

ScadaPhone WebServer Datasheet

ScadaPhone Webserver allows real-time access to ScadaPhone Alarm Summary, Tag Database and Logs from a Web Browser, Local or remotely.

Overview

ScadaPhone WebServer allows real-time access to ScadaPhone **Alarm Summary, Tag Database** and **Logs** from a **Web Browser**, Local or remotely.

WebServer allows a user to access predefined items as follows:

- Check System Status
- View Alarm Summary and Acknowledge Alarms
- View Tag Lists
- Modify Tag Values
- View Alarm History
- View Activity Log
- View Performance Log
- View Email Log
- View TTP Server Log
- View TTP Redundancy Log

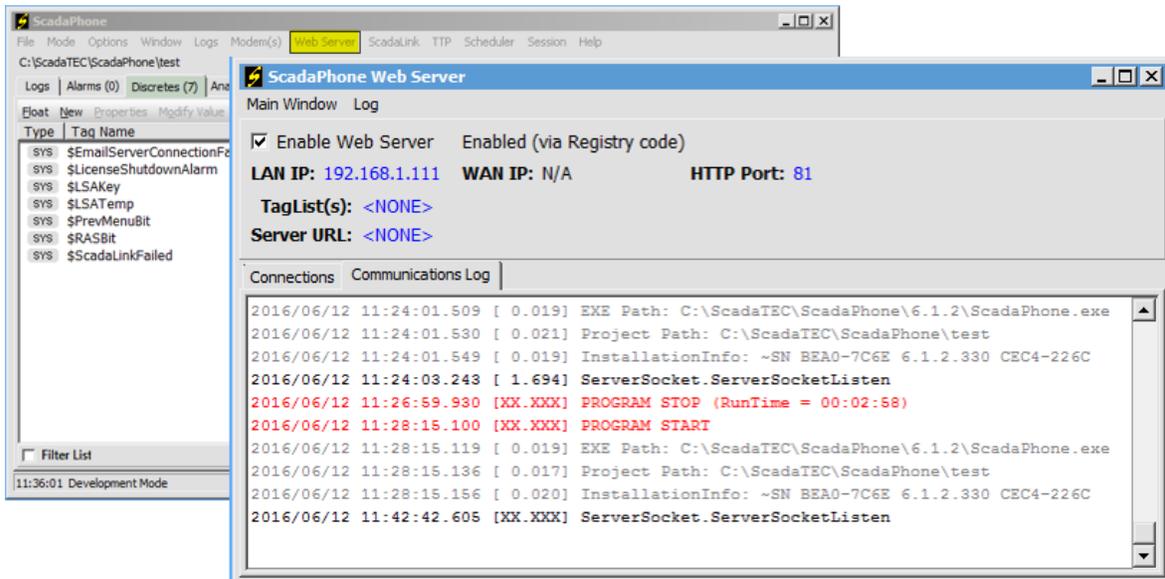
The primary goal of implementing this interface as a standard HTML web page interface is to achieve cross platform remote access capability from any smart-phone, tablet, laptop or desktop computer. To use the **ScadaPhone WebServer** from a remote connection, the computer on which ScadaPhone is installed must have internet access and must be allowed to accept incoming connections from remote clients through a configurable **HTTP Port**.

WebServer capability is optional and must be authorized separately from the standard ScadaPhone authorization. Non-authorized use of this feature is limited to a **one-hour trial period** (for testing and evaluation). To authorize the Web Server for continuous use, click the license-status label and follow the instructions.

Configure WebServer

Click the **WebServer** menu item from ScadaPhone's main window.

Check Enable WebServer box.



Incoming client browser connection attempts will be ignored unless there is a check-mark in the **Enable WebServer** box.

The Local Area Network IP Address (**LAN IP**), Wide Area Network IP Address (**WAN IP**) and HTTP Port are displayed to inform the user where to connect. For example:

- <http://192.168.1.102:81> from any machine on the local network.
- <http://174.134.4.144:81> from the internet.

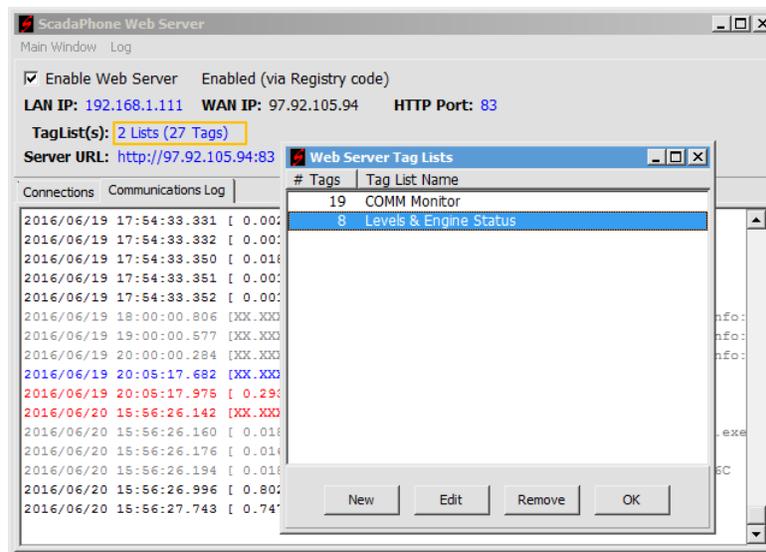
If the computer on which this server is hosted has a **Dynamic IP Address**, the address values will be subject to change; if this is the case, the best solution is to use a **Dynamic DNS Service** (such as No-IP.com, changeip.com, etc...). A Dynamic DNS Server will typically require the installation of a small utility application which periodically makes sure that the current WAN IP of your server is assigned to a static URL which the client web browsers can save as a Bookmark or Favorite URL. Some of these services are FREE for one or more listings.

If the host machine has more than one Network Adapter, the preferred adapter can be selected by clicking on the blue **LAN IP** label. The selected adapter preference will be stored via the **MAC Address** (which never changes) to ensure that it is correctly selected on subsequent runs of ScadaPhone which may happen after the adapter has been assigned to a different **IP Address**.

The **HTTP Port** is the Windows Socket to which ScadaPhone's Web Server will be bound. The globally accepted default port number for HTTP servers is port **80**; however, many Internet Service Providers will block traffic going to port **80** for security or performance reasons. To avoid this common issue, ScadaPhone's Web Server defaults to port **81**, but can be set to any other available port number (simply click on the blue port number label to select a different port number).

The **Server URL** setting specifies what kind of link back to this web server should be placed in **outgoing email alarm notifications**; this link can be set to use a WAN IP URL (such as <http://174.134.4.144:81>), a DNS hosted URL (such as <http://www.MySys.net:81>), or no link.

The ScadaPhone Web Server allows the system designer to specify lists of tags to be made accessible to web clients. The desired tags can be segregated and placed into groups that have a common association (e.g. "Communications" or "Electrical Generation") so that the user can navigate to the desired information quickly. To configure the list(s) of tags to be made available through the ScadaPhone Web Server, click the **Tag List(s)** hyperlink:



There is no limit to the number of lists or the number of tags in each list, but care should be taken to not overburden the users with excessively long list when they are viewing this information on their mobile devices.

From a selected list, the remote user can view the current values of each tag. Clicking on the **Modify** button in the list allows the user to modify the **Tag's** value.

Below are examples of a **Group Tag List** and an **Expanded Tag List**



Group Tag List



Expanded Tag List

Router Configuration

In most cases, the ScadaPhone Web Server will be installed on a network under the control of a router. So when ScadaPhone displays the WAN IP on the Web Server setup window, this is really the IP Address of the router as allocated by the Internet Service Provider. In order to properly route connections from the internet through the router and down to the host machine, the router must be assigned a port number. The port forwarding router function is typically used.

Once connected, a **Login** screen as shown below, will be displayed. The User Name and Password must match one of the entries in the “Users” tab in ScadaPhone.



Login Screen

Once successfully logged in, the **Main Menu** screen will display. The tabs on this screen provide navigation to other screens in the WebServer connection.



Main Menu

System Status displays the System Time, whether ScadaPhone is in Runtime or Development Mode, Connection Duration and the Client IP address.



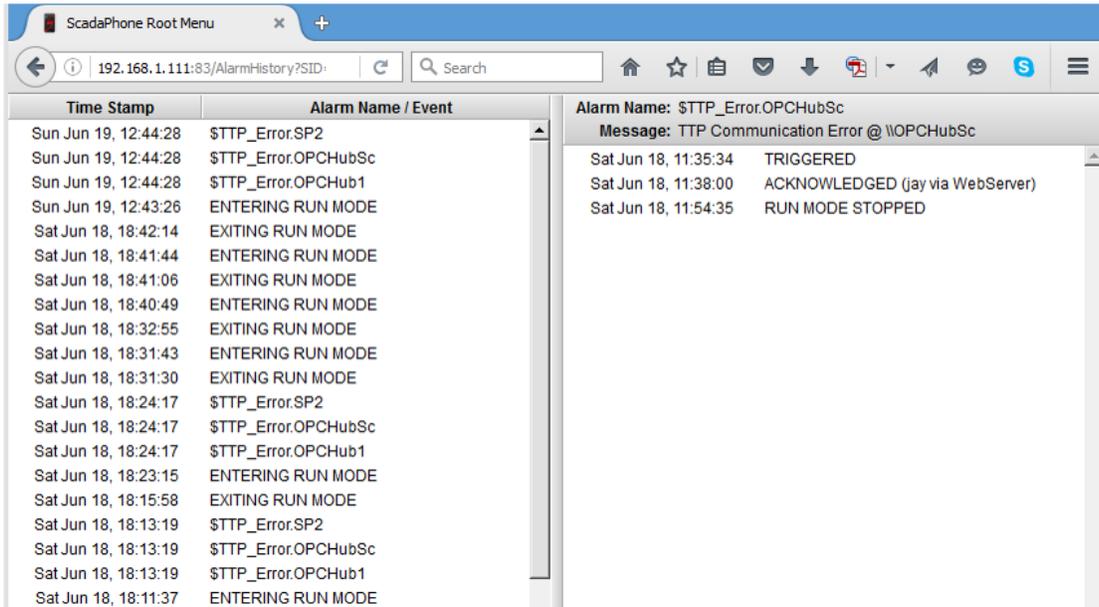
System Status

The User can view the Alarm History and other Logs listed on the Logs Menu

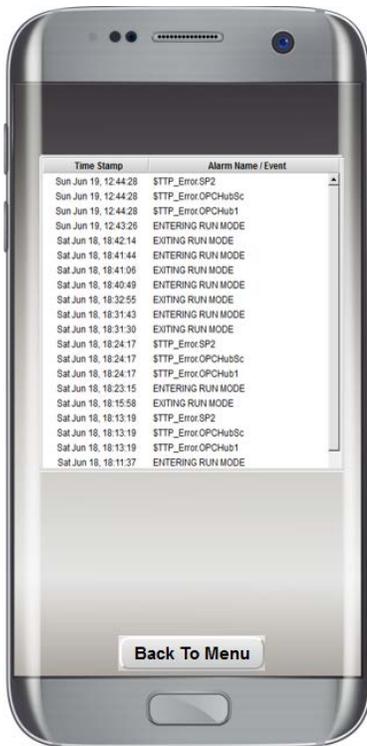


Logs Menu

Alarm History Log is one of the most useful logs. It tracks the activity of an alarm. When this log is displayed, the left panel displays a list of the most recent alarms. Selecting an entry from this list will display its activity on the right panel.



Alarm History Log on a Local Computer



Alarm History Log on a Mobile Device

The user can view the **Alarm Summary** and acknowledge alarms by checking the boxes and then click the button labelled **Ack Alarms**



Alarm Summary



Alarms Acknowledged

If there is no activity from the remote connection for approximately 3 minutes, The screen will give a 20 second warning and then the user will be automatically logged off.

