

Module Errno

Ruby exception objects are subclasses of `Exception`. However, operating systems typically report errors using plain integers. Module `Errno` is created dynamically to map these operating system errors to Ruby classes, with each error number generating its own subclass of `SystemCallError`. As the subclass is created in module `Errno`, its name will start `Errno::`.

```
Exception
  StandardError
    SystemCallError
      Errno::xxx
```

The names of the `Errno::` classes depend on the environment in which Ruby runs. On a typical Unix or Windows platform, you'll find Ruby has `Errno` classes such as `Errno::EACCES`, `Errno::EAGAIN`, `Errno::EINTR`, and so on.

The integer operating system error number corresponding to a particular error is available as the class constant `Errno::error::Errno`.

```
Errno::EACCES::Errno # => 13
Errno::EAGAIN::Errno # => 35
Errno::EINTR::Errno # => 4
```

The full list of operating system errors on your particular platform is available as the constants of `Errno`. Any user-defined exceptions in this module (including subclasses of existing exceptions) must also define an `Errno` constant.

```
Errno.constants # => E2BIG, EACCES, EADDRINUSE, EADDRNOTAVAIL, EADV,
  EAFNOSUPPORT, EAGAIN, ...
```

1.9 / As of Ruby 1.8, exceptions are matched in `rescue` clauses using `Module#===`. The `===` method is overridden for class `SystemCallError` to compare based on the `Errno` value. Thus, if two distinct `Errno` classes have the same underlying `Errno` value, they will be treated as the same exception by a `rescue` clause.