

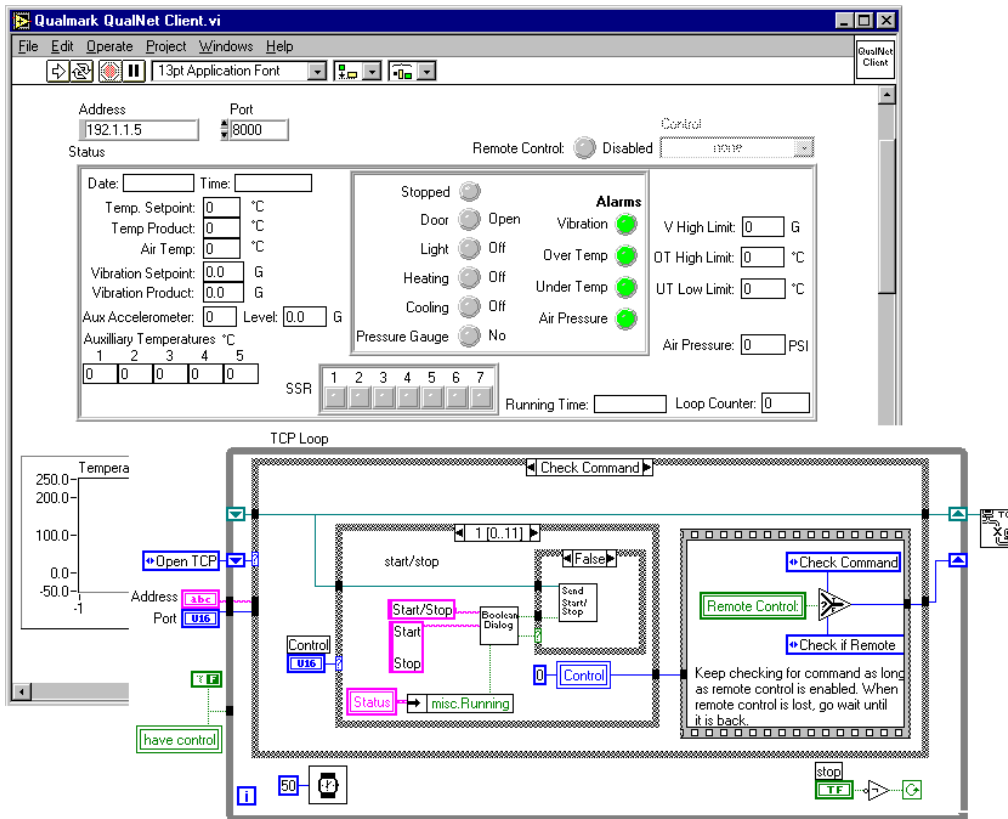
The Problem:

A manufacturer of HALT/HASS systems receives requests from its customers for a LabVIEW interface so that product test application programs written in LabVIEW can be smoothly integrated with the conditions present in the environmental chambers.

The Solution:

The computer used for control of the HALT/HASS environmental chambers has a control program written in Visual Basic with a server option that supports TCP (Transmission Control Protocol) messages for chamber control and UDP (User Datagram Protocol) messages for chamber status. LabVIEW contains built in functions for both message types. A driver library of VIs were written that incorporate all of the chamber's available monitor and control functions. One or more can be incorporated in a LabVIEW program. As an example, chamber conditions might be altered based on certain test results obtained from the product undergoing test or a certain product test may be performed based on current chamber conditions.

In addition, an example LabVIEW program was written to show how the driver VIs can be incorporated to duplicate the client version of the Visual Basic program.



Hardware Used:

Software Used:
National Instruments LabVIEW