

bidibackend Reference Manual

1.0.1

Generated by Doxygen 1.3.1

Thu Feb 26 14:26:07 2004

Contents

1	bidiBackend API Document	1
2	bidibackend Module Index	3
2.1	bidibackend Modules	3
3	bidibackend Compound Index	5
3.1	bidibackend Compound List	5
4	bidibackend File Index	7
4.1	bidibackend File List	7
5	bidibackend Module Documentation	9
5.1	Parallel/USB CUPS backend.	9
5.2	XML parser library for Bidi format.	10
5.3	Test programs.	11
6	bidibackend Class Documentation	13
6.1	_EntryPrtAlert Struct Reference	13
6.2	_EntryPrtMarkerSupplies Struct Reference	15
6.3	_EntryPrtStatus Struct Reference	17
6.4	_infoCUPS Struct Reference	18
6.5	BidiWrapperObj Struct Reference	19
6.6	Entry Struct Reference	22
6.7	EntryPrtAlert Struct Reference	24
6.8	EntryPrtLocalization Struct Reference	25
6.9	EntryPrtMarkerSupplies Struct Reference	26
6.10	enumList Struct Reference	27
6.11	infoCUPS Struct Reference	28
6.12	Parser Struct Reference	29

7 bidibackend File Documentation	31
7.1 backendCommon.c File Reference	31
7.2 backendCommon.h File Reference	34
7.3 backendWrapperBidi.c File Reference	42
7.4 backendWriteData.c File Reference	47
7.5 bidiEntry.c File Reference	50
7.6 bidiEntry.h File Reference	52
7.7 bidiEntryCUPS.c File Reference	55
7.8 bidiEntryCUPS.h File Reference	57
7.9 bidiparallel.c File Reference	59
7.10 bidiParser.c File Reference	62
7.11 bidiParser.h File Reference	65
7.12 bidiTypes.h File Reference	70
7.13 bidiusb.c File Reference	72
7.14 checkLocale.c File Reference	76
7.15 checkPlugin.c File Reference	77
7.16 Doxyheader File Reference	79
7.17 entryPrtAlert.c File Reference	80
7.18 entryPrtAlert.h File Reference	82
7.19 entryPrtLocalization.c File Reference	87
7.20 entryPrtLocalization.h File Reference	89
7.21 entryPrtMarkerSupplies.c File Reference	91
7.22 entryPrtMarkerSupplies.h File Reference	93
7.23 entryPrtStatus.c File Reference	97
7.24 entryPrtStatus.h File Reference	99
7.25 parserPrtAlert.c File Reference	101
7.26 parserPrtLocalization.c File Reference	103
7.27 parserPrtMarkerSupplies.c File Reference	105
7.28 parserPrtStatus.c File Reference	107
7.29 testformat.c File Reference	108
7.30 testplugin.c File Reference	110

Chapter 1

bidiBackend API Document

This package contains two modules.

bidibackend - CUPS backend programs which support Bidi status read.

libbidiformat - XML parse library which is support Bidi status format(like Printer-MIB).

Author:

Toshihiro Yamagishi<toshihiro@turbolinux.co.jp>

Date

2004/02/18 20:49:03

Chapter 2

bidibackend Module Index

2.1 bidibackend Modules

Here is a list of all modules:

Parallel/USB CUPS backend.	9
XML parser library for Bidi format.	10
Test programs.	11

Chapter 3

bidibackend Compound Index

3.1 bidibackend Compound List

Here are the classes, structs, unions and interfaces with brief descriptions:

_EntryPrtAlert	13
_EntryPrtMarkerSupplies	15
_EntryPrtStatus	17
_infoCUPS	18
BidiWrapperObj (Wrapper structure containing bidiC,bidi module name,XML parser..)	19
Entry (The top structure containing the parsed printer status)	22
EntryPrtAlert (The structure that containing the PrtAlertEntry messages)	24
EntryPrtLocalization (The structure that containing the PrtLocalizatonEntry messages)	25
EntryPrtMarkerSupplies (The structure that containing the PrtMarkerSuppliesEntry messages)	26
enumList	27
infoCUPS (The structure containing the IPP messages)	28
Parser (Structure for parser which parse printer status written in XML format)	29

Chapter 4

bidibackend File Index

4.1 bidibackend File List

Here is a list of all files with brief descriptions:

backendCommon.c (Definition of functions used by backend and Bidi object)	31
backendCommon.h (Definition of functions used USB and parallel backend)	34
backendWrapperBidi.c (Definition of wrapper object for Bidi)	42
backendWriteData.c (Functions for outputting print data to printer,fetching printer status from bidi module)	47
bidiEntry.c (Functions for Entry object)	50
bidiEntry.h (Type definitions for Entry object)	52
bidiEntryCUPS.c (Functions for infoCUPS object)	55
bidiEntryCUPS.h (Type definitions for infoCUPS object)	57
bidiparallel.c (Parallel port backend with bidi status read for the Common UNIX Printing System (CUPS))	59
bidiParser.c (Functions for Parser object)	62
bidiParser.h (Type definitions for Parser object)	65
bidiTypes.h (Type definitions of the variable used by Printer-MIB)	70
bidiusb.c (USB port backend with bidi status read for the Common UNIX Printing System (CUPS))	72
checkLocale.c	76
checkPlugin.c (Test program for communicating with Bidi module)	77
Doxyheader	79
entryPrtAlert.c (Functions of EntryPrtAlert object)	80
entryPrtAlert.h (Type definitions of EntryPrtAlert object)	82
entryPrtLocalization.c (Functions of EntryPrtLocalization object)	87
entryPrtLocalization.h (Type definitons of EntryPrtLocalization object)	89
entryPrtMarkerSupplies.c (Functions of EntryPrtMarkerSupplies object)	91
entryPrtMarkerSupplies.h (Type definitions for EntryPrtMarkerSupplies object)	93
entryPrtStatus.c (Not in use!!)	97
entryPrtStatus.h (Not in use!!)	99
parserPrtAlert.c (Parse PrtAlertEntry)	101
parserPrtLocalization.c (Parse PrtLocalizationEntry)	103
parserPrtMarkerSupplies.c (Parse PrtMarkerSuppliesEntry)	105
parserPrtStatus.c (Not in use!!)	107
testformat.c (Test program to check bidiformat)	108
testplugin.c	110

Chapter 5

bidibackend Module Documentation

5.1 Parallel/USB CUPS backend.

Files

- file [backendCommon.c](#)
definition of functions used by backend and Bidi object.
- file [backendWrapperBidi.c](#)
definition of wrapper object for Bidi.
- file [backendWriteData.c](#)
Functions for outputting print data to printer, fetching printer status from bidi module.
- file [bidiparallel.c](#)
Parallel port backend with bidi status read for the Common UNIX Printing System (CUPS).
- file [bidiusb.c](#)
USB port backend with bidi status read for the Common UNIX Printing System (CUPS).

5.2 XML parser library for Bidi format.

Files

- file [bidiEntry.c](#)

Functions for [Entry](#) object.

- file [bidiEntryCUPS.c](#)

Functions for [infoCUPS](#) object.

- file [bidiParser.c](#)

Functions for [Parser](#) object.

- file [entryPrtAlert.c](#)

functions of [EntryPrtAlert](#) object.

- file [entryPrtLocalization.c](#)

functions of [EntryPrtLocalization](#) object.

- file [entryPrtMarkerSupplies.c](#)

functions of [EntryPrtMarkerSupplies](#) object.

- file [entryPrtStatus.c](#)

not in use!!

- file [parserPrtAlert.c](#)

parse PrtAlertEntry.

- file [parserPrtLocalization.c](#)

parse PrtLocalizationEntry.

- file [parserPrtMarkerSupplies.c](#)

parse PrtMarkerSuppliesEntry.

- file [parserPrtStatus.c](#)

not in use!!

5.3 Test programs.

Files

- file [checkPlugin.c](#)

test program for communicating with Bidi module.

- file [testformat.c](#)

test program to check bidiformat.

Chapter 6

bidibackend Class Documentation

6.1 _EntryPrtAlert Struct Reference

```
#include <entryPrtAlert.h>
```

Collaboration diagram for _EntryPrtAlert:



Public Attributes

- `_EntryPrtAlert * next`
link to self
- `enumPrtAltSevLevel PrtAltSevLevel`
PrtAlertSeverityLevel enumeration.
- `enumPrtAltGrp PrtAltGrp`
PrtAlertGroup enumeration.
- `enumPrtAltGrpIndex PrtAltGrpIndex`
PrtAlertGroupIndex enumeration.
- `enumPrtAltCode PrtAltCode`
PrtAlertCode enumeration.
- `OSTRING * PrtAltDesc`
PrtAlertDescription enumeration.

6.1.1 Member Data Documentation

6.1.1.1 struct `_EntryPrtAlert*` `_EntryPrtAlert::next`

link to self

6.1.1.2 enum `PrtAltCode` `_EntryPrtAlert::PrtAltCode`

PrtAlertCode enumeration.

6.1.1.3 OSTRING* `_EntryPrtAlert::PrtAltDesc`

PrtAlertDescription enumeration.

6.1.1.4 enum `PrtAltGrp` `_EntryPrtAlert::PrtAltGrp`

PrtAlertGroup enumeration.

6.1.1.5 enum `PrtAltGrpIndex` `_EntryPrtAlert::PrtAltGrpIndex`

PrtAlertGroupIndex enumeration.

6.1.1.6 enum `PrtAltSevLevel` `_EntryPrtAlert::PrtAltSevLevel`

PrtAlertSeverityLevel enumeration.

The documentation for this struct was generated from the following file:

- `entryPrtAlert.h`

6.2 _EntryPrtMarkerSupplies Struct Reference

```
#include <entryPrtMarkerSupplies.h>
```

Collaboration diagram for _EntryPrtMarkerSupplies:



Public Attributes

- `_EntryPrtMarkerSupplies * next`
link to self
- `enumPrtMarkSupIndex PrtMarkSupIndex`
PrtMarkerSuppliesIndex enumeration.
- `enumPrtMarkSupType PrtMarkSupType`
PrtMarkerSuppliesType enumeration.
- `OSTRING * PrtMarkSupDesc`
PrtMarkerSuppliesDescription message.
- `enumPrtMarkSupSupUnit PrtMarkSupSupUnit`
PrtMarkerSuppliesSupplyUnit enumeration.
- `INT32 PrtMarkSupMaxCap`
PrtMarkerSuppliesMaxCapacity value.
- `INT32 PrtMarkSupLevel`
PrtMarkerSuppliesLevel value.

6.2.1 Member Data Documentation

6.2.1.1 struct _EntryPrtMarkerSupplies* `_EntryPrtMarkerSupplies::next`

link to self

6.2.1.2 OSTRING* `_EntryPrtMarkerSupplies::PrtMarkSupDesc`

PrtMarkerSuppliesDescription message.

6.2.1.3 enumPrtMarkSupIndex _EntryPrtMarkerSupplies::PrtMarkSupIndex

PrtMarkerSuppliesIndex enumeration.

6.2.1.4 INT32 _EntryPrtMarkerSupplies::PrtMarkSupLevel

PrtMarkerSuppliesLevel value.

6.2.1.5 INT32 _EntryPrtMarkerSupplies::PrtMarkSupMaxCap

PrtMarkerSuppliesMaxCapacity value.

6.2.1.6 enumPrtMarkSupSupUnit _EntryPrtMarkerSupplies::PrtMarkSupSupUnit

PrtMarkerSuppliesSupplyUnit enumeration.

6.2.1.7 enumPrtMarkSupType _EntryPrtMarkerSupplies::PrtMarkSupType

PrtMarkerSuppliesType enumeration.

The documentation for this struct was generated from the following file:

- [entryPrtMarkerSupplies.h](#)

6.3 _EntryPrtStatus Struct Reference

```
#include <entryPrtStatus.h>
```

Collaboration diagram for _EntryPrtStatus:



Public Attributes

- `_EntryPrtStatus * next`
- `enumPrtStatusIndex PrtStatIndex`
- `enumPrtStatusType PrtStatType`
- `OSTRING * PrtStatDesc`

6.3.1 Member Data Documentation

6.3.1.1 struct `_EntryPrtStatus*` `_EntryPrtStatus::next`

6.3.1.2 `OSTRING* _EntryPrtStatus::PrtStatDesc`

6.3.1.3 `enumPrtStatusIndex _EntryPrtStatus::PrtStatIndex`

6.3.1.4 `enumPrtStatusType _EntryPrtStatus::PrtStatType`

The documentation for this struct was generated from the following file:

- `entryPrtStatus.h`

6.4 _infoCUPS Struct Reference

```
#include <bidiEntryCUPS.h>
```

Collaboration diagram for _infoCUPS:



Public Attributes

- `_infoCUPS * next`
link to self
- `char state_reason [MESG_SIZE]`
state-reason messages
- `char state_messages [MESG_SIZE]`
state-messages messages

6.4.1 Member Data Documentation

6.4.1.1 struct _infoCUPS* _infoCUPS::next

link to self

6.4.1.2 char _infoCUPS::state_messages[MESG_SIZE]

state-messages messages

6.4.1.3 char _infoCUPS::state_reason[MESG_SIZE]

state-reason messages

The documentation for this struct was generated from the following file:

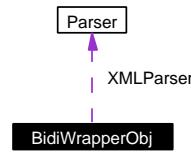
- `bidiEntryCUPS.h`

6.5 BidiWrapperObj Struct Reference

Wrapper structure containing bidiC,bidi module name,XML parser...

```
#include <backendCommon.h>
```

Collaboration diagram for BidiWrapperObj:



Public Attributes

- BidiC * **bidiC**
Pointer to the real Bidi object.
- char * **bidiLang**
Pointer to the locale string.
- int **bidiReadFD**
File descriptor of Bidi object for read.
- char * **bidiModuleName**
Pointer to the string of Bidi module name.
- int **bidiReadInterval**
Number of interval for read status.
- int **bidiCapJob**
Whether Bidi object supports bidiStartJob(),bidiEndJob(),bidiCancelJob().
- int **bidiDoJob**
Whether it is under doing Job.
- int **bidiEprogress**
Whether it is under eprogress.
- int **bidiReadStatus**
Whether it is under read status from bidi object.
- int **bidiJobID**
Job ID.

- `char * XMLinfo`
Pointer to the read status from bidi object.
- `size_t infoSize`
Number of bytes of the size for status.
- `Parser * XMLParser`
Pointer to the XML parser for parse bidi status.

6.5.1 Detailed Description

Wrapper structure containing bidiC,bidi module name,XML parser...

6.5.2 Member Data Documentation

6.5.2.1 `BidiC* BidiWrapperObj::bidiC`

Pointer to the real Bidi object.

6.5.2.2 `int BidiWrapperObj::bidiCapJob`

Whether Bidi object supports bidiStartJob(),bidiEndJob(),bidiCancelJob().

6.5.2.3 `int BidiWrapperObj::bidiDoJob`

Whether it is under doing Job.

6.5.2.4 `int BidiWrapperObj::bidiEprogress`

Whether it is under eprogress.

6.5.2.5 `int BidiWrapperObj::bidiJobID`

Job ID.

6.5.2.6 char* BidiWrapperObj::bidiLang

Pointer to the locale string.

6.5.2.7 char* BidiWrapperObj::bidiModuleName

Pointer to the string of Bidi module name.

6.5.2.8 int BidiWrapperObj::bidiReadFD

File descriptor of Bidi object for read.

6.5.2.9 int BidiWrapperObj::bidiReadInterval

Number of interval for read status.

6.5.2.10 int BidiWrapperObj::bidiReadStatus

Whether it is under read status from bidi object.

6.5.2.11 size_t BidiWrapperObj::infoSize

Number of bytes of the size for status.

6.5.2.12 char* BidiWrapperObj::XMLInfo

Pointer to the read status from bidi object.

6.5.2.13 Parser* BidiWrapperObj::XMLParser

Pointer to the XML parser for parse bidi status.

The documentation for this struct was generated from the following file:

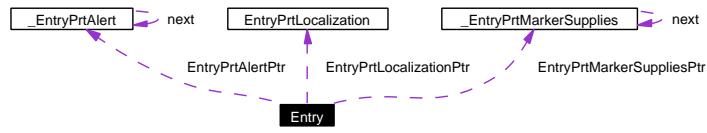
- [backendCommon.h](#)

6.6 Entry Struct Reference

The top structure containing the parsed printer status.

```
#include <bidiEntry.h>
```

Collaboration diagram for Entry:



Public Attributes

- `EntryPrtLocalization * EntryPrtLocalizationPtr`
Pointer to [EntryPrtLocalization](#).
- `EntryPrtMarkerSupplies * EntryPrtMarkerSuppliesPtr`
Pointer to [EntryPrtMarkerSupplies](#).
- `EntryPrtAlert * EntryPrtAlertPtr`
Pointer to [EntryPrtAlert](#).

6.6.1 Detailed Description

The top structure containing the parsed printer status.

6.6.2 Member Data Documentation

6.6.2.1 `EntryPrtAlert* Entry::EntryPrtAlertPtr`

Pointer to [EntryPrtAlert](#).

6.6.2.2 `EntryPrtLocalization* Entry::EntryPrtLocalizationPtr`

Pointer to [EntryPrtLocalization](#).

6.6.2.3 `EntryPrtMarkerSupplies*` `Entry::EntryPrtMarkerSuppliesPtr`

Pointer to `EntryPrtMarkerSupplies`.

The documentation for this struct was generated from the following file:

- `bidiEntry.h`

6.7 EntryPrtAlert Struct Reference

The structure that containing the PrtAlertEntry messages.

```
#include <entryPrtAlert.h>
```

6.7.1 Detailed Description

The structure that containing the PrtAlertEntry messages.

The documentation for this struct was generated from the following file:

- [entryPrtAlert.h](#)

6.8 EntryPrtLocalization Struct Reference

The structure that containing the PrtLocalizationEntry messages.

```
#include <entryPrtLocalization.h>
```

Public Attributes

- **OSTRING * PrtLocLang**
PrtLocalizationLanguage message.
- **CCHARSET PrtLocCharSet**
PrtLocalizationCharacterSet message.

6.8.1 Detailed Description

The structure that containing the PrtLocalizationEntry messages.

6.8.2 Member Data Documentation

6.8.2.1 CCHARSET EntryPrtLocalization::PrtLocCharSet

PrtLocalizationCharacterSet message.

6.8.2.2 OSTRING* EntryPrtLocalization::PrtLocLang

PrtLocalizationLanguage message.

The documentation for this struct was generated from the following file:

- [entryPrtLocalization.h](#)

6.9 EntryPrtMarkerSupplies Struct Reference

The structure that containing the PrtMarkerSuppliesEntry messages.

```
#include <entryPrtMarkerSupplies.h>
```

6.9.1 Detailed Description

The structure that containing the PrtMarkerSuppliesEntry messages.

The documentation for this struct was generated from the following file:

- [entryPrtMarkerSupplies.h](#)

6.10 enumList Struct Reference

```
#include <bidiEntry.h>
```

Public Attributes

- int [value](#)
- const char * [name](#)

6.10.1 Member Data Documentation

6.10.1.1 const char* [enumList::name](#)

6.10.1.2 int [enumList::value](#)

The documentation for this struct was generated from the following file:

- [bidiEntry.h](#)

6.11 infoCUPS Struct Reference

The structure containing the IPP messages.

```
#include <bidiEntryCUPS.h>
```

6.11.1 Detailed Description

The structure containing the IPP messages.

The documentation for this struct was generated from the following file:

- [bidiEntryCUPS.h](#)

6.12 Parser Struct Reference

Structure for parser which parse printer status written in XML format.

```
#include <bidiParser.h>
```

Public Attributes

- `xmlTextReaderPtr reader`

libxml2 text reader

- `State state`

In which entry is parser.

6.12.1 Detailed Description

Structure for parser which parse printer status written in XML format.

6.12.2 Member Data Documentation

6.12.2.1 `xmlTextReaderPtr Parser::reader`

`libxml2 text reader`

6.12.2.2 `State Parser::state`

In which entry is parser.

The documentation for this struct was generated from the following file:

- `bidiParser.h`

Chapter 7

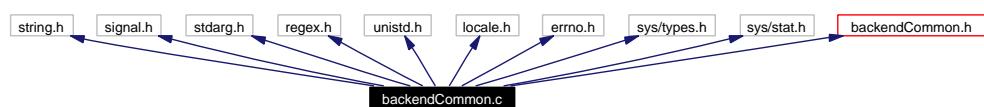
bidibackend File Documentation

7.1 backendCommon.c File Reference

definition of functions used by backend and Bidi object.

```
#include <string.h>
#include <signal.h>
#include <stdarg.h>
#include <regex.h>
#include <unistd.h>
#include <locale.h>
#include <errno.h>
#include <sys/types.h>
#include <sys/stat.h>
#include "backendCommon.h"
```

Include dependency graph for backendCommon.c:



Functions

- void `debugPrint` (char *msg,...)
Function for debug print.
- char * `getLang` (void)
Function for get program's current locale+UTF-8.

- int [fetchPPDEntry](#) (const char *ppdname, BidiWrapperObj *obj)
Get the value from PPD file.
- int [writeXMLdata](#) (BidiWrapperObj *bidiobj, const char *printer_name)
Function for write status raw data which is not processed by XML parser.
- [infoCUPS * parseXML](#) (BidiWrapperObj *bidiobj)
Function for convert XML status data into IPP data.

7.1.1 Detailed Description

definition of functions used by backend and Bidi object.

This file defines some common functinos which is used by any backend programs.

DatDate

2004/02/24 10:00:03

VersRevision

1.20

Copyright (C) 2004 by Turbolinux,Inc.

7.1.2 Function Documentation

7.1.2.1 void [debugPrint](#) (char * *msg*, ...)

Function for debug print.

Parameters:

msg is print message.

Returns:

None.

7.1.2.2 int [fetchPPDEntry](#) (const char * *ppdname*, [BidiWrapperObj](#) * *obj*)

Get the value from PPD file.

Parameters:

ppdname filename of PPD file.

obj Pointer to the [BidiWrapperObj](#).

Return values:

- 1 Fail.
- 0 Success.

7.1.2.3 char* getLang (void)

Function for get program's current locale+UTF-8.

Especially ,in case 'ja' Japanese enviroment return the "ja_JP.UTF-8".

Returns:

current LC_MESSAGES locale.

7.1.2.4 infoCUPS* parseXML ([BidiWrapperObj](#) * *bidiobj*)

Function for convert XML status data into IPP data.

Parameters:

bidiobj Pointer to BidiWrapperObject.

Returns:

Pointer to [infoCUPS](#) object.

7.1.2.5 int writeXMLdata ([BidiWrapperObj](#) * *bidiobj*, const char * *printer.name*)

Function for write status raw data which is not processed by XML parser.

Parameters:

bidiobj Pointer to BidiWrapperObject.

printer.name Pointer to file name string to save.

Return values:

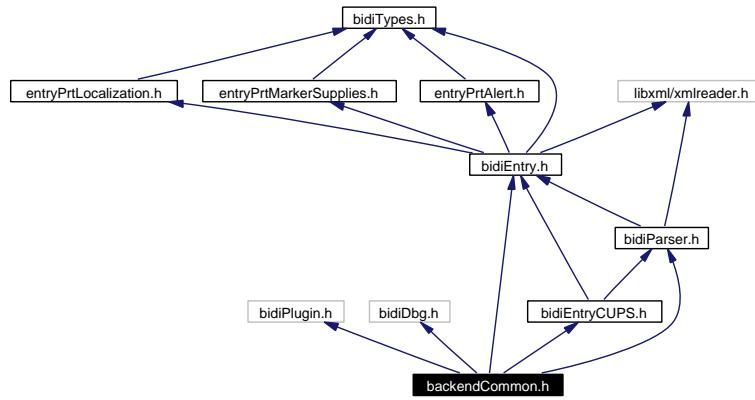
- < 0 Fail
- 0 Success

7.2 backendCommon.h File Reference

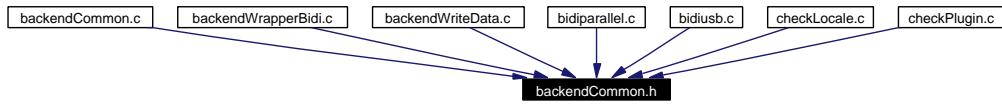
definition of functions used USB and parallel backend.

```
#include <bidiPlugin.h>
#include <bidiDbg.h>
#include <bidiEntry.h>
#include <bidiParser.h>
#include <bidiEntryCUPS.h>
```

Include dependency graph for backendCommon.h:



This graph shows which files directly or indirectly include this file:



Compounds

- struct [BidiWrapperObj](#)

Wrapper structure containing bidiC,bidi module name,XML parser...

Defines

- #define [PPD_PLUGIN](#) “*opbidiPlugin”
Bidi-Plugin module name defined in PPD.
- #define [PPD_READ_INTERVAL](#) “*opbidiReadInterval”

Bidi-Plugin interval time defined in PPD.

- #define **BIDL_TIMEOUT** 3
Second of timeout.
- #define **XML_DIR** ”/var/log/opbidi/printer/”
directory name where raw XML data is saved .
- #define **STATE_BUF** 1024
size of status buffer
- #define **STATE_MESG_SIZE** 1024
size of message buffer
- #define **DEBUGPRINT**(msg)
function for debug print

Functions

- void **debugPrint** (char *msg,...)
Function for debug print.
- void **signal_handler** (int)
Function for signal handler.
- void **initSignal** (void)
Initialize signal functions.
- int **fetchPPDEntry** (const char *, BidiWrapperObj *)
Get the value from PPD file.
- char * **getLang** (void)
Function for get program's current locale+UTF-8.
- **infoCUPS** * **parseXML** (BidiWrapperObj *)
Function for convert XML status data into IPP data.
- int **writeXMLdata** (BidiWrapperObj *, const char *)
Function for write status raw data which is not processed by XML parser.
- BidiWrapperObj * **newBidiObj** (void)
*Constructor that creates an empty **BidiWrapperObj**.*
- BidiWrapperObj * **initBidi** (const char *, int, const char *)
*Function for initialize **BidiWrapperObj**.*
- void * **deleteBidiObj** (BidiWrapperObj *)
*Destructor that delete the **BidiWrapperObj**.*

- void **deleteBidi** (BidiWrapperObj *)

Wrapper function of bidiDestroy.
- int **startBidiJob** (BidiWrapperObj *, int)

Wrapper function of bidiStartJob.
- int **endBidiJob** (BidiWrapperObj *)

Wrapper function of bidiEndJob.
- int **endBidiRead** (BidiWrapperObj *)

Wrapper function of bidiEndRead.
- int **startBidiRead** (BidiWrapperObj *, int)

Wrapper function of bidiStartRead.
- int **readBidiStatus** (BidiWrapperObj *)

Wrapper function of bidiReadStatus.

7.2.1 Detailed Description

definition of functions used USB and parallel backend.

DatDate

2004/02/24 08:56:36

VersRevision

1.11

Copyright (C) 2004 by Turbolinux,Inc.

7.2.2 Define Documentation

7.2.2.1 #define BIDL_TIMEOUT 3

Second of timeout.

7.2.2.2 #define DEBUGPRINT(msg)

function for debug print

7.2.2.3 #define PPD_PLUGIN "*opbidiPlugin"

Bidi-Plugin module name defined in PPD.

7.2.2.4 #define PPD_READ_INTERVAL "*opbidiReadInterval"

Bidi-Plugin interval time defined in PPD.

7.2.2.5 #define STATE_BUF 1024

size of status buffer

7.2.2.6 #define STATE_MESG_SIZE 1024

size of message buffer

7.2.2.7 #define XML_DIR "/var/log/opbidi/printer/"

directory name where raw XML data is saved .

7.2.3 Function Documentation

7.2.3.1 void debugPrint (char * msg, ...)

Function for debug print.

Parameters:

msg is print message.

Returns:

None.

7.2.3.2 void deleteBidi ([BidiWrapperObj](#) * *bidiobj*)

Wrapper function of bidiDestroy.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

Returns:

None.

7.2.3.3 void * deleteBidiObj (**BidiWrapperObj** * *bidiobj*)

Destructor that delete the **BidiWrapperObj**.

Parameters:

bidiobj Pointer to **BidiWrapperObj**.

Returns:

None.

7.2.3.4 int endBidiJob (**BidiWrapperObj** * *bidiobj*)

Wrapper function of bidiEndJob.

Parameters:

bidiobj Pointer to **BidiWrapperObj**.

Return values:

< 0 Fail.

> 0 Success.

7.2.3.5 int endBidiRead (**BidiWrapperObj** * *bidiobj*)

Wrapper function of bidiEndRead.

Parameters:

bidiobj Pointer to **BidiWrapperObj**.

Return values:

< 0 Fail.

> 0 Success.

7.2.3.6 int fetchPPDEntry (const char * *ppdname*, **BidiWrapperObj** * *obj*)

Get the value from PPD file.

Parameters:

ppdname filename of PPD file.

obj Pointer to the **BidiWrapperObj**.

Return values:

-1 Fail.

0 Success.

7.2.3.7 `char* getLang (void)`

Function for get program's current locale+UTF-8.

Especially ,in case 'ja' Japanese enviroment return the "ja_JP.UTF-8".

Returns:

current LC_MESSAGES locale.

7.2.3.8 `BidiWrapperObj * initBidi (const char * PPDfile, int FD, const char * bidiLang)`

Function for initalize [BidiWrapperObj](#).

Parameters:

PPDfile File path to the PPD file.

FD File descriptor of printer device.

bidiLang Pointer to the language string.

Returns:

Pointer to the new [BidiWrapperObj](#).

7.2.3.9 `void initSignal (void)`

Initialize signal functions.

7.2.3.10 `BidiWrapperObj * newBidiObj (void)`

Constructor that creates an empty [BidiWrapperObj](#).

Returns:

Pointer to the initialed [BidiWrapperObj](#).

7.2.3.11 `infoCUPS* parseXML (BidiWrapperObj * bidiobj)`

Function for convert XML status data into IPP data.

Parameters:

bidiobj Pointer to BidiWrapperObject.

Returns:

Pointer to [infoCUPS](#) object.

7.2.3.12 int readBidiStatus ([BidiWrapperObj](#) * *bidiobj*)

Wrapper function of bidiReadStatus.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

Return values:

< 0 Fail.

> 0 Success.

7.2.3.13 void signal_handler (int *sig*)

Function for signal handler.

7.2.3.14 int startBidiJob ([BidiWrapperObj](#) * *bidiobj*, int *jobid*)

Wrapper function of bidiStartJob.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

jobid Id number of Job.

Return values:

< 0 Fail.

> 0 Success.

7.2.3.15 int startBidiRead ([BidiWrapperObj](#) * *bidiobj*, int *bidiReadMode*)

Wrapper function of bidiStartRead.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

bidiReadMode Enum of the Bidi reading mode.

Return values:

< 0 Fail.

> 0 Success.

7.2.3.16 int writeXMLdata ([BidiWrapperObj](#) * *bidiobj*, const char * *printer_name*)

Function for write status raw data which is not processed by XML parser.

Parameters:

bidiobj Pointer to BidiWrapperObject.

printer_name Pointer to file name string to save.

Return values:

< 0 Fail

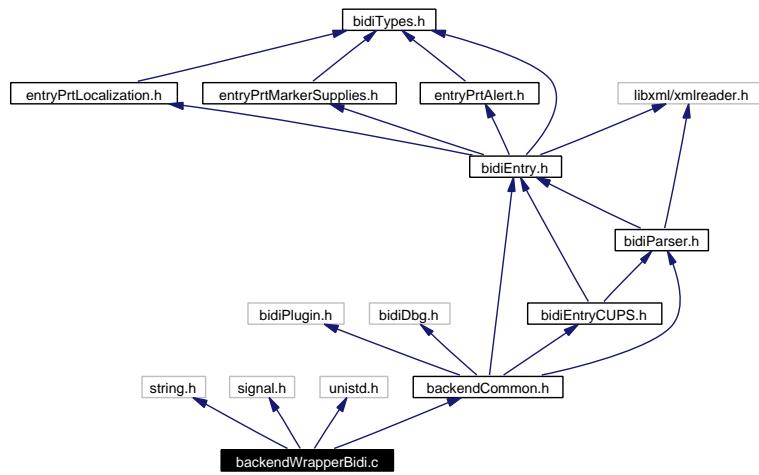
0 Success

7.3 backendWrapperBidi.c File Reference

definition of wrapper object for Bidi.

```
#include <string.h>
#include <signal.h>
#include <unistd.h>
#include "backendCommon.h"
```

Include dependency graph for backendWrapperBidi.c:



Functions

- void [signal_handler](#) (int)
Function for signal handler.
- void [initSignal](#) (void)
Initialize signal functions.
- BidiWrapperObj * [newBidiObj](#) (void)
Constructor that creates an empty [BidiWrapperObj](#).
- void * [deleteBidiObj](#) (BidiWrapperObj *)
Destructor that delete the [BidiWrapperObj](#).
- BidiWrapperObj * [initBidi](#) (const char *, int, const char *)
Function for initialize [BidiWrapperObj](#).
- void [deleteBidi](#) (BidiWrapperObj *)
Wrapper function of [bidiDestroy](#).

- int **startBidiJob** (BidiWrapperObj *, int)
Wrapper function of bidiStartJob.
- int **endBidiJob** (BidiWrapperObj *)
Wrapper function of bidiEndJob.
- int **endBidiRead** (BidiWrapperObj *)
Wrapper function of bidiEndRead.
- int **startBidiRead** (BidiWrapperObj *, int)
Wrapper function of bidiStartRead.
- int **readBidiStatus** (BidiWrapperObj *)
Wrapper function of bidiReadStatus.
- int **cancelBidiJob** (BidiWrapperObj *)
Wrapper function of bidiCancelJob.

7.3.1 Detailed Description

definition of wrapper object for Bidi.

This file defines **BidiWrapperObj** which is used by any backend program. **BidiWrapperObj** is an object containing bidiC,bidi module name,XML parser...

DatDate

2004/02/24 10:00:04

VersRevision

1.9

Copyright (C) 2004 by Turbolinux,Inc.

7.3.2 Function Documentation

7.3.2.1 int cancelBidiJob (**BidiWrapperObj** * *bidiobj*)

Wrapper function of bidiCancelJob.

Parameters:

bidiobj Pointer to **BidiWrapperObj**.

Return values:

< 0 Fail.

> 0 Success.

7.3.2.2 void deleteBidi ([BidiWrapperObj](#) * *bidiobj*)

Wrapper function of bidiDestroy.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

Returns:

None.

7.3.2.3 void* deleteBidiObj ([BidiWrapperObj](#) * *bidiobj*)

Destructor that delete the [BidiWrapperObj](#).

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

Returns:

None.

7.3.2.4 int endBidiJob ([BidiWrapperObj](#) * *bidiobj*)

Wrapper function of bidiEndJob.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

Return values:

< 0 Fail.

> 0 Success.

7.3.2.5 int endBidiRead ([BidiWrapperObj](#) * *bidiobj*)

Wrapper function of bidiEndRead.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

Return values:

< 0 Fail.

> 0 Success.

7.3.2.6 BidiWrapperObj* initBidi (const char * *PPDfile*, int *FD*, const char * *bidiLang*)

Function for initialze [BidiWrapperObj](#).

Parameters:

- PPDfile* File path to the PPD file.
- FD* File descriptor of printer device.
- bidiLang* Pointer to the language string.

Returns:

Pointer to the new [BidiWrapperObj](#).

7.3.2.7 void initSignal (void)

Initialize signal functions.

7.3.2.8 BidiWrapperObj* newBidiObj (void)

Constructor that creates an empty [BidiWrapperObj](#).

Returns:

Pointer to the initialized [BidiWrapperObj](#).

7.3.2.9 int readBidiStatus ([BidiWrapperObj](#) * *bidiobj*)

Wrapper function of bidiReadStatus.

Parameters:

- bidiobj* Pointer to [BidiWrapperObj](#).

Return values:

- < 0 Fail.
- > 0 Success.

7.3.2.10 void signal_handler (int *sig*)

Function for signal handler.

7.3.2.11 int startBidiJob ([BidiWrapperObj](#) * *bidiobj*, int *jobid*)

Wrapper function of bidiStartJob.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

jobid Id number of Job.

Return values:

< 0 Fail.

> 0 Success.

7.3.2.12 int startBidiRead ([BidiWrapperObj](#) * *bidiobj*, int *bidiReadMode*)

Wrapper function of bidiStartRead.

Parameters:

bidiobj Pointer to [BidiWrapperObj](#).

bidiReadMode Enum of the Bidi reading mode.

Return values:

< 0 Fail.

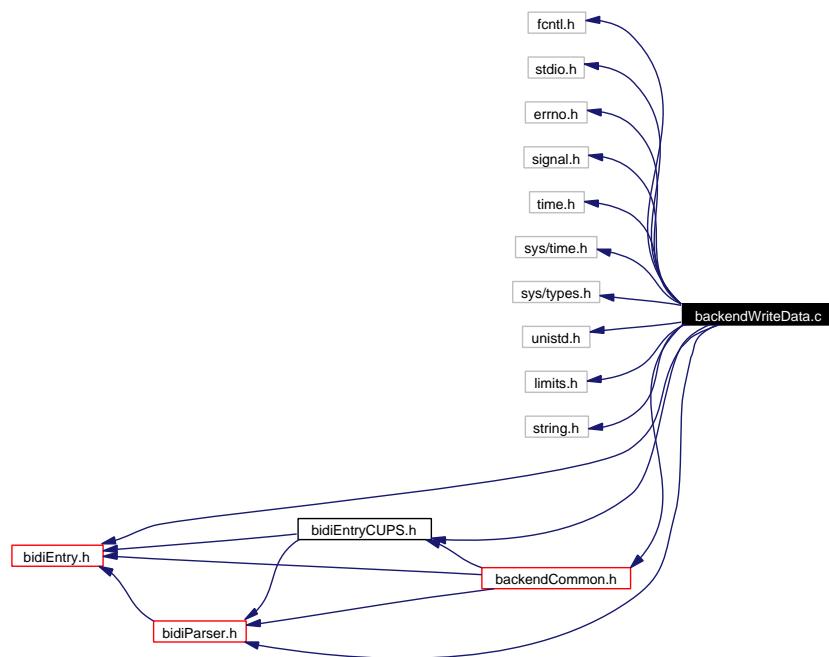
> 0 Success.

7.4 backendWriteData.c File Reference

Functions for outputting print data to printer, fetching printer status from bidi module.

```
#include <fcntl.h>
#include <stdio.h>
#include <errno.h>
#include <signal.h>
#include <time.h>
#include <sys/time.h>
#include <sys/types.h>
#include <unistd.h>
#include <limits.h>
#include <string.h>
#include <bidiEntry.h>
#include <bidiParser.h>
#include <bidiEntryCUPS.h>
#include "backendCommon.h"
```

Include dependency graph for backendWriteData.c:



Defines

- #define **STATE_MESG_SIZE** 1024
size of status message buffer.
- #define **BIDI_WRITE_TIMEOUT** 2
number of writing data timeout.
- #define **DATA_BUF_SIZE** (PIPE_BUF)

Functions

- void **writeData** (BidiWrapperObj *, int, int)
*Function for outputting print data to outFD,fetching printer status from inFD via **BidiWrapperObj**.*

7.4.1 Detailed Description

Functions for outputting print data to printer,fetching printer status from bidi module.

DatDate

2004/02/24 10:00:04

VersRevision

1.5

2004/02/13 Modified by Canon.INC

Copyright CANON INC. 2004

- 1) Modified the select loop to set only the necessary fd into the fdset under each condition.
- 2) Modified to read the printer status data every interval time.
- 3) Read the entire printer status data at one select loop.
- 4) Change the buffer byte size to "PIPE_BUF".
- 5) Set an alarm signal before writing the printer data.
- 6) Set an appropriate fd into the "bidiFD".
- 7) Set an appropriate timeout value into the select() function.

Copyright (C) 2004 by Turbolinux,Inc.

7.4.2 Define Documentation

7.4.2.1 #defi ne BIDL WRITE TIMEOUT 2

number of writing data timeout.

7.4.2.2 #define DATA_BUF_SIZE (PIPE_BUF)

7.4.2.3 #define STATE_MESG_SIZE 1024

size of status message buffer.

7.4.3 Function Documentation

7.4.3.1 void writeData ([BidiWrapperObj](#) * *objBidi*, int *inFD*, int *outFD*)

Function for outputting print data to outFD,fetching printer status from inFD via [BidiWrapperObj](#).

Parameters:

objBidi Pointer to BidiWrapperObject.

inFD File descriptor of input data.

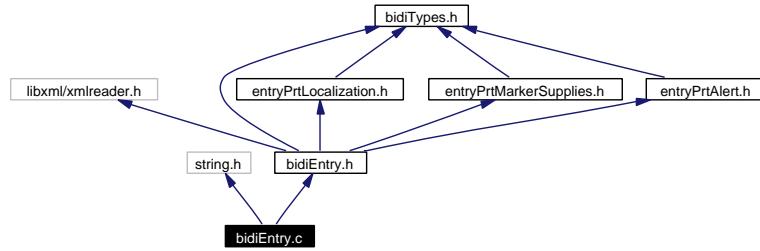
outFD File descriptor of printer device.

7.5 bidiEntry.c File Reference

Functions for [Entry](#) object.

```
#include <string.h>
#include "bidiEntry.h"
```

Include dependency graph for bidiEntry.c:



Functions

- `Entry * newEntry (void)`
constructor that creates an empty [Entry](#) object.
- `void deleteEntry (Entry *self)`
destructor that delete an [Entry](#) object.
- `char * getIndexName (enumPrtMarkSupIndex index)`
Get color character name from MarkerSuppliesIndex.

7.5.1 Detailed Description

Functions for [Entry](#) object.

DatDate

2004/02/24 09:06:20

VersRevision

1.10

copyright : (C) 2004 by Turbolinux, Inc.

7.5.2 Function Documentation

7.5.2.1 void deleteEntry ([Entry](#) * *self*)

destructor that delete an [Entry](#) object.

Parameters:

self Pointer to [Entry](#) object.

7.5.2.2 char* getIndexName ([enumPrtMarkSupIndex](#) *index*)

Get color character name from MarkerSuppliesIndex.

Parameters:

index Number of [enumPrtMarkSupIndex](#).

Returns:

Pointer to color character string.

7.5.2.3 [Entry](#)* newEntry ([void](#))

constructor that creates an empty [Entry](#) object.

Returns:

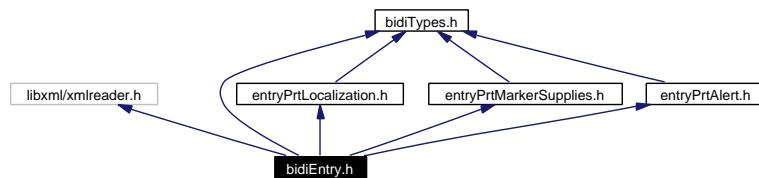
Pointer to [Entry](#) object.

7.6 bidiEntry.h File Reference

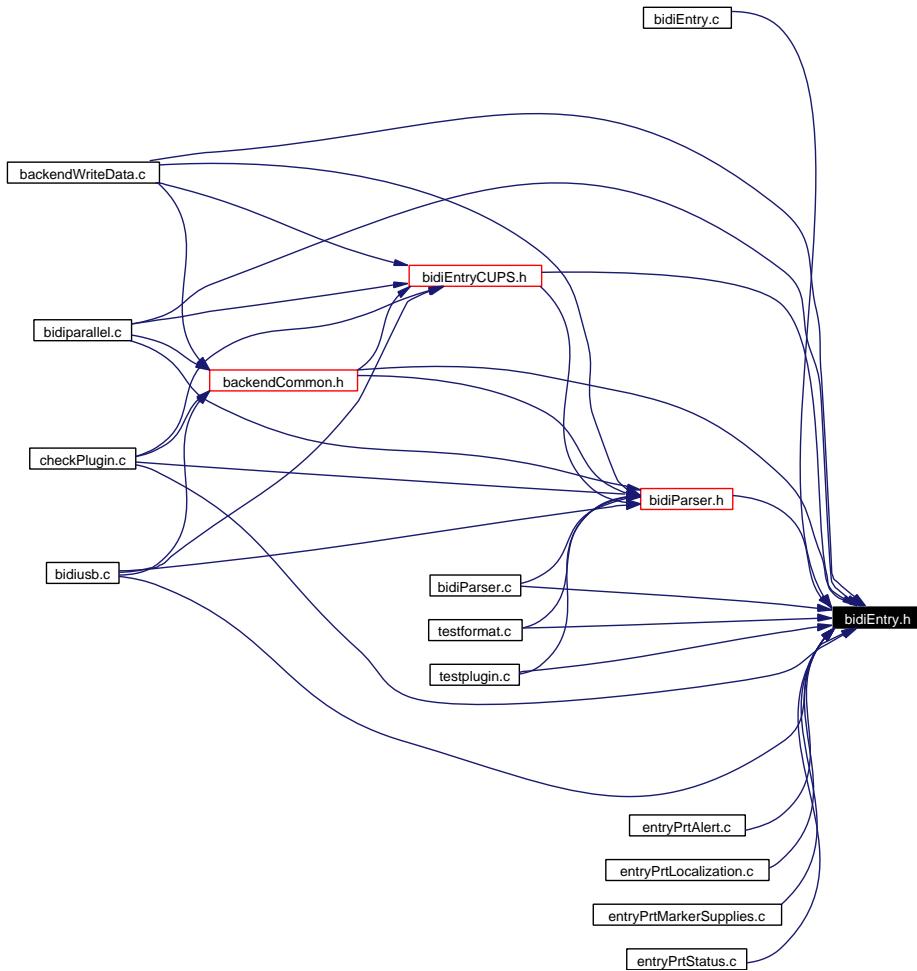
Type definitions for [Entry](#) object.

```
#include <libxml/xmlreader.h>
#include <bidiTypes.h>
#include <entryPrtLocalization.h>
#include <entryPrtMarkerSupplies.h>
#include <entryPrtAlert.h>
```

Include dependency graph for bidiEntry.h:



This graph shows which files directly or indirectly include this file:



Compounds

- struct [Entry](#)
The top structure containing the parsed printer status.
- struct [enumList](#)

Functions

- Entry * [newEntry](#) (void)
constructor that creates an empty [Entry](#) object.
- void [deleteEntry](#) (Entry *)
destructor that delete an [Entry](#) object.
- char * [getEnumName](#) (const enumList *, const int)
- char * [getIndexName](#) (enumPrtMarkSupIndex)
Get color character name from MarkerSuppliesIndex.

7.6.1 Detailed Description

Type definitions for [Entry](#) object.

Date

2004/02/24 10:00:04

Vers

1.12

copyright : (C) 2004 by Turbolinux,Inc.

7.6.2 Function Documentation

7.6.2.1 void deleteEntry ([Entry](#) * *self*)

destructor that delete an [Entry](#) object.

Parameters:

self Pointer to [Entry](#) object.

7.6.2.2 char* getEnumName (const [enumList](#) *, const *int*)

7.6.2.3 char* getIndexName ([enumPrtMarkSupIndex](#) *index*)

Get color character name from MarkerSuppliesIndex.

Parameters:

index Number of enumPrtMarkSupIndex.

Returns:

Pointer to color character string.

7.6.2.4 [Entry](#)* newEntry (void)

constructor that creates an empty [Entry](#) object.

Returns:

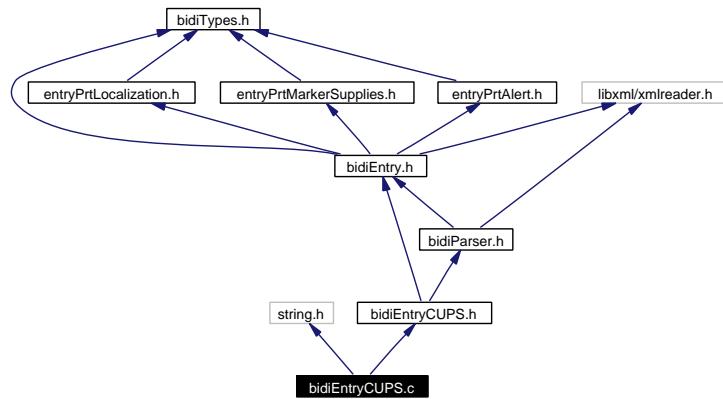
Pointer to [Entry](#) object.

7.7 bidiEntryCUPS.c File Reference

Functions for `infoCUPS` object.

```
#include <string.h>
#include "bidiEntryCUPS.h"
```

Include dependency graph for `bidiEntryCUPS.c`:



Functions

- `infoCUPS * makeIPPInfo (Entry *entry)`

Function to make IPP message.

7.7.1 Detailed Description

Functions for `infoCUPS` object.

Date

2004/02/24 10:00:04

Version

1.8

copyright : (C) 2004 by Turbolinux, Inc.

7.7.2 Function Documentation

7.7.2.1 `infoCUPS* makeIPPInfo (Entry * entry)`

Function to make IPP message.

Parameters:

entry Pointer to [Entry](#) object.

Returns:

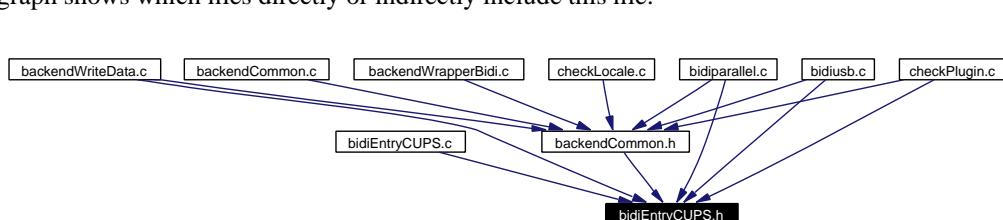
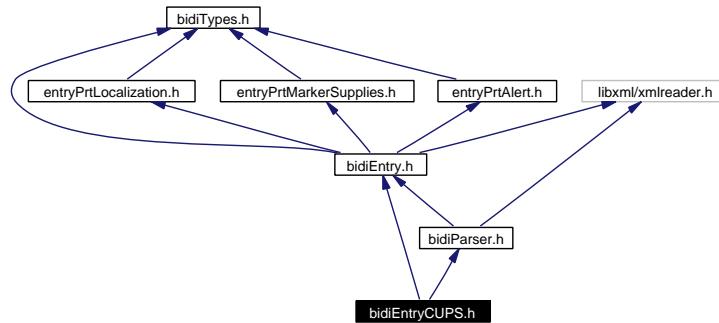
Pointer to inofCUPS object.

7.8 bidiEntryCUPS.h File Reference

Type definitions for [infoCUPS](#) object.

```
#include "bidiEntry.h"
#include "bidiParser.h"
```

Include dependency graph for bidiEntryCUPS.h:



Compounds

- struct [_infoCUPS](#)

Defines

- #define [MESG_SIZE](#) 128

Typedefs

- typedef [_infoCUPS](#) [infoCUPS](#)

Functions

- [infoCUPS * makeIPPIInfo \(Entry *\)](#)

Function to make IPP message.

7.8.1 Detailed Description

Type definitions for [infoCUPS](#) object.

Date

2004/02/24 08:56:36

Vers

1.7

copyright : (C) 2004 by Turbolinux,Inc.

7.8.2 Define Documentation

7.8.2.1 #define MESG_SIZE 128

7.8.3 Typedef Documentation

7.8.3.1 typedef struct _infoCUPS [infoCUPS](#)

7.8.4 Function Documentation

7.8.4.1 [infoCUPS*](#) [makeIPPIInfo](#) ([Entry](#) * *entry*)

Function to make IPP message.

Parameters:

entry Pointer to [Entry](#) object.

Returns:

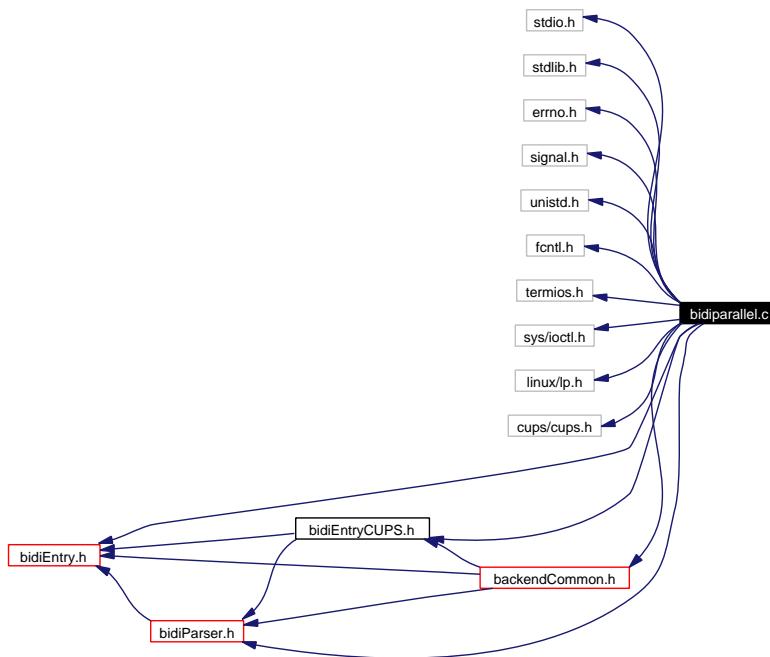
Pointer to [infoCUPS](#) object.

7.9 bidiparallel.c File Reference

Parallel port backend with bidi status read for the Common UNIX Printing System (CUPS).

```
#include <stdio.h>
#include <stdlib.h>
#include <errno.h>
#include <signal.h>
#include <unistd.h>
#include <fcntl.h>
#include <termios.h>
#include <sys/ioctl.h>
#include <linux/lp.h>
#include <cups/cups.h>
#include "bidiEntry.h"
#include "bidiParser.h"
#include "bidiEntryCUPS.h"
#include "backendCommon.h"
```

Include dependency graph for bidiparallel.c:



Defines

- #define `strlcpy` `cups_strlcpy`
- #define `strlcat` `cups_strlcat`
- #define `PARALLEL_NAME` "bidiparallel"
- #define `IOCNR_GET_DEVICE_ID` 1
- #define `LPIOC_GET_DEVICE_ID`(len) `_IOC(_IOC_READ, 'P', IOCNR_GET_DEVICE_ID, len)`

Functions

- size_t `cups_strlcpy` (char *, const char *, size_t)
- size_t `cups_strlcat` (char *, const char *, size_t)
- void `list_devices` (void)

Function for List devices connected with parallel port.

- int `main` (int argc, char **argv)
main function for bidiparallel program

7.9.1 Detailed Description

Parallel port backend with bidi status read for the Common UNIX Printing System (CUPS).

Parallel backend program send print data to printer and fetch printer status from bidi object.

DatDate

2004/02/24 08:56:36

VersRevision

1.19

Copyright (C) 2004 by Turbolinux,Inc.

7.9.2 Define Documentation

7.9.2.1 #define IOCNR_GET_DEVICE_ID 1

7.9.2.2 #define LPIOC_GET_DEVICE_ID(len) _IOC(_IOC_READ, 'P', IOCNR_GET_DEVICE_ID, len)

7.9.2.3 #define PARALLEL_NAME "bidiparallel"

7.9.2.4 #define strlcat cups_strlcat**7.9.2.5 #define strlcpy cups_strlcpy****7.9.3 Function Documentation****7.9.3.1 size_t cups_strlcat (char *, const char *, size_t)****7.9.3.2 size_t cups_strlcpy (char *, const char *, size_t)****7.9.3.3 void list_devices (void)**

Function for List devices connected with parallel port.

Returns:

None.

7.9.3.4 int main (int argc, char ** argv)

main function for bidiparallel program

Parameters:

argc Number of argument.

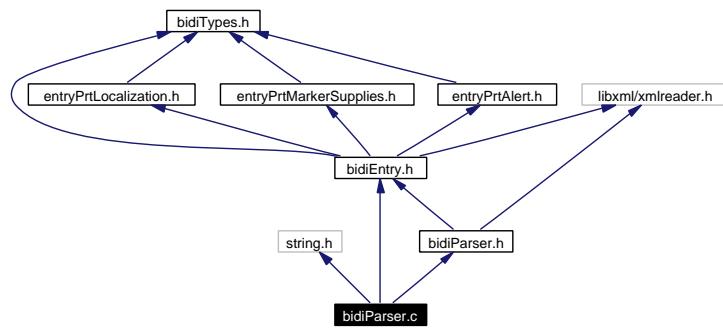
argv Pointer to argument.

7.10 bidiParser.c File Reference

Functions for [Parser](#) object.

```
#include <string.h>
#include "bidiEntry.h"
#include "bidiParser.h"
```

Include dependency graph for bidiParser.c:



Functions

- Parser * [newParser](#) (void)
constructor that creates an empty [Parser](#) object.
- void [deleteParser](#) (Parser *self)
destructor that delete [Parser](#) object.
- int [parseParserFromFile](#) (Parser *self, const char *uri)
parse from file which is written in Bi-di format.
- int [parseParserFromFd](#) (Parser *self, int fd)
parse from file descriptor which is written in Bi-di format.
- int [parseParserFromBuff](#) (Parser *self, const char *buffer, int size)
parse from memory which is written in Bi-di format.
- Entry * [fetchEntryFromParser](#) (Parser *parser)
Function for fetch entry object.

7.10.1 Detailed Description

Functions for [Parser](#) object.

Date

2004/02/24 10:00:04

Vers

1.13

copyright : (C) 2004 by Turbolinux,Inc.

7.10.2 Function Documentation

7.10.2.1 void deleteParser ([Parser](#) * *self*)

destructor that delete [Parser](#) object.

Parameters:

self Pointer to [Parser](#) object.

7.10.2.2 [Entry](#)* fetchEntryFromParser ([Parser](#) * *parser*)

Function for fetch entry object.

Parameters:

parser Pointer to [Parser](#) object.

Return values:

NULL Fail

*[Entry](#) Success

7.10.2.3 [Parser](#)* newParser (void)

constructor that creates an empty [Parser](#) object.

Returns:

Pointer to [Parser](#) object.

7.10.2.4 int parseParserFromBuff ([Parser](#) * *self*, const char * *buffer*, int *size*)

parse from memory which is written in Bi-di format.

Parameters:

self Pointer to [Parser](#) object.

buffer Pointer to parse buffer.

size Number in bytes of parse buffer.

Return values:

-1 Fail.

0 Success.

7.10.2.5 int parseParserFromFd ([Parser](#) * *self*, int *fd*)

parse from file descriptor which is written in Bi-di format.

Parameters:

self Pointer to [Parser](#) object.

fd File descriptor of parse file.

Return values:

-1 Fail.

0 Success.

7.10.2.6 int parseParserFromFile ([Parser](#) * *self*, const char * *uri*)

parse from file which is written in Bi-di format.

Parameters:

self Pointer to [Parser](#) object.

uri Pointer to parse uri.

Return values:

-1 Fail.

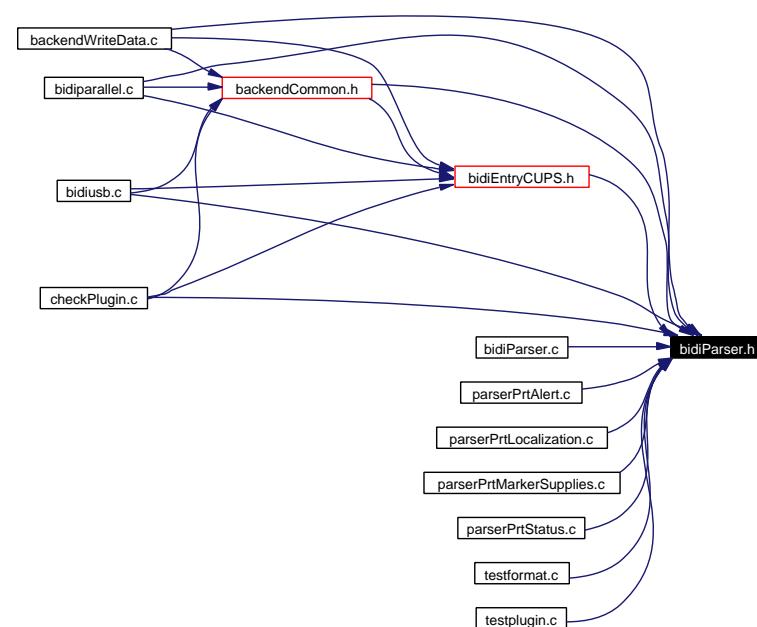
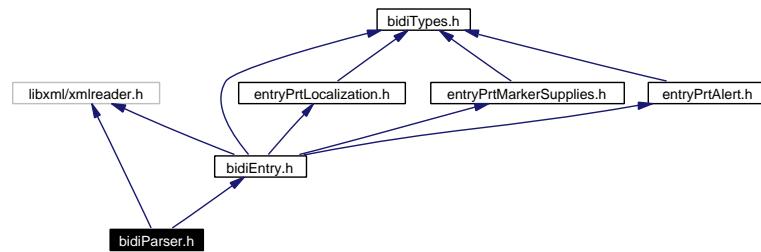
0 Success.

7.11 bidiParser.h File Reference

Type definitions for [Parser](#) object.

```
#include <libxml/xmlreader.h>
#include <bidiEntry.h>
```

Include dependency graph for bidiParser.h:



Compounds

- struct [Parser](#)

Structure for parser which parse printer status written in XML format.

Enumerations

- enum `State` {

STATE_START = 0, STATE_PRINTER_MIB, STATE_LOC_TABLE, STATE_LOC_ENTRY,

STATE_LOC_LANG, STATE_LOC_CHARSET, STATE_MRKSUP_TABLE,

STATE_MRKSUP_ENTRY, STATE_MRKSUP_INDEX, STATE_MRKSUP_TYPE, STATE_MRKSUP_DESCRIPTION,

STATE_MRKSUP_SUPPLYUNIT,

STATE_MRKSUP_MAXCAPACITY, STATE_MRKSUP_LEVEL, STATE_ALT_TABLE,

STATE_ALT_ENTRY,

STATE_ALT_SEVERITYLEVEL, STATE_ALT_GROUP, STATE_ALT_GROUPINDEX,

STATE_ALT_CODE,

STATE_ALT_DESCRIPTION }

Functions

- Parser * `newParser` (void)

constructor that creates an empty `Parser` object.
- void `deleteParser` (Parser *)
 - int `parseParser` (Parser *, const char *)

Function for fetch entry object.
- Entry * `fetchEntryFromParser` (Parser *)

Function for fetch entry object.
- int `parseParserFromFile` (Parser *, const char *)

parse from file which is written in Bi-di format.
- int `parseParserFromFd` (Parser *, int)

parse from file descriptor which is written in Bi-di format.
- int `parseParserFromBuff` (Parser *, const char *, int)

parse from mememory which is written in Bi-di format.

7.11.1 Detailed Description

Type definitions for `Parser` object.

DatDate

2004/02/24 10:00:04

VersRevision

1.12

copyright : (C) 2004 by Turbolinux,Inc.

7.11.2 Enumeration Type Documentation

7.11.2.1 enum State

Enumerate types used in [Parser](#) object.

Enumeration values:

- STATE_START
- STATE_PRINTER_MIB
- STATE_LOC_TABLE
- STATE_LOC_ENTRY
- STATE_LOC_LANG
- STATE_LOC_CHARSET
- STATE_MRKSUP_TABLE
- STATE_MRKSUP_ENTRY
- STATE_MRKSUP_INDEX
- STATE_MRKSUP_TYPE
- STATE_MRKSUP_DESCRIPTION
- STATE_MRKSUP_SUPPLYUNIT
- STATE_MRKSUP_MAXCAPACITY
- STATE_MRKSUP_LEVEL
- STATE_ALT_TABLE
- STATE_ALT_ENTRY
- STATE_ALT_SEVERITYLEVEL
- STATE_ALT_GROUP
- STATE_ALT_GROUPINDEX
- STATE_ALT_CODE
- STATE_ALT_DESCRIPTION

7.11.3 Function Documentation

7.11.3.1 void deleteParsery ([Parser](#) *)

7.11.3.2 Entry* fetchEntryFromParser ([Parser *parser](#))

Function for fetch entry object.

Parameters:

parser Pointer to [Parser](#) object.

Return values:

NULL Fail

**Entry* Success

7.11.3.3 Parser* newParser (void)

constructor that creates an empty [Parser](#) object.

Returns:

Pointer to [Parser](#) object.

7.11.3.4 int parseParser ([Parser *](#), const char *)

7.11.3.5 int parseParserFromBuff ([Parser *self](#), const char *buffer, int size)

parse from memory which is written in Bi-di format.

Parameters:

self Pointer to [Parser](#) object.

buffer Pointer to parse buffer.

size Number in bytes of parse buffer.

Return values:

-1 Fail.

0 Success.

7.11.3.6 int parseParserFromFd ([Parser *self](#), int fd)

parse from file descriptor which is written in Bi-di format.

Parameters:

self Pointer to [Parser](#) object.

fd File descriptor of parse file.

Return values:

- 1 Fail.
- 0 Success.

7.11.3.7 int parseParserFromFile ([Parser](#) * *self*, const char * *uri*)

parse from file which is written in Bi-di format.

Parameters:

- self* Pointer to [Parser](#) object.
- uri* Pointer to parse uri.

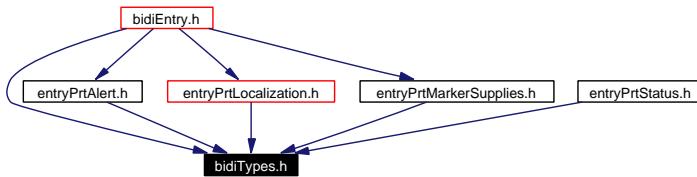
Return values:

- 1 Fail.
- 0 Success.

7.12 bidiTypes.h File Reference

Type definitions of the variable used by Printer-MIB.

This graph shows which files directly or indirectly include this file:



Typedefs

- `typedef long INT32`
Integer32.
- `typedef unsigned char OSTRING`
OCTET STRING.
- `typedef int CCHARSET`
CodedCharset.
- `typedef char SUBUNITSTATUS`
SubUnitStatus.

7.12.1 Detailed Description

Type definitions of the variable used by Printer-MIB.

Date

2004/02/24 08:56:36

Version

1.7

copyright : (C) 2004 by Turbolinux, Inc.

7.12.2 Typedef Documentation

7.12.2.1 typedef int CCHARSET

CodedCharset.

7.12.2.2 typedef long INT32

Integer32.

7.12.2.3 typedef unsigned char OSTRING

OCTET STRING.

7.12.2.4 typedef char SUBUNITSTATUS

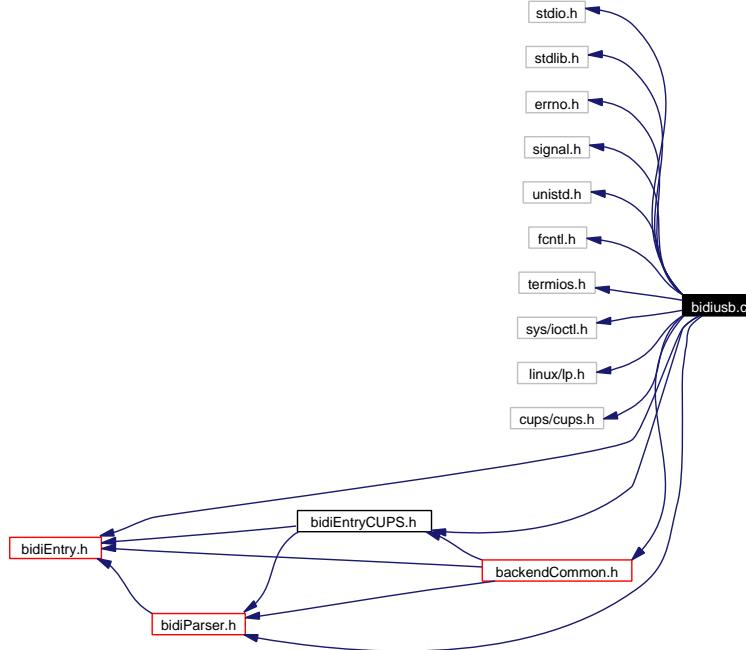
SubUnitStatus.

7.13 bidiusb.c File Reference

USB port backend with bidi status read for the Common UNIX Printing System (CUPS).

```
#include <stdio.h>
#include <stdlib.h>
#include <errno.h>
#include <signal.h>
#include <unistd.h>
#include <fcntl.h>
#include <termios.h>
#include <sys/ioctl.h>
#include <linux/lp.h>
#include <cups/cups.h>
#include "bidiEntry.h"
#include "bidiParser.h"
#include "bidiEntryCUPS.h"
#include "backendCommon.h"
```

Include dependency graph for bidiusb.c:



Defines

- #define `strlcpy` `cups_strlcpy`
safe string copy.
- #define `strlcat` `cups_strlcat`
safe string concatenation.
- #define `USB_NAME` "bidiusb"
program name.
- #define `IOCNR_GET_DEVICE_ID` 1
- #define `LPIOC_GET_DEVICE_ID`(len) `_IOC(_IOC_READ, 'P', IOCNR_GET_DEVICE_ID, len)`
ioctl macro to get device_id string.

Functions

- size_t `cups_strlcpy` (char *, const char *, size_t)
- size_t `cups_strlcat` (char *, const char *, size_t)
- void `decode_device_id` (int port, const char *device_id, char *make_model, int mmsize, char *uri, int urisize)
Decode the IEEE-1284 device ID string.
- void `list_devices` (void)
Function for List all USB devices.
- int `open_device` (const char *uri)
Function for Open a USB device...
- int `main` (int argc, char **argv)
main function for bidiusb program

7.13.1 Detailed Description

USB port backend with bidi status read for the Common UNIX Printing System (CUPS).

USB backend program send print data to printer and fetch printer status from bidi object.

DatDate

2004/02/24 08:56:36

VersRevision

1.28

Copyright (C) 2004 by Turbolinux,Inc.

7.13.2 Define Documentation

7.13.2.1 #define IOCNR_GET_DEVICE_ID 1

7.13.2.2 #define LPIOC_GET_DEVICE_ID(len) _IOC(_IOC_READ, 'P', IOCNR_GET_DEVICE_ID, len)

ioctl macro to get device_id string.

7.13.2.3 #define strlcat cups_strlcat

safe string concatenation.

7.13.2.4 #define strlcpy cups_strlcpy

safe string copy.

7.13.2.5 #define USB_NAME "bidiusb"

program name.

7.13.3 Function Documentation

7.13.3.1 size_t cups_strlcat (char *, const char *, size_t)

7.13.3.2 size_t cups_strlcpy (char *, const char *, size_t)

7.13.3.3 void decode_device_id (int port, const char * device_id, char * make_model, int mmsize, char * uri, int urisize)

Decode the IEEE-1284 device ID string.

Parameters:

port Port number.

device_id 1284 device ID string.

make_model model name.

mmsize Size of buffer.

uri Device URI.

urisize Size of buffer.

Returns:

None.

7.13.3.4 void list_devices (void)

Function for List all USB devices.

Returns:

None.

7.13.3.5 int main (int *argc*, char ** *argv*)

main function for bidiusb program

Parameters:

argc Number of argument.

argv Pointer to argument.

7.13.3.6 int open_device (const char * *uri*)

Function for Open a USB device...

Parameters:

uri Pointer to open device string.

Return values:

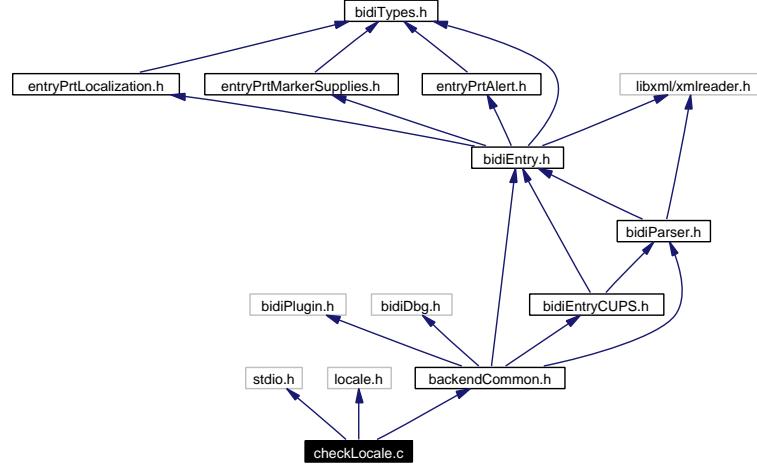
> 0 Opened device descriptor

< 0 Fail

7.14 checkLocale.c File Reference

```
#include <stdio.h>
#include <locale.h>
#include "backendCommon.h"
```

Include dependency graph for checkLocale.c:



Functions

- int **main** (int argc, char **argv)

7.14.1 Function Documentation

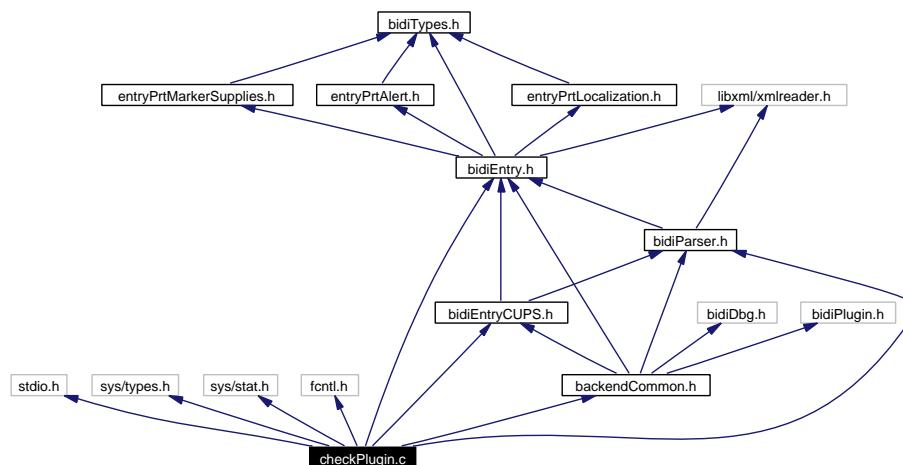
7.14.1.1 int main (int *argc*, char ***argv*)

7.15 checkPlugin.c File Reference

test program for communicating with Bidi module.

```
#include <stdio.h>
#include <sys/types.h>
#include <sys/stat.h>
#include <fcntl.h>
#include <bidiEntry.h>
#include <bidiParser.h>
#include <bidiEntryCUPS.h>
#include "backendCommon.h"
```

Include dependency graph for checkPlugin.c:



Functions

- int `main` (int argc, char **argv)

7.15.1 Detailed Description

test program for communicating with Bidi module.

Usage: checkPlugin [printer device file] [PPD file]

Date

2004/02/24 08:56:36

Vers**Revision**

1.5

Copyright (C) 2004 by Turbolinux,Inc.

7.15.2 Function Documentation

7.15.2.1 int main (int *argc*, char ** *argv*)

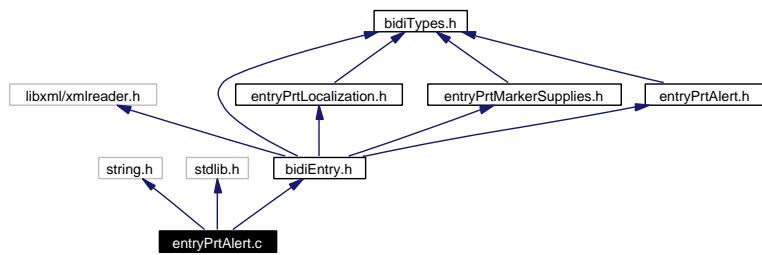
7.16 Doxyheader File Reference

7.17 entryPrtAlert.c File Reference

functions of [EntryPrtAlert](#) object.

```
#include <string.h>
#include <stdlib.h>
#include "bidiEntry.h"
```

Include dependency graph for entryPrtAlert.c:



Functions

- `EntryPrtAlert * newEntryPrtAlert (void)`
constructor that creates an empty `EntryPrtAlert` object.
- `void deleteEntryPrtAlt (EntryPrtAlert *self)`
destructor that delete `EntryPrtAlert` object.
- `EntryPrtAlert * addEntryPrtAlt (EntryPrtAlert *self)`
Function to make new `EntryPrtAlert` object.
- `void setEntryPrtAlt (EntryPrtAlert *entPrtAlt, xmlChar *node_name, xmlChar *data)`
Function to set data to `EntryPrtAlert` object.

7.17.1 Detailed Description

functions of [EntryPrtAlert](#) object.

Date

2004/02/24 09:06:20

Version

1.8

copyright : (C) 2004 by Turbolinux,Inc.

7.17.2 Function Documentation

7.17.2.1 `EntryPrtAlert* addEntryPrtAlt (EntryPrtAlert * self)`

Function to make new `EntryPrtAlert` object.

Parameters:

self Pointer to `EntryPrtAlert` object

Return values:

NULL Fail

`*EntryPrtAlert` Success

7.17.2.2 `void deleteEntryPrtAlt (EntryPrtAlert * self)`

destructor that delete `EntryPrtAlert` object.

Parameters:

self Pointer to `EntryPrtAlert` object

7.17.2.3 `EntryPrtAlert* newEntryPrtAlert (void)`

constructor that creates an empty `EntryPrtAlert` object.

Return values:

NULL Fail

`*EntryPrtAlert` Success

7.17.2.4 `void setEntryPrtAlt (EntryPrtAlert * entPrtAlt, xmlChar * node_name, xmlChar * data)`

Function to set data to `EntryPrtAlert` object.

Parameters:

entPrtAlt Pointer to `EntryPrtAlert` object

node_name Pointer to node name string

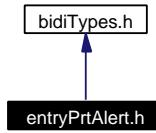
data Pointer to data string

7.18 entryPrtAlert.h File Reference

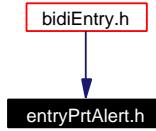
Type definitions of [EntryPrtAlert](#) object.

```
#include <bidiTypes.h>
```

Include dependency graph for entryPrtAlert.h:



This graph shows which files directly or indirectly include this file:



Compounds

- struct [EntryPrtAlert](#)

Typedefs

- typedef `_EntryPrtAlert` [EntryPrtAlert](#)

Enumerations

- enum [enumPrtAltGrpIndex](#) { `PRTALT_INDEX_C` = 1, `PRTALT_INDEX_M` = 2, `PRTALT_INDEX_Y` = 3, `PRTALT_INDEX_K` = 4 }
PrtAlertGroupIndex enumeration.
- enum [enumPrtAltSevLevel](#) { `PRTALT_SEVLEV_OTHER` = 1, `PRTALT_SEVLEV_CRITICAL` = 3, `PRTALT_SEVLEV_WARNING` = 4 }
PrtAlertSeverityLevel enumeration.
- enum [enumPrtAltGrp](#) {
 `PRTALT_GRP_OTHER` = 1, `PRTALT_GRP_HR_MIB_STORAGE_T` = 3,
`PRTALT_GRP_HR_MIB_DEVICE_T` = 4, `PRTALT_GRP_GENERAL_PRINTER` = 5,
`PRTALT_GRP_COVER` = 6, `PRTALT_GRP_LOCALIZATION` = 7, `PRTALT_GRP_INPUT` = 8,
`PRTALT_GRP_OUTPUT` = 9,
 }

```
PRTALT_GRP_MARKER      = 10,      PRTALT_GRP_MARKER_SUPPLIES      = 11,
PRTALT_GRP_MARKER_COLORANT = 12, PRTALT_GRP_MEDIA_PATH = 13,
PRTALT_GRP_CHANNEL     = 14,      PRTALT_GRP_INTERPRETER      = 15,
PRTALT_GRP_CONSOLE_DISP_BUFFER = 16, PRTALT_GRP_CONTENT_LENGTH = 17
}

PrtAlertGroup enumeration.
```

- enum `enumPrtAltCode` {


```
PRTALT_CODE_OTHER = 1, PRTALT_CODE_UNKNOWN = 2, PRTALT_CODE_COVER_OPEN
= 3, PRTALT_CODE_COVER_CLOSED = 4,
PRTALT_CODE_INTLOCK_OPEN = 5, PRTALT_CODE_INTLOCK_CLOSED = 6,
PRTALT_CODE_CONFIG_CHANGED = 7, PRTALT_CODE_JAM = 8,
PRTALT_CODE_DOOR_OPEN = 501, PRTALT_CODE_DOOR_CLOSED = 502,
PRTALT_CODE_POWER_UP = 503, PRTALT_CODE_POWER_DOWN = 504,
PRTALT_CODE_INPUT_MEDIASUPP_EMPTY = 808, PRTALT_CODE_IKN_EMPTY = 1102,
PRTALT_CODE_IKN_ALMOST_EMPTY = 1105 }
```

PrtAlertCode enumeration..

Functions

- `EntryPrtAlert * newEntryPrtAlert (void)`
constructor that creates an empty `EntryPrtAlert` object.
- `void deleteEntryPrtAlt (EntryPrtAlert *)`
destructor that delete `EntryPrtAlert` object.
- `EntryPrtAlert * addEntryPrtAlt (EntryPrtAlert *)`
Function to make new `EntryPrtAlert` object.
- `void setEntryPrtAlt (EntryPrtAlert *, xmlChar *, xmlChar *)`
Function to set data to `EntryPrtAlert` object.

7.18.1 Detailed Description

Type definitions of `EntryPrtAlert` object.

DatDate

2004/02/24 10:00:04

VersRevision

1.8
 copyright : (C) 2004 by Turbolinux,Inc.

7.18.2 Typedef Documentation

7.18.2.1 `typedef struct _EntryPrtAlert EntryPrtAlert`

7.18.3 Enumeration Type Documentation

7.18.3.1 `enum enumPrtAltCode`

PrtAlertCode enumeration..

Enumeration values:

`PRTALT_CODE_OTHER`
`PRTALT_CODE_UNKNOWN`
`PRTALT_CODE_COVER_OPEN`
`PRTALT_CODE_COVER_CLOSED`
`PRTALT_CODE_INTLOCK_OPEN`
`PRTALT_CODE_INTLOCK_CLOSED`
`PRTALT_CODE_CONFIG_CHANGED`
`PRTALT_CODE_JAM`
`PRTALT_CODE_DOOR_OPEN`
`PRTALT_CODE_DOOR_CLOSED`
`PRTALT_CODE_POWER_UP`
`PRTALT_CODE_POWER_DOWN`
`PRTALT_CODE_INPUT_MEDIASUPP_EMPTY`
`PRTALT_CODE_IKN_EMPTY`
`PRTALT_CODE_IKN_ALMOST_EMPTY`

7.18.3.2 `enum enumPrtAltGrp`

PrtAlertGroup enumeration .

Enumeration values:

`PRTALT_GRP_OTHER`
`PRTALT_GRP_HR_MIB_STORAGE_T`
`PRTALT_GRP_HR_MIB_DEVICE_T`
`PRTALT_GRP_GENERAL_PRINTER`
`PRTALT_GRP_COVER`
`PRTALT_GRP_LOCALIZATION`
`PRTALT_GRP_INPUT`
`PRTALT_GRP_OUTPUT`
`PRTALT_GRP_MARKER`
`PRTALT_GRP_MARKER_SUPPLIES`

PRTALT_GRP_MARKER_COLORANT
PRTALT_GRP_MEDIA_PATH
PRTALT_GRP_CHANNEL
PRTALT_GRP_INTERPRETER
PRTALT_GRP_CONSOLE_DISP_BUFFER
PRTALT_GRP_CONTENT_LENGTH

7.18.3.3 enum [enumPrtAltGrpIndex](#)

PrtAlertGroupIndex enumeration .

Enumeration values:

PRTALT_INDEX_C
PRTALT_INDEX_M
PRTALT_INDEX_Y
PRTALT_INDEX_K

7.18.3.4 enum [enumPrtAltSevLevel](#)

PrtAlertSeverityLevel enumeration .

Enumeration values:

PRTALT_SEVLEV_OTHER
PRTALT_SEVLEV_CRITICAL
PRTALT_SEVLEV_WARNING

7.18.4 Function Documentation

7.18.4.1 [EntryPrtAlert*](#) addEntryPrtAlt ([EntryPrtAlert *self](#))

Function to make new [EntryPrtAlert](#) object.

Parameters:

self Pointer to [EntryPrtAlert](#) object

Return values:

NULL Fail

*[EntryPrtAlert](#) Success

7.18.4.2 void deleteEntryPrtAlt ([EntryPrtAlert](#) * *self*)

destructor that delete [EntryPrtAlert](#) object.

Parameters:

self Pointer to [EntryPrtAlert](#) object

7.18.4.3 [EntryPrtAlert](#)* newEntryPrtAlert (void)

constructor that creates an empty [EntryPrtAlert](#) object.

Return values:

NULL Fail

**EntryPrtAlert* Success

7.18.4.4 void setEntryPrtAlt ([EntryPrtAlert](#) * *entPrtAlt*, [xmlChar](#) * *node_name*, [xmlChar](#) * *data*)

Function to set data to [EntryPrtAlert](#) object.

Parameters:

entPrtAlt Pointer to [EntryPrtAlert](#) object

node_name Pointer to node name string

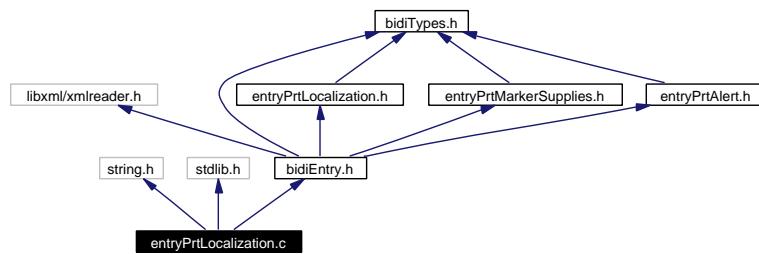
data Pointer to data string

7.19 entryPrtLocalization.c File Reference

functions of [EntryPrtLocalization](#) object.

```
#include <string.h>
#include <stdlib.h>
#include "bidiEntry.h"
```

Include dependency graph for entryPrtLocalization.c:



Functions

- `EntryPrtLocalization * newEntryPrtLoc (void)`
constructor that creates an empty [EntryPrtLocalization](#) object.
- `void deleteEntryPrtLoc (EntryPrtLocalization *self)`
destructor that delete [EntryPrtLocalization](#) object.
- `void setEntryPrtLoc (EntryPrtLocalization *newentry, xmlChar *node_name, xmlChar *data)`
Function to set data to [EntryPrtLocalization](#) object.

7.19.1 Detailed Description

functions of [EntryPrtLocalization](#) object.

Date

2004/02/24 09:06:20

Version

1.8

copyright : (C) 2004 by Turbolinux, Inc.

7.19.2 Function Documentation

7.19.2.1 void deleteEntryPrtLoc ([EntryPrtLocalization](#) * *self*)

destructor that delete [EntryPrtLocalization](#) object.

Parameters:

self Pointer to [EntryPrtLocalization](#) object

7.19.2.2 [EntryPrtLocalization](#)* newEntryPrtLoc (void)

constructor that creates an empty [EntryPrtLocalization](#) object.

Returns:

Pointer to [EntryPrtLocalization](#) object

7.19.2.3 void setEntryPrtLoc ([EntryPrtLocalization](#) * *newentry*, [xmlChar](#) * *node_name*, [xmlChar](#) * *data*)

Function to set data to [EntryPrtLocalization](#) object.

Parameters:

newentry Pointer to [EntryPrtLocalization](#) object

node_name Pointer to node name string

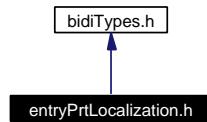
data Pointer to data string

7.20 entryPrtLocalization.h File Reference

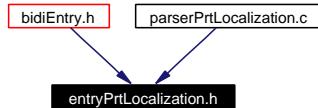
Type definitons of [EntryPrtLocalization](#) object.

```
#include <bidiTypes.h>
```

Include dependency graph for entryPrtLocalization.h:



This graph shows which files directly or indirectly include this file:



Compounds

- struct [EntryPrtLocalization](#)

The structure that containing the PrtLocalizationEntry messages.

Functions

- `EntryPrtLocalization * newEntryPrtLoc (void)`
constructor that creates an empty [EntryPrtLocalization](#) object.
- `void deleteEntryPrtLoc (EntryPrtLocalization *)`
destructor that delete [EntryPrtLocalization](#) object.
- `void setEntryPrtLoc (EntryPrtLocalization *, xmlChar *, xmlChar *)`
Function to set data to [EntryPrtLocalization](#) object.

7.20.1 Detailed Description

Type definitons of [EntryPrtLocalization](#) object.

Date

2004/02/24 10:00:04

Vers

Revision

1.8

copyright : (C) 2004 by Turbolinux,Inc.

7.20.2 Function Documentation

7.20.2.1 void deleteEntryPrtLoc ([EntryPrtLocalization](#) * *self*)

destructor that delete [EntryPrtLocalization](#) object.

Parameters:

self Pointer to [EntryPrtLocalization](#) object

7.20.2.2 [EntryPrtLocalization](#)* newEntryPrtLoc (void)

constructor that creates an empty [EntryPrtLocalization](#) object.

Returns:

Pointer to [EntryPrtLocalization](#) object

7.20.2.3 void setEntryPrtLoc ([EntryPrtLocalization](#) * *newentry*, [xmlChar](#) * *node_name*, [xmlChar](#) * *data*)

Function to set data to [EntryPrtLocalization](#) object.

Parameters:

newentry Pointer to [EntryPrtLocalization](#) object

node_name Pointer to node name string

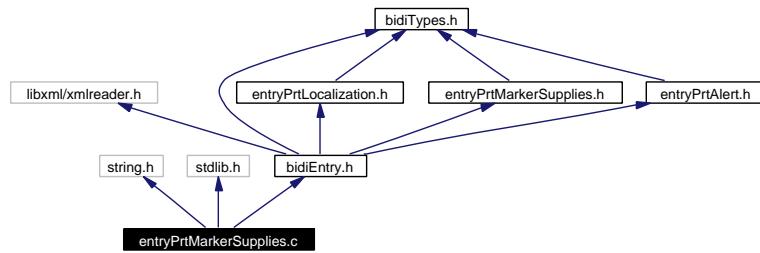
data Pointer to data string

7.21 entryPrtMarkerSupplies.c File Reference

functions of [EntryPrtMarkerSupplies](#) object.

```
#include <string.h>
#include <stdlib.h>
#include "bidiEntry.h"
```

Include dependency graph for entryPrtMarkerSupplies.c:



Functions

- [EntryPrtMarkerSupplies * newEntryPrtMarkSupp \(void\)](#)
constructor that creates an empty [EntryPrtMarkerSupplies](#) object.
- [void deleteEntryPrtMarkSupp \(EntryPrtMarkerSupplies *self\)](#)
destructor that delete [EntryPrtMarkerSupplies](#) object.
- [EntryPrtMarkerSupplies * addEntryPrtMarkSupp \(EntryPrtMarkerSupplies *self\)](#)
Function to make new [EntryPrtMarkerSupplies](#) object.
- [void setEntryPrtMarkSupp \(EntryPrtMarkerSupplies *entPrtMrkSup, xmlChar *node_name, xmlChar *data\)](#)
Function to set data to [EntryPrtMarkerSupplies](#) object.

7.21.1 Detailed Description

functions of [EntryPrtMarkerSupplies](#) object.

DatDate

2004/02/24 09:06:20

VersRevision

1.8

copyright : (C) 2004 by Turbolinux,Inc.

7.21.2 Function Documentation

7.21.2.1 `EntryPrtMarkerSupplies*` addEntryPrtMarkSupp (`EntryPrtMarkerSupplies * self`)

Function to make new `EntryPrtMarkerSupplies` object.

Parameters:

self Pointer to `EntryPrtMarkerSupplies` object

Return values:

NULL Fail

**EntryPrtMarkerSupplies* Success

7.21.2.2 `void deleteEntryPrtMarkSupp` (`EntryPrtMarkerSupplies * self`)

destructor that delete `EntryPrtMarkerSupplies` object.

Parameters:

self Pointer to `EntryPrtMarkerSupplies` object

7.21.2.3 `EntryPrtMarkerSupplies*` newEntryPrtMarkSupp (`void`)

constructor that creates an empty `EntryPrtMarkerSupplies` object.

Return values:

NULL Fail

**EntryPrtMarkerSupplies* Success

7.21.2.4 `void setEntryPrtMarkSupp` (`EntryPrtMarkerSupplies * entPrtMrkSup, xmlChar * node_name, xmlChar * data`)

Function to set data to `EntryPrtMarkerSupplies` object.

Parameters:

entPrtMrkSup Pointer to `EntryPrtMarkerSupplies` object

node_name Pointer to node name string

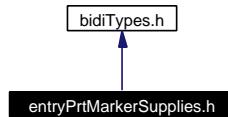
data Pointer to data string

7.22 entryPrtMarkerSupplies.h File Reference

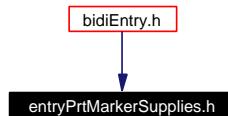
Type definitions for [EntryPrtMarkerSupplies](#) object.

```
#include <bidiTypes.h>
```

Include dependency graph for entryPrtMarkerSupplies.h:



This graph shows which files directly or indirectly include this file:



Compounds

- struct [EntryPrtMarkerSupplies](#)

Typedefs

- typedef [_EntryPrtMarkerSupplies](#) [EntryPrtMarkerSupplies](#)

Enumerations

- enum [enumPrtMarkSupIndex](#) {
 [PRTMARK_INDEX_C](#) = 1, [PRTMARK_INDEX_M](#) = 2,
 [PRTMARK_INDEX_Y](#) = 3, [PRTMARK_INDEX_K](#) = 4
 }

PrtMarkerSuppliesIndex enumeration..
- enum [enumPrtMarkSupType](#) {
 [PRTMARK_SUPTYPE_OTHER](#) = 1, [PRTMARK_SUPTYPE_UNKNOWN](#) = 2,
 [PRTMARK_SUPTYPE_TONER](#) = 3, [PRTMARK_SUPTYPE_WASTE_TONER](#) = 4,
 [PRTMARK_SUPTYPE_INK](#) = 5, [PRTMARK_SUPTYPE_INK_CARTRIDGE](#) = 6,
 [PRTMARK_SUPTYPE_INK_RIBON](#) = 7, [PRTMARK_SUPTYPE_WASTE_INK](#) = 8,
 [PRTMARK_SUPTYPE_OPC](#) = 9, [PRTMARK_SUPTYPE_DEVELOPER](#) = 10,
 [PRTMARK_SUPTYPE_FUSER_OIL](#) = 11, [PRTMARK_SUPTYPE_SOLID_WAX](#) = 12,
 [PRTMARK_SUPTYPE_RIBBON_WAX](#) = 13, [PRTMARK_SUPTYPE_WASTE_WAX](#) = 14
 }

PrtMarkerSuppliesType enumeration..

```

• enum enumPrtMarkSupSupUnit {
    PRTMARK_SUPUNIT_INCH = 3, PRTMARK_SUPUNIT_MICRO_METER = 4,
    PRTMARK_SUPUNIT_OUNCE = 12, PRTMARK_SUPUNIT_GRAM = 13,
    PRTMARK_SUPUNIT_FLUID_OUNCE = 14, PRTMARK_SUPUNIT_MILLILITER = 15,
    PRTMARK_SUPUNIT_PERCENT = 19 }

```

PrtMarkerSuppliesSupplyUnit enumeration..

Functions

- `EntryPrtMarkerSupplies * newEntryPrtMarkSupp (void)`
constructor that creates an empty `EntryPrtMarkerSupplies` object.
- `void deleteEntryPrtMarkSupp (EntryPrtMarkerSupplies *)`
destructor that delete `EntryPrtMarkerSupplies` object.
- `EntryPrtMarkerSupplies * addEntryPrtMarkSupp (EntryPrtMarkerSupplies *)`
Function to make new `EntryPrtMarkerSupplies` object.
- `void setEntryPrtMarkSupp (EntryPrtMarkerSupplies *, xmlChar *, xmlChar *)`
Function to set data to `EntryPrtMarkerSupplies` object.

7.22.1 Detailed Description

Type definitions for `EntryPrtMarkerSupplies` object.

DatDate

2004/02/24 10:00:04

VersRevision

1.8

copyright : (C) 2004 by Turbolinux,Inc.

7.22.2 Typedef Documentation

7.22.2.1 `typedef struct _EntryPrtMarkerSupplies EntryPrtMarkerSupplies`

7.22.3 Enumeration Type Documentation

7.22.3.1 enum `enumPrtMarkSupIndex`

PrtMarkerSuppliesIndex enumeration..

Enumeration values:

- `PRTMARK_INDEX_C`
- `PRTMARK_INDEX_M`
- `PRTMARK_INDEX_Y`
- `PRTMARK_INDEX_K`

7.22.3.2 enum `enumPrtMarkSupSupUnit`

PrtMarkerSuppliesSupplyUnit enumeration..

Enumeration values:

- `PRTMARK_SUPUNIT_INCH`
- `PRTMARK_SUPUNIT_MICRO_METER`
- `PRTMARK_SUPUNIT_OUNCE`
- `PRTMARK_SUPUNIT_GRAM`
- `PRTMARK_SUPUNIT_FLUID_OUNCE`
- `PRTMARK_SUPUNIT_MILLILITER`
- `PRTMARK_SUPUNIT_PERCENT`

7.22.3.3 enum `enumPrtMarkSupType`

PrtMarkerSuppliesType enumeration..

Enumeration values:

- `PRTMARK_SUPTYPE_OTHER`
- `PRTMARK_SUPTYPE_UNKNOWN`
- `PRTMARK_SUPTYPE_TONER`
- `PRTMARK_SUPTYPE_WASTE_TONNER`
- `PRTMARK_SUPTYPE_INK`
- `PRTMARK_SUPTYPE_INK_CARTRIDGE`
- `PRTMARK_SUPTYPE_INK_RIBON`
- `PRTMARK_SUPTYPE_WASTE_INK`
- `PRTMARK_SUPTYPE_OPC`
- `PRTMARK_SUPTYPE_DEVELOPER`
- `PRTMARK_SUPTYPE_FUSER_OIL`
- `PRTMARK_SUPTYPE_SOLID_WAX`
- `PRTMARK_SUPTYPE_RIBBON_WAX`
- `PRTMARK_SUPTYPE_WASTE_WAX`

7.22.4 Function Documentation

7.22.4.1 `EntryPrtMarkerSupplies*` addEntryPrtMarkSupp (`EntryPrtMarkerSupplies * self`)

Function to make new `EntryPrtMarkerSupplies` object.

Parameters:

self Pointer to `EntryPrtMarkerSupplies` object

Return values:

NULL Fail

**EntryPrtMarkerSupplies* Success

7.22.4.2 `void deleteEntryPrtMarkSupp` (`EntryPrtMarkerSupplies * self`)

destructor that delete `EntryPrtMarkerSupplies` object.

Parameters:

self Pointer to `EntryPrtMarkerSupplies` object

7.22.4.3 `EntryPrtMarkerSupplies*` newEntryPrtMarkSupp (`void`)

constructor that creates an empty `EntryPrtMarkerSupplies` object.

Return values:

NULL Fail

**EntryPrtMarkerSupplies* Success

7.22.4.4 `void setEntryPrtMarkSupp` (`EntryPrtMarkerSupplies * entPrtMrkSup, xmlChar * node_name, xmlChar * data`)

Function to set data to `EntryPrtMarkerSupplies` object.

Parameters:

entPrtMrkSup Pointer to `EntryPrtMarkerSupplies` object

node_name Pointer to node name string

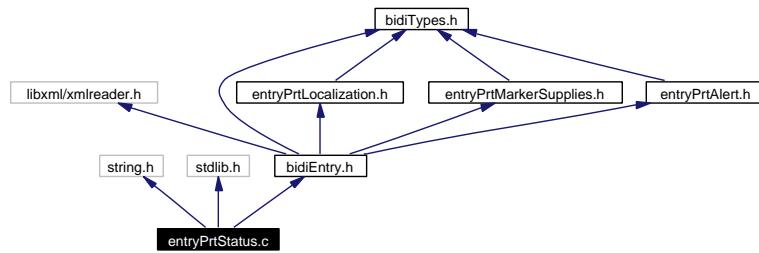
data Pointer to data string

7.23 entryPrtStatus.c File Reference

not in use!!

```
#include <string.h>
#include <stdlib.h>
#include "bidiEntry.h"
```

Include dependency graph for entryPrtStatus.c:



Functions

- `EntryPrtStatus * newEntryPrtStatus (void)`
- `void deleteEntryPrtStat (EntryPrtStatus *self)`
- `EntryPrtStatus * addEntryPrtStat (EntryPrtStatus *self)`
- `void setEntryPrtStat (EntryPrtStatus *entPrtStat, xmlChar *node_name, xmlChar *data)`

7.23.1 Detailed Description

not in use!!

DatDate

2004/02/24 08:56:36

VersRevision

1.6
copyright : (C) 2004 by Turbolinux, Inc.

7.23.2 Function Documentation

7.23.2.1 `EntryPrtStatus* addEntryPrtStat (EntryPrtStatus * self)`

7.23.2.2 void deleteEntryPrtStat ([EntryPrtStatus](#) * *self*)

7.23.2.3 [EntryPrtStatus](#)* newEntryPrtStatus (void)

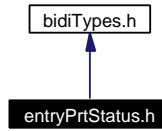
7.23.2.4 void setEntryPrtStat ([EntryPrtStatus](#) * *entPrtStat*, [xmlChar](#) * *node_name*, [xmlChar](#) * *data*)

7.24 entryPrtStatus.h File Reference

not in use!!

```
#include <bidiTypes.h>
```

Include dependency graph for entryPrtStatus.h:



Compounds

- struct [_EntryPrtStatus](#)

TypeDefs

- typedef [_EntryPrtStatus](#) [EntryPrtStatus](#)

Enumerations

- enum [enumPrtStatusIndex](#) { [PRTSTAT_INDEX](#) = 1 }
- enum [enumPrtStatusType](#) {

[PRTSTAT_TYPE_ERROR](#) = 0, [PRTSTAT_TYPE_PRINTING](#) = 1, [PRTSTAT_TYPE_BUSY](#) = 2,
 [PRTSTAT_TYPE_WAIT](#) = 3,

[PRTSTAT_TYPE_IDLE](#) = 4, [PRTSTAT_TYPE_IMPOSSIBLE](#) = 5, [PRTSTAT_TYPE_INK_DRY](#) = 6,
 [PRTSTAT_TYPE_CLEANING](#) = 7,

[PRTSTAT_TYPE_FACTORY_DEFAULT](#) = 8, [PRTSTAT_TYPE_MOTOR_OFF](#) = 9,
 [PRTSTAT_TYPE_SHUTTINGDOWN](#) = 10, [PRTSTAT_TYPE_WAIT_INIT](#) = 11,

[PRTSTAT_TYPE_INITIALIZING](#) = 12 }

7.24.1 Detailed Description

not in use!!

Date

2004/02/24 08:56:36

Version

1.6

copyright : (C) 2004 by Turbolinux,Inc.

7.24.2 Typedef Documentation

7.24.2.1 `typedef struct _EntryPrtStatus EntryPrtStatus`

7.24.3 Enumeration Type Documentation

7.24.3.1 `enum enumPrtStatusIndex`

Enumeration values:

`PRTSTAT_INDEX`

7.24.3.2 `enum enumPrtStatusType`

Enumeration values:

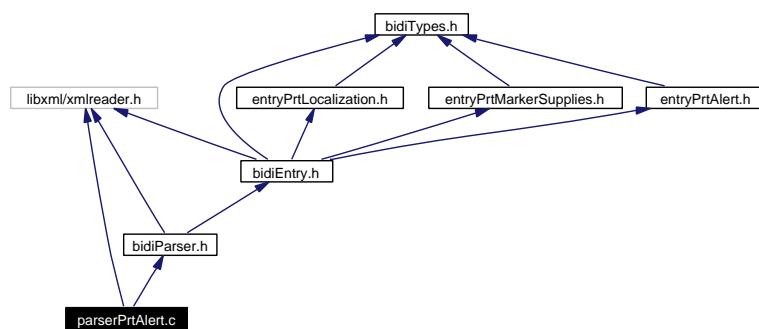
`PRTSTAT_TYPE_ERROR`
`PRTSTAT_TYPE_PRINTING`
`PRTSTAT_TYPE_BUSY`
`PRTSTAT_TYPE_WAIT`
`PRTSTAT_TYPE_IDLE`
`PRTSTAT_TYPE_IMPOSSIBLE`
`PRTSTAT_TYPE_INK_DRY`
`PRTSTAT_TYPE_CLEANING`
`PRTSTAT_TYPE_FACTORY_DEFAULT`
`PRTSTAT_TYPE_MOTOR_OFF`
`PRTSTAT_TYPE_SHUTTINGDOWN`
`PRTSTAT_TYPE_WAIT_INIT`
`PRTSTAT_TYPE_INITIALIZING`

7.25 parserPrtAlert.c File Reference

parse PrtAlertEntry.

```
#include <libxml/xmlreader.h>
#include "bidiParser.h"
```

Include dependency graph for parserPrtAlert.c:



Functions

- void [parseNodePrtAlert](#) (Parser *, Entry *)

parse XML data and set data to [Entry](#) object especially PrtAlertEntry.

7.25.1 Detailed Description

parse PrtAlertEntry.

DatDate

2004/02/24 10:00:04

VersRevision

1.11

copyright : (C) 2004 by Turbolinux,Inc.

7.25.2 Function Documentation

7.25.2.1 void [parseNodePrtAlert](#) ([Parser](#) * *parser*, [Entry](#) * *entry*)

parse XML data and set data to [Entry](#) object especially PrtAlertEntry.

Parameters:

parser Pointer to [Parser](#) object.

entry Pointer to [Entry](#) object.

Returns:

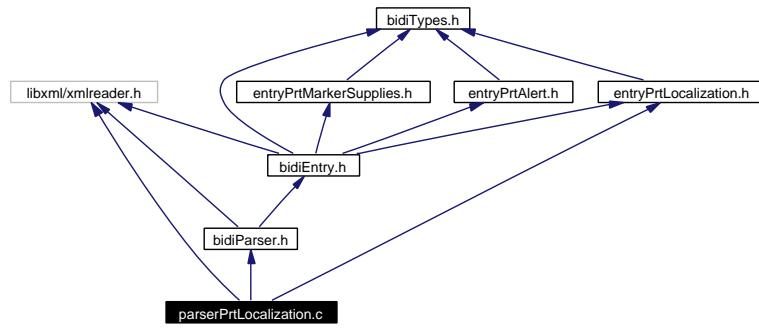
None.

7.26 parserPrtLocalization.c File Reference

parse PrtLocalizationEntry.

```
#include <libxml/xmlreader.h>
#include "bidiParser.h"
#include "entryPrtLocalization.h"
```

Include dependency graph for parserPrtLocalization.c:



Functions

- void [parseNodePrtLocalization](#) (Parser *, Entry *)
parse XML data and set data to [Entry](#) object especially PrtLocalizationEntry.

7.26.1 Detailed Description

parse PrtLocalizationEntry.

DatDate

2004/02/24 10:00:04

VersRevision

1.10

copyright : (C) 2004 by Turbolinux, Inc.

7.26.2 Function Documentation

7.26.2.1 void [parseNodePrtLocalization](#) ([Parser](#) * *parser*, [Entry](#) * *entry*)

parse XML data and set data to [Entry](#) object especially PrtLocalizationEntry.

Parameters:

parser Pointer to [Parser](#) object.

entry Pointer to [Entry](#) object.

Returns:

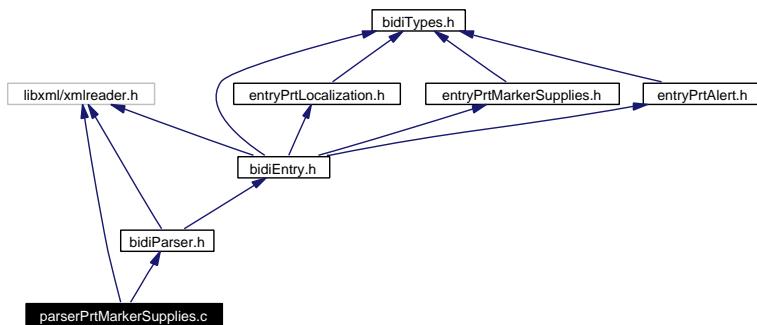
None.

7.27 parserPrtMarkerSupplies.c File Reference

parse PrtMarkerSuppliesEntry.

```
#include <libxml/xmlreader.h>
#include "bidiParser.h"
```

Include dependency graph for parserPrtMarkerSupplies.c:



Functions

- void [parseNodePrtMarkerSupplies](#) (Parser *, Entry *)

parse XML data and set data to [Entry](#) object especially PrtMarkerSuppliesEntry.

7.27.1 Detailed Description

parse PrtMarkerSuppliesEntry.

Date

2004/02/24 10:00:04

Version

1.10

copyright : (C) 2004 by Turbolinux,Inc.

7.27.2 Function Documentation

7.27.2.1 void [parseNodePrtMarkerSupplies](#) (Parser * *parser*, Entry * *entry*)

parse XML data and set data to [Entry](#) object especially PrtMarkerSuppliesEntry.

Parameters:

parser Pointer to [Parser](#) object.

entry Pointer to [Entry](#) object.

Returns:

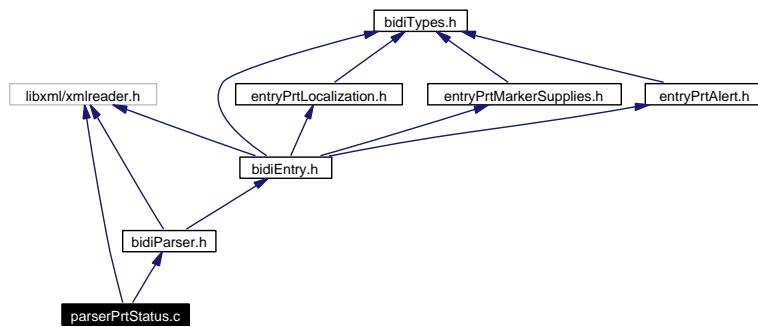
None.

7.28 parserPrtStatus.c File Reference

not in use!!

```
#include <libxml/xmlreader.h>
#include "bidiParser.h"
```

Include dependency graph for parserPrtStatus.c:



Functions

- void [parseNodePrtStatus](#) (Parser *, Entry *)

7.28.1 Detailed Description

not in use!!

Date

2004/02/24 10:00:04

Version

1.7

copyright : (C) 2004 by Turbolinux, Inc.

7.28.2 Function Documentation

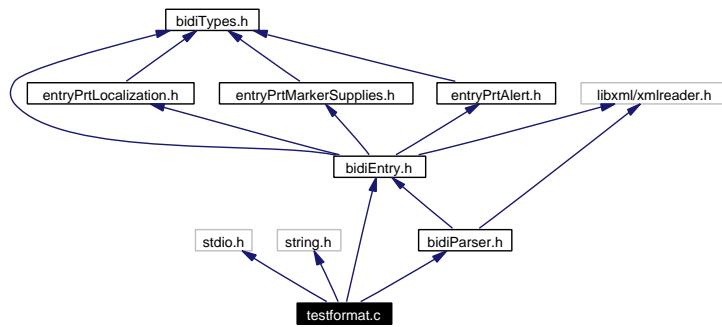
7.28.2.1 void parseNodePrtStatus (Parser *, Entry *)

7.29 testformat.c File Reference

test program to check bidiformat.

```
#include <stdio.h>
#include <string.h>
#include "bidiEntry.h"
#include "bidiParser.h"
```

Include dependency graph for testformat.c:



Functions

- void [showLocalization](#) (EntryPrtLocalization *entLoc)
- void [showMarkerSupplies](#) (EntryPrtMarkerSupplies *entMrk)
- void [showAlert](#) (EntryPrtAlert *entAlt)
- void [showEntry](#) (Entry *entry)
- int [main](#) (int argc, char **argv)

7.29.1 Detailed Description

test program to check bidiformat.

Usage: testformat [XML file]

Date

2004/02/18 20:48:05

Copyright (C) 2004 by Turbolinux, Inc.

7.29.2 Function Documentation

7.29.2.1 int main (int *argc*, char ** *argv*)

7.29.2.2 void showAlert ([EntryPrtAlert](#) * *entAlt*)

7.29.2.3 void showEntry ([Entry](#) * *entry*)

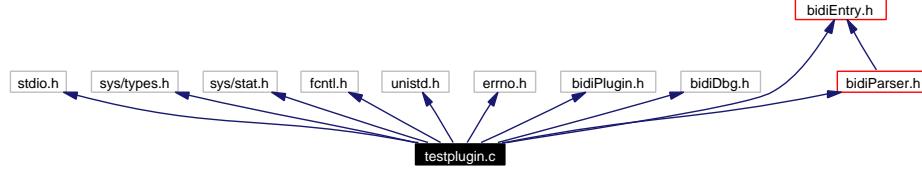
7.29.2.4 void showLocalization ([EntryPrtLocalization](#) * *entLoc*)

7.29.2.5 void showMarkerSupplies ([EntryPrtMarkerSupplies](#) * *entMrk*)

7.30 testplugin.c File Reference

```
#include <stdio.h>
#include <sys/types.h>
#include <sys/stat.h>
#include <fcntl.h>
#include <unistd.h>
#include <errno.h>
#include <bidiPlugin.h>
#include <bidiDbg.h>
#include <bidiEntry.h>
#include <bidiParser.h>
```

Include dependency graph for testplugin.c:



Functions

- void [showLocalization](#) (EntryPrtLocalization *entLoc)
- void [showMarkerSupplies](#) (EntryPrtMarkerSupplies *entMrk)
- void [showAlert](#) (EntryPrtAlert *entAlt)
- void [showEntry](#) (Entry *entry)
- char * [addInfo](#) (char *dest, const char *append, size_t len)
- int [main](#) (int argc, char *argv[])

7.30.1 Function Documentation

7.30.1.1 `char* addInfo (char * dest, const char * append, size_t len)`

7.30.1.2 `int main (int argc, char * argv[])`

7.30.1.3 void showAlert ([EntryPrtAlert](#) * *entAlt*)

7.30.1.4 void showEntry ([Entry](#) * *entry*)

7.30.1.5 void showLocalization ([EntryPrtLocalization](#) * *entLoc*)

7.30.1.6 void showMarkerSupplies ([EntryPrtMarkerSupplies](#) * *entMrk*)

Index

_EntryPrtAlert, 13
_EntryPrtAlert
 next, 14
 PrtAltCode, 14
 PrtAltDesc, 14
 PrtAltGrp, 14
 PrtAltGrpIndex, 14
 PrtAltSevLevel, 14
_EntryPrtMarkerSupplies, 15
_EntryPrtMarkerSupplies
 next, 15
 PrtMarkSupDesc, 15
 PrtMarkSupIndex, 15
 PrtMarkSupLevel, 16
 PrtMarkSupMaxCap, 16
 PrtMarkSupSupUnit, 16
 PrtMarkSupType, 16
_EntryPrtStatus, 17
_EntryPrtStatus
 next, 17
 PrtStatDesc, 17
 PrtStatIndex, 17
 PrtStatType, 17
_infoCUPS, 18
_infoCUPS
 next, 18
 state_messages, 18
 state_reason, 18

addEntryPrtAlt
 entryPrtAlert.c, 81
 entryPrtAlert.h, 85
addEntryPrtMarkSupp
 entryPrtMarkerSupplies.c, 92
 entryPrtMarkerSupplies.h, 96
addEntryPrtStat
 entryPrtStatus.c, 97
addInfo
 testplugin.c, 110

backendCommon.c, 31
backendCommon.c
 debugPrint, 32
 fetchPPDEntry, 32
 getLang, 33
 parseXML, 33
 writeXMLdata, 33
backendCommon.h, 34
backendCommon.h
 BIDI_TIMEOUT, 36
 DEBUGPRINT, 36
 debugPrint, 37
 deleteBidi, 37
 deleteBidiObj, 37
 endBidiJob, 38
 endBidiRead, 38
 fetchPPDEntry, 38
 getLang, 38
 initBidi, 39
 initSignal, 39
 newBidiObj, 39
 parseXML, 39
 PPD_PLUGIN, 36
 PPD_READ_INTERVAL, 36
 readBidiStatus, 39
 signal_handler, 40
 startBidiJob, 40
 startBidiRead, 40
 STATE_BUF, 37
 STATE_MESG_SIZE, 37
 writeXMLdata, 40
 XML_DIR, 37
backendWrapperBidi.c, 42
backendWrapperBidi.c
 cancelBidiJob, 43
 deleteBidi, 43
 deleteBidiObj, 44
 endBidiJob, 44
 endBidiRead, 44
 initBidi, 44
 initSignal, 45
 newBidiObj, 45
 readBidiStatus, 45
 signal_handler, 45
 startBidiJob, 45
 startBidiRead, 46
backendWriteData.c, 47
backendWriteData.c
 BIDI_WRITE_TIMEOUT, 48
 DATA_BUF_SIZE, 48

STATE_MESG_SIZE, 49
writeData, 49
BIDI_TIMEOUT
 backendCommon.h, 36
BIDI_WRITE_TIMEOUT
 backendWriteData.c, 48
bidiC
 BidiWrapperObj, 20
bidiCapJob
 BidiWrapperObj, 20
bidiDoJob
 BidiWrapperObj, 20
bidiEntry.c, 50
bidiEntry.c
 deleteEntry, 50
 getIndexName, 51
 newEntry, 51
bidiEntry.h, 52
bidiEntry.h
 deleteEntry, 54
 getEnumName, 54
 getIndexName, 54
 newEntry, 54
bidiEntryCUPS.c, 55
bidiEntryCUPS.c
 makeIPPIInfo, 55
bidiEntryCUPS.h, 57
bidiEntryCUPS.h
 infoCUPS, 58
 makeIPPIInfo, 58
 MESG_SIZE, 58
bidiEprogress
 BidiWrapperObj, 20
bidiJobID
 BidiWrapperObj, 20
bidiLang
 BidiWrapperObj, 20
bidiModuleName
 BidiWrapperObj, 21
bidiparallel.c, 59
 cups_strlcat, 61
 cups_strlcpy, 61
 IOCNR_GET_DEVICE_ID, 60
 list_devices, 61
 LPIOC_GET_DEVICE_ID, 60
 main, 61
 PARALLEL_NAME, 60
 strlcat, 60
 strlcpy, 61
bidiParser.c, 62
bidiParser.c
 deleteParser, 63
 fetchEntryFromParser, 63
 newParser, 63
parseParserFromBuff, 63
parseParserFromFd, 64
parseParserFromFile, 64
bidiParser.h, 65
 STATE_ALT_CODE, 67
 STATE_ALT_DESCRIPTION, 67
 STATE_ALT_ENTRY, 67
 STATE_ALT_GROUP, 67
 STATE_ALT_GROUPINDEX, 67
 STATE_ALT_SEVERITYLEVEL, 67
 STATE_ALT_TABLE, 67
 STATE_LOC_CHARSET, 67
 STATE_LOC_ENTRY, 67
 STATE_LOC_LANG, 67
 STATE_LOC_TABLE, 67
 STATE_MRKSUP_DESCRIPTION, 67
 STATE_MRKSUP_ENTRY, 67
 STATE_MRKSUP_INDEX, 67
 STATE_MRKSUP_LEVEL, 67
 STATE_MRKSUP_MAXCAPACITY, 67
 STATE_MRKSUP_SUPPLYUNIT, 67
 STATE_MRKSUP_TABLE, 67
 STATE_MRKSUP_TYPE, 67
 STATE_PRINTER_MIB, 67
 STATE_START, 67
bidiParser.h
 deleteParsery, 67
 fetchEntryFromParser, 67
 newParser, 68
 parseParser, 68
 parseParserFromBuff, 68
 parseParserFromFd, 68
 parseParserFromFile, 69
 State, 67
bidiReadFD
 BidiWrapperObj, 21
bidiReadInterval
 BidiWrapperObj, 21
bidiReadStatus
 BidiWrapperObj, 21
bidiTypes.h, 70
bidiTypes.h
 CCHARSET, 70
 INT32, 71
 OSTRING, 71
 SUBUNITSTATUS, 71
bidiusb.c, 72
 cups_strlcat, 74
 cups_strlcpy, 74
 decode_device_id, 74
 IOCNR_GET_DEVICE_ID, 73
 list_devices, 75
 LPIOC_GET_DEVICE_ID, 74
 main, 75

open_device, 75
 strlcat, 74
 strlcpy, 74
 USB_NAME, 74
BidiWrapperObj, 19
BidiWrapperObj
 bidic, 20
 bidiCapJob, 20
 bidiDoJob, 20
 bidiEprogress, 20
 bidiJobID, 20
 bidiLang, 20
 bidiModuleName, 21
 bidiReadFD, 21
 bidiReadInterval, 21
 bidiReadStatus, 21
 infoSize, 21
 XMLInfo, 21
 XMLParser, 21

cancelBidiJob
 backendWrapperBidi.c, 43
CCHARSET
 bidiTypes.h, 70
checkLocale.c, 76
checkLocale.c
 main, 76
checkPlugin.c, 77
checkPlugin.c
 main, 78
cups_strlcat
 bidiparallel.c, 61
 bidiusb.c, 74
cups_strlcpy
 bidiparallel.c, 61
 bidiusb.c, 74

DATA_BUF_SIZE
 backendWriteData.c, 48
DEBUGPRINT
 backendCommon.h, 36
debugPrint
 backendCommon.c, 32
 backendCommon.h, 37
decode_device_id
 bidiusb.c, 74
deleteBidi
 backendCommon.h, 37
 backendWrapperBidi.c, 43
deleteBidiObj
 backendCommon.h, 37
 backendWrapperBidi.c, 44
deleteEntry
 bidiEntry.c, 50

 bidiEntry.h, 54
deleteEntryPrtAlt
 entryPrtAlert.c, 81
 entryPrtAlert.h, 85
deleteEntryPrtLoc
 entryPrtLocalization.c, 87
 entryPrtLocalization.h, 90
deleteEntryPrtMarkSupp
 entryPrtMarkerSupplies.c, 92
 entryPrtMarkerSupplies.h, 96
deleteEntryPrtStat
 entryPrtStatus.c, 97
deleteParser
 bidiParser.c, 63
deleteParsery
 bidiParser.h, 67
Doxyheader, 79

endBidiJob
 backendCommon.h, 38
 backendWrapperBidi.c, 44
endBidiRead
 backendCommon.h, 38
 backendWrapperBidi.c, 44
Entry, 22
 EntryPrtAlertPtr, 22
 EntryPrtLocalizationPtr, 22
 EntryPrtMarkerSuppliesPtr, 22
EntryPrtAlert, 24
 entryPrtAlert.h, 83
entryPrtAlert.c, 80
entryPrtAlert.c
 addEntryPrtAlt, 81
 deleteEntryPrtAlt, 81
 newEntryPrtAlert, 81
 setEntryPrtAlt, 81
entryPrtAlert.h, 82
 PRTALT_CODE_CONFIG_CHANGED, 84
 PRTALT_CODE_COVER_CLOSED, 84
 PRTALT_CODE_COVER_OPEN, 84
 PRTALT_CODE_DOOR_CLOSED, 84
 PRTALT_CODE_DOOR_OPEN, 84
 PRTALT_CODE_IKN_ALMOST_EMPTY, 84
 PRTALT_CODE_IKN_EMPTY, 84
 PRTALT_CODE_INPUT_MEDIASUPP_EMPTY, 84
 PRTALT_CODE_INTLOCK_CLOSED, 84
 PRTALT_CODE_INTLOCK_OPEN, 84
 PRTALT_CODE_JAM, 84
 PRTALT_CODE_OTHER, 84
 PRTALT_CODE_POWER_DOWN, 84
 PRTALT_CODE_POWER_UP, 84
 PRTALT_CODE_UNKNOWN, 84

PRTALT_GRP_CHANNEL, 85
PRTALT_GRP_CONSOLE_DISP_-
BUFFER, 85
PRTALT_GRP_CONTENT_LENGTH, 85
PRTALT_GRP_COVER, 84
PRTALT_GRP_GENERAL_PRINTER, 84
PRTALT_GRP_HR_MIB_DEVICE_T, 84
PRTALT_GRP_HR_MIB_STORAGE_T, 84
PRTALT_GRP_INPUT, 84
PRTALT_GRP_INTERPRETER, 85
PRTALT_GRP_LOCALIZATION, 84
PRTALT_GRP_MARKER, 84
PRTALT_GRP_MARKER_COLORANT,
84
PRTALT_GRP_MARKER_SUPPLIES, 84
PRTALT_GRP_MEDIA_PATH, 85
PRTALT_GRP_OTHER, 84
PRTALT_GRP_OUTPUT, 84
PRTALT_INDEX_C, 85
PRTALT_INDEX_K, 85
PRTALT_INDEX_M, 85
PRTALT_INDEX_Y, 85
PRTALT_SEVLEV_CRITICAL, 85
PRTALT_SEVLEV_OTHER, 85
PRTALT_SEVLEV_WARNING, 85
entryPrtAlert.h
 addEntryPrtAlt, 85
 deleteEntryPrtAlt, 85
 EntryPrtAlert, 83
 enumPrtAltCode, 84
 enumPrtAltGrp, 84
 enumPrtAltGrpIndex, 85
 enumPrtAltSevLevel, 85
 newEntryPrtAlert, 86
 setEntryPrtAlt, 86
EntryPrtAlertPtr
 Entry, 22
EntryPrtLocalization, 25
EntryPrtLocalization
 PrtLocCharSet, 25
 PrtLocLang, 25
entryPrtLocalization.c, 87
entryPrtLocalization.c
 deleteEntryPrtLoc, 87
 newEntryPrtLoc, 88
 setEntryPrtLoc, 88
entryPrtLocalization.h, 89
entryPrtLocalization.h
 deleteEntryPrtLoc, 90
 newEntryPrtLoc, 90
 setEntryPrtLoc, 90
EntryPrtLocalizationPtr
 Entry, 22
EntryPrtMarkerSupplies, 26
entryPrtMarkerSupplies.h, 94
entryPrtMarkerSupplies.c, 91
entryPrtMarkerSupplies.c
 addEntryPrtMarkSupp, 92
 deleteEntryPrtMarkSupp, 92
 newEntryPrtMarkSupp, 92
 setEntryPrtMarkSupp, 92
entryPrtMarkerSupplies.h, 93
 PRTMARK_INDEX_C, 95
 PRTMARK_INDEX_K, 95
 PRTMARK_INDEX_M, 95
 PRTMARK_INDEX_Y, 95
 PRTMARK_SUPTYPE_DEVELOPER, 95
 PRTMARK_SUPTYPE_FUSER_OIL, 95
 PRTMARK_SUPTYPE_INK, 95
 PRTMARK_SUPTYPE_INK_-
 CARTRIDGE, 95
 PRTMARK_SUPTYPE_INK_RIBON, 95
 PRTMARK_SUPTYPE_OPC, 95
 PRTMARK_SUPTYPE_OTHER, 95
 PRTMARK_SUPTYPE_RIBBON_WAX,
 95
 PRTMARK_SUPTYPE_SOLID_WAX, 95
 PRTMARK_SUPTYPE_TONER, 95
 PRTMARK_SUPTYPE_UNKNOWN, 95
 PRTMARK_SUPTYPE_WASTE_INK, 95
 PRTMARK_SUPTYPE_WASTE_-
 TONNER, 95
 PRTMARK_SUPTYPE_WASTE_WAX, 95
 PRTMARK_SUPUNIT_FLUIDOUNCE,
 95
 PRTMARK_SUPUNIT_GRAM, 95
 PRTMARK_SUPUNIT_INCH, 95
 PRTMARK_SUPUNIT_MICRO_METER,
 95
 PRTMARK_SUPUNIT_MILLILITER, 95
 PRTMARK_SUPUNIT_OUNCE, 95
 PRTMARK_SUPUNIT_PERCENT, 95
entryPrtMarkerSupplies.h
 addEntryPrtMarkSupp, 96
 deleteEntryPrtMarkSupp, 96
 EntryPrtMarkerSupplies, 94
 enumPrtMarkSupIndex, 94
 enumPrtMarkSupSupUnit, 95
 enumPrtMarkSupType, 95
 newEntryPrtMarkSupp, 96
 setEntryPrtMarkSupp, 96
EntryPrtMarkerSuppliesPtr
 Entry, 22
EntryPrtStatus
 entryPrtStatus.h, 100
entryPrtStatus.c, 97
entryPrtStatus.c
 addEntryPrtStat, 97

deleteEntryPrtStat, 97
 newEntryPrtStatus, 98
 setEntryPrtStat, 98
 entryPrtStatus.h, 99
 PRTSTAT_INDEX, 100
 PRTSTAT_TYPE_BUSY, 100
 PRTSTAT_TYPE_CLEANING, 100
 PRTSTAT_TYPE_ERROR, 100
 PRTSTAT_TYPE_FACTORY_DEFAULT, 100
 PRTSTAT_TYPE_IDLE, 100
 PRTSTAT_TYPE_IMPOSSIBLE, 100
 PRTSTAT_TYPE_INITIALIZING, 100
 PRTSTAT_TYPE_INK_DRY, 100
 PRTSTAT_TYPE_MOTOR_OFF, 100
 PRTSTAT_TYPE_PRINTING, 100
 PRTSTAT_TYPE_SHUTTINGDOWN, 100
 PRTSTAT_TYPE_WAIT, 100
 PRTSTAT_TYPE_WAIT_INIT, 100
 entryPrtStatus.h
 EntryPrtStatus, 100
 enumPrtStatusIndex, 100
 enumPrtStatusType, 100
 enumList, 27
 enumList
 name, 27
 value, 27
 enumPrtAltCode
 entryPrtAlert.h, 84
 enumPrtAltGrp
 entryPrtAlert.h, 84
 enumPrtAltGrpIndex
 entryPrtAlert.h, 85
 enumPrtAltSevLevel
 entryPrtAlert.h, 85
 enumPrtMarkSupIndex
 entryPrtMarkerSupplies.h, 94
 enumPrtMarkSupSupUnit
 entryPrtMarkerSupplies.h, 95
 enumPrtMarkSupType
 entryPrtMarkerSupplies.h, 95
 enumPrtStatusIndex
 entryPrtStatus.h, 100
 enumPrtStatusType
 entryPrtStatus.h, 100
 fetchEntryFromParser
 bidiParser.c, 63
 bidiParser.h, 67
 fetchPPDEntry
 backendCommon.c, 32
 backendCommon.h, 38
 getEnumName

bidiEntry.h, 54
 getIndexName
 bidiEntry.c, 51
 bidiEntry.h, 54
 getLang
 backendCommon.c, 33
 backendCommon.h, 38
 infoCUPS, 28
 bidiEntryCUPS.h, 58
 infoSize
 BidiWrapperObj, 21
 initBidi
 backendCommon.h, 39
 backendWrapperBidi.c, 44
 initSignal
 backendCommon.h, 39
 backendWrapperBidi.c, 45
 INT32
 bidiTypes.h, 71
 IOCNR_GET_DEVICE_ID
 bidiparallel.c, 60
 bidiusb.c, 73
 list_devices
 bidiparallel.c, 61
 bidiusb.c, 75
 LPIOC_GET_DEVICE_ID
 bidiparallel.c, 60
 bidiusb.c, 74
 main
 bidiparallel.c, 61
 bidiusb.c, 75
 checkLocale.c, 76
 checkPlugin.c, 78
 testformat.c, 108
 testplugin.c, 110
 makeIPPIInfo
 bidiEntryCUPS.c, 55
 bidiEntryCUPS.h, 58
 MESG_SIZE
 bidiEntryCUPS.h, 58
 name
 enumList, 27
 newBidiObj
 backendCommon.h, 39
 backendWrapperBidi.c, 45
 newEntry
 bidiEntry.c, 51
 bidiEntry.h, 54
 newEntryPrtAlert
 entryPrtAlert.c, 81

entryPrtAlert.h, 86
newEntryPrtLoc
 entryPrtLocalization.c, 88
 entryPrtLocalization.h, 90
newEntryPrtMarkSupp
 entryPrtMarkerSupplies.c, 92
 entryPrtMarkerSupplies.h, 96
newEntryPrtStatus
 entryPrtStatus.c, 98
newParser
 bidiParser.c, 63
 bidiParser.h, 68
next
 _EntryPrtAlert, 14
 _EntryPrtMarkerSupplies, 15
 _EntryPrtStatus, 17
 _infoCUPS, 18

open_device
 bidiusb.c, 75
OSTRING
 bidiTypes.h, 71

Parallel/USB CUPS backend., 9
PARALLEL_NAME
 bidiparallel.c, 60
parseNodePrtAlert
 parserPrtAlert.c, 101
parseNodePrtLocalization
 parserPrtLocalization.c, 103
parseNodePrtMarkerSupplies
 parserPrtMarkerSupplies.c, 105
parseNodePrtStatus
 parserPrtStatus.c, 107
parseParser
 bidiParser.h, 68
parseParserFromBuff
 bidiParser.c, 63
 bidiParser.h, 68
parseParserFromFd
 bidiParser.c, 64
 bidiParser.h, 68
parseParserFromFile
 bidiParser.c, 64
 bidiParser.h, 69
Parser, 29
 reader, 29
 state, 29
parserPrtAlert.c, 101
parserPrtAlert.c
 parseNodePrtAlert, 101
parserPrtLocalization.c, 103
parserPrtLocalization.c
 parseNodePrtLocalization, 103

parserPrtMarkerSupplies.c, 105
parserPrtMarkerSupplies.c
 parseNodePrtMarkerSupplies, 105
parserPrtStatus.c, 107
parserPrtStatus.c
 parseNodePrtStatus, 107
parseXML
 backendCommon.c, 33
 backendCommon.h, 39
PPD_PLUGIN
 backendCommon.h, 36
PPD_READ_INTERVAL
 backendCommon.h, 36
PRTALT_CODE_CONFIG_CHANGED
 entryPrtAlert.h, 84
PRTALT_CODE_COVER_CLOSED
 entryPrtAlert.h, 84
PRTALT_CODE_COVER_OPEN
 entryPrtAlert.h, 84
PRTALT_CODE_DOOR_CLOSED
 entryPrtAlert.h, 84
PRTALT_CODE_DOOR_OPEN
 entryPrtAlert.h, 84
PRTALT_CODE_IKN_ALMOST_EMPTY
 entryPrtAlert.h, 84
PRTALT_CODE_IKN_EMPTY
 entryPrtAlert.h, 84
PRTALT_CODE_INPUT_MEDIASUPP_-
 EMPTY
 entryPrtAlert.h, 84
PRTALT_CODE_INTLOCK_CLOSED
 entryPrtAlert.h, 84
PRTALT_CODE_INTLOCK_OPEN
 entryPrtAlert.h, 84
PRTALT_CODE_JAM
 entryPrtAlert.h, 84
PRTALT_CODE_OTHER
 entryPrtAlert.h, 84
PRTALT_CODE_POWER_DOWN
 entryPrtAlert.h, 84
PRTALT_CODE_POWER_UP
 entryPrtAlert.h, 84
PRTALT_CODE_UNKNOWN
 entryPrtAlert.h, 84
PRTALT_GRP_CHANNEL
 entryPrtAlert.h, 85
PRTALT_GRP_CONSOLE_DISP_BUFFER
 entryPrtAlert.h, 85
PRTALT_GRP_CONTENT_LENGTH
 entryPrtAlert.h, 85
PRTALT_GRP_COVER
 entryPrtAlert.h, 84
PRTALT_GRP_GENERAL_PRINTER
 entryPrtAlert.h, 84

PRTALT_GRP_HR_MIB_DEVICE_T
 entryPrtAlert.h, 84

PRTALT_GRP_HR_MIB_STORAGE_T
 entryPrtAlert.h, 84

PRTALT_GRP_INPUT
 entryPrtAlert.h, 84

PRTALT_GRP_INTERPRETER
 entryPrtAlert.h, 85

PRTALT_GRP_LOCALIZATION
 entryPrtAlert.h, 84

PRTALT_GRP_MARKER
 entryPrtAlert.h, 84

PRTALT_GRP_MARKER_COLORANT
 entryPrtAlert.h, 84

PRTALT_GRP_MARKER_SUPPLIES
 entryPrtAlert.h, 84

PRTALT_GRP_MEDIA_PATH
 entryPrtAlert.h, 85

PRTALT_GRP_OTHER
 entryPrtAlert.h, 84

PRTALT_GRP_OUTPUT
 entryPrtAlert.h, 84

PRTALT_INDEX_C
 entryPrtAlert.h, 85

PRTALT_INDEX_K
 entryPrtAlert.h, 85

PRTALT_INDEX_M
 entryPrtAlert.h, 85

PRTALT_INDEX_Y
 entryPrtAlert.h, 85

PRTALT_SEVLEV_CRITICAL
 entryPrtAlert.h, 85

PRTALT_SEVLEV_OTHER
 entryPrtAlert.h, 85

PRTALT_SEVLEV_WARNING
 entryPrtAlert.h, 85

PrtAltCode
 _EntryPrtAlert, 14

PrtAltDesc
 _EntryPrtAlert, 14

PrtAltGrp
 _EntryPrtAlert, 14

PrtAltGrpIndex
 _EntryPrtAlert, 14

PrtAltSevLevel
 _EntryPrtAlert, 14

PrtLocCharSet
 EntryPrtLocalization, 25

PrtLocLang
 EntryPrtLocalization, 25

PRTMARK_INDEX_C
 entryPrtMarkerSupplies.h, 95

PRTMARK_INDEX_K
 entryPrtMarkerSupplies.h, 95

PRTMARK_INDEX_M
 entryPrtMarkerSupplies.h, 95

PRTMARK_INDEX_Y
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_DEVELOPER
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_FUSER_OIL
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_INK
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_INK_CARTTRIDGE
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_INK_RIBON
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_OPC
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_OTHER
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_RIBBON_WAX
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_SOLID_WAX
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_TONER
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_UNKNOWN
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_WASTE_INK
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_WASTE_TONNER
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPTYPE_WASTE_WAX
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPUNIT_FLUID_OUNCE
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPUNIT_GRAM
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPUNIT_INCH
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPUNIT_MICRO_METER
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPUNIT_MILLILITER
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPUNIT_OUNCE
 entryPrtMarkerSupplies.h, 95

PRTMARK_SUPUNIT_PERCENT
 entryPrtMarkerSupplies.h, 95

PrtMarkSupDesc
 _EntryPrtMarkerSupplies, 15

PrtMarkSupIndex
 _EntryPrtMarkerSupplies, 15

PrtMarkSupLevel
 _EntryPrtMarkerSupplies, 16

PrtMarkSupMaxCap
 _EntryPrtMarkerSupplies, 16

PrtMarkSupSupUnit
 _EntryPrtMarkerSupplies, 16
PrtMarkSupType
 _EntryPrtMarkerSupplies, 16
PRTSTAT_INDEX
 entryPrtStatus.h, 100
PRTSTAT_TYPE_BUSY
 entryPrtStatus.h, 100
PRTSTAT_TYPE_CLEANING
 entryPrtStatus.h, 100
PRTSTAT_TYPE_ERROR
 entryPrtStatus.h, 100
PRTSTAT_TYPE_FACTORY_DEFAULT
 entryPrtStatus.h, 100
PRTSTAT_TYPE_IDLE
 entryPrtStatus.h, 100
PRTSTAT_TYPE_IMPOSSIBLE
 entryPrtStatus.h, 100
PRTSTAT_TYPE_INITIALIZING
 entryPrtStatus.h, 100
PRTSTAT_TYPE_INK_DRY
 entryPrtStatus.h, 100
PRTSTAT_TYPE_MOTOR_OFF
 entryPrtStatus.h, 100
PRTSTAT_TYPE_PRINTING
 entryPrtStatus.h, 100
PRTSTAT_TYPE_SHUTTINGDOWN
 entryPrtStatus.h, 100
PRTSTAT_TYPE_WAIT
 entryPrtStatus.h, 100
PRTSTAT_TYPE_WAIT_INIT
 entryPrtStatus.h, 100
PrtStatDesc
 _EntryPrtStatus, 17
PrtStatIndex
 _EntryPrtStatus, 17
PrtStatType
 _EntryPrtStatus, 17

readBidiStatus
 backendCommon.h, 39
 backendWrapperBidi.c, 45

reader
 Parser, 29

setEntryPrtAlt
 entryPrtAlert.c, 81
 entryPrtAlert.h, 86

setEntryPrtLoc
 entryPrtLocalization.c, 88
 entryPrtLocalization.h, 90

setEntryPrtMarkSupp
 entryPrtMarkerSupplies.c, 92
 entryPrtMarkerSupplies.h, 96

setEntryPrtStat
 entryPrtStatus.c, 98

showAlert
 testformat.c, 109
 testplugin.c, 110

showEntry
 testformat.c, 109
 testplugin.c, 111

showLocalization
 testformat.c, 109
 testplugin.c, 111

showMarkerSupplies
 testformat.c, 109
 testplugin.c, 111

signal_handler
 backendCommon.h, 40
 backendWrapperBidi.c, 45

startBidiJob
 backendCommon.h, 40
 backendWrapperBidi.c, 45

startBidiRead
 backendCommon.h, 40
 backendWrapperBidi.c, 46

State
 bidiParser.h, 67

state
 Parser, 29

STATE_ALT_CODE
 bidiParser.h, 67

STATE_ALT_DESCRIPTION
 bidiParser.h, 67

STATE_ALT_ENTRY
 bidiParser.h, 67

STATE_ALT_GROUP
 bidiParser.h, 67

STATE_ALT_GROUPINDEX
 bidiParser.h, 67

STATE_ALT_SEVERITYLEVEL
 bidiParser.h, 67

STATE_ALT_TABLE
 bidiParser.h, 67

STATE_BUF
 backendCommon.h, 37

STATE_LOC_CHARSET
 bidiParser.h, 67

STATE_LOC_ENTRY
 bidiParser.h, 67

STATE_LOC_LANG
 bidiParser.h, 67

STATE_LOC_TABLE
 bidiParser.h, 67

STATE_MESG_SIZE
 backendCommon.h, 37
 backendWriteData.c, 49

state_messages
 .infoCUPS, 18
STATE_MRKSUP_DESCRIPTION
 bidiParser.h, 67
STATE_MRKSUP_ENTRY
 bidiParser.h, 67
STATE_MRKSUP_INDEX
 bidiParser.h, 67
STATE_MRKSUP_LEVEL
 bidiParser.h, 67
STATE_MRKSUP_MAXCAPACITY
 bidiParser.h, 67
STATE_MRKSUP_SUPPLYUNIT
 bidiParser.h, 67
STATE_MRKSUP_TABLE
 bidiParser.h, 67
STATE_MRKSUP_TYPE
 bidiParser.h, 67
STATE_PRINTER_MIB
 bidiParser.h, 67
state_reason
 .infoCUPS, 18
STATE_START
 bidiParser.h, 67
strlcat
 bidiparallel.c, 60
 bidiusb.c, 74
strlcpy
 bidiparallel.c, 61
 bidiusb.c, 74
SUBUNITSTATUS
 bidiTypes.h, 71

Test programs., 11
testformat.c, 108
 main, 108
 showAlert, 109
 showEntry, 109
 showLocalization, 109
 showMarkerSupplies, 109
testplugin.c, 110
 addInfo, 110
 main, 110
 showAlert, 110
 showEntry, 111
 showLocalization, 111
 showMarkerSupplies, 111

USB_NAME
 bidiusb.c, 74

value
 enumList, 27

writeData