Transformation Steps

The Data Transformation module offers different ways of performing transformations on your data. These include transformation steps that can be dragged into a flow, performing inline field transformations, and even data conversion. Besides the transformation steps that come included with this module, you can also download and install plug-ins to include more steps in your environment.

Here is a breakdown of the different ways of performing transformations:

- **Built-in transformations:** This refers to transformations in the transformation step panel that come included in the data transformation module. These do not require any type of set up.
- **Downloadable transformation step:** You can also download and install special plug-ins from the Marketplace that become available in the transformation step panel. (See the Transform Steps section in the Marketplace for all available options.)
- **Inline field transformations:** This refers to functions that users can perform directly on the data (in the data preview panel or the step configuration panel).

Following is a list of all the transformations that you can perform on your data. Click on a transformation name to learn how to use it in your flow.

Transformation	Type	Description
Aggregate	Built-in transformation step	This step transforms your data into a summary form, by applying functions like count, count distinct, sum, average, etc.
Calculated Field	Built-in transformation step	This step creates a calculated field based on other fields in the step.
Filter	Built-in transformation step	This step is for filtering data in a step.
Merge	Built-in transformation step	This step merges two sets of data based on the configured Join Fields.
Split	Built-in transformation step	This step duplicates an input dataset to create identical output datasets.
Union	Built-in transformation step	This step combines the data from two steps together.
Date Component	Built-in transformation step	This step extracts specific date elements from date fields.
PitneyBowes Forward Geocoding	Downloadable transformation step	This step uses the PitneyBowes forward geocoding API to convert address values into location coordinates.
OpenCage Forward Geocoding	Downloadable transformation step	Uses the OpenCage forward geocoding API to convert address values into location coordinates.
PMML Model Prediction	Downloadable transformation step	This step integrates a model saved as a PMML file into the platform and applies it on the data.
PFA Model Prediction	Downloadable transformation step	This step integrates a PFA model and applies it on the data.
H2O Model Prediction	Downloadable transformation step	This step integrates a model created in H2O.ai and applies it on the data.
R Model Prediction	Downloadable transformation step	This step integrates an R model and applies it on the data.
Data Type Conversions	Inline Field transformation	Set of functions used to convert the data type of a field into another type. For example, text can be converted into numeric values, SQL date, or SQL timestamp.
GeoPoint Conversion	Data type conversion	Generate GeoPoint values based on geographical data.
Duplicate Field	Inline Field transformation	Create a copy of the data field.
Number Precision	Inline Field transformation	Round off a numeric value.
Sub-string	Inline Field transformation	Extract part of a string.

Switch Case	Inline Field transformation	Convert text to all uppercase, all lowercase, or proper case.
White Space	Inline Field transformation	Remove white space from data.
Find and Replace	Inline Field transformation	Search for specific data values and replace them with other values.
Grouped Data	Inline Field transformation	Group a field's values.
Nulls to Zero	Inline Field transformation	Replaces every null value in a numeric field with zero.