

***BDP Project Description:*****Wonderware 8.0 InTouch Upgrade for Legacy Square D PLC Application*****End User / Location:*****City of Orange, Jackson Street Waste Water Treatment Plant, Orange, Texas*****Client / Location:*****City of Orange, Public Works Department, Orange, Texas*****Control System Platform:*****Wonderware 8.0 InTouch with Square D Model 450 PLCs on Symax Ethernet Network*****BDP Scope:*****Purchase and install Wonderware 8.0 InTouch software on a PC with Windows XP Professional, and connect HMI PC to an exiting Square D Symax Ethernet Network.*****BDP Services:*****Evaluate interface issues and perform off-line product testing to confirm product compatibility from HMI PC to PLC, including IO Server and Ethernet hardware.****Perform version upgrade on existing Wonderware project, and convert Tag Database to use a Modbus Ethernet IO Server compatible with an EPE-5 interface module.****Recover historical data files and reporting package from original HMI PC, then install files on a new PC and confirm report operations with revised HMI Tag Database.*****Product Issues:*****Connecting the latest HMI software to a legacy PLC system is not always a simple task. In this case, the available Square D IO Server was not compatible with Windows XP, so an alternate Wonderware 8.0 IO Server was required. Working closely with the manufacturer's technical specialists, BDP Inc. identified the compatible software versions, the Tag Database conversion requirements, and the Ethernet interface hardware necessary to connect Wonderware 8.0 InTouch to legacy Square D Model 450 PLCs on an existing Symax Ethernet Network.*****Accomplishments:*****The HMI upgrade required that the Square D IO Server be replaced with a Modbus Ethernet IO Server, which also required that the Wonderware Tag Database be converted to Modbus register addresses instead of the original Symax address format.****The new Ethernet hardware included an EPE-5 interface card that converts Modbus messages to Symax messages, while providing the Ethernet connection between the new PC and the existing Symax Ethernet network. The EPE-5 interface card completes the HMI version upgrade for the legacy Square D Model 450 PLCs.****No changes in the existing Square D PLC setup or logic programming were required to complete the Wonderware 8.0 InTouch version upgrade.**