Account Setup and Maintenance
Integration Specification

INEIGHT

InEight®
PLATFORM

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	09-SEP-2018	Initial release.
2.0	23-OCT-2018	Field Descriptions table - DisplayUserId: Deleted last paragraph in the description.
	04-DEC-2018	Updated description of EmployeeId in the Users integration to reference the Display Id instead of Source System Id.
	24-APR-2019	Updated to latest template. Added User Role Assignment API details
3.0	02-MAY-2019	Published release.
4.0	09-MAY-2019	Added IsExternalUser field to Users. Published release.
5.0	30-JAN-2020	Added information about updating records in Users. Added Organizations integration. Added Account Codes. Removed Organizations (Get) from Overview. Published revision (Release 19.11).
6.0	21-SEP-2020	Added Source System ID Considerations section to Users. Published revision (Release 20.7)
7.0	21-OCT-2020	Added User Delete and Update User Source System ID integrations. Published revision (Release 20.9)
8.0	29-JAN-2021	Deleted unused fields DisplayUserId, DateFormat, DecimalFormat, Language in Users. Added AccountCode_Get integration to Account Codes. Added ReplaceAccountCodeSourceSystemId, AccountCodeOperationType fields to AccountCode_Import in Account Codes. Published revision (Release 20.11)
9.0	22-SEP-2021	Added Roles integrations. Added Users (Get) integration. Published revision (Release 21.7)
10.0	25-OCT-2021	Updated NOTE in Updating a User Record about changing EmailAddress. Published revision (Release 21.10)
11.0	11-MAY-2022	Added process flow information to Delete Users. Published revision (Release 22.2)
12.0	03-OCT-2022	Clarified description for AdminLevel field in Roles. Published revision
13.0	19-SEP-2023	Clarified description for DisplayUserId, VendorCode, and EmployeeId fields in Users. Clarified description for DisplayId, field in Account Codes. Clarified description for AdminLevel and SourceSystemName fields in Roles. Published revision.

Contents

Overview

This document describes integrations that can be used to initially set up in the InEight cloud platform for a customer and maintain specific entities that are required for continued operation of the account.

Integrations in this Document

Integration	Description
Users	The Users integrations allow the customer to manage information about the people that have login credentials and access to the InEight cloud platform from a third-party system, such as a Human Capital Management (HCM) tool.
Delete Users	The Delete Users integration allows a customer to delete a single record or multiple records that can be scheduled via an external system or done manually in the integration. The deletion can be done whether the user's status is active or inactive, and there is no restriction on the number of User records that can be deleted through a bulk delete action.
Update User SSID	The Update User SSID integration allows users to edit and change the Source System ID in a single record or multiple records that can be scheduled via an external system or done manually in the integration. There is no restriction on the number of SSIDs that can be updated through the API.
User Role Assignment	The User Role module in the InEight cloud platform is used to assign roles to users. Rather than assign individual permissions directly to each user, permissions are grouped into roles. UserRole can define one or more roles to a user, and then grant permissions to each role in the cloud platform. There can also be an administrator role that is automatically assigned with all permissions.
Organizations	The Organizations integration allows customers to maintain a synchronized list of the organization hierarchy structure within a company used for the assignment of roles and permissions, assignment of projects, and for reporting.
Account Codes	The Account Codes (Import and Get) integrations allow customers to create and maintain their master list of account codes that can be used for business functions in multiple InEight cloud applications. Any new account codes and updates to account codes performed using these APIs are automatically published (instead of being staged) and are immediately available for use in InEight cloud applications.

Related Integrations

Integration	Description	Document
Employees	Anyone can be either a user, an employee, or both a user and an employee in the InEight cloud platform. Users have specific login credentials and are licensed to use the products and functionality. Employees are resources within the cloud platform that are included in specific lists and can be assigned to work. For example, when creating a daily plan in InEight Plan an employee can be assigned to work items and time can be recorded for them. Users are not resources and cannot be assigned to work to items.	Master Data for Employees

Users

The Users integrations allow the customer to create and maintain information about the people that have login credentials and access to the InEight cloud platform from a third-party system, such as a Human Capital Management (HCM) tool.

NOTE	When a new user is created via User_Import (or the UI), the Default role is assigned to a user, which is read-only and cannot be edited.

Users (Import)

Direction	To the InEight cloud platform.
Frequency	Determined by external system.
Trigger Methods	Determined by external system.
Average Payload Size	Entire entity – Thousands of records. Entity delta – Less than 100 records, but dependent on what triggers a delta and how often the data is collected.
API Name	Users_Import
InEight Application	**Starting Version** 18.3
	Ending Version

Users (Get)

Direction	From InEight cloud platform to external ERP.
Frequency	Determined by external system.
Trigger Methods	Determined by external system.
Average Payload Size	Entire entity – Thousands of records. Entity delta – Less than 100 records, but dependent on what triggers a delta and how often the data is collected.
API Name	Users_Get
InEight Application	**Starting Version** 21.7
	Ending Version

Fields

Depth	Name	Type	Precision	Parent	Req.
1	FirstName	String	100		Yes
1	LastName	String	100		Yes
1	EmailAddress[1]	String	200		Yes
1	IsActive	Boolean	NA		No
1	DisplayUserId	String	50		No
1	WorkNumber	Array	30		No
1	MobileNumber	String	30		No
1	SourceSystemId	String	50		No
1	SourceSystemName	String	50		No
1	VendorCode	String	250		No
1	EmployeeId	String	50		No
1	DateFormat	NA	NA		No
1	DecimalFormat	NA	NA		No
1	Language	NA	NA		No
1	IsExternalUser	Boolean	NA		No
1	StartDate[2]	String	25		No
1	EndDate[2]	String	25		No

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

Name	Description	Example
FirstName	Full first name of the user.	Jalen
LastName	Full last name of the user.	Smith
EmailAddress	Email address of the user that must be a unique identifier.	jsmith@gmail.com
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
DisplayUserId	Identifier that can be used privately if provided by the external system and does not show in the UI. If no value is entered, email address is used.	jsmith@gmail.com

Name	Description	Example
WorkNumber	Valid phone number for the user at their work location. This is the Office number field in the UI.	555-555-5555
MobileNumber	Valid mobile phone number for the user.	555-555-5555
SourceSystemId	Identifier created by the system of record and used in all system communications as the primary method of specifying a unique record. This field does not display in normal use of InEight cloud platform and can contain internal identifiers such as a GUID that is not understood by typical system users. See Source System ID for additional information.	6546774
SourceSystemName	Unique name assigned to the system of record by the InEight cloud platform that matches the external system using the integration.	SAPHNC
VendorCode	Identifies a vendor that exists in master data and shows as the ID in the UI. Users with a VendorCode are managed by the associated vendor and their availability is limited to that vendor.	BASE
EmployeeId	For users who are also operational resources (*i.e.,* a user that enters time via weekly timesheet or daily plans) this is the Employee ID listed in their operational resource record. This ID must already exist in Master data library > Operational resources > Employees.	6413444
DateFormat	*Not used. Reserved for future functionality.*	NA
DecimalFormat	*Not used. Reserved for future functionality.*	NA
Language	*Not used. Reserved for future functionality.*	NA
IsExternalUser	Determines if the user record represents a guest account with an email domain that is different from the customer's active directory. This field defaults to false if a value is not provided.	false
StartDate	Date that a user first has access to the InEight cloud platform. If not provided, the date of when the record is received is used.	2017-07-13T00:00:00+0000
EndDate	Date when access to the InEight cloud platform for the user ends. If not provided, a default end date of 12/31/9999 is used. **NOTE:** If needed, a future date can be used for this field.	9999-12-31T00:00:00+0000

Source System ID

The SourceSystemID for a user should remain constant regardless of any changes that are made to the user's information in the source system. For example, if the SourceSystemId is tied to the name or email address of a user and either one changes, then SourceSystemId is also subject to change.

It is strongly recommended not to use the same ID as an associated Employee record. There are instances where the SourceSystemId of an employee might need to change, such as relocating to a different country, which could require a new record in the source system. If the user and associated employee have the same SourceSystemId and the User record needs to change because of a change to the employee, this could result an issue where the source system can no longer keep track of the user's SourceSystemId.

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.

API/Entity Logic	Condition	Code	Message
API Validation	Valid Payload	200	
API Validation	Require fields are not provided. Possible <<Field Name>> options: • FirstName • LastName • EmailAddress	400	The request is invalid. The [Field Name] Field is required.
API Validation	Provided data exceeds the string size. Possible <<Field Name>> options: • FirstName • LastName • EmailAddress • DisplayUserId • MobileNumber • SourceSystemId • SourceSystemName • VendorCode • EmployeeId • StartDate • EndDate	400	The request is invalid. The field [Field Name] 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 SourceSystemId/DisplayId	200	"Duplicate Email/SourceSystemId found. Aborting the process."
Entity Logic Validation	Payload has invalid VendorId	200	"Invalid Vendor {SourceSystemId}/VendorId {VendorId} for Users {FirstName}"
Entity Logic Validation	Payload has invalid EmployeeId	200	"Invalid Employee {EmployeeDisplay}/EmployeeId {EmployeeId} for Users {FirstName}"
Entity Logic Validation	Payload has invalid CountryISOCode	200	"Invalid country {CountryISOCode} for Users {FirstName}"

API/Entity Logic	Condition	Code	Message
Entity Logic Validation	Payload has invalid RegionISOCode	200	"Invalid region {RegionISOCode} for Users {FirstName}"
Entity Logic Validation	Payload has conflict with uniqueness on SourceSystemId or DisplayId with existing data	200	"Duplicate found in SourceSystemId or DisplayId for '{Display}'"
Entity Logic Validation	Payload has Invalid User while inserting	200	"Ignoring invalid user having Email '{Email}' for adding"
Entity Logic Validation	Payload has Invalid User while Updating	200	"Ignoring invalid user having email '{Email}' for update"
Entity Logic Validation	user_startDate is less than user_endDate	200	"{validationMessage} for Users {FirstName}"
Entity Logic Validation	Valid Payload	200	"Imported {resultsCount} of {itemsCount} Users entities: Adds({addsCount}) Updates({updatesCount}) Deletes({deletesCount}) Errors(0) Skipped({itemsCount - resultsCount})"

Sample JSON

New User Record

```
[
    {
    "FirstName": "John",
    "LastName": "Smith",
    "EmployeeId": "00001613",
    "IsActive": true,
    "DisplayUserId": "",
    "EmailAddress": "john.smith@abcompany.com",
    "WorkNumber": "",
    "MobileNumber": "",
    "SourceSystemId": "00001613",
    "SourceSystemName": "CLNTERPSOU",
    "VendorCode": "BASE",
    "DateFormat": "",
    "DecimalFormat": "",
    "IsExternalUser": false,
    "Language": "",
    "StartDate": "2017-07-13T00:00:00+0000",
    "EndDate": "9999-12-31T00:00:00+0000"
    }
]
```

Updating a User 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.

NOTE	When updating User records, it is possible to provide only the fields that require a new value along with all required fields for the API (LastName, FirstName, EmailAddress). However, when the original User record was created using this API, and a SourceSystemId was provided for the record, the SourceSystemId must also be considered a required field in the update request. This ensures the record matching logic has all available values to identify the correct User record to update. **IMPORTANT:** If only EmailAddress is changed either via API or UI, the user will not receive the system generated email notification about the change.

Updating EmployeeId for Users created in UI
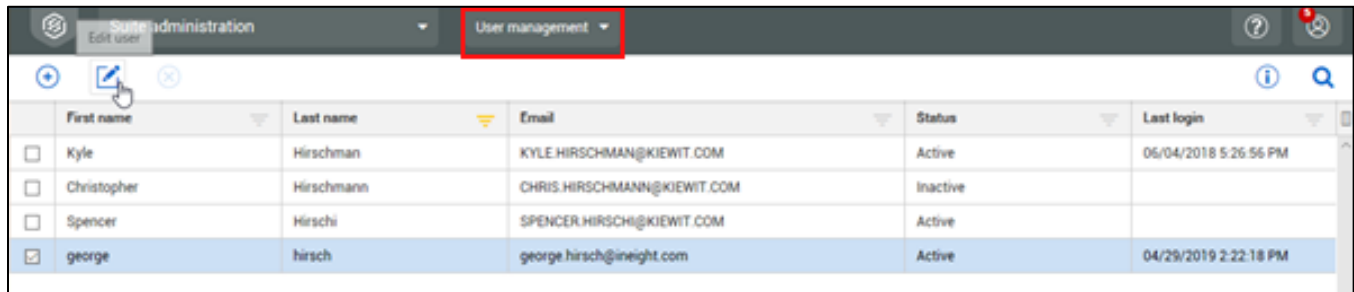
```
[
    {
    "FirstName": "Stacie",
    "LastName": "Brando",
    "EmailAddress": "sbrando@somewhere.com",
    "EmployeeId": "77778886"
    }
]
```

Updating EmployeeId for Users with SourceSystemId values
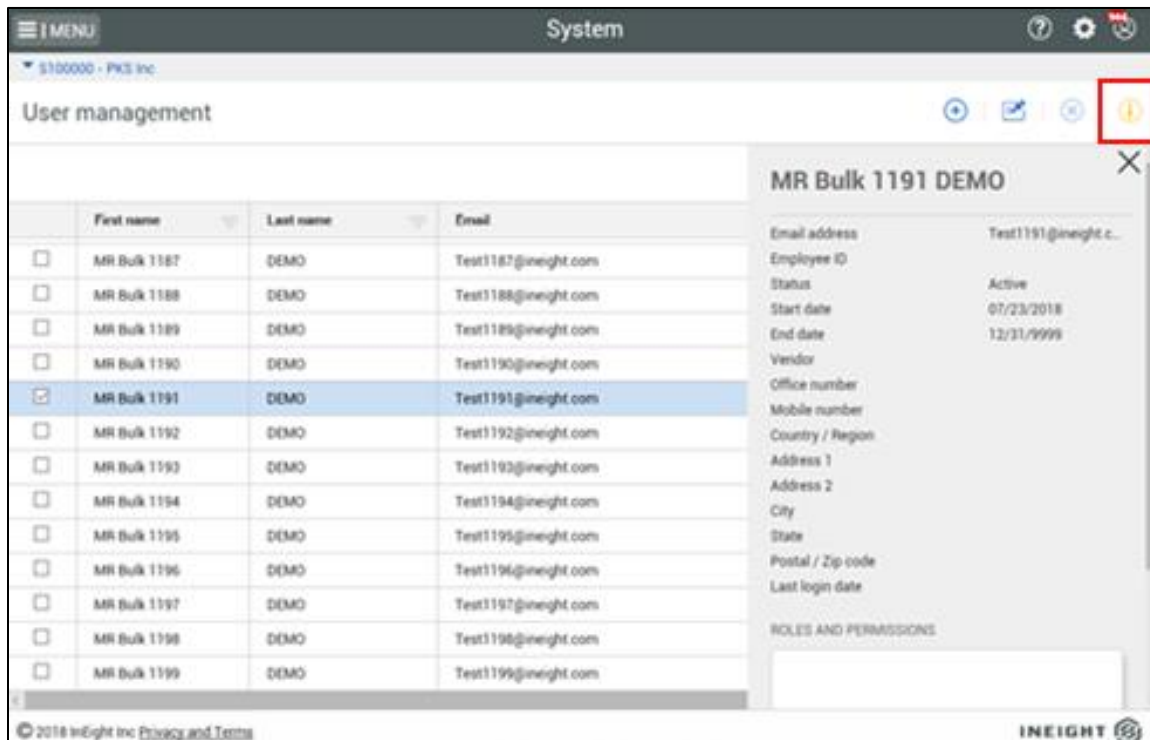
```
[
    {
    "FirstName": "Stacie",
    "LastName": "Brando",
    "EmailAddress": "sbrando@somewhere.com",
    "SourceSystemId": "sbrando7777"
    "EmployeeId": "77778886"
    }
]
```

Verification

Users added through integration are shown on the Suite administration > **User management** page.

To view User record details, select a record on the **User management** page, and then click the **Information** icon.

Delete Users

The Delete Users integration allows a customer to delete a single record or multiple records that can be scheduled via an external system or done manually in the integration. The deletion can be done whether the user's status is active or inactive, and there is no restriction on the number of User records that can be deleted through a bulk delete action. The record deletion is done by setting IsActive to *false*, and any system records used to authenticate the user against Active Directory (Login User table) is inactivated. Validation is provided to ensure that a user cannot delete their own record.

If a contact is promoted to a user, and then later removed, the delete user API code is used to check if the user is linked to any contacts and those links are removed. At the contact level the IsUser field is set to *false*. After the links are removed, the contact can again be promoted to a user just like any other contact. This flow is applied when a user is deleted in UI or through the external API.

Direction		To the InEight cloud platform.
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Entire entity – Thousands of records. Entity delta – Less than 100 records, but dependent on what triggers a delta and how often the data is collected.
API Name		Users_Delete
Cloud Platform	Starting Version	20.9
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Req.
1	SourceSystemId[1]	String	200		Yes

1 - Natural Key field.

Field Descriptions

Name	Description	Example
SourceSystemId	Identifier created by the system of record and used in all system communications as the primary method of specifying a unique record. This field does not display in normal use of InEight cloud platform and can contain internal identifiers such as a GUID that is not understood by typical system users.	6546774

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.

API/Entity Logic	Condition	Code	Message
API Validation	Valid Payload	200	
API Validation	Require fields are not provided. Possible <<Field Name>> options: • SourceSystemId	400	The request is invalid. The [Field Name] Field is required.
API Validation	Provided data exceeds the string size. Possible <<Field Name>> options: • SourceSystemId	400	The request is invalid. The field [Field Name] 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 SourceSystemId/DisplayId	200	"Duplicate Email/SourceSystemId found. Aborting the process."
Entity Logic Validation	Payload has conflict with uniqueness on SourceSystemId or DisplayId with existing data	200	"Duplicate found in SourceSystemId or DisplayId for '{Display}'"
Entity Logic Validation	Valid Payload	200	"Imported {resultsCount} of {itemsCount} Users entities: Adds({addsCount}) Updates({updatesCount}) Deletes({deletesCount}) Errors(0) Skipped({itemsCount - resultsCount})"

Sample JSON

```
[
    {
    "SourceSystemId": "00001613",
    }
]
```

Delete Users

Update User SSID

The Update User SSID integration allows users to edit and change the Source System ID in a single record or multiple records that can be scheduled via an external system or done manually in the integration. This API impacts Users_Import and Users_Get APIs only. There is no restriction on the number of SSIDs that can be updated through the API.

Direction	To the InEight cloud platform.
Frequency	Determined by external system.
Trigger Methods	Determined by external system.
Average Payload Size	Entire entity – Hundreds of records. Entity delta – Less than 100 records, but dependent on what triggers a delta and how often the data is collected.
API Name	User_UpdateUserSysteID
Cloud Platform	**Starting Version** 20.9
	Ending Version

Fields

Depth	Name	Type	Precision	Parent	Req.
1	EmailAddress	String	200		Yes
1	SourceSystemId[1]	String	200		Yes

1 - Natural Key field.

Field Descriptions

Name	Description	Example
SourceSystemId	Identifier created by the system of record and used in all system communications as the primary method of specifying a unique record. This field does not display in normal use of InEight cloud platform and can contain internal identifiers such as a GUID that is not understood by typical system users.	6546774
EmailAddress	Email address of the user that must be a unique identifier.	jsmith@gmail.com

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.

API/Entity Logic	Condition	Code	Message
API Validation	Valid Payload	200	
API Validation	Require fields are not provided. Possible <<Field Name>> options: • SourceSystemId	400	The request is invalid. The [Field Name] Field is required.
API Validation	Provided data exceeds the string size. Possible <<Field Name>> options: • SourceSystemId	400	The request is invalid. The field [Field Name] 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 SourceSystemId/DisplayId	200	"Duplicate Email/SourceSystemId found. Aborting the process."
Entity Logic Validation	Payload has conflict with uniqueness on SourceSystemId or DisplayId with existing data	200	"Duplicate found in SourceSystemId or DisplayId for '{Display}'"
Entity Logic Validation	Valid Payload	200	"Imported {resultsCount} of {itemsCount} Users entities: Adds({addsCount}) Updates({updatesCount}) Deletes({deletesCount}) Errors(0) Skipped({itemsCount - resultsCount})"

Sample JSON

New User Record

```
[
   {
   "SourceSystemId": "00001613",
   "EmailAddress": "sbrando@somewhere.com"
   }
]
```

Updating a User 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.

NOTE	When updating User records, it is possible to provide only the fields that require a new value along with all required fields for the API (LastName, FirstName, EmailAddress). However, when the original User record was created using this API, and a SourceSystemId was provided for the record, the SourceSystemId must also be considered a required field in the update request. This ensures the record matching logic has all available values to identify the correct User record to update.

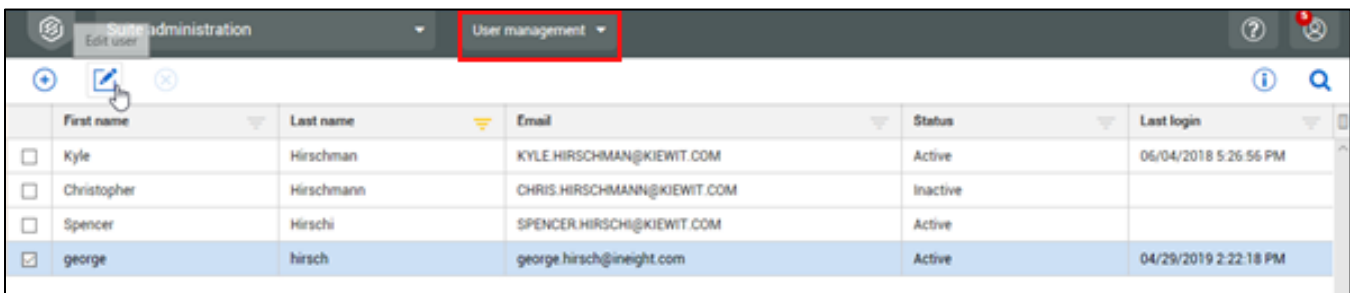### Updating EmployeeId for Users created in UI

```
[
  {
    "FirstName": "Stacie",
    "LastName": "Brando",
    "EmailAddress": "sbrando@somewhere.com",
    "EmployeeId": "77778886"
  }
]
```

Updating EmployeeId for Users with SourceSystemId values

```
[
  {
    "FirstName": "Stacie",
    "LastName": "Brando",
    "EmailAddress": "sbrando@somewhere.com",
    "SourceSystemId": "sbrando7777",
    "EmployeeId": "77778886"
  }
]
```

Verification

Users added through integration are shown on the Suite administration > **User management** page.

To view User record details, select a record on the **User management** page, and then click the **Information** icon.

User Role Assignment

The User Role module in the InEight cloud platform is used to assign roles to users. Rather than assign individual permissions directly to each user, permissions are grouped into roles. UserRole can define one or more roles to a user, and then grant permissions to each role in the cloud platform. There can also be an administrator role that is automatically assigned with all permissions.

Direction	To the InEight cloud platform.
Frequency	Integration occurs each time users are created and assigned to a role, or a role assignment to a user is changed.
Trigger Methods	Determined by external system
Average Payload Size	Entire entity – Thousands of records. Entity delta – Less than 100 records, or hundreds of records depending on the scope of the role changes
APIM Name	UserRole_Import
Cloud Platform	**Starting Version**	18.4
	Ending Version	

1 – Integration can accept a single file of all records as an initial push of data, or to replace all data to resynchronize systems.
2 – Integration accepts files with one or more records representing changes (new, change, delete) to the data set.

Fields

Depth	Name	Type	Precision	Parent	Req.
1	RoleName	String	100		Yes
1	UserSourceSystemId	String	200		Yes
1	ProjectSourceSystemId	String	200		No
1	OrganizationSourceSystemId	String	300		No
1	IsActive	Boolean	NA		No

Field Descriptions

Name	Description	Example
RoleName	Name of the role that will be assigned to the user. The name provided in this field must match an existing role within the InEight cloud platform.	Contract Administrator
UserSourceSystemId	SourceSystemId of an existing user within the InEight cloud platform.	johndoe@webuildthings.com

Name	Description	Example
ProjectSourceSystemId	SourceSystemId of an existing project in the InEight cloud platform. This sets the permissions associated to the role to only this project. If the role should be assigned to multiple projects for the user, then multiple records must be sent. If the user should have the role assigned to all projects that fall beneath a specific organization level, then use the OrganizationSourceSystemId field instead. **NOTE:** You can use ProjectSourceSystemId or OrganizationSourceSystemId, but not both.	654677
OrganizationSourceSystemId	SourceSystemId of an existing organization within the InEight cloud platform. This grants the permissions associated to the role to all projects that hierarchically fall under this organization. **NOTE:** You can use OrganizationSourceSystemId or ProjectSourceSystemId, but not both.	BLDWEST
IsActive	Entity association inbound: Sending a value of *false* in this field will cause the association of user to role to be soft deleted. If a value is not provided, the default value true is used.	true

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.

API/Entity Logic	Condition	Code	Message
API Validation	Valid Payload	200	
API Validation	Required Fields are not Provided. [Field Name] options are: - UserId	400	The request is invalid. The [Field Name] Field is required.
Entity Logic Validation	Payload data is Empty	400	No Content
Entity Logic Validation	Payload has invalid UserId	400	Entity not Found.
Entity Logic Validation	Payload has more than one with same roles record	400	Duplicate Entity Exist
Entity Logic Validation	Payload has Roleid if it is inactive	400	Entity not Found.

API/Entity Logic	Condition	Code	Message
Entity Logic Validation	Payload not having projectId and organizationid	400	No Project or Organization specified
Entity Logic Validation	Payload have projectId and organizationid	400	Both Organization or Project Specified
Entity Logic Validation	Payload User should not exist in sysAdminUsers	400	Cannot assign/unassign any role to service account user for UserId
Entity Logic Validation	Payload roles roleId should not be same with the sysAdminUsers roleid	400	Cannot assign System Administrator role to user
Entity Logic Validation	Payload userid and login userid are same and setting definition is set to No	400	assign/unassign of Role to Self is Not Allowed
Entity Logic Validation	Payload organizationid not exist in projectsuit and inactive	400	Entity not Found.
Entity Logic Validation	Payload projectid not exist in projectsuit and inactive	400	Entity not Found.
Entity Logic Validation	Payload projectid is closed state in projectsuit	400	Project is closed.
Entity Logic Validation	Payload has projectid and role adminlevel is more than projectAdmin	400	One or more roles selected are either Account or Organization level roles. Cannot assign to project.
Entity Logic Validation	Payload has organizationid and role adminlevel is equals to accountadmin	400	Non-root organization role assignment exists. Cannot change admin level to Account Admin.
Entity Logic Validation	Valid Payload	200	"User (2) roles reassigned."

Sample JSON

Sample 1

```
[
    {
    "RoleName": "212725_Role",
    "UserSourceSystemId": "joedoe@Ineight.com",
    "ProjectSourceSystemId": "110111",
    "IsActive": true
    },
    {
    "RoleName": "Rekha_Test",
    "UserSourceSystemId": "joedoe@Ineight.com",
    "OrganizationSourceSystemId": "S10000",
    "IsActive": true
    }
]
```

Sample 2 - User Assigned to Multiple Roles

```
[
   {
   "RoleName": "Contract Creator",
   "UserSourceSystemId": "joedoe@Ineight.com",
   "ProjectSourceSystemId": "110111",
   "IsActive": true
   },
   {
   "RoleName": "Contract Reviewer",
   "UserSourceSystemId": "joedoe@Ineight.com",
   "ProjectSourceSystemId": "110111",
   "IsActive": true
   },
   {
   "RoleName": "Change Manager",
   "UserSourceSystemId": "joedoe@Ineight.com",
   "ProjectSourceSystemId": "110111",
   "IsActive": true
   }
]
```

Sample 3 - User Assigned Same Role to Multiple Projects

```
[
   {
   "RoleName": "Contract Manager",
   "UserSourceSystemId": "joedoe@Ineight.com",
   "ProjectSourceSystemId": "110111",
   "IsActive": true
   },
   {
   "RoleName": "Contract Manager ",
   "UserSourceSystemId": "joedoe@Ineight.com",
   "ProjectSourceSystemId": "110222",
   "IsActive": true
   },
   {
   "RoleName": "Contract Manager",
   "UserSourceSystemId": "joedoe@Ineight.com",
   "ProjectSourceSystemId": "110333",
   "IsActive": true
   }
]
```

Verification

Roles assigned to users are shown on the Suite administration > **User management** page. Select a User record, and then click the edit icon to show the User record details.

In the Roles section, verify the correct roles have been assigned to the selected user.

Organizations

The Organizations integration allows customers to maintain a synchronized list of the organization hierarchy structure within a company used for the assignment of roles and permissions, assignment of projects, and for reporting.

Direction	To the InEight cloud platform.
Frequency	Determined by external system.
Trigger Methods	Determined by external system.
Average Payload Size	Dependent on the size of the organization structure and number of projects. Potentially hundreds of organizational units and sub-units.
APIM Name	Organizations_Import
InEight Application	**Starting Version**	19.1
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Req.
1	OrganizationName	String	300		Yes
1	SourceSystemName	String	50		No
1	SourceSystemId	String	300		No
1	OrganizationDescription	String	255		Yes
1	ParentOrganization	String	300		Yes
1	IsActive	Boolean	NA		No

Field Descriptions

Name	Description	Example
OrganizationName	The name of the organization as it should appear within the InEight UI.	SW Regional District
SourceSystemName	Unique name assigned to the system of record by the InEight cloud platform that matches the external system using the integration.	SAPHNC

Name	Description	Example
SourceSystemId	Identifier created by the system of record and used in all system communications as the primary method of specifying a unique record. This field does not display in normal use of InEight cloud platform and can contain internal identifiers such as a GUID that is not understood by typical system users.	SWDST
OrganizationDescription	A description of the organization record that can be viewed within the InEight UI.	Southwest Region for all Energy and Utility projects.
ParentOrganization	The SourceSystemId of the organization record's parent. Use this field to create a hierarchical structure for organizations. If the organization record is at the top of the hierarchical structure, use the value *RootOrg1* as the Parent Organization. **NOTE:** When processing records within this integration, records provided within the JSON will be sorted to create or update any organizations that represent a parent first to ensure records that have a parent reference will be created or updated without failing.	RootOrg1
IsActive	When set to *false*, the Organization record will be soft deleted from InEight.	true

Sample

```
[
    {
    "OrganizationName": "S0009.01",
    "SourceSystemName": "SMOKE_09.01",
    "SourceSystemId": "SMOKE_09.01",
    "OrganizationDescription": "SB_TEST_ORG",
    "ParentOrganization": "SMOKE_09",
    "IsActive": true
    }
]
```

Verification

From the main menu, select "All projects & organizations".

Then select the "ORGANIZATIONS" tab to see the entire organization hierarchy.

Account Codes

The Account Codes integrations allow customers to create and maintain their master list of account codes that can be used for business functions in multiple InEight cloud applications. Any new account codes and updates to account codes performed using these APIs are automatically published (instead of being staged) and are immediately available for use in InEight cloud applications.

Account Code (Import)

Direction	To InEight cloud platform.
Frequency	Infrequent / Determined by external system.
Trigger Methods	Triggered by external system as needed.
Average Payload Size	Thousands of records.
API Name	AccountCode_Import
InEight Application — Starting Version	19.11
InEight Application — Ending Version	

Account Code (Get)

Direction	From InEight cloud platform to external ERP.
Frequency	Infrequent / Determined by external system.
Trigger Methods	Triggered by external system as needed.
Average Payload Size	Thousands of records.
API Name	AccountCode_Get
InEight Application — Starting Version	20.11
InEight Application — Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Req.
1	DisplayId	String	250		Yes
1	AcountCodeDescription	String	255		Yes
1	IsActive	Boolean	NA		No
1	ParentAccountCodeSoureSystemId	String	10		No
1	ReplaceAccountCodeSourceSystemId	String	250		No

Depth	Name	Type	Precision	Parent	Req.
1	AccountCodeOperationType	String	10		Yes
1	PrimaryAutoQuantity	Boolean	NA		No
1	SecondaryAutoQuantity	Boolean	NA		No
1	IsTerminal	Boolean	NA		No
1	SourceSystemId	String	250		No
1	SourceSystemName	String	50		No
1	PrimaryUOMReference	String	255		No
1	CurrencyCode	String	50		No
1	SecondaryUOMReference	String	255		No
1	ContributePrimaryToPrimary	Boolean	NA		No
1	ContributePrimaryToSecondary	Boolean	NA		No
1	ContributeSecondaryToSecondary	Boolean	NA		No
1	FlagAsDisabled	Boolean	NA		No
1	Notes	String	5000		No
1	SafetyNotes	String	5000		No
1	EnvironmentalNotes	String	5000		No
1	QualityNotes	String	5000		No
1	AccountCodeTag1	String	100		No
1	AccountCodeTag2	String	100		No
1	AccountCodeTag3	String	100		No
1	AccountCodeTag4	String	100		No
1	AccountCodeTag5	String	100		No
1	AccountCodeTag6	String	100		Req.
1	AccountCodeTag7	String	100		No
1	AccountCodeTag8	String	100		No
1	AccountCodeTag9	String	100		No
1	AccountCodeTag10	String	100		No
1	AccountCodeTag11	String	100		No
1	AccountCodeTag12	String	100		No
1	AccountCodeTag13	String	100		No
1	AccountCodeTag14	String	100		No
1	AccountCodeTag15	String	100		No
1	AccountCodeTag16	String	100		No
1	AccountCodeTag17	String	100		No

Depth	Name	Type	Precision	Parent	Req.
1	AccountCodeTag18	String	100		No
1	AccountCodeTag19	String	100		No
1	AccountCodeTag20	String	100		No
1	UserDefinedField1	String	250		No
1	UserDefinedField2	String	250		No
1	UserDefinedField3	String	250		No
1	UserDefinedField4	String	250		No
1	UserDefinedField5	String	250		No
1	UserDefinedField6	String	250		No
1	UserDefinedField7	String	250		No
1	UserDefinedField8	String	250		No
1	UserDefinedField9	String	250		No
1	UserDefinedField10	String	250		No

Field Descriptions

Name	Description	Example
DisplayId	Unique identifier that is publicly recognizable. This field is displayed in normal use of product platform applications and shows as the Account Code in the UI. The value sent in this field can match SourceSystemId if there is no need to use a public versus private unique identifier.	61.03.02.000.02
AcountCodeDescription	Informal description of the record that shows as Description in normal use of product platform applications to assist users when performing searches or selections. This field supports a large number of text characters, but it is recommended to keep the description as short as possible while retaining an easily recognized meaning.	Mud Slab
IsActive	Sending a value of *false* in this field will cause the record to be soft deleted from the InEight product platform. If a value is not provided the default value *true* is used. It is not recommended to use this field to hide or suspend a record because deleted records cannot be reinstated.	true
ParentAccountCodeSoureSystemId	Source system ID of the record that represents the parent of the current record within the account code hierarchy.	61.03.02.000
ReplaceAccountCodeSourceSystemId	Source system ID of the record that represents the replacement of the current record within the account code hierarchy when the AccountCodeOperationType value is 2, 3, or 4.	

Name	Description	Example
AccountCodeOperationType	Specifies the operation being performed. Possible acceptable values: • 1 = Add, • 2 = Update, • 3 = Rename, • 4 = Move, • 5 = Delete	5
PrimaryAutoQuantity	Enables or disables the Auto Quantity Primary flag for the account code.	true
SecondaryAutoQuantity	Enables or disables the Auto Quantity Secondary flag for the account code.	false
IsTerminal	Determines if the account code is the last one within a branch of the hierarchy.	false
SourceSystemId	Identifier created by the system of record and used in all system communications as the primary method of specifying a unique record. This field does not display in normal use of product platform applications and can contain internal identifiers such as a GUID that is not understandable by typical system users.	61.03.02.000.02
SourceSystemName	Unique name assigned to the system of record by the InEight cloud platform that matches the external system using the integration.	SAPHNC
PrimaryUOMReference	Name or Source System ID of a valid Unit of Measure record.	CY
CurrencyCode	Name of a valid Currency record.	USD
SecondaryUOMReference	Name or Source System ID of a valid Unit of Measure record.	CM
ContributePrimaryToPrimary	Sets the value for the Contribute Primary to Primary option on the account code.	true
ContributePrimaryToSecondary	Sets the value for the Contribute Primary to Secondary option on the account code.	false
ContributeSecondaryToSecondary	Sets the value for the Contribute Secondary to Secondary option on the account code.	true
FlagAsDisabled	Sets the value for the flag to disable option on the account code.	False
Notes	Optional notes that can be permanently placed on an Account Code	Only use this account code for large bore pipe in industrial waste projects.
SafetyNotes	Open field for notes on the account code record	Any Text
EnvironmentalNotes	Open field for notes on the account code record	Any Text
QualityNotes	Open field for notes on the account code record	Any Text

Name	Description	Example
AccountCodeTag1	Optional free-text field. Account Code Tag fields might appear as a different name than AccountCodeTag[n] within the UI. For example, a customer might rename AccountCodeTag1 to "Estimator Name" in the UI, but the name of the field in the JSON for this integration must still be labeled as "AccountCodeTag1".	Any text
AccountCodeTag2	Optional free-text field.	Any text
AccountCodeTag3	Optional free-text field.	Any text
AccountCodeTag4	Optional free-text field.	Any text
AccountCodeTag5	Optional free-text field.	Any text
AccountCodeTag6	Optional free-text field.	Any text
AccountCodeTag7	Optional free-text field.	Any text
AccountCodeTag8	Optional free-text field.	Any text
AccountCodeTag9	Optional free-text field.	Any text
AccountCodeTag10	Optional free-text field.	Any text
AccountCodeTag11	Optional free-text field.	Any text
AccountCodeTag12	Optional free-text field.	Any text
AccountCodeTag13	Optional free-text field.	Any text
AccountCodeTag14	Optional free-text field.	Any text
AccountCodeTag15	Optional free-text field.	Any text
AccountCodeTag16	Optional free-text field.	Any text
AccountCodeTag17	Optional free-text field.	Any text
AccountCodeTag18	Optional free-text field.	Any text
AccountCodeTag19	Optional free-text field.	Any text
AccountCodeTag20	Optional free-text field.	Any text
UserDefinedField1	Optional text value. The text that is placed in this field should match an option from a list of values defined for the field within the Account Code UI. Note that User Defined fields might appear as a different name than UserDefinedField[n] within the UI. For example, a customer might rename UserDefinedField1 to "Market" in the UI, but the name of the field in the JSON for this integration must still be labeled as "UserDefinedField1".	Text option
UserDefinedField2	Optional text value that must match an option from a defined list.	Text option
UserDefinedField3	Optional text value that must match an option from a defined list.	Text option
UserDefinedField4	Optional text value that must match an option from a defined list.	Text option

Name	Description	Example
UserDefinedField5	Optional text value that must match an option from a defined list.	Text option
UserDefinedField6	Optional text value that must match an option from a defined list.	Text option
UserDefinedField7	Optional text value that must match an option from a defined list.	Text option
UserDefinedField8	Optional text value that must match an option from a defined list.	Text option
UserDefinedField9	Optional text value that must match an option from a defined list.	Text option
UserDefinedField10	Optional text value that must match an option from a defined list.	Text option

Sample JSON

```
[
    {
    "DisplayId": "61.02.05.000.91",
    "AccountCodeDescription": "Mod Slab / Rat Slab - Cleanup",
    "IsActive": true,
    "ParentAccountCodeSourceSystemId": "61.02.05.000",
    "ParentAccountCodeSoureSystemId": ""
    "AccountCodeOperationType": 5
    "PrimaryAutoQuantity": true,
    "SecondaryAutoQuantity": false,
    "IsTerminal": true,
    "SourceSystemId": "61.02.05.000.91",
    "SourceSystemName": "JDE",
    "PrimaryUOMReference": "CY",
    "CurrencyCode": "USD",
    "SecondaryUOMReference": "CM",
    "ContributePrimaryToPrimary": true,
    "ContributePrimaryToSecondary": false,
    "ContributeSecondaryToSecondary": false,
    "FlagAsDisabled": false,
    "Notes": "For use on heavy industrial projects only",
    "SafetyNotes": "",
    "EnvironmentalNotes": "",
    "QualityNotes": "",
    "AccountCodeTag1": "",
    "AccountCodeTag2": "",
    "AccountCodeTag3": "",
    "AccountCodeTag4": "",
    "AccountCodeTag5": "",
    "AccountCodeTag6": "",
    "AccountCodeTag7": "",
    "AccountCodeTag8": "",
    "AccountCodeTag9": "",
    "AccountCodeTag10": "",
    "AccountCodeTag11": "",
```

```
      "AccountCodeTag12":  "",
      "AccountCodeTag13":  "",
      "AccountCodeTag14":  "",
      "AccountCodeTag15":  "",
      "AccountCodeTag16":  "",
      "AccountCodeTag17":  "",
      "AccountCodeTag18":  "",
      "AccountCodeTag19":  "",
      "AccountCodeTag20":  "",
      "UserDefinedField1":  "",
      "UserDefinedField2":  "",
      "UserDefinedField3":  "",
      "UserDefinedField4":  "",
      "UserDefinedField5":  "",
      "UserDefinedField6":  "",
      "UserDefinedField7":  "",
      "UserDefinedField8":  "",
      "UserDefinedField9":  "",
      "UserDefinedField10":  ""
      }
]
```

Verification

Updates can be viewed in the Core UI under Master data libraries > Account codes in either the Staging or Published tabs.

Roles

The import can be used to create roles in bulk for any user with default permissions View organizations, View active projects, View UoM, and View currency. This integration only allows creation of new roles and cannot be used to update existing roles.

Roles (Import)

Direction		To InEight cloud platform.
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Dependent on the size of the organization structure and number of projects. Potentially hundreds of organizational units and sub-units.
API Name		Roles_Import
InEight Application	Starting Version	21.7
	Ending Version	

Roles (Get)

Direction		From InEight cloud platform to external ERP.
Frequency		Determined by external system.
Trigger Methods		Determined by external system.
Average Payload Size		Dependent on the size of the organization structure and number of projects. Potentially hundreds of organizational units and sub-units.
API Name		Roles_Get
InEight Application	Starting Version	21.7
	Ending Version	

Fields

Depth	Name	Type	Precision	Parent	Req.
1	RoleName	String	300		Yes
1	Description	String	50		No
1	AdminLevel	String	300		No
1	SourceSystemID	String	255		Yes

Depth	Name	Type	Precision	Parent	Req.
1	SourceSystemName	String	300		Yes
1	IsSystem	Boolean	NA		No
1	IsActive	Boolean	NA		No

Field Descriptions

Name	Description	Example
RoleName	Name of the role as it should appear within the InEight UI.	Paving Supervisor
Description	Description of the role	Supervise, track and report on budgets, timelines and staff actively involved in paving
AdminLevel	Level of the administrator as defined in the UI. Possible values are: • Level 0 – Base • Level 1 – Project Admin • Level 2 – Organization Admin • Level 3 – Account Admin	Level 1 – Project Admin
SourceSystemID	Unique record ID assigned by the InEight cloud platform and matching the external system that is using the integration. Work with InEight to provision a unique value for this field.	1121dwd1234ffer4
SourceSystemName	Unique name assigned to the system of record by the InEight cloud platform and matching the external system that is using the integration.	SAPHNC
IsSystem	Defines a system versus custom role. Values are 1 for System and 2 for Custom. In Roles_Import through APIM, user input for this field is ignored and is always set as false.	1
IsActive	When set to false, the Organization record will be soft deleted from InEight cloud platform system.	0

JSON Sample

```
[
    {
    "RoleName": "Paving supervisor",
    "Description": "Supervise, track and report on budgets, timelines and staff
actively involved in paving",
    "AdminLevel": "Level 1 – Project Admin",
    "SourceSystemId": "1122wew2435r4fv455y4g",
    "SourceSystemName": "SAP",
    "IsSystem": false,
    "IsActive": true
```

```
        }
]
```

Verification

Validation is performed on each role in the array and will skip any record that fails. The records that pass are inserted and details regarding the failed inserts is provided in the logs.

From the main menu, go to Suite Administration, and then select the Roles and Permissions tab to manage roles.