MiscSerialPort

Inherits From: Object

Declared In: misckit/MiscSerialPort.h

Class Description

The MiscSerialPort class provides a wrapper around the serial ports in NeXTSTEP. It includes the ability to set the port's baudrate, parity, bits per character and to control the modem line DTR. A MiscSerialPort is initialized with the init method and then the various parameters are established for the line. A delegate provides a means to pass received characters to another object to be processed. Sending data is done by calling the sendChars:length: method. The line may be paused using the suspend and restarted by the continue methods in the event that it is desired to allow another mechanism (such as a subprocess) to have access to the port for a time.

Instance Variables

char **portName**[64];   BOOL **connected**;   BOOL **suspended**;int

| | **fd**; | id **delegate**; int **currentBaud**; int **currentParity**; | DPSTimedEntry ***tentry**; |

portName	Full path to the serial device.
connected	YES if the port is currently active.
suspended	YES if the port has been paused.
fd	file descriptor for an active port.
delegate	points to the delegate object. This object must answer the methods described for the MiscSerialPortDelegate category.
currentBaud	current baud rate (i.e. B9600)
currentParity	parity for the port as described in MiscSerialPort.h
tentry	a timed entry used to poll for received data

Method Types

Initializing the serial port	± init
Setting and examining parameters	± setDeviceName: ± setBaud: ± setBaudByName: ± setParity:

	± setDelegate:
	- (int)filedes
	- (BOOL)suspended
Controlling Communications	- (BOOL)connect
	- disconnect
	- suspend
	- continue
	- dropDTR
	- raiseDTR
Sending Data	- transmitChars:length:
Delegate methods	receiveChars:length:
	hangup

Instance Methods

connect
   - (BOOL)**connect**

Opens the port with the current parameters. Be sure to set a valid delegate before doing this.   Returns **YES** if the connect succeded and **NO** if the connection failed.

See also: **- disconnect**

continue

- continue

Restarts communications after the port has been suspended.   Returns *self*.

See also: **- suspend**

delegate
- delegate

Returns the pointer to the current delegate.

See also: **- setDelegate:**

disconnect
- disconnect

Closes the serial port.   Returns *self*.

See also: **-connect**

init
- init

Initializes an instance of MiscSerialPort.   Returns *self*.

dropDTR
- dropDTR

Lowers the DTR line to the port. This is usefull for hanging up on a modem.   Returns *self*.

See also: **-raiseDTR**

filedes
   - (int)**filedes**

Returns the file descriptor for an open port.

raiseDTR
   - raiseDTR

Raises the DTR line for the port.   Returns **self**.

See also: **- dropDTR**

setBaud:
   - setBaud: (int)baud

Sets the baudrate for the port. Baud should be one of the declared values in <sgtty.h>.   Returns **self**.

See also: **- setBaudByName:**

setBaudByName:
   - setBaudByName: (const char *)speed

Allows the setting of baud rate by a string value such as "9600".   Returns **self**.

See also: **- setBaud:**

setDelegate:
   - setDelegate: theConsumer

Sets the object that received characters and status changes will be sent to.   Returns **self**.

See also: **- delegate**

setDeviceName:
   - setDeviceName: (const char *)name

Sets the path to the port's device file. This should be done before calling connect. If the port is connected and this routine is called with a name that does not match the current name then the port will be disconnected and reconnected (this is not recomended since there is no way to get the connect status).   Returns **self**.

setParity
   - setParity: (int)parity

Sets the parity of the port. This is currently stubbed in and not implemented.   Returns **self**.

transmitChars:length:
   - transmitChars: (const char *)buffer **length:** (int)length

Transmits a buffer of characters through the port.   Returns **self**.

Delegate Methods

receiveChars: length:
   - receiveChars: (char *)buffer **length:** (int)length

Called when characters are received on the port to give the delegate a chance to process them. .   Returns **self**.

hangup
   - receiveChars: (char *)buffer **length:** (int)length

Called on a high to low transition of DCD. Not currently implemented .   Returns **self**.