

# Changes to the Language

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The following changes have been applied to Wrangle in this release of Trifacta®.

## Release 8.11

### Nest transformation explicitly types transformed column

In prior releases, when a Nest transformation was applied to a column to nest values into Arrays or Objects, the resulting column was re-inferred by the Trifacta application. This re-inference should not be necessary, since the target column's data type is effectively declared in the transformation definition.

Beginning in this release, the output column of these Nest transformations is explicitly typed to Array or Object data type, based on the definition of the transformation.

**NOTE:** Existing uses of the Nest transformation are not immediately affected. However, if these transformations are edited, then the changes may cause unexpected results and breakages in downstream transformations. If the recipe was originally designed expecting a different data type, subsequent steps may have been used to clean up the nested data, assuming that it was String values or some other data type. If the output column is now explicitly typed as Array or Object data type, these steps may be broken. You may be able to fix these broken steps by explicitly typing the output column to String after the Nest transformation and before your subsequent steps.

For more information, see *Nest Your Data*.

## Release 8.10

### Split by position no longer requires sorted list of positions

Beginning in this release, when you create a Split by position transformation, the numeric values indicating the positions do not need to be listed in sorted numeric order.

**Tip:** You can now do faster iteration since you can add new positions as needed when previewing the transformation.

For more information, see *Split Column*.

## Release 8.5

### Support for numeric separators in NUMFORMAT function

Beginning in Release 8.5, the NUMFORMAT function supports the following configurable separators for localizing numeric values:

Option Name	Description
Decimal Separator	The string used to separate the integer part of a Decimal value from its fractional part.
Grouping Separator	The string used to separate a group of digits.

For more information, see *NUMFORMAT Function*.

### New functions

Function Name	Description
<i>NUMVALUE Function</i>	Converts a string formatted as a number into an Integer or Decimal value by parsing out the specified decimal and group separators. A string or a function returning formatted numbers of String type or a column containing formatted numbers of string type can be inputs.

## Release 8.4

### New functions

Documentation for the following functions is now available.

Function Name	Description
<i>FINDNTH Function</i>	Returns the position of the nth occurrence of a letter or pattern in the input string where a specified matching string is located in the provided column. You can search either from left or right.
<i>PARSESTRING Function</i>	Evaluates an input against the String datatype. If the input matches, the function outputs a String value. Input can be a literal, a column of values, or a function returning values. Values can be of any data type.
<i>PARSEARRAY Function</i>	Evaluates a String input against the Array datatype. If the input matches, the function outputs an Array value. Input can be a literal, a column of values, or a function returning String values.
<i>PARSEOBJECT Function</i>	Evaluates a String input against the Object datatype. If the input matches, the function outputs an Object value. Input can be a literal, a column of values, or a function returning String values.

## Release 8.3

None.

## Release 8.2

None.

## Release 7.10

### New functions

Function Name	Description
<i>EOMONTH</i> Function	Returns the serial date number for the last day of the month before or after a specified number of months from a starting date.

## Release 7.9

### Transform Builder now supports All columns option

Beginning in Release 7.9, select **All** columns option has been added in the Transform Builder.

Option Name	Description
All	Selects all columns in the dataset

### Example:

<b>Transformation Name</b>	Rename columns
<b>Parameter: Option</b>	Add suffix
<b>Parameter: Columns</b>	All
<b>Parameter: Suffix</b>	_new

The following is the list of the transformations that accept the All option for selecting columns:

- Date format
- Delete columns
- Move columns
- Rename column
- Replace
- Replace text or patterns
- Replace cells
- Replace text between delimiters
- Replace by position
- Replace mismatched values
- Replace missing values
- Edit with formula
- Change column type
- Text format
- Unpivot columns

For more information, see *Transform Builder*.

## Release 7.8

### Rename transform now supports Upper / Lower and Left / Right options

Beginning in Release 7.8, the Rename transform supports the following new options:

Option Name	Description
Convert to lowercase	Converts existing column names to lowercase
Convert to UPPERCASE	Converts existing column names to uppercase
Keep from beginning (left)	Specifies the number of characters to keep from the beginning of column names
Keep from end (right)	Specifies the number of characters to keep from the end of column names

For more information on rename columns, see *Rename Columns*.

## Release 7.5

### New Functions

#### Approximation statistical functions:

**Tip:** Approximation functions are suitable for larger datasets. As the number of rows increases, accuracy and calculation performance improves for these functions.

Function Name	Description
<i>APPROXIMATEMEDIAN Function</i>	Computes the approximate median from all row values in a column or group. Input column can be of Integer or Decimal.
<i>APPROXIMATEPERCENTILE Function</i>	Computes an approximation for a specified percentile across all row values in a column or group. Input column can be of Integer or Decimal.
<i>APPROXIMATEQUARTILE Function</i>	Computes an approximation for a specified quartile across all row values in a column or group. Input column can be of Integer or Decimal.

#### base64 encoding functions:

Function Name	Description
<i>BASE64ENCODE Function</i>	Converts an input value to base64 encoding with optional padding with an equals sign (=). Input can be of any type. Output type is String.
<i>BASE64DECODE Function</i>	Converts an input base64 value to text. Output type is String.

## Release 7.4

### New Functions

Function Name	Description
<i>WEEKDAYNAME Function</i>	Derives the full name from a Datetime value of the corresponding weekday as a String. Source value can be a reference to a column containing Datetime values or a literal.