

Annotated trace of HFR executing the pushup script hfr-pushups-36

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M) setup{7}[10961]> End of setup #####
M) oneSec{14}[11962]> CPU: 0.00 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.0 0.0 0 /Flow: 0.0 0.0 /1Sec: 0.0 0.0 0 /
M) oneSec{14}[12962]> CPU: 0.76 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.2 1 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[13962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[14962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[15962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[16962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[17962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[18962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[19962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[20962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[21962]> CPU: 0.66 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[22962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[23962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
M) oneSec{14}[24962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /
VVVVV ----- timestamps in millis()
M) oneSec{14}[25962]> CPU: 0.65 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.1 0.1 0 /

// change trace output from console to MQTT - 1Sec routine does a bit more work preparing & sending MQTT message-----V
aa/hfr48B8/health M) oneSec{14}[268962]> CPU: 0.92 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health M) oneSec{14}[269962]> CPU: 0.86 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.3 0.3 0 /
aa/hfr48B8/health M) oneSec{14}[270962]> CPU: 0.96 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health M) oneSec{14}[271962]> CPU: 0.92 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health M) oneSec{14}[272962]> CPU: 0.86 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.3 0.3 0 /

// MQTT.fx command to down load a script starts, and its commands are processed by mqttBroker::processCmd(String payload)
// this consists of translating the command data and putting it into memory arrays. There's no leg movement yet.
// This command processing seems to fall under "MQTT" category
hfr48B8/commands NEW_FLOW
hfr48B8/commands f1,1000,MLRH,10,0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0
hfr48B8/commands f1,500,MLRH,10,0,0,0, 0,3,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,3,0
hfr48B8/commands f1,500,MLRH,10,0,0,0, -4,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0, -4,0,0
hfr48B8/commands f1,500,MLRH,10,0,0,0, -4,0,0, 0,3,0, 0,0,0, 0,0,0, 0,3,0, -4,0,0
hfr48B8/commands f1,500,MLRH,10,0,0,0, -4,0,0, -4,0,0, 0,0,0, 0,0,0, -4,0,0, -4,0,0
hfr48B8/commands f1,500,MLRH,10,0,0,0, -4,0,0, -4,0,0, 0,3,0, 0,3,0, -4,0,0, -4,0,0
hfr48B8/commands f1,500,MLRH,10,0,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0
hfr48B8/commands f1,1000,MLRH,10,0,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0
hfr48B8/commands f1,1000,MLRH,10,0,0,0, -4,-5,0, -4,-5,0, -4,-5,0, -4,-5,0, -4,-5,0, -4,-5,0
aa/hfr48B8/health M) oneSec{14}[273962]> CPU: 1.13 /Oled: 0.0 0.0 0 /MQTT: 0.2 0.1 1 /webMon: 0.6 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
hfr48B8/commands f1,1000,MLRH,10,0,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0
hfr48B8/commands f1, 500,MLRH,10,0,0,0, -4,2.3,0, -4,2.3,0, -4,2.3,0, -4,2.3,0, -4,2.3,0, -4,2.3,0
hfr48B8/commands f1, 500,MLRH,10,0,0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0
hfr48B8/commands f1,1000,MLRH,10,0,0,0, -4,-5,0, -4,-5,0, -4,-5,0, -4,-5,0, -4,-5,0, -4,-5,0
hfr48B8/commands f1,1000,MLRH,10,0,0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0
hfr48B8/commands f1, 500,MLRH,10,0,0,0, -4,2.3,0, -4,2.3,0, -4,2.3,0, -4,2.3,0, -4,2.3,0, -4,2.3,0
hfr48B8/commands f1, 500,MLRH,10,0,0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0
hfr48B8/commands f1, 500,MLRH,10,0,0,0, 4.62, 9.9,0, -4, 0,0, 4.62, 9.9,0, -4, 0,0, 4.62, 9.9,0, -4, 0,0
hfr48B8/commands f1,1000,MLRH,10,0,0,0, 4.62, 9.9,0, -4,-5,0, 4.62, 9.9,0, -4,-5,0, 4.62, 9.9,0, -4,-5,0
hfr48B8/commands f1,1000,MLRH,10,0,0,0, 4.62, 9.9,0, -4, 0,0, 4.62, 9.9,0, -4, 0,0, 4.62, 9.9,0, -4, 0,0
aa/hfr48B8/health M) oneSec{14}[274962]> CPU: 1.23 /Oled: 0.0 0.0 0 /MQTT: 0.3 0.1 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
hfr48B8/commands f1, 500,MLRH,10,0,0,0, 4.62, 9.9,0, -4,2.3,0, 4.62, 9.9,0, -4,2.3,0, 4.62, 9.9,0, -4,2.3,0
hfr48B8/commands f1, 500,MLRH,10,0,0,0, 4.62, 9.9,0, -4, 0,0, 4.62, 9.9,0, -4, 0,0, 4.62, 9.9,0, -4, 0,0
hfr48B8/commands f1,1000,MLRH,10,0,0,0, 4.62, 9.9,0, -4,-5,0, 4.62, 9.9,0, -4,-5,0, 4.62, 9.9,0, -4,-5,0
hfr48B8/commands f1,1000,MLRH,10,0,0,0, 4.62, 9.9,0, -4, 0,0, 4.62, 9.9,0, -4, 0,0, 4.62, 9.9,0, -4, 0,0
hfr48B8/commands f1, 500,MLRH,10,0,0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0
hfr48B8/commands f1, 500,MLRH,10,0,0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0, -4, 0,0
hfr48B8/commands f1,500,MLRH,10,0,0,0, 0,3,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, 0,3,0
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hfr48B8/commands fl,500,MLRH,10,0,0,0, 0,0,0, -4,0,0, -4,0,0, -4,0,0, -4,0,0, 0,0,0
hfr48B8/commands fl,500,MLRH,10,0,0,0, 0,0,0, 0,3,0, -4,0,0, -4,0,0, 0,3,0, 0,0,0
hfr48B8/commands fl,500,MLRH,10,0,0,0, 0,0,0, 0,0,0, -4,0,0, -4,0,0, 0,0,0, 0,0,0
aa/hfr48B8/health M) oneSec{14}[275962]> CPU: 1.28 /Oled: 0.0 0.0 0 /MQTT: 0.4 0.1 0 /webMon: 0.6 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
hfr48B8/commands fl,500,MLRH,10,0,0,0, 0,0,0, 0,0,0, 0,3,0, 0,3,0, 0,0,0, 0,0,0
hfr48B8/commands fl,500,MLRH,10,0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0
hfr48B8/commands fl, 500,MLRH,10,0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0, 0,0,0
hfr48B8/commands fl,1000,MLRH,10,0,0,0, 0,3,0,0, 0,3,0,0, 0,3,0,0, 0,3,0,0, 0,3,0,0, 0,3,0,0,
hfr48B8/commands DO_FLOW,1
// DO_FLOW command ends the flow definition in memory and starts its execution by the flow subsystem-----V
aa/hfr48B8/health M) oneSec{14}[276962]> CPU: 1.24 /Oled: 0.0 0.0 0 /MQTT: 0.3 0.1 0 /webMon: 0.6 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[277408]> start of flow row # 0
aa/hfr48B8/health L) do_flow{13}[277756]> start of flow row #1
// A Delay(340) command allows for the worst case initial positioning of the servos. Time is counted against Flow----V
aa/hfr48B8/health M) oneSec{14}[277962]> CPU: 38.76 /Oled: 0.0 0.0 1 /MQTT: 0.1 0.1 1 /webMon: 0.6 0.1 1 /Flow: 37.7 35.1 /1Sec: 0.4 0.4 0 /
// rows in the arrays are executed sequentially-----V
aa/hfr48B8/health L) do_flow{13}[278211]> start of flow row # 2
aa/hfr48B8/health L) do_flow{13}[278711]> start of flow row # 3
// MQTT processing goes quiet, and the flow subsystem moves legs-----V -----V
aa/hfr48B8/health M) oneSec{14}[278962]> CPU: 13.27 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 1 /webMon: 0.6 0.1 0 /Flow: 12.3 0.4 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[279211]> start of flow row # 4
aa/hfr48B8/health L) do_flow{13}[279711]> start of flow row # 5
aa/hfr48B8/health M) oneSec{14}[279962]> CPU: 13.26 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 12.3 0.4 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[280711]> start of flow row # 6
aa/hfr48B8/health M) oneSec{14}[280962]> CPU: 12.63 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 11.7 0.4 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[281710]> start of flow row # 7
aa/hfr48B8/health M) oneSec{14}[281963]> CPU: 12.64 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 11.7 0.3 /1Sec: 0.4 0.4 1 /
aa/hfr48B8/health L) do_flow{13}[282712]> start of flow row # 8
aa/hfr48B8/health M) oneSec{14}[282963]> CPU: 16.08 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 15.1 0.6 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[283213]> start of flow row # 9
aa/hfr48B8/health L) do_flow{13}[283712]> start of flow row # 10
aa/hfr48B8/health M) oneSec{14}[283963]> CPU: 16.32 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 15.4 0.6 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[284713]> start of flow row # 11
aa/hfr48B8/health M) oneSec{14}[284963]> CPU: 15.52 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 14.6 0.6 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[285211]> start of flow row # 12
aa/hfr48B8/health M) oneSec{14}[285963]> CPU: 13.85 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 12.9 0.4 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[286211]> start of flow row # 13
aa/hfr48B8/health L) do_flow{13}[286711]> start of flow row # 14
aa/hfr48B8/health M) oneSec{14}[286963]> CPU: 13.93 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 13.0 0.4 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[287211]> start of flow row # 15
aa/hfr48B8/health L) do_flow{13}[287712]> start of flow row # 16
aa/hfr48B8/health M) oneSec{14}[287963]> CPU: 14.42 /Oled: 0.0 0.0 1 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 13.5 0.5 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[288212]> start of flow row # 17
aa/hfr48B8/health L) do_flow{13}[288711]> start of flow row # 18
aa/hfr48B8/health M) oneSec{14}[288963]> CPU: 13.25 /Oled: 0.0 0.0 1 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 12.3 0.5 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[289210]> start of flow row # 19
aa/hfr48B8/health M) oneSec{14}[289963]> CPU: 14.87 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 13.9 0.3 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health L) do_flow{13}[290212]> end of multi row flow processing
// when we run out of rows to execute, everything goes quiet -----V
aa/hfr48B8/health M) oneSec{14}[290963]> CPU: 4.89 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.6 0.1 0 /Flow: 4.0 0.5 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health M) oneSec{14}[291963]> CPU: 0.92 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health M) oneSec{14}[292963]> CPU: 0.91 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health M) oneSec{14}[293963]> CPU: 0.91 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /
aa/hfr48B8/health M) oneSec{14}[294963]> CPU: 0.91 /Oled: 0.0 0.0 0 /MQTT: 0.0 0.0 0 /webMon: 0.5 0.1 0 /Flow: 0.0 0.0 /1Sec: 0.4 0.4 0 /

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