TERMA

TEMU
Serial Console Model Manual

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Table 1. Record of Changes

Rev	Date	Author	Note
1.1	2016-05-12	MH	Auto gen tables.
1.0	2015-03-01	MH	Initial version.

1. Introduction

The serial console is a simple endpoint for serial traffic that you can connect a device's UART to. It echos received data to stdout and optionally logs the data in an unbounded log.

2. Dedicated API

There is a dedicated API for accessing the console log. Note that the functions are defined in libTEMUConsole.so.

```
// Include the Console API
#include "temu-c/Models/Console.h"

// These functions are defined in libTEMUConsole.so
uint64_t temu_consoleGetLineCount(void *Con);
const char* temu_consoleGetLine(void *Con, uint64_t Line);
```

3. Creation

The Console class is defined in libTEMUConsole.so. The constructor takes no parameters.

4. Configuration

config.caretControl can be used to eliminate some VT100 characters that are printed to the console otherwise.

config.recordTraffic can be set to enable data recording in the console model, this data can then be extracted with the API.

5. Attributes

5.1. Properties

Name	Type	Description
config.caretControl	uint8_t	

Name	Type	Description
config.recordTraffic	uint8_t	
lastByte	uint8_t	
object.timeSource	object	Time source object (a cpu or machine object)
outByte	uint8_t	
serial	iref	

5.2. Interfaces

Name	Type	Description
SerialIface	SerialIface	

5.3. Ports

Prop	Iface	Description
serial	SerialIface	serial port

6. Limitations

- The record buffer cannot be cleaned without deleting the console object.
- Caret control only omits caret sequences from being put on stdout (especially nice when booting Linux). It doesn’t act on the sequences in any way at the moment e.g. a delete character will be ignored and not actually delete anything.
- The record buffer will not be checkpointed.