

# MiscMergeDriver

**Inherits From:** Object  
**Declared In:** misckit/MiscMergeDriver.h

## Class Description

A MiscMergeDriver is used to merge an ASCII template with several dictionaries filled with key/value pairs. Each dictionary will be used in turn to generate a new output `^document^`.

If you only need to generate a single merge, you may wish to simply use a MiscMergeEngine object. If you have several merges to perform, then a MiscMergeDriver implements the required loop to generate the required merges, as well as supporting a protocol that allows the merge engine some control over the loop. If you create your own loop, instead of using a MiscMergeDriver instance, some of the merge commands such as `^next^` will be ignored rather than performing the desired function.

To use a MiscMergeDriver you must provide it with a template, dictionaries to merge into the template, and, optionally, a MiscMergeEngine instance. If a MiscMergeEngine is not provided, one will be created to perform the merge. To set up a merge template, use the **-setTemplate:** method. It expects an instance of the MiscMergeTemplate class, which comes from an ASCII file or from a MiscString object.

The data to be merged into the template is set up using the **-setMergeData:** method. The data should be

stored as key/value pairs in a MiscDictionary object for each merge to be performed. Place all the dictionaries into a List object and use the List object as the argument to **-setMergeData:**.

Finally, use the **-doMerge:** method to perform the desired merge operation. The results will be returned as a List object with a MiscString corresponding to each MiscDictionary in the List provided to the MiscMergeDriver by the most recent **-setData:** message. For example, the third MiscString will contain the results from the merge with the third MiscDictionary. If the Merge returned no result (due to an error or an `^omit` command, for example) then the MiscString will be empty.

If you wish to use a specific subclass of MiscMergeEngine to perform the merge, then use the **-setEngine:** method to set up the engine before calling **-doMerge:**. This engine will be used for all subsequent merges unless **-setEngine:** is sent again.

For more information, please see the IntroMiscMerge.rtf document. It describes the syntax of the merge language and built-in commands available. The MiscMergeArchitecture.rtf document describes the architecture of the various classes used to perform merging operations and how to add custom commands to the framework.

## Instance Variables

```
MiscMergeTemplate *template;  
List *dictionaries;  
List *output;  
MiscMergeEngine *engine;  
BOOL merging;  
int _mergeLoopIndex;
```

template

MiscMergeTemplate for merging

dictionaries	List of MiscDictionaries used for merges
output	The output list that will be returned by <b>-doMerge:</b>
engine	The merge engine to be used for merges
merging	YES if merging, NO if not
_mergeLoopIndex	Index to <b>dictionaries</b> when merge is in progress

## Method Types

Accessing the template	- template - setTemplate:
Accessing the data	- mergeData - setMergeData:
Performing a merge	- doMerge:
Accessing the engine	- engine - setEngine:

## Instance Methods

**doMerge:**  
- (List \*)**doMerge:sender**

Sets up a merge engine, if necessary, and performs a merge of the template with the MiscDictionaries in the data List. Any engines created will be destroyed after the merge; engines set using **-setEngine** will persist, however.

A List object populated with MiscStrings will be returned. There is a one-to-one correspondence between the index of the return MiscStrings in the List and the MiscDictionaries' indices in the List that was provided via the most recent **-setMergeData**. Thus, if there were six dictionaries used for merging, six MiscStrings will be returned, as the result of six merges. Note that the `^next` command will cause a MiscMergeEngine to attempt to skip forward to the next MiscDictionary, while still performing a single merge. In this case, an empty MiscString will be inserted in the output List as a placeholder and the final merge result will be put in the slot corresponding to the last dictionary used. Merges that fail or are halted due to an `^omit` command will also be represented by an empty MiscString in the output.

### **engine**

- (MiscMergeEngine \*)**engine**

Returns the merge engine, an instance of MiscMergeEngine, that will be used to perform a merge. If no engine has been set up, then **nil** is returned.

### **mergeData**

- (List \*)**mergeData**

Returns the List of MiscDictionaries that will be used for the next merge.

### **setEngine:**

- **setEngine:**(MiscMergeEngine \*)*anEngine*

Sets up an engine to be used for merging. If no engine is set, a temporary engine will be created before and used during a merge. It will be destroyed after it is used. Engines set using **-setEngine:** will not be destroyed at the end of a merge and will be used for subsequent merges as well. Setting a new engine will not free the old engine; the MiscMergeDriver does not `^own` the engine; it only makes use of it. This way, the same engine

could be used by several MiscMergeDriver instances. Setting the engine to **nil** will revert to the default create/use/destroy pattern. The engine cannot be changed while a merge loop is in progress. Returns **self** if successful or **nil** if failure occurs.

**setMergeData:**

- **setMergeData:**(List \*)*aList*

Sets the List of MiscDictionaries that will be used for the next merge. Returns **self** upon success and **nil** upon failure. This method fails if a merge is in progress.

**setTemplate:**

- **setTemplate:**(MiscMergeTemplate \*)*aTemplate*

Sets the MiscMergeTemplate that will be used for the next merge. Returns **self** upon success and **nil** upon failure. This method fails if a merge is in progress.

**template**

- (MiscMergeTemplate \*)**template**

Returns the MiscMergeTemplate that will be used for the next merge.