

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.

Edit FormatTableDateTime() Command

Format the contents of a date/time (or string that can be parsed into a date/time) input column to create values in the output column.

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="NRCS_50PercentForecasts", InputColumn="PublicationDate", DateTimeFormat="%Y-%m", OutputColumn="PublicationDateToMonth", OutputType=DateTime, InsertBeforeColumn="CalculationDate")`

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.	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.	None – must be specified.
FormatterType	The date/time formatter type, which defines the format specifiers, one of:	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.	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> .	None – must be specified.
OutputType	Specify if the output column should be other than <code>String</code> type. 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).	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).
%y	Year (00-99).
%Y	Year (0000-9999).
%Z	Time zone (e.g., MST).
\${dt:YearForYearType}	4-digit year for the given <code>OutputYearType</code> .