NAME

ares_gethostbyname – Initiate a host query by name

SYNOPSIS

#include <ares.h>

typedef void (*ares_host_callback)(void **arg***, int** *status***,
int** *timeouts***, struct hostent ****hostent***)**

void ares_gethostbyname(ares_channel *channel***, const char ****name***,
int** *family***, ares_host_callback** *callback***, void ****arg***)**

DESCRIPTION

The **ares_gethostbyname** function initiates a host query by name on the name service channel identified by *channel*. The parameter *name* gives the hostname as a NUL-terminated C string, and *family* gives the desired type of address for the resulting host entry. When the query is complete or has failed, the ares library will invoke *callback*. Completion or failure of the query may happen immediately, or may happen during a later call to *ares_process(3)*, *ares_destroy(3)* or *ares_cancel(3)*.

The callback argument *arg* is copied from the **ares_gethostbyname** argument *arg*. The callback argument *status* indicates whether the query succeeded and, if not, how it failed. It may have any of the following values:

ARES_SUCCESS   The host lookup completed successfully.

ARES_ENOTIMP   The ares library does not know how to find addresses of type *family*.

ARES_EBADNAME The hostname **name** is composed entirely of numbers and periods, but is not a valid representation of an Internet address.

ARES_ENOTFOUND
                               The address *addr* was not found.

ARES_ENOMEM   Memory was exhausted.

ARES_EDESTRUCTION
                               The name service channel *channel* is being destroyed; the query will not be completed.

The callback argument *timeouts* reports how many times a query timed out during the execution of the given request.

On successful completion of the query, the callback argument *hostent* points to a **struct hostent** containing the name of the host returned by the query. The callback need not and should not attempt to free the memory pointed to by *hostent*; the ares library will free it when the callback returns. If the query did not complete successfully, *hostent* will be **NULL**.

SEE ALSO

ares_process(3), **ares_gethostbyaddr**(3)

AUTHOR

Greg Hudson, MIT Information Systems
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