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Rocky Enterprise Linux 9.2 Manual Pages on command 'Exporter::Tiny::Manual::Importing.3pm'

\$ man Exporter::Tiny::Manual::Importing.3pm

Exporter::Tiny::Manual::Importing(3pm)

NAME

Exporter::Tiny::Manual::Importing - importing from Exporter::Tiny-based modules

DESCRIPTION

For the purposes of this discussion we'll assume we have a module called "MyUtils" which exports functions called "froblicate", "red", "blue", and "green". It has a tag set up called ":colours" which corresponds to "red", "blue", and "green".

Many of these tricks may seem familiar from Sub::Exporter. That is intentional.

Exporter::Tiny doesn't attempt to provide every feature of Sub::Exporter, but where it does it usually uses a fairly similar API.

Basic importing

It's easy to import a single function from a module:

```
use MyUtils "froblicate";
```

Or a list of functions:

```
use MyUtils "red", "green";
```

Perl's "qw()" shorthand for a list of words is pretty useful:

```
use MyUtils qw( red green );
```

If the module defines tags, you can import them like this:

```
use MyUtils qw( :colours );
```

Or with a hyphen instead of a colon:

```
use MyUtils qw( -colours );
```

Hyphens are good because Perl will autoquote a bareword that follows them:

```
use MyUtils -colours;
```

And it's possible to mix function names and tags in the same list:

```
use MyUtils qw( frobnicate :colours );
```

Renaming imported functions

It's possible to rename a function you're importing:

```
use MyUtils "frobnicate" => { -as => "frob" };
```

Or you can apply a prefix and/or suffix. The following imports the function and calls it "my_frobnicate_thing".

```
use MyUtils "frobnicate" => { -prefix => "my_", -suffix => "_thing" };
```

You can apply a prefix/suffix to all functions you import by placing the hashref first in the import list. (This first hashref is referred to as the global options hash, and can do some special things.)

```
use MyUtils { prefix => "my_" }, "frobnicate";
```

Did you notice that we used "-prefix" and "-suffix" in the normal options hash, but "prefix" and "suffix" (no hyphen) in the global options hash? That's a common pattern with this module.

You can import the same function multiple times with different names:

```
use MyUtils  
    "frobnicate" => { -as => "frob" },  
    "frobnicate" => { -as => "frbnc" };
```

Tags can take the "-prefix" and "-suffix" options too. The following imports "colour_red", "colour_green", and "colour_blue":

```
use MyUtils -colours => { -prefix => "colour_" };
```

You can also set "-as" to be a coderef to generate a function name. This imports functions called "RED", "GREEN", and "BLUE":

```
use MyUtils -colours => { -as => sub { uc($_[0]) } };
```

Note that it doesn't make sense to use "-as" with a tag unless you're doing this coderef thing. Coderef "as" also works in the global options hash.

DO NOT WANT!

Sometimes you want to supply a list of functions you don't want to import. To do that, prefix the function with a bang. This imports everything except "frobnicate":

```
use MyUtils qw( -all !frobnicate );
```

You can add the bang prefix to tags too. This will import everything except the colours.

```
use MyUtils qw( -all !:colours );
```

Negated imports always "win", so the following will not import "froblicate", no matter how many times you repeat it...

```
use MyUtils qw( !froblicate frobnicate frobnicate frobnicate );
```

Importing by regexp

Here's how you could import all functions beginning with an "f":

```
use MyUtils qw( /^F/i );
```

Or import everything except functions beginning with a "z":

```
use MyUtils qw( -all !/^Z/i );
```

Note that regexps are always supplied as strings starting with "/", and not as quoted regexp references ("qr/.../").

Import functions into another package

Occasionally you need to import functions not into your own package, but into a different package. You can do that like this:

```
use MyUtils { into => "OtherPkg" }, "froblicate";  
OtherPkg::frobincate(...);
```

However, `Import::Into` will probably provide you with a better approach which doesn't just work with `Exporter::Tiny`, but all exporters.

Lexical subs

Often you want to make use of an exported function, but don't want it to "pollute" your namespace.

There is this `Sub::Exporter::Lexical` thing that was designed as a plugin for `Sub::Exporter`, but `Exporter::Tiny`'s API is close enough that it will work. Do you remember that global options hash? Just use that to tell `Exporter::Tiny` to use an alternative sub installer.

```
{  
  use Sub::Exporter::Lexical lexical_installer => { -as => "lex" };  
  use MyUtils { installer => lex }, "froblicate";  
  frobnicate(...); # ok  
}  
frobincate(...); # not ok
```

Another way to do lexical functions is to import a function into a scalar variable:

```
my $func;  
use MyUtils "froblicate" => { -as => \$func };
```

```
$func->(...);
```

You can even provide a hashref to put all imported functions into as part of that global options hash I mentioned earlier.

```
my %funcs;  
use MyUtils { into => \%funcs }, "froblicate";  
$funcs{froblicate}->(...);
```

Unimporting

You can unimport the functions that MyUtils added to your namespace:

```
no MyUtils;
```

Or just specific ones:

```
no MyUtils qw(froblicate);
```

If you renamed a function when you imported it, you should unimport by the new name:

```
use MyUtils frobnicate => { -as => "frob" };  
...;  
no MyUtils "frob";
```

Unimporting using tags and regexps should mostly do what you want.

DIAGNOSTICS

Overwriting existing sub '%s::%s' with sub '%s' exported by %s

A warning issued if Exporter::Tiny is asked to export a symbol which will result in an existing sub being overwritten. This warning can be suppressed using either of the following:

```
use MyUtils { replace => 1 }, "froblicate";  
use MyUtils "froblicate" => { -replace => 1 };
```

Or can be upgraded to a fatal error:

```
use MyUtils { replace => "die" }, "froblicate";  
use MyUtils "froblicate" => { -replace => "die" };
```

Refusing to overwrite existing sub '%s::%s' with sub '%s' exported by %s

The fatal version of the above warning.

Could not find sub '%s' exported by %s

You requested to import a sub which the package does not provide.

Cannot provide an -as option for tags

Because a tag may provide more than one function, it does not make sense to request a single name for it. Instead use "-prefix" or "-suffix".

Passing options to unimport '%s' makes no sense

When you import a sub, it occasionally makes sense to pass some options for it.

However, when unimporting, options do nothing, so this warning is issued.

SEE ALSO

Exporter::Shiny, Exporter::Tiny.

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