

NAME

`ares_set_servers`, `ares_set_servers_ports` – Initialize an `ares_channel` name servers configuration

SYNOPSIS

```
#include <ares.h>
```

```
int ares_set_servers(ares_channel channel, struct ares_addr_node *servers)
```

```
int ares_set_servers_ports(ares_channel channel, struct ares_addr_port_node *servers)
```

DESCRIPTION

The `ares_set_servers(3)` function initializes name servers configuration for the channel data identified by `channel`, from a `servers` pointer to a linked list of `ares_addr_node` structs holding name servers address data.

The name server linked list pointer argument may be the result of a previous call to `ares_get_servers(3)` or a linked list of `ares_addr_node` structs set up by other means.

The `ares_set_servers(3)` function also allows the specification of UDP and TCP ports to be used for communication on a per-server basis. The provided linked list argument may be the result of a previous call to `ares_get_servers_ports(3)` or a linked list of `ares_addr_port_node` structs set up by other means.

This function replaces any potentially previously configured name servers with the ones given in the linked list. So, in order to configure a channel with more than one name server all the desired ones must be specified in a single list.

The function does not take ownership of the linked list argument. The caller is responsible for freeing the linked list when no longer needed.

This function is capable of handling IPv4 and IPv6 name server addresses simultaneously, rendering `ares_init_options(3)` with optmask `ARES_OPT_SERVERS` functionally obsolete except for IPv4-only name server usage.

RETURN VALUES

`ares_set_servers(3)` may return any of the following values:

ARES_SUCCESS

The name servers configuration was successfully initialized.

ARES_ENOMEM

The process's available memory was exhausted.

ARES_ENODATA

The channel data identified by `channel` was invalid.

ARES_ENOTINITIALIZED

c-ares library initialization not yet performed.

SEE ALSO

`ares_set_servers_csv(3)`, `ares_get_servers(3)`, `ares_init_options(3)`, `ares_dup(3)`

AVAILABILITY

`ares_set_servers(3)` was added in c-ares 1.7.1; `ares_set_servers_ports(3)` was added in c-ares 1.11.0.

AUTHOR

Implementation of this function and associated library internals are based on code, comments and feedback provided in November and December of 2008 by Daniel Stenberg, Gregor Jasny, Phil Blundell and Yang Tse, December 2009 by Cedric Bail, February 2010 by Jakub Hrozek. On March 2010 Yang Tse shuffled all the bits and this function popped out.

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