MAIN IRRIGATION CONTROLLER

WebSocket Connected

PUMP MOTOR ON | PUMP MOTOR OFF

ZONE 1 ON | ZONE 1 OFF

ZONE 2 ON | ZONE 2 OFF

Web controller "sends" pumpcontrol object to server...

{'messageType':'pumpcontrol', 'control':{'zone1': 1}}

WebSocket Server (WSS)

pumpObject

scheduler

The scheduler directly manipulates a Proxy in pumpObject when node-cron events fire.

Irrigation Server Status Messages

Pump status: 0

Zone 1 status: 1

Zone2 status: 0

{"messageType": "pumpControl", "pumpmotor": 0, "zone1": 1, "zone2": 0}

The pumpObject uses the WSS to send a status update to the web controller page.

Web controller "sends" scheduleObject object to server...

Irrigation Scheduling

Start Irrigation Date: 06/06/2017

Stop Irrigation Time: 06:00 AM

Stop Irrigation Time: 07:00 AM

Schedule Irrigation

{'messageType':'schedule', 'startDate':'Tuesday, June 6th 2017', 'startTime':'6:00:00 AM', 'stopTime':'7:00:00 AM'}

Messages incoming to the server are dispatched to the pumpObject or scheduler. Both objects are EventEmitters.

{"messageType": "schedule", "scheduleDate": "Tuesday, June 6th 2017"), "scheduleStart": "6:00:00 AM"), "scheduleStop": "7:00:00 AM")}

Current Irrigation Schedule

Date: Tuesday, June 6th 2017

Start: 6:00:00 AM

Stop: 7:00:00 AM

Current Time

Tuesday, June 6th 2017, 9:02:04 PM

The scheduler uses the WSS to send updates to the web controller schedule display.