

PROBLEM STATEMENT

- What problem or need does this technology solve?
- Wire diagrams used in interactive electronic technical manuals (IETM) to isolate faulty wiring is difficult. Screen displays are small and circuit paths often continue over multiple sheets of a wiring diagram. Pentecom has a nonproprietary solution that helps maintainers to trace signal paths through wiring diagrams when troubleshooting faulty wiring.

BENEFITS

- Maintainers troubleshooting faulty wiring can clearly follow signal paths on small displays and across multiple sheets of a diagram, easing the tedious, error-prone method of thumbing through over-sized paper drawings.
- Simulation of switches and circuit breakers aid in troubleshooting.
- Incorporates a nonproprietary solution to simplify efforts to identify and maintain the tracing and simulation data associated with a wiring diagram.
- Improves troubleshooting speed and fewer errors from manually tracing wires.
- Lowers operating costs by eliminating maintenance errors.

TECHNOLOGY SOLUTION

- Describe the capability:
- Uses existing IETM views and 2D wiring diagrams, adding interactive wire tracing and simulation capability.
- Leverages commercial-off-the-shelf (COTS) technology to identify the tracing and simulation data associated with a wiring diagram.
- Pentecom introduced a change proposal to the S1000D specification with the goal of establishing this capability as a standard. Only proprietary options exist now.

GRAPHIC

