Integration with PLCs

Complexities of PLCs / VersaCall's Integration Approach

Dealing with the Complexities of PLCs

Process & Equipment Control

PLC's offer a broad spectrum of capability but their primary function is for process/equipment control and monitoring. 70% of the PLCs are not networked and are typically integrated with equipment controls.

Capturing Production Information

Although it is well within the capabilities of a PLC to capture production performance information, it is typically secondary to the PLCs primary function of equipment and process control. Production information can include counts, runtime, downtime, uptime, idle time and scrap. The major problem with this is getting the information out of the PLC and into the hands of the people who need it.

Non-Standard Programming

The nature of PLCs typically leads to custom programming in each and every PLC. Any program changes have to be made to each and every PLC.

Multiple Generations of PLCs

Once installed, a PLC is usually not replaced or upgraded when a new generation of technology is introduced. This leaves an installed base of PLCs that includes multiple generations of PLC components.

Many Manufacturers of PLCs

Although Alllen Bradley is said to control 63% of the PLC market, there are multiple manufacturers of PLCs worldwide.

VersaCall's Approach to Integrating with PLCs

Non-Invasive Integration Approach

VersaCall requires an output from a PLC. VersaCall does not want to compromise in any way the functionality of the existing PLC especially the PLCs process or equipment control function. The customer is expected to provide the output. For this reason, VersaCall will not be involved in programming PLCs.

Approach Is Independent of Programming/Generations/Manufacturers

VersaCall's approach provides for the capture of production performance information from multiple generations of PLCs and manufacturers or how a PLC is programmed.

Integration Methods

There are 3 basic ways to integrate a PLC with the VersaCall System: (1) Switch Contact/Relay, (2) Serial/RS2-232, and (3) Ethernet. The most common way is the switch contact or relay. From this we can capture when the equipment is down, a pulse that represents the machine cycled or when a part was made. Serial is used to capture error codes. Ethernet can be used to talk directly to the VT2000 system via a TCP port in order to bypass the hardware.

Customer Responsible for Providing PLC Output

The customer is required to provide the output from the PLCs. VersaCall's technical resources are available to provide information on the form and format of the required output

VersaCall has a number of successful PLC integration installations including BMW Manufacturing, HON and many others. We look forward to the opportunity to discuss the integration of a VersaCall System at your location