Walchem Fluent™ Requirements for W600, Intuition-6 and W900 Walchem Controllers

I. Overview:

Walchem Fluent™ is a proprietary Walchem developed connection technology that simplifies many aspects of connecting to and communicating with its water treatment controllers when they are connected to a private LAN (Local Area Network) or external cell modem. The Walchem Fluent™ connection scheme is a communication method that allows controllers to connect to the Walchem Fluent™ Account Management website in a seamless, plug and play manner.
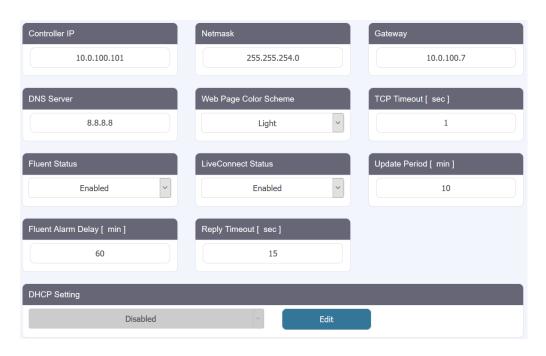
II. What are the requirements for Walchem Fluent™ to work?

1. Permission to connect the controller to the private network:

The controller can be configured with DHCP support. If the facility does not support IP address assignment via DHCP, a fixed IP address can be programmed into the controller's Ethernet settings menu.
Enable Walchem Fluent™ Status and enable LiveConnect Status, and program the Update Period (how often data will be sent to Walchem Fluent™).

(The Ethernet IP/Netmask/Gateway addresses shown below are just an example, your controller's addresses will most likely be different.)

Controller IP	Netmask	Gateway
10.0.100.101	255.255.254.0	10.0.100.7

DNS Server	Web Page Color Scheme	TCP Timeout [sec]
8.8.8.8	Light	1

Fluent Status	LiveConnect Status	Update Period [min]
Enabled	Enabled	10

Fluent Alarm Delay [min]	Reply Timeout [sec]
60	15

DHCP Setting
Disabled   Edit

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2. Outbound Access:

The controller needs **outbound** network access to the Internet. This type of outbound access is very similar to the outbound privileges given to PC's on a private network when they access various websites and send email over the Internet. There is no need to modify any router/firewall inbound configuration settings.

The following ports and protocols used must be open:

- TCP and UDP support on Port 53 used to access a public DNS server if there is no private DNS server available

- UDP support on Port 9012 & TCP support on Port 44965 used to establish a secure, encrypted, point-to-point connection to Walchem Fluent™ Account Manager Gateway

- TCP support on Port 44998 used to send data records to Walchem Fluent™.

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Walchem Fluent™ Requirements for W600,
Intuition-6 and W900 Walchem Controllers &
Troubleshooting Guide – W600/W900 Connection to
Walchem Fluent™ Server

Troubleshooting Guide – W600/Intuition-6/W900 Connection to Walchem Fluent™ Server

Purpose: Troubleshoot a W600/Intuition-6/W900 controller connection to the Walchem Fluent™ server (https://fluent.walchem.com/login.html). Please follow the steps below.

1. Establish a physical connection between the controller and the LAN using a CAT5 cable

2. Program the controller with Ethernet IP, Netmask, and Gateway addresses
    a. By going to Config -> Ethernet Settings and enabling DHCP or
    b. By going to Config -> Ethernet Settings and manually entering the addresses based on the guidance from the LAN's IT department
    c. IP addresses in the 172.18.xxx.xxx range are not allowed.

3. Under Config -> Ethernet Settings:
    a. Enable Walchem Fluent™
    b. Enable LiveConnect
    c. Program the Update Period (how often data will be sent to Walchem Fluent™)

If the controller is successfully connected, under Config -> Ethernet Settings you will see:
    DHCP Status (if applicable) = Success
    Last Walchem Fluent™ Data = today's date and time
    Live Connect Status = Success

If data is not going out, or Live Connect is not successful, then please check the following:

1. Make sure that the controller is on the LAN. If using DHCP, that should say Success. Using a computer on the same LAN you should be able to enter the IP address of the controller (found under Config -> Ethernet Settings), open a web browser, and type the IP address of the controller into the browser. If this doesn't work, then work with IT. Either the physical connection is bad or the addresses are incorrect.

2. Make sure that the controller is allowed outbound access to the Internet. This type of outbound access is very similar to the outbound privileges given to PC's on a private network when they access various websites and send email over the Internet. There is no need to modify any router/firewall inbound configuration settings.
    a. The gateway address must be valid
    b. Consult with IT. The following ports and protocols used must be open
        • TCP and UDP support on Port 53 used to access a public DNS server if there is no private DNS server available

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 • UDP support on Port 9012 & TCP support on Port 44965 used to establish a secure, encrypted, point-to-point connection to Walchem's VTouch Account Manager Gateway

 • TCP support on Port 44998 used to send data records to VTouch.