

**NAME**

File::stat - by-name interface to Perl's built-in stat() functions

**SYNOPSIS**

```
use File::stat;
$st = stat($file) or die "No $file: $!";
if ( ($st->mode & 0111) && $st->nlink > 1 ) {
    print "$file is executable with lotsa links\n";
}

if ( -x $st ) {
    print "$file is executable\n";
}

use Fcntl "S_IRUSR";
if ( $st->cando(S_IRUSR, 1) ) {
    print "My effective uid can read $file\n";
}

use File::stat qw(:FIELDS);
stat($file) or die "No $file: $!";
if ( ($st_mode & 0111) && ($st_nlink > 1) ) {
    print "$file is executable with lotsa links\n";
}
```

**DESCRIPTION**

This module's default exports override the core stat() and lstat() functions, replacing them with versions that return "File::stat" objects. This object has methods that return the similarly named structure field name from the stat(2) function; namely, dev, ino, mode, nlink, uid, gid, rdev, size, atime, mtime, ctime, blksize, and blocks.

As of version 1.02 (provided with perl 5.12) the object provides "-X" overloading, so you can call filetest operators (-f, -x, and so on) on it. It also provides a ->cando method, called like

```
$st->cando( ACCESS, EFFECTIVE )
```

where *ACCESS* is one of S\_IRUSR, S\_IWUSR or S\_IXUSR from the *Fcntl* module, and *EFFECTIVE* indicates whether to use effective (true) or real (false) ids. The method interprets the mode, uid and gid fields, and returns whether or not the current process would be allowed the specified access.

If you don't want to use the objects, you may import the ->cando method into your namespace as a regular function called stat\_cando. This takes an arrayref containing the return values of stat or lstat as its first argument, and interprets it for you.

You may also import all the structure fields directly into your namespace as regular variables using the :FIELDS import tag. (Note that this still overrides your stat() and lstat() functions.) Access these fields as variables named with a preceding st\_ in front their method names. Thus, \$stat\_obj->dev() corresponds to \$st\_dev if you import the fields.

To access this functionality without the core overrides, pass the use an empty import list, and then access function functions with their full qualified names. On the other hand, the built-ins are still available via the CORE:: pseudo-package.

## BUGS

As of Perl 5.8.0 after using this module you cannot use the implicit `$_` or the special filehandle `_` with `stat()` or `lstat()`, trying to do so leads into strange errors. The workaround is for `$_` to be explicit

```
my $stat_obj = stat $_;
```

and for `_` to explicitly populate the object using the unexported and undocumented `populate()` function with `CORE::stat()`:

```
my $stat_obj = File::stat::populate(CORE::stat(_));
```

## ERRORS

`-%s` is not implemented on a `File::stat` object

The filetest operators `-t`, `-T` and `-B` are not implemented, as they require more information than just a `stat` buffer.

## WARNINGS

These can all be disabled with

```
no warnings "File::stat";
```

`File::stat` ignores use filetest 'access'

You have tried to use one of the `-rwxRwx` filetests with `use filetest 'access'` in effect. `File::stat` will ignore the pragma, and just use the information in the `mode` member as usual.

`File::stat` ignores VMS ACLs

VMS systems have a permissions structure that cannot be completely represented in a `stat` buffer, and unlike on other systems the builtin filetest operators respect this. The `File::stat` overloads, however, do not, since the information required is not available.

## NOTE

While this class is currently implemented using the `Class::Struct` module to build a struct-like class, you shouldn't rely upon this.

## AUTHOR

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