

A CASE FOR GREENER COMPUTING

THE PROBLEM

CMA Communications, a cable operator serving rural communities in Louisiana, Mississippi, Nevada and Texas, planned to unify their network communications across 17 local cable offices in four states. The initial project was to create backup and connectivity servers at every office and to replace desktops and upgrade software as necessary to ensure operating system and software compatibility between locations. Early in the planning process, however, it was determined that computing resources and software versions varied from office to office and that many locations did not have reliable power or facilities to support on-site servers.

Recognizing that a more comprehensive solution would be required, CMA leadership approved a more comprehensive approach to network unification, with the primary stipulation that the final result be both energy efficient and environmentally friendly, and fall within the budget allocations of the original plan.

THE SOLUTION

CMA utilized ATS to find the most appropriate tactics to achieve their network unification goal. Given the project parameters including budget constrictions, hardware capacity and software version incompatibilities from office to office, and the charge of finding a greener computing environment, ATS drafted a project design for CMA's new network environment.

The ATS plan involved deployment of an entire virtualized infrastructure. CMA's 20 network servers were virtualized into a single physical server hosted at the ATS data center. Seventy five desktop computers in CMA's 18 regional offices were replaced with Wyse EarthSmart® thin clients at every workstation. The virtualized desktop has allowed CMA to take advantage of workload balancing of its cable systems and distributed power management of a virtual infrastructure. With those mechanisms in place, ATS was able to provide instant standardization of operating systems and software across the company, along with the ability to manage future updates from a single location.

THE RESULTS

The CMA/ATS Infrastructure Virtualization Project resulted in complete network unification among the CMA offices—at a lower cost than required to update hardware and software across the system.

In terms of energy efficiency, ATS hit the ball out of the park. By replacing underutilized desktops with thin clients, CMA recognized lower energy consumption. Every server virtualized with the project saved 7000kWh of electricity annually, totaling approximately \$700 in energy costs. "We are blown away by the results," said Mark Reaves, Vice President of Operation for CMA. "We recognized energy savings at every single regional office immediately after moving to ATS hosting," he said.

In addition to operating efficiencies, ATS was able to help CMA achieve the goal of implementing a greener computing strategy:

- **Environmental Benefit of Thin Client Computing vs. PC**
- **Fewer materials and less energy is used in thin client production**
- **90 percent less energy used each year**
- **Climate control efficiencies resulting in lower heat production**
- **Less noise pollution in user areas**

