Content Setup Tools for Configuration & Data Loading

Config Connector

Connector

- A program written in order to extract specific data points from a text/csv file.

- Validates incoming files by analysing the file name, file extension and column headings in the file

- Reads each row of file and of verify data

- Identifies rows as :
  - Rows Skipped - Any blank rows will be automatically skipped
  - Rows Read - All other rows will be considered data rows to be loaded

- Error out if row is not identified

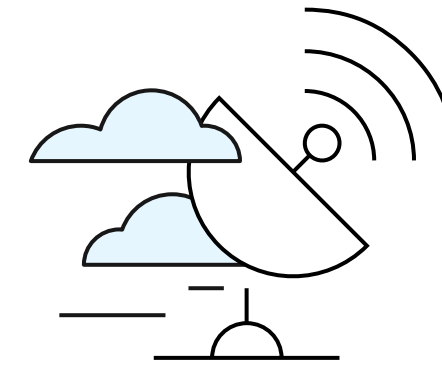- Data row handlers - determines what happens with the data and where to store in Envizi.
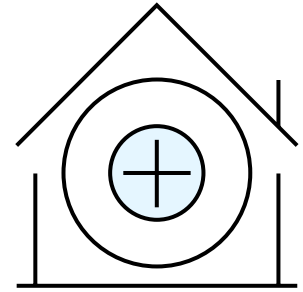
Config Connector

Config Connector

The Config Connector supports the following actions in bulk using an easy to use, single excel template which is uploaded to Envizi to perform multiple actions including
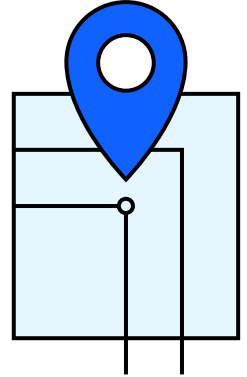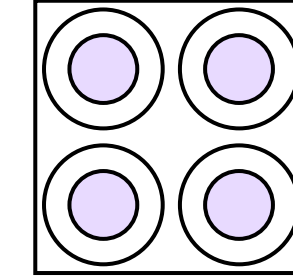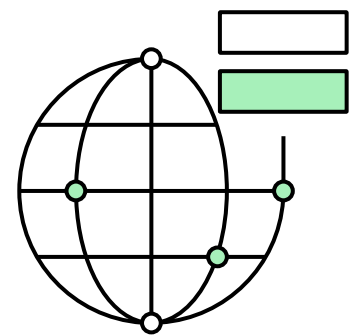
Create/Update Locations

Create/Update Address - Single physical address per location only

Create/Update Location Attributes - (Lat/Long, closed date)

Set the location region based on Lat/Long or Country to derive relevant energy and emission factors.

Set the Location weather station based on region

Create a nested classification group structure and multiple portfolio groups
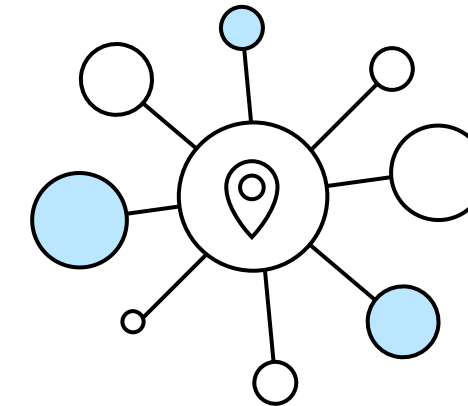
Assign Locations to multiple group structures (no % split)
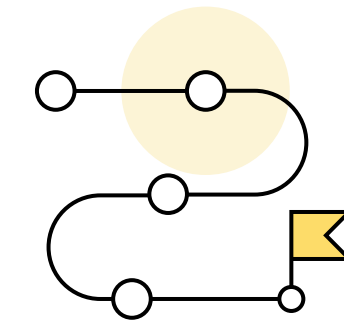
Move locations between existing groups

It's primary use is to quickly configure the underlying structure of Groups and Locations which are foundational to further configuration, data loading and reporting throughout Envizi. It can be used to keep Envizi in sync with the POC requirements which are defined in the underlying excel template.

Config Connector Design

- Input file should be
  - File name = *Envizi_SetupConfigXXXX o XXXX*
    - any character(s) (including spaces)
  - File type = *xls or xlsx*
  - Tab Name = *Setup*

  - *Ex: "Envizi_SetupConfig_DemoCorp Locations_1.xlsx"*

- Group Configuration
  - Upto 3 level groups , Columns D-F
  - Establish relation between groups
  - Group description acts primary key, without GroupIDs presents
  - Group description – ensures no duplication , can create multiple groups with same name
  - Group name <= 50 chars
  - Group description <= 250 chars

Column and Heading	Column and Heading
A	ORGANIZATION
B	GROUP TYPE
C	GROUP HIERARCHY NAME
D	GROUP NAME 1
E	GROUP NAME2
F	GROUP NAME 3
G	LOCATION
H	LOCATION REFERENCE
I	LOCATION REF NO
J	STREET ADDRESS
K	CITY
L	STATE PROVINCE
M	POSTAL CODE
N	COUNTRY
O	LATITUDE Y
P	LONGITUDE X
Q	LOCATION CLOSE DATE

Example	GROUPNAME1	GROUPNAME2	GROUPNAME3	Envizi Grouping RESULT
1 tier structure			Location list	• Location List (group) 　　o Locations
2 tier structure		Australia	New South Wales	• Australia (group) 　o New South Wales (group) 　　o Locations
3 tier structure	Asia Pacific	Australia	New South Wales	• Asia Pacific (group) 　o Australia (group) 　　▪ New South Wales (group) 　　　• Locations
No groups defined				N/A - No group created

Config Connector Design

- Location Configuration
  - Creates a new location
    - Unique values of column G & H
  - Updates existing location
    - Must match values of column G Or H
  - Group description acts primary key, without GroupIDs presents
  - Group description – ensures no duplication , can create multiple groups with same name
  - Location name <= 100 chars
  - Location reference <= 50 chars

Column and Heading	Column and Heading
A	ORGANIZATION
B	GROUP TYPE
C	GROUP HIERARCHY NAME
D	GROUP NAME 1
E	GROUP NAME2
F	GROUP NAME 3
G	LOCATION
H	LOCATION REFERENCE
I	LOCATION REF NO
J	STREET ADDRESS
K	CITY
L	STATE PROVINCE
M	POSTAL CODE
N	COUNTRY
O	LATITUDE Y
P	LONGITUDE X
Q	LOCATION CLOSE DATE

Envizi Column (Internal Use Only)	Source File Column and Name (Location of Data in File)		Data Format	Notes and Assumptions
Location Type	N/A	N/A	String	Default to 'Other'
Location Name	G	LOCATION	String	
Location Reference	H	LOCATION REFERENCE	String	Location Reference is only set upon Location create as it's a primary field used for location identification. It will not be updated when matching on an existing location by location name.

Config Connector Design

- Address Configuration
  - Creates new address
  - Updates the address – matching columns G or H

Envizi Column and Name (Internal Use Only)	Source File Column and Name (Location of Data in File)		Data Format	Notes and Assumptions
Address Type	N/A	N/A	String	Default to 'Physical'
Address	J	STREET ADDRESS	String	
City	K	CITY	String	
State	L	STATE PROVINCE	String	
Postal Code	M	POSTAL CODE	String	
Country Region	N	COUNTRY	String	

- Region Configuration
  - Sets region based on
    - latitude and longitude values
    - Country of the address.
  - Requires to determining appropriate location-based energy and emission factors.
    - Most granular region set if latitude and longitude are provided
    - Country will be used to determine region if no latitude and longitude are provided
    - If no match can be found, the region will be set to earth as a default region to fall back on to ensure some generic factors are still applied

Envizi Column and Name (Internal Use Only)	Source File Column and Name (Location of Data in File)		Data Format	Notes and Assumptions
Country Region	N	COUNTRY	String	
Latitude	O	LATITUDE Y	Decimal	
Longitude	Y	LONGITUDE X	Decimal	

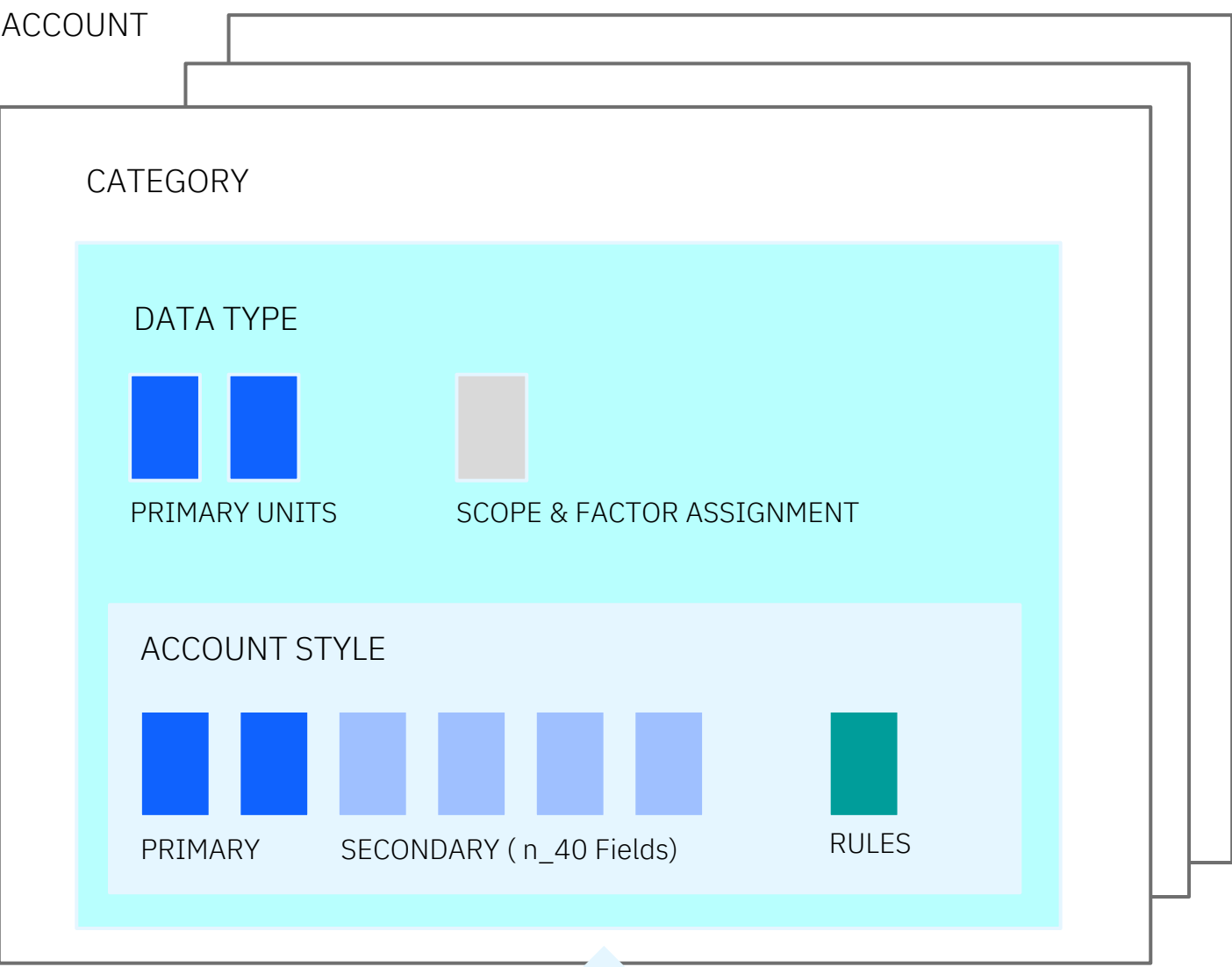| Column and Heading	Column and Heading
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F	GROUP NAME 3
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H	LOCATION REFERENCE
I	LOCATION REF NO
J	STREET ADDRESS
K	CITY
L	STATE PROVINCE
M	POSTAL CODE
N	COUNTRY
O	LATITUDE Y
P	LONGITUDE X
Q	LOCATION CLOSE DATE

Universal Connectors

UNIVERSAL ACCOUNT CONNECTOR

A universal connector that is designed to load transformed files containing Account records to end points, avoiding the need to develop custom connectors.

A Data Loading Template (Account Style Extract Report) can be downloaded from the UI for any given Account Style.

ACCOUNT

CATEGORY

DATA TYPE

PRIMARY UNITS   SCOPE & FACTOR ASSIGNMENT

ACCOUNT STYLE

PRIMARY   SECONDARY (n_40 Fields)   RULES

DATA INTEGRATION

UNIVERSAL ACCOUNT CONNECTOR

Loads transformed file to end points

Transformation Services

Transforms source file to Universal format (by Account Style)

OPTION A

OPTION B

SOURCE FILE

Data loading Templates - Universal Account Connectors

- Multi-purpose report templates that allow you to use a spreadsheet-based approach

- Create or Modify account data in bulk

- Capture records for one or more accounts

- Create accounts if do not exists

Two different approaches:

- 1. Capture data with only Primary Measure and Cost (PM&C)

- 2. Capture data with with additional / Secondary fields

1. Capture data with only Primary Measure and Cost (PM&C) – Simple account styles

- Simple account styles

- Load only with Quantity (Primary Measure) and Cost

- Bulk load of data for multiple account styles at the same time

- Create / Update records of multiple accounts

- Template to use :

  - 1.1 Account Setup and Data Load PM&C

  - 1.2 For POCs :

    - Simplified version of Account Setup and Data Load PM&C provided by product team

    - Works only for account styles coming with out of the box

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Organization	Location	Account Style Caption	Account Number	Account Re	Account Supplier	Record Start YYYY	Record End YYY	Quantit	Total cost (incl	Record Referer	Record Invoi	Record Data Quality	
2	Business ABC	Athens Manufacturing GA	S2 - Electricity - kWh	11111000002	NCCC12321311	AGL	2022-01-01	2022-01-31	1000	300	Spike in consumption	1231546	Actual	
25	Business ABC	Athens Manufacturing GA	S1 - Natural Gas - GJ	22222111111		Origin	2022-12-01	2022-12-31	2585	775.5				
26	Business ABC	Athens Manufacturing GA	KPI - Floor Area - m2	Floor space		SAP	2022-01-01	2022-01-31	100					
38														

2. Capture data along with additional / secondary fields

- Complex account styles

- One account style data at one time

- Load data for multiple accounts of **same account style**

- Bulk load of data for multiple account styles at the same time

- Create / Update records of multiple accounts

- Template to use : **Account Setup and Data Load**

Understand templates – 1.2 POC Account Setup & Data load

- Comes with two sheets
  - Records to Load
  - Supported account styles

- File name details:
  - *File name = 'POC Account Setup and Data Load###*'*
  - *File type = xls or xlsx*
  - *Tab name = "Records to load"*

Connector configurations:
  - *Date format = YYYY-MM-DD*

- *Create new Accounts*
  - *No matching account number in given location*

- *Overwrite existing records*
 - *If account number and date matches*

Column	Column Heading
A	Organization
B	Location
C	Account Style Caption
D	Account Number
E	Account Reference
F	Account Supplier
G	Record Start YYYY-MM-DD
H	Record End YYYY-MM-DD
I	Quantity
J	Total cost (incl. Tax) in local currency
K	Record Reference
L	Record Invoice Number
M	Record Data Quality

|	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Organization	Location	Account Style Caption	Account Number	Account Re	Account Supplier	Record Start YYYY	Record End YYY	Quantit	Total cost (incl	Record Referer	Record Invoi	Record Data Quality	
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38														

Account Data Connectors

| Account Data Connectors	Connector (description)	File format	Source	Create New Accounts	**Update existing account details**	Extract, modify and upload existing data	Load Quantity + Cost	Load additional account style fields (other than Quantity and Cost)	Load more than 1 account style in each file	Locked to Universal Account Style Set
POC Account Setup and Data Load / Account Setup and Data Load PM &C	An excel template containing a list of pre-defined universal account styles and a data template to support the entry and automated upload of records for new or existing accounts. Only loads data into primary quantity and cost fields.	XLSX	Excel Document	✓	✗	✓	✓	✓	✗	✗
Account Setup and Data Load	Supports extracting then modifying existing Account records or entering new records for new and existing accounts. Loads data into primary quantity, cost and additional account style fields.	CSV	Envizi Extract Report	✓	✗	✗	✓	✗	✓	✓

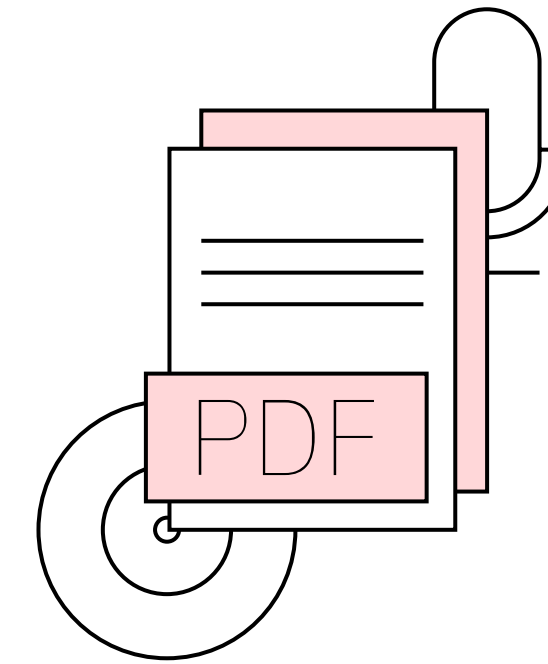# Other tasks which you can manage directly in the UI
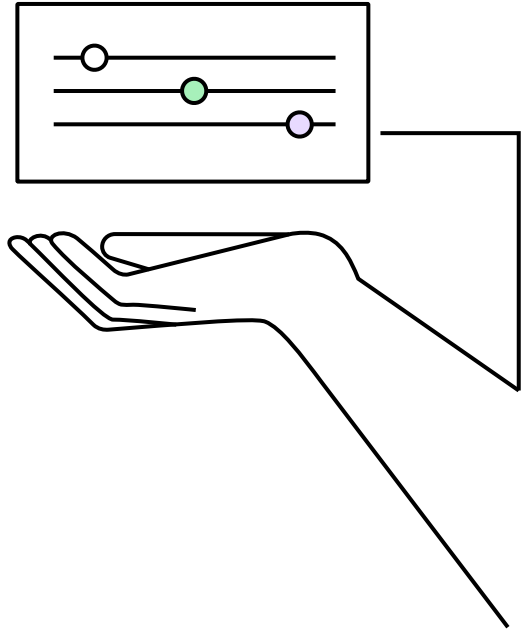
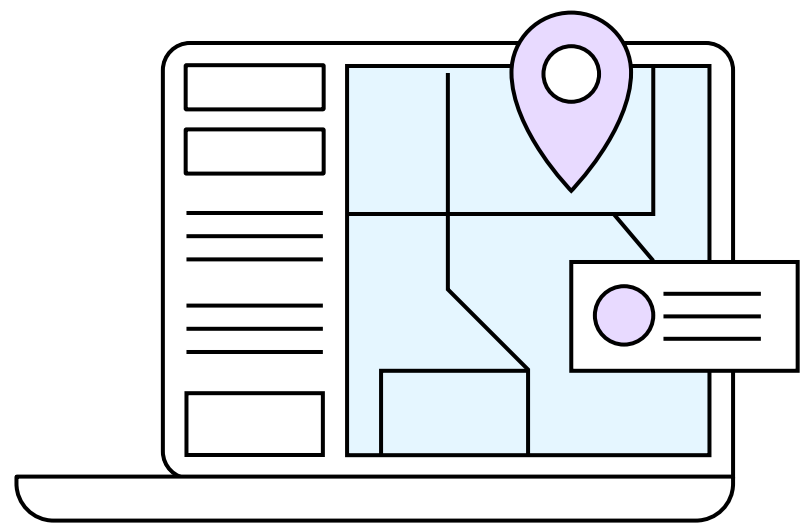Setting additional
location attributes
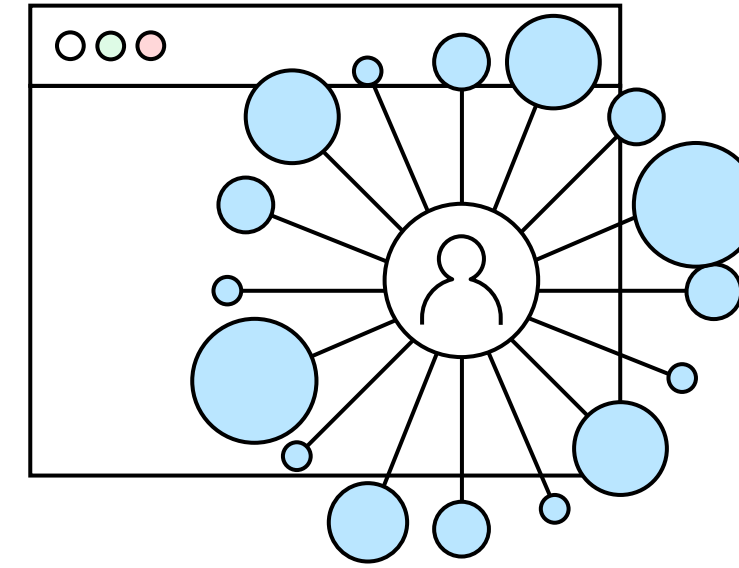
Creating additional users or
amending user access
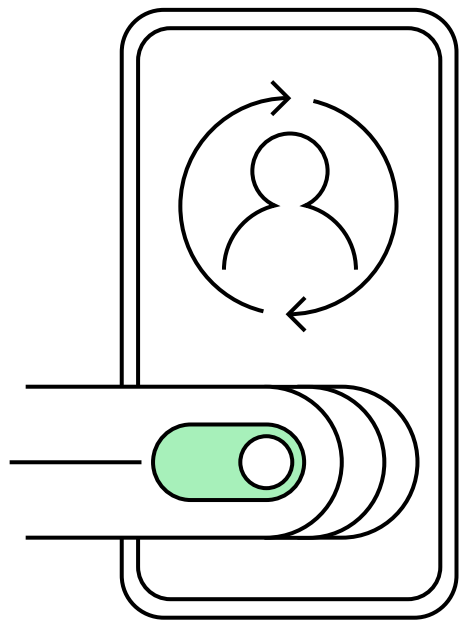
Updating account details
for existing accounts

Attaching PDFs
to records

PDF

Creating % apportionment rules for locations
which are mapped to multiple groups within
the same structure

New Data Connectivity Solution

GOALS:

- Improve scalability by simplifying and streamlining the data connectivity process.

- Provide options/flexibility for clients, business partners and ecosystem.

ACCOUNT STYLE WIZARD

DATA INTEGRATION SERVICES
by IBM Integration Services (DOU)
(via Expert Labs SOW)

CLIENT DATA

SUPPORTED PATHWAY

Data transformation & support services

ENVIZI

Manual transformation or by 3rd party tools (by client, business partner, eco-system)

DATA TRANSFORMATION

UNSUPPORTED PATHWAY

Universal Account Connector

Universal Meter Connectors