README: Modbus/TCP Integration Kit for PAC Project R8.2d
March 15, 2012

Requires PAC Control version 8.1a or newer

Important Note for Users Upgrading from Version 8.1 (or Earlier) of this Toolkit
In prior versions of the toolkit (versions 8.1 and earlier), all Register data was
handled with either a float table (in the case of Read Holding Registers, Read
Input Registers, Preset Multiple Registers, and Read Write Holding Registers) or a
float variable (in the case of Preset Single Register) regardless of the value of
the Data Type parameter.

Starting with version R8.2a of the toolkit, the table and variable data types now
correctly match the Data Type parameter. This impacts how the subroutines are
called by the strategy and how the strategy interacts with the data tables.

When calling the subroutine, you will now need to pass both float and integer
tables (or float and integer variables). The subroutine will know which to use
based on the value of the Data Type parameter. For example, if using integer data,
you still have to pass the float table (or variable) even though it won't be used
(and vice versa). The simplest thing to do is to just configure the extra table as
having a length of 1 so it does not take up too much room in the controller.

You will also need to make sure that your strategy interacts with the correct data
tables. When using Data Types 2 or 3, which are both float data types, your
strategy will need to interact with the appropriate float table. When using Data
Types 0, 1, 4, or 5, which are all integer data types, your strategy will need to
interact with the appropriate integer table.

Master

R8.2d
3/15/2012
Changed subroutines to correct logic for address ID.

R8.2c
8/25/2010
Changed subroutines to receive characters faster.

R8.2b
7/13/2009
Added function 8

R8.2a
6/01/2009
* Added an integer table to function 3, 4, 16 and 23.
* Added an integer to function 6.
* Changed the name of the float table passed parameter used by function 3, 4, 16
  and 23.
* Changed the name of the float variable used by function 6.
* Tested using PAC R8.1c

V8.1d
12/10/2008
* Added new operation mode
* Added function 22
* Tested using PAC R8.1c

V8.1c
11/20/2008
* Fixed 16 bit signed if between -1 and 0
* Corrected response length
* Added check of correct table length
* Corrected problem with WEB zip file

V8.1b
04/25/2008
Corrected bug in block 35 that prevents multiple masters

V8.1a
01/16/2008
* Modified to keep session open
* Tested using PAC Project R8.1c

V8.1
12/04/2007
* Added function 23
* Tested using PAC Project R8.1b

V8.0
04/09/2007
Loaded and tested using PAC Project R8.0c

V1.1
11/02/2006
Added delay after -412 error

<u>Slave</u>

R8.2d
3/15/2012
No change to slave chart.

R8.2c
8/25/2010
Changed receive block to receive characters faster.

R8.2b
07/13/2009
Added function 8

8.2a
06/01/2009
* Added an integer table to function 3, 4, 6, 16 and 23
* Changed the name of the float used by function 3, 4, 6, 16 and 23

V8.1d
12/10/2008
* Added new operation mode
* Added function 22
* Tested using PAC R8.1c

V8.1c
11/20/2008
* Fixed 16 bit signed if between -1 and 0
* Corrected response length
* Corrected problem with WEB zip file

* Tested using PAC R8.1c

V8.1b
04/25/2008
* Corrected bug in block 35
* Corrected address check
* Tested using PAC R8.1c

V8.1a
01/16/2008
* Modified to keep session open
* Tested using PAC R8.1c

V8.1
12/04/2007
* Added function 23
* Tested using PAC Project R8.1b

V8.0
04/09/2007
Loaded and tested using PAC Project R8.0c