

Unpivot Columns

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You can convert columns into rows of values. A conversion transformation extracts the values from a specified column or columns and turns the column name and each extracted value into key-value pairs.

- Unpivot can be applied to one or more columns.
- Often, this transformation is applied to datasets containing pivoted or aggregated data.

NOTE: Depending on the number of source columns, an unpivot operation can significantly increase the number of rows in your dataset.

Single-column Unpivot

When you unpivot a single column of data, the column is separated into two new columns in your dataset:

New column name	Values
key	All values are the name of the source column.
value	Each row contains one of the row values from the source column.

NOTE: These columns replace the source column in the dataset. To retain the source column, create a copy of it first and then unpivot the copied column.

Source:

The following example contains a very simple set of data:

Name	favoriteColor	favoriteDessert
Anna	red	ice cream
Bella	pink	cookies
Callie	blue	pie

Transformation:

You can unpivot these columns one-by-one into row data:

Transformation Name	Unpivot columns
Parameter: Columns	favoriteColor

Parameter: Group size	1
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Results:

The new unpivoted columns are placed at the end of the dataset, and the source column is removed.

Name	favoriteDessert	key	value
Anna	ice cream	favoriteColor	red
Bella	cookies	favoriteColor	pink
Callie	pie	favoriteColor	blue

Multi-column Unpivot

This example turns the data from multiple columns into a single set of key-value pairs, where the key is the column name associated with the source of the data in the value column.

Source:

The following dataset shows student test scores per test. Each row represents the scores of individual students.

StudentId	test1Score	test2Score	test3Score
001	75	79	77
002	84	81	86
003	79	82	87
004	92	94	92

Transformation:

You can use the following transformation to turn the dataset into one row per student-test combination:

Transformation Name	Unpivot columns
Parameter: Columns	test1Score, test2Score, test3Score
Parameter: Group size	1

Results:

The results are as follows:

StudentId	key	value
001	test1Score	75
002	test2Score	79
003	test3Score	77
001	test1Score	84
002	test2Score	81
003	test3Score	86
001	test1Score	79
002	test2Score	82

003	test3Score	87
001	test1Score	92
002	test2Score	94
003	test3Score	92

You can then rename the `key` and `value` columns as needed.

Ranges

You can specify a range of columns in your dataset. In the previous example, you can specify the three test score columns using the following value in the Columns textbox:

All three columns are unpivoted.

Wildcards

NOTE: You can use the asterisk (*) wildcard in the Columns textbox to apply the unpivot to the entire dataset, which generates a `key` and a `value` column, containing all column-row entries from the source columns. However, unpivoting a large number of columns can significantly increase the number of rows in your dataset.