

Command Reference: FormatTableDateTime()

Format a date/time column in a table

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The `FormatTableDateTime()` command formats a date/time input column from a table to create a table output column. For example, it may be necessary to reformat a date/time column into an object type that is more suitable for reporting, further processing, or export to a spreadsheet. See also the `FormatTableString()` command. Formatting occurs as follows:

1. The specified date/time column is formatted into a string using the format specifier string specified by the `FormatterType` and `DateTimeFormat` parameters. Missing values in input will result in blanks (nulls) in output.
2. The resulting string can be converted to another column type (e.g., an integer or double) by specifying the `OutputType` parameter.

The following dialog is used to edit the command and illustrates the syntax of the command.

Format the contents of a date/time input column to create values in the output column.
The input column must have a type of Date, DateTime, or a string that can be parsed to a date/time.
The output type can be set to:
DateTime - if the resulting formatted string can be parsed to a date/time (e.g., with less precision than original)
(note TSTool by default displays all DateTime objects using ISO YYYY-MM-DD, etc. notation in tables)
Double - if the resulting formatted string can be parsed to a floating point number (e.g., year only)
Integer - if the resulting formatted string can be parsed to an integer (e.g., year only)
String - if the resulting formatted string should be treated as a literal string

Table ID: Required - table to process.
Input column: Required - name of date/time column to process.
Date/time format: => Required - to specify output format.
OutputYearType: Optional - year type to interpret \${dt:YearForTypeYear} (default=Calendar).
Output column: Required - output column name.
Output type: Optional - specify output column type (default=String).
Insert before column: Optional - column to insert before (default=at end).

Command:

```
FormatTableDateTime(TableID="Table1", InputColumn="DateTimeISO", DateTimeFormat="%Y-%m", OutputColumn="PublicationDateToMonth", OutputType=DateTime, InsertBeforeColumn="CalculationDate")
```

Cancel OK

FormatTableDateTime

FormatTableDateTime() Command Editor

The command syntax is as follows:

`FormatTableDateTime (Parameter=Value, ...)`

Command Parameters

| Parameter | Description | Default |
|---------------|--|---------------------------|
| TableID | The identifier for the table to process. Can be specified using processor <code>\${Property}</code> . | None – must be specified. |
| InputColumn | The name of the input date/time column to process. The column can contain date/time objects or strings that can be parsed into date/time objects. Can be specified using processor <code>\${Property}</code> . | None – must be specified. |
| FormatterType | The date/time formatter type that defines <code>DateTimeFormat</code> : | C |

| Parameter | Description | Default |
|---------------------|--|---------------------------------|
| | <ul style="list-style-type: none"> C – the C programming language <code>strftime()</code> function, which has been widely copied (described below). MS – Microsoft convention (currently not supported but may be added in the future). | |
| DateTimeFormat | The format specifier string used to format the date/time values. Specify as many format specifiers as appropriate. All other characters will be transferred to the output string. See the table below for valid specifiers. Can be specified using processor <code>\${Property}</code> . | None – must be specified. |
| OutputYearType | Indicate the year type used to transform the date/time to an output. For example, specify <code>OutputYearType=Water</code> and <code>DateTimeFormat=\${dt:YearForYearType}</code> to output the water year corresponding to the input date/time. | |
| OutputColumn | The name of the column to receive the output. If the column does not exist in the table it will be created, considering <code>OutputType</code> . Can be specified using processor <code>\${Property}</code> . | None – must be specified. |
| OutputType | Specify if the output column should be other than a <code>String</code> . Successful conversion to the output type requires that the format string result is consistent with the desired output type. | String |
| InsertBefore Column | The name of the column before which the output column should be inserted (if the output column needs to be created). Can be specified using processor <code>\${Property}</code> . | Insert at the end of the table. |

The following table lists the supported format strings for `FormatterType=C`:

Supported C (Strftime) Format Specifiers

| Format Specifier | Description |
|-------------------------------------|--|
| %a | Weekday abbreviation (e.g., Sun) |
| %A | Weekday (e.g., Sunday). |
| %b | Month abbreviation (e.g., Jan). |
| %B | Month (e.g., January). |
| %d | Day (01-31). |
| %H | Hour (00-23). |
| %I | Hour (01-12). |
| %j | Day of year (001-366). |
| %m | Month (01-12). |
| %M | Minute (00-59). |
| %p | AM, PM (noon=PM, midnight=AM). |
| %S | Second (00-59). |
| %s | Number of seconds since Jan 1, 1970 00:00:00 |
| %y | Year (00-99). |
| %Y | Year (0000-9999). |
| %Z | Time zone (e.g., MST). |
| <code>\${dt:YearForYearType}</code> | 4-digit year for the given <code>OutputYearType</code> . |