

Panel PC: The NEW OIT

Replacing traditional Operator Interface Terminals enhances your SCADA system instead of duplicating it

Operator Interface Terminals (OITs) have long been a standard part of distributed monitoring and control systems. They provide an on-site single-purpose interface to distributed PLCs and RTUs.

In recent years, the Panel PC has emerged as a cost effective alternative and has driven a whole new approach to SCADA server architecture. When combined with some of the unique features of VTScada™ software from Trihedral, the result is lower hardware costs, faster integration, greater system reliability and reduced training.



Diagram A

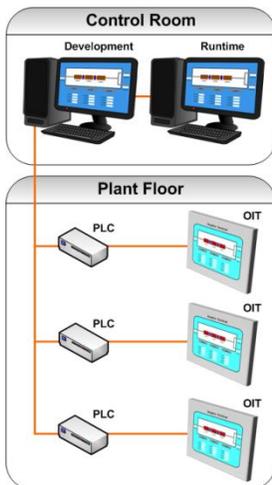
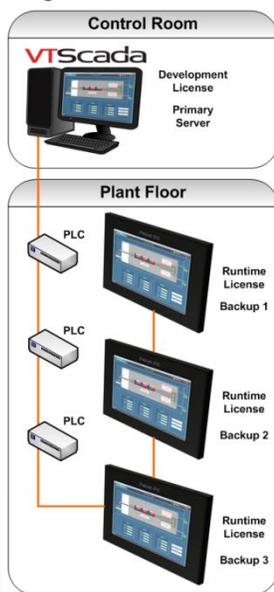


Diagram B



Reduced Hardware and Software Cost

Monitoring and control systems typically include a SCADA software application running on two computers (development and runtime) in the control room. They can also include one or more OITs, each one communicating with a single I/O device. For example, in Diagram A, there are two SCADA workstations and three single-purpose OITs. By replacing the OITs with a Windows 7® Panel PC (Diagram B) you can eliminate the second office PC and still have four fully-functional workstations.

Half the Integration Time

For each I/O device in a traditional system, you would need to create a graphic display in both the SCADA application and the local OIT using different sets of tools. In a Panel PC-based VTScada system, you would only need to create one set of displays that would be visible throughout the system. Consistent displays also reduce training time and help to avoid operator confusion. VTScada's unique real-time configuration allows developers to push changes to displays, tags, and application properties out to all workstations without restarting the system.

Redundancy

Since each Panel PC is running a VTScada Runtime license, you can easily configure each one to be a redundant automatic backup to the primary server. In our example, the new system could include three levels of redundancy; each one containing an identical copy of the VTScada Historical Database. When an offline server is restored, its historical data are automatically synchronized. If the system includes VTScada Internet Clients, each Runtime license can also act as a redundant VTScada Internet Server.

Greater Flexibility

To keep the tag count (and cost) of each VTScada license to a minimum, you can use area filtering to only load each Panel PC with the tags required for that local I/O device. Conversely, if your tag count is not limited, you can provide authorized users with full access to any part of the system from any workstation. You can also use the new VTScada Security Rules to provide specific users with access to specific sets of tags from specific workstations.

Try It for Yourself

Download the 90-day Trial

Trihedral.com/demo

VTScada is a trademark of
Trihedral Engineering Limited