

# Command Reference: WriteTimeSeriesToDataStore()

## Write time series to a database datastore

Version 11.08.00, 2016-02-03

The `WriteTimeSeriesToDataStore()` command writes time series to the specified database datastore. This command can only write to databases that have a supported design structure. Currently this command is only available for generic datastores (see the **Generic Database Datastore** appendix for information about supported database designs and datastore configuration properties). This command cannot be used with web service datastores and use with Excel datastores has not been tested. This command is useful in particular for bulk data loading such as for database initialization and when tight integration with TSTool is not required or has not been implemented.

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

**Edit WriteTimeSeriesToDataStore() Command**

Write time series to a database datastore, where time series to database table mapping is defined in the datastore configuration. Currently the choices do not cascade. In the future, cascading set of choices may be implemented to help with writing single time series. Enter date/times to a precision appropriate for output time series.

**Specify time series information**

TS list:  Optional - indicates the time series to process (default=AllTS).

TSID (for TSList=AllMatchingTSID):

EnsembleID (for TSList=EnsembleID):

Output start:  Optional - override the global output start (default=write all data).

Output end:  Optional - override the global output end (default=write all data).

**Specify datastore information**

Datastore:  Required - database datastore to receive data.

Datastore location type:  Optional - specify location type to use in datastore (default=time series location type).

Datastore location ID:  Optional - specify location identifier to use in datastore (default=time series location ID).

Datastore data source:  Optional - specify data source to use in datastore (default=time series data source).

Datastore data type:  Optional - specify data type to use in datastore (default=time series data type).

Datastore interval:  Optional - specify data interval to use in datastore (default=time series data interval).

Datastore scenario:  Optional - specify scenario to use in datastore (default=time series scenario).

Datastore missing value:  Optional - value to write for missing data (default=time series missing value).

Datastore units:  Optional - specify units to use in datastore (default=time series units).

Write mode:  Optional - how to write data records (default=InsertUpdate).

Command:

WriteTimeSeriesToDataStore

**WriteTimeSeriesToDataStore() Command Editor**

The command syntax is as follows:

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

### Command Parameters

Parameter	Description	Default
TSList	Indicates the list of time series to be processed, one of: <ul style="list-style-type: none"> <li>AllMatchingTSID – all time series that match the TSID (single TSID or TSID with wildcards) will be processed.</li> <li>AllTS – all time series before the command.</li> <li>EnsembleID – all time series in the ensemble will be processed.</li> <li>FirstMatchingTSID – the first time series that matches the TSID (single TSID or TSID with wildcards) will be processed.</li> <li>LastMatchingTSID – the last time series that matches the TSID (single TSID or TSID with wildcards) will be processed.</li> <li>SelectedTS – the time series are those selected with the SelectTimeSeries() command.</li> </ul>	AllTS
TSID	The time series identifier or alias for the time series to be processed, using the * wildcard character to match multiple time series. Can be specified using \${Property} notation.	Required if TSList=*TSID.
EnsembleID	The ensemble to be processed, if processing an ensemble. Can be specified using \${Property} notation.	Required if TSList=EnsembleID.
OutputStart	The date/time for the start of the output. Can be specified using \${Property} notation.	Use the global output period.
OutputEnd	The date/time for the end of the output. Can be specified using \${Property} notation.	Use the global output period.
DataStore	The name of a database datastore to receive data.	None – must be specified.
DataStore LocationType	The location type to match in the datastore. Can be specified using \${Property} notation.	Location type from time series is used.
DataStore LocationID	The location identifier to match in the datastore. Can be specified using \${Property} notation.	Location identifier from time series is used.
DataStore DataSource	The data source (provider) to match in the datastore. Can be specified using \${Property} notation.	Data source from time series is used.
DataStore DataType	The data type to match in the datastore. Can be specified using \${Property} notation.	Data type from time series is used.
DataStore Interval	The data interval to match in the datastore. Can be specified using \${Property} notation.	Data interval from time series is used.

Parameter	Description	Default
DataStore Scenario	The scenario to match in the datastore. Can be specified using <code>\${Property}</code> notation.	Scenario from time series is used.
DataStore MissingValue	The value to write to the datastore to indicate a missing value in the time series. Specify <code>null</code> to write null to the database.	Missing value used for the time series will be used (e.g., NaN, -999).
DataStoreUnits	Units to use for time series in the database, currently not used. Time series data must match the time series as defined in the database. Can be specified using <code>\${Property}</code> notation.	
WriteMode	<p>The method used to write time series data records, recognizing the databases use insert and update SQL statements. Note that any insert/update actions only occur on exact matches of date/time, not on a period. For example, <code>DeleteInsert</code> only deletes records that match the specific date/time of a value in the time series. Specify <code>WriteMode</code> as:</p> <ul style="list-style-type: none"> <li>• <code>DeleteAllThenInsert</code> – delete all the data records for the time series and then insert the time series data records, useful for bulk loading</li> <li>• <code>DeletePeriodThenInsert</code> – delete the data records in the specified output period and then insert the time series data records, useful for bulk loading</li> <li>• <code>DeleteInsert</code> – delete the data first and then insert (all values will need to be matched to delete)</li> <li>• <code>Insert</code> – insert the data with no attempt to update if the insert fails</li> <li>• <code>InsertUpdate</code> – try inserting the data first and if that fails try to update</li> <li>• <code>Update</code> – update the data with no attempt to insert if the update fails</li> <li>• <code>UpdateInsert</code> – try updating the data first and if that fails try to insert</li> </ul>	InsertUpdate

This page is intentionally blank.