### **NAME**

"IO::Async::Loop::Select" - use IO::Async with "select(2)"

# **SYNOPSIS**

Normally an instance of this class would not be directly constructed by a program. It may however, be useful for runing IO::Async with an existing program already using a select call.

```
use IO::Async::Loop::Select;

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

$loop->add( ... );

while(1) {
    my ( $rvec, $wvec, $evec ) = ('') x 3;
    my $timeout;

    $loop->pre_select( \$rvec, \$wvec, \$evec, \$timeout );
    ...
    my $ret = select( $rvec, $wvec, $evec, $timeout );
    ...
    $loop->post_select( $rvec, $evec, $wvec );
}
```

#### **DESCRIPTION**

This subclass of IO::Async::Loop uses the select (2) syscall to perform read-ready and write-ready tests.

To integrate with an existing select-based event loop, a pair of methods pre\_select and post\_select can be called immediately before and after a select call. The relevant bits in the readready, write-ready and exceptional-state bitvectors are set by the pre\_select method, and tested by the post\_select method to pick which event callbacks to invoke.

#### CONSTRUCTOR

new

```
$loop = IO::Async::Loop::Select->new
```

This function returns a new instance of a IO::Async::Loop::Select object. It takes no special arguments.

#### **METHODS**

```
pre_select
```

```
$loop->pre_select( \$readvec, \$writevec, \$exceptvec, \$timeout )
```

This method prepares the bitvectors for a select call, setting the bits that the Loop is interested in. It will also adjust the \$timeout value if appropriate, reducing it if the next event timeout the Loop requires is sooner than the current value.

\\$readvec

\\$writevec

\\$exceptvec

Scalar references to the reading, writing and exception bitvectors

\\$timeout

Scalar reference to the timeout value

### post\_select

```
$loop->post_select( $readvec, $writevec, $exceptvec )
```

This method checks the returned bitvectors from a select call, and calls any of the callbacks that are appropriate.

```
$readvec
$writevec
$exceptvec
```

Scalars containing the read-ready, write-ready and exception bitvectors

## loop\_once

```
$count = $loop->loop_once( $timeout )
```

This method calls the pre\_select method to prepare the bitvectors for a select syscall, performs it, then calls post\_select to process the result. It returns the total number of callbacks invoked by the post\_select method, or undef if the underlying select (2) syscall returned an error.

# **SEE ALSO**

• IO::Select – OO interface to select system call

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