

# MiscTableScroll

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## Overview

This is the source code for the MiscTableScroll framework and palette for OPENSTEP and Rhapsody. MiscTableScroll is similar to Apple's NSTableView class. This version of MiscTableScroll is compatible with Rhapsody Developer Release for Mach and Windows NT, OPENSTEP 4.2 for Mach and Windows NT, as well as OPENSTEP 4.1 for Mach.

## User Interface Features

- Column and row titles.
- Resizing of columns and rows.
- Dragging rows and columns to rearrange them.
- Automatic sorting of rows as columns are rearranged.

- A button in column titles to toggle between ascending and descending sort direction.
- Incremental search.
- In-cell text editing.
- Exporting contents as ASCII, ASCII-delimited or dBASE through the Save Panel.
- Full keyboard and mouse control.
- Interacts with the Pasteboard, Font Panel, and Services.

## **Programmer Interface Features**

- Each column and row can have its own size.
- Each cell can have its own color and font or inherit them from the MiscTableScroll.
- Each column can have its own cell type.
- Lazy mode for large or expensive-to-generate data sets.
- Full control over selection.
- Smart memory management ± you don't pay for features you don't use.
- Simple indexed access to rows and columns regardless of visual order.
- Uniform treatment of rows and columns ± referred to generically as *s/ots*.
- Support for dragging images directly out of cells.
- Extensive delegate hooks.

## Installation

MiscTableScroll is normally distributed with the MiscKit for Rhapsody and OPENSTEP. However, since it does not use nor rely on any other part of the MiscKit, it can be used as a stand-alone framework and palette. Use this package to create a stand-alone framework and palette or to replace an out-of-date copy of MiscTableScroll.

Follow these steps to install the MiscTableScroll package:

- Check version numbers
- Remove previous version
- Unpack
- Compile and install framework and palette
- Compile the example programs (*optional*)
- Clean up

All of the instructions below assume that the environment variable `$(NEXT_ROOT)` is defined. This variable is defined by default under Windows NT. However under Mach it is *not* defined so you should define it yourself before issuing the commands in the following sections.

Under Mach, the typical value of `${NEXT_ROOT}` is the empty string. If you are using the C-shell then define it by typing:

```
% setenv NEXT_ROOT ""
```

If you are using the Bourne shell then type:

```
$ NEXT_ROOT=""  
$ export NEXT_ROOT
```

## Check Version Numbers

If you have a previous version of MiscTableScroll for Rhapsody or OPENSTEP, check the version number of the package which you already have by looking in the `PACKAGE_NUMBER` file in the source code directory or inside either the installed framework or palette. Compare that number with the version number encoded in the name of the file `MiscTableScroll.????.?.gnutar.gz`. This way you can tell which version is newer or older, and decide whether to proceed.

## Remove Previous Version

If you have a previous version of the MiscTableScroll that you want to replace with this package, then you need to remove the old version before unpacking the new version.

If you used the standard MiscKit directory structure then these commands will remove the previous version. If you used a different directory structure, then you will need to adjust the commands as necessary to match your installation.

```
# Remove source
% rm -rf ${NEXT_ROOT}/LocalDeveloper/Source/MiscKit2/Palettes/MiscTableScroll \
    ${NEXT_ROOT}/LocalDeveloper/Source/MiscKit2/Examples/LazyScrollDir \
    ${NEXT_ROOT}/LocalDeveloper/Source/MiscKit2/Examples/ScrollDir

# Remove targets
% rm -rf ${NEXT_ROOT}/LocalLibrary/Frameworks/MiscTableScroll.framework \
    ${NEXT_ROOT}/LocalDeveloper/Palettes/MiscTableScroll.palette \
    ${NEXT_ROOT}/LocalDeveloper/Examples/MiscKit2/LazyScrollDir \
    ${NEXT_ROOT}/LocalDeveloper/Examples/MiscKit2/ScrollDir
```

## Unpack

Unpack the MiscTableScroll package by choosing a convenient directory, such as `${NEXT_ROOT}/LocalDeveloper/Source`, and performing the following commands:

```
% mkdirs ${NEXT_ROOT}/LocalDeveloper/Source
% cd ${NEXT_ROOT}/LocalDeveloper/Source
```

```
% gunzip -v MiscTableScroll*gnutar.gz
% gnutar xvf MiscTableScroll*gnutar
```

Unpacking the MiscTableScroll package creates the following directory structure:

```
MiscKit2
  Examples
    LazyScrollDir
    ScrollDir
  Palettes
    MiscTableScroll
      Framework
      Documentation
      Notes
      Palette
```

## Compile and Install Framework and Palette

By default, MiscTableScroll is configured to install its components in the following locations:

<code>\${NEXT_ROOT}/LocalDeveloper/Palettes</code>	<code>MiscTableScroll.palette</code>
<code>\${NEXT_ROOT}/LocalLibrary/Frameworks</code>	<code>MiscTableScroll.framework</code>
<code>\${NEXT_ROOT}/LocalLibrary/Executables</code>	<code>MiscTableScroll.dll</code> ( <i>Windows 95 &amp; NT only</i> )

If these locations are inappropriate for your site, you can adjust them using Project Builder's *Inspector* panel. The installation directory can be configured individually for the framework and the palette.

To build and install the MiscTableScroll framework and palette using Project Builder, follow these steps:

- Open the project file contained within the top-level MiscTableScroll source directory: `${NEXT_ROOT}/LocalDeveloper/Source/MiscKit2/Palettes/MiscTableScroll/PB.project`
- Choose the appropriate architectures from the *Build Options* panel.
- Select the install target from the *Build Options* panel.
- Press the *Build* button.

If you are using Windows 95 or NT then you need to add the framework's executable path to your system PATH variable. For instance, if `${NEXT_ROOT}` at your site is defined as `C:\NeXT`, then you should add `C:\NeXT\LocalLibrary\Executables` to your PATH. Consult the Windows documentation if you need help setting the PATH variable.

### **Compile Example Programs** (*optional*)

You can build the example programs LazyScrollDir and ScrollDir using Project Builder, as follows:

- Open the project file contained within the source directory.
- Choose the appropriate architectures from the *Build Options* panel.
- Press the *Build* button.

The project files for the example programs are located in:

```

${NEXT_ROOT}/LocalDeveloper/Source/MiscKit2/Examples/LazyScrollDir/PB.project
${NEXT_ROOT}/LocalDeveloper/Source/MiscKit2/Examples/ScrollDir/PB.project

```

Finally, if you would like to have the source code for the example programs installed in `${NEXT_ROOT}/LocalDeveloper/Examples/MiscKit2`, either copy the directories there using NeXT's Workspace or execute the following commands:

```

% cd ${NEXT_ROOT}/LocalDeveloper
% rm -rf Examples/MiscKit2/LazyScrollDir Examples/MiscKit2/ScrollDir
% mkdirs Examples/MiscKit2
% cp -r Source/MiscKit2/Examples/LazyScrollDir Source/MiscKit2/Examples/ScrollDir Examples/MiscKit2

```

**Clean Up**

At this point the installation is complete. To reclaim disk space, remove the temporary files which



were created during the build process by pressing the *Clean* button on Project Builder's *Build* panel. Or, if you do not plan to refer back to the source code, then you can delete that directory entirely:

```
% rm -rf ${NEXT_ROOT}/LocalDeveloper/Source/MiscKit2
```

## Conversion

This package comes with a **tops** script to aid porting of NEXTSTEP 3.x programs which use MiscTableScroll to OPENSTEP 4.x and Rhapsody. The script should be run after running the standard NeXT-supplied conversion scripts. It is located within the MiscTableScroll framework:

```
MiscTableScroll.framework/Resources/MiscTableScroll-3.3-4.x.tops
```

## Documentation

Documentation for the public classes is located within the framework and can be found in the files:

- MiscTableScroll.rtf
- MiscTableCell.rtf
- MiscExporter.rtf

The example programs demonstrate how to use the most important features of MiscTableScroll:

- LazyScrollDir
- ScrollDir

The following files also provide valuable information. Except for PACKAGE\_NUMBER which is located in the top-level source directory, all of the remaining files reside in the Notes subdirectory.

PACKAGE_NUMBER	MiscTableScroll version.
HISTORY.txt	Description of changes between versions.
OPENSTEP-HISTORY.txt	Description of OPENSTEP & Rhapsody changes between versions.
TODO.txt	A list of future enhancements.
OPENSTEP-TODO.txt	A list of OPENSTEP & Rhapsody related future enhancements.
BUGS.txt	A list of known bugs.
OPENSTEP-BUGS.txt	A list of OPENSTEP & Rhapsody related bugs.
MACH-NT-4.2.txt	Description of issues which arose when porting MiscTableScroll from OPENSTEP 4.1 for Mach to OPENSTEP 4.2 for both Mach and Windows NT.

Finally, the source code itself is commented and may be consulted as needed. It has been formatted with tab-stops of 8 characters and indentation of 4 spaces.

## Conclusion

MiscTableScroll was written by Paul S. McCarthy and Eric Sunshine and is copyright ©1995, 1996, 1997, 1998 by Paul S. McCarthy and Eric Sunshine. It is included in the MiscKit by permission from the authors and is governed by the MiscKit license found in the file `License.rtf` in the MiscKit distribution.

Please direct comments, questions, and complaints to:

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NeXT, MIME, and ASCII mail accepted.