

1 Apache2::ServerRec - Perl API for Apache server record accessors

1.1 Synopsis

```

use Apache2::ServerRec ();

$error_fname = $s->error_fname();

$is_virtual = $s->is_virtual();

$keep_alive      = $s->keep_alive();
$keep_alive_max  = $s->keep_alive_max();
$keep_alive_timeout = $s->keep_alive_timeout();

$limit_req_fields    = $s->limit_req_fields();
$limit_req_fieldsize = $s->limit_req_fieldsize();
$limit_req_line      = $s->limit_req_line();

$path = $s->path();

$hostname = $s->server_hostname();
$port     = $s->port();

$server_admin = $s->server_admin();

$proc = $s->process();

$timeout = $s->timeout();
$loglevel = $s->loglevel();

my $server = Apache2::ServerUtil->server;
my $vhosts = 0;
for (my $s = $server->next; $s; $s = $s->next) {
    $vhosts++;
}
print "There are $vhosts virtual hosts";

```

1.2 Description

`Apache2::ServerRec` provides the Perl API for Apache `server_rec` object.

`Apache2::ServerUtil` provides an extra functionality.

1.3 API

`Apache2::ServerRec` provides the following functions and/or methods:

1.3.1 *error_fname*

Get/set the `ErrorLog` file value (e.g. `logs/error_log`)

```
$error_fname      = $s->error_fname();
$prev_error_fname = $s->error_fname($new_error_fname);
```

- **obj:** `$s` (`Apache2::ServerRec` object)
- **opt arg1:** `$new_error_fname` (string)

If passed, sets the new value for ErrorLog

Note the limited functionality under threaded MPMs.

- **ret:** `$error_fname` (string)

Returns the ErrorLog value setting.

If `$new_error_fname` is passed returns the setting before the change.

- **since:** 2.0.00

1.3.2 is_virtual

Test whether `$s` is a virtual host object

```
$is_virtual = $s->is_virtual();
```

- **obj:** `$s` (`Apache2::ServerRec` object)
- **ret:** `$is_virtual` (boolean)

Returns the `is_virtual` setting.

If `$new_is_virtual` is passed, returns the setting before the change.

- **since:** 2.0.00

Example:

```
print "This is a virtual host" if $s->is_virtual();
```

1.3.3 keep_alive

Get/set the KeepAlive setting, which specifies whether Apache should accept more than one request over the same connection from the same client.

```
$keep_alive      = $s->keep_alive();
$prev_keep_alive = $s->keep_alive($new_keep_alive);
```

- **obj:** `$s` (`Apache2::ServerRec` object)
- **opt arg1:** `$new_keep_alive` (boolean)

If passed, sets the new keep_alive.

Note the limited functionality under threaded MPMs.

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

Returns the KeepAlive setting.

If \$new_keep_alive is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.4 keep_alive_max

Get/set the MaxKeepAliveRequest setting, which specifies the maximum number of requests Apache will serve over a KeepAlive connection.

```
$keep_alive_max      = $s->keep_alive_max();  
$prev_keep_alive_max = $s->keep_alive_max($new_keep_alive_max);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_keep_alive_max (integer)**

If passed, sets the new keep_alive_max.

Note the limited functionality under threaded MPMs.

- **ret: \$keep_alive_max (integer)**

Returns the keep_alive_max setting.

If \$new_keep_alive_max is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.5 keep_alive_timeout

Get/set the KeepAliveTimeout setting (in microseconds), which specifies how long Apache will wait for another request before breaking a KeepAlive connection.

```
$keep_alive_timeout  = $s->keep_alive_timeout();  
$prev_keep_alive_timeout = $s->keep_alive_timeout($new_timeout);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_keep_alive_timeout (integer)**

The expected value is in microseconds.

If passed, sets the new `KeepAlive` timeout.

Note the limited functionality under threaded MPMs.

- **ret: \$keep_alive_timeout (integer)**

Returns the `KeepAlive` timeout value (in microseconds).

If `$new_timeout` is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.6 limit_req_fields

Get/set limit on number of request header fields

```
$limit_req_fields      = $s->limit_req_fields();
$prev_limit_req_fields = $s->limit_req_fields($new_limit_req_fields);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_limit_req_fields (integer)**

If passed, sets the new request headers number limit.

Note the limited functionality under threaded MPMs.

- **ret: \$limit_req_fields (integer)**

Returns the request headers number limit.

If `$new_limit_req_fields` is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.7 limit_req_fieldsize

Get/set limit on size of any request header field

```
$limit_req_fieldsize = $s->limit_req_fieldsize();
$prev_limit          = $s->limit_req_fieldsize($new_limit);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_limit_req_fieldsize (integer)**

If passed, sets the new request header size limit.

Note the limited functionality under threaded MPMs.

- **ret: \$limit_req_fieldsize (integer)**

Returns the request header size limit.

If \$new_limit is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.8 limit_req_line

Get/set limit on size of the HTTP request line

```
$limit_req_line      = $s->limit_req_line();  
$prev_limit_req_line = $s->limit_req_line($new_limit_req_line);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_limit_req_line (integer)**

If passed, sets the new request line limit value.

Note the limited functionality under threaded MPMs.

- **ret: \$limit_req_line (integer)**

Returns the request line limit value

If \$new_limit_req_line is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.9 loglevel

Get/set the LogLevel directive value

```
$loglevel          = $s->loglevel();  
$prev_loglevel     = $s->loglevel($new_loglevel);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_loglevel (Apache2::Const :log constant)**

If passed, sets a new LogLevel value

Note the limited functionality under threaded MPMs.

- **ret: \$loglevel (Apache2::Const :log constant)**

Returns the LogLevel value as a constant.

If `$new_loglevel` is passed, returns the setting before the change.

- **since: 2.0.00**

For example, to set the `LogLevel` value to `info`:

```
use Apache2::Const -compile => qw(LOG_INFO);
$s->loglevel(Apache2::Const::LOG_INFO);
```

1.3.10 *next*

The next server record in the list (if there are vhosts)

```
$s_next = $s->next();
```

- **obj: `$s` (Apache2::ServerRec object)**
- **ret: `$s_next` (Apache2::ServerRec object)**
- **since: 2.0.00**

For example the following code traverses all the servers, starting from the base server and continuing to vhost servers, counting all available vhosts:

```
use Apache2::ServerRec ();
use Apache2::ServerUtil ();
my $server = Apache2::ServerUtil->server;
my $vhosts = 0;
for (my $s = $server->next; $s; $s = $s->next) {
    $vhosts++;
}
print "There are $vhosts virtual hosts";
```

1.3.11 *path*

Get/set pathname for the `ServerPath` setting

```
$path      = $s->path();
$prev_path = $s->path($new_path);
```

- **obj: `$s` (Apache2::ServerRec object)**
- **opt arg1: `$new_path` (string)**

If passed, sets the new path.

Note the limited functionality under threaded MPMs.

- **ret: `$path` (string)**

Returns the path setting.

If `$new_path` is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.12 *port*

Get/set the port value

```
$port      = $s->port();
$prev_port = $s->port($new_port);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_port (integer)**

If passed, sets the new port.

Note the limited functionality under threaded MPMs.

META: I don't think one should be allowed to change port number after the server has started.

- **ret: \$port (integer)**

Returns the port setting.

If `$new_port` is passed returns the setting before the change.

- **since: 2.0.00**

1.3.13 *process*

The process this server is running in

```
$proc = $s->process();
```

- **obj: \$s (Apache2::ServerRec object)**
- **ret: \$proc (Apache2::Process object)**
- **since: 2.0.00**

1.3.14 *server_admin*

Get/set the ServerAdmin value

```
$server_admin      = $s->server_admin();
$prev_server_admin = $s->server_admin($new_server_admin);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_server_admin (string)**

If passed, sets the new ServerAdmin value.

Note the limited functionality under threaded MPMs.

- **ret: \$server_admin (string)**

Returns the ServerAdmin value.

If \$new_server_admin is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.15 server_hostname

Get/set the ServerName value

```
$server_hostname      = $s->server_hostname();
$prev_server_hostname = $s->server_hostname($new_server_hostname);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_server_hostname (string)**

If passed, sets the ServerName value

Note the limited functionality under threaded MPMs.

- **ret: \$server_hostname (string)**

Returns the ServerName value

If \$new_server_hostname is passed, returns the setting before the change.

- **since: 2.0.00**

1.3.16 timeout

Get/set the timeout (TimeOut) (in microsecs), which Apache will wait for before it gives up doing something

```
$timeout      = $s->timeout();
$prev_timeout = $s->timeout($new_timeout);
```

- **obj: \$s (Apache2::ServerRec object)**
- **opt arg1: \$new_timeout (integer)**

If passed, sets the new timeout (the value should be in microseconds).

Note the limited functionality under threaded MPMs.

- **ret: \$timeout (integer)**

Returns the timeout setting in microseconds.

If \$new_timeout is passed, returns the setting before the change.

- **since: 2.0.00**

Let us repeat again: the timeout values is microseconds. For example to set the timeout to 20 secs:

```
$s->timeout(20_000_000);
```

1.4 Notes

1.4.1 Limited Functionality under Threaded MPMs

Note that under threaded MPMs, some of the read/write accessors, will be able to set values only before threads are spawned (i.e. before the `ChildInit` phase). Therefore if you are developing your application on the non-threaded MPM, but planning to have it run under threaded mpm, you should not use those methods to set values after the `ChildInit` phase.

The affected accessor methods are marked as such in their respective documentation entries.

1.5 Unsupported API

`Apache2::ServerRec` also provides auto-generated Perl interface for a few other methods which aren't tested at the moment and therefore their API is a subject to change. These methods will be finalized later as a need arises. If you want to rely on any of the following methods please contact the the `mod_perl` development mailing list so we can help each other take the steps necessary to shift the method to an officially supported API.

1.5.1 addr

Get the `addr` value

```
$addr = $s->addr();
```

- **obj: \$s (Apache2::ServerRec object)**
- **ret: \$addr (Apache2::ServerAddr)**

Returns the `addr` setting.

- **since: subject to change**

META: this methods returns a vhost-specific Apache2::ServerAddr object, which is not implemented at the moment. See the struct `server_addr_rec` entry in `httpd-2.0/include/httpd.h` for more information. It seems that most (all?) of the information in that record is available through other APIs.

1.5.2 *lookup_defaults*

Get the `lookup_defaults` value. MIME type info, etc., before we start checking per-directory info.

```
$lookup_defaults = $s->lookup_defaults();
```

- **obj:** `$s` (**Apache2::ServerRec** object)
- **ret:** `$lookup_defaults` (**Apache2::ConfVector**)

Returns the `lookup_defaults` setting.

- **since:** subject to change

1.5.3 *module_config*

Get config vector containing pointers to modules' per-server config structures.

```
$module_config = $s->module_config();
```

- **obj:** `$s` (**Apache2::ServerRec** object)
- **ret:** `$module_config` (**Apache2::ConfVector**)

Returns the `module_config` setting.

- **since:** subject to change

1.5.4 *names*

Get/set the value(s) for the `ServerAlias` setting

```
$names          = $s->names();
$prev_names     = $s->names($new_names);
```

- **obj:** `$s` (**Apache2::ServerRec** object)
- **opt arg1:** `$new_names` (**APR::ArrayHeader**)

If passed, sets the new names.

Note the limited functionality under threaded MPMs.

- **ret:** `$names` (**APR::ArrayHeader**)

Returns the `names` setting.

If `$new_names` is passed, returns the setting before the change.

- **since: 2.0.00**

META: we don't have `APR::ArrayHeader` yet

1.5.5 *wild_names*

Wildcarded names for `ServerAlias` servers

```
$wild_names      = $s->wild_names();  
$prev_wild_names = $s->wild_names($new_wild_names);
```

- **obj: `$s` (`Apache2::ServerRec` object)**
- **opt arg1: `$new_wild_names` (`APR::ArrayHeader`)**

If passed, sets the new `wild_names`.

Note the limited functionality under threaded MPMs.

- **ret: `$wild_names` (`APR::ArrayHeader`)**

Returns the `wild_names` setting.

If `$new_wild_names` is passed, returns the setting before the change.

- **since: 2.0.00**

META: we don't have `APR::ArrayHeader` yet

1.6 See Also

`mod_perl 2.0` documentation.

1.7 Copyright

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

1.8 Authors

The `mod_perl` development team and numerous contributors.

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