Notes for Getting Your MegaTron Online

Web Advantage server and website are designed to keep in constant contact with MegaTron controllers connected to the internet. The Web Advantage sever constantly downloads real time data and saves this data, for graphing and logging trends. It can also send alarm notification to multiple individuals via e-mail. In addition, it lets a user log in to check or change settings in the controller.

The WebAdvantage is designed to be straightforward and easy to use. Please read your MegaTron manual and familiarize yourself with the MegaTron controller. Setup requires only a few minutes, provided you have the necessary information on hand. When your WebAdvantage enabled MegaTron arrives, it will need access to the Internet via a DSL or other connection.

Once the controller is placed in it's permanent position, some settings will need to be changed so that the unit can connect to the Internet. You will need the following information/equipment to properly configure the unit:

- A network connection and the appropriate cabling (RJ-45 terminated category 5 cable for H1, a phone line for H4). A USB cellular modem with data plan from Advantage Controls is also available to connect with the H1 option.
- Knowing whether the unit will be connected to the Internet through a LAN (local area network) or directly connected using an ISP (Internet service provider, such as EarthLink, or AT&T).
- If connected to a LAN, know whether the unit will be using a **static** or **dynamic** IP address. If the unit will use a static IP address, you will need to obtain a useable static IP addresses from your IT staff for the **network address**, **network mask**, and **network gateway**. If the unit will use dynamic addressing (available only on software versions HG and later), this information is provided automatically.

Frequently Asked Questions

Here are some FAQs your IT department may want to know before giving the unit access to the Internet.

Q. *What TCP ports does the controller use?*
A. Port 80 is the port to be used for Internet-bound traffic. The controller can also be configured to use port 9090. The servers block all inbound traffic aside from Port 80 and require controller software/encryption to establish communication.

Q. *How much network bandwidth does the controller require?*
A. During normal operations about 32 bytes are sent every 10 seconds. When downloads or changes are made this amount can go up to 150 - 175 bytes, but these events are short in duration and infrequent.

Q. *How much data/bandwidth does the controller send/use?*
A. It varies by build and configuration, anywhere from 10MB to 150MB a month.

Q. *If the network is unavailable to the controller; does data queue so when the network is available again it is bombarded with this data?*
A. No. The controller will start replacing missing data slowly, once the connection is re-established.

Q. *Is my data protected?*
A. The servers are redundant in the event of a CPU, drive, fan, memory or power failure. They are kept behind locked doors in a NOC environment.

Q. *Can the unit be used to contact any other web locations?*
A. No, The controller can only contact the WebAdvantage server. The controller has no browser, or messaging capabilities aside from alarm notifications that are sent through the WebAdvantage server.

Q. *Is our information secure?*
A. Communication between WebAdvantage users is custom encrypted and the server is hardened to keep your data secure. The controller initiates the connection to the server from inside the customer's network. The server is never looking for the controller. We use hardened Linux core servers with custom developed software and firewall configurations. Only our server has the ability to communicate with the controller aside from local web services.

Q. *Can the unit be connected to a wireless network connection?*
A. Yes, but additional hardware will be required. To connect to an existing wireless network infrastructure is possible with a wireless bridge such as the Linksys WET200. These devices are designed to allow a hardwired network device to be configured and accessible to existing wireless networks. The wireless bridge must first be configured prior to installation. Then plug the Cat5e/RJ45 connection from the MegaTron H1 option into the wireless network bridge. Once configured to properly access the existing network the unit will then automatically connect to the WebAdvantage service.

A wifi network can be created by adding a wireless access point such as the Linksys WAP54G. This device extends the wired existing network into a wireless network. To configure and secure this device it would need to be connected to a notebook or computer via a crossover cable and configured prior to installation.