

## FieldServer Case Study - Fort Huachuca Army Intelligence Center

Rev. 1.B

Ft. Huachuca in Arizona is home to the United States Army Intelligence Center focused on leading, training, equipping and supporting the world's premier corps of Military Intelligence Professionals. Ft. Huachuca is dependent upon integrated data communications to maintain a safe environment for the soldiers of the base and to present an environment conducive to the instruction taking place. Located in the Sonoran Desert south of Tucson, Ft. Huachuca is very dependent upon the water supplied by the base reservoir.

The monitoring stations at the Ft. Huachuca Reservoir are JCI Metasys N2 devices including a DX9100 and a UNT controller. The building management system for the rest of the base included Circon workstations. To insure a constant supply of water to this desert base, the Army commissioned the Ft. Huachuca Reservoir Project to improve the management system since it was imperative that the information from the remote reservoir be available on a constant basis to the building management system. Advanced Controls Corporation (ACC) was commissioned to integrate the reservoir monitoring devices to a Circon front end workstation. The task would entail bringing data from DX9100 and UNT controllers from the water system to the new Circon workstation.

These points are currently sending data on the N2 Bus and then converted to Leased Line to cover a large distance and reconverted to N2 bus as they reached the Metasys NCM. Due to the fact that the Metasys NCM350 was going to be on the same N2 bus with the FieldServer an alternate configuration was required. The integrator found that the flexible configuration programming of the FieldServer enabled them to easily provide

In this configuration there are no client side connections in the configuration file and the FieldServer is given an address so that it can be added as a VND (Vendor) device on the Metasys Network map. The two points are now able to be mapped to an appropriate system on the Metasys Network map. The reasoning for this is that the points have to be written to the FieldServer through the NCM's Programming Language (GPL) code and the points have to be mapped to

this alternative configuration.

DX9100 UNT Metasys Host Operator Workstation Metasys N2 TCP/IP Building 2 Leased FS-B2011 TCP/IP LonWorks TCP/IP **Building 1** Metasys N2 **ILON 1000** 

use them in GPL. Using the points for the DX and UNT that are already mapped to the front end as Analog Inputs (Al's) it is possible to write the Al info through GPL to the FieldServer points as AO points.

Once the data was written to the N2 data array in the FieldServer a Move command is used to transfer it to another data array for the LON side of the FieldServer. Then the data was sent over a LON backbone to an iLON 1000. This was done so the data from the FieldServer could be sent over IP as in the LON protocol for use on the Circon Visual Integrator workstation. The FieldServer and the iLON were added to the workstation LON database and then the points were added to the graphics on the front end.

Jason Clements of Advanced Controls said, "Overall this project was a complete success to Ft. Huachuca. The customer is very happy with the results and the information from the reservoir is now fully integrated into the system just as the customer requested".