
11002	Pay item identifier match not found
11003	Either Billed revenue or Billed quantity is required
11004	Billed revenue cannot be 0
11005	Billed revenue cannot exceed the maximum limit of 11,11
11006	Billed revenue must be a numeric value
11007	Billed quantity cannot be 0
11008	Billed quantity cannot exceed the maximum limit of 11,11
11009	Billed quantity must be a numeric value
11010	Cost category is required when Billed revenue is not null
11011	Cost Category match not found
11012	Billed date is required
11013	Billed date format should be MM/DD/YYYY
11014	Billed date must be valid"
11015	Billed date must be equal to or less than today's date
11016	WBS phase code match not found
11017	CBS position code match not found
11018	Notes cannot exceed the maximum character limit of 250
11019	WBS phase code is not associated with Pay item
11020	CBS position code is not associated with Pay item
10029	System Error. Kindly Try again later

Status Codes

API/Entity Logic	Condition	Code	Message
API Validation	Failure	500	
API Validation	Successful	200	
API Validation	Project display not available	400	Project display not found
API Validation	Too many records	400	The file size exceeds the maximum record limit of 30000
API Validation		417	Expectation failed

The location url will be available and the content will be provided as above.

Push Time Phased Forecast - Sync

Direction		From InEight Control
Frequency		Initiated at any time by a user in the Control application.
Trigger Method(s)		Manually initiated in the UI
Average Payload Size		Dependent on frequency of integration and size of project. For a large project that initiates updates weekly, there are potentially thousands of records.
APIM Name		Not available through APIM
InEight Control	Starting Version	19.11
	Ending Version	
<u>Configuration Entity Name</u>		Control: Time Phased Forecast

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectExternalID	String	50	
1	TimePhaseForecastMapper	Array	NA	
2	PhaseCode	String	1	TimePhaseForecastMapper
2	UnitofMeasure	String	1	TimePhaseForecastMapper
2	Currency	String	1	TimePhaseForecastMapper
2	CostCurve	String	1	TimePhaseForecastMapper
2	ForecastMethod	String	1	TimePhaseForecastMapper
2	Year	String	1	TimePhaseForecastMapper
2	Month	String	1	TimePhaseForecastMapper
2	ForecastedCost	String	1	TimePhaseForecastMapper
2	RemainingCost	String	1	TimePhaseForecastMapper
2	Name	String	2	TimePhaseForecastMapper
2	Amount	String	2	TimePhaseForecastMapper
2	IsTerminalCostCategory	String	2	TimePhaseForecastMapper
2	ForecastManhours	String	2	TimePhaseForecastMapper
2	ForecastQuantity	String	2	TimePhaseForecastMapper
2	EnabledForecastMethod	Boolean	NA	TimePhaseForecastMapper
2	AveragePerformanceSetting	String	2	TimePhaseForecastMapper
2	CBSPosition	String	2	TimePhaseForecastMapper

Depth	Name	Type	Precision ¹	Parent
2	CostItemSourceSystemId	String	2	TimePhaseForecastMapper
2	IsActive	String	2	TimePhaseForecastMapper
2	CreatedBy	String	2	TimePhaseForecastMapper
2	CreatedDate	String	2	TimePhaseForecastMapper
2	ModifiedBy	String	2	TimePhaseForecastMapper
2	ModifiedDate	String	2	TimePhaseForecastMapper
1	TimPhaseForecastValues	Array	NA	
2	ProjectID	String	50	TimePhaseForecastValues
2	BatchSequence	Number	Integer	TimePhaseForecastValues
2	BatchCount	Number	Integer	TimePhaseForecastValues
2	LogTokenID	String	50	TimePhaseForecastValues
2	TimePhaseForecastData	Array	NA	TimePhaseForecastValues
3	TimePhaseForecast	Array	NA	TimePhaseForecastData
4	1	String	50	TimePhaseForecast
4	2	String	25	TimePhaseForecast
4	3	String	25	TimePhaseForecast
4	4	String	50	TimePhaseForecast
4	5	String	50	TimePhaseForecast
4	15	Boolean	NA	TimePhaseForecast
4	16	String	50	TimePhaseForecast
4	17	Boolean	NA	TimePhaseForecast
4	18	String	50	TimePhaseForecast
4	19	Boolean	NA	TimePhaseForecast
4	20	String	201	TimePhaseForecast
4	21	String	50	TimePhaseForecast
4	22	String	201	TimePhaseForecast
4	23	String	50	TimePhaseForecast
4	ForecastPeriod	Array	NA	TimePhaseForecast
5	6	String	4	ForecastPeriod
5	7	String	4	ForecastPeriod
5	8	Decimal	11,11	ForecastPeriod
5	9	Decimal	11,11	ForecastPeriod
5	ForecastCostCategory	Array	NA	ForecastPeriod
6	10	String	100	ForecastCostCategory

Depth	Name	Type	Precision ¹	Parent
6	11	Decimal	11,11	ForecastCostCategory
6	12	Boolean	NA	ForecastCostCategory
5	13	Decimal	11,11	ForecastPeriod
5	14	Decimal	11,11	ForecastPeriod
2	LiveForecastCost	Array	NA	TimePhaseForecastValues
3	LiveCostCategory	Array	NA	LiveForecastCost
4	CostCategoryID	Number	Integer	LiveCostCategory
4	CostCategoryName	String	100	LiveCostCategory
4	IsTerminal	Boolean	NA	LiveCostCategory
4	Cost	Decimal	11,11	LiveCostCategory

1 - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ProjectExternalId	Project Display	190001
TimePhaseForecastMapper	Array header.	
PhaseCode	Defines which attribute phase code is associated with in the JSON.	1
UnitofMeasure	Defines which attribute that unit of measure is associated with in the JSON.	2
Currency	Defines which attribute that currency is associated with in the JSON.	3
CostCurve	Defines which attribute that cost curve is associated with in the JSON.	4
ForecastMethod	Defining which attribute that forecast method is associated with in the JSON.	5
Year	Defines which attribute that year is associated with in the JSON.	6
Month	Defines which attribute that month is associated with in the JSON.	7
ForecastedCost	Defines which attribute that forecasted cost is associated with in the JSON.	8
RemainingCost	Defines which attribute that remaining cost is associated with in the JSON.	9
Name	Defines which attribute that cost category Source System ID is associated with in the JSON. See to Appendix A .	10

Name	Description	Example
Amount	Defines which attribute that period forecast amount is associated with in the JSON.	11
IsTerminalCostCategory	Defines which attribute that is terminal cost category indicator is associated with in the JSON.	12
ForecastManhours	Defines which attribute that period forecast manhours is associated with in the JSON.	13
ForecastQuantity	Defines which attribute that period forecast quantity is associated with in the JSON.	14
EnabledForecastMethod	Defines which attribute that the enabled forecast method indicator is associated with in the JSON.	15
AveragePerformanceSetting	Defines which attribute that the average performance setting is associated with in the JSON.	16
CBSPosition	Defines which attribute that the CBS position is associated with in the JSON.	17
CostItemSourceSystemId	Defines which attribute that the cost items source system id is associated with in the JSON.	18
IsActive	Defines which attribute that the is Active is associated with in the JSON.	19
CreatedBy	Defines which attribute that the created by is associated with in the JSON.	20
CreatedDate	Defines which attribute that the created date is associated with in the JSON.	21
ModifiedBy	Defines which attribute that the modified by is associated with in the JSON.	22
ModifiedDate	Defines which attribute that the modified date is associated with in the JSON.	23
TimPhaseForecastValues	An array	
ProjectID	Project Display as shown in the UI, which unique to a project.	123456
BatchSequence	If there is more than one batch for the interface, this defines the sequence in which this JSON should be read.	1
BatchCount	Defines if there is more than one batch for this interface.	1
LogTokenID	GUID for the sync will need to be returned in the confirmation with the status.	
TimePhaseForecastData	An array.	
TimePhaseForecast	An array.	
1	Cost item WBS phase code.	1004
2	Cost item unit of measure.	Each
3	Cost item currency.	USD
4	Cost item cost curve.	Linear

Name	Description	Example
5	Cost item's forecast method.	Current Estimate
15	Setting for forecast method setting being enabled.	true
16	Cost item's average performance setting that is selected.	To date
17	Cost item's CBS position.	1.1
18	Cost item's source system ID.	190001.1
19	Cost item's indicator if it is active or inactive.	True
20	User that created the cost item.	Bob Roberts
21	Cost item created date.	2025-04-21T19:00:46.1159403
22	User that modified the cost item last.	Bob Roberts
23	Date that the cost item was modified last.	2025-05-20T15:00:46.1159403
ForecastPeriod	An array.	
6	Time phased forecast year.	2020
7	Time phased forecast month.	3
8	Period forecasted cost.	1000
9	Period Forecast remaining cost.	100
ForecastCostCategory	An array	
10	Source System ID of the cost category to associate the forecasted cost with that was in the time phase forecast mapper array. See Appendix A .	Undefined Total
11	Cost of time phased forecast for that cost category.	500
12	Is terminal indicator for the cost category.	True
13	Manhours for time phased forecast for that period.	1
14	Quantity for the time phased forecast for that period.	2
LiveForecastCost	An array.	
LiveCostCategory	An array.	
CostCategoryID	Numeric representation for the cost category name.	0
CostCategoryName	Cost category Source System ID. See Appendix A .	Undefined Total
IsTerminal	Indicates if the cost category is terminal or not.	True
Cost	Amount of live forecast for the cost category.	11000.99901

Sample JSON

```
{
  "ProjectExternalId": "190009",
  "TimePhaseForecastMapper": {
    "PhaseCode": "1",
    "UnitOfMeasure": "2",
    "Currency": "3",
    "CostCurve": "4",
    "ForecastMethod": "5",
    "Year": "6",
    "Month": "7",
    "ForecastedCost": "8",
    "RemainingCost": "9",
    "Name": "10",
    "Amount": "11",
    "IsTerminalCostCategory": "12",
    "ForecastManhours": "13",
    "ForecastQuantity": "14",
    "EnabledForecastMethod": "15",
    "AveragePerformanceSetting": "16",
    "CBSPosition": "17",
    "CostItemSourceSystemId": "18",
    "IsActive": "19",
    "CreatedBy": "20",
    "CreatedDate": "21",
    "ModifiedBy": "22",
    "ModifiedDate": "23"
  },
  "TimePhaseForecastValues": {
    "ProjectId": "190009",
    "BatchSequence": 1,
    "BatchCount": 1,
    "LogTokenId": "a0902d59-d538-4906-a0f1-8d2b8c1b79cf",
    "TimePhaseForecastData": {
      "TimePhaseForecast": [
        {
          "1": "2",
          "2": "Ea",
          "3": "USD",
          "4": "Linear",
          "5": "None",
          "15": false,
          "16": null,
          "17": "1.1",
          "18": "0181ca2053da48a2b746bdde14c511fe",
          "19": true,
          "20": "InEight Service Account",
          "21": "2025-05-22T22:20:00.1466667",
          "22": "InEight Service Account",
          "23": "2025-05-22T22:20:00.1466667",
          "ForecastPeriod": [
            {
              "6": "2025",
              "7": "12",
              "8": 0.0,

```

```

    "9": 0.0,
    "ForecastCostCategory": [],
    "13": 0.0,
    "14": 10.69958847737
  },
  {
    "6": "2025",
    "7": "11",
    "8": 0.0,
    "9": 0.0,
    "ForecastCostCategory": [],
    "13": 0.0,
    "14": 14.40329218107
  },
  {
    "6": "2025",
    "7": "10",
    "8": 0.0,
    "9": 0.0,
    "ForecastCostCategory": [],
    "13": 0.0,
    "14": 11.52263374486
  },
  {
    "6": "2025",
    "7": "9",
    "8": 0.0,
    "9": 0.0,
    "ForecastCostCategory": [],
    "13": 0.0,
    "14": 11.52263374486
  },
  {
    "6": "2025",
    "7": "8",
    "8": 0.0,
    "9": 0.0,
    "ForecastCostCategory": [],
    "13": 0.0,
    "14": 14.40329218107
  },
  {
    "6": "2025",
    "7": "7",
    "8": 0.0,
    "9": 0.0,
    "ForecastCostCategory": [],
    "13": 0.0,
    "14": 11.52263374486
  },
  {
    "6": "2025",
    "7": "6",
    "8": 0.0,
    "9": 0.0,
    "ForecastCostCategory": [],
    "13": 0.0,

```



```
        "14": 11.52263374486
      },
      {
        "6": "2025",
        "7": "5",
        "8": 0.0,
        "9": 0.0,
        "ForecastCostCategory": [],
        "13": 0.0,
        "14": 14.40329218107
      }
    ]
  },
  {
    "1": "1",
    "2": "PLS",
    "3": "USD",
    "4": "Linear",
    "5": "Manual (EAC)",
    "15": true,
    "16": null,
    "17": "1",
    "18": "bc2cdbeced2b4fe0ba26065b0219bf46",
    "19": true,
    "20": "InEight Service Account",
    "21": "2025-05-22T22:20:00.13",
    "22": "InEight Service Account",
    "23": "2025-05-22T22:20:00.13",
    "ForecastPeriod": [
      {
        "6": "2025",
        "7": "12",
        "8": 2460.90534979424,
        "9": 0.0,
        "ForecastCostCategory": [
          {
            "10": "Total",
            "11": 2460.90534979424,
            "12": false
          },
          {
            "10": "Undefined Total",
            "11": 2460.90534979424,
            "12": true
          }
        ],
        "13": 0.0,
        "14": 0.10699588477
      },
      {
        "6": "2025",
        "7": "11",
        "8": 3312.75720164609,
        "9": 0.0,
        "ForecastCostCategory": [
          {
            "10": "Total",
```

```

        "11": 3312.75720164609,
        "12": false
      },
      {
        "10": "Undefined Total",
        "11": 3312.75720164609,
        "12": true
      }
    ],
    "13": 0.0,
    "14": 0.14403292181
  },
  {
    "6": "2025",
    "7": "10",
    "8": 2650.20576131687,
    "9": 0.0,
    "ForecastCostCategory": [
      {
        "10": "Total",
        "11": 2650.20576131687,
        "12": false
      },
      {
        "10": "Undefined Total",
        "11": 2650.20576131687,
        "12": true
      }
    ],
    "13": 0.0,
    "14": 0.11522633745
  },
  {
    "6": "2025",
    "7": "9",
    "8": 2650.20576131687,
    "9": 0.0,
    "ForecastCostCategory": [
      {
        "10": "Total",
        "11": 2650.20576131687,
        "12": false
      },
      {
        "10": "Undefined Total",
        "11": 2650.20576131687,
        "12": true
      }
    ],
    "13": 0.0,
    "14": 0.11522633745
  },
  {
    "6": "2025",
    "7": "8",
    "8": 3312.75720164609,
    "9": 0.0,

```

```
"ForecastCostCategory": [  
  {  
    "10": "Total",  
    "11": 3312.75720164609,  
    "12": false  
  },  
  {  
    "10": "Undefined Total",  
    "11": 3312.75720164609,  
    "12": true  
  }  
],  
"13": 0.0,  
"14": 0.14403292181  
},  
{  
  "6": "2025",  
  "7": "7",  
  "8": 2650.20576131687,  
  "9": 0.0,  
  "ForecastCostCategory": [  
    {  
      "10": "Total",  
      "11": 2650.20576131687,  
      "12": false  
    },  
    {  
      "10": "Undefined Total",  
      "11": 2650.20576131687,  
      "12": true  
    }  
  ],  
  "13": 0.0,  
  "14": 0.11522633745  
},  
{  
  "6": "2025",  
  "7": "6",  
  "8": 2650.20576131687,  
  "9": 0.0,  
  "ForecastCostCategory": [  
    {  
      "10": "Total",  
      "11": 2650.20576131687,  
      "12": false  
    },  
    {  
      "10": "Undefined Total",  
      "11": 2650.20576131687,  
      "12": true  
    }  
  ],  
  "13": 0.0,  
  "14": 0.11522633745  
},  
{  
  "6": "2025",
```

```

        "7": "5",
        "8": 0.0,
        "9": 3312.75720164609,
        "ForecastCostCategory": [
            {
                "10": "Total",
                "11": 3312.75720164609,
                "12": false
            },
            {
                "10": "Undefined Total",
                "11": 3312.75720164609,
                "12": true
            }
        ],
        "13": 0.0,
        "14": 0.14403292181
    }
]
},
{
    "1": "3a",
    "2": "Hour",
    "3": "USD",
    "4": "Linear",
    "5": "Current budget",
    "15": true,
    "16": null,
    "17": "2",
    "18": "6b363823aad346189ad56b58c8beb860",
    "19": true,
    "20": "InEight Service Account",
    "21": "2025-05-22T22:20:00.1466667",
    "22": "InEight Service Account",
    "23": "2025-05-22T22:20:00.1466667",
    "ForecastPeriod": [
        {
            "6": "2025",
            "7": "7",
            "8": 3259.25925898765,
            "9": 0.0,
            "ForecastCostCategory": [
                {
                    "10": "Total",
                    "11": 3259.25925898765,
                    "12": false
                },
                {
                    "10": "Materials",
                    "11": 543.20987654321,
                    "12": false
                },
                {
                    "10": "Undefined Materials",
                    "11": 543.20987654321,
                    "12": true
                }
            ]
        }
    ]
}

```

```
{
  {
    "10": "Supplies",
    "11": 2716.04938244444,
    "12": false
  },
  {
    "10": "Undefined Supplies",
    "11": 2716.04938244444,
    "12": true
  }
],
"13": 0.0,
"14": 40.74074074074
},
{
  "6": "2025",
  "7": "6",
  "8": 4148.14814780247,
  "9": 0.0,
  "ForecastCostCategory": [
    {
      "10": "Total",
      "11": 4148.14814780247,
      "12": false
    },
    {
      "10": "Materials",
      "11": 691.35802469136,
      "12": false
    },
    {
      "10": "Undefined Materials",
      "11": 691.35802469136,
      "12": true
    },
    {
      "10": "Supplies",
      "11": 3456.79012311111,
      "12": false
    },
    {
      "10": "Undefined Supplies",
      "11": 3456.79012311111,
      "12": true
    }
  ],
  "13": 0.0,
  "14": 51.85185185185
},
{
  "6": "2025",
  "7": "5",
  "8": 0.0,
  "9": 4592.59259220988,
  "ForecastCostCategory": [
    {
      "10": "Total",
```

```

        "11": 4592.59259220988,
        "12": false
      },
      {
        "10": "Materials",
        "11": 765.43209876543,
        "12": false
      },
      {
        "10": "Undefined Materials",
        "11": 765.43209876543,
        "12": true
      },
      {
        "10": "Supplies",
        "11": 3827.16049344445,
        "12": false
      },
      {
        "10": "Undefined Supplies",
        "11": 3827.16049344445,
        "12": true
      }
    ],
    "13": 0.0,
    "14": 57.40740740741
  }
}
]
},
"LiveForecastCost": {
  "LiveCostCategory": [
    {
      "CostCategoryId": 0,
      "CostCategoryName": "Total",
      "IsTerminal": false,
      "cost": 34999.999999
    },
    {
      "CostCategoryId": 175,
      "CostCategoryName": "Materials",
      "IsTerminal": false,
      "cost": 2000.0
    },
    {
      "CostCategoryId": 179,
      "CostCategoryName": "Undefined Materials",
      "IsTerminal": true,
      "cost": 2000.0
    },
    {
      "CostCategoryId": 198,
      "CostCategoryName": "Undefined Total",
      "IsTerminal": true,
      "cost": 23000.0
    }
  ],

```

```
{
  {
    "CostCategoryId": 205,
    "CostCategoryName": "Supplies",
    "IsTerminal": false,
    "cost": 9999.999999
  },
  {
    "CostCategoryId": 206,
    "CostCategoryName": "Undefined Supplies",
    "IsTerminal": true,
    "cost": 9999.999999
  }
]
}
```

Status Codes

There are no integration status codes.

Push Forecast Revenue - Sync

Direction		From InEight Control
Frequency		Initiated at any time by a user in the Control application.
Trigger Methods		Manually initiated in the UI.
Average Payload Size		Dependent on frequency of integration and size of project. For a large project that initiates updates weekly, there are potentially thousands of records.
APIM Name		Not available through APIM.
InEight Control	Starting Version	20.11
	Ending Version	
<u>Configuration Entity Name</u>		Control: Push Forecast Revenue

Fields

Depth	Name	Type	Precision ¹	Parent
1	ForecastRevenue	Array	NA	
2	LogTokenID	String	50	
2	ProjectDisplayId	String	50	
2	UnApprovedRevenue	Decimal	11,11	
2	CountofPayItems	Number	Integer	
2	ForecastRevenueDetails	Array	NA	
3	PayItemId	String	150	ForecastRevenueDetails
3	PayItemNumber	String	50	ForecastRevenueDetails
3	PayItemDescription	String	150	ForecastRevenueDetails
3	ForecastRevenue	String	50	ForecastRevenueDetails
3	RevenueForecastMethod	String	100	ForecastRevenueDetails
3	SalesOrder	String	50	ForecastRevenueDetails
3	UnApprovedRevenue	Decimal	11,11	ForecastRevenueDetails
3	ContributingUnapprovedRevenue	Decimal	11,11	ForecastRevenueDetails

¹ - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ForecastRevenue	Array header.	
LogTokenID	GUID for the sync will need to be returned in the confirmation with the status.	cb68a7a1-31c8-430f-8a3c-43572b84f830
ProjectDisplayId	Project Display as shown in the UI, which unique to a project.	100000
UnApprovedRevenue	Provides unapproved revenue that has not yet been associated with a pay item.	10000.34
CountofPayItems	Count of pay items included in the payload.	4
ForecastRevenueDetails	Array header. This section is repeated for each pay item contained in the integration.	
PayItemId	Unique external pay item ID that will not change.	363.1
PayItemNumber	Pay item number entered in the UI by the user.	1
PayItemDescription	Pay item description entered in the UI by the user.	Base Contract
ForecastRevenue	Forecasted revenue for the cost item.	1000000.23
RevenueForecastMethod	Revenue forecast method of the pay item.	Default
SalesOrder	Sales order that is assigned to the pay item.	5000000001
UnApprovedRevenue	Unapproved revenue associated with the pay item.	100.23
ContributingUnapprovedRevenue	Unapproved revenue contributes to the forecast revenue.	100.00

Sample JSON

```
{
  "ForecastRevenue": {
    "LogTokenID": "33acb869-cefc-4135-b46c-007b932b113c",
    "ProjectDisplayId": "190000",
    "UnApprovedRevenue": 0.0,
    "CountofPayItems": 10,
    "ForecastRevenueDetails": [
      {
        "PayItemId": "12628.2",
        "PayItemNumber": "2",
        "PayItemDescription": "2",
        "ForecastRevenue": 4.0,
        "RevenueForecastMethod": "Default",
        "SalesOrder": "",
        "UnApprovedRevenue": 1.0,
        "ContributingUnapprovedRevenue": 0.0
      },
      {
        "PayItemId": "12628.7",
        "PayItemNumber": "7",

```

```

        "PayItemDescription": "7",
        "ForecastRevenue": "",
        "RevenueForecastMethod": "Default",
        "SalesOrder": "",
        "UnApprovedRevenue": 0.0,
        "ContributingUnapprovedRevenue": 0.0
    },
    {
        "PayItemId": "12628.8",
        "PayItemNumber": "8",
        "PayItemDescription": "8",
        "ForecastRevenue": "",
        "RevenueForecastMethod": "Default",
        "SalesOrder": "",
        "UnApprovedRevenue": 0.0,
        "ContributingUnapprovedRevenue": 0.0
    },
    {
        "PayItemId": "12628.6",
        "PayItemNumber": "6",
        "PayItemDescription": "6",
        "ForecastRevenue": "",
        "RevenueForecastMethod": "Default",
        "SalesOrder": "",
        "UnApprovedRevenue": 0.0,
        "ContributingUnapprovedRevenue": 0.0
    },
    {
        "PayItemId": "12628.5",
        "PayItemNumber": "5",
        "PayItemDescription": "5",
        "ForecastRevenue": "",
        "RevenueForecastMethod": "Default",
        "SalesOrder": "",
        "UnApprovedRevenue": 0.0,
        "ContributingUnapprovedRevenue": 0.0
    },
    {
        "PayItemId": "c2665b08aed84762bbbbe09c7ea36eb3",
        "PayItemNumber": "07.029",
        "PayItemDescription": "07.029",
        "ForecastRevenue": 104091.63,
        "RevenueForecastMethod": "Default",
        "SalesOrder": "",
        "UnApprovedRevenue": 1500.0,
        "ContributingUnapprovedRevenue": 700.0
    }
]
}

```

Status Codes

There are no integration status codes.

Push Time Phased Budget - Sync

Direction		From InEight Control
Frequency		Initiated at any time by a user in the Control application.
Trigger Method(s)		Manually initiated in the UI
Average Payload Size		Dependent on frequency of integration and size of project. For a large project that initiates updates weekly, there are potentially thousands of records.
APIM Name		Not available through APIM
InEight Control	Starting Version	21.1
	Ending Version	
<u>Configuration Entity Name</u>		Control: Time Phased Budget

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectExternalID	String	25	
1	ProjectDisplay	String	25	
1	TimePhaseBudgetMapper	Array	NA	
2	PhaseCode	String	1	TimePhaseBudgetMapper
2	UnitofMeasure	String	1	TimePhaseBudgetMapper
2	Currency	String	1	TimePhaseBudgetMapper
2	CostCurve	String	1	TimePhaseBudgetMapper
2	Year	String	1	TimePhaseBudgetMapper
2	Month	String	1	TimePhaseBudgetMapper
2	BudgetCost	String	1	TimePhaseBudgetMapper
2	Cost Category	String	1	TimePhaseBudgetMapper
2	Cost	String	1	TimePhaseBudgetMapper
2	IsTerminalCostCategory	String	2	TimePhaseBudgetMapper
2	CBSPosition	String	2	TimePhaseBudgetMapper
2	CostItemSourceSystemId	String	2	TimePhaseBudgetMapper
2	IsActive	String	2	TimePhaseBudgetMapper
2	CreatedBy	String	2	TimePhaseBudgetMapper
2	CreatedDate	String	2	TimePhaseBudgetMapper
2	ModifiedBy	String	2	TimePhaseBudgetMapper

Depth	Name	Type	Precision ¹	Parent
2	ModifiedDate	String	2	TimePhaseBudgetMapper
1	TimPhaseBudgetValues	Array	NA	
2	ProjectID	String	50	TimePhaseBudgetValues
2	BatchSequence	Number	Integer	TimePhaseBudgetValues
2	BatchCount	Number	Integer	TimePhaseBudgetValues
2	LogTokenID	String	50	TimePhaseBudgetValues
2	TimePhaseBudgetData	Array	NA	TimePhaseBudgetValues
3	TimePhaseBudget	Array	NA	TimePhaseBudgetData
4	1	String	50	TimePhaseBudget
4	2	String	25	TimePhaseBudget
4	3	String	25	TimePhaseBudget
4	4	String	50	TimePhaseBudget
4	11	String	50	TimePhaseBudget
4	12	String	50	TimePhaseBudget
4	13	Boolean		TimePhaseBudget
4	14	String	201	TimePhaseBudget
4	15	String	50	TimePhaseBudget
4	16	String	201	TimePhaseBudget
4	17	String	50	TimePhaseBudget
4	BudgetPeriod	Array	NA	TimePhaseBudget
5	5	String	4	BudgetPeriod
5	6	String	4	BudgetPeriod
5	7	Decimal	11,11	BudgetPeriod
5	BudgetCostCategory	Array	NA	BudgetPeriod
6	8	String	100	BudgetCostCategory
6	9	Decimal	11,11	BudgetCostCategory
6	10	Boolean	NA	BudgetCostCategory

¹ - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ProjectExternalID	External Project ID.	190001
ProjectDisplay	Project Display ID that is unique.	190001
TimePhaseBudgetMapper	Array header.	
PhaseCode	Defines the attribute that WBS phase code is associated with in the JSON.	1
UnitofMeasure	Defines the attribute that unit of measure is associated with in the JSON.	2
Currency	Defines the attribute that currency is associated with in the JSON.	3
CostCurve	Defines the attribute that cost curve is associated with in the JSON.	4
Year	Defines the attribute that year is associated with in the JSON.	5
Month	Defines the attribute that month is associated with in the JSON.	6
BudgetCost	Defines the attribute that forecasted cost is associated with in the JSON.	7
CostCategory	Defines the attribute that cost category Source System ID is associated with in the JSON. See Appendix A .	8
Cost	Defines the attribute that period forecast amount is associated with in the JSON.	9
IsTerminalCostCategory	Defines the attribute that is terminal cost category indicator is associated with in the JSON.	10
CBSPosition	Defines the attribute that CBS position is associated with in the JSON.	
CostItemSourceSystemId	Defines the attribute that cost item source system id is associated with in the JSON.	
IsActive	Defines the attribute that is active is associated with in the JSON.	
CreatedBy	Defines the attribute that created by is associated with in the JSON.	
CreatedDate	Defines the attribute that created date is associated with in the JSON.	
ModifiedBy	Defines the attribute that modified by is associated with in the JSON.	
ModifiedDate	Defines the attribute that modified date is associated with in the JSON.	
TimPhaseBudgetValues	An array	

Name	Description	Example
ProjectID	Project Display as shown in the UI, which unique to a project.	123456
BatchSequence	If there is more than one batch for the interface, this defines the sequence in which this JSON should be read.	1
BatchCount	Defines if there is more than one batch for this interface.	1
LogTokenID	GUID for the sync will need to be returned in the confirmation with the status.	cb68a7a1-31c8-430f-8a3c-43572b84f830
TimePhaseBudgetData	An array.	
TimePhaseBudget	An array.	
1	WBS phase code for the cost item.	1004
2	Unit of measure for the cost item.	Each
3	Currency for the cost item.	USD
4	Cost curve for the cost item.	Linear
11	CBS Position for the cost item	1.1
12	Cost item source system id for the cost item.	190001.1
13	Cost item active indicator.	true
14	Cost item created by.	Bob Robert
15	Cost item created date.	2025-01-16T15:01:56.17+00:00
16	Cost item modified by.	Bob Robert
17	Cost item modified date.	2025-05-16T15:09:56.17+00:00
BudgetPeriod	An array.	
5	Year for the time phase budget.	2020
6	Month for the time phase budget.	3
7	Cost for the period budgeted.	1000
BudgetCostCategory	An Array	
8	Source System ID of the cost category to associate the budgeted cost with what was in the time phase budget mapper array. See Appendix A .	Undefined Total
9	Cost for the time phased forecast.	500
10	Is terminal cost category.	True

Sample JSON

```
{
  "ProjectExternalId": "190009",
  "ProjectDisplay": "190009",
  "TimePhaseBudgetMapper": {
    "PhaseCode": "1",
    "UnitOfMeasure": "2",
    "Currency": "3",
    "CostCurve": "4",
    "Year": "5",
    "Month": "6",
    "BudgetCost": "7",
    "Costcategory": "8",
    "Cost": "9",
    "IsTerminalCostCategory": "10",
    "CBSPosition": "11",
    "CostItemSourceSystemId": "12",
    "IsActive": "13",
    "CreatedBy": "14",
    "CreatedDate": "15",
    "ModifiedBy": "16",
    "ModifiedDate": "17"
  },
  "TimePhaseBudgetValues": {
    "ProjectId": "190009",
    "BatchSequence": 1,
    "BatchCount": 1,
    "LogTokenId": "cc22e8e5-7350-43a7-bf7d-40749ae53877",
    "TimePhaseBudgetData": {
      "TimePhaseBudget": [
        {
          "1": "3a",
          "2": "Hour",
          "3": "USD",
          "4": "Linear",
          "11": "2",
          "12": "6b363823aad346189ad56b58c8beb860",
          "13": true,
          "14": "John Smith",
          "15": "2025-05-22T21:16:31.44+00:00",
          "16": "John Smith",
          "17": "2025-05-22T21:51:32.923+00:00",
          "BudgetPeriod": [
            {
              "5": "2025",
              "6": "4",
              "7": 0.0,
              "BudgetCostCategory": []
            },
            {
              "5": "2025",
              "6": "7",
              "7": 3259.25925925926,
              "BudgetCostCategory": [

```

```

        "8": "Total",
        "9": 3259.25925925926,
        "10": false
    },
    {
        "8": "Materials",
        "9": 543.20987654321,
        "10": false
    },
    {
        "8": "Undefined Materials",
        "9": 543.20987654321,
        "10": true
    },
    {
        "8": "Supplies",
        "9": 2716.04938271605,
        "10": false
    },
    {
        "8": "Undefined Supplies",
        "9": 2716.04938271605,
        "10": true
    }
]
},
{
    "5": "2025",
    "6": "6",
    "7": 4148.148148148148,
    "BudgetCostCategory": [
        {
            "8": "Total",
            "9": 4148.14814814815,
            "10": false
        },
        {
            "8": "Materials",
            "9": 691.35802469136,
            "10": false
        },
        {
            "8": "Undefined Materials",
            "9": 691.35802469136,
            "10": true
        },
        {
            "8": "Supplies",
            "9": 3456.79012345679,
            "10": false
        },
        {
            "8": "Undefined Supplies",
            "9": 3456.79012345679,
            "10": true
        }
    ]
}
]

```



```

    },
    {
      "5": "2025",
      "6": "5",
      "7": 4592.592592592592,
      "BudgetCostCategory": [
        {
          "8": "Total",
          "9": 4592.59259259259,
          "10": false
        },
        {
          "8": "Materials",
          "9": 765.43209876543,
          "10": false
        },
        {
          "8": "Undefined Materials",
          "9": 765.43209876543,
          "10": true
        },
        {
          "8": "Supplies",
          "9": 3827.16049382716,
          "10": false
        },
        {
          "8": "Undefined Supplies",
          "9": 3827.16049382716,
          "10": true
        }
      ]
    }
  ],
},
{
  "1": "2",
  "2": "Ea",
  "3": "USD",
  "4": "Linear",
  "11": "1.1",
  "12": "0181ca2053da48a2b746bdde14c511fe",
  "13": true,
  "14": "John Smith",
  "15": "2025-05-22T21:16:00.077+00:00",
  "16": "John Smith",
  "17": "2025-05-22T21:51:32.923+00:00",
  "BudgetPeriod": [
    {
      "5": "2025",
      "6": "12",
      "7": 3621.16991643455,
      "BudgetCostCategory": [
        {
          "8": "Total",
          "9": 3621.16991643455,
          "10": false
        }
      ]
    }
  ]
}

```

```

    },
    {
      "8": "Labor",
      "9": 3621.16991643455,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3621.16991643455,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "11",
  "7": 4874.65181058495,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Labor",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 4874.65181058495,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "10",
  "7": 3899.72144846795,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3899.72144846795,
      "10": true
    }
  ]
},

```

```
{
  "5": "2025",
  "6": "9",
  "7": 3899.721448468,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.721448468,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.721448468,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3899.721448468,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "8",
  "7": 4874.65181058495,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Labor",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 4874.65181058495,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "7",
  "7": 3899.72144846795,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.72144846795,
```

```

        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 3899.72144846795,
        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "6",
    "7": 3899.72144846795,
    "BudgetCostCategory": [
      {
        "8": "Total",
        "9": 3899.72144846795,
        "10": false
      },
      {
        "8": "Labor",
        "9": 3899.72144846795,
        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 3899.72144846795,
        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "5",
    "7": 4874.651810585,
    "BudgetCostCategory": [
      {
        "8": "Total",
        "9": 4874.651810585,
        "10": false
      },
      {
        "8": "Labor",
        "9": 4874.651810585,
        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 4874.651810585,
        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "4",
    "7": 3899.72144846795,

```

```
"BudgetCostCategory": [  
  {  
    "8": "Total",  
    "9": 3899.72144846795,  
    "10": false  
  },  
  {  
    "8": "Labor",  
    "9": 3899.72144846795,  
    "10": false  
  },  
  {  
    "8": "Undefined Labor",  
    "9": 3899.72144846795,  
    "10": true  
  }  
]  
,  
{  
  "5": "2025",  
  "6": "3",  
  "7": 4874.65181058495,  
  "BudgetCostCategory": [  
    {  
      "8": "Total",  
      "9": 4874.65181058495,  
      "10": false  
    },  
    {  
      "8": "Labor",  
      "9": 4874.65181058495,  
      "10": false  
    },  
    {  
      "8": "Undefined Labor",  
      "9": 4874.65181058495,  
      "10": true  
    }  
  ]  
},  
{  
  "5": "2025",  
  "6": "2",  
  "7": 3899.72144846797,  
  "BudgetCostCategory": [  
    {  
      "8": "Total",  
      "9": 3899.72144846797,  
      "10": false  
    },  
    {  
      "8": "Labor",  
      "9": 3899.72144846797,  
      "10": false  
    },  
    {  
      "8": "Undefined Labor",
```

```

        "9": 3899.72144846797,
        "10": true
    }
  ],
  },
  {
    "5": "2024",
    "6": "12",
    "7": 0.0,
    "BudgetCostCategory": []
  },
  {
    "5": "2025",
    "6": "1",
    "7": 3481.89415041783,
    "BudgetCostCategory": [
      {
        "8": "Total",
        "9": 3481.89415041783,
        "10": false
      },
      {
        "8": "Labor",
        "9": 3481.89415041783,
        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 3481.89415041783,
        "10": true
      }
    ]
  }
]
},
{
  "1": "1",
  "2": "PLS",
  "3": "USD",
  "4": "Linear",
  "11": "1",
  "12": "bc2cdbeced2b4fe0ba26065b0219bf46",
  "13": true,
  "14": "John Smith",
  "15": "2025-05-22T21:15:04.253+00:00",
  "16": "John Smith",
  "17": "2025-05-22T21:26:00.723+00:00",
  "BudgetPeriod": [
    {
      "5": "2025",
      "6": "12",
      "7": 3621.16991643455,
      "BudgetCostCategory": [
        {
          "8": "Total",
          "9": 3621.16991643455,
          "10": false
        }
      ]
    }
  ]
}

```

```
    },
    {
      "8": "Labor",
      "9": 3621.16991643455,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3621.16991643455,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "11",
  "7": 4874.65181058495,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Labor",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 4874.65181058495,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "10",
  "7": 3899.72144846795,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3899.72144846795,
      "10": true
    }
  ]
},
]
```

```

{
  "5": "2025",
  "6": "9",
  "7": 3899.721448468,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.721448468,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.721448468,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3899.721448468,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "8",
  "7": 4874.65181058495,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Labor",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 4874.65181058495,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "7",
  "7": 3899.72144846795,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.72144846795,

```



```
        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 3899.72144846795,
        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "6",
    "7": 3899.72144846795,
    "BudgetCostCategory": [
      {
        "8": "Total",
        "9": 3899.72144846795,
        "10": false
      },
      {
        "8": "Labor",
        "9": 3899.72144846795,
        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 3899.72144846795,
        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "5",
    "7": 4874.651810585,
    "BudgetCostCategory": [
      {
        "8": "Total",
        "9": 4874.651810585,
        "10": false
      },
      {
        "8": "Labor",
        "9": 4874.651810585,
        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 4874.651810585,
        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "4",
    "7": 3899.72144846795,
```

```

        "BudgetCostCategory": [
          {
            "8": "Total",
            "9": 3899.72144846795,
            "10": false
          },
          {
            "8": "Labor",
            "9": 3899.72144846795,
            "10": false
          },
          {
            "8": "Undefined Labor",
            "9": 3899.72144846795,
            "10": true
          }
        ]
      },
      {
        "5": "2025",
        "6": "3",
        "7": 4874.65181058495,
        "BudgetCostCategory": [
          {
            "8": "Total",
            "9": 4874.65181058495,
            "10": false
          },
          {
            "8": "Labor",
            "9": 4874.65181058495,
            "10": false
          },
          {
            "8": "Undefined Labor",
            "9": 4874.65181058495,
            "10": true
          }
        ]
      },
      {
        "5": "2025",
        "6": "2",
        "7": 3899.72144846797,
        "BudgetCostCategory": [
          {
            "8": "Total",
            "9": 3899.72144846797,
            "10": false
          },
          {
            "8": "Labor",
            "9": 3899.72144846797,
            "10": false
          },
          {
            "8": "Undefined Labor",

```

```
        "9": 3899.72144846797,  
        "10": true  
      }  
    ],  
  },  
  {  
    "5": "2025",  
    "6": "1",  
    "7": 3481.89415041783,  
    "BudgetCostCategory": [  
      {  
        "8": "Total",  
        "9": 3481.89415041783,  
        "10": false  
      },  
      {  
        "8": "Labor",  
        "9": 3481.89415041783,  
        "10": false  
      },  
      {  
        "8": "Undefined Labor",  
        "9": 3481.89415041783,  
        "10": true  
      }  
    ]  
  },  
  {  
    "5": "2024",  
    "6": "12",  
    "7": 0.0,  
    "BudgetCostCategory": []  
  }  
]  
}  
}
```

Status Codes

There are no integration status codes.

Sales Order (Generic) - Post

Direction		To InEight Control
Frequency		As determined by the customer
Trigger Methods		From an external system.
Average Payload Size		Dependent on the number of sales orders associated to the project.
APIM Name		Upsert Sales Order Generic
InEight Control	Starting Version	21.5
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent
1	ProjectDisplay	String	50	
1	SalesOrder	Array	NA	
2	SalesOrder	String	50	SalesOrder
2	SourceSystemId	String	50	SalesOrder
2	SourceSystemName	String	250	SalesOrder
2	Description	String	250	SalesOrder

Field Descriptions

Name	Description	Example
ProjectDisplay	External project ID, which is unique for a project.	10000
SalesOrder	Array header	
SalesOrder	Sales order – Must be unique across the environment.	SI0001
SourceSystemId	Unique External ID for the sales order.	SI0001
SourceSystemName	Name of the system from where the information was originated.	External System
Description	Description of the sales order.	Main Contract

Sample JSON

```
{
  "ProjectDisplay": "TestProject",
  "SalesOrder": [
    {
      "SalesOrder": "SI0001",
      "SourceSystemId": " SI0001",
      "SourceSystemName": "External System",
      "Description": "Sales Order Description"
    }
  ]
}
```

Integration Status Codes

	Condition	Code	Message
API validation	Project Number provided does not exist.	400	Project Number [Project Number] is not available
API validation	Bad format	400	Bad request
API validation	Too many records	400	The file size exceeds the maximum record limit of 20000
API validation		417	Expectation failed
API validation	Failure	500	
API Validation	Valid Payload	200	

The location url will be available and the content will be empty.

Multiple Project Actuals (Generic) - Post

The actuals (generic) allows actual cost, quantity, equipment hours and man-hours to be associated to a cost item based on the joining criteria of WBS phase code or CBS position for up to 15 different projects in a JSON. It is expected the values that are sent by the ERP represent transactional totals from the last time actuals were sent to Control. The values should not represent job to-date entries.

Direction		To the InEight cloud platform.
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Entire entity – Tens of thousands of records. Recommendations: - Maximum number of transactions is 10,000 per project. - Group transactions on a project, do not send individual transactions in a payload one by one. - If group exceeds 10,000 transactions and requires more than one payload, allow five minutes between payloads. - A project will process the payloads received one at a time; it will not process multiple payloads in parallel.
API Name		Create MultiProject Actuals Generic
InEight Control	Starting Version	21.7
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Req.
1	ProjectDisplay	String	50		Yes
1	Actuals	Array	NA		Yes
2	PhaseCode	String	24	Actuals	No ¹
2	CBSPositionCode	String	50	Actuals	No ¹
2	PostingDate	String	25	Actuals	Yes
2	Notes	String	250	Actuals	No
2	Quantity	String	NA	Actuals	No
2	ManHours	String	22	Actuals	No
2	EquipmentHours	String	22	Actuals	No
2	Cost	Array	NA	Actuals	No
3	CostCategories	Array	NA	Cost	No
4	Name	String	30	CostCategories	No
4	Amount	String	30	CostCategories	No

Depth	Name	Type	Precision	Parent	Req.
2	ActualsUserDefined1	String	25	Actuals	No
2	ActualsUserDefined2	String	25	Actuals	No
2	ActualsUserDefined3	String	250	Actuals	No
2	ActualsUserDefined4	String	250	Actuals	No
2	ActualsUserDefined5	String	250	Actuals	No
2	ActualsUserDefined6	String	250	Actuals	No
2	EstimateResource	String	50	Actuals	No
1	SourceSystemName	String	50		No
1	SourceSystemId	String	50		No

1 – See NOTE in Field Descriptions section for additional field requirements information.

Field Descriptions

Name	Description	Example
ProjectDisplay	External Project ID is unique to a project.	TestProject
Actuals	Array header of the cost item actuals records.	
PhaseCode	WBS phase code associated with the cost item for the Actuals record. NOTE: Although stated as not required, either PhaseCode or CBSPositionCode must be provided.	1002
CBSPositionCode	CBS Position Code associated with the cost item for the Actuals record. NOTE: Although stated as not required, either CBSPositionCode or PhaseCode must be provided.	1.1
PostingDate	Date that indicates the financial period the cost, man-hours, equipment hours or quantities will be associated.	10/18/2018
Notes	Any additional information about the transaction.	Maintenance
Quantity	Claimed quantity for the cost item.	5
ManHours	Claimed man-hours for the cost item.	4
EquipmentHours	Claimed equipment-hours for the cost item.	5
Cost	Array header of the cost records for cost categories.	5000
CostCategories	Array header of the cost categories records. All fields within this array can be repeated for each cost item that has data.	
Name	Source system ID of the cost category. Refer to appendix A.	RE Repair Labor
Amount	Claimed amount of cost for that cost category.	5000

Name	Description	Example
ActualsUserDefined1	A date field associated to the actual transaction.	09/09/2024
ActualsUserDefined2	A date field associated to the actual transaction.	09/09/2024
ActualsUserDefined3	A free-form text field associated to the actual transaction.	User defined 3
ActualsUserDefined4	A free-form text field associated to the actual transaction.	User defined 4
ActualsUserDefined5	A free-form text field associated to the actual transaction.	User defined 5
ActualsUserDefined6	A free-form text field associated to the actual transaction.	User defined 6
EstimateResource	An estimate resource code associated to the actual transaction.	Labor1
SourceSystemName	Not used	External System
SourceSystemId	Not used	81de2acd1cf74401bfdd04e1db9b3944

Sample JSON

```
[{
  "ProjectDisplay": "190003",
  "Actuals": [{
    "PhaseCode": "1005",
    "CBSPositionCode": "1.2",
    "PostingDate": "10/12/2023",
    "Notes": "Maintenance",
    "Quantity": "5",
    "ManHours": "4",
    "EquipmentHours": "5",
    "ActualsUserDefined1": "10/12/2023",
    "ActualsUserDefined2": "10/12/2023",
    "ActualsUserDefined3": "udf3",
    "ActualsUserDefined4": "udf4",
    "ActualsUserDefined5": "udf5",
    "ActualsUserDefined6": "udf6",
    "EstimateResource": "1-Labor",
    "Cost": {
      "CostCategories": [{
        "Name": "RE Repair Labor",
        "Amount": "5000"
      }]
    }
  ]},
  "SourceSystemId": "2",
  "SourceSystemName": "External System"
},
{
  "ProjectDisplay": "190002",
  "Actuals": [{
    "PhaseCode": "1000",
```



```
"CBSPositionCode": "1.2",
"PostingDate": "08/12/2024",
"Notes": "Maintenance",
"Quantity": "5",
"ManHours": "4",
"EquipmentHours": "5",
"ActualsUserDefined1": "08/12/2024",
"ActualsUserDefined2": "08/12/2024",
"ActualsUserDefined3": "udf3",
"ActualsUserDefined4": "udf4",
"ActualsUserDefined5": "udf5",
"ActualsUserDefined6": "udf6",
"EstimateResource": "",
"Cost": {
  "CostCategories": [{
    "Name": "RE Repair Labor",
    "Amount": "5000"
  }]
},
"SourceSystemId": "3",
"SourceSystemName": "External System"
}
```

Integration Status

There are multiple ways to get the status associated with the Multi Project Actuals (generic) API, depending on the issue or how the customer wants to view the status of the integration.

- Results are available through the import history screen, which includes error messaging in a downloadable file.
- A location field is available in the results in the response header.

Sample:

Location <https://qa.hds.ineight.com/ExternalSystem//Messages/Status?messageId=772d849e-4739-4e34-9467-0da05b9434e0>

A system must be able to go to that URI and see if the API was successful or failed.

Sample:

Success

```
{
  "Status": "Success",
  "CorrelationID": "fd058d5f-d22f-4056-8c72-6c25265707f0",
  "ProjectDisplay": "103093",
  "ErrorDetails": []
}
```

Failure

```
{
  "Status": "Failed",
  "CorrelationID": "de068edb-b9ac-4281-8a08-7926ae2fe316",
}
```

```

"ProjectDisplay": "GoldenSnapshot26072022180836",
"ErrorDetails": [
  {
    "ErrorCode": 10014,
    "ErrorDescription": "In order to claim man hours 'Allow as built' value
within Control must be set to 'All' or 'Cost'",
    "CostItemList": [
      {
        "Code": "1007"
      }
    ]
  }
]
}

```

Status Codes

API/Entity Logic	Condition	Code	Message
API Validation	Project Display must have a valid project number in InEight.	400	Failed to validate project details
API Validation	Portion of the projects are not valid	400	Partially submitted for processing. Please check FailedProjects section for projects which are not processed
API Validation	Number of records	400	The file size exceeds the maximum record limit 65000 per project
API Validation	Invalid format	400	Bad request
API Validation		417	Expectation failed
API Validation	No actuals in the payload	400	Missing import parameters
API Validation	Number of projects	400	Number of projects exceeded maximum project limit of 15
API Validation	Failure	500	
API Validation	Successful	200	

The location url will be available and the content will be provided as above.

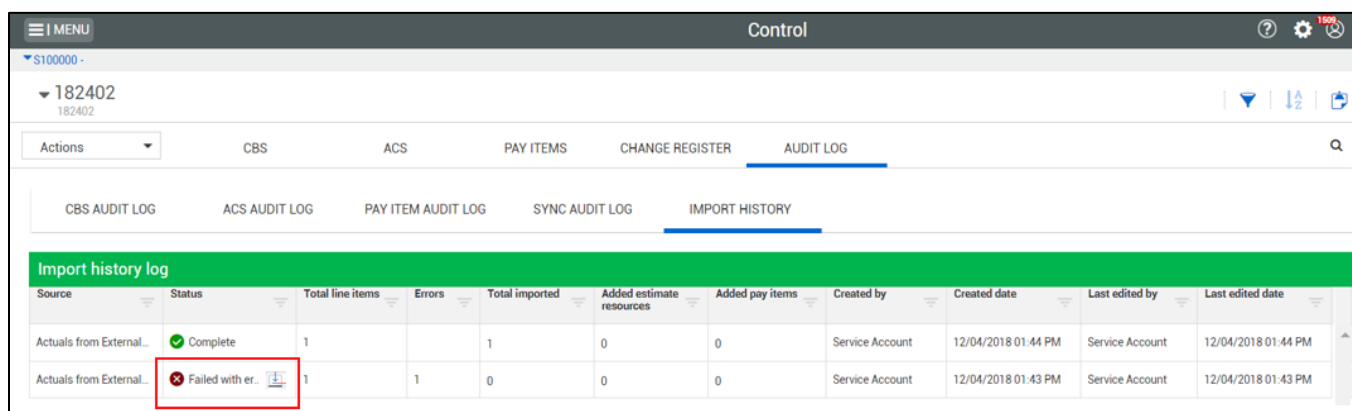
Entity Logic Validation Errors

10001	WBS phase code or CBS position code is required
10002	WBS Phase code in external system exceeds the maximum character limit of 50
10003	WBS phase code match not found
10004	CBS position code in external system exceeds the maximum character limit of 100
10005	CBS position code match not found
10006	Notes in external system exceeds the maximum character limit of 4000
10007	As-built lock value within Control must be False

10008	Quantities in external system must be a numeric value
10009	Quantity in external system exceeds the maximum character limit of 11 before decimal place
10010	In order to claim quantities 'Allow as built' value within Control must be set to 'All' or 'Quantity'
10011	In order to claim quantities 'Hide in plan and progress ' value within Control must be set to 'Checked'
10012	Man-hours in external system must be a numeric value
10013	Man-hours in external system exceeds the maximum character limit of 11 before decimal place
10014	In order to claim man hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
10015	Equipment-hours in external system must be a numeric value
10016	Equipment hours in external system exceeds the maximum character limit of 11 before decimal place
10017	In order to claim equipment hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
10018	In order to claim cost 'Allow as built' value within Control must be set to 'All' or 'Cost'
10019	Cost category in external system is required to claim cost
10020	Cost category in external system exceeds the maximum character limit of 50
10021	Cost Category match not found
10022	Cost in external system must be a numeric value
10023	Cost in external system exceeds the maximum character limit of 11 before decimal place
10024	Value exceeds character limit
10025	Posting date in external system must be equal to or less than today's date
10026	Posting date from external system is required
10027	Posting date in external system must be valid
10028	Posting date format within external system should be MM/DD/YYYY
10029	System Error. Kindly try again later
10030	Projects sent exceeds the max number available
10031	<field> has more than 250 characters
10032	Estimate resource code is not available in this project
10033	<field> is not formatted as a date (MM/DD/YYYY)
10034	Actual cost, manhours or quantity are required for an actual posting

Verification

Additional error messaging is available through the Integrations log for each project sent.



Source	Status	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date	Last edited by	Last edited date
Actuals from External...	Complete	1		1	0	0	Service Account	12/04/2018 01:44 PM	Service Account	12/04/2018 01:44 PM
Actuals from External...	Failed with error	1	1	0	0	0	Service Account	12/04/2018 01:43 PM	Service Account	12/04/2018 01:43 PM

The following table lists the error messaging available in the Integrations log file.

Message
WBS phase code match not found
SAP status control value within Control must be blank
At least one among WBS phase code or CBS position code is require
CBS position code match not found
Posting date from external system is required
Posting date format within external system should be MM/DD/YYYY
Posting date in external system must be valid
Posting date in external system must be equal to or less than today's date
Notes in external system exceeds the maximum character limit of 250
Quantities in external system must be a numeric value
Allow-as-built value within Control must be set to 'All' or 'Quantity'
Hide in plan and progress ' value within Control must be set to 'Checked'
Man-hours in external system must be a numeric value
In order to claim man-hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
Equipment-hours in external system must be a numeric value
In order to claim equipment hours 'Allow as built' value within Control must be set to 'All' or 'Cost'
Cost in external system must be a numeric value
In order to claim cost 'Allow as built' value within Control must be set to 'All' or 'Cost'
Cost category in external system is required to claim cost
Cost Category match not found
ProjectDisplay in external system exceeds the maximum character limit of 200
CBS position code in external system exceeds the maximum character limit of 100
Quantity in external system exceeds the maximum character limit of 11 before decimal place
Man-hours in external system exceeds the maximum character limit of 11 before decimal place
Equipment hours in external system exceeds the maximum character limit of 11 before decimal place
Cost in external system exceeds the maximum character limit of 11 before decimal place
Cost category in external system exceeds the maximum character limit of 50
ActualsUserDefined1 has Invalid Date
ActualsUserDefined2 has Invalid Date
ActualsUserDefined1 has an invalid format. The Date Format should be MM/dd/yyyy

Message
ActualsUserDefined2 has an invalid format. The Date Format should be MM/dd/yyyy
ActualsUserDefined3 has more than 250 characters
ActualsUserDefined4 has more than 250 characters
ActualsUserDefined5 has more than 250 characters
ActualsUserDefined6 has more than 250 characters
Estimate resource code <code> is not available in this project

Cost Item (Generic) – Get

NOTE:

When requesting a project's cost items information, the external project ID must be used in the request.

Direction		Request to retrieve information for a project
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Entire entity – thousands to tens of thousands of records based on the size of the project
APIM Name		List Cost Item
InEight Control	Starting Version	23.4
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent
1	@odata.context	String	500	
1	Value	Array	8	
2	ProjectExternalId	String	50	Value
2	ProjectDisplayID	String	200	Value
2	CostItemId	Int	22	Value
2	WbsPhaseCode	String	50	Value
2	CBSPosition	String	100	Value
2	Description	String	250	Value
2	Start ¹	String	25	Value
2	Finish ¹	String	25	Value
2	ActualStart ¹	String	25	Value
2	ActualFinish ¹	String	25	Value
2	EarlyStart ¹	String	25	Value
2	EarlyFinish ¹	String	25	Value
2	LateStart ¹	String	25	Value
2	LateFinish ¹	String	25	Value
2	AccountCode	String	500	Value
2	AccountCodeDescription	String	500	Value

Depth	Name	Type	Precision	Parent
2	AllowAsBuilt	String	20	Value
2	AsBuiltLock	Boolean	N/A	Value
2	HideinPlanProgressDesign	Boolean	N/A	Value
2	BudgetSegment1	String	250	Value
2	BudgetSegment2	String	250	Value
2	BudgetSegment3	String	250	Value
2	BudgetSegment4	String	250	Value
2	IsTerminal	Boolean	N/A	Value
2	PayItemAssignmentId	String	250	Value
2	PayItemAssignmentNumber	String	250	Value
2	CBSContributeQty	Boolean	N/A	Value
2	Currency	String	250	Value
2	QuantityDriver	String	100	Value
2	UOM	String	255	Value
2	CostSource	String	250	Value
2	CostSegment	String	250	Value
2	SourceSystemID	String	250	Value
2	SourceSystemName	String	250	Value
2	Issue	String	250	Value
2	Notes	String	4000	Value
2	Tag1	String	100	Value
2	Tag2	String	100	Value
2	Tag3	String	100	Value
2	Tag4	String	100	Value
2	Tag5	String	100	Value
2	Tag6	String	100	Value
2	Tag7	String	100	Value
2	Tag8	String	100	Value
2	Tag9	String	100	Value
2	Tag10	String	100	Value
2	Tag11	String	100	Value
2	Tag12	String	100	Value
2	Tag13	String	100	Value
2	Tag14	String	100	Value

Depth	Name	Type	Precision	Parent
2	Tag15	String	100	Value
2	Tag16	String	100	Value
2	Tag17	String	100	Value
2	Tag18	String	100	Value
2	Tag19	String	100	Value
2	Tag20	String	100	Value
2	Tag21	String	100	Value
2	Tag22	String	100	Value
2	Tag23	String	100	Value
2	Tag24	String	100	Value
2	Tag25	String	100	Value
2	UserDefined1	String	250	Value
2	UserDefined2	String	250	Value
2	UserDefined3	String	250	Value
2	UserDefined4	String	250	Value
2	UserDefined5	String	250	Value
2	UserDefined6	String	250	Value
2	UserDefined7	String	250	Value
2	UserDefined8	String	250	Value
2	UserDefined9	String	250	Value
2	UserDefined10	String	250	Value
2	UserDefined11	String	250	Value
2	UserDefined12	String	250	Value
2	UserDefined13	String	250	Value
2	UserDefined14	String	250	Value
2	UserDefined15	String	250	Value
2	Rework	Boolean	N/A	Value
2	IsActive	Boolean	N/A	Value
2	CreatedBy	String	50	Value
2	CreateDate ¹	String	25	Value
2	ModifiedBy	String	50	Value
2	ModifiedDate ¹	String	25	Value

¹ – The data format for Date/Time fields is YYYY-MM-DDTHH:MM:SS±hhmm, where hhmm is the time zone offset. If the time is already converted to UTC, then the offset will be +0000

Field Descriptions

Name	Description	Example
@odata.context	http of where the information was requested	https://test.ineight.com/integrations/\$metadata#ControlCostItem
ProjectDisplayId	Project Display as shown in the UI.	103466
ProjectExternalId	Unique external identifier for the project.	103466
CostItemId	Internal ID for the cost item.	92122
WBSPhaseCode	WBS Phase code for the cost item.	1000
CBSPosition	CBS position of the cost item.	1.1.1.3.3
Description	User-defined description of the cost item.	Financial Results
Start	Start date of the cost item.	2022-07-01T00:00:00
Finish	Finish date of the cost item.	2022-07-01T00:00:00
ActualStart	Actual start date of the cost item.	2022-07-01T00:00:00
ActualFinish	Actual finish date of the cost item.	2022-07-01T00:00:00
EarlyStart	Early start date of the cost item.	2022-07-01T00:00:00
EarlyFinish	Early finish date of the cost item.	2022-07-01T00:00:00
LateStart	Late start date of the cost item.	2022-07-01T00:00:00
LateFinish	Late finish date of the cost item.	2022-07-01T00:00:00
AccountCode	Account code assigned to the cost item.	10.10.0.1
AccountDescription	Description of the account code.	Bonds
AllowAsBuilt	Defines whether the system allows for tracking of cost, quantity, man-hours, and equipment hours.	None
AsBuiltLock	An overwrite for the AllowAsBuilt to determine if actuals should be posted against a cost item.	true
HideInPlanProgressDesign	Hide in Plan, Progress and Design for the cost item.	true
BudgetSegment1	Budget segment 1 for the cost item.	10000
BudgetSegment2	Budget segment 2 for the cost item.	100
BudgetSegment3	Budget segment 3 for the cost item.	1
BudgetSegment4	Budget segment 4 for the cost item.	10
IsTerminal	IsTerminal for the cost item.	true
PayItemAssignmentId	Pay item source system ID for the cost item.	100.1
PayItemAssignmentNumber	Pay item number entered in the UI by a user.	1
CBSContributeQty	CBS contribute quantity for the cost item.	false
Currency	Currency of the cost item.	USD

Name	Description	Example
QuantityDriver	Quantity Driver for the cost item.	Superior CI
UOM	Cost item unit of measure.	PLS
CostSource	Cost Source for the cost item.	Plug
CostSegment	Cost Segment for the cost item..	Direct Cost
SourceSystemId	Unique external source system ID.	Any text
SourceSystemName	External source system name.	External system
Issue	Issue for the cost item.	Issue 1
Notes	CBS Notes for the cost item.	Any text
Tag1	CBS tag 1 for the cost item.	Any text
Tag2	CBS tag 2 for the cost item.	Any text
Tag3	CBS tag 3 for the cost item.	Any text
Tag4	CBS tag 4 for the cost item.	Any text
Tag5	CBS tag 5 for the cost item.	Any text
Tag6	CBS tag 6 for the cost item.	Any text
Tag7	CBS tag 7 for the cost item.	Any text
Tag8	CBS tag 8 for the cost item.	Any text
Tag9	CBS tag 9 for the cost item.	Any text
Tag10	CBS tag 10 for the cost item.	Any text
Tag11	CBS tag 11 for the cost item.	Any text
Tag12	CBS tag 12 for the cost item.	Any text
Tag13	CBS tag 13 for the cost item.	Any text
Tag14	CBS tag 14 for the cost item.	Any text
Tag15	CBS tag 15 for the cost item.	Any text
Tag16	CBS tag 16 for the cost item.	Any text
Tag17	CBS tag 17 for the cost item.	Any text
Tag18	CBS tag 18 for the cost item.	Any text
Tag19	CBS tag 19 for the cost item.	Any text
Tag20	CBS tag 20 for the cost item.	Any text
Tag21	CBS tag 21 for the cost item.	Any text
Tag22	CBS tag 22 for the cost item.	Any text
Tag23	CBS tag 23 for the cost item.	Any text
Tag24	CBS tag 24 for the cost item.	Any text
Tag25	CBS tag 25 for the cost item.	Any text
UserDefined1	CBS user defined 1 for the cost item.	Any text

Name	Description	Example
UserDefined2	CBS user defined 2 for the cost item.	Any text
UserDefined3	CBS user defined 3 for the cost item.	Any text
UserDefined4	CBS user defined 4 for the cost item.	Any text
UserDefined5	CBS user defined 5 for the cost item.	Any text
UserDefined6	CBS user defined 6 for the cost item.	Any text
UserDefined7	CBS user defined 7 for the cost item.	Any text
UserDefined8	CBS user defined 8 for the cost item.	Any text
UserDefined9	CBS user defined 9 for the cost item.	Any text
UserDefined10	CBS user defined 10 for the cost item.	Any text
UserDefined11	CBS user defined 11 for the cost item.	Any text
UserDefined12	CBS user defined 12 for the cost item.	Any text
UserDefined13	CBS user defined 13 for the cost item.	Any text
UserDefined14	CBS user defined 14 for the cost item.	Any text
UserDefined15	CBS user defined 15 for the cost item.	Any text
Rework	Cost item is marked for rework.	true
IsActive	Determines if the cost item is active in the project.	true
CreatedBy	Name of the user that created the cost item.	Service Account
CreatedDate	Date created.	2023-04-18T21:10:28.42
ModifiedBy	Name of the user that made the last change.	John Doe
ModifiedDate	Date last modified.	2023-04-18T21:10:28.42

Sample JSON

```
{
  "@odata.context":
  "https://api.ineight.com/integrations/$metadata#ControlCostItem",
  "value": [
    {
      "ProjectExternalId": "190009",
      "ProjectDisplayID": "190009",
      "CostItemID": 2208601,
      "CBSPosition": "1.1",
      "WbsPhaseCode": "2",
      "Description": "Cost item 2",
      "Start": "2025-01-01T00:00:00",
      "Finish": "2025-12-25T00:00:00",
      "ActualStart": null,
      "ActualFinish": null,
      "EarlyStart": "2025-01-01T00:00:00",
      "EarlyFinish": "2025-12-25T00:00:00",
      "LateStart": null,

```

```

"LateFinish": null,
"AccountCode": "",
"AccountCodeDescription": "",
"AllowAsBuilt": "All",
"AsBuiltLock": "False",
"HideinPlanProgressDesign": false,
"BudgetSegment1": "2",
"BudgetSegment2": "190009",
"BudgetSegment3": "",
"BudgetSegment4": "",
"IsTerminal": true,
"PayItemAssignmentID": "",
"PayItemAssignmentNumber": "",
"CBSContributeQty": false,
"Currency": "USD",
"QuantityDriver": "Superior CI",
"UOM": "EA",
"CostSource": "Plug",
"CostSegment": "Direct Cost",
"SourceSystemID": "0181ca2053da48a2b746bdde14c511fe",
"SourceSystemName": "",
"Issue": "",
"Notes": "",
"Tag1": "Tag 1",
"Tag2": "tag 2",
"Tag3": "",
"Tag4": "Tag 4",
"Tag5": "Tag 5",
"Tag6": "Tag 6",
"Tag7": "",
"Tag8": "tag 8",
"Tag9": "",
"Tag10": "Tag 10",
"Tag11": "Tag Eleven",
"Tag12": "12-12-12",
"Tag13": "",
"Tag14": "",
"Tag15": "tag 15",
"Tag16": "tag 16",
"Tag17": "tag 17",
"Tag18": "",
"Tag19": "",
"Tag20": "Walls - Stone",
"Tag21": "",
"Tag22": "",
"Tag23": "",
"Tag24": "",
"Tag25": "",
"UserDefined1": "",
"UserDefined2": "",
"UserDefined3": "",
"UserDefined4": "",
"UserDefined5": "",
"UserDefined6": "",
"UserDefined7": "",
"UserDefined8": "",
"UserDefined9": "",

```

```
"UserDefined10": "",
"UserDefined11": "",
"UserDefined12": "",
"UserDefined13": "",
"UserDefined14": "",
"UserDefined15": "",
"Rework": false,
"IsActive": true,
"CreatedBy": "John Smith",
"CreatedDate": "2025-05-22T21:16:00.077",
"ModifiedBy": "John Smith",
"ModifiedDate": "2025-05-22T21:51:32.923"
},
{
  "ProjectExternalId": "190009",
  "ProjectDisplayID": "190009",
  "CostItemID": 2208600,
  "CBSPosition": "1",
  "WbsPhaseCode": "1",
  "Description": "Cost item 1",
  "Start": "2025-01-01T00:00:00",
  "Finish": "2025-12-25T00:00:00",
  "ActualStart": null,
  "ActualFinish": null,
  "EarlyStart": "2025-01-01T00:00:00",
  "EarlyFinish": "2025-12-25T00:00:00",
  "LateStart": null,
  "LateFinish": null,
  "AccountCode": "",
  "AccountCodeDescription": "",
  "AllowAsBuilt": "None",
  "AsBuiltLock": "False",
  "HideinPlanProgressDesign": false,
  "BudgetSegment1": "1",
  "BudgetSegment2": "190009",
  "BudgetSegment3": "",
  "BudgetSegment4": "",
  "IsTerminal": false,
  "PayItemAssignmentID": "",
  "PayItemAssignmentNumber": "",
  "CBSContributeQty": false,
  "Currency": "USD",
  "QuantityDriver": "Superior CI",
  "UOM": "PLS",
  "CostSource": "Detail",
  "CostSegment": "Direct Cost",
  "SourceSystemID": "bc2cdbeced2b4fe0ba26065b0219bf46",
  "SourceSystemName": "",
  "Issue": "",
  "Notes": "",
  "Tag1": "",
  "Tag2": "",
  "Tag3": "",
  "Tag4": "",
  "Tag5": "",
  "Tag6": "",
  "Tag7": "",
```

```

    "Tag8": "",
    "Tag9": "",
    "Tag10": "",
    "Tag11": "",
    "Tag12": "",
    "Tag13": "",
    "Tag14": "",
    "Tag15": "",
    "Tag16": "",
    "Tag17": "",
    "Tag18": "",
    "Tag19": "",
    "Tag20": "",
    "Tag21": "",
    "Tag22": "",
    "Tag23": "",
    "Tag24": "",
    "Tag25": "",
    "UserDefined1": "",
    "UserDefined2": "",
    "UserDefined3": "",
    "UserDefined4": "",
    "UserDefined5": "",
    "UserDefined6": "",
    "UserDefined7": "",
    "UserDefined8": "",
    "UserDefined9": "",
    "UserDefined10": "",
    "UserDefined11": "",
    "UserDefined12": "",
    "UserDefined13": "",
    "UserDefined14": "",
    "UserDefined15": "",
    "Rework": false,
    "IsActive": true,
    "CreatedBy": "John Smith",
    "CreatedDate": "2025-05-22T21:15:04.253",
    "ModifiedBy": "John Smith",
    "ModifiedDate": "2025-05-22T21:26:00.723"
  },
  {
    "ProjectExternalId": "190009",
    "ProjectDisplayID": "190009",
    "CostItemID": 2208602,
    "CBSPosition": "2",
    "WbsPhaseCode": "3a",
    "Description": "Cost item 3",
    "Start": "2025-05-01T00:00:00",
    "Finish": "2025-07-20T00:00:00",
    "ActualStart": null,
    "ActualFinish": null,
    "EarlyStart": "2025-05-01T00:00:00",
    "EarlyFinish": "2025-07-20T00:00:00",
    "LateStart": null,
    "LateFinish": null,
    "AccountCode": "",
    "AccountCodeDescription": "",

```

```
"AllowAsBuilt": "All",
"AsBuiltLock": "False",
"HideinPlanProgressDesign": false,
"BudgetSegment1": "3a",
"BudgetSegment2": "190009",
"BudgetSegment3": "",
"BudgetSegment4": "",
"IsTerminal": true,
"PayItemAssignmentID": "",
"PayItemAssignmentNumber": "",
"CBSContributeQty": false,
"Currency": "USD",
"QuantityDriver": "Superior CI",
"UOM": "H",
"CostSource": "Plug",
"CostSegment": "Direct Cost",
"SourceSystemID": "6b363823aad346189ad56b58c8beb860",
"SourceSystemName": "",
"Issue": "",
"Notes": "",
"Tag1": "",
"Tag2": "",
"Tag3": "",
"Tag4": "",
"Tag5": "",
"Tag6": "",
"Tag7": "",
"Tag8": "",
"Tag9": "",
"Tag10": "",
"Tag11": "",
"Tag12": "",
"Tag13": "",
"Tag14": "",
"Tag15": "",
"Tag16": "",
"Tag17": "",
"Tag18": "",
"Tag19": "",
"Tag20": "",
"Tag21": "",
"Tag22": "",
"Tag23": "",
"Tag24": "",
"Tag25": "",
"UserDefined1": "1",
"UserDefined2": "2",
"UserDefined3": "3",
"UserDefined4": "4",
"UserDefined5": "5",
"UserDefined6": "6",
"UserDefined7": "7",
"UserDefined8": "8",
"UserDefined9": "9",
"UserDefined10": "10",
"UserDefined11": "11",
"UserDefined12": "12",
```

```
    "UserDefined13": "13",
    "UserDefined14": "14",
    "UserDefined15": "15",
    "Rework": false,
    "IsActive": true,
    "CreatedBy": "John Smith",
    "CreatedDate": "2025-05-22T21:16:31.44",
    "ModifiedBy": "John Smith",
    "ModifiedDate": "2025-05-22T21:51:32.923"
  }
]
```

Status Codes

	Condition	Code	Message
API Validation	Valid request	202	

Budget (Generic) – Get

NOTE:

When requesting a project's budget information, the external project ID must be used in the request.

Direction		Request to retrieve information for a project
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Entire entity – thousands to tens of thousands of records based on the size of the project
APIM Name		List Budget
InEight Control	Starting Version	23.4
	Ending Version	

Fields

Depth	Name	Type	Precision ¹	Parent
1	@odata.context	String	500	
1	Value	Array	N/A	
2	OriginalBudgetQuantity	Decimal	22,11	Value
2	OriginalBudgetUnitofMeasure	String	255	Value
2	OriginalBudgetManhours	Decimal	22,11	Value
2	OriginalBudgetTotalCost	Decimal	22,11	Value
2	OriginalBudgetUnitCost	Decimal	22,11	Value
2	OriginalBudgetCostCategory	Array	N/A	Value
3	Name	String	50	OriginalBudgetCostCategory
3	Cost	Decimal	22,11	OriginalBudgetCostCategory
3	IsTerminalCostCategory	Boolean	N/A	OriginalBudgetCostCategory
2	CurrentBudgetQuantity	Decimal	22,11	Value
2	CurrentBudgetUnitofMeasure	String	255	Value
2	CurrentBudgetManHours	Decimal	22,11	Value
2	CurrentBudgetTotalCost	Decimal	22,11	Value
2	CurrentBudgetUnitCost	Decimal	22,11	Value
2	CurrentBudgetCostCategory	Array	N/A	Value
3	Name	String	50	CurrentBudgetCostCategory

Depth	Name	Type	Precision ¹	Parent
3	Cost	Decimal	22,11	CurrentBudgetCostCategory
3	IsTerminalCostCategory	Boolean	N/A	CurrentBudgetCostCategory
2	CurrentEstimateQuantity	Decimal	22,11	Value
2	CurrentEstimateUnitofMeasure	String	255	Value
2	CurrentEstimateManHours	Decimal	22,11	Value
2	CurrentEstimateTotalCost	Decimal	22,11	Value
2	CurrentEstimateUnitCost	Decimal	22,11	Value
2	CurrentEstimateCostCategory	Array	N/A	Value
3	Name	String	50	CurrentEstimateCostCategory
3	Cost	Decimal	22,11	CurrentEstimateCostCategory
3	IsTerminalCostCategory	Boolean	N/A	CurrentEstimateCostCategory
2	ProjectId	String	200	Value
2	ProjectExternalId	String	50	Value
2	PhaseCode	String	50	Value
2	IsTerminal	Boolean	N/A	Value
2	CBSPosition	String	100	Value
2	IsActive	Boolean	N/A	Value
2	Suspend	Boolean	N/A	Value
2	IsBudgetLocked	Boolean	N/A	Value
2	CostItemId	Integer	N/A	Value
2	CostItemSourceSystemID	String	250	Value
2	PendingBudgetCost	Decimal	22,11	Value
2	CreatedBy	String	50	Value
2	CreatedDate ²	String	25	Value
2	ModifiedBy	String	50	Value
2	ModifiedDate ²	String	25	Value
2	Currency	String	250	Value

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

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

Field Descriptions

Name	Description	Example
@odata.context	http of where the information was requested	https://test.ineight.com/integrations/\$metadata#ControlBudget
Value	Array	
OriginalBudgetQuantity	Original budget quantity of a cost item.	100
OriginalBudgetUnitofMeasure	Original budget unit of measure of a cost item.	PLS
OriginalBudgetManhours	Original budget manhours of a cost item.	4
OriginalBudgetTotalCost	Original Budget total cost of a cost item.	430
OriginalBudgetUnitCost	Original budget unit cost of a cost item.	4.3
OriginalBudgetCostCategory	Array	
Name	Source System ID of a cost category. See Appendix A .	RE Repair Labor
Cost	Cost of that cost category.	100
IsTerminalCostCategory	If the cost category is a terminal.	True
CurrentBudgetQuantity	Current budget quantity of a cost item.	100
CurrentBudgetUnitofMeasure	Current budget unit of measure of a cost item.	PLS
CurrentBudgetManHours	Current budget man hours of a cost item.	4
CurrentBudgetTotalCost	Current budget total cost of a cost item.	430
CurrentBudgetUnitCost	Current budget unit cost of a cost item.	4.3
CurrentBudgetCostCategory	Array	
Name	Source System ID of a cost category. See Appendix A .	RE Repair Labor
Cost	Cost of that cost category.	100
IsTerminalCostCategory	If the cost category is a terminal.	true
CurrentEstimateQuantity	Forecast take-off quantity of a cost item.	10
CurrentEstimateUnitofMeasure	Current estimate unit of measure of a cost item.	PLS
CurrentEstimateManHours	Current estimate man hours of a cost item.	5
CurrentEstimateTotalCost	Current estimate total cost of a cost item.	500
CurrentEstimateUnitCost	Current estimate unit cost of a cost item.	5
CurrentEstimateCostCategory	Array	
Name	Source System ID of the cost category. See Appendix A .	RE Repair Labor
Cost	Cost of that cost category.	100
IsTerminalCostCategory	If the cost category is a terminal.	True
ProjectId	Unique project display ID.	190001

Name	Description	Example
ProjectExternalId	External project ID.	190001
PhaseCode	WBS phase code of a cost item.	1000
IsTerminal	Indicates if the cost item is terminal.	True
CBSPosition	CBS position of a cost item.	1.1
IsActive	Indicates if the cost item is active in the project.	True
Suspend	Indicates if the cost item is suspended in the project.	False
IsBudgetLocked	Indicates if the budget is locked on the cost item.	True
CostItemSourceSystemID	Unique external ID for the cost item.	1000.1
PendingBudgetCost	Amount of pending budget that has not been approved of the cost item.	400
CreatedBy	Name of the user that created cost item.	John Doe
CreatedDate	Date created.	2023-04-18T21:10:28.42
ModifiedBy	Name of the user that made the last change.	John Doe
ModifiedDate	Date last modified.	2023-04-18T21:10:28.42
Currency	Currency of the cost item.	USD

Sample JSON

```
{
  "@odata.context":
  "https://api.ineight.com/integrations/$metadata#ControlBudget",
  "value": [
    {
      "OriginalBudgetQuantity": 0.0,
      "OriginalBudgetUnitOfMeasure": "PLS",
      "OriginalBudgetManHours": 1000.0,
      "OriginalBudgetTotalCost": 50000.0,
      "OriginalBudgetUnitCost": 0.0,
      "OriginalBudgetCostCategory": [
        {
          "Name": "Total",
          "Cost": 50000.0,
          "IsTerminalCostCategory": false
        },
        {
          "Name": "Labor",
          "Cost": 50000.0,
          "IsTerminalCostCategory": false
        },
        {
          "Name": "Undefined Total",
          "Cost": 0.0,
          "IsTerminalCostCategory": true
        },
        {

```

```
        "Name": "Undefined Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": true
    },
    ],
    "CurrentBudgetQuantity": 0.0,
    "CurrentBudgetUnitOfMeasure": "PLS",
    "CurrentBudgetManHours": 1000.0,
    "CurrentBudgetTotalCost": 50000.0,
    "CurrentBudgetUnitCost": 0.0,
    "CurrentBudgetCostCategory": [
        {
            "Name": "Total",
            "Cost": 50000.0,
            "IsTerminalCostCategory": false
        },
        {
            "Name": "Labor",
            "Cost": 50000.0,
            "IsTerminalCostCategory": false
        },
        {
            "Name": "Undefined Total",
            "Cost": 0.0,
            "IsTerminalCostCategory": true
        },
        {
            "Name": "Undefined Labor",
            "Cost": 50000.0,
            "IsTerminalCostCategory": true
        }
    ],
    "CurrentEstimateQuantity": 1.0,
    "CurrentEstimateUnitOfMeasure": "PLS",
    "CurrentEstimateManHours": 1000.0,
    "CurrentEstimateTotalCost": 50000.0,
    "CurrentEstimateUnitCost": 50000.0,
    "CurrentEstimateCostCategory": [
        {
            "Name": "Total",
            "Cost": 50000.0,
            "IsTerminalCostCategory": false
        },
        {
            "Name": "Labor",
            "Cost": 50000.0,
            "IsTerminalCostCategory": false
        },
        {
            "Name": "Undefined Labor",
            "Cost": 50000.0,
            "IsTerminalCostCategory": true
        }
    ],
    "ProjectId": "190009",
    "ProjectExternalId": "190009",
    "PhaseCode": "1",
```

```

    "IsTerminal": false,
    "CBSPosition": "1",
    "IsActive": true,
    "Suspend": false,
    "IsBudgetLocked": false,
    "CostItemId": 2208600,
    "CostItemSourceSystemID": "bc2cdbc2b4fe0ba26065b0219bf46",
    "PendingBudgetCost": 0.0,
    "CreatedBy": "John Smith",
    "CreatedDate": "2025-05-22T21:15:04+00:00",
    "ModifiedBy": "John Smith",
    "ModifiedDate": "2025-05-22T21:26:00+00:00",
    "Currency": "USD"
  },
  {
    "OriginalBudgetQuantity": 100.0,
    "OriginalBudgetUnitOfMeasure": "EA",
    "OriginalBudgetManHours": 1000.0,
    "OriginalBudgetTotalCost": 50000.0,
    "OriginalBudgetUnitCost": 500.0,
    "OriginalBudgetCostCategory": [
      {
        "Name": "Total",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
      },
      {
        "Name": "Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
      },
      {
        "Name": "Undefined Total",
        "Cost": 0.0,
        "IsTerminalCostCategory": true
      },
      {
        "Name": "Undefined Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": true
      }
    ],
    "CurrentBudgetQuantity": 100.0,
    "CurrentBudgetUnitOfMeasure": "EA",
    "CurrentBudgetManHours": 1000.0,
    "CurrentBudgetTotalCost": 50000.0,
    "CurrentBudgetUnitCost": 500.0,
    "CurrentBudgetCostCategory": [
      {
        "Name": "Total",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
      },
      {
        "Name": "Labor",
        "Cost": 50000.0,
        "IsTerminalCostCategory": false
      }
    ]
  }
]

```

```

    },
    {
      "Name": "Undefined Total",
      "Cost": 0.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Undefined Labor",
      "Cost": 50000.0,
      "IsTerminalCostCategory": true
    }
  ],
  "CurrentEstimateQuantity": 100.0,
  "CurrentEstimateUnitOfMeasure": "EA",
  "CurrentEstimateManHours": 1000.0,
  "CurrentEstimateTotalCost": 50000.0,
  "CurrentEstimateUnitCost": 500.0,
  "CurrentEstimateCostCategory": [
    {
      "Name": "Undefined Total",
      "Cost": 0.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Undefined Labor",
      "Cost": 50000.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Total",
      "Cost": 50000.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Labor",
      "Cost": 50000.0,
      "IsTerminalCostCategory": false
    }
  ],
  "ProjectId": "190009",
  "ProjectExternalId": "190009",
  "PhaseCode": "2",
  "IsTerminal": true,
  "CBSPosition": "1.1",
  "IsActive": true,
  "Suspend": false,
  "IsBudgetLocked": true,
  "CostItemId": 2208601,
  "CostItemSourceSystemID": "0181ca2053da48a2b746bdde14c511fe",
  "PendingBudgetCost": 0.0,
  "CreatedBy": "John Smith",
  "CreatedDate": "2025-05-22T21:16:00+00:00",
  "ModifiedBy": "John Smith",
  "ModifiedDate": "2025-05-22T21:51:32+00:00",
  "Currency": "USD"
},
{

```

```

"OriginalBudgetQuantity": 150.0,
"OriginalBudgetUnitOfMeasure": "H",
"OriginalBudgetManHours": 0.0,
"OriginalBudgetTotalCost": 12000.0,
"OriginalBudgetUnitCost": 80.0,
"OriginalBudgetCostCategory": [
  {
    "Name": "Total",
    "Cost": 12000.0,
    "IsTerminalCostCategory": false
  },
  {
    "Name": "Materials",
    "Cost": 2000.0,
    "IsTerminalCostCategory": false
  },
  {
    "Name": "Undefined Total",
    "Cost": 0.0,
    "IsTerminalCostCategory": true
  },
  {
    "Name": "Supplies",
    "Cost": 10000.0,
    "IsTerminalCostCategory": false
  },
  {
    "Name": "Undefined Materials",
    "Cost": 2000.0,
    "IsTerminalCostCategory": true
  },
  {
    "Name": "Undefined Supplies",
    "Cost": 10000.0,
    "IsTerminalCostCategory": true
  }
],
"CurrentBudgetQuantity": 150.0,
"CurrentBudgetUnitOfMeasure": "H",
"CurrentBudgetManHours": 0.0,
"CurrentBudgetTotalCost": 12000.0,
"CurrentBudgetUnitCost": 80.0,
"CurrentBudgetCostCategory": [
  {
    "Name": "Total",
    "Cost": 12000.0,
    "IsTerminalCostCategory": false
  },
  {
    "Name": "Materials",
    "Cost": 2000.0,
    "IsTerminalCostCategory": false
  },
  {
    "Name": "Undefined Total",
    "Cost": 0.0,
    "IsTerminalCostCategory": true
  }
]

```



```
    },
    {
      "Name": "Supplies",
      "Cost": 10000.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Undefined Materials",
      "Cost": 2000.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Undefined Supplies",
      "Cost": 10000.0,
      "IsTerminalCostCategory": true
    }
  ],
  "CurrentEstimateQuantity": 150.0,
  "CurrentEstimateUnitOfMeasure": "H",
  "CurrentEstimateManHours": 0.0,
  "CurrentEstimateTotalCost": 12000.0,
  "CurrentEstimateUnitCost": 80.0,
  "CurrentEstimateCostCategory": [
    {
      "Name": "Undefined Total",
      "Cost": 0.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Undefined Supplies",
      "Cost": 10000.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Total",
      "Cost": 12000.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Supplies",
      "Cost": 10000.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Undefined Materials",
      "Cost": 2000.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Materials",
      "Cost": 2000.0,
      "IsTerminalCostCategory": false
    }
  ],
  "ProjectId": "190009",
  "ProjectExternalId": "190009",
  "PhaseCode": "3a",
```

```
    "IsTerminal": true,
    "CBSPosition": "2",
    "IsActive": true,
    "Suspend": false,
    "IsBudgetLocked": true,
    "CostItemId": 2208602,
    "CostItemSourceSystemID": "6b363823aad346189ad56b58c8beb860",
    "PendingBudgetCost": 0.0,
    "CreatedBy": "John Smith",
    "CreatedDate": "2025-05-22T21:16:31+00:00",
    "ModifiedBy": "John Smith",
    "ModifiedDate": "2025-05-22T21:51:32+00:00",
    "Currency": "USD"
  }
}
```

Status Codes

	Condition	Code	Message
API Validation	Valid request	202	

Forecast (Generic) – Get

NOTE:

When requesting a project's forecast information, the external project ID must be used in the request.

Direction		Request to retrieve information for a project
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Entire entity – thousands to tens of thousands of records based on the size of the project
API Name		List Live Forecast
InEight Control	Starting Version	23.4
	Ending Version	

Fields

Depth	Name	Type	Precision ¹	Parent
1	@odata.context	String	500	
1	Value	Array	8	
2	ProjectDisplay	String	200	Value
2	ProjectExternalId	String	50	Value
2	CostItemId	Int		Value
2	WBSPHaseCode	String	50	Value
2	CBSPosition	String	100	Value
2	CostItemSourceSystemId	String	250	Value
2	IsActive	Boolean	N/A	Value
3	IsTerminal	Boolean	N/A	Value
3	Suspend	Boolean	N/A	Value
3	UOM	String	255	Value
2	Currency	String	250	Value
2	ForecastMethod	String	50	Value
2	AveragePerformanceSetting	String	250	Value
2	ForecastNotes	String	1000	Value
2	ForecastManHours	Decimal	22,11	Value
2	ForecastTotalCost	Decimal	22,11	Value

Depth	Name	Type	Precision ¹	Parent
3	CreatedBy	String	50	Value
3	CreatedDate ²	String	25	Value
3	ModifiedBy	String	50	Value
2	ModifiedDate ²	String	25	Value
2	ForecastCostCategory	Array	N/A	Value
2	Name	String	50	ForecastCostCategory
2	Cost	Decimal	22,11	ForecastCostCategory
2	IsTerminalCostCategory	Boolean	N/A	ForecastCostCategory

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

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

Field Descriptions

Name	Description	Example
@odata.context	http of where the information was requested.	https://test.ineight.com/integrations/\$metadata#ControllLiveForecast
Value	Array	
ProjectDisplay	Project display ID specified in the UI.	190001
ProjectExternalId	External project ID.	190001
CostItemId	Internal unique cost item ID	4
WBSPHaseCode	WBS phase code of a cost item.	1000
CBSPosition	Cost items CBS position.	430
CostItemSourceSystemId	Unique external cost item ID.	1000.1
IsActive	Determines if a cost item is being used.	
IsTerminal	Determines if a cost item is a terminal.	RE Repair Labor
Suspend	Determines if a cost item is suspended.	100
UOM	Unit of measure of a cost item.	True
Currency	Currency of a cost item.	100
ForecastMethod	Forecast method of a cost item.	PLS
AveragePerformanceSetting	Average performance setting of a cost item.	4
ForecastNotes	Last forecast note of a cost item.	430
ForecastManHours	Forecast man hours of a cost item.	4.3

Name	Description	Example
ForecastTotalCost	Forecast total cost of a cost item.	
CreatedBy	Name of the user that created the live forecast information.	John Doe
CreatedDate	Date created.	2023-04-18T21:10:28.42
ModifiedBy	Name of the user that made the last change.	John Doe
ModifiedDate	Date last modified.	2023-04-18T21:10:28.42
ForecastCostCategory	Array	
Name	Source system ID of a cost category.	RE Repair Labor
Cost	Cost of that cost category.	100
IsTerminalCostCategory	Is terminal of the cost category.	True

Sample JSON

```
{
  "@odata.context":
  "https://api.ineight.com/integrations/$metadata#ControlLiveForecast",
  "value": [
    {
      "ProjectDisplay": "190009",
      "ProjectExternalId": "190009",
      "CostItemID": 2208600,
      "WBSPhaseCode": "1",
      "CBSPosition": "1",
      "CostItemSourceSystemId": "bc2cdbc2b4fe0ba26065b0219bf46",
      "IsActive": true,
      "IsTerminal": false,
      "Suspend": false,
      "UOM": "PLS",
      "Currency": "USD",
      "ForecastMethod": "Manual (EAC)",
      "AveragePerformanceSetting": "",
      "ForecastNotes": "",
      "ForecastManHours": 0.0,
      "ForecastTotalCost": 23000.0,
      "CreatedBy": "John Smith",
      "CreatedDate": "5/22/2025 9:15:04 PM",
      "ModifiedBy": "John Smith",
      "ModifiedDate": "5/22/2025 9:26:00 PM",
      "ForecastCostCategory": [
        {
          "Name": "Total",
          "Cost": 23000.0,
          "IsTerminalCostCategory": false
        },
        {
          "Name": "Undefined Total",
          "Cost": 23000.0,
          "IsTerminalCostCategory": true
        }
      ]
    }
  ]
}
```

```

    }
  ],
  {
    "ProjectDisplay": "190009",
    "ProjectExternalId": "190009",
    "CostItemID": 2208601,
    "WBSPhaseCode": "2",
    "CBSPosition": "1.1",
    "CostItemSourceSystemId": "0181ca2053da48a2b746bde14c511fe",
    "IsActive": true,
    "IsTerminal": true,
    "Suspend": false,
    "UOM": "EA",
    "Currency": "USD",
    "ForecastMethod": "None",
    "AveragePerformanceSetting": "",
    "ForecastNotes": "",
    "ForecastManHours": 0.0,
    "ForecastTotalCost": 0.0,
    "CreatedBy": "John Smith",
    "CreatedDate": "5/22/2025 9:16:00 PM",
    "ModifiedBy": "John Smith",
    "ModifiedDate": "5/22/2025 9:51:32 PM",
    "ForecastCostCategory": []
  },
  {
    "ProjectDisplay": "190009",
    "ProjectExternalId": "190009",
    "CostItemID": 2208602,
    "WBSPhaseCode": "3a",
    "CBSPosition": "2",
    "CostItemSourceSystemId": "6b363823aad346189ad56b58c8beeb860",
    "IsActive": true,
    "IsTerminal": true,
    "Suspend": false,
    "UOM": "H",
    "Currency": "USD",
    "ForecastMethod": "Current budget",
    "AveragePerformanceSetting": "",
    "ForecastNotes": "",
    "ForecastManHours": 0.0,
    "ForecastTotalCost": 11999.999999,
    "CreatedBy": "John Smith",
    "CreatedDate": "5/22/2025 9:16:31 PM",
    "ModifiedBy": "John Smith",
    "ModifiedDate": "5/22/2025 9:51:32 PM",
    "ForecastCostCategory": [
      {
        "Name": "Total",
        "Cost": 11999.999999,
        "IsTerminalCostCategory": false
      },
      {
        "Name": "Materials",
        "Cost": 2000.0,
        "IsTerminalCostCategory": false
      }
    ]
  }
]

```

```
    },
    {
      "Name": "Undefined Materials",
      "Cost": 2000.0,
      "IsTerminalCostCategory": true
    },
    {
      "Name": "Supplies",
      "Cost": 9999.999999,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Undefined Supplies",
      "Cost": 9999.999999,
      "IsTerminalCostCategory": true
    }
  ]
}
```

Status Codes

	Condition	Code	Message
API Validation	Valid request	202	

Time Phased Budget (Generic) – Get

NOTE:

When requesting the project time phased budget information, the external project ID must be used in the request.

Direction		Request to retrieve information for a project
Frequency		Determined by external system
Trigger Method(s)		External system
Average Payload Size		Dependent on size and length of the project.
APIM Name		List Time Phased Budget
InEight Control	Starting Version	23.4
	Ending Version	
<u>Configuration Entity Name</u>		ControlTimePhasedBudget_Get

Fields

Depth	Name	Type	Precision ¹	Parent
1	@odata.context	String	500	
1	Value	Array	N/A	
2	ProjectExternalID	String	200	Value
2	ProjectDisplay	String	200	Value
2	TimePhaseBudgetMapper	Array	NA	Value
3	PhaseCode	String	1	TimePhaseBudgetMapper
3	UnitofMeasure	String	1	TimePhaseBudgetMapper
3	Currency	String	1	TimePhaseBudgetMapper
3	CostCurve	String	1	TimePhaseBudgetMapper
3	Year	String	1	TimePhaseBudgetMapper
3	Month	String	1	TimePhaseBudgetMapper
3	BudgetCost	String	1	TimePhaseBudgetMapper
3	CostCategory	String	1	TimePhaseBudgetMapper
3	Cost	String	1	TimePhaseBudgetMapper
3	IsTerminalCostCategory	String	2	TimePhaseBudgetMapper
3	CBSPosition	String	2	TimePhaseBudgetMapper
3	CostItemSourceSystemId	String	2	TimePhaseBudgetMapper

Depth	Name	Type	Precision ¹	Parent
3	IsActive	String	2	TimePhaseBudgetMapper
3	CreatedBy	String	2	TimePhaseBudgetMapper
3	CreatedDate	String	2	TimePhaseBudgetMapper
3	ModifiedBy	String	2	TimePhaseBudgetMapper
3	ModifiedDate	String	2	TimePhaseBudgetMapper
2	TimPhaseBudgetValues	Array	N/A	
2	BatchSequence	Number	Integer	TimePhaseBudgetValues
2	BatchCount	Number	Integer	TimePhaseBudgetValues
2	LogTokenID	String	50	TimePhaseBudgetValues
3	TimePhaseBudget	Array	NA	TimePhaseBudgetValues
4	1	String	50	TimePhaseBudget
4	2	String	25	TimePhaseBudget
4	3	String	25	TimePhaseBudget
4	4	String	50	TimePhaseBudget
4	11	String	100	TimePhaseBudget
4	12	String	50	TimePhaseBudget
4	13	Boolean	N/A	TimePhaseBudget
4	14	String	50	TimePhaseBudget
4	15 ²	String	25	TimePhaseBudget
4	16	String	50	TimePhaseBudget
4	17 ²	String	25	TimePhaseBudget
4	BudgetPeriod	Array	N/A	TimePhaseBudget
5	5	String	4	BudgetPeriod
5	6	String	4	BudgetPeriod
5	7	Decimal	11,11	BudgetPeriod
5	BudgetCostCategory	Array	NA	BudgetPeriod
6	8	String	100	BudgetCostCategory
6	9	Decimal	11,11	BudgetCostCategory
6	10	Boolean	NA	BudgetCostCategory

1 - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

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

Field Descriptions

Name	Description	Example
@odata.context		https://test.ineight.com/integrations/\$metadata#ControlTimePhasedBudget
Value	Array	
ProjectExternalId	Unique project display ID.	190001
ProjectDisplay	External project ID.	190001
TimePhaseBudgetMapper	Array header.	
PhaseCode	Defines the attribute that WBS phase code is associated with in the JSON.	1
UnitofMeasure	Defines the attribute that unit of measure is associated with in the JSON.	2
Currency	Defines the attribute that currency is associated with in the JSON.	3
CostCurve	Defines the attribute that cost curve is associated with in the JSON.	4
Year	Defines the attribute that year is associated with in the JSON.	5
Month	Defines the attribute that month is associated with in the JSON.	6
BudgetCost	Defines the attribute that forecasted cost is associated with in the JSON.	7
CostCategory	Defines the attribute that cost category Source System ID is associated with in the JSON. See Appendix A .	8
Cost	Defines the attribute that period forecast amount is associated with in the JSON.	9
IsTerminalCostCategory	Defines the attribute that is terminal cost category indicator is associated with in the JSON.	10
CBSPosition	Defines the attribute that CBS Position indicator is associated with in the JSON.	11
CostItemSourceSystemId	Defines the attribute that cost item source system ID is associated with in the JSON.	12
IsActive	Defines the attribute that is active indicator is associated with in the JSON.	13
CreatedBy	Defines the attribute that created by indicator is associated with in the JSON.	14
CreatedDate	Defines the attribute that is created date is associated with in the JSON.	15
ModifiedBy	Defines the attribute that modified by is associated with in the JSON.	16

Name	Description	Example
ModifiedDate	Defines the attribute that modified date is associated with in the JSON.	17
TimPhaseBudgetValues	An array	
BatchSequence	If there is more than one batch for the interface, this defines the sequence in which this JSON should be read.	1
BatchCount	Defines if there is more than one batch for this interface.	1
LogTokenID	Identifier in the sync log sequence.	46654a33-103c-4598-aa6c-aed092d40d
TimePhaseBudget	An array.	
1	WBS phase of a cost item.	1004
2	Unit of measure of a cost item.	Each
3	Currency of a cost item.	USD
4	Cost curve of a cost item.	Linear
11	CBS position of a cost item.	1.1
12	Cost item source system ID of a cost item.	bc9cda37-e97a-ba4c-9ea1-3b3a04847514
13	Is active of a cost item.	True
14	Created by of a cost item.	John Doe
15	Created date of a cost item.	2023-04-17T21:50:00.617+00:00
16	Modified by of a cost item.	John Doe
17	Modified date of a cost item.	2023-04-17T21:50:00.617+00:00
BudgetPeriod	An array.	
5	Year of the time phase budget.	2020
6	Month of the time phase budget.	3
7	Period budgeted cost.	1000
BudgetCostCategory	An Array	
8	Source System ID of the cost category for the time phase budget. See Appendix A .	Undefined Total
9	Amount of time phased budget for that cost category for the period.	500
10	Is terminal for the cost category time phase budget.	True

Sample JSON

```
{
  "@odata.context":
  "https://api.ineight.com/integrations/$metadata#ControlTimePhasedBudget",
  "value": [
    {
      "ProjectExternalId": "190009",
      "ProjectDisplay": "190009",
      "TimePhaseBudgetMapper": {
        "PhaseCode": "1",
        "UnitOfMeasure": "2",
        "Currency": "3",
        "CostCurve": "4",
        "Year": "5",
        "Month": "6",
        "BudgetCost": "7",
        "Costcategory": "8",
        "Cost": "9",
        "IsTerminalCostCategory": "10",
        "CBSPosition": "11",
        "CostItemSourceSystemId": "12",
        "IsActive": "13",
        "CreatedBy": "14",
        "CreatedDate": "15",
        "ModifiedBy": "16",
        "ModifiedDate": "17"
      },
      "TimePhaseBudgetValues": {
        "BatchSequence": 1,
        "BatchCount": 1,
        "LogTokenId": "4e9d709a-4917-419f-80e9-e25e44b77664",
        "TimePhaseBudget": [
          {
            "1": "2",
            "2": "Ea",
            "3": "USD",
            "4": "Linear",
            "11": "1.1",
            "12": "0181ca2053da48a2b746bdde14c511fe",
            "13": true,
            "14": "John Smith",
            "15": "2025-05-22T21:16:00.077+00:00",
            "16": "John Smith",
            "17": "2025-05-22T21:51:32.923+00:00",
            "BudgetPeriod": [
              {
                "5": "2025",
                "6": "12",
                "7": 3621.16991643455,
                "BudgetCostCategory": [
                  {
                    "8": "Total",
                    "9": 3621.16991643455,
                    "10": false
                  }
                ]
              }
            ]
          }
        ]
      }
    }
  ]
}
```

Time Phased Budget (Generic) – Get

```

      "5": "2025",
      "6": "9",
      "7": 3899.721448468,
      "BudgetCostCategory": [
        {
          "8": "Total",
          "9": 3899.721448468,
          "10": false
        },
        {
          "8": "Labor",
          "9": 3899.721448468,
          "10": false
        },
        {
          "8": "Undefined Labor",
          "9": 3899.721448468,
          "10": true
        }
      ]
    },
    {
      "5": "2025",
      "6": "8",
      "7": 4874.65181058495,
      "BudgetCostCategory": [
        {
          "8": "Total",
          "9": 4874.65181058495,
          "10": false
        },
        {
          "8": "Labor",
          "9": 4874.65181058495,
          "10": false
        },
        {
          "8": "Undefined Labor",
          "9": 4874.65181058495,
          "10": true
        }
      ]
    },
    {
      "5": "2025",
      "6": "7",
      "7": 3899.72144846795,
      "BudgetCostCategory": [
        {
          "8": "Total",
          "9": 3899.72144846795,
          "10": false
        },
        {
          "8": "Labor",
          "9": 3899.72144846795,
          "10": false
        }
      ]
    }
  ]
}

```

```
    },
    {
      "8": "Undefined Labor",
      "9": 3899.72144846795,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "6",
  "7": 3899.72144846795,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3899.72144846795,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "5",
  "7": 4874.651810585,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4874.651810585,
      "10": false
    },
    {
      "8": "Labor",
      "9": 4874.651810585,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 4874.651810585,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "4",
  "7": 3899.72144846795,
  "BudgetCostCategory": [
```

```

        {
            "8": "Total",
            "9": 3899.72144846795,
            "10": false
        },
        {
            "8": "Labor",
            "9": 3899.72144846795,
            "10": false
        },
        {
            "8": "Undefined Labor",
            "9": 3899.72144846795,
            "10": true
        }
    ]
},
{
    "5": "2025",
    "6": "3",
    "7": 4874.65181058495,
    "BudgetCostCategory": [
        {
            "8": "Total",
            "9": 4874.65181058495,
            "10": false
        },
        {
            "8": "Labor",
            "9": 4874.65181058495,
            "10": false
        },
        {
            "8": "Undefined Labor",
            "9": 4874.65181058495,
            "10": true
        }
    ]
},
{
    "5": "2025",
    "6": "2",
    "7": 3899.72144846797,
    "BudgetCostCategory": [
        {
            "8": "Total",
            "9": 3899.72144846797,
            "10": false
        },
        {
            "8": "Labor",
            "9": 3899.72144846797,
            "10": false
        },
        {
            "8": "Undefined Labor",
            "9": 3899.72144846797,

```



```
        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "1",
    "7": 3481.89415041783,
    "BudgetCostCategory": [
      {
        "8": "Total",
        "9": 3481.89415041783,
        "10": false
      },
      {
        "8": "Labor",
        "9": 3481.89415041783,
        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 3481.89415041783,
        "10": true
      }
    ]
  },
  {
    "5": "2024",
    "6": "12",
    "7": 0.0,
    "BudgetCostCategory": []
  }
],
{
  "1": "1",
  "2": "PLS",
  "3": "USD",
  "4": "Linear",
  "11": "1",
  "12": "bc2cdbeced2b4fe0ba26065b0219bf46",
  "13": true,
  "14": "John Smith",
  "15": "2025-05-22T21:15:04.253+00:00",
  "16": "John Smith",
  "17": "2025-05-22T21:26:00.723+00:00",
  "BudgetPeriod": [
    {
      "5": "2025",
      "6": "12",
      "7": 3621.16991643455,
      "BudgetCostCategory": [
        {
          "8": "Total",
          "9": 3621.16991643455,
          "10": false
        }
      ],
    }
  ],
}
```

```

        {
            "8": "Labor",
            "9": 3621.16991643455,
            "10": false
        },
        {
            "8": "Undefined Labor",
            "9": 3621.16991643455,
            "10": true
        }
    ]
},
{
    "5": "2025",
    "6": "11",
    "7": 4874.65181058495,
    "BudgetCostCategory": [
        {
            "8": "Total",
            "9": 4874.65181058495,
            "10": false
        },
        {
            "8": "Labor",
            "9": 4874.65181058495,
            "10": false
        },
        {
            "8": "Undefined Labor",
            "9": 4874.65181058495,
            "10": true
        }
    ]
},
{
    "5": "2025",
    "6": "10",
    "7": 3899.72144846795,
    "BudgetCostCategory": [
        {
            "8": "Total",
            "9": 3899.72144846795,
            "10": false
        },
        {
            "8": "Labor",
            "9": 3899.72144846795,
            "10": false
        },
        {
            "8": "Undefined Labor",
            "9": 3899.72144846795,
            "10": true
        }
    ]
},
{

```

```

"5": "2025",
"6": "9",
"7": 3899.721448468,
"BudgetCostCategory": [
  {
    "8": "Total",
    "9": 3899.721448468,
    "10": false
  },
  {
    "8": "Labor",
    "9": 3899.721448468,
    "10": false
  },
  {
    "8": "Undefined Labor",
    "9": 3899.721448468,
    "10": true
  }
]
},
{
  "5": "2025",
  "6": "8",
  "7": 4874.65181058495,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Labor",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 4874.65181058495,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "7",
  "7": 3899.72144846795,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.72144846795,
      "10": false
    }
  ]
}

```

```

    },
    {
      "8": "Undefined Labor",
      "9": 3899.72144846795,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "6",
  "7": 3899.72144846795,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.72144846795,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3899.72144846795,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "5",
  "7": 4874.651810585,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4874.651810585,
      "10": false
    },
    {
      "8": "Labor",
      "9": 4874.651810585,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 4874.651810585,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "4",
  "7": 3899.72144846795,
  "BudgetCostCategory": [

```

```
{
  {
    "8": "Total",
    "9": 3899.72144846795,
    "10": false
  },
  {
    "8": "Labor",
    "9": 3899.72144846795,
    "10": false
  },
  {
    "8": "Undefined Labor",
    "9": 3899.72144846795,
    "10": true
  }
]
},
{
  "5": "2025",
  "6": "3",
  "7": 4874.65181058495,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Labor",
      "9": 4874.65181058495,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 4874.65181058495,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "2",
  "7": 3899.72144846797,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 3899.72144846797,
      "10": false
    },
    {
      "8": "Labor",
      "9": 3899.72144846797,
      "10": false
    },
    {
      "8": "Undefined Labor",
      "9": 3899.72144846797,
```

```

        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "1",
    "7": 3481.89415041783,
    "BudgetCostCategory": [
      {
        "8": "Total",
        "9": 3481.89415041783,
        "10": false
      },
      {
        "8": "Labor",
        "9": 3481.89415041783,
        "10": false
      },
      {
        "8": "Undefined Labor",
        "9": 3481.89415041783,
        "10": true
      }
    ]
  },
  {
    "5": "2024",
    "6": "12",
    "7": 0.0,
    "BudgetCostCategory": []
  }
],
{
  "1": "3a",
  "2": "Hour",
  "3": "USD",
  "4": "Linear",
  "11": "2",
  "12": "6b363823aad346189ad56b58c8beb860",
  "13": true,
  "14": "John Smith",
  "15": "2025-05-22T21:16:31.44+00:00",
  "16": "John Smith",
  "17": "2025-05-22T21:51:32.923+00:00",
  "BudgetPeriod": [
    {
      "5": "2025",
      "6": "7",
      "7": 3259.25925925926,
      "BudgetCostCategory": [
        {
          "8": "Total",
          "9": 3259.25925925926,
          "10": false
        }
      ]
    }
  ],

```

```
{
  "8": "Materials",
  "9": 543.20987654321,
  "10": false
},
{
  "8": "Undefined Materials",
  "9": 543.20987654321,
  "10": true
},
{
  "8": "Supplies",
  "9": 2716.04938271605,
  "10": false
},
{
  "8": "Undefined Supplies",
  "9": 2716.04938271605,
  "10": true
}
]
},
{
  "5": "2025",
  "6": "6",
  "7": 4148.148148148148,
  "BudgetCostCategory": [
    {
      "8": "Total",
      "9": 4148.14814814815,
      "10": false
    },
    {
      "8": "Materials",
      "9": 691.35802469136,
      "10": false
    },
    {
      "8": "Undefined Materials",
      "9": 691.35802469136,
      "10": true
    },
    {
      "8": "Supplies",
      "9": 3456.79012345679,
      "10": false
    },
    {
      "8": "Undefined Supplies",
      "9": 3456.79012345679,
      "10": true
    }
  ]
},
{
  "5": "2025",
  "6": "5",
```

```

    "7": 4592.592592592592,
    "BudgetCostCategory": [
      {
        "8": "Total",
        "9": 4592.59259259259,
        "10": false
      },
      {
        "8": "Materials",
        "9": 765.43209876543,
        "10": false
      },
      {
        "8": "Undefined Materials",
        "9": 765.43209876543,
        "10": true
      },
      {
        "8": "Supplies",
        "9": 3827.16049382716,
        "10": false
      },
      {
        "8": "Undefined Supplies",
        "9": 3827.16049382716,
        "10": true
      }
    ]
  },
  {
    "5": "2025",
    "6": "4",
    "7": 0.0,
    "BudgetCostCategory": []
  }
]
}

```

Status Codes

	Condition	Code	Message
API Validation	Valid request	202	

Time Phased Forecast (Generic) – Get

NOTE:

When requesting a project's forecast time phased information, the external project ID must be used in the request.

Direction		Request to retrieve information for a project
Frequency		Determined by external system
Trigger Method(s)		External system
Average Payload Size		Dependent on size and length of the project.
APIM Name		List Time Phased Forecast
InEight Control	Starting Version	23.4
	Ending Version	
<u>Configuration Entity Name</u>		ControlTimePhasedForecast_Get

Fields

Depth	Name	Type	Precision ¹	Parent
1	@odata.context	String	500	
1	Value	Array	N/A	
2	ProjectExternalID	String	200	Value
2	ProjectDisplay	String	200	Value
2	TimePhaseForecastMapper	Array	NA	
3	PhaseCode	String	1	TimePhaseForecastMapper
3	UnitofMeasure	String	1	TimePhaseForecastMapper
3	Currency	String	1	TimePhaseForecastMapper
3	CostCurve	String	1	TimePhaseForecastMapper
3	ForecastMethod	String	1	TimePhaseForecastMapper
3	Year	String	1	TimePhaseForecastMapper
3	Month	String	1	TimePhaseForecastMapper
3	ForecastedCost	String	1	TimePhaseForecastMapper
3	RemainingCost	String	1	TimePhaseForecastMapper
3	Name	String	2	TimePhaseForecastMapper
3	Amount	String	2	TimePhaseForecastMapper
3	IsTerminalCostCategory	String	2	TimePhaseForecastMapper

Depth	Name	Type	Precision ¹	Parent
3	ForecastManhours	String	2	TimePhaseForecastMapper
3	ForecastQuantity	String	2	TimePhaseForecastMapper
3	EnableForecastMethod	String	2	TimePhaseForecastMapper
3	AveragePerformanceSetting	String	2	TimePhaseForecastMapper
3	CBSPosition	String	2	TimePhaseForecastMapper
3	CostItemSourceSystemId	String	2	TimePhaseForecastMapper
3	IsActive	String	2	TimePhaseForecastMapper
3	CreatedBy	String	2	TimePhaseForecastMapper
3	CreatedDate	String	2	TimePhaseForecastMapper
3	ModifiedBy	String	2	TimePhaseForecastMapper
3	ModifiedDate	String	2	TimePhaseForecastMapper
2	TimePhaseForecastValues	Array	N/A	
3	ProjectID	String	200	TimePhaseForecastValues
3	BatchSequence	Number	Integer	TimePhaseForecastValues
3	BatchCount	Number	Integer	TimePhaseForecastValues
3	LogTokenID	String	50	TimePhaseForecastValues
3	TimePhaseForecast	Array	NA	TimePhaseForecastValues
4	1	String	50	TimePhaseForecast
4	2	String	25	TimePhaseForecast
4	3	String	25	TimePhaseForecast
4	4	String	50	TimePhaseForecast
4	5	String	50	TimePhaseForecast
4	15	Boolean	N/A	TimePhaseForecast
4	16	String	100	TimePhaseForecast
4	17	String	100	TimePhaseForecast
4	18	String	100	TimePhaseForecast
4	19	Boolean	N/A	TimePhaseForecast
4	20	String	50	TimePhaseForecast
4	21 ²	String	25	TimePhaseForecast
4	22	String	50	TimePhaseForecast
4	23 ²	String	25	TimePhaseForecast
4	ForecastPeriod	Array	N/A	TimePhaseForecast
5	6	String	4	ForecastPeriod
5	7	String	4	ForecastPeriod

Depth	Name	Type	Precision ¹	Parent
5	8	Decimal	11,11	ForecastPeriod
5	9	Decimal	11,11	ForecastPeriod
5	ForecastCostCategory	Array	NA	ForecastPeriod
6	10	String	100	ForecastCostCategory
6	11	Decimal	11,11	ForecastCostCategory
6	12	Boolean	NA	ForecastCostCategory
5	13	Decimal	11,11	ForecastPeriod
5	14	Decimal	11,11	ForecastPeriod

1 - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

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

Field Descriptions

Name	Description	Example
@odata.context		https://test.ineight.com/integrations/\$metadata#ControlTimePhasedForecast
Value	Array	
ProjectExternalId	Unique external project display ID.	190001
ProjectDisplay	Project display ID.	190001
TimePhaseForecastMapper	Array header.	
PhaseCode	Defines the attribute that WBS phase code is associated with in the JSON.	1
UnitofMeasure	Defines the attribute that unit of measure is associated with in the JSON.	2
Currency	Defines the attribute that currency is associated with in the JSON.	3
CostCurve	Defines the attribute that cost curve is associated with in the JSON.	4
ForecastMethod	Defines the attribute that forecast method is associated with in the JSON.	5
Year	Defines the attribute that year is associated with in the JSON.	6
Month	Defines the attribute that month is associated with in the JSON.	7

Name	Description	Example
ForecastedCost	Defines the attribute that forecasted cost is associated with in the JSON.	8
RemainingCost	Defines the attribute that remaining cost is associated with in the JSON.	9
Name	Defines the attribute that cost category source system ID is associated with in the JSON. See Appendix A .	10
Amount	Defines the attribute that period forecast amount is associated with in the JSON.	11
IsTerminalCostCategory	Defines the attribute that is terminal cost category indicator is associated with in the JSON.	12
ForecastManhours	Defines the attribute that forecast manhours is associated with in the JSON.	13
ForecastQuantity	Defines the attribute that forecast quantity is associated with in the JSON.	14
EnabledForecastMethod	Defines the attribute that enable forecast method is associated with in the JSON.	15
AveragePerformanceSetting	Defines the attribute that forecast quantity is associated with in the JSON.	16
CBSPosition	Defines the attribute that CBS position indicator is associated with in the JSON.	17
CostItemSourceSystemId	Defines the attribute that the cost item source system ID is associated with in the JSON.	18
IsActive	Defines the attribute that is active indicator is associated with in the JSON.	19
CreatedBy	Defines the attribute that created by indicator is associated with in the JSON.	20
CreatedDate	Defines the attribute that is created date is associated with in the JSON.	21
ModifiedBy	Defines the attribute that modified by is associated with in the JSON.	22
ModifiedDate	Defines the attribute that modified date is associated with in the JSON.	23
TimPhaseForecastValues	An array	
BatchSequence	If there is more than one batch for the interface, this defines the sequence in which this JSON should be read.	1
BatchCount	Defines if there is more than one batch for this interface.	1
LogTokenID	Identifier in the sync log sequence.	46654a33-103c-4598-aa6c-aed092d40d
TimePhaseForecast	An array.	
1	WBS phase code of a cost item.	1004
2	Unit of measure of a cost item.	Each

Name	Description	Example
3	Currency of a cost item.	USD
4	Cost curve of a cost item.	Linear
5	Forecast method of a cost item.	Current Estimate
15	Enable forecast method of a cost item.	True
16	Average performance setting of a cost item.	To date
17	CBS position of a cost item.	1.1
18	Cost item source system ID of the cost item.	bc9cda37-e97a-ba4c-9ea1-3b3a04847514
19	Is active of a cost item.	True
20	Created by of a cost item.	John Doe
21	Created date of a cost item.	2023-04-17T21:50:00.617+00:00
22	Modified by of a cost item.	John Doe
23	Modified date of a cost item.	2023-04-17T21:50:00.617+00:00
ForecastPeriod	An array.	
6	Year of the time phase forecast.	2020
7	Month of the time phase forecast.	3
8	Period budgeted cost of the time phase forecast.	1000
ForecastCostCategory	An Array	
10	Source system ID of the cost category for the time phase forecast mapper array. See Appendix A .	Undefined Total
11	Amount of time phased forecast for that cost category for the period.	500
12	Is terminal cost category for the time phase forecast.	True
13	Manhours for the time phase forecast.	6.7
14	Quantity for the time phase forecast.	1.2

Sample JSON

```
{
  "@odata.context":
  "https://api.ineight.com/integrations/$metadata#ControlTimePhasedForecast",
  "value": [
    {
      "ProjectExternalId": "190009",
      "ProjectDisplay": "190009",
      "TimePhaseForecastMapper": {
        "PhaseCode": "1",
        "UnitOfMeasure": "2",
```

```

    "Currency": "3",
    "CostCurve": "4",
    "ForecastMethod": "5",
    "Year": "6",
    "Month": "7",
    "ForecastedCost": "8",
    "RemainingCost": "9",
    "Name": "10",
    "Amount": "11",
    "IsTerminalCostCategory": "12",
    "ForecastManhours": "13",
    "ForecastQuantity": "14",
    "EnabledForecastMethod": "15",
    "AveragePerformanceSetting": "16",
    "CBSPosition": "17",
    "CostItemSourceSystemId": "18",
    "IsActive": "19",
    "CreatedBy": "20",
    "CreatedDate": "21",
    "ModifiedBy": "22",
    "ModifiedDate": "23"
  },
  "TimePhaseForecastValues": {
    "ProjectId": "14991",
    "BatchSequence": 1,
    "BatchCount": 1,
    "LogTokenId": "1aaf1e83-2b8a-4e64-9344-cc898dbd2ea1",
    "TimePhaseForecast": [
      {
        "1": "3a",
        "2": "Hour",
        "3": "USD",
        "4": "Linear",
        "5": "Current budget",
        "15": true,
        "16": null,
        "17": "2",
        "18": "6b363823aad346189ad56b58c8beb860",
        "19": true,
        "20": "InEight Service Account",
        "21": "2025-05-22T22:20:00.1466667",
        "22": "InEight Service Account",
        "23": "2025-05-22T22:20:00.1466667",
        "ForecastPeriod": [
          {
            "6": "2025",
            "7": "5",
            "8": 0.0,
            "9": 4592.59259220988,
            "ForecastCostCategory": [
              {
                "10": "Total",
                "11": 4592.59259220988,
                "12": false
              },
              {
                "10": "Materials",

```

```
        "11": 765.43209876543,  
        "12": false  
      },  
      {  
        "10": "Undefined Materials",  
        "11": 765.43209876543,  
        "12": true  
      },  
      {  
        "10": "Supplies",  
        "11": 3827.16049344445,  
        "12": false  
      },  
      {  
        "10": "Undefined Supplies",  
        "11": 3827.16049344445,  
        "12": true  
      }  
    ],  
    "13": 0.0,  
    "14": 57.40740740741  
  },  
  {  
    "6": "2025",  
    "7": "6",  
    "8": 4148.14814780247,  
    "9": 0.0,  
    "ForecastCostCategory": [  
      {  
        "10": "Total",  
        "11": 4148.14814780247,  
        "12": false  
      },  
      {  
        "10": "Materials",  
        "11": 691.35802469136,  
        "12": false  
      },  
      {  
        "10": "Undefined Materials",  
        "11": 691.35802469136,  
        "12": true  
      },  
      {  
        "10": "Supplies",  
        "11": 3456.79012311111,  
        "12": false  
      },  
      {  
        "10": "Undefined Supplies",  
        "11": 3456.79012311111,  
        "12": true  
      }  
    ],  
    "13": 0.0,  
    "14": 51.85185185185  
  },  
],
```

```

    {
      "6": "2025",
      "7": "7",
      "8": 3259.25925898765,
      "9": 0.0,
      "ForecastCostCategory": [
        {
          "10": "Total",
          "11": 3259.25925898765,
          "12": false
        },
        {
          "10": "Materials",
          "11": 543.20987654321,
          "12": false
        },
        {
          "10": "Undefined Materials",
          "11": 543.20987654321,
          "12": true
        },
        {
          "10": "Supplies",
          "11": 2716.04938244444,
          "12": false
        },
        {
          "10": "Undefined Supplies",
          "11": 2716.04938244444,
          "12": true
        }
      ],
      "13": 0.0,
      "14": 40.74074074074
    }
  ],
  {
    "1": "2",
    "2": "Ea",
    "3": "USD",
    "4": "Linear",
    "5": "None",
    "15": false,
    "16": null,
    "17": "1.1",
    "18": "0181ca2053da48a2b746bdde14c511fe",
    "19": true,
    "20": "InEight Service Account",
    "21": "2025-05-22T22:20:00.1466667",
    "22": "InEight Service Account",
    "23": "2025-05-22T22:20:00.1466667",
    "ForecastPeriod": [
      {
        "6": "2025",
        "7": "5",
        "8": 0.0,

```



```
      "9": 0.0,  
      "ForecastCostCategory": [],  
      "13": 0.0,  
      "14": 14.40329218107  
    },  
    {  
      "6": "2025",  
      "7": "6",  
      "8": 0.0,  
      "9": 0.0,  
      "ForecastCostCategory": [],  
      "13": 0.0,  
      "14": 11.52263374486  
    },  
    {  
      "6": "2025",  
      "7": "7",  
      "8": 0.0,  
      "9": 0.0,  
      "ForecastCostCategory": [],  
      "13": 0.0,  
      "14": 11.52263374486  
    },  
    {  
      "6": "2025",  
      "7": "8",  
      "8": 0.0,  
      "9": 0.0,  
      "ForecastCostCategory": [],  
      "13": 0.0,  
      "14": 14.40329218107  
    },  
    {  
      "6": "2025",  
      "7": "9",  
      "8": 0.0,  
      "9": 0.0,  
      "ForecastCostCategory": [],  
      "13": 0.0,  
      "14": 11.52263374486  
    },  
    {  
      "6": "2025",  
      "7": "10",  
      "8": 0.0,  
      "9": 0.0,  
      "ForecastCostCategory": [],  
      "13": 0.0,  
      "14": 11.52263374486  
    },  
    {  
      "6": "2025",  
      "7": "11",  
      "8": 0.0,  
      "9": 0.0,  
      "ForecastCostCategory": [],  
      "13": 0.0,
```

```

        "14": 14.40329218107
      },
      {
        "6": "2025",
        "7": "12",
        "8": 0.0,
        "9": 0.0,
        "ForecastCostCategory": [],
        "13": 0.0,
        "14": 10.69958847737
      }
    ]
  },
  {
    "1": "1",
    "2": "PLS",
    "3": "USD",
    "4": "Linear",
    "5": "Manual (EAC)",
    "15": true,
    "16": null,
    "17": "1",
    "18": "bc2cdbeced2b4fe0ba26065b0219bf46",
    "19": true,
    "20": "InEight Service Account",
    "21": "2025-05-22T22:20:00.13",
    "22": "InEight Service Account",
    "23": "2025-05-22T22:20:00.13",
    "ForecastPeriod": [
      {
        "6": "2025",
        "7": "5",
        "8": 0.0,
        "9": 3312.75720164609,
        "ForecastCostCategory": [
          {
            "10": "Total",
            "11": 3312.75720164609,
            "12": false
          },
          {
            "10": "Undefined Total",
            "11": 3312.75720164609,
            "12": true
          }
        ],
        "13": 0.0,
        "14": 0.14403292181
      },
      {
        "6": "2025",
        "7": "6",
        "8": 2650.20576131687,
        "9": 0.0,
        "ForecastCostCategory": [
          {
            "10": "Total",

```

```
        "11": 2650.20576131687,  
        "12": false  
      },  
      {  
        "10": "Undefined Total",  
        "11": 2650.20576131687,  
        "12": true  
      }  
    ],  
    "13": 0.0,  
    "14": 0.11522633745  
  },  
  {  
    "6": "2025",  
    "7": "7",  
    "8": 2650.20576131687,  
    "9": 0.0,  
    "ForecastCostCategory": [  
      {  
        "10": "Total",  
        "11": 2650.20576131687,  
        "12": false  
      },  
      {  
        "10": "Undefined Total",  
        "11": 2650.20576131687,  
        "12": true  
      }  
    ],  
    "13": 0.0,  
    "14": 0.11522633745  
  },  
  {  
    "6": "2025",  
    "7": "8",  
    "8": 3312.75720164609,  
    "9": 0.0,  
    "ForecastCostCategory": [  
      {  
        "10": "Total",  
        "11": 3312.75720164609,  
        "12": false  
      },  
      {  
        "10": "Undefined Total",  
        "11": 3312.75720164609,  
        "12": true  
      }  
    ],  
    "13": 0.0,  
    "14": 0.14403292181  
  },  
  {  
    "6": "2025",  
    "7": "9",  
    "8": 2650.20576131687,  
    "9": 0.0,
```

```

    "ForecastCostCategory": [
      {
        "10": "Total",
        "11": 2650.20576131687,
        "12": false
      },
      {
        "10": "Undefined Total",
        "11": 2650.20576131687,
        "12": true
      }
    ],
    "13": 0.0,
    "14": 0.11522633745
  },
  {
    "6": "2025",
    "7": "10",
    "8": 2650.20576131687,
    "9": 0.0,
    "ForecastCostCategory": [
      {
        "10": "Total",
        "11": 2650.20576131687,
        "12": false
      },
      {
        "10": "Undefined Total",
        "11": 2650.20576131687,
        "12": true
      }
    ],
    "13": 0.0,
    "14": 0.11522633745
  },
  {
    "6": "2025",
    "7": "11",
    "8": 3312.75720164609,
    "9": 0.0,
    "ForecastCostCategory": [
      {
        "10": "Total",
        "11": 3312.75720164609,
        "12": false
      },
      {
        "10": "Undefined Total",
        "11": 3312.75720164609,
        "12": true
      }
    ],
    "13": 0.0,
    "14": 0.14403292181
  },
  {
    "6": "2025",

```

```
    "7": "12",
    "8": 2460.90534979424,
    "9": 0.0,
    "ForecastCostCategory": [
      {
        "10": "Total",
        "11": 2460.90534979424,
        "12": false
      },
      {
        "10": "Undefined Total",
        "11": 2460.90534979424,
        "12": true
      }
    ],
    "13": 0.0,
    "14": 0.10699588477
  }
}
]
```

Status Codes

	Condition	Code	Message
API Validation	Valid request	202	

Live Forecast (Generic) - Post

Direction		Request to post live forecast information for a project
Frequency		Determined by external system
Trigger Method(s)		External system
Average Payload Size		Dependent on size and length of the project.
APIM Name		Upsert Live Forecast
InEight Control	Starting Version	23.4
	Ending Version	
<u>Configuration Entity Name</u>		LiveForecastImport

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectDisplay	String	50	
1	ForecastDetails	Array	NA	
2	PhaseCode	String	50	ForecastDetails
2	CBSPosition	String	100	ForecastDetails
2	CostItemSourceSystemId	String	50	ForecastDetails
2	ForecastMHR	String	22	ForecastDetails
2	ForecastNotes	String	250	ForecastDetails
2	ForecastCosts	Array	N/A	
3	Name	String	1	ForecastCosts
3	Amount	Decimal	11,11	ForecastCosts

1 - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ProjectDisplay	External project ID, which is unique for a project.	190001
ForecastDetails	Array header	

Name	Description	Example
PhaseCode*	WBS Phase code for the cost item to be updated. NOTE: Although stated as not required, either PhaseCode or CBSPositionCode must be provided.	1000
CBSPosition*	CBS position for the cost item to be updated. NOTE: Although stated as not required, either PhaseCode or CBSPositionCode must be provided.	1
CostItemSourceSystemId	For future use.	
ForecastMHR	Forecast manhours for the cost item.	4
ForecastNotes	Forecast notes for the cost item.	This is a note
ForecastCosts	Array header	
Name	Cost category source system ID for the amount specified. See Appendix A .	Undefined Total
Amount	Forecast cost for the cost category for the cost item.	15000

Sample JSON

```
{
  "ProjectDisplay": "190000",
  "ForecastDetails": [
    {
      "PhaseCode": "1002",
      "ForecastMHR": "100",
      "ForecastNotes": "This is a test",
      "ForecastCosts": [
        {
          "Name": "Undefined Total",
          "Amount": 10000.0
        },
        {
          "Name": "Labor Base",
          "Amount": 20000.0
        }
      ]
    }
  ]
}
```

Integration Status

There are multiple ways to get the status associated with the Time Phased Forecast post depending on the issue or how the customer wants to view the status of the integration.

- Results are available via the Import history tab in the Audit log, which includes status and processing details including any errors.
- A location field is available in the results in the response header.

Example:

Location <https://qa.hds.ineight.com/ExternalSystem//Messages/Status?messageId=772d849e-4739-4e34-9467-0da05b9434e0>

A system must be able to go to that URI and see if the API was successful or failed.

Example:

Success

```
{
  "Status": "Success",
  "CorrelationID": "fd058d5f-d22f-4056-8c72-6c25265707f0",
  "ProjectDisplay": "103093",
  "ErrorDetails": []
}
```

Failure

```
{
  "Status": "Failed",
  "CorrelationID": "de068edb-b9ac-4281-8a08-7926ae2fe316",
  "ProjectDisplay": "GoldenSnapshot26072022180836",
  "ErrorDetails": [
    {
      "ErrorCode": 14009,
      "ErrorDescription": "The Forecast method is invalid",
      "CostItemList": [
        {
          "Code": "1007"
        }
      ]
    }
  ]
}
```

Entity Logic Validation Errors

10029	System Error. Kindly Try again later
10001	WBS phase code or CBS position code or Costitem Sourcesystem is required
10003	WBS phase code or CBS position code or Costitem Sourcesystem are not found
14004	The project is required
14005	The project id is not valid
14006	Cost Category <name of the cost category sent> does not match.
14007	Month or year provided is not valid

14008	Value exceeds maximum size
14009	The Forecast method is invalid
14010	The Forecast method Manual(ETC) is invalid
14011	The Forecast method is invalid, with the Allow as-built
14012	Duplicate entries for the same cost item
14013	The forecast method at the parent is None
14014	The Forecast method Contract is invalid
14015	The Forecast method Current Budget is invalid
14018	Forecast notes are required

Status Codes

	Condition	Code	Message
API Validation	No data	400	Missing input parameters
API Validation	Project not valid	400	Project display match not found
API Validation		417	Expectation failed
API Validation	Failure	500	
API Validation	Valid Payload	200	

Time Phased Forecast (Generic) - Post

Direction		Request from ERP to post time phased forecast information for a project.
Frequency		Determined by external system.
Trigger Method(s)		Determined by external system.
Average Payload Size		Dependent on size and length of the project.
APIM Name		Upsert Time Phased Forecast
InEight Control	Starting Version	23.6
	Ending Version	
<u>Configuration Entity Name</u>		TimePhasedForecastImport

Fields

Depth	Name	Type	Precision ¹	Parent
1	ProjectDisplay	String	50	
1	TimePhasedForecastDetails	Array	NA	
2	PhaseCode	String	50	TimePhasedForecastDetails
2	CBSPosition	String	100	TimePhasedForecastDetails
2	StaticManualTimePhasedForecast	String	10	TimePhasedForecastDetails
2	ForecastNotes	String	250	TimePhasedForecastDetails
2	TimePhasedForecastPeriodDetails	Array	NA	TimePhasedForecastDetails
3	Month	String	2	TimePhasedForecastPeriodDetails
3	Year	String	4	TimePhasedForecastPeriodDetails
3	ForecastCost	Decimal	11,11	TimePhasedForecastPeriodDetails
3	Quantity	Decimal	11,11	TimePhasedForecastPeriodDetails
3	ManHours	Decimal	11,11	TimePhasedForecastPeriodDetails
3	RemainingCost	Decimal	11,11	TimePhasedForecastPeriodDetails
3	RemainingQuantity	Decimal	11,11	TimePhasedForecastPeriodDetails
3	RemainingManHours	Decimal	11,11	TimePhasedForecastPeriodDetails

1 - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

Field Descriptions

Name	Description	Example
ProjectDisplay	External project ID, which is unique for a project.	190001
TimePhasedForecastDetails	Array header	
PhaseCode*	Phase code for the cost item to be updated. NOTE: Although stated as not required, either PhaseCode or CBSPositionCode must be provided.	1000
CBSPosition*	CBS position for the cost item to be updated. NOTE: Although stated as not required, either PhaseCode or CBSPositionCode must be provided.	1
StaticManualTimePhasedForecast	Determines if the time phased forecast should adjust or remain the same when manually entered. NOTE: This field is only recognized in the payload if there is a difference in the values that were sent in the TimePhasedForecastPeriodDetails. If there are no differences in the sum of values in the fiscal periods, StaticManualTimePhasedForecast will not be set.	True
ForecastNotes	Notes on the forecast	This is a note
TimePhasedForecastPeriodDetails	Array header	
Month	Month for the forecast.	08
Year	Year for the forecast.	2023
ForecastCost	Forecast cost for the fiscal period.	15000
Quantity	Forecast quantity for the fiscal period.	200
ManHours	Forecast manhours for the fiscal period.	300
RemainingCost	Remaining forecast cost for the closing current fiscal period.	400
RemainingQuantity	Remaining forecast quantity for the closing current fiscal period.	10
RemainingManHours	Remaining forecast manhours for the closing current fiscal period.	12

Sample JSON

```
{
  "ProjectDisplayID": "190000",
  "TimePhasedForecastDetails": [
    {
      "PhaseCode": "1020",
      "CBSPosition": "",
      "StaticManualTimePhasedForecast": "True",
      "ForecastNotes": "",
      "TimePhasedForecastPeriodDetails": [
        {
          "Month": "08",
          "Year": 2023,
          "ForecastCost": "200",
          "Quantity": 100,
          "ManHours": "10",
          "RemainingCost": "",
          "RemainingQuantity": "",
          "RemainingManHours": ""
        }
      ]
    },
    {
      "PhaseCode": "1021",
      "CBSPosition": "",
      "StaticManualTimePhasedForecast": "True",
      "ForecastNotes": "",
      "TimePhasedForecastPeriodDetails": [
        {
          "Month": "08",
          "Year": 2023,
          "ForecastCost": "300",
          "Quantity": 200,
          "ManHours": "100",
          "RemainingCost": "",
          "RemainingQuantity": "",
          "RemainingManHours": ""
        }
      ]
    }
  ]
}
```

Integration Status

There are multiple ways to get the status associated with the Time Phased Forecast post depending on the issue or how the customer wants to view the status of the integration.

- Results are available via the Import history tab in the Audit log, which includes status and processing details including any errors.
- A location field is available in the results in the response header.

Example:

Location <https://qa.hds.ineight.com/ExternalSystem//Messages/Status?messageId=772d849e-4739-4e34-9467-0da05b9434e0>

A system must be able to go to that URI and see if the API was successful or failed.

Example:

Success

```
{
  "Status": "Success",
  "CorrelationID": "fd058d5f-d22f-4056-8c72-6c25265707f0",
  "ProjectDisplay": "103093",
  "ErrorDetails": []
}
```

Failure

```
{
  "Status": "Failed",
  "CorrelationID": "de068edb-b9ac-4281-8a08-7926ae2fe316",
  "ProjectDisplay": "GoldenSnapshot26072022180836",
  "ErrorDetails": [
    {
      "ErrorCode": 14009,
      "ErrorDescription": "The Forecast method is invalid",
      "CostItemList": [
        {
          "Code": "1007"
        }
      ]
    }
  ]
}
```

Status Codes

	Condition	Code	Message
API Validation	No data	400	Missing input parameters
API Validation	Project not valid	400	Project display match not found
API Validation		417	Expectation failed
API Validation	Failure	500	

	Condition	Code	Message
API Validation	Valid Payload	200	

Entity Logic Validation Errors

10029	System Error. Kindly Try again later
14001	WBS phase code match not found
14002	CBS Position code match not found
14003	WBS phase code or the CBS Position is required
14004	The project is required
14005	The project id is not valid
14007	Only numerical values accepted
14008	Value exceeds maximum size
14009	The Forecast method is invalid
14010	The Forecast method Manual(ETC) is invalid
14011	The Forecast method is invalid, with the Allow as-built
14012	Duplicate entries for the same cost item
14013	The forecast method at the parent is None
14016	Forecast in a closed fiscal period is not available to update
14017	Forecast remaining is not allowed to be modified
14018	Forecast notes are required
14019	Time phased forecast is not enabled on the project. Updating time phased forecast is not available
14020	Time phased forecast is not allowed on this cost item

Change Order (Generic) – Get

NOTE:

When requesting change order information for a project, the external project ID must be used in the request. Refer to the API definition Request parameters section in the [InEight API Developer Portal](#) for the list of required parameters in the request.

Direction		Request to retrieve information for a project
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Entire entity – thousands to tens of thousands of records based on the size of the project
APIM Name		List Change Order
InEight Control	Starting Version	23.12
	Ending Version	

Fields

Depth	Name	Type	Precision ¹	Parent
1	@odata.context	String	500	
1	Value	Array	N/A	
2	ProjectDisplayId	String	200	Value
2	ProjectExternalId	String	50	Value
2	ChangeOrderID	Int		Value
2	ChangeOrderNumber	String	50	Value
2	Description	String	500	Value
2	CCO	String	250	Value
2	IssueNumber	String	200	Value
2	LastChangedBy	String	200	Value
2	LastChangedOn	String	50	Value
2	Notes	String	250	Value
2	Status	String	50	Value
2	ChangeManagementTag1	String	100	Value
2	ChangeManagementTag2	String	100	Value
2	ChangeManagementTag3	String	100	Value
2	TotalBudgetCostAdjustment	Decimal	22,11	Value

Depth	Name	Type	Precision ¹	Parent
2	TotalBudgetMHAdjustment	Decimal	22,11	Value
2	TotalContractPrice	Decimal	22,11	Value
2	ChangeOrderTypeId	Int		Value
2	Type	String	50	Value
2	ChangeManagementUserDefined1	String	500	Value
2	ChangeManagementUserDefined2	String	500	Value
2	ChangeManagementUserDefined3	String	500	Value
2	ApprovalProbability	Decimal	22,11	Value
2	Discipline	String	500	Value
2	ApprovedOn	String	50	Value
2	ApprovedBy	String	200	Value
2	IsActive	Boolean	N/A	Value
2	StartDate	String	50	Value
2	FinishDate	String	50	Value
2	CostCurve	String	50	Value
2	CostItems	Array	N/A	Value
3	CostItemId	Int		CostItems
3	WBSPHaseCode	String	50	CostItems
3	CBSPosition	String	100	CostItems
3	CostItemSourceSystemId	String	250	CostItems
3	IsActive	Boolean	N/A	CostItems
3	IsTerminal	Boolean	N/A	CostItems
3	Change	Array	N/A	CostItems
4	ChangeOrderDetailId	Int		Change
4	Manhours	Decimal	22,11	Change
4	Quantity	Decimal	22,11	Change
4	Costs	Array	N/A	Change
5	Name	String	50	Costs
5	Cost	Decimal	22,11	Costs
5	IsTerminalCostCategory	Boolean	N/A	Costs
3	TimePhased	Array	N/A	CostItems
4	Month	String	2	TimePhased
4	Year	String	4	TimePhased
4	CostsPerMonth	Decimal	22,11	TimePhased

Depth	Name	Type	Precision ¹	Parent
4	Costs	Array	N/A	TimePhased
5	Name	String	50	Costs
5	Cost	Decimal	22,11	Costs
5	IsTerminalCostCategory	Boolean	N/A	Costs
2	PayItems	Array	N/A	Value
3	PayItemNumber	String	100	PayItems
3	PayItemPosition	String	100	PayItems
3	PayItemSourceSystemId	String	150	PayItems
3	IsActive	Boolean	N/A	PayItems
3	IsTerminal	Boolean	N/A	PayItems
3	AdjustedCurrentPrice	Decimal	22,11	PayItems
3	AdjustedCurrentUnitPrice	Decimal	22,11	PayItems
3	AdjustedPayQuantity	Decimal	22,11	PayItems
3	BillingMethod	String	50	PayItems
3	PayItemStatus	String	50	PayItems

1 – For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

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

Field Descriptions

Name	Description	Example
@odata.context	http of where the information was requested.	https://test.ineight.com/integrations/\$metadata#ControlChangeOrder
ProjectDisplayId	Unique project display ID.	190001
ProjectExternalId	External project ID.	190001
ChangeOrderID	Id of the change order	2134
ChangeOrderNumber	Change order number of the change order	1.0
Description	Description of the change order	Change order 1
CCO	CCO from Change associated to the Change order	CCO 1
IssueNumber	Issue number from Change associated to the change order	Issue 1
LastChangedBy	Last user to modify the change order	John Smith

Name	Description	Example
LastChangedOn	Last day and time the change order was modified	2024-01-11T21:46:49.3146637+00:00
Notes	Notes on the Change order	This is a note
Status	Status of the Change order	Approved
ChangeManagementTag1	Change management tag 1 on the Change order	Tag 1
ChangeManagementTag2	Change management tag 2 on the Change order	Tag 2
ChangeManagementTag3	Change management tag 3 on the Change order	Tag 3
ApprovalProbability	Approval probability % on the change order	100.0
Discipline	Discipline selected on the change order	
ApprovedOn	When the change order was approved	
ApprovedBy	Who approved the change order	John Smith
IsActive	If the change order is active or deleted	True
StartDate	The start date of the change order if Time phased budget is being used	2024-01-01T00:00:00+00:00
FinishDate	The finish date of the change order if the Time phased budget is being used	2024-01-01T00:00:00+00:00
CostCurve	The cost curve of the change order if time phased budget is being used	Linear
CostItemId	Internal unique cost item ID	4
WBSPHaseCode	WBS phase code of a cost item.	1000
CBSPosition	Cost items CBS position.	1.1
CostItemSourceSystemId	Unique cost item ID for external purposes.	1000.1
IsActive	Determines if a cost item active or deleted	true
IsTerminal	Determines if a cost item is a terminal.	true
ChangeOrderDetailID	Internal unique identifier for the change order line	1
Manhours	Adjusted man hours for a cost item on a change order	4.3
Quantity	Adjusted quantity for a cost item on a change order	3
Name	Source system ID of a cost category for the adjusted cost on that cost item See Appendix A .	Undefined Labor
Cost	Adjusted cost for cost category for a cost item on a change order	100
IsTerminalCostCategory	If the cost category is terminal	true
Month	Month for time phased budget	3
Year	Year for time phased budget	2024
CostPerMonth	Total adjusted amount for that month	60

Name	Description	Example
Name	Source system ID of a cost category for the adjusted cost of the time phased budget on that cost item See Appendix A .	Undefined Labor
Cost	Adjusted cost for cost category for a cost item for the time phased budget on a change order	3
IsTerminalCostCategory	If the cost category is terminal	true
PayItemNumber	Pay item number in the change order	1
PayItemPosition	Pay item position of the pay item in the change order	1
PayItemSourceSystemId	Unique cost item ID for external purposes.	23.1
IsActive	Determines if a pay item active or deleted	True
IsTerminal	Determines if a pay item is a terminal.	True
AdjustedCurrentPrice	Adjusted price for a pay item on a change order	50
AdjustedCurrentUnitPrice	Adjusted unit price for a pay item on a change order	12.2
AdjustedPayQuantity	Adjusted quantity for a pay item on a change order	3
BillingMethod	Billing method for a pay item on a change order	Fixed Final Price
PayItemStatus	Status for a pay item on a change order	Approved

Sample JSON

```
{
  "@odata.context":
  "https://api.ineight.com/integrations/$metadata#ControlChangeOrder",
  "value": [
    {
      "ProjectDisplayId": "190004",
      "ProjectExternalId": "190003",
      "ChangeOrderId": 227726,
      "ChangeOrderNumber": "2.0",
      "Description": "",
      "CCO": "",
      "CreatedDate": "2024-01-17T21:55:17.491+00:00",
      "IssueNumber": "",
      "LastChangedBy": "John Smith",
      "LastChangedOn": "2024-01-17T21:55:28.1489349+00:00",
      "Notes": "",
      "Status": "Pending",
      "ChangeManagementTag1": "",
      "ChangeManagementTag2": "",
      "ChangeManagementTag3": "",
      "TotalBudgetCostAdjustment": 150.0,
      "TotalBudgetMHAdjustment": 0.0,
      "TotalContractPrice": 2000.0,
      "ChangeOrderTypeId": 14,
      "Type": "Contract adjustment",
      "ChangeManagementUserDefined1": "",
      "ChangeManagementUserDefined2": "",
      "ChangeManagementUserDefined3": ""
    }
  ]
}
```

```

"ApprovalProbability": 0.0,
"Discipline": "",
"ApprovedOn": "",
"ApprovedBy": "John Smith",
"IsActive": true,
"StartDate": "2024-01-02T00:00:00+00:00",
"FinishDate": "2024-01-02T00:00:00+00:00",
"CostCurve": "Linear",
  "CostItems": [
    {
      "CostItemId": 1970249,
      "CBSPosition": "2",
      "WBSPhaseCode": "1004",
      "IsTerminal": true,
      "CostItemSourceSystemID": "",
      "IsActive": true,
      "Change": {
        "ChangeOrderDetailId": 2161114,
        "Manhours": 0.0,
        "Quantity": 0.0,
        "Costs": [
          {
            "Name": "Total",
            "Cost": 50.0,
            "IsTerminalCostCategory": false
          },
          {
            "Name": "Undefined",
            "Cost": 50.0,
            "IsTerminalCostCategory": true
          }
        ]
      }
    },
    {
      "TimePhased": [
        {
          "Month": "1",
          "Year": "2024",
          "CostPerMonth": 50.0,
          "Costs": [
            {
              "Name": "Total",
              "Cost": 50.0,
              "IsTerminalCostCategory": false
            },
            {
              "Name": "Undefined",
              "Cost": 50.0,
              "IsTerminalCostCategory": true
            }
          ]
        }
      ]
    }
  ],
  {
    "CostItemId": 1970250,
    "WBSPhaseCode": "1005",
    "CBSPosition": "3",

```

```
"IsTerminal": true,
"CostItemSourceSystemID": "",
"IsActive": true,
"Change": {
  "ChangeOrderDetailId": 2161115,
  "Manhours": 0.0,
  "Quantity": 0.0,
  "Costs": [
    {
      "Name": "Total",
      "Cost": 100.0,
      "IsTerminalCostCategory": false
    },
    {
      "Name": "Undefined",
      "Cost": 100.0,
      "IsTerminalCostCategory": true
    }
  ]
},
"TimePhased": [
  {
    "Month": "1",
    "Year": "2024",
    "CostPerMonth": 100.0,
    "Costs": [
      {
        "Name": "Total",
        "Cost": 100.0,
        "IsTerminalCostCategory": false
      },
      {
        "Name": "Undefined",
        "Cost": 100.0,
        "IsTerminalCostCategory": true
      }
    ]
  }
],
"PayItems": [
  {
    "PayItemNumber": "2",
    "PayItemPosition": "",
    "PayItemSourceSystemId": "13211.2",
    "IsActive": true,
    "IsTerminal": false,
    "AdjustedCurrentPrice": 2000.0,
    "AdjustedCurrentUnitPrice": 20.0,
    "AdjustedPayQuantity": 100.0,
    "BillingMethod": "Fixed Final Price",
    "PayItemStatus": "Pending"
  }
]
]
```

```
}

```

Integration Status Codes

	Condition	Code	Message
API Validation	Valid request	202	

Actuals (Generic) – Get

NOTE:

When requesting a project's actuals information, the external project ID, Grouping, and IncludeRollups actuals must be used in the request.

Direction		Request to retrieve information for a project
Frequency		Determined by external system
Trigger Method(s)		External system
Average Payload Size		Dependent on the parameters specified by the calling external system and the project.
APIM Name		List Actuals
InEight Control	Starting Version	24.5
	Ending Version	
Other		Required Parameter: Projectid - External project id Grouping - TRANSACTION, POSTINGDATE, COSTITEM IncludeRollups - TRUE, FALSE Actual - COST, MANHOURS, EQUIPMENTHRS, QUANTITY Other Parameters: Type - ESTIMATED, CONFIRMED, ALL ToDate - pull actuals between a date range for the posted date - format (MM-DD-YYYY or YYYY-MM-DD) FromDate - pull actuals between a date range for the posted date - format (MM-DD-YYYY or YYYY-MM-DD)

Fields

Depth	Name	Type	Precision ¹	Parent
1	@odata.context	String	500	
1	Value	Array	N/A	
2	ProjectExternalId	String	200	Value
2	ProjectDisplay	String	200	Value
2	CostItems	Array	NA	
3	PhaseCode	String	50	CostItems
3	CBSPositionCode	String	50	CostItems
3	CostItemSourceSystemId	String	250	CostItems
3	AllowAsBuilt	String	50	CostItems

Depth	Name	Type	Precision ¹	Parent
3	IsTerminal	Boolean	NA	CostItems
3	IsActive	Boolean	NA	CostItems
3	Actuals	Array	NA	CostItems
4	SourceSystemId	String	50	Actuals
4	SourceSystemName	String	50	Actuals
4	Type	String	50	Actuals
4	PostingDate	String	50	Actuals
4	Notes	String	250	Actuals
4	Quantity	Decimal	11,11	Actuals
4	ManHours	Decimal	11,11	Actuals
4	EquipmentHours	Decimal	11,11	Actuals
4	IsActive	Boolean	NA	Actuals
4	Cost	Array	NA	Actuals
5	Name	String	30	Cost
5	Amount	Decimal	11,11	Cost
5	IsTerminal	Boolean	NA	Cost
4	ActualsUserDefined1	String	25	Actuals
4	ActualsUserDefined2	String	25	Actuals
4	ActualsUserDefined3	String	250	Actuals
4	ActualsUserDefined4	String	250	Actuals
4	ActualsUserDefined5	String	250	Actuals
4	ActualsUserDefined6	String	250	Actuals
4	EstimateResource	String	50	Actuals

1 - For numeric data types, precision is given as total digits allowed in the field and the number of those digits that exist to the right of the decimal. For example, 16,5 represents a total of 16-digits allowed in the field with 5 of those digits existing as decimal places and 11 digits on the left of the decimal. The decimal is not counted as a digit.

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

Field Descriptions

Name	Description	Example
@odata.context		https://test.ineight.com/integrations/\$metadata#ControlActuals
Value	Array	

Name	Description	Example
ProjectExternalId	Unique external project ID.	190001
ProjectDisplay	Project display ID.	190001
CostItems	Array header.	
PhaseCode	Defines the WBS phase code for the cost item.	1001
CBSPositionCode	CBS position for the cost item.	1.2
CostItemSourceSystemId	Cost Item source system ID for the cost item.	190001.1001
AllowAsBuilt	Allow As Built for the cost item.	All, Cost, Quantity, None
IsTerminal	Is Terminal for the cost item.	true, false
IsActive	Indicator if the cost item is active.	true, false
Actuals	Array header	
SourceSystemId	Source system id for the actual posting.	190001.1001.1
SourceSystemName	Source system name for the actual posting.	ERP
Type	Type for the actual posting.	CONFIRMED, ESTIMATED
PostingDate	Posting Date for the actual posting.	2024-05-06
Notes	Notes for the actual posting.	
Quantity	Quantity for the actual posting.	1.25
ManHours	Manhours for the actual posting.	2.5
EquipmentHours	Equipment hours for the actual posting.	3.0
IsActive	Indicator if the actual postings is soft deleted.	true, false
Cost	Array header.	
Name	Cost category source system id that is associated to the cost in the array (Please refer to Appendix A).	
Amount	Amount of cost for the actuals.	19.10
IsTerminal	Is Terminal for the Cost category.	true, false
ActualsUserDefined1	A date field associated to the actual transaction.	2024-09-09
ActualsUserDefined2	A date field associated to the actual transaction.	2024-09-09
ActualsUserDefined3	A free-form text field associated to the actual transaction.	User defined 3
ActualsUserDefined4	A free-form text field associated to the actual transaction.	User defined 4
ActualsUserDefined5	A free-form text field associated to the actual transaction.	User defined 5
ActualsUserDefined6	A free-form text field associated to the actual transaction.	User defined 6
EstimateResource	An estimate resource code associated to the actual transaction.	Labor1

Sample JSON

```
{
  "@odata.context":
  "https://api.ineight.com/integrations/$metadata#ControlActuals",
  "value": [
    {
      "ProjectDisplay": "190003",
      "ExternalProjectID": "190003",
      "CostItems": [
        {
          "PhaseCode": "1006",
          "CBSPositionCode": "1.1.1.1.1.2",
          "CostItemSourceSystemId": "d24a3184-041a-212c-b027-d90fb03b5af6",
          "AllowAsBuilt": "All",
          "IsTerminal": true,
          "IsActive": true,
          "Actuals": [
            {
              "SourceSystemId": "",
              "SourceSystemName": "ExternalSystem",
              "Type": "CONFIRMED",
              "PostingDate": "2024-07-12",
              "Notes": "1006",
              "Quantity": 0.0,
              "ManHours": 0.0,
              "EquipmentHours": 0.0,
              "IsActive": true,
              "ActualsUserDefined1": "2024-07-12",
              "ActualsUserDefined2": "2024-10-24",
              "ActualsUserDefined3": "udf3",
              "ActualsUserDefined4": "udf4",
              "ActualsUserDefined5": "udf5",
              "ActualsUserDefined6": "udf6",
              "EstimateResource": "",
              "Cost": [
                {
                  "Name": "Total",
                  "Amount": 5000.0,
                  "IsTerminal": false
                },
                {
                  "Name": "Materials",
                  "Amount": 5000.0,
                  "IsTerminal": false
                },
                {
                  "Name": "Undefined Materials",
                  "Amount": 5000.0,
                  "IsTerminal": true
                }
              ]
            }
          ]
        }
      ]
    }
  ],
}
```

```
"PhaseCode": "1005",
"CBSPositionCode": "1.1.1.1.1.1",
"CostItemSourceSystemId": "36029a96-7ff1-0680-94b4-5110b5401936",
"AllowAsBuilt": "All",
"IsTerminal": true,
"IsActive": true,
"Actuals": [
  {
    "SourceSystemId": "",
    "SourceSystemName": "ExternalSystem",
    "Type": "CONFIRMED",
    "PostingDate": "2024-07-13",
    "Notes": "Maintenance",
    "Quantity": 0.0,
    "ManHours": 0.0,
    "EquipmentHours": 0.0,
    "IsActive": true,
    "ActualsUserDefined1": "",
    "ActualsUserDefined2": "",
    "ActualsUserDefined3": "",
    "ActualsUserDefined4": "",
    "ActualsUserDefined5": "",
    "ActualsUserDefined6": "",
    "EstimateResource": "",
    "Cost": [
      {
        "Name": "Total",
        "Amount": 5000.0,
        "IsTerminal": false
      },
      {
        "Name": "Rented Equipment",
        "Amount": 5000.0,
        "IsTerminal": false
      },
      {
        "Name": "RE Operation",
        "Amount": 5000.0,
        "IsTerminal": false
      },
      {
        "Name": "RE Repair Labor",
        "Amount": 5000.0,
        "IsTerminal": true
      }
    ]
  }
]
```

Integration Status Codes

	Condition	Code	Message
API Validation	Valid request	202	

Appendix A: Cost Categories

The following table shows the complete list of cost categories available in the InEight cloud platform.

Level 0	Level 1	Level 2	Level 3	Level 4	SourceSystemId
Total					Total
	Labor				Labor
		Labor Base			Labor Base
		Labor Burden			Labor Burden
			Labor Fringes		Labor Fringes
				Travel	Travel
				Premium	Premium
				Holiday	Holiday
				Savings	Savings
				Pension	Pension
				Vacation	Vacation
				Subsistence	Subsistence
				Health & Welfare	Health & Welfare
				Apprenticeship	Apprenticeship
				Undefined Fringe1	Undefined Fringe1
				Undefined Fringe2	Undefined Fringe2
				Undefined Labor Fringes	Undefined Labor Fringes
			Labor Insurance		Labor Insurance
				Bodily Injury & Property Damage	Bodily Injury & Property Damage
				Workers Compensation	Workers Compensation
				Undefined Insurance1	Undefined Insurance1
				Undefined Insurance2	Undefined Insurance2
				Undefined Labor Insurance	Undefined Labor Insurance
			Labor Taxes		Labor Taxes
				FICA	FICA
				FUTA	FUTA
				SUTA	SUTA

Level 0	Level 1	Level 2	Level 3	Level 4	SourceSystemId
				Undefined Tax1	Undefined Tax1
				Undefined Labor Taxes	Undefined Labor Taxes
			Undefined Labor Burden		Undefined Labor Burden
		Undefined Labor			Undefined Labor
	Construction Equipment				Owned Equipment
		OE Ownership			OE Ownership
			OE Depreciation		OE Depreciation
			OE Overhead		OE Overhead
			OE Cost of Facilities Capital (Cfc)		OE Cost of Facilities Capital (Cfc)
			OE Insurance		OE Insurance
			OE License		OE License
			OE Taxes		OE Taxes
			OE Overhaul Parts		OE Overhaul Parts
			OE Overhaul Labor		OE Overhaul Labor
			OE Undefined Ownership1		OE Undefined Ownership1
			Undefined OE Ownership		Undefined OE Ownership
		OE Operation			OE Operation
			OE Repair Parts		OE Repair Parts
			OE Repair Labor		OE Repair Labor
			OE Fuel		OE Fuel
			OE Lube		OE Lube
			OE Tires & Tracks		OE Tires & Tracks
			OE Ground Engaging Components		OE Ground Engaging Components
			OE Undefined Operation1		OE Undefined Operation1
			Undefined OE Operation		Undefined OE Operation
		Undefined Construction Equipment			Undefined Owned Equipment

Level 0	Level 1	Level 2	Level 3	Level 4	SourceSystemId
	FOM Rented Equipment				Rented Equipment
		RE Rental			RE Rental
			RE Rent Expense		RE Rent Expense
			RE Overhead		RE Overhead
			RE Finance Expense		RE Finance Expense
			RE Insurance		RE Insurance
			RE License		RE License
			RE Rental Taxes		RE Rental Taxes
			RE Overhaul Parts		RE Overhaul Parts
			RE Overhaul Labor		RE Overhaul Labor
			RE Undefined Rent1		RE Undefined Rent1
			Undefined RE Rental		Undefined RE Rental
		RE Operation			RE Operation
			RE Repair Parts		RE Repair Parts
			RE Repair Labor		RE Repair Labor
			RE Fuel		RE Fuel
			RE Lube		RE Lube
			RE Tires & Tracks		RE Tires & Tracks
			RE Ground Engaging Components		RE Ground Engaging Components
			RE Undefined Operation1		RE Undefined Operation1
			Undefined RE Operation		Undefined RE Operation
		Undefined FOM Rented Equipment			Undefined Rented Equipment
	Materials				Materials
		Installed Equipment			Installed Equipment
		Installed Materials			Installed Materials
		Construction Supplies			Construction Supplies
		Undefined Materials			Undefined Materials
	Subcontract				Subcontract
		Subcontract Price			Subcontract Price

Level 0	Level 1	Level 2	Level 3	Level 4	SourceSystemId
		Subcontract Conditions			Subcontract Conditions
		Subcontract Taxes			Subcontract Taxes
		Subcontract Bond			Subcontract Bond
		Undefined Subcontract			Undefined Subcontract
	Fees				Fees
		Job Bond			Job Bond
		Job Insurance			Job Insurance
		Business Taxes			Business Taxes
		Sales Taxes			Sales Taxes
		Fees Undefined1			Fees Undefined1
		Undefined Fees			Undefined Fees
		Finance Expense			Finance Expense
	Allowance				Allowance
		Risk Allowance			Risk Allowance
		Contingency Allowance			Contingency Allowance
		Undefined Allowance			Undefined Allowance
		Adjustment Allowance			Adjustment Allowance
	G & A				Custom Category1
	Undefined				Undefined Total
	Supplies				Supplies
		Undefined Supplies			Undefined Supplies