

NAME

libssh2_session_supported_algs - get list of supported algorithms

SYNOPSIS

```
#include <libssh2.h>
```

```
int
```

```
libssh2_session_supported_algs(LIBSSH2_SESSION* session,  
                               int method_type,  
                               const char*** algs);
```

DESCRIPTION

session - An instance of initialized LIBSSH2_SESSION (the function will use its pointer to the memory allocation function). *method_type* - Method type. See *libssh2_session_method_pref(3)*. *algs* - Address of a pointer that will point to an array of returned algorithms

Get a list of supported algorithms for the given *method_type*. The *method_type* parameter is equivalent to *method_type* in *libssh2_session_method_pref(3)*. If successful, the function will allocate the appropriate amount of memory. When not needed anymore, it must be deallocated by calling *libssh2_free(3)*. When this function is unsuccessful, this must not be done.

In order to get a list of all supported compression algorithms, *libssh2_session_flag(session, LIBSSH2_FLAG_COMPRESS, 1)* must be called before calling this function, otherwise only "none" will be returned.

If successful, the function will allocate and fill the array with supported algorithms (the same names as defined in RFC 4253). The array is not NULL terminated.

EXAMPLE

```
#include "libssh2.h"  
  
const char **algorithms;  
int rc, i;  
LIBSSH2_SESSION *session;  
  
/* initialize session */  
session = libssh2_session_init();  
rc = libssh2_session_supported_algs(session,  
                                   LIBSSH2_METHOD_CRYPT_CS,  
                                   &algorithms);
```

```
if(rc > 0) {
    /* the call succeeded, do sth. with the list of algorithms
       (e.g. list them)... */
    printf("Supported symmetric algorithms:\n");
    for(i = 0; i < rc; i++)
        printf("\t%s\n", algorithms[i]);

    /* ... and free the allocated memory when not needed anymore */
    libssh2_free(session, algorithms);
}
else {
    /* call failed, error handling */
}
```

RETURN VALUE

On success, a number of returned algorithms (i.e a positive number will be returned). In case of a failure, an error code (a negative number, see below) is returned. 0 should never be returned.

ERRORS

LIBSSH2_ERROR_BAD_USE - Invalid address of algs.

LIBSSH2_ERROR_METHOD_NOT_SUPPORTED - Unknown method type.

LIBSSH2_ERROR_INVALID - Internal error (normally should not occur).

LIBSSH2_ERROR_ALLOC - Allocation of memory failed.

AVAILABILITY

Added in 1.4.0

SEE ALSO

[libssh2_session_methods\(3\)](#), [libssh2_session_method_pref\(3\)](#) [libssh2_free\(3\)](#)