

MiscSerialPort

Inherits From: NSObject

Declared In: MiscKit/MiscSerialPort.h

Class Description

The MiscSerialPort class provides access to serial ports. Port parameters such as baud rate, character length, parity and number of stop bits can be controlled. Most of the work is handled by an underlying NSFileHandle object.

Characters are transmitted to the serial line by the **writeData:** and **writeString:** methods.

Arrival of incoming characters is reported by the posting of a **MiscSerialPortReadCompletionNotification** to the default notification center. The *object* associated with the notification is the MiscSerialPort object which posted the notification. The *userInfo* dictionary contains the characters read from the serial port.

Instance Variables

```
BOOL isOpen;  
int fd;  
NSString *portName;  
int baud;  
enum MiscSerialPortParity parity;  
int characterLength;  
NSString *errorString;  
NSFileHandle *fileHandle;
```

isOpen	Set when the port has been successfully opened.
fd	The serial port file descriptor.
portName	The name of the serial port.
baud	The serial port rate.
parity	The serial port parity.
characterLength	The number of bits in a character.
errorString	A description of the most recent error.
fileHandle	The NSFileHandle object which does most of the work.

Method Types

Object initialization	- initWithPort:baud: - setCharacterLength:parity:
Object status	- errorString
Sending characters	- writeData: - writeString:

Instance Methods

errorString

- (NSString *)**errorString**

Returns a description of the most recent error, or **nil** if no error has yet occurred.

initWithPort:baud:

- **initWithPort:**(NSString *)*aString* **baud:**(int)*anInt*

Open the serial port whose name is given in *aString* and set the port speed to *anInt*. Returns **self** if all goes well. Returns **nil** if the serial port can not be opened or the parameters can not be set. Use **errorString** to get the reason for the failure to open or initialize the device.

See also: - `errorString`

setCharacterLength:parity:

- (BOOL)`setCharacterLength:(int)cLen parity:(int)par`

Set the number of bits in a character to *cLen* and the parity to *par*. Acceptable values for *par* are:

`MiscSerialPortNoParity`

`MiscSerialPortEvenParity`

`MiscSerialPortOddParity`

writeData:

- (BOOL)`writeData:(NSData *)data`

Transmit the contents of *data* to the serial line.

See also: - `writeString:`

writeString:

- (BOOL)`writeString:(NSString *)aString`

Transmit the contents of *aString* to the serial line.

See also: - `writeData:`

Notifications

MiscSerialPortReadCompletionNotification

Posted when characters arrive at the serial port.

The notification contains:

Notification Object

The notifying MiscSerialPort object.

Userinfo Key

Value

MiscSerialPortNotificationDataItem

An **NSData** object containing the received data.