

# **Bi-di Plug-in Caller API**

BBR Co.Ltd.

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# Bi-di Plug-in Caller API データ構造索引

## Bi-di Plug-in Caller API データ構造

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# Bi-di Plug-in Caller API ファイル索引

## Bi-di Plug-in Caller API ファイル一覧

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# Bi-di Plug-in Caller API データ構造

## 構造体 BidiC

2BidiCControl object used in all Bi-di Plug-in APIs.

```
#include <bidPlugin.h>
```

### 変数

- **void \* dlHandle**  
*Handle returned by dlopen(), if NULL, indicates process type.*
- **union {**
- **void \* pLibC**
- **struct {**
- **int pid**
- **int dataWriteFD**
- **int dataReadFD**
- **int cmdWriteFD**
- **int cmdReadFD**
- **} prc**
- **} mod**  
*Union part in the control object.*
- **BidiCxt context**  
*Current context.*
- **BidiCxt saveContext**  
*Previous context.*

---

### 説明

Control object used in all Bi-di Plug-in APIs.

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## 構造体

### **int BidiC::cmdReadFD**

Pipe fd for command reading.

### **int BidiC::cmdWriteFD**

Pipe fd for command writing.

### **int BidiC::dataReadFD**

Pipe fd for data reading.

### **int BidiC::dataWriteFD**

Pipe fd for data writing.

### **int BidiC::pid**

Process ID.

### **void\* BidiC::pLibC**

Control object used in Bi-di Plug-in module.

### **struct { ... } BidiC::prc**

Struct data for process type in the control object.

---

この構造体の説明は次のファイルから生成されました:

- **bidiPlugin.h**

# Bi-di Plug-in Caller API ファイル

## bid\_DBG.h

2bid\_DBG.hHeader file of common debug function.

### マクロ定義

- **#define \_dbgPrint(msg)**  
*Function for the debug printing available only in debug version.*
- 

### 説明

Header file of common debug function.

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### マクロ定義

#### **#define \_dbgPrint(msg)**

Function for the debug printing available only in debug version.

### 引数:

*msg* Print message.

## bidiPlugin.c

2bidiPlugin.c Implementation of Bi-di Plug-in caller API.

```
#include <stdio.h>
#include <strings.h>
#include <unistd.h>
#include <errno.h>
#include <dlfcn.h>
#include <setjmp.h>
#include <signal.h>
#include "bidiPlugin.h"
#include "bidiDbg.h"
```

### データ構造

- struct **\_pipeFDs**

### マクロ定義

- #define **\_GNU\_SOURCE**
- #define **MAX\_PATH\_LEN** 128  
*Maximum byte length of the module path name.*

### 関数

- void **sigExit** (void)  
*Signal handler for longjmp.*
- int **getInt** (unsigned char \*buf)  
*Get int value from 4 bytes chars by Big Endian rule.*
- void **setInt** (unsigned int val, char \*buf)  
*Set 4 bytes chars from the int value by Big Endian rule.*
- int **fullRead** (int fd, char \*buf, int size)  
*Read the data from the fd as possible.*
- int **fullWrite** (int fd, char \*buf, int size)  
*Write the data to the fd as possible.*
- int **readHeader** (int fd, int \*cmdID)



*Read the packet header.*

- **int readBody** (int fd, int cnt, int args[])  
*Read the packet body when the body is array of the int data.*
- **int writePacket** (int fd, int cmdID, int cnt, int args[])  
*Write the packet when the body is array of the int data.*
- **int writePacket2** (int fd, int cmdID, int arg1, char \*arg2)  
*Write the packet when the body is string data.*
- **int createProcess** (struct \_pipeFDs \*fds, char \*pName, int fdRead, int fdWrite, char \*pURI)  
*Create the process type of Plug-in module binded by 2 bi-directinal pipes.*
- **BidiC \* bidiNew** (char \*pName, int fdRead, int fdWrite, char \*pURI)  
*Create a new Bi-di Object.*
- **void bidiDestroy** (BidiC \*pBidiC)  
*Destroy the Bi-di Object.*
- **int bidiGetCap** (BidiC \*pBidiC, BidiCap cap)  
*Get the Bi-di Object capabilities.*
- **int bidiStartJob** (BidiC \*pBidiC, int idJob)  
*Start the printing job sequence.*
- **int bidiEndJob** (BidiC \*pBidiC)  
*Stop the printing job sequence.*
- **int bidiCancelJob** (BidiC \*pBidiC, int idJob)  
*Cancel the printing job sequence.*
- **int bidiGetReadFD** (BidiC \*pBidiC)  
*Get the file descriptor for reading from the Bi-di Object.*
- **int bidiStartRead** (BidiC \*pBidiC, BidiReadMode idReadMode, char \*pLang)  
*Start the reading sequence.*
- **int bidiRead** (BidiC \*pBidiC, void \*pBuf, int nBufBytes)  
*Read the printer status from the Bi-di Object.*
- **int bidiEndRead** (BidiC \*pBidiC)

*Stop the reading sequence.*

- **int bidiGetWriteFD (BidiC \*pBidiC)**  
*Get the file descriptor for writing to the Bi-di Object.*
- **int bidiStartWrite (BidiC \*pBidiC)**  
*Start the writing sequence.*
- **int bidiWrite (BidiC \*pBidiC, void \*pBuf, int nBufBytes)**  
*Write data to the Bi-di Object.*
- **int bidiEndWrite (BidiC \*pBidiC)**  
*Stop the writing sequence.*
- **int bidiCtrl (BidiC \*pBidiC, int idRequest, void \*pData, int nDataBytes)**  
*Control the Bi-di Object.*

## 変数

- **jmp\_buf env**  
*Variable of the stack context.*

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## 説明

Implemtation of Bi-di Plug-in caller API.

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## 関数

**int bidiCancelJob (BidiC \* pBidiC, int idJob)**

Cancel the printing job sequence.

This function is OPTIONAL.

引数:

*pBidiC* Pointer to the Bi-di Object.  
*idJob* Job ID.

**戻り値:**

*BIDI\_OK* Normal terminated.  
*BIDI\_ERROR* When error.  
*BIDI\_EPROGRESS* When the job can't stop(the job is running).  
*BIDI\_ENDJOB* When the job is not exist in Bi-di Plug-in module.

**int bidiCtrl (BidiC \* *pBidiC*, int *idRequest*, void \* *pData*, int *nDataBytes*)**

Control the Bi-di Object.

This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.  
*idRequest* Request ID.  
*pData* Pointer to the for each request.  
*nDataBytes* Number of bytes of the data.

**戻り値:**

>0 Number of bytes of the data read.  
0 When no data remains.  
*BIDI\_ERROR* When error.  
*BIDI\_EINTR* When accepted signals.

**void bidiDestroy (BidiC \* *pBidiC*)**

Destroy the Bi-di Object.

This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

None.

**int bidiEndJob (BidiC \* *pBidiC*)**

Stop the printing job sequence.

This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

*BIDI\_OK* Normal terminated.

*BIDI\_ERROR* When error.

*BIDI\_EPROGRESS* When the job can't stop(the job is running).

**int bidiEndRead (BidiC \* *pBidiC*)**

Stop the reading sequence.

This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

*BIDI\_OK* Normal terminated.

*BIDI\_ERROR* When error.

**int bidiEndWrite (BidiC \* *pBidiC*)**

Stop the writing sequence.

This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

*BIDI\_OK* Normal terminated.

*BIDI\_ERROR* When error.

**int bidiGetCap (BidiC \* *pBidiC*, BidiCap *cap*)**

Get the Bi-di Object capabilities.

This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.  
*cap* Enum of the Bi-di Object capabilities.

**戻り値:**

*BIDI\_TRUE* The condition specified by *cap* is true.  
*BIDI\_FALSE* The condition specified by *cap* is false.  
*BIDI\_ERROR* When error.

**int bidiGetReadFD (BidiC \* *pBidiC*)**

Get the file descriptor for reading from the Bi-di Object.  
This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

File descriptor. *BIDI\_ERROR* when error.

**int bidiGetWriteFD (BidiC \* *pBidiC*)**

Get the file descriptor for writing to the Bi-di Object.  
This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

File descriptor, *BIDI\_ERROR* when error.

**BidiC\* bidiNew (char \* *pName*, int *fdRead*, int *fdWrite*, char \* *pURI*)**

Create a new Bi-di Object.  
This function MUST be supported.

**引数:**

*pName* Name of the Bi-di Plug-in library or Bi-di Plug-in program.  
*fdRead* File descriptor for reading the printer status data from the Bi-di Plug-in module.  
*fdWrite* File descriptor for writing the printer command data to the Bi-di Plug-in module.  
*pURI* Device URI.

**戻り値:**

Pointer to the Bi-di Object, NULL when error.

**int bidiRead (BidiC \* *pBidiC*, void \* *pBuf*, int *nBufBytes*)**

Read the printer status from the Bi-di Object.

This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.  
*pBuf* Pointer to the buffer for storing the printer status data.  
*nBufBytes* Number of bytes of the printer status data buffer.

**戻り値:**

>0 Number of bytes of the printer status data read.  
0 When no data remains.  
*BIDI\_ERROR* When error.  
*BIDI\_EINTR* When accepted signals.(read 0byte)

**int bidiStartJob (BidiC \* *pBidiC*, int *idJob*)**

Start the printing job sequence.

This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.  
*idJob* Job ID.

**戻り値:**

*BIDI\_OK* Normal terminated.  
*BIDI\_ERROR* When error.  
*BIDI\_EPROGRESS* When the job is running.

**int bidiStartRead (BidiC \* *pBidiC*, BidiReadMode *idReadMode*, char \* *pLang*)**

Start the reading sequence.

This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

*idReadMode* Enum of the Bi-di Object reading mode.

*pLang* Pointer to the language string. (ロケール指定文字列と同様の言語+地域+文字コード指定文字列) NULL可

**戻り値:**

*BIDI\_OK* Normal terminated.

*BIDI\_ERROR* When error.

*BIDI\_EINTR* When accepted signals.

**int bidiStartWrite (BidiC \* *pBidiC*)**

Start the writing sequence.

This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

*BIDI\_OK* Normal terminated.

*BIDI\_ERROR* When error.

*BIDI\_EINTR* When accepted signals.(read 0byte)

**int bidiWrite (BidiC \* *pBidiC*, void \* *pBuf*, int *nBufBytes*)**

Write data to the Bi-di Object.

This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

*pBuf* Pointer to the buffer for writing data.

*nBufBytes* Number of bytes of the writing data.

**戻り値:**

>0 Number of bytes of the writing data.

*0* When no data written.  
*BIDI\_ERROR* When error.  
*BIDI\_EINTR* When accepted signals.(write 0byte)

**int createProcess (struct \_pipeFDs \* *fds*, char \* *pName*, int *fdRead*, int *fdWrite*, char \* *pURI*)**  
**[static]**

Create the process type of Plug-in module binded by 2 bi-directinal pipes.

**引数:**

*fds* Pointer of the struct data includes the File descriptors of 2 bi-directinal pipes. (output)  
*pName* Name of the Bi-di Plug-in library or Bi-di Plug-in program.  
*fdRead* File descriptor for reading the printer status data from the Bi-di Plug-in module.  
*fdWrite* File descriptor for writing the printer command data to the Bi-di Plug-in module.  
*pURI* Device URI.

**戻り値:**

ID of the created process, -1 when error.

**int fullRead (int *fd*, char \* *buf*, int *size*)** **[static]**

Read the data from the fd as possible.

**引数:**

*fd* File descriptor.  
*buf* Pointer to the buffer for reading data.  
*size* Number of bytes of the read data buffer.

**戻り値:**

*>0* Number of bytes of the read data.  
*0* When no data remains.  
*-1* When error.

**int fullWrite (int *fd*, char \* *buf*, int *size*)** **[static]**

Write the data to the fd as possible.

**引数:**

*fd* File descriptor.  
*buf* Pointer to the buffer for writing data.



*size* Number of bytes of the write data buffer.

**戻り値:**

$\geq 0$  Number of bytes of the write data.  
-1 When error.

**int getInt (unsigned char \* *buf*) [static]**

Get int value from 4 bytes chars by Big Endian rule.

**引数:**

*buf* Big Endianルールで整列した intを表現する4バイト文字列。

**戻り値:**

変換後のint値

**int readBody (int *fd*, int *cnt*, int *args*[]) [static]**

Read the packet body when the body is array of the int data.

**引数:**

*fd* File descriptor.  
*cnt* Number of the data.  
*args* Array of the int data. (output)

**戻り値:**

Number of bytes of the packet body, -1 when error.

**int readHeader (int *fd*, int \* *cmdID*) [static]**

Read the packet header.

**引数:**

*fd* File descriptor.  
*cmdID* Command ID. (output)

**戻り値:**

Number of bytes of the packet body, -1 when error.

**void setInt (unsigned int *val*, char \* *buf*) [static]**

Set 4 bytes chars from the int value by Big Endian rule.

**引数:**

*val* int value.

*buf* Pointer to the 4 bytes chars.

**戻り値:**

None.

**void sigExit (void) [static]**

Signal handler for longjmp.

**戻り値:**

None.

**int writePacket (int *fd*, int *cmdID*, int *cnt*, int *args*[]) [static]**

Write the packet when the body is array of the int data.

**引数:**

*fd* File descriptor.

*cmdID* Command ID.

*cnt* Number of the data.

*args* Array of the int data.

**戻り値:**

Number of bytes of the write packet, -1 when error.

**int writePacket2 (int *fd*, int *cmdID*, int *arg1*, char \* *arg2*) [static]**

Write the packet when the body is string data.

**引数:**

*fd* File descriptor.  
*cmdID* Command ID.  
*arg1* Length of the string data.  
*arg2* String data.

**戻り値:**

Number of bytes of the write packet, -1 when error.

## bidPlugin.h

2bidPlugin.hHeader file of Bi-di Plug-in caller API.

### データ構造

- struct **BidiC**  
*Control object used in all Bi-di Plug-in APIs.*

### マクロ定義

- #define **BIDI\_OK** 0  
*Return value shows normal return.*
- #define **BIDI\_FALSE** 0  
*Return value shows false value.*
- #define **BIDI\_TRUE** 1  
*Return value shows true value.*
- #define **BIDI\_ERROR** (-1)  
*Return value shows error return.*
- #define **BIDI\_EINTR** (-2)  
*Return value shows signal interruption.*
- #define **BIDI\_EPROGRESS** (-3)  
*Return value shows in processing.*
- #define **BIDI\_ENOJOB** (-4)  
*Return value shows no job.*
- #define **BIDI\_CMD\_NEW** 0x00000001  
*Command ID of the **bidNew()** function.*
- #define **BIDI\_CMD\_DESTROY** 0x00000002  
*Command ID of the **bidDestroy()** function.*
- #define **BIDI\_CMD\_GETCAP** 0x00000003

*Command ID of the **bidGetCap()** function.*

- **#define BIDI\_CMD\_STARTJOB 0x00000011**  
*Command ID of the **bidStartJob()** function.*
- **#define BIDI\_CMD\_ENDJOB 0x00000012**  
*Command ID of the **bidEndJob()** function.*
- **#define BIDI\_CMD\_CANCELJOB 0x00000013**  
*Command ID of the **bidCancelJob()** function.*
- **#define BIDI\_CMD\_STARTREAD 0x00000021**  
*Command ID of the **bidStartRead()** function.*
- **#define BIDI\_CMD\_ENDREAD 0x00000022**  
*Command ID of the **bidEndRead()** function.*
- **#define BIDI\_CMD\_READ 0x00000023**  
*Command ID of the **bidRead()** function.*
- **#define BIDI\_CMD\_STARTWRITE 0x00000031**  
*Command ID of the **bidStartWrite()** function.*
- **#define BIDI\_CMD\_ENDWRITE 0x00000032**  
*Command ID of the **bidEndWrite()** function.*
- **#define BIDI\_CMD\_WRITE 0x00000033**  
*Command ID of the **bidWrite()** function.*
- **#define BIDI\_CMD\_CTRL 0x00000034**  
*Command ID of the **bidCtrl()** function.*
- **#define BIDI\_CMD\_OK 0x80000000**  
*Command ID of response shows normal processing.*
- **#define BIDI\_CMD\_ERROR 0x80000001**  
*Command ID of response shows illegal operation.*
- **#define BIDI\_PLUGIN\_VERSION 0x00010000**  
*Minimum version of Plug-in module which can be accepted.*

## 列举型

- enum **BidiCap** { **BIDI\_CAP\_WRITE** = 1, **BIDI\_CAP\_JOB** = 2, **BIDI\_CAP\_CTRL** = 3 }  
*Enum type used in the **bidGetCap()** function.*
- enum **BidiReadMode** { **BIDI\_READ\_PRT\_MIB\_SUMMARY** = 1 }  
*Enum type shows the read mode of the print status.*
- enum **BidiCxt** { **BIDI\_CXT\_NORMAL**, **BIDI\_CXT\_READIN**, **BIDI\_CXT\_WRITEIN**, **BIDI\_CXT\_JOBIN** }  
*Enum type shows the context status.*

## 関数

- **BidiC** \* **bidNew** (char \*pName, int fdRead, int fdWrite, char \*pURI)  
*Create a new Bi-di Object.*
- void **bidDestroy** (**BidiC** \*pBidiC)  
*Destroy the Bi-di Object.*
- int **bidGetCap** (**BidiC** \*pBidiC, **BidiCap** cap)  
*Get the Bi-di Object capabilities.*
- int **bidStartJob** (**BidiC** \*pBidiC, int idJob)  
*Start the printing job sequence.*
- int **bidEndJob** (**BidiC** \*pBidiC)  
*Stop the printing job sequence.*
- int **bidCancelJob** (**BidiC** \*pBidiC, int idJob)  
*Cancel the printing job sequence.*
- int **bidGetReadFD** (**BidiC** \*pBidiC)  
*Get the file descriptor for reading from the Bi-di Object.*
- int **bidStartRead** (**BidiC** \*pBidiC, **BidiReadMode** idReadMode, char \*pLang)  
*Start the reading sequence.*
- int **bidRead** (**BidiC** \*pBidiC, void \*pBuf, int nBufBytes)  
*Read the printer status from the Bi-di Object.*
- int **bidEndRead** (**BidiC** \*pBidiC)

*Stop the reading sequence.*

- **int bidiGetWriteFD (BidiC \*pBidiC)**  
*Get the file descriptor for writing to the Bi-di Object.*
- **int bidiStartWrite (BidiC \*pBidiC)**  
*Start the writing sequence.*
- **int bidiWrite (BidiC \*pBidiC, void \*pBuf, int nBufBytes)**  
*Write data to the Bi-di Object.*
- **int bidiEndWrite (BidiC \*pBidiC)**  
*Stop the writing sequence.*
- **int bidiCtrl (BidiC \*pBidiC, int idRequest, void \*pData, int nDataBytes)**  
*Control the Bi-di Object.*

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## 説明

Header file of Bi-di Plug-in caller API.

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## 列挙型

### enum BidiCap

Enum type used in the **bidiGetCap()** function.

### 列挙型の値:

**BIDI\_CAP\_WRITE** Supports the **bidiStartWrite()**, **bidiEndWrite()** and the **bidiWrite()** functions.

**BIDI\_CAP\_JOB** Supports the **bidiStartJob()**, **bidiEndJob()** and the **bidiCancelJob()** functions.

**BIDI\_CAP\_CTRL** Supports the **bidiCtrl()** function.

## enum BidiCxt

Enum type shows the context status.

### 列挙型の値:

*BIDI\_CXT\_NORMAL* Context shows normal status.  
*BIDI\_CXT\_READIN* Context shows between the start and the end read.  
*BIDI\_CXT\_WRITEIN* Context shows between the start and the end write.  
*BIDI\_CXT\_JOBIN* Context shows between the start and the end job.

## enum BidiReadMode

Enum type shows the read mode of the print status.

### 列挙型の値:

*BIDI\_READ\_PRT\_MIB\_SUMMARY* 短縮形式のプリンタステータスをreadする。

---

## 関数

### int bidiCancelJob (BidiC \* *pBidiC*, int *idJob*)

Cancel the printing job sequence.

This function is OPTIONAL.

### 引数:

*pBidiC* Pointer to the Bi-di Object.  
*idJob* Job ID.

### 戻り値:

*BIDI\_OK* Normal terminated.  
*BIDI\_ERROR* When error.  
*BIDI\_EPROGRESS* When the job can't stop(the job is running).  
*BIDI\_ENDJOB* When the job is not exist in Bi-di Plug-in module.

### int bidiCtrl (BidiC \* *pBidiC*, int *idRequest*, void \* *pData*, int *nDataBytes*)

Control the Bi-di Object.



This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.  
*idRequest* Request ID.  
*pData* Pointer to the for each request.  
*nDataBytes* Number of bytes of the data.

**戻り値:**

*>0* Number of bytes of the data read.  
*0* When no data remains.  
*BIDI\_ERROR* When error.  
*BIDI\_EINTR* When accepted signals.

**void bidiDestroy (BidiC \* *pBidiC*)**

Destroy the Bi-di Object.

This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

None.

**int bidiEndJob (BidiC \* *pBidiC*)**

Stop the printing job sequence.

This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.

**戻り値:**

*BIDI\_OK* Normal terminated.  
*BIDI\_ERROR* When error.  
*BIDI\_EPROGRESS* When the job can't stop(the job is running).

### **int bidiEndRead (BidiC \* *pBidiC*)**

Stop the reading sequence.

This function MUST be supported.

#### **引数:**

*pBidiC* Pointer to the Bi-di Object.

#### **戻り値:**

*BIDI\_OK* Normal terminated.

*BIDI\_ERROR* When error.

### **int bidiEndWrite (BidiC \* *pBidiC*)**

Stop the writing sequence.

This function is OPTIONAL.

#### **引数:**

*pBidiC* Pointer to the Bi-di Object.

#### **戻り値:**

*BIDI\_OK* Normal terminated.

*BIDI\_ERROR* When error.

### **int bidiGetCap (BidiC \* *pBidiC*, BidiCap *cap*)**

Get the Bi-di Object capabilities.

This function MUST be supported.

#### **引数:**

*pBidiC* Pointer to the Bi-di Object.

*cap* Enum of the Bi-di Object capabilities.

#### **戻り値:**

*BIDI\_TRUE* The condition specified by *cap* is true.

*BIDI\_FALSE* The condition specified by *cap* is false.

*BIDI\_ERROR* When error.

### **int bidiGetReadFD (BidiC \* *pBidiC*)**

Get the file descriptor for reading from the Bi-di Object.

This function MUST be supported.

#### **引数:**

*pBidiC* Pointer to the Bi-di Object.

#### **戻り値:**

File descriptor. BIDI\_ERROR when error.

### **int bidiGetWriteFD (BidiC \* *pBidiC*)**

Get the file descriptor for writing to the Bi-di Object.

This function MUST be supported.

#### **引数:**

*pBidiC* Pointer to the Bi-di Object.

#### **戻り値:**

File descriptor, BIDI\_ERROR when error.

### **BidiC\* bidiNew (char \* *pName*, int *fdRead*, int *fdWrite*, char \* *pURI*)**

Create a new Bi-di Object.

This function MUST be supported.

#### **引数:**

*pName* Name of the Bi-di Plug-in library or Bi-di Plug-in program.

*fdRead* File descriptor for reading the printer status data from the Bi-di Plug-in module.

*fdWrite* File descriptor for writing the printer command data to the Bi-di Plug-in module.

*pURI* Device URI.

#### **戻り値:**

Pointer to the Bi-di Object, NULL when error.

### **int bidiRead (BidiC \* *pBidiC*, void \* *pBuf*, int *nBufBytes*)**

Read the printer status from the Bi-di Object.

This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.  
*pBuf* Pointer to the buffer for storing the printer status data.  
*nBufBytes* Number of bytes of the printer status data buffer.

**戻り値:**

>0 Number of bytes of the printer status data read.  
0 When no data remains.  
*BIDI\_ERROR* When error.  
*BIDI\_EINTR* When accepted signals.(read 0byte)

**int bidiStartJob (BidiC \* *pBidiC*, int *idJob*)**

Start the printing job sequence.

This function is OPTIONAL.

**引数:**

*pBidiC* Pointer to the Bi-di Object.  
*idJob* Job ID.

**戻り値:**

*BIDI\_OK* Normal terminated.  
*BIDI\_ERROR* When error.  
*BIDI\_EPROGRESS* When the job is running.

**int bidiStartRead (BidiC \* *pBidiC*, BidiReadMode *idReadMode*, char \* *pLang*)**

Start the reading sequence.

This function MUST be supported.

**引数:**

*pBidiC* Pointer to the Bi-di Object.  
*idReadMode* Enum of the Bi-di Object reading mode.  
*pLang* Pointer to the language string. (ロケール指定文字列と同様の言語+地域+文字コード指定文字列) NULL可

**戻り値:**

*BIDI\_OK* Normal terminated.  
*BIDI\_ERROR* When error.

*BIDI\_EINTR* When accepted signals.

### **int bidiStartWrite (BidiC \* *pBidiC*)**

Start the writing sequence.

This function is OPTIONAL.

#### **引数:**

*pBidiC* Pointer to the Bi-di Object.

#### **戻り値:**

*BIDI\_OK* Normal terminated.

*BIDI\_ERROR* When error.

*BIDI\_EINTR* When accepted signals.(read 0byte)

### **int bidiWrite (BidiC \* *pBidiC*, void \* *pBuf*, int *nBufBytes*)**

Write data to the Bi-di Object.

This function is OPTIONAL.

#### **引数:**

*pBidiC* Pointer to the Bi-di Object.

*pBuf* Pointer to the buffer for writing data.

*nBufBytes* Number of bytes of the writing data.

#### **戻り値:**

*>0* Number of bytes of the writing data.

*0* When no data written.

*BIDI\_ERROR* When error.

*BIDI\_EINTR* When accepted signals.(write 0byte)

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