



## **GSA - United States Courthouse Owensboro KY**

IEC Systems worked with the GSA Kentucky Property Management Center to replace the controls at the United States Courthouse in Owensboro KY. This facility was in need of replacement of an aging inoperable Johnson Controls Metasys system. The Owners team wanted to expand the web based LON EMCS that IEC Systems had installed in Frankfort KY the year prior. IEC Systems evaluated the facility which had a partially installed and partially operable Metasys system installed on the Mechanical equipment. We surveyed and studied the mechanical systems and how they operated, evaluated the current operating parameters and sequences and developed a new control strategy to operate the facility to maximize energy conservation measures without sacrificing, even making significant improvements to tenant comfort. In our evaluation we discovered some poorly thought out and ineffectively installed ductwork runs and modifications that had never been recorded or documented. There were outdoor air hoods that allowed rainwater to be directly drawn into the ductwork, and eventually drip through courtroom ceilings. This caused the O&M Contractor at the Judges direction to blank off the OA intakes entirely. IEC Systems properly installed new OA intake hoods and enabled the introduction of outside air as originally designed, IEC Systems installed LON based Web enabled non-proprietary controls on all the major mechanical equipment to meet the new sequences and operation parameters to maximize comfort and efficiency. This included all Air Handling Units, Boilers chillers and pumps, all terminal units and representative space temperature, humidity and CO2 monitoring. In order to save on the initial upfront costs, we designed the system to utilize excess server capacity at the Frankfort site connected through the GSA intranet. Thus far the

Mechanical systems are operating efficiently, effecting reduced utility consumption and enhanced tenant comfort to everyone's satisfaction.