WebAdvantage3
Device Internet Communications

Internet Control:

➢ **MegaTron Controller**
➢ **MegaTronXS Controller**
➢ **MegaTronSS Controller**

VERY IMPORTANT: This manual contains information and contact sheets that must be returned in order for you to use the controller online.   DO NOT DISCARD THIS MANUAL!

10/2017
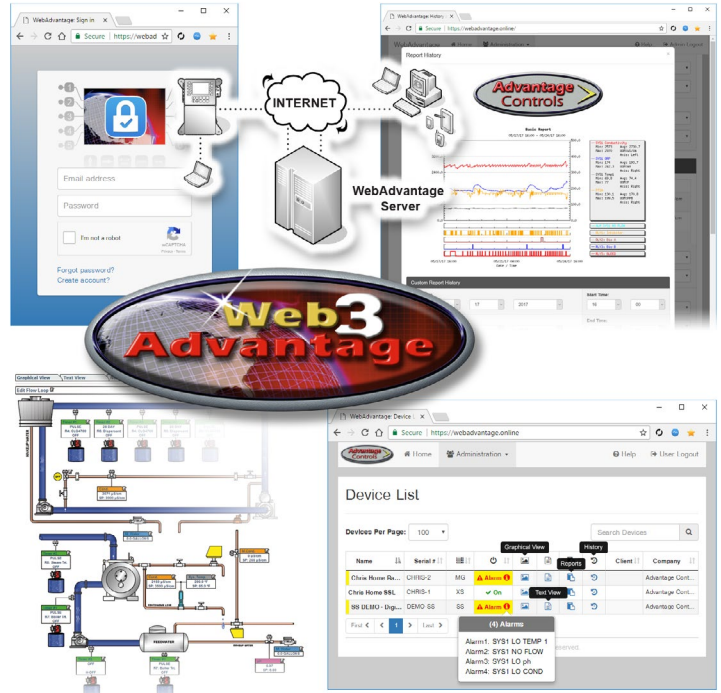
Contents

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```

WebAdvantage Connection - SETUP CHECKLIST

• Do you have a WebAdv3 USER ID and password? _____ **Yes**, *if 'No' proceed to page 17.*

• Has your account admin added the device and linked it to your USER ID? _____ **Yes**, *if 'No' proceed to page 21*.

• Is your controller currently connected to WebAdvantage in either Classic or Enhanced modes? _____ **No**, *if 'Yes' proceed to "Migration Steps" beginning on page 18*.

Congratulations! You are now ready to go online with Web Advantage 3.

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Overview

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

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 company provided network connection or Advantage cellular router.

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).

- 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, DNS** and **network gateway**. If the unit will use dynamic addressing, this information is provided automatically.

Getting Started

Using the inline coupler provided with the unit, connect a live CAT5 cable to the CAT5 cable coming from the MegaTron Controller.

Note: A unit must have a name of at least one character for the WebAdvantage server to recognize it when viewing the status page.

Once you have determined if the controller will be using a dynamic IP address (DHCP) or static IP address you will need to make sure the controller's Network settings are configured appropriately. From the Home menu of the controller go into the Configure menu then the Network sub menu.

```
        >NETWORK<

IP ADDRESS:   0.0.0.0
SUBNET MASK:  0.0.0.0
GATEWAY       0.0.0.0
ACI SERVER:   connect.webadvantage.online:80
LOCAL MODE:   ON
REMOTE MODE:  ON                    DHCP
SETTINGS                           RESET
```

```
       >CONFIGURE NETWORK<

IP ADDRESS              HTTP LOCAL
IP MASK                HTTP REMOTE
GATEWAY                   SEC DNS
PRI. DNS                    HOST
SERVER                    DOMAIN
```

If connecting to the network using a static IP address, the DHCP will need to be off and the static information IP, Mask, Gateway and DNS entered into the controller. If you are connecting to the network using a dynamic IP address, the settings will be applied automatically.

When making changes use the keypad to enter numbers, the up / down arrows to scroll through the alphabet. Press the right arrow after each desired character is entered to set the next character.

TIP: If you press the HELP button after arrowing over to the next position the last letter or number you selected will be displayed, this is especially handy if you are using lower case letters.

Note: Always press the RESET button when any changes have been made to the network settings.

Web Advantage website url:

https://webadvantage.online

(or) from the **www.AdvantageControls.com** website.
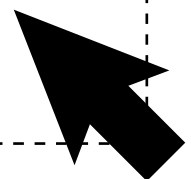
## Log In Screen

To login you must have the USERID and password that was created on page 17. If this has not been filled in and submitted, contact our WebAdvantage department at 918-686-6211.

You can then use <u>any desktop or mobile web browser</u> that allows cookies, and has java scripting enabled to connect to the remote communications server.

• USERID = Email Address
• Password
  ✔ • "Not a Robot" Captcha Verification
  Note: On success reveals sign in button
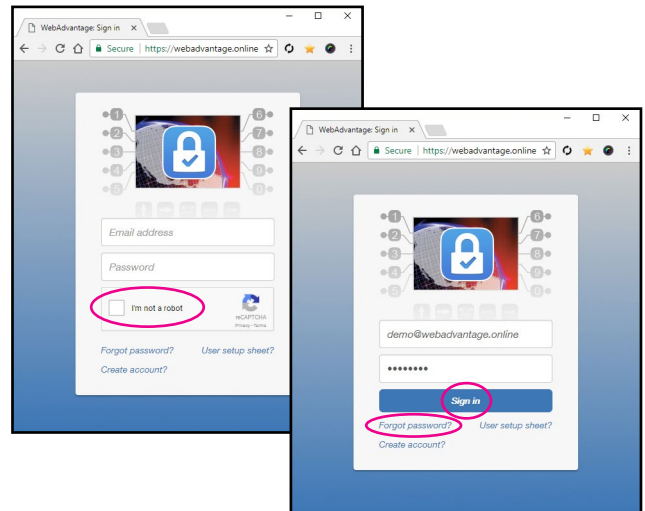
If you have misplaced your USERID / password or
need to create a new account, links are provided near the bottom of the login form.

Device List (Home)

Optimized for use with mobile and desktop browsers. Mobile menu accessed with the icon at the top right

Mobile Version

Desktop Version

You start at the Device List screen when you first log in.

This screen lists all the devices you have connected to the system.
From here you have access to a sortable/searchable list of devices by Name, Serial, Type, Status, Graphical View, Text View, Reports, History, Access, and more...

Select the controller you wish to work with by clicking on **"Graphical View"**, **"Text View", "Reports"** or **"History"**. You can view the controller settings by clicking on either **"Graphical"** or **"Text View"**. The "**History**" link will allow you to view your history in a log table or graph mode. **"Reports"** will allow you to use the device data to generate a report. To return to this screen, click **"Home"** link on the bar at the top of the page at anytime.
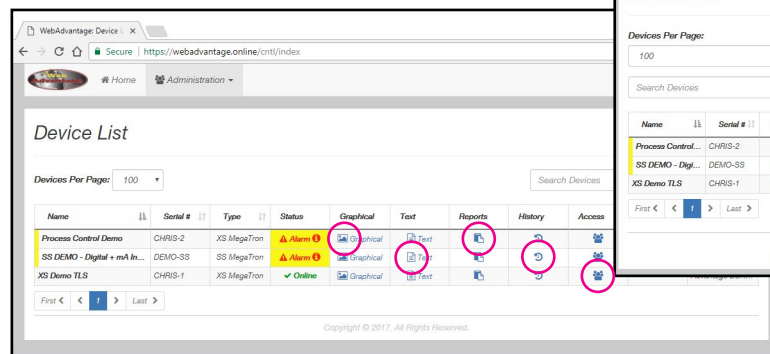
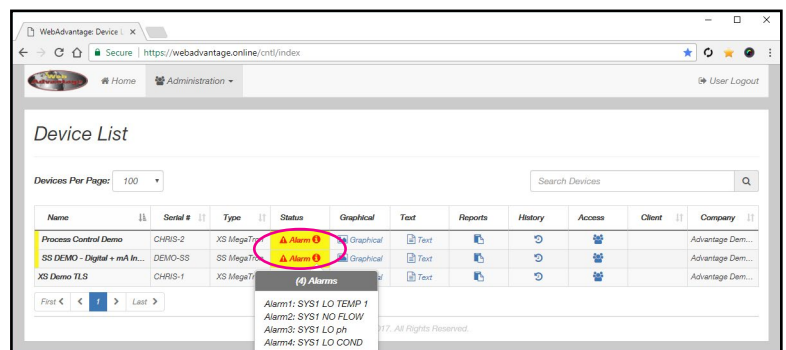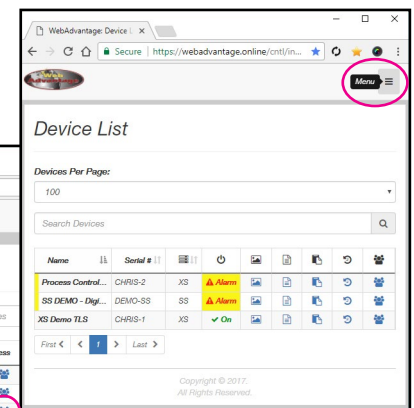⚠ **Alarm Quick Summary** shown when clicking on a particular alert.

Conditions:
• On-Line – **Green**
• Off-Line – **Red**
• Alarm Condition – **Yellow**

🖼 Graphical View

• Visual representation of system

📄 Text View

• Text only version of system setting and readings

Text View

Graphical View

Note: You can alternate between the different views at any time from the home screen (device view) or from the tabs at the top of each view.

📑 Reports

Here you can create as many custom reports that are desired for a given MegaTron controller. These reports can have any of the system parameters plotted onto a graph (probe readings, relays, alarms, Notepad entries) in various colors. It is recommended that reports / graphs use readings of the same units of measure to keep a graph understandable.

Reports can then be set to have the server automatically email them at a desired interval to various email accounts.

• Listing of saved reports
      • View, edit, delete options
• Create a new report
• Create a new report from template. See page 14.

General

• Report Name
• Permissions
     • User, User (Shared) or Controller

User: Only the report creator can see report on WebAdv

User (Shared): Creator can edit report. Others can only view report

Controller: Anyone with controller access can edit or view report.

Note: You can email reports to others not on WebAdv if needed. See "Emailing" section below.
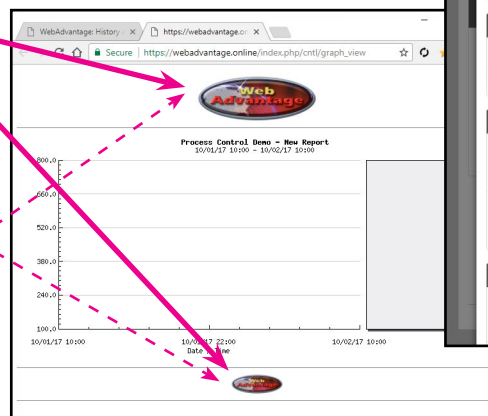

Branding

(Location choice)
• Primary logo
• Secondary logo

(Image choice)
     • None
     • Company
     • Device

Note: Uploading images may require admin permissions. See page 21.

Sample Report

Emailing

• Email date = Future email will be sent on this date

Note: If you plan to disconnect your controller for an extended period of time, change the "**Email Date**" to match the future re-connection. This will avoid a backlog of unnecessary emails waiting to be sent after reconnect. It is also a good time to verify that the assigned email has not changed.

• Hour offset = Adjustable in relation to central time zone

• Logs
  • Graph only, Graph and logs only, Logs only, Webadvantage export = Text file based on report channels

• Email addresses = Multiple email addresses can be listed in this field with a comma "," between each address.

Tip: If you need the alarm sent via text, most USA based phone carriers have an email address assigned to the phone's text messaging function. Adding this particular email address to the user's profile alarms, WebAdvantage will send an email to the phone that shows up as a text message. That email address is typically the phone's 10 digit number @ a particular carrier base address.
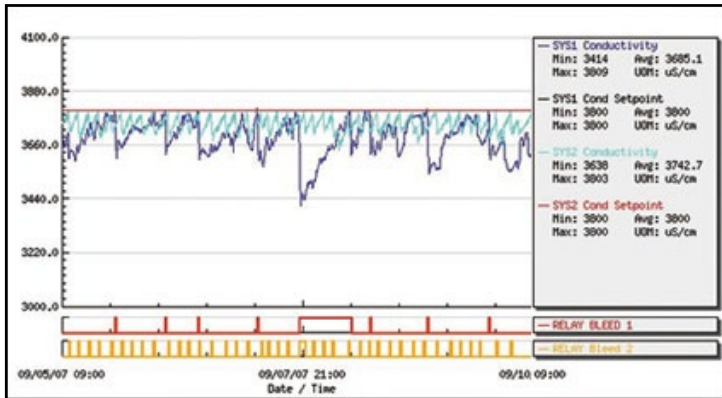

Past Examples:
Verizon = 9186866211@vtext.com
AT&T = 9186866211@txt.att.net

Report Settings

• Interval = How often report will be sent

• Axis
    • Single
    • Dual = Example: Dual axis allows you to
      view conductivity and pH on the same graph.

• Left Axis (Min)
• Left Axis (Max)
• Right Axis (Min)
• Right Axis (Max)

Sample Graph

Channels

Any sensor or measure going through controller.

• New channel
    • View, modify, delete
• Channel Name, Color, Axis, Legend Type, Name
Override

• Channel Name = Listing comes from the controller

• Channel Color = Line color on graph

• Axis
  • Left or Right-hand side

• Legend Type
  • Average or Usage

Average: Displays min/max values on graph

Usage: Displays projected usage based on previous data

• Name Override = Example: Shorten the System 1 pH title to just pH in the graph's legend.

• Also create user template = When checked only the creator can see this template
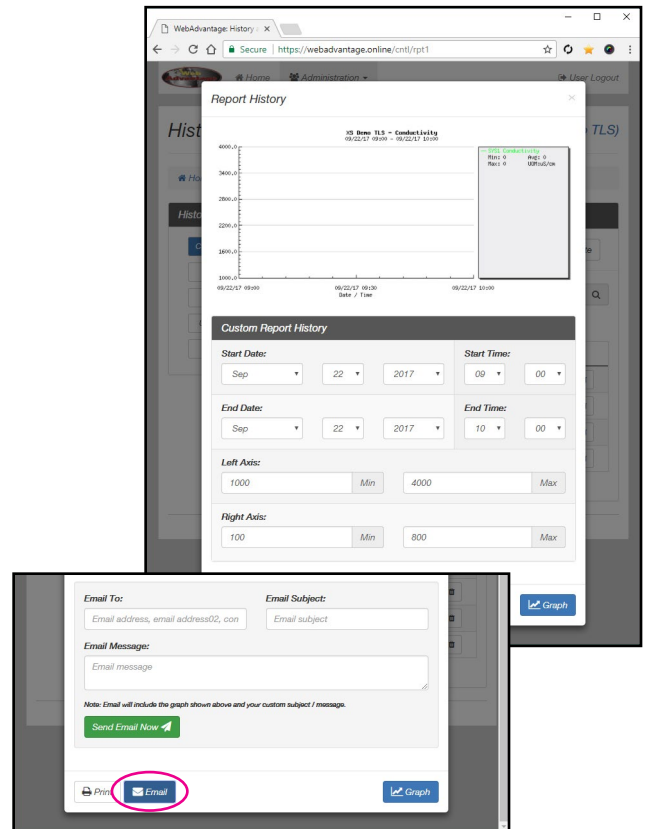
Viewing / Generating Reports

• Graph
• Start Date / Time
• End Date / Time
• Left Axis (Min)
• Left Axis (Max)
• Right Axis (Min)
• Right Axis (Max)
Select values then click the graph button to update.

• Email Button = Expands to show email options
    • Email To
    • Email Subject
    • Email Message

Note: Email will include the graph shown above along with your custom subject / message.

History (Quick View)

Shortcut from Device List

General
    • History of: Sensor, Notepad, Water Meter, Relay, Alarm, Special Events, mA Inputs
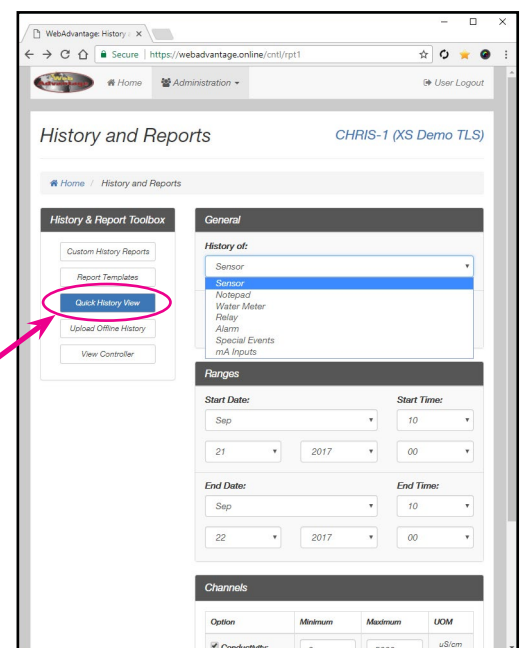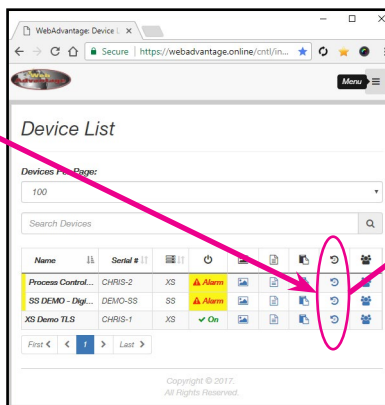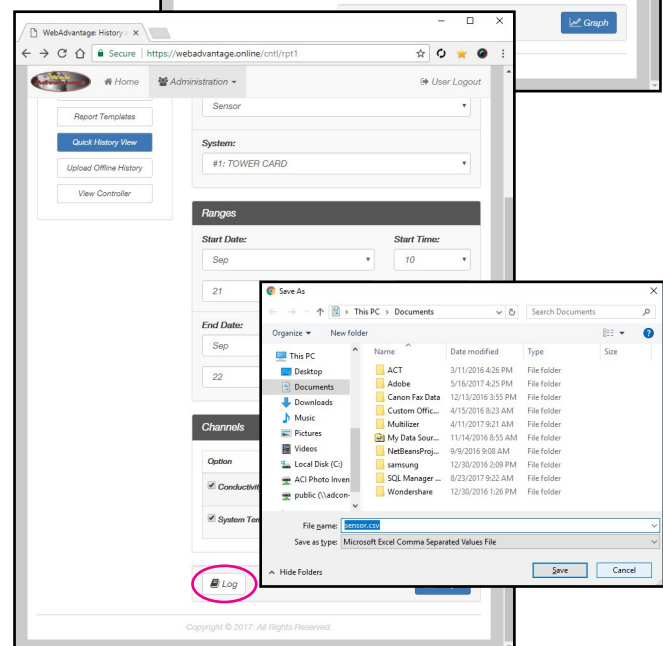
• System = Controller assigned values

Ranges

• Start date / time
• End date / time

Note: Based on central time zone. Rendering times may vary.

Channels

• Channel option = Pulled from controller
> • Min
> • Max
> • UOM (Unit of measure)

Log Button = Create a .csv file of history data
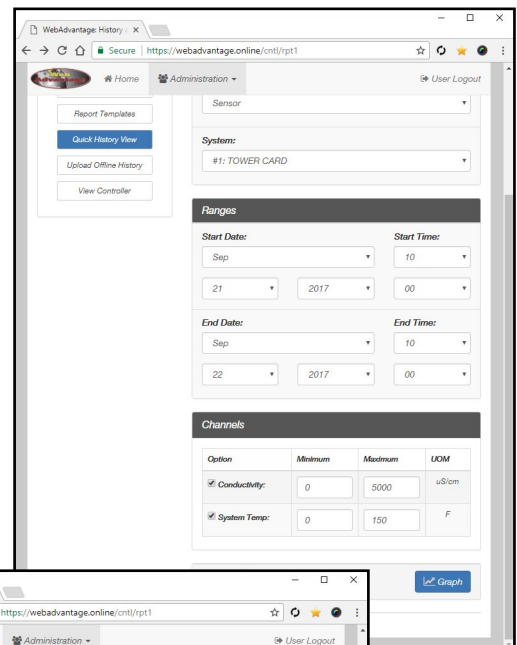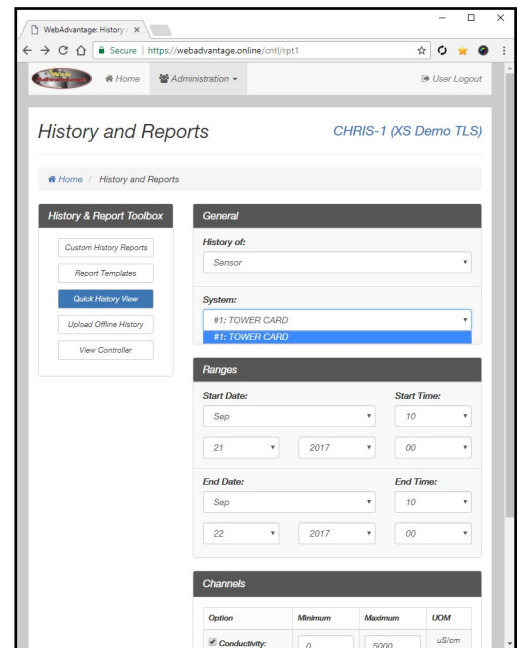
Graph Button = Displays graph in popup
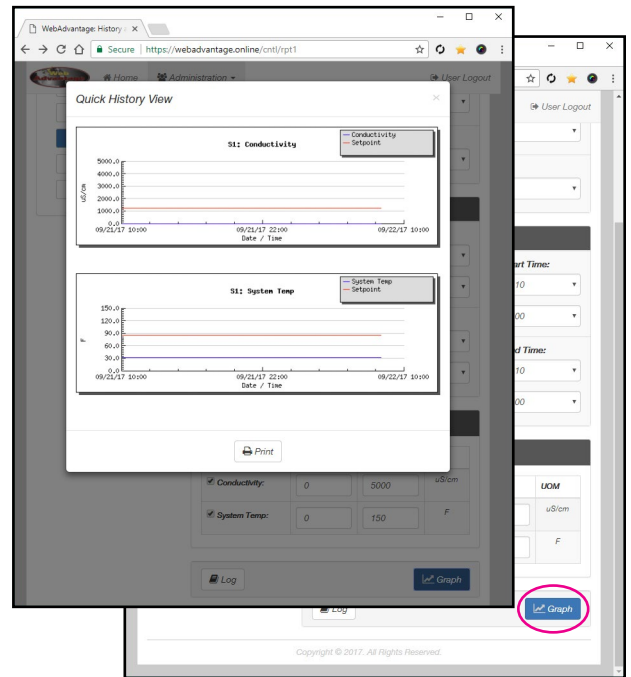
Viewing a Custom History Report

• Custom History Report

    • **Magnifying glass icon** to view
     report. Here you can <u>temporarily</u>
     <u>change</u> values to update the graph.
     This will not affect future reports.

    • **Pencil icon** to edit report.
     This <u>will</u> <u>change</u> <u>future</u> reports.

    • **Trash can icon** to <u>permanently</u>
     <u>remove</u> report
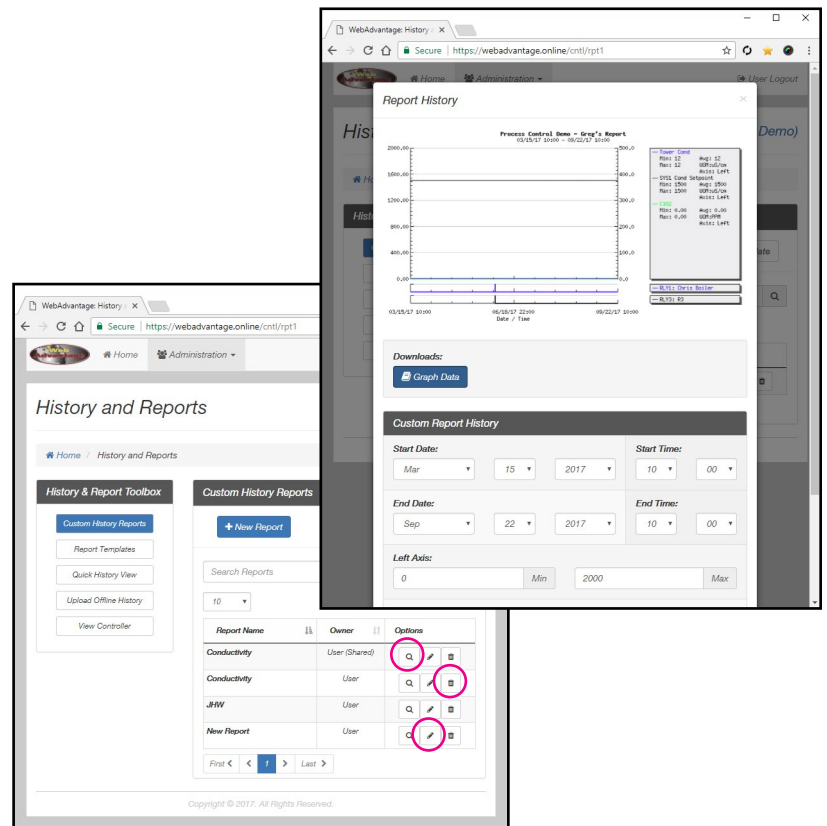
Downloads

• Graph data button = Only available when report is set to Graph & Log.
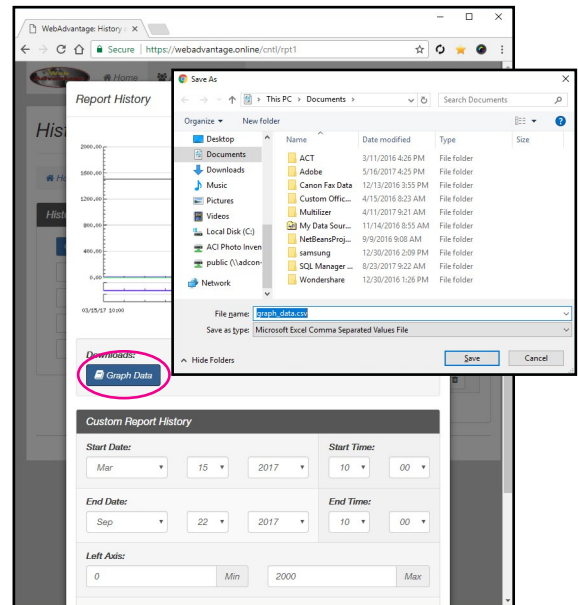
New Report Template

• Report Templates
      • New Template

Note: To learn more about each of these settings, refer back to page 6.
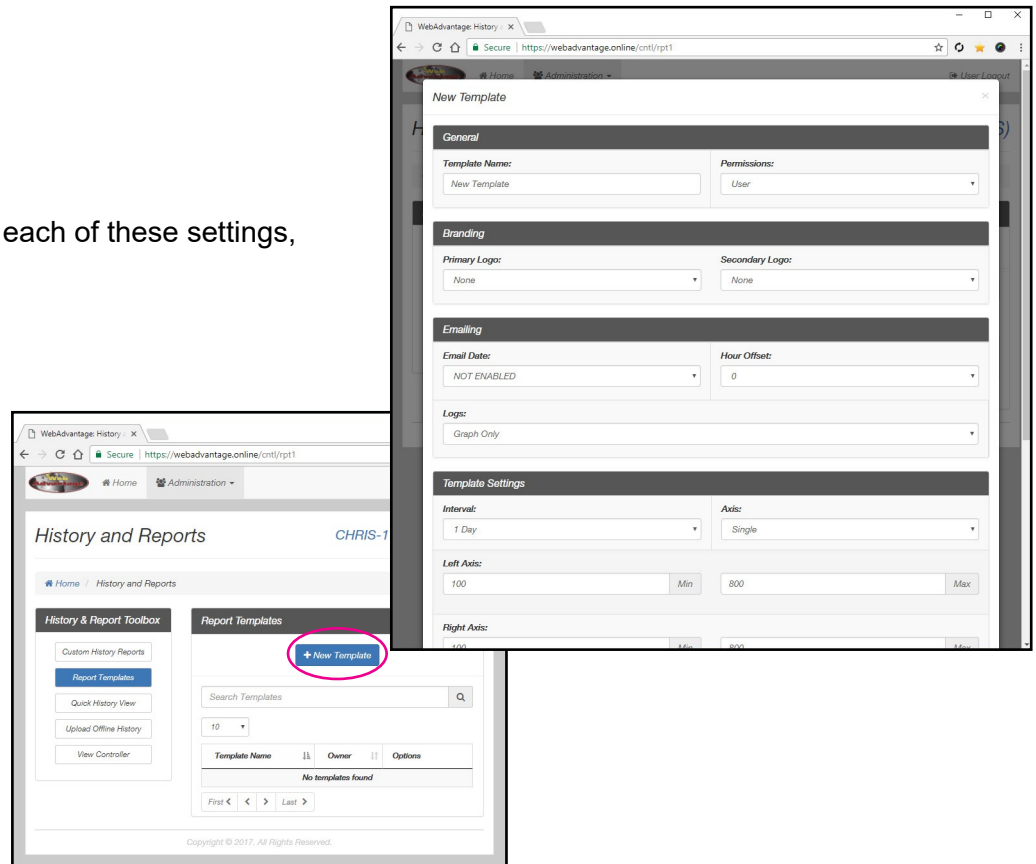
Access

Note: Only available with device manager privileges.

• Click the **People icon** to see who has access to the device
• Change permissions if allowed
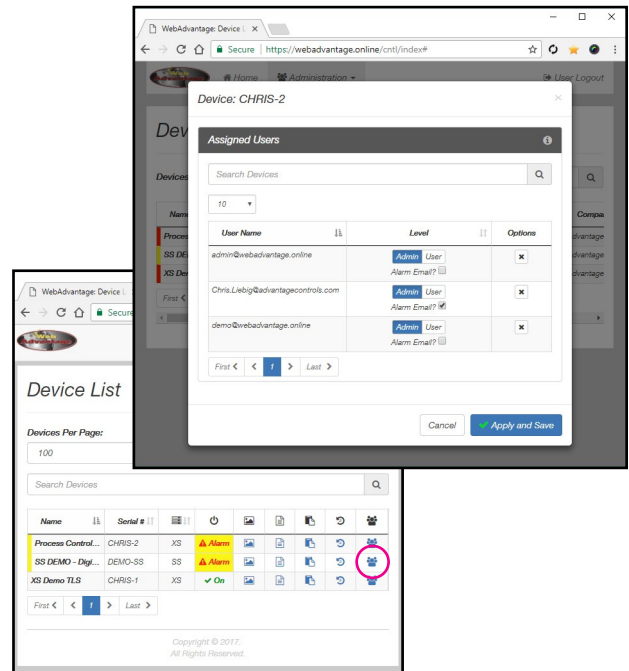
Extensive administration function tutorials can be found on our Youtube page.

https://www.youtube.com/watch?v=YH33KFA6Hng

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. Controllers with communication card "option H" use port 443.

> **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.** *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.** *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 encrypted and the server is hardened to keep your data secure.

Checking Communications Status / Status Codes

Once the appropriate network settings have been entered into the unit, the MegaTron will begin to contact the Web Advantage server automatically. The connection status of the controller can be determined by viewing the Run screen. A two letter code will be in the lower middle section of the RUN screens indicating connection status. **Note:** A bar underneath these letters indicates a solid connection.

Status codes for controllers with Option H1, H11, H21, H22 or H31:

NC = Talking to ICM but not yet connected
DR = DHCP Remote Connection (Communicating with WebAdvantage Server)
SR = Static Remote Connection (Communicating with WebAdvantage Server)
DL = DHCP Local Connection (Communicating Locally)
SL = Static Local Connection (Communicating Locally)
FL = DHCP Failed Local Connection (Communications Failure)

Status codes for controllers with Option H:

NC = No Ethernet/Wifi Connection
SL = Static Addressing, No access to web
SR = Static Addressing with Web Access
DL = DHCP Addressing, No access to web
DR = DHCP Addressing with Web Access
SC = Static Addressing with Web Access, Connection to WebAdvantage
DC = DHCP Addressing with Web Access, Connection to WebAdvantage
SA = Static Addressing with Web Access, Connection to WebAdvantage is authenticated & completed
DA = DHCP Addressing with Web Access, Connection to WebAdvantage is authenticated & completed
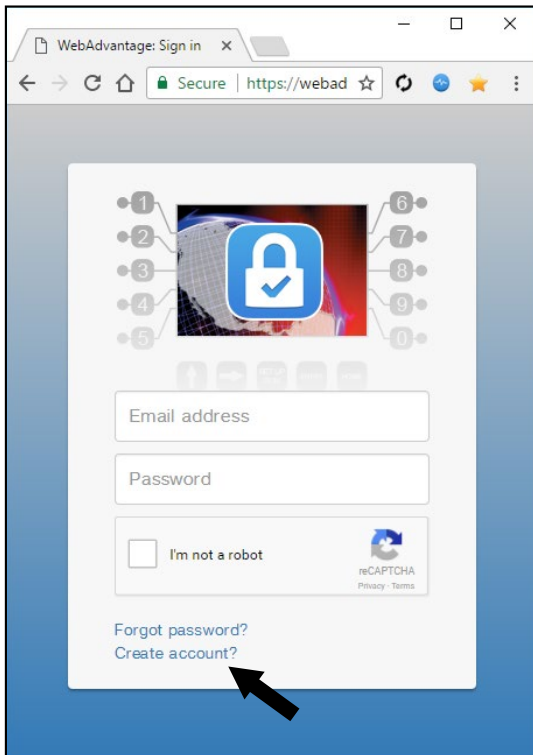
USER ID Setup

Setting Up a USER ID

Before you can view a device, a **USER ID** must be setup. Note: If you already have a USER ID and are just adding a new device, skip to step 4.

Step 1: Visit https://webadvantage.online or access the registration form with the QR code below.
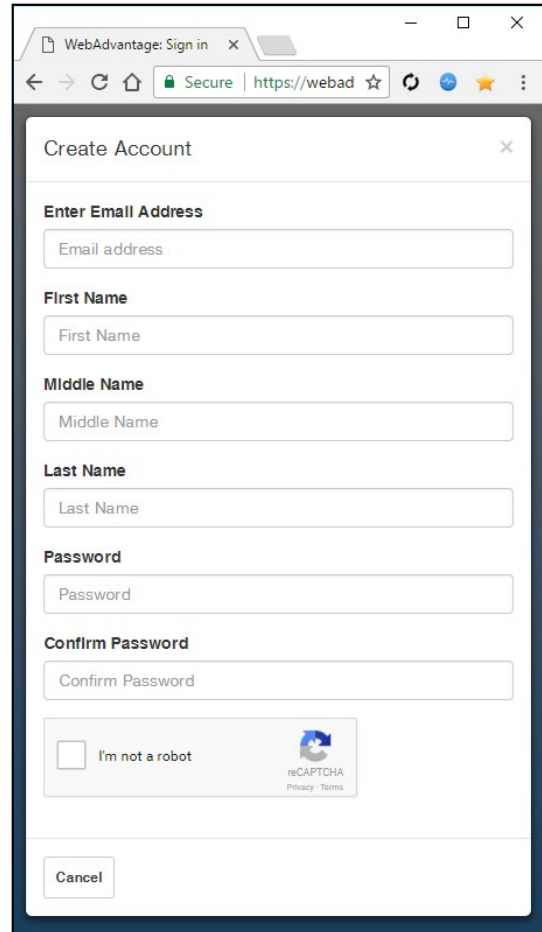
Step 2: Choose **Create Account?** at the bottom of the login screen.

Step 3: After completing form click **SAVE** to create ID.

Note: The email address you add will be your USER ID.

Step 4: Important! Contact our WebAdv3 dept with your USER ID (email), the device's serial number and your phone number.

USER ID (email)	
Device Serial #	
Phone:	

Fax: 918-686-6212
Phone: 918-686-6211
Email: support@advantagecontrols.com

Note: Please allow 24 hours for processing.

Web Advantage 3 Migration

This guide is designed to help with transferring your controller from previous WebAdv versions. If during the migration process you have trouble connecting to WebAdv3, please contact support at 918-686-6211.

There are (3) methods of transferring your MegaTron controller to Web Advantage 3:
1) Controller front panel 2) Classic WebAdv
3) Enhanced WebAdv

Please Note: History does not transfer to WebAdv3 but will still be viewable on WebAdv2 with old login information.

Method 1: Controller Front Panel

Step 1:
Push the **SET UP RUN** button to get this screen. From here push **CONFIGURE** (Button 7) to go to the next screen.

```
          >HOME SETUP<

SETPOINTS              DATE/TIME
CALIBRATION           CONFIGURE
TIMERS                  HISTORY
CUSTOMIZE           WATER METER
ALARMS                   RELAYS
```

Step 2:
This is the Configure Screen. From here push **NETWORK** (Button 8) to go to the next screen.

```
          >CONFIGURE<

PASSWORD               CONTRAST
RELAYS               TEMP SCALE
                       NETWORK
HISTORY                SYS INFO
FLOW SW                 FACTORY
```

Step 3:
This is the Network Summary Screen. Record the ACI SERVER value for troubleshooting. Press **SETTINGS** (Button 5) to continue.

```
              >NETWORK<
    IP ADDR:  192.168.1.76
SUBNET MASK:  255.255.255.0
    GATEWAY:  192.168.1.240
     DOMAIN:  DynamiCUniversal Rabbit BIO
 ACI SERVER:  web80.advantagecontrols.com
       HOST:  mycontroller
        MAC:  00:90:c2:d9:ea:7c
       DHCP:  On
 Local Mode:  On
Remote Mode:  On                      DHCP
SETTINGS                             RESET
```

Step 4:
This is the Configure Network Screen. From here push **SERVER** (Button 5) to go to the next screen.

```
       >CONFIGURE NETWORK<

                      HTTP LOCAL
                     HTTP REMOTE

                            HOST
 SERVER
```

Step 5:
Change the value [1] to connect.webadvantage.online**:80** If you are having trouble connecting use IP address 65.38.24.37**:80** Press **ENTER** to confirm.

Note: Megatron / XS controller models containing the H card (i.e., XSCPF5-H), use :443 H1, H11, H21, H22, H31 models use :80

```
       >CONFIGURE NETWORK<
      WEB SERVER ADDRESS          L
                                  E
 [connect.webadvantage.online:80]
 USE ARROW KEYS TO CHANGE, PRESS
 ENTER TO ACCEPT OR BACK TO ERASE T
 SERVER
```

Step 6:
Press the **BACK** button**.** Press **RESET** (Button 0) and then press **ENTER**. A 60 second restart countdown will begin.

```
              >NETWORK<
    IP ADDR:  192.168.1.76
SUBNET MASK:  255.255.255.0
    GATEWAY:  192.168.1.240
     DOMAIN:  DynamiCUniversal Rabbit BIO
 ACI SERVER:  connect.webadvantage.online:80
       HOST:  mycontroller
        MAC:  00:90:c2:d9:ea:7c
       DHCP:  On
 Local Mode:  On
Remote Mode:  On                      DHCP
SETTINGS                             RESET
```

Step 7:
Login to http://webadvantage.online with your new, company administrator assigned, user id and password.

Step 8:
Find migrating controller in list of devices. If the controller is shown as **Online** (or in Alarm) you have successfully migrated to Web Advantage 3. If controller is not listed, check settings entered in Step 5 and proceed.

Notes:

[1] MegaTron XS controllers can use a connected USB keyboard to change values and navigate menus.

Web Advantage 3 Migration

Method 2: Web Advantage (Classic)

Step 1:
Login to Web Advangtage - Classic:
https://webadvantage.advantagecontrols.com/login.php

Next, select controller and choose view.

Step 2:
Push the **SET UP RUN** button to get this screen. From here push **CONFIGURE** to go to the next screen.

```
              >HOME SETUP<

SETPOINTS               DATE/TIME
CALIBRATION             CONFIGURE
TIMERS                    HISTORY
CUSTOMIZE              WATER METER
ALARMS                     RELAYS
```

Step 3:
This is the Configure Screen. From here push **NETWORK** to go to the next screen.

```
              >CONFIGURE<

PASSWORD                CONTRAST
RELAYS                TEMP SCALE
                        NETWORK
HISTORY                 SYS INFO
FLOW SW                  FACTORY
```

Step 4:
This is the Interface Screen. From here push **INTERFACE 1** to go to the next screen.

```
          >CONFIGURE NETWORK<
INTERFACE 1
```

Step 5:
This is the Network Summary Screen. Record the ACI SERVER value for troubleshooting. Press **SETTINGS** to continue.

```
              >NETWORK<
   IP ADDR:  192.168.1.76
SUBNET MASK: 255.255.255.0
   GATEWAY:  192.168.1.240
    DOMAIN:  DynamiCUniversal Rabbit BIO
ACI SERVER:  web80.advantagecontrols.com
      HOST:  mycontroller
       MAC:  00:90:c2:d9:ea:7c
      DHCP:  On
                                 DHCP
SETTINGS                        RESET
```

Step 6:
This is the Configure Network Screen. From here push **SERVER** (Button 5) to go to the next screen.

```
          >CONFIGURE NETWORK<

                       HTTP LOCAL
                      HTTP REMOTE

                             HOST
SERVER
```

Step 7:
Change the value [1] to connect.webadvantage.online**:80**
If you are having trouble connecting use IP address 65.38.24.37**:80** Press **ENTER** to confirm.

Note: Megatron / XS controller models containing the H card (i.e., XSCPF5-H), use :443 H1, H11, H21, H22, H31 models use :80

```
          >CONFIGURE NETWORK<
       WEB SERVER ADDRESS

  [connect.webadvantage.online:80]

  USE ARROW KEYS TO CHANGE, PRESS
  ENTER TO ACCEPT OR BACK TO ERASE
SERVER
```

Step 8:
Press the **BACK** button**.** Press **RESET** (Button 0) and then press **ENTER**. A 60 second restart countdown will begin.

```
              >NETWORK<
   IP ADDR:  192.168.1.76
SUBNET MASK: 255.255.255.0
   GATEWAY:  192.168.1.240
    DOMAIN:  DynamiCUniversal Rabbit BIO
ACI SERVER:  connect.webadvantage.online:80
      HOST:  mycontroller
       MAC:  00:90:c2:d9:ea:7c
      DHCP:  On
Local Mode:  On
Remote Mode: On                  DHCP
SETTINGS                        RESET
```

Step 9:
Login to http://webadvantage.online with your new, company administrator assigned, user id and password.

Step 10:
Find migrating controller in list of devices. If the controller is shown as **Online** (or in Alarm) you have successfully migrated to Web Advantage 3. If controller is not listed, check settings entered in Step 7 and proceed.

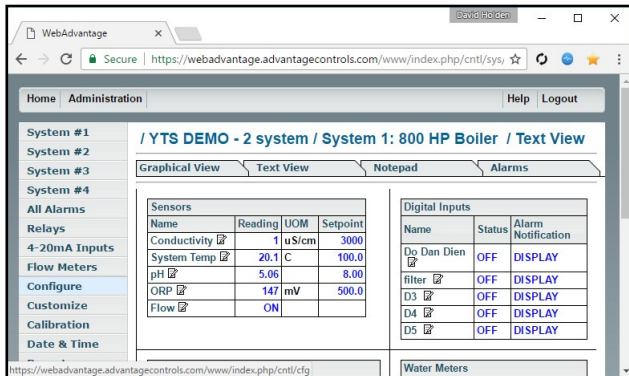# Web Advantage 3 Migration

Method 3: Web Advantage (Enhanced)

Step 1:
Login to Web Advangtage - Enhanced:
https://webadvantage.advantagecontrols.com/www/index.php
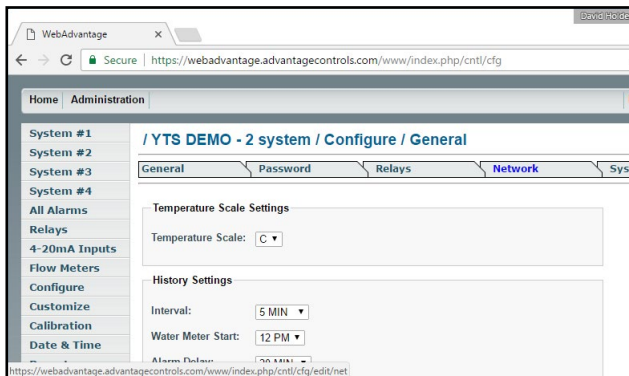
Next, select controller and choose text view.

Step 2:
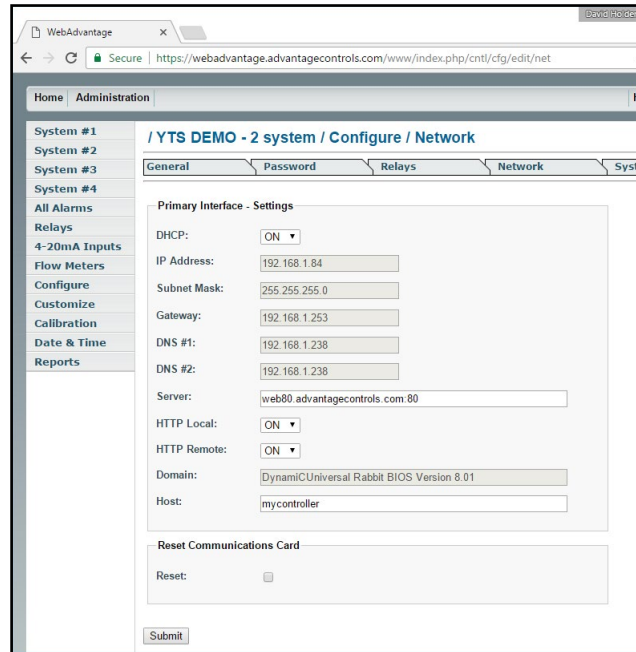From the left menu, click on **CONFIGURE** to go to the next screen.

Step 3:
From here click on the **NETWORK** tab at the top of the page to go to the next screen.

Step 4:
This is the Network Summary Screen. Record the SERVER value for troubleshooting.

Step 5:
Change the value [1] to connect.webadvantage.online**:80**
If you are having trouble connecting use IP address 65.38.24.37**:80**
Note: Megatron / XS controller models containing the H card (i.e., XSCPF5-H), use :443 H1, H11, H21, H22, H31 models use :80

Step 6:
Next, check the **RESET** box. Press **SUBMIT**. A 60 second restart countdown will begin. Browser will give a time-out error.

Step 7:
Login to http://webadvantage.online with your new, company administrator assigned, user id and password.

Step 8:
Find migrating controller in list of devices. If the controller is shown as **Online** (or in Alarm) you have successfully migrated to Web Advantage 3. If controller is not listed, check settings entered in Step 5 and proceed.

Admins <u>Only</u>: Add Device and Assign USER ID

Setting Up / Accessing a Device

Note: USER ID and Company Access Permissions are required before you can access a device. *For creating a USER ID see the Setting Up a USER ID steps on page 17.*

Company Access Permissions: If you are not a part of a company already registered with WebAdvantage, please contact your company's WebAdv account manager for device access.

Step 1: Access the WebAdvantage page at https://webadvantage.online.

Note: Only company administrators can add, edit, remove or modify devices, user accounts, history reports. User account permissions only allow for viewing of devices.

Step 2: Choose **Administration** at top of page.

Step 3: Then choose **Manage Devices**.

Step 4: Enter the device's **Name** and **Serial Number**. The remaining fields are optional. Click **SAVE** to submit.

Note: Please allow up to 24 hrs for processing before controller shows in device list.

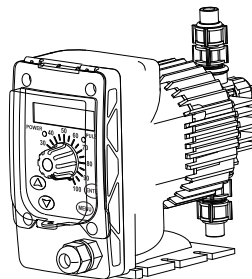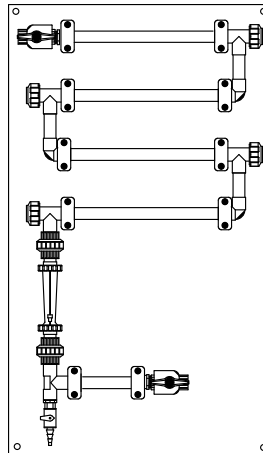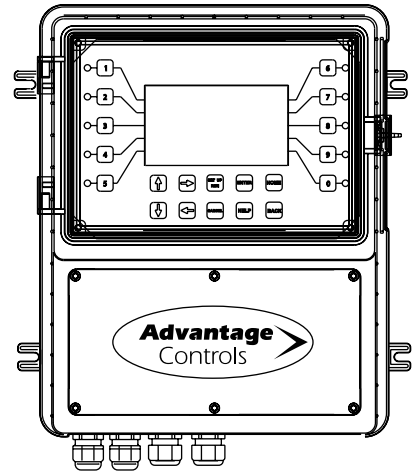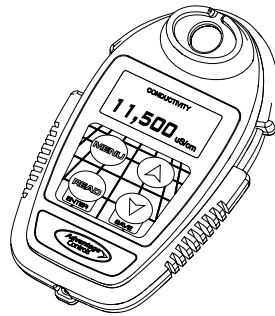WebAdvantage support can be reached at 918-686-6211 or via email at support@advantagecontrols.com.
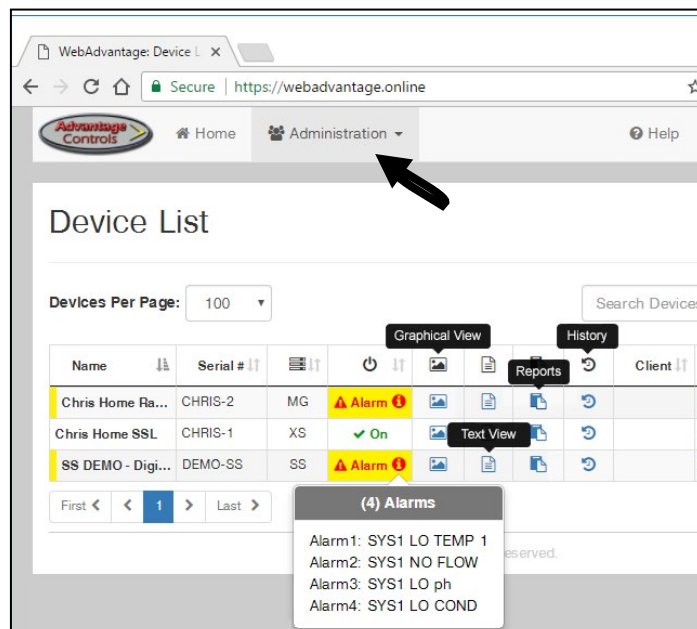
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