

1 Apache2::Module - Perl API for creating and working with Apache modules

1.1 Synopsis

```

use Apache2::Module ();

#Define a configuration directive
my @directives = (
    {
        name => 'MyDirective',
    }
);

Apache2::Module::add(__PACKAGE__, \@directives);

# iterate over the whole module list
for (my $modp = Apache2::Module::top_module(); $modp; $modp = $modp->next) {
    my $name           = $modp->name;
    my $index          = $modp->module_index;
    my $ap_api_major_version = $modp->ap_api_major_version;
    my $ap_api_minor_version = $modp->ap_api_minor_version;
    my $commands       = $modp->cmds;
}

# find a specific module
my $module = Apache2::Module::find_linked_module('mod_ssl.c');

# remove a specific module
$module->remove_loaded_module();

# access module configuration from a directive
sub MyDirective {
    my ($self, $parms, $args) = @_;
    my $srv_cfg = Apache2::Module::get_config($self, $parms->server);
    [...]
}

# test if an Apache module is loaded
if (Apache2::Module::loaded('mod_ssl.c')) {
    [...]
}

# test if a Perl module is loaded
if (Apache2::Module::loaded('Apache2::Status')) {

    [...]
}

```

1.2 Description

`Apache2::Module` provides the Perl API for creating and working with Apache modules

See [Apache Server Configuration Customization in Perl](#).

1.3 API

Apache2::Module provides the following functions and/or methods:

1.3.1 *add*

Add a module's custom configuration directive to Apache.

```
Apache2::Module::add($package, $cmds);
```

- **arg1: \$package (string)**
the package of the module to add
- **arg2: \$cmds (ARRAY of HASH refs)**
the list of configuration directives to add
- **ret: no return value**
- **since: 2.0.00**

See also Apache Server Configuration Customization in Perl.

1.3.2 *ap_api_major_version*

Get the httpd API version this module was build against, **not** the module's version.

```
$major_version = $module->ap_api_major_version();
```

- **obj: \$module (Apache2::Module object)**
- **ret: \$major_version (integer)**
- **since: 2.0.00**

This method is used to check that module is compatible with this version of the server before loading it.

1.3.3 *ap_api_minor_version*

Get the module API minor version.

```
$minor_version = $module->ap_api_minor_version();
```

- **obj: \$module (Apache2::Module object)**
- **ret: \$minor_version (integer)**
- **since: 2.0.00**

`ap_api_minor_version()` provides API feature milestones.

It's not checked during module init.

1.3.4 *cmds*

Get the `Apache2::Command` object, describing all of the directives this module defines.

```
$command = $module->cmds();
```

- **obj:** `$module (Apache2::Module object)`
- **ret:** `$command (Apache2::Command object)`
- **since:** 2.0.00

1.3.5 *get_config*

Retrieve a module's configuration. Used by configuration directives.

```
$cfg = Apache2::Module::get_config($class, $server, $dir_config);
$cfg = Apache2::Module::get_config($class, $server);
$cfg = $self->get_config($server, $dir_config);
$cfg = $self->get_config($server);
```

- **obj:** `$module (Apache2::Module object)`
- **arg1:** `$class (string)`

The Perl package this configuration is for

- **arg2:** `$server (Apache2::ServerRec object)`

The current server, typically `$r->server` or `$parms->server`.

- **opt arg3:** `$dir_config (Apache2::ConfVector object)`

By default, the configuration returned is the server level one. To retrieve the per directory configuration, use `$r->per_dir_config` as a last argument.

- **ret:** `$cfg (HASH reference)`

A reference to the hash holding the module configuration data.

- **since:** 2.0.00

See also [Apache Server Configuration Customization in Perl](#).

1.3.6 *find_linked_module*

Find a module based on the name of the module

```
$module = Apache2::Module::find_linked_module($name);
```

- **arg1: \$name (string)**

The name of the module ending in `.c`

- **ret: \$module (Apache2::Module object)**

The module object if found, undef otherwise.

- **since: 2.0.00**

For example:

```
my $module = Apache2::Module::find_linked_module('mod_ssl.c');
```

1.3.7 *loaded*

Determine if a certain module is loaded

```
$loaded = Apache2::Module::loaded($module);
```

- **name: \$module (string)**

The name of the module to search for.

If `$module` ends with `.c`, search all the modules, statically compiled and dynamically loaded.

If `$module` ends with `.so`, search only the dynamically loaded modules.

If `$module` doesn't contain a `.`, search the loaded Perl modules (checks `%INC`).

- **ret: \$loaded (boolean)**

Returns true if the module is loaded, false otherwise.

- **since: 2.0.00**

For example, to test if this server supports ssl:

```
if (Apache2::Module::loaded('mod_ssl.c')) {  
    [...]  
}
```

To test if this server dynamically loaded mod_perl:

```
if (Apache2::Module::loaded('mod_perl.so')) {
    [...]
}
```

To test if Apache2::Status is loaded:

```
if (Apache2::Module::loaded('Apache2::Status')) {
    [...]
}
```

1.3.8 module_index

Get the index to this modules structures in config vectors.

```
$index = $module->module_index();
```

- **obj:** \$module (Apache2::Module object)
- **ret:** \$index (integer)
- **since:** 2.0.00

1.3.9 name

Get the name of the module's .c file

```
$name = $module->name();
```

- **obj:** \$module (Apache2::Module object)
- **ret:** \$name (string)
- **since:** 2.0.00

For example a mod_perl module, will return: *mod_perl.c*.

1.3.10 next

Get the next module in the list, undef if this is the last module in the list.

```
$next_module = $module->next();
```

- **obj:** \$module (Apache2::Module object)
- **ret:** \$next_module (Apache2::Module object)
- **since:** 2.0.00

1.3.11 remove_loaded_module

Remove a module from the list of loaded modules permanently.

```
$module->remove_loaded_module();
```

- **obj:** `$module (Apache2::Module object)`
- **ret:** no return value
- **since:** 2.0.00

1.3.12 top_module

Returns the first module in the module list. Usefull to start a module iteration.

```
$module = Apache2::Module::top_module();
```

- **ret:** `$module (Apache2::Module object)`
- **since:** 2.0.00

1.4 See Also

`mod_perl 2.0` documentation.

1.5 Copyright

`mod_perl 2.0` and its core modules are copyrighted under The Apache Software License, Version 2.0.

1.6 Authors

The `mod_perl` development team and numerous contributors.

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