

**NAME**

"IO::Async::File" – watch a file for changes

**SYNOPSIS**

```
use IO::Async::File;

use IO::Async::Loop;
my $loop = IO::Async::Loop->new;

my $file = IO::Async::File->new(
    filename => "config.ini",
    on_mtime_changed => sub {
        my ( $self ) = @_;
        print STDERR "Config file has changed\n";
        reload_config( $self->handle );
    }
);

$loop->add( $file );

$loop->run;
```

**DESCRIPTION**

This subclass of IO::Async::Notifier watches an open filehandle or named filesystem entity for changes in its `stat()` fields. It invokes various events when the values of these fields change. It is most often used to watch a file for size changes; for this task see also IO::Async::FileStream.

While called “File”, it is not required that the watched filehandle be a regular file. It is possible to watch anything that `stat(2)` may be called on, such as directories or other filesystem entities.

**EVENTS**

The following events are invoked, either using subclass methods or CODE references in parameters.

**on\_dev\_changed** \$new\_dev, \$old\_dev

**on\_ino\_changed** \$new\_ino, \$old\_ino

...

**on\_ctime\_changed** \$new\_ctime, \$old\_ctime

Invoked when each of the individual `stat()` fields have changed. All the `stat()` fields are supported apart from `blocks` and `blksize`. Each is passed the new and old values of the field.

**on\_devino\_changed** \$new\_stat, \$old\_stat

Invoked when either of the `dev` or `ino` fields have changed. It is passed two File::stat instances containing the complete old and new `stat()` fields. This can be used to observe when a named file is renamed; it will not be observed to happen on opened filehandles.

**on\_stat\_changed** \$new\_stat, \$old\_stat

Invoked when any of the `stat()` fields have changed. It is passed two File::stat instances containing the old and new `stat()` fields.

**PARAMETERS**

The following named parameters may be passed to `new` or `configure`.

**handle => IO**

The opened filehandle to watch for `stat()` changes if `filename` is not supplied.

**filename => STRING**

Optional. If supplied, watches the named file rather than the filehandle given in `handle`. The file will be opened for reading and then watched for renames. If the file is renamed, the new filename is opened and tracked similarly after closing the previous file.

**interval => NUM**

Optional. The interval in seconds to poll the filehandle using `stat (2)` looking for size changes. A default of 2 seconds will be applied if not defined.

**METHODS****handle**

```
$handle = $file->handle
```

Returns the filehandle currently associated with the instance; either the one passed to the `handle` parameter, or opened from the `filename` parameter.

**AUTHOR**

Paul Evans <leonerd@leonerd.org.uk>