Command Reference: ReadTimeSeriesList()

Read one or more time series using location identifiers from a table

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The ReadTimeSeriesList () command reads one or more time series using location identifiers from a table, an example of which is shown below as a comma-separated value file (tables can also be read from Excel, delimited file, datastore, or other source):

```
# Example list file. Comments start with the # character.
# Column headings can be specified in the first non-comment row using quotes.
"Structure ID", "Structure Name"
500501, Ditch 501
500502, Ditch 502
# Invalid ID (see IfNotFound parameter)
509999, Ditch 9999
```

The command typically is used when reading time series from a single source and can streamline processing in the following situations:

- A list of identifiers may have been generated from a database query
- A list of identifiers may have been extracted from a model data set

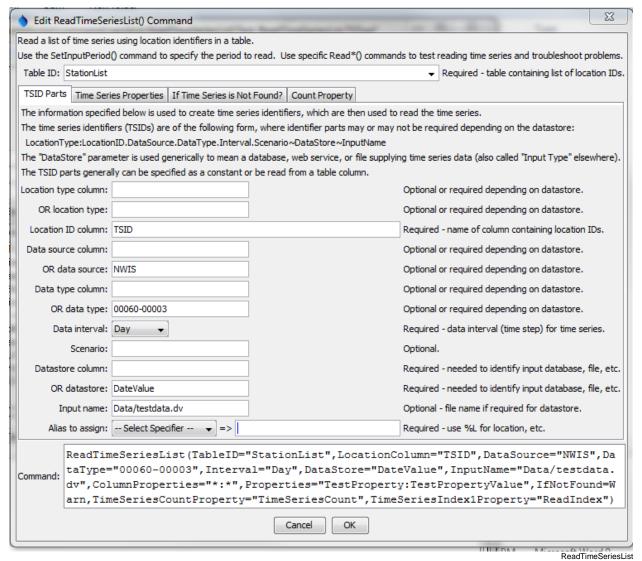
TSTool uses the location identifiers in the table with the command parameters and internally creates a list of time series identifiers. The time series are of the standard form (information in brackets is optional for basic use):

```
[LocationType:]Location.DataSource.DataType.Interval[.Scenario]~DataStore[~InputName]
```

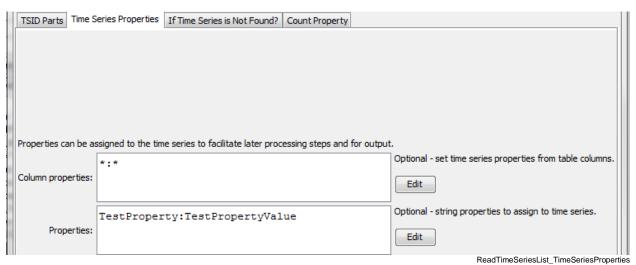
TSTool then queries each time series using the time series identifier. See also the ReadTimeSeries () command, which performs essentially the same functionality but only reads one time series. Refer to the appendices for each datastore and file input type to understand specific time series identifier conventions.

Although it is possible to specify a datastore or input type that reads from files by also using the InputName, this may not be appropriate because the ReadTimeSeriesList() command can only specify one input file name and the file will be reopened for each time series read. Instead, read commands for specific file formats should be used because these commands typically are optimized to read multiple time series from the files. Use the SetInputPeriod() command to set the period to read.

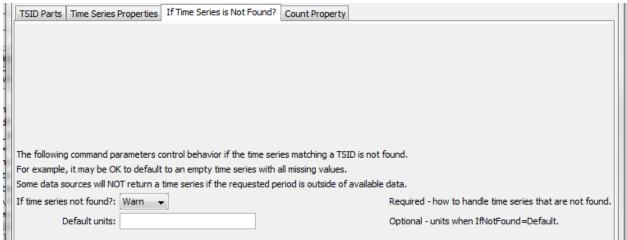
The following dialog is used to edit the command and illustrates the syntax of the command.



ReadTimeSeriesList() Command Editor for Main TSID Parameters

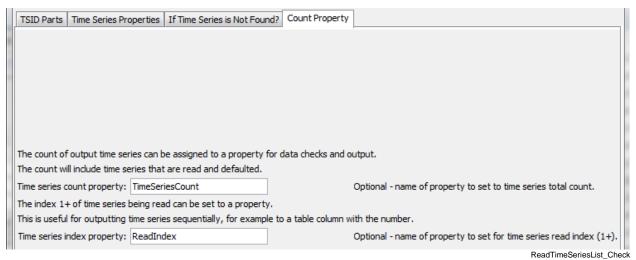


ReadTimeSeriesList() Command Editor Time Series Properties Parameters



ReadTimeSeriesList_IfNotFound

ReadTimeSeriesList() Command Editor for Parameters if Time Series is not Found



ReadTimeSeriesList() Command Editor for Parameters Used in Checks

The command syntax is as follows:

ReadTimeSeriesList(Parameter=Value, ...)

Command Parameters

Parameter	Description	Default
TableID	The identifier for the table that provides the list of	None – must be
	location identifiers.	specified.
LocationType	The column in the table containing the location type	May or may not be
Column	to use in time series identifiers. Specify	required, depending on
	LocationTypeColumn or LocationType.	the datastore or input
		type.
LocationType	The location type in the time series identifier.	May or may not be
	Specify LocationTypeColumn or	required, depending on
	LocationType.	the datastore or input
		type.
LocationColumn	The column in the table containing the location	None – must be
	identifiers to use in time series identifiers.	specified.
DataSource	The column in the table containing the data source	May or may not be
Column	to use in time series identifiers. Specify	required, depending on
	DataSourceColumn or DataSource.	the datastore or input
		type.
DataSource	The data source(s) in the time series identifier,	May or may not be
	separated by commas. For example, if using the	required, depending on
	State of Colorado's HydroBase, USGS indicates that	the datastore or input
	data are from the United States Geological Survey	type
	and DWR are from the Division of Water Resources.	
	If multiple data sources are specified, each will be	
	tried until a time series is found. This is enabled	
	because sometimes gages change ownership.	
D - E	Specify DataSourceColumn or DataSource.	B
DataType	The column in the table containing the data type to	Data type is often
Column	use in time series identifiers. Specify	required
D - E	DataTypeColumn or DataType.	D : : :
DataType	The data type in the time series identifier. For	Data type is often
	example, if using the State of Colorado's	required
	HydroBase, DivTotal is used for diversion totals.	
- ·	Specify DataTypeColumn or DataType.	NY
Interval	Data interval in the time series identifier, using	None – must be
	standard values such as 15Minute, 6Hour, Day,	specified.
	Month, Year.	
Scenario	Scenario in the time series identifier.	Usually not required.
DataStore	The data store (or input type) in the time series	None – must be
	identifier. Refer to the datastore and input type	specified.
T N	appendices or the TSTool main GUI for options.	0 11 1 1
InputName	The input name in the time series identifier, when a	Generally only required
7.1.	file name is required.	when reading from a file.
Alias	Time series alias to assign, using a combination of	No alias is assigned.
	% specifiers and literal strings.	

Parameter	Description	Default
Column	Column names and matching time series property	No time series properties
Properties	name to set, using syntax:	will be set from the
	Column1:Property1,Column2:Property2	table.
	Specify * for the column name to set all column	
	values as properties. Specify * for the property	
	value to use the column name for the time series	
	property.	
Properties	String properties to be assigned to the time series	
	using syntax	
	Property1:Value1, Property2:Value2	
IfNotFound	Indicates how to handle missing time series, one of:	Warn
	Warn – generate fatal warnings and do not	
	include in output.	
	• Ignore – generate non-fatal warnings and do	
	not include in output.	
	Default – generate non-fatal warnings and	
	create empty time series for those that could not	
	be found. This requires that a	
	SetOutputPeriod() command be used	
	before the command to define the period for	
	default time series.	
DefaultUnits	Default units when IfNotFound=Default.	Blank – no units.
TimeSeries	The name of the processor property to set with the	
CountProperty	count of time series processed, including read and	
	defaulted time series.	
TimeSeries	The name of the time series property to set with the	
Index1Property	index position (1+) for the time series read from the	
	list, essentially a running count of read time series.	

A sample command file to process monthly diversion data from the State of Colorado's HydroBase database is as follows:

- # Read monthly diversion total from HydroBase for the structures in the list
- # file. The data source is set to DWR because data source is saved in
- # HydroBase.

ReadTimeSeriesList(TableID="Diversions.csv", LocationColumn="WDID",
 DataSource=DWR, DataType=DivTotal, Interval=Month, InputType=HydroBase,
 IfNotFound=Default)

ReadTimeSeriesList()	Command
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TSTool Documentation

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