Command Reference: TimeSeriesToTable()

Copy one or more time series into a table

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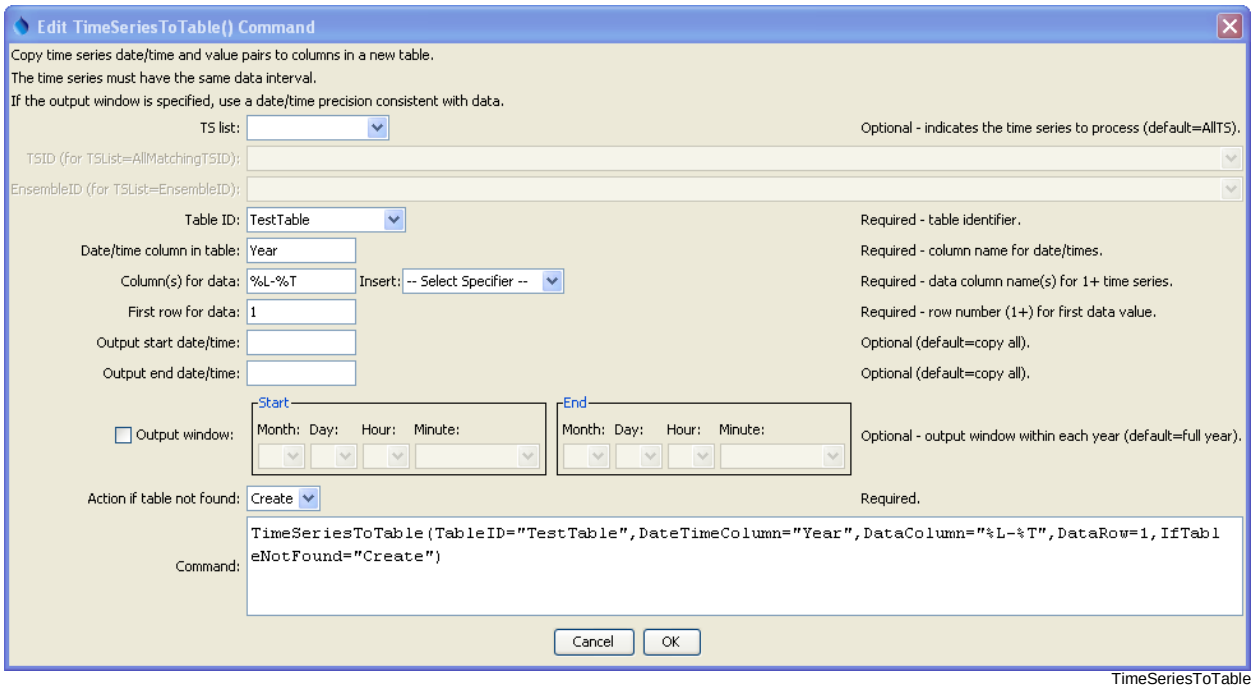
The `TimeSeriesToTable()` command copies one or more time series into a table. The time series must be regular interval (no irregular interval time series) and the intervals must match. Currently the command can only be used to create a new table but in the future the command is envisioned to write into an existing table. This command is useful when performing table analysis processing and outputting table formats (e.g., with the `WriteTableToDelimitedFile()` command).

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



TimeSeriesToTable

TimeSeriesToTable() Command Editor

The command syntax is as follows:

```
TimeSeriesToTable(Parameter=Value,…)
```

Command Parameters

Parameter	Description	Default
`TSList`	Indicates the list of time series to be processed, one of: • `AllMatchingTSID` – all time series that match the `TSID` (single TSID or TSID with wildcards) will be modified. • `AllTS` – all time series before the command.	`AllTS`

Parameter	Description	Default
	• `EnsembleID` – all time series in the ensemble will be modified. • `FirstMatchingTSID` – the first time series that matches the `TSID` (single TSID or TSID with wildcards) will be modified. • `LastMatchingTSID` – the last time series that matches the `TSID` (single TSID or TSID with wildcards) will be modified. • `SelectedTS` – the time series are those selected with the `SelectTimeSeries()` command.	
`TSID`	The time series identifier or alias for the time series to be modified, using the `*` wildcard character to match multiple time series.	Required when `TSList=*TSID`
`EnsembleID`	The ensemble to be modified, if processing an ensemble.	Required when `TSList=EnsembleID.`
`TableID`	The identifier for the table to copy data into (or the identifier for the new table to create if `IfTableNotFound=Create`).	None – must be specified.
`DateTimeColumn`	The table column name to receive date/time information.	None – must be specified.
`DataColumn`	The data column name(s) to receive time series data. This parameter may in the future allow multiple names separated by a delimiter. However, multiple names are currently supported by using time series property format specifiers, available in a list of choices. These specifiers are consistent with other commands and the legend formatter in the graphing tool.	None – must be specified.
`DataRow1`	First table row for data (1+), where the row number is data only (column names are not considered a data row).	None – must be specified.
`OutputStart`	The starting date/time for the copy.	Available period.
`OutputEnd`	The ending date/time for the copy.	Available period.
`OutputWindowStart`	The calendar date/time for the output start within each year. Specify using the format `MM`, `MM-DD`, `MM-DD hh`, or `MM-DD hh:mm`, consistent with the time series interval precision. A year of `2000` will be used internally to parse the date/time. Use this parameter to limit	Output the full year.

Parameter	Description	Default
	data processing within the year, for example to output only a single month or a season.	
`OutputWindowEnd`	Specify date/time for the output end within each year. See `OutputWindowStart` for details.	Output the full year.
`IfTableNotFound`	Indicate action if the table identifier is not matched, one of: • `Create` – create a new table • `Warn` – warn that the table was not matched	`Warn`

A sample command file is as follows (this command file is used to verify the command during testing):

```
# Test copying annual time series to a table, and also create the table
StartLog(LogFile="Results/Test_TimeSeriesToTable_Year_Create.TSTool.log")
RemoveFile(InputFile="Results/Test_TimeSeriesToTable_Year_Create_out.csv",
    IfNotFound=Ignore)
NewPatternTimeSeries(Alias="ts1",NewTSID="ts1..Flow.Year",SetStart="1960",
    SetEnd="2000",Units="ACFT",PatternValues="1,2,5,8,,20")
NewPatternTimeSeries(Alias="ts2",NewTSID="ts2..Flow.Year",SetStart="1950",
    SetEnd="2005",Units="ACFT",PatternValues="2,4,10,16,,40")
TimeSeriesToTable(TableID=TestTable,DateTimeColumn=Year,DataColumn=%L-%T,
    DataRow=1,IfTableNotFound="Create")
# Generate the results.
WriteTableToDelimitedFile(TableID="TestTable",
    OutputFile="Results\Test_TimeSeriesToTable_Year_Create_out.csv")
# Uncomment the following to recreate expected results
# WriteTableToDelimitedFile(TableID="TestTable",
#    OutputFile="ExpectedResults\Test_TimeSeriesToTable_Year_Create_out.csv")
CompareFiles(InputFile1="ExpectedResults/Test_TimeSeriesToTable_Year_Create_out.csv",
    InputFile2="Results/Test_TimeSeriesToTable_Year_Create_out.csv",IfDifferent=Warn)
```

The resulting table will be listed in the ***Tables*** area of the TSTool interface and clicking on the `TestTable` identifier will display the table similar to the following:

TSTool - Table "TestTable"

Year	ts1-Flow	ts2-Flow
1950		2.00
1951		4.00
1952		10.00
1953		16.00
1954		
1955		40.00
1956		2.00
1957		4.00
1958		10.00
1959		16.00
1960	1.00	
1961	2.00	40.00
1962	5.00	2.00
1963	8.00	4.00
1964		10.00
1965	20.00	16.00
1966	1.00	
1967	2.00	40.00
1968	5.00	2.00
1969	8.00	4.00
1970		10.00
1971	20.00	16.00

Displaying 56 rows, 3 columns. Ready

TimeSeriesToTable2