

Command Reference: SetDiversionMultiStructFromList()

Set diversion MultiStruct parts from data in a list file

StateCU and StateMod Command

Version 3.09.01, 2010-02-01

The `SetDiversionMultiStructFromList()` command reads diversion MultiStruct part identifier data from a list file and saves the information for the diversion (a CU Location or StateMod diversion station). A diversion MultiStruct indicates that multiple diversion stations take water from more than one tributary but irrigate the same lands. Each diversion station is included in the model network and retains its normal capacity and historical diversions; however, average efficiencies are calculated using the combined demand and historical diversion time series. The demands for the primary structure (the first listed) are set to the total demands, with demands for secondary stations being set to zero. Diversion MultiStruct definition commands are required only when processing the demand time series. The following dialog is used to edit the command and illustrates the syntax of the command.

Edit SetDiversionMultiStructFromList() Command

This command sets a Diversion MultiStruct location's information from a list file.
A "MultiStruct" is used when demands are met using water from different tributaries.
Each diversion station is represented in the model network
and the historical water rights and diversion time series are distinct for each diversion station.
However, the efficiencies are estimated using combined demand and historical diversion time series,
and total demands are used for the primary structure, with zero demands on the other structure(s).
Operating rules are used to handle sharing diversion water.
The primary ID will receive all demands.
Columns should be delimited by commas.
It is recommended that the location of the file be specified using a path relative to the working directory.
The working directory is: C:\Develop\StateDMI_SourceBuild\StateDMI\test\regression\UserManualRef\WriteDiversionDemandTSMonthlyToStateMod

List file:	<input type="text" value="rgTW_multistruct.csv"/>	<input type="button" value="Browse"/>
ID column:	<input type="text" value="1"/>	Required - column for the Diversion MultiStruct IDs.
Name column:	<input type="text"/>	Optional - column for the Diversion MultiStruct name.
Part IDs column:	<input type="text" value="2"/>	Required - first/only column for the part IDs.
Parts listed how:	<input type="text" value="InRow"/>	Required - are part IDs listed in row or column?
Part IDs column (max):	<input type="text"/>	Optional - maximum column for part IDs if in row (default is use all).
If not found:	<input type="text"/>	Optional - indicate action if no ID match is found (default=Warn).
Command:	<pre>SetDiversionMultiStructFromList (ListFile="rgTW_multistruct.csv", IDCol=1, PartIDsCol=2, PartsListedHow=InRow)</pre>	

SetDiversionMultiStructFromList

SetDiversionMultiStructFromList() Command Editor

The command syntax is as follows:

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

Command Parameters

Parameter	Description	Default
ListFile	The name of the input file to read, surrounded by double quotes.	None – must be specified.
IDCol	The column number (1+) containing the diversion MultiStruct primary station identifiers.	None – must be specified.
NameCol	The column number (1+) containing the diversion MultiStruct name.	None – optional (if not specified the name will not be changed).
PartIDsCol	The column number (1+) for the first column having part identifiers.	None – must be specified.
PartIDsColMax	The column number (1+) for the last column having part identifiers.	Use all available columns.
PartsListedHow	If InRow, it is expected that all parts defining a system are listed in the same row. If InColumn, it is expected that the parts defining a system are listed one per row, with multiple rows defining the full system (PartIDsColMax is ignored in this case).	None – must be specified.
IfNotFound	Used for error handling, one of the following: <ul style="list-style-type: none"> Fail – generate a failure message if the MultiStruct identifier is not matched Ignore – ignore (don't add and don't generate a message) if the aggregate identifier is not matched Warn – generate a warning message if the aggregate identifier is not matched 	Warn

An example list file is shown below:

```
#AggID,Ditch,Ditch,Ditch,Ditch,Ditch,Ditch,Ditch,Ditch,Ditch,Ditch,Ditch,
20MS01,200516,200613,201004
20MS02,200623,201060,210521,210522
20MS03,200706,200784
20MS04,200814,200815
20MS05,200683,200775
...
```