INSTRUCTION MANUAL

RTMC WebServer

Revision: 8/10

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RTMC WebServer

1. Introduction

The RTMC WebServer is designed to be a very simple solution for displaying real-time data on the Internet. The RTMC WebServer generates images from your RTMC display screens and exports them to Internet browsers such as Internet Explorer, Firefox, or Opera. The web displays generated are read-only when displayed in a browser. This means that the use of toggles, sliders, and set points will be limited to display only, and will not allow you to set variables or toggle ports and flags remotely. If you need to be able to perform remote control operations, you will need a remote client application, which can be purchased from Campbell Scientific.

2. Getting Started

In order to use the RTMC WebServer you will need to create an RTMC display screen using the RTMC Developer program included with LoggerNet, RTDAQ, or RTMC Pro. Once you have the screen developed and LoggerNet or RTDAQ running, you are ready to start up the RTMC WebServer. When you run the RTMC WebServer for the first time, an option dialog is displayed that allows you to configure how the RTMC WebServer will behave (see the following section for additional information on the web server options). If a web server is currently using the default HTTP port of 80, then a dialog will be displayed allowing you to change the port the RTMC WebServer will use. Once you have finished setting up the RTMC WebServer options dialog, press the "OK" button.

The RTMC WebServer application runs in the Windows system tray located at the bottom right of the screen. Right-clicking on the icon will bring up a menu that allows you to modify the web server options or exit the application. Hovering the mouse over the icon will display the IP address of the web server and the current state. The icon color will help determine the state of the RTMC WebServer as well. If someone has accessed your web server recently then the color will change from blue (idle) to green (active).

To view web pages from your web server, you will need to launch your web browser application and enter the URL for your web server. For example, if my IP address is 192.168.1.2, I would enter http://192.168.1.2 to view my web page. This is also the URL that would be used to access your web server from a different computer. If you are trying to access the web server locally, just enter http://localhost in your browser.

NOTE	There are many different types of networks, firewalls, and Internet Service Providers (ISP). If you are having problems accessing your web server, you will need to contact your network administrator to troubleshoot the issue.

NOTE	When running RTMC WebServer with RTDAQ, you must be connected to your datalogger and actively polling a table for new data to be displayed in RTMC WebServer. This means you must have data from the table displayed in a real-time window (field monitor, table monitor, graph, etc.) with the Start button pressed.

3. RTMC WebServer Options

The following options can be set for the RTMC WebServer.

RTMC Project File: The RTMC project file you want displayed to users on the Internet.

Auto reload: This option allows the RTMC WebServer to monitor the RTMC Project File for changes and automatically reload it if the file changes. This is convenient when the RTMC Project file is under development and you want to preview the file in browser.

Update Interval: The RTMC WebServer will create new images to be displayed on the Internet based on this interval. This interval is also used by the browser to determine how often to refresh the view of the web page.

HTTP Port: Web browsers use port 80 by default when connecting to a web server. However, only one web server can be using a specific port. So if you are trying to run more than one web server, you will need to specify different ports for each of them. If you are running your web server on a port other than port 80, you will need to specify the port number in the URL in order to view web pages from the web server. For example, http://www.your-server.com:81 would try to connect to the web server using port 81 instead of the default web server on port 80.

Hide Tabbed Page Headings: This option hides the tabs at the top of the page which allow you to navigate between screens. You may wish to do this if your project has only one screen or if you use hotspots to navigate between screens.

Show Data Browse Tab: Checking this option will display a "Data Browser" tab at the top of each web page generated by the RTMC WebServer. This Hyperlink will allow anyone to view all of the stations and tables in your LoggerNet or RTDAQ network map and display the newest record for each table. (In RTDAQ, you will only see data for tables of the connected datalogger.)

Show Network Status Tab: Checking this option will display a "Network Status" tab at the top of each web page generated by the web server. This Hyperlink will allow anyone to view the status of your LoggerNet or RTDAQ network.

Disable TableDisplay Auto Page Refresh: TableDisplay components are displayed as image maps and can be clicked on from within your RTMC Screen Displays. Often this will result in a large HTML table of data being generated. This option allows you to browse the data without the page being refreshed causing you to lose your position on the page.

Security Settings: Enabling security allows you to set a username and password that a user must enter in order to view web pages from the web server.

4. Command Line

The command line is a convenient way to run multiple web servers simultaneously. Typically this is not necessary.

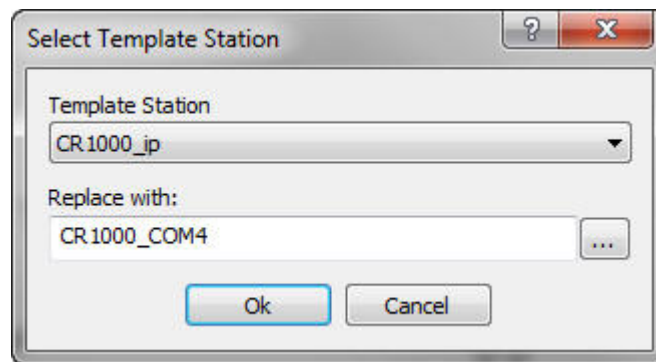Optional Command Line Parameters:

> --web_file_name=[*drive*]:[*path*]*filename*
> --web_auto_reload_file=True|False
> --web_update_interval=*nnnnn*
> --web_update_interval_units=Seconds|Minutes|Hours|Days|Weeks
> --web_port=*nnnnn*
> --web_show_data_browse=True|False
> --web_show_tables=True|False (same as --web_show_data_browse)
> --web_show_status=True|False
> --web_hide_tabbed_headings=True|False
> --web_disable_table_refresh=True|False
> --web_enable_security=True|False
> --web_username=*username*
> --web_password=*password*

Ex. RTMC_WebServer.exe --web_update_interval=10 --web_update_interval_units=Minutes --web_port=8080 --web_show_tables=True --web_show_status=False --web_file_name=c:\campbellsci\rtmc\new_project.rtmc2

5. Template Stations

If a project was designated "Load as Template" in RTMC Pro, the user will be given the chance to replace stations each time the project is opened in RTMC WebServer. This enables the same project to be easily used for multiple stations

When a project designated as "Load as Template" is loaded in RTMC WebServer, the following dialog box will appear:

The Template Station drop-down list will contain all of the stations used in the template project. After selecting a station from the drop-down list, open the Data Source Browser by pressing the button to the right of the Replace with field. From the Data Source Browser, select a station to replace the template station. Each reference to the template station in the project will be replaced by the designated station.

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