

## NAME

AutoSplit - split a package for autoloading

## SYNOPSIS

```
autosplit($file, $dir, $keep, $check, $modtime);
```

```
autosplit_lib_modules(@modules);
```

## DESCRIPTION

This function will split up your program into files that the AutoLoader module can handle. It is used by both the standard perl libraries and by the MakeMaker utility, to automatically configure libraries for autoloading.

The `autosplit` interface splits the specified file into a hierarchy rooted at the directory `$dir`. It creates directories as needed to reflect class hierarchy, and creates the file `autosplit.ix`. This file acts as both forward declaration of all package routines, and as timestamp for the last update of the hierarchy.

The remaining three arguments to `autosplit` govern other options to the autosplitter.

### `$keep`

If the third argument, `$keep`, is false, then any pre-existing `*.al` files in the autoloading directory are removed if they are no longer part of the module (obsoleted functions). `$keep` defaults to 0.

### `$check`

The fourth argument, `$check`, instructs `autosplit` to check the module currently being split to ensure that it includes a `use` specification for the AutoLoader module, and skips the module if AutoLoader is not detected. `$check` defaults to 1.

### `$modtime`

Lastly, the `$modtime` argument specifies that `autosplit` is to check the modification time of the module against that of the `autosplit.ix` file, and only split the module if it is newer. `$modtime` defaults to 1.

Typical use of AutoSplit in the perl MakeMaker utility is via the command-line with:

```
perl -e 'use AutoSplit; autosplit($ARGV[0], $ARGV[1], 0, 1, 1)'
```

Defined as a Make macro, it is invoked with file and directory arguments; `autosplit` will split the specified file into the specified directory and delete obsolete `.al` files, after checking first that the module does use the AutoLoader, and ensuring that the module is not already currently split in its current form (the modtime test).

The `autosplit_lib_modules` form is used in the building of perl. It takes as input a list of files (modules) that are assumed to reside in a directory `lib` relative to the current directory. Each file is sent to the autosplitter one at a time, to be split into the directory `lib/auto`.

In both usages of the autosplitter, only subroutines defined following the perl `__END__` token are split out into separate files. Some routines may be placed prior to this marker to force their immediate loading and parsing.

## Multiple packages

As of version 1.01 of the AutoSplit module it is possible to have multiple packages within a single file. Both of the following cases are supported:

```
package NAME;
```

```
__END__
sub AAA { ... }
package NAME::option1;
sub BBB { ... }
package NAME::option2;
sub BBB { ... }

package NAME;
__END__
sub AAA { ... }
sub NAME::option1::BBB { ... }
sub NAME::option2::BBB { ... }
```

## DIAGNOSTICS

`AutoSplit` will inform the user if it is necessary to create the top-level directory specified in the invocation. It is preferred that the script or installation process that invokes `AutoSplit` have created the full directory path ahead of time. This warning may indicate that the module is being split into an incorrect path.

`AutoSplit` will warn the user of all subroutines whose name causes potential file naming conflicts on machines with drastically limited (8 characters or less) file name length. Since the subroutine name is used as the file name, these warnings can aid in portability to such systems.

Warnings are issued and the file skipped if `AutoSplit` cannot locate either the `__END__` marker or a "package Name;"-style specification.

`AutoSplit` will also emit general diagnostics for inability to create directories or files.