WebControl32 Tcp Bridge

Version:	1.0
Hardware Version:	Rev-5.0
Firmware Version:	V4.0.1 or Greater
Date last modified:	15/01/2012

Table of Contents

1 Introduction

This document details the WebControl32 TCP bridge feature and the WcBridge PC utility. The TCP Bridge gives direct access to user's custom software to the on board UART's and DOW bus via a TCP socket.

1.1 References

Reference	Description
WebControl32 Hardware Guide	

1.2 Table of Definitions

The following table is a list of definitions used though out the document.

Definition	Description
DOW	Dallas One Wire
TCP	Transmittion Control Protocol
GUI	Graphical User Interface
UART	Universal Asynchronous Receiver Transmitter

2 TCP Bridge

2.1 Basics

WebControl32 exposes direct access to the two RS232 ports and the Dallas One Wire (DOW) bus over TCP. To access these ports directly simply open a socket to the peripheral port as configured from the web gui.or if no port has been pre-configured WebControl uses the following default ports:

Peripheral	TCP port
UART1	4500
UART2	5000
DOW	10000

Configuration of UART parameters (baud rate, stop bits) etc is done via the uart 2 tcp page from the web gui.

3 WcBridge Utility

3.1 Overview

The WcBridge utility is a small piece of software designed to run on a PC to bridge a virtual serial port to a TCP socket to access a WebControl UART or the DOW bus directly via a virtual PC COM port (or tty for Linux).

In order to use WcBridge it is necessary to install Com0Com or tty0tty on to your machine. See the documentation with Com0Com or tty0tty for installation and configuration instructions.

Com0Com can be obtained from here: http://com0com.sourceforge.net/
tty0tty can be obtained for Linux from here: http://tty0tty.sourceforge.net/

3.2 Usage

Once WcBridge has been installed and a virtual comport pair has be configured simply run WcBridge from the command line as follows:

```
wcbridge <comm.> <webcontrol host> <webcontrol host port>
```

where:

comm. – part B of the com0com virtual comport part
webcontrol host – the address or host name of the WebControl board
webcontrol host port – the port number to access the desired pheripheral on the WebControl board

e.g. `wcbridge CNCB0 192.168.1.15 4500`
would start wcbridge with part B of the virtual com0com pair 0, connect to WebControl port 4500.
Once wcbridge is running your custom application software can open part A of the com0com pair and read and write data directly to the WebControl peripheral.

3.3 Trouble Shooting

If you are having difficulties start wcbridge with the `verbose` option as the last command line parameter and wcbridge will give you extra debug output to aid in diagnosing the problem.

4 Revision History

Version	Whom	Date	Changes
1.0	CAI Networks	15/01/2012	Initial first version