INEIGHT

Billings Line Items

Integration Specification

BILLINGS

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	11-JUL-2025	Initial Release
2.0	10-OCT-2025	Added InvoiceNumber field to Line Items. Published revision (Release 25.9)

Contents

Overview

This document describes integrations that can be used to import and update Line Item transactions into the InEight Billings product. Line Items are typically used to process Accounts Payable transactions which need to undergo markup and billing related processes (LEMs and/or Invoices).

Integrations in this Document

Integration	Description
Line Items	This integration allows the customer to import and manage various third party billing, accounts payable, and other miscellaneous billable items into the Billings product. Typically, this integration is utilized in conjunction with the customers' ERP or accounting system.
Code Values	These (Import and Get) integrations allow the customer to create and maintain the master list of the various lookup values utilized within the Billings application. Any new code values and updates to code values performed using these APIs are automatically published (instead of being staged) and are immediately available for use in the Billings application.

Related Integrations

Integration	Description
NA	

Line Items

The Line Items integrations allow the customer to manage and import various third party billing, accounts payable, and other miscellaneous billable items into the Billings product. Typically, this integration is utilized in conjunction with a customer's ERP or accounting system.

NOTE:	When a new Line Item is created via the LineItems_Import (or the UI), a new Timesheet number is assigned to it, unless one is provided during the import.

Line Items (Import)

Direction		To the InEight Billings product
Frequency		Determined by external system
Trigger Method		Determined by external system
Average Payload Size		
APIM Portal Name		Upsert LineItem
InEight Application	**Starting Version**	23.8
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Req.
1	ProjectCode	String	255		Yes
1	TimesheetNumber	String	255		No
1	ItemType	String	10		Yes
1	PersonnelCode	String	255		No
1	PersonnelType	String	10		No
1	EquipmentCode	String	255		No
1	EquipmentUnitNumber	String	255		No
1	EquipmentType	String	10		No
1	MaterialCode	String	255		No
1	MaterialType	String	10		No
1	SupplierCode	String	255		No
1	SourceOtherType	String	255		No
1	PONumber	String	255		No
1	Description	String	2000		No
1	LineItemType	String	10		Yes
1	WBSCodePath	String	2000		No
1	WBSPhaseCode	String	255		No
1	PayItem	String	255		No

Depth	Name	Type	Precision	Parent	Req.
1	Notes	String	2000		No
1	WorkOrderCode	String	255		No
1	UserDef1	String	2000		No
1	UserDef2	String	2000		No
1	UserDef3	Number	10,3		No
1	UserDef4	Number	10,3		No
1	UserDef5	String	2000		No
1	UserDef6	String	2000		No
1	UserDef7	String	2000		No
1	UserDef8	String	2000		No
1	UserDef9	Number	10,3		No
1	UserDef10	Number	10,3		No
1	InvoiceNumber	String	255		No
1	LineItemDate[1]	String	10		Yes
1	UOM	String	10		Yes
1	Qty	Number	10,3		Yes
1	Rate	Number	10,2		No
1	Amount	Number	10,2		No
	SourceSystemName	String	50		Yes
1	SourceSystemID	String	50		Yes
1	DocumentImage	String (base 64 encoded	very large per bulk storage limits		No

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
ProjectCode	Job/Project identifier	20230001
TimesheetNumber	Billings Timesheet number to use for the item. If a record contains a blank TimesheetNumber value, the import will group all import items by ProjectCode and create one timesheet in the Billings product to contain the imported Line Item records.	20230001-0993
ItemType	Identifier as to type of item for the record. Acceptable values are: • Personnel • Equipment • Material • LineItem • Other	LineItem

Name	Description	Example
PersonnelCode	Resource code that uniquely identifies the person the line item relates to, as per the master resource profile. **NOTE**: This field is only used if the ItemType value is *Personnel, LineItem* or *Other.*	EMP0087631
PersonnelType	Valid value from Code Values list, filtered for CodeType of LabourType. **NOTE**: This field is only used if the ItemType value is *Personnel* or *LineItem*.	
EquipmentCode	Resource code that uniquely identifies the piece of equipment the line item relates to, as per the master resource profile. EquipmentUnitNumber OR EquipmentCode can be used to identify a piece of equipment. **NOTE**: This field is only used if the ItemType value is *Equipment, LineItem,* or *Other*.	R1234 9519
EquipmentUnitNumber	Resource unit number that uniquely identifies the piece of equipment the line item relates to, as per the master resource profile. EquipmentUnitNumber OR EquipmentCode can be used to identify a piece of equipment. **NOTE**: This field is only used if the ItemType value is *Equipment, LineItem,* or *Other*.	123
EquipmentType	Valid value from Code Values list, filtered for CodeType of EquipmentType. **NOTE**: This field is only used if the ItemType value is *Equipment* or *LineItem.*	
MaterialCode	Resource code that uniquely identifies the material the line item relates to, as per the master resource profile. **NOTE**: This field is only used if the ItemType value is *Material, LineItem* or *Other.*	V-2-154 911569
MaterialType	Valid value from Code Values list, filtered for CodeType of MaterialType. **NOTE**: This field is only used if the ItemType value is *Material* or *LineItem.*	
SupplierCode	Unique code used to identify the company/vendor the line item relates to. **NOTE**: This field is only used if the ItemType value is *LineItem* or *LineItem.*	VEN6556
SourceOtherType	Valid value from Code Values list, filtered for CodeType of OtherResourceType. **NOTE**: This field is only used if the ItemType value is *Other*.	
PONumber	Free-form text field.	
Description	Free-form text field.	
LineItemType	Valid value from Code Values list, filtered for CodeType of LineItemType. The LineItemType lookup logic from the Code values table: Lookup incoming LineItemType against the Abbreviation field. If value is not found, then look for first match on Short Description, sorted by Display Order.	3rd Party

Name	Description	Example
WBSCodePath	Codes from each level of Project. Contains code from Project (root project code value), plus the code from all WBS levels and cost code relevant to placement of record within timesheet. Separated segments with /.	
WBSPhaseCode	Mapped value from InEight Control. This value directly relates to WBSCodePath.	
PayItem	Mapped value from InEight Control. This value directly relates to WBSCodePath.	
Notes	Free-form text field.	
WorkOrderCode	Work Order code that uniquely identifies the work order the line item relates to, as per the project specific work order list.	
UserDef1	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a string and can therefore be used to capture vendor invoice number or other relevant info.	
UserDef2	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a string and can therefore be used to capture vendor invoice number or other relevant info.	
UserDef3	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a number and can therefore be used to capture vendor subcontractor hours, aboriginal hours, or any other number value specific to aid in reporting or processing of LEM or invoice information.	
UserDef4	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a number and can therefore be used to capture vendor subcontractor hours, aboriginal hours, or any other number value specific to aid in reporting or processing of LEM or invoice information.	
UserDef5	Available field that can be used to identify client specific attributes associated with the record being captured. This is a string and can therefore be used to capture vendor invoice number or other relevant info.	
UserDef6	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a string and can therefore be used to capture vendor invoice number or other relevant info.	
UserDef7	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a string and can therefore be used to capture vendor invoice number or other relevant info.	
UserDef8	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a string and can therefore be used to capture vendor invoice number or other relevant info.	

Name	Description	Example
UserDef9	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a number and can therefore be used to capture vendor subcontractor hours, aboriginal hours, or any other number value specific to aid in reporting or processing of LEM or invoice information.	
UserDef10	Available field that can be used to identify client specific attributes associated with the record being captured. This value is a number and can therefore be used to capture vendor subcontractor hours, aboriginal hours, or any other number value specific to aid in reporting or processing of LEM or invoice information.	
InvoiceNumber	Available field that can be used to associate an invoice number to a line item record.	INV009982271
LineItemDate	Item date associated with the record being processed. A common use for identifying a date for line item entries is when processing billable accounts payable records, where the invoice date or invoice payment date, might be used in identifying the date that the record is associated with.	
UOM	Unit of measure associated with the record in terms of how it is going to be charged to the client. Each and lump sum UOMs are commonly used when processing vendor invoices using subtotal amounts (either by invoice, or invoice line item), but are not limited to those options. If UOM is blank, use Each. The UOM lookup logic from the Code values table is to look up incoming UOM against the Abbreviation field. If value is not found, then look for first match on Short Description, sorted by Display Order.	Each Lump Sum Feet Meters
Qty	Number used as the basis for multiplying against the rate. If blank or 0, default value to 1.	1
Rate	Value of the record that is used to multiply against the quantity. If no rate is provided and Qty is 1, default Rate equal to Amount. If no rate is provided and Qty is > 1, use Amount divided by Qty to calculate Rate.	$100.00
Amount	Quantity multiplied by the rate. Alternatively, the amount can be entered directly, in which the quantity and rate are not used to calculate the amount (in the event that Qty and Rate are not used, Qty will be set to 1 and the Rate will be set to equal the Amount). This is the value that is used as the basis for the application of project markup amounts. For example, if the amount is $100, and there is a 6% markup for this Line Item type, then the following is true: Cost rate = $100; Markup amount = $6; LEM or Invoice total = $106.	$100.00
SourceSystemName	Name of the external system that is using the integration. Work with InEight to provision a unique value for this field.	
SourceSystemID	Identifier created by the system of record and used in all system communications as the primary method of specifying a unique record.	

Name	Description	Example
DocumentImage	PDF or JPG scan of supporting document (*e.g.,* work ticket, invoice, PO, etc.). Maximum file size is 2Gb. Allowable file types are: PDF, PNG, JPEG/JPG, HEIC, BMP, GIF, TIFF/TIF.	

Source System ID

API/Entity Logic	Condition	Code	Message
API Validation	Valid Payload	200	
API Validation	Required field(s) are not provided. Possible <<Field Name>> options: • ProjectCode • ItemType • LineItemType • LineItemDate • UOM • Qty • SourceSystemName • SourceSystemID	400	The request is invalid. The [Field Name] field is required. Message: The request is invalid.
API Validation	Provided data exceeds the string size. Possible <<Field Name>> options: • ProjectCode • TimesheetNumber • ItemType • PersonnelCode • PersonnelType • EquipmentCode • EquipmentUnitNumber • EquipmentType • MaterialCode • MaterialType • SupplierCode • SourceOtherType • PONumber • LineitemType • WBSPhaseCode • PayItem • WorkOrderCode • LineItemDate • UOM • SourceSystemName • SourceSystemID	400	The request is invalid. The [Field Name] field must be a string with a maximum length of [String Length]. Message: The request is invalid.
Entity Logic Validation	Payload has more than one record with same SourceSystemName and SourceSystemID	200	"Duplicate LineItemID/SourceSystemName/SourceSystemID found. Aborting the process." "[SourceSystemName]/SourceSystemID].
Entity Logic Validation	Payload has invalid lookup field value. Possible <<Field Name>> options: • ProjectCode • ItemType	200	"Invalid [Field Name]/[Value]."

API/Entity Logic	Condition	Code	Message
	• PersonnelCode • PersonnelType • EquipmentCode • EquipmentUnitNumber • EquipmentType • MaterialCode • MaterialType • SupplierCode • SourceOtherType • LineItemType • WBSCodePath • WBSPhaseCode • PayItem • WorkOrderCode • UOM		
Entity Logic Validation	Payload has conflict with *Personnel* ItemType. ItemType value is *Personnel*, but one or more of the following fields have values: • EquipmentCode • EquipmentUnitNumber • EquipmentType • MaterialCode • MaterialType • SourceOtherType • SupplierCode	200	"Ignoring unsupported values for ItemType of Personnel. Ignored fields: [Field Name List]."
Entity Logic Validation	Payload has conflict with *Equipment* ItemType. ItemType value is *Equipment*, but one or more of the following fields have values: • PersonnelCode • PersonnelType • MaterialCode • MaterialType • SourceOtherType • SupplierCode	200	"Ignoring unsupported values for ItemType of Equipment. Ignored fields: [Field Name List]."
Entity Logic Validation	Payload has conflict with *Material* Itemtype. ItemType value is *Material*, but one or more of the following fields have values: • PersonnelCode • PersonnelType • EquipmentCode • EquipmentUnitNumber • EquipmentType • SourceOtherType • SupplierCode	200	"Ignoring unsupported values for ItemType of Material. Ignored fields: [Field Name List]."
Entity Logic Validation	Payload has conflict with *LineItem* ItemType. ItemType value is *LineItem*, but payload contains data linking item to more than single resource and type. Only one resource and type can be linked to a single row:	400	The request is invalid. ItemType of LineItem can only be linked to a single resource, that is Personnel OR Equipment OR Material OR Supplier.

API/Entity Logic	Condition	Code	Message
	• PersonnelCode • PersonnelType OR • EquipmentCode • EquipmentUnitNumber • EquipmentType OR • MaterialCode • MaterialType		
Entity Logic Validation	Payload has conflict with *Other* ItemType. ItemType value is *Other*, but payload contains data linking item to more than single resource. Only one resource can be linked to a single row: • PresonnelCode OR • EquipmentCode • EquipmentUnitNumber OR • MaterialCode	400	The request is invalid. ItemType of Other can only be linked to a single resource, that is Personnel OR Equipment OR Material.
Entity Logic Validation	Payload contains resource type data for ItemType of *Other*. ItemType value is *Other*, but payload contains resource type value. Possible <<Field Name>> options: • PersonnelType • EquipmentType • MaterialType	200	"Ignoring unsupported values for ItemType of Other. Ignored fields: [Field Name List]."

The SourceSystemID for a line item should remain constant regardless of any changes that are made to the line item's information in the source system. For example, if the SourceSystemId is tied to the Purchase Order and PO Line # and either one of these changes, then SourceSystemId is also subject to change.

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 rules 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.

Sample JSON

New Line Item Record

```
[
   {
   "ProjectCode”: "20230001",
   "ItemType": "LineItem",
   "SupplierCode": "AcklandsGranger",
   "PONumber": "ACK 2023-05-98521",
   "Description": "Consumables”,
   "LineItemType ": "3rd Party",
   " WBSCodePath ": "20230001/99/C8/1258B",
   " LineItemDate ": "2023-04-28",
   "UOM": "each"
   "Qty": 1.000
      "SourceSystemName": "RYVIT-VISTA"
   "SourceSystemID": "125-998-85791-A"
   }
]
```

Updating a Line Item Record

CAUTION:	Because the REST method for this API is POST and not PATCH, the processing logic will default a NULL or empty string for fields that are not provided and overwrite any previously existing data in the record.

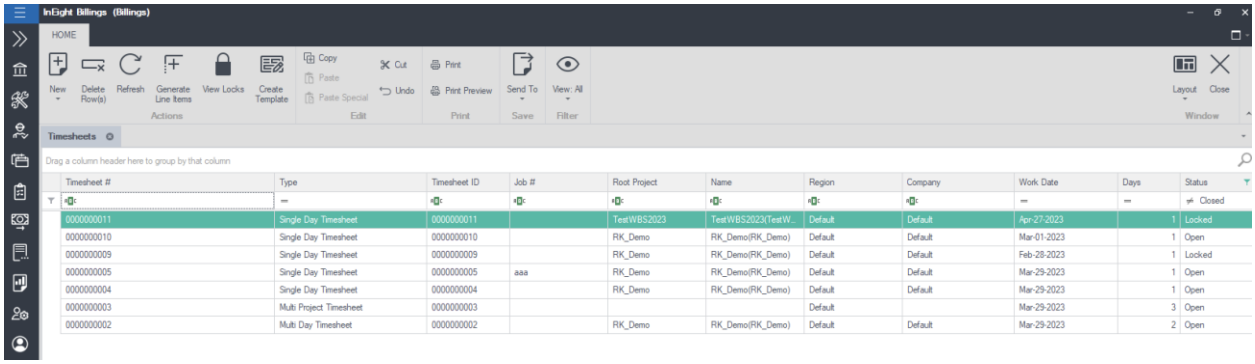
When updating Line Item records, it is possible to provide only the fields that require a new value along with all required fields for the API.

However, when the original Line Item record was created using this API, and a SourceSystemName and SourceSystemID was provided for the record, the SourceSystemNama and SourceSystemID must also be considered a required field in the update request. This ensures that the record matching logic has all available values to identify the correct Line Item record to update.

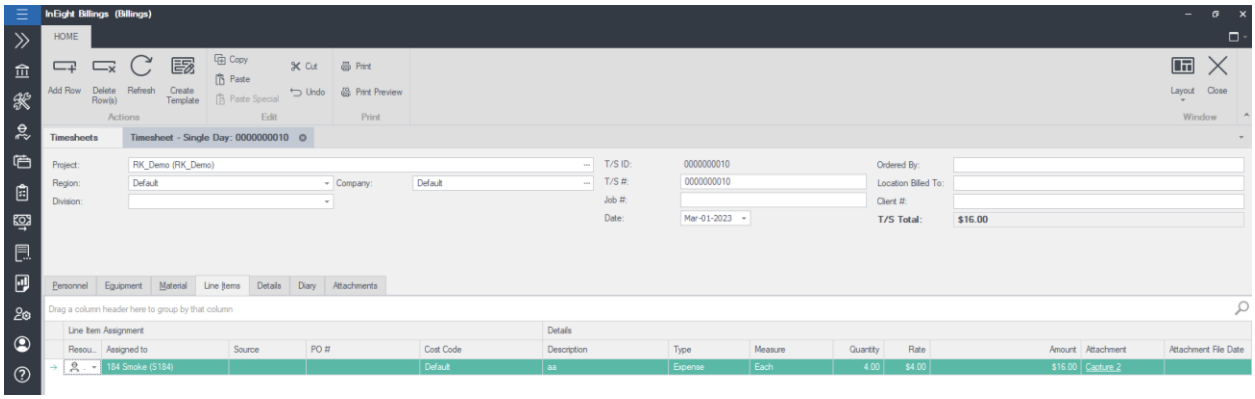
IMPORTANT:	If the record being updated has already been processed into a LEM or an Invoice withing Billings, the update via this API will create a debit/credit transaction.

Verification

Line Items and corresponding Timesheets added through integration are shown on the Billings > Timesheets page.



To view a Timesheet with one or more Line Items, select and double-click a record on the Timesheet List window.



Code Values

The Code Values integrations allow the customer to import and manage various system value lists (selectors or drop downs), including third party billing, accounts payable, and other miscellaneous billable items into the Billings product. Typically, this integration is utilized in conjunction with the customers' ERP or accounting system.

Code Values (Import)

Direction		To the InEight Billings product
Frequency		Determined by external system
Trigger Method		Determined by external system
Average Payload Size		
APIM Portal Name		Upsert CodeValue
InEight Application	**Starting Version**	23.8
	Ending Version	

Code Values (Get)

Direction		From Billings to external ERP.
Frequency		Determined by external system
Trigger Method		Determined by external system
Average Payload Size		Entire entity – Hundreds of records Entity delta – Less than 20 records, but dependent on what triggers a delta and how often the data is collected.
APIM Portal Name		List CodeValue
InEight Application	**Starting Version**	23.8
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Reg.
1	CodeType[1]	String	255		Yes
1	CodeSubType[1]	String	255		No
1	CodeValue	String	10		Yes
1	Description	String	2000		Yes
1	ShortDescription	String	100		No
1	SystemFlag	Boolean	NA		Yes
1	DisplayOrder	Number	10		Yes
1	Value1	Number	10,2		No

Depth	Name	Type	Precision	Parent	Reg.
1	Value2	Number	10,2		No
1	IsActive	Boolean	NA		Yes
1	SourceSystemID	String	50		Yes
1	SourceSystemName	String	50		Yes

1 - Identifies specific lookup type:

Lookup Type

The accepted combinations of CodeType and CodeSubTypes are shown in the following table. Values in parenthesis are only for explanation of what the CodeSubType value means.

CodeType	CodeSubType
AddressType	null
AttachmentType	B (Processes)
AttachmentType	I (Invoices)
AttachmentType	L (LEMs)
AttachmentType	Project
AttachmentType	Timesheet
ClassificationType	null
CountryType	null
EquipmentType	null
LabourType	null
LineItemType	null
MaterialType	null
POStatus	null
PhoneType	null
ProvStateType	CA (Canada)
ProvStateType	US (US)
RelationType	ClientContactType
RelationshipType	null
ResourceType	null
ShiftRotationType	null
UnitType	Equipment
UnitType	Labour
UnitType	LineItem
UnitType	Material

Field Descriptions

Name	Description	Example
CodeType	Identifies lookup by type (*See above table for values*)	ProvStateType
CodeSubType	If the lookup is "nested" (e.g., Country then State or Country then Province), then contains the second level type identifier.	CA
CodeValue	Value of the list item stored in database tables	AB
Description	Long description used in user interface and reports	Alberta
DisplayOrder	Integer for ordering list of values by CodeType and CodeSubType	6
IsActive	Sending a value of *false* in this field causes the record to be soft deleted from the InEight cloud platform. If a value is not provided, the default value *true* is used.	true
ShortDescription	Short description used in user interface and reports	Alta
SourceSystemID	Identifier created by the system of record and used in all system communications as the primary method of specifying a unique record.	
SourceSystemName	Name of the external system that is using the integration. Work with InEight to provision a unique value for this field.	
SystemFlag	Flag indicating if the user can modify the row in the user interface.	false
Value1	Available field that can be used to identify client specific attributes associated with the record being captured.	
Value2	Available field that can be used to identify client specific attributes associated with the record being captured.	

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 rules 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.
    - Errors marked with * are exceptions. The record will be imported but a warning is still generated.

API/Entity Logic	Condition	Code	Message
API Validation	Valid Payload	200	
API Validation	Required field(s) are not provided. Possible <<Field Name>> options: • CodeType • CodeValue • Description • SystemFlag • DisplayOrder • Status	400	The request is invalid. The [Field Name] field is required.
API Validation	Provided data exceeds the string size. Possible <<Field Name>> options: • CodeType • CodeSubType • CodeValue • Description • ShortDescription • Status	400	The request is invalid. The [Field Name] field must be a string with a maximum length of [String Length]. Message: The request is invalid.
Entity Logic Validation	Payload has invalid lookup field value. Possible <<Field Name>> options: • CodeType • Status	200	Invalid [Field Name]/[Value].
Entity Logic Validation	CodeType is valid but the CodeSubType is not one of the accepted CodeSubTypes, based on the above CodeType & CodeSubType table.	200	Invalid CodeSubType/[Value]. The CodeSubType does not match the supported CodeSubTypes for this CodeType.
*Entity Logic Validation	If CodeType is valid but the CodeSubType should be null, based on the CodeType, based on the above CodeType & CodeSubType table.	200	Invalid CodeSubType/[Value]. The CodeSubType should be null. CodeSubType has been set to null.

Sample JSON

New Code Value Record

```
[
   {
   "CodeType": "LineItemType",
   "CodeValue": "SUB",
   "Description": "Subcontractor Invoice",
   "DisplayOrder": 6,
   "SystemFlag": false,
   "Status ": "Active"
   }
]
```

Updating a Code Value Record

CAUTION:	Because the REST method for this API is POST and not PATCH, the processing logic will default a NULL or empty string for fields that are not provided and overwrite any previously existing data in the record.

When updating Code Value records, it is possible to provide only the fields that require a new value along with all required fields for the API.

IMPORTANT:	If the record being updated has already been processed into a Timesheet, LEM, or an Invoice withing Billings, the update via this API will update the value on existing records.

Verification

Code Values added through integration are shown on the Billings > Suite Administration > System Configuration > **Drop Down Values** with the applicable drop-down list selected (Timesheet Line Item Types shown below, as this is the value type that is utilized by Line Items).