



Solution Overview

Customer

Logan Aluminum, Inc.

Industry

Aluminum Sheet Products

Key Benefits

Support for legacy software
Lower maintenance costs
"Bumpless" installation
ACP Terminal Server Support

Applications Deployed

Citrix Metaframe 1.8
Intellution iFIX
Microsoft Visual Basic

ACP Solutions

DC-30-100 Office Thin Clients
MBPC-5820-ACP
TA-10-001 ThinAdapter



About ACP ThinManager®

ACP's ThinManager® is an enhancement to the basic Windows® Terminal Server operating systems such as Windows® 2000 Server and Windows® 2003 Server. The features added by ThinManager® focus on the industrial market, allowing users to replace the PCs they are now using on the factory floor with inexpensive "Windows terminals" that are much easier (and less expensive) to maintain. While any Thin Client will allow multiple instances of existing Windows® software to run on a single PC (the Terminal Server) only ACP Enabled Thin Clients running under ThinManager® provide the functionality, redundancy and I/O required in industrial installations.

Logan Aluminum Rolls Out ACP Thin Client Technology

"ThinManager was by far the best Thin Client Management Software package we had seen. What really impressed us the most was the ease of replacing a terminal if it fails."

— Charles Jennett, Logan Aluminum Hot Mill Automation Team

Named for the county in Kentucky where it made its home in the early 1980's, Logan Aluminum, a joint venture between Arco Aluminum and Alcan, specializes in the production of rolled aluminum. The 1.5 billion pounds of metal that passes through this plant each year makes up about 1/3 of the rolled aluminum used by the entire US aluminum can market.

The Challenge: Update the Aging HMI System Without Affecting Production

The Logan Plant only shuts down only one day each year, and new products must be installed without risking Logan's World-Class Production and Utilization numbers. Like many factories, Logan was using PCs throughout to monitor and control production, but the management team was becoming tired of system updates and ongoing PC maintenance. Whatever HMI they settled on, they wanted a way to distribute the user interface without relying on the traditional distributed PC model.

Implementing ACP Technology

The Logan Automation Team had been reading up on Microsoft Terminal Server technology and realized that it would allow them to replace their PCs with Thin Client terminals. The benefits that a Terminal Server system could bring to their installation were evident - any new interface software installed on a single server but displayed on multiple Thin Clients was their solution to software maintenance.

During this process, Intellution was chosen as the HMI provider, and the Automation Team set up a server with Windows NT 4.0 TSE to test for compatibility with the Intellution products, as well as with their existing HMI software. To save money during this pilot project, Logan used existing Windows computers as Thin Clients. This allowed them to rapidly configure a test bed for all of their evaluations, and it soon became apparent that a Thin Client system would be a stable and capable platform for the project.

After seeing demonstrations of Intellution software running on ACP Enabled Thin Clients, Logan had the assurance that the pieces of this project would come together as they had hoped. ACP Enabled Thin Client hardware and ACP's ThinManager management software would be the perfect compliment for the proposed HMI Terminal Server setup.

Implementation of the new Thin Client based HMI system began, and when they were finished with the first phase of the installation, the Hot Mill section of the plant had 3 Compaq 6400R servers for the user interface screens and 2 Compaq DL 380 for the Intellution SCADA servers. Each 6400 was outfitted with dual 500 PIII Xeon processors with 1 GB of memory, while the DL380's have dual 733 PIII processors with 512 MB of memory. All communications between the Thin Clients and the servers is across a 100MB-fiber network.

One of the user interface servers runs a user interface written in Microsoft's Visual Basic, another runs Intellution's standard iFIX product. The third server uses the Server Failover functionality built into ACP's ThinManager to serve as backup for the other servers.

Future Plans

Logan's Hot Mill Automation Team worked closely with ACP to collect the information that they needed to get all of the software up and running to their satisfaction. ACP provided key contacts at Intellution, was a major player helping Intellution with the development of their TSE product, and remains active in Logan's expansion project.

Because of the success of this initial Thin Client project, other business units at Logan Aluminum are now considering a Thin Client Solution for their operator interface upgrades. Once these units are converted, Logan Aluminum will have fifty or more ACP Enabled Thin Clients installed and running under ACP's ThinManager.



ACP®

