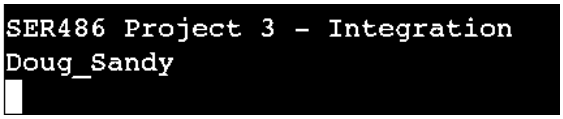
Test Instructions for SER456 Project 3

Before beginning, make sure that the temperature limits are set to the following values:

- tcrit_hi 150
- twarn_hi 140
- twarn_lo 0
- tcrit_lo -40

1. Start putty

   The start-up banner should display along with your name

2. Type <ctrl-C> to "connect" a socket to the device. The "Connection Established" message should be displayed.

3. Type the following command to delete any existing log entries

   DELETE /device/log

4. Type the following command to display the device state. At this point, the device should be in the NORMAL temperature state and the status LED should be off.

   GET /device


```
{
  "vpd":{
    "model":"Sandy",
    "manufacturer":"Douglas",
    "serial_number":"_UNASSIGNED",
    "manufacture_date":"01/01/2000",
    "mac_address":"44:4F:55:53:41:4E",
    "country_code":"USA"
  }
  "tcrit_hi":1023,
  "twarn_hi":1022,
  "tcrit_lo":0,
  "twarn_lo":1,
  "temperature":88,
  "state":NORMAL,
  "log":[

  ]
}
```

5. Type the following command to change the twarn_hi value. This should generate an alarm condition and the led should begin a slow blink, indicating a warning condition. Note: if you are testing on the simulator, it may take many seconds for the alarm to be displayed.

   PUT /device/config?twarn_hi=50

   ```
   ALARM: 6
   ```

6. Type the following command to change the tcrit_hi value. This should generate an alarm condition and the led should begin a fast blink, indicating a critical condition.

   PUT /device/config?tcrit_hi=60

   ```
   ALARM: 5
   ```

7. Type the following command to change the tcrit_hi value. This should allow the device temperature to fall within the warning range again. An alarm should not be generated and the led should begin a slow blink, indicating a warning condition.

   PUT /device/config?tcrit_hi=150

8. Type the following command to change the tcrit_hi value again. This should force the device temperature to fall within the critical range again, but because of hysteresis an alarm should not be generated. The led, however, should begin a fast blink, indicating a critical condition.

   PUT /device/config?tcrit_hi=60

9. Type the following commands to return the temperature limits to their original values:

   PUT /device/config?tcrit_hi=150

   PUT /device/config?twarn_hi=140

10. Execute the following command to display the system event log. There should be two events in it corresponding to the high temperature warning and the critically high temperature alert.

    GET /device


```
"log":[
  {
    "timestamp":"01/01/2000 00:00:06","eventnum":6
  },
  {
    "timestamp":"01/01/2000 00:00:07","eventnum":5
  }
]
```

11. Execute the following command to force a device reset. After approximately two seconds, the start up banner should appear again, signifying that the device was reset. Note, if you are testing on the simulator, this may take over a minute.

    PUT /device?reset=”true” **(you may need to type this command instead of pasting it)**

```
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Doug_Sandy
```

12. After establishing a connection (<ctrl-C>), dump the log one more time to display system events. Now there are two more log entries associated with the forced reset of the device, and the startup of the device.

    GET /device


```
"log":[
  {
    "timestamp":"01/01/2000 00:00:06","eventnum":6
  },
  {
    "timestamp":"01/01/2000 00:00:07","eventnum":5
  },
  {
    "timestamp":"01/01/2000 00:00:19","eventnum":2
  },
  {
    "timestamp":"01/01/2000 00:00:01","eventnum":0
  }
]
```