

mcs Library Release Notes

Version 1.0.5

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Revision History

| Version | Revision Date | Description |
|---------|---------------|--|
| 1.0.5 | 05/29/2006 | Added support for the 05/29/2006 version |
| 1.0.4 | 08/26/2005 | Added support for the 09/01/2005 version |
| 1.0.2 | 03/18/2005 | Added support for the 03/28/2005 version |
| 1.0.0 | 01/24/2005 | Added support for the 01/31/2005 version |
| 0.3.0 | 10/28/2004 | Added support for the 11/10/2004 version |
| 0.2.1 | 10/12/2004 | Added cautions about multi-thread operation |
| 0.2.0 | 08/26/2004 | Added support for the 09/02/2004 version (changed function names and argument types) |
| 0.1.0 | 08/02/2004 | Initial version. |

1 About the mcs library

“mcs” is an abbreviation of “Multiple Channel Stream,” which provides functions that communicate between the Nintendo DS program and multiple Windows applications.

1.1 Features of the mcs Library

The following features are currently provided by the mcs library.

1.1.1 Stream Communications between PC and NITRO Hardware Using Multiple Channels

The mcs library provides a feature for stream communications using multiple channels between multiple Windows applications that run on the PC and programs that run on the Nintendo DS hardware.

1.1.2 File Input/Output on PC

The mcs library provides a feature that makes it possible to read/write files on Windows, and to enumerate files in directories.

1.1.3 Outputting a Character String to the PC

In the mcs library, a Windows application called the mcs server provides mcs features. The mcs library provides the functionality for outputting character strings from the Nintendo DS program to the console display of this mcs server.

1.2 Multi-Thread Operation

NITRO-System library is not designed to be thread-safe (supporting multi-thread). Therefore, when calling the mcs library API (with some exceptions) from the interrupt handler or a different thread, it may not operate normally.

2 Major changes

2.1 Changes in the 09/01/2005 Version

2.1.1 DEBUGGER SHARING Support

DEBUGGER SHARING is supported with IS-NITRO-DEBUGGER version 1.56 and later.

2.2 Changes in the 03/28/2005 Version

2.2.1 Addition of Functions

Added the `NNS_McsSeekFile` function, which changes the current file pointer position.

2.2.2 Addition of Features

Made changes in the mcs server application so that the time interval for obtaining data from the Nintendo DS can be changed in the Options dialog box.

2.3 Changes in the 01/31/2005 Version

2.3.1 Changes to Function Behavior

Until now, when the mcs server was not connected to the Nintendo DS hardware, the functions `NNS_McsOpenFile` and `NNS_McsFindFirstFile` were blocked until that connection was made. As of this version, if there is no connection, the functions will exit with an error.

2.3.2 Addition of Functions

The following functions have been added:

- The functions `NNS_McsInitPrint`, `NNS_McsPutString`, and `NNS_McsPrintf`, to output character strings to the mcs server console.
- The function `NNS_McsIsServerConnect`, which determines the mcs server connection state.
- The function `NNS_McsGetServerErrorCode`, which gets the error code of the error which occurred in Windows during file input and output.

2.3.3 Revision of Function Names

The function `NNS_McsUnregisterRecvResource` is now `NNS_McsUnregisterRecvResource`.

2.4 Changes to 05/29/2006 Version

2.4.1 Bug Fix

The Nintendo DS function `NNS_McsReadFile` did not return the correct size for the file that was read. This problem was fixed.

2.5 Changes in the 11/10/2004 version

2.5.1 Function Name Changes

Changed name of the function from `NNS_McsGetTotaStreamReadableSize` to `NNS_McsGetTotalStreamReadableSize`.

2.5.2 Enhanced Features

Made it possible to include PC environment variables in the file name patterns specified with the `NNS_McsOpenFile()` and `NNS_McsFindFirstFile()` functions.

2.6 Changes in the 09/02/2004 version

2.6.1 Changed Function Names

The function `NNS_McsGetStreamlReadbleSize` was changed to `NNS_McsGetStreamReadableSize`. Also, the function `NNS_McsGetTotaStreamlReadbleSize` was changed to `NNS_McsGetTotaStreamReadableSize`.

2.6.2 Changed Argument Types

Previously, the data transmission recognition value that can be determined by the user was type `u32`. However, since only 16 bits were valid, the type was changed to `u16`.

3 Known Problems

Currently there are no known problems.

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