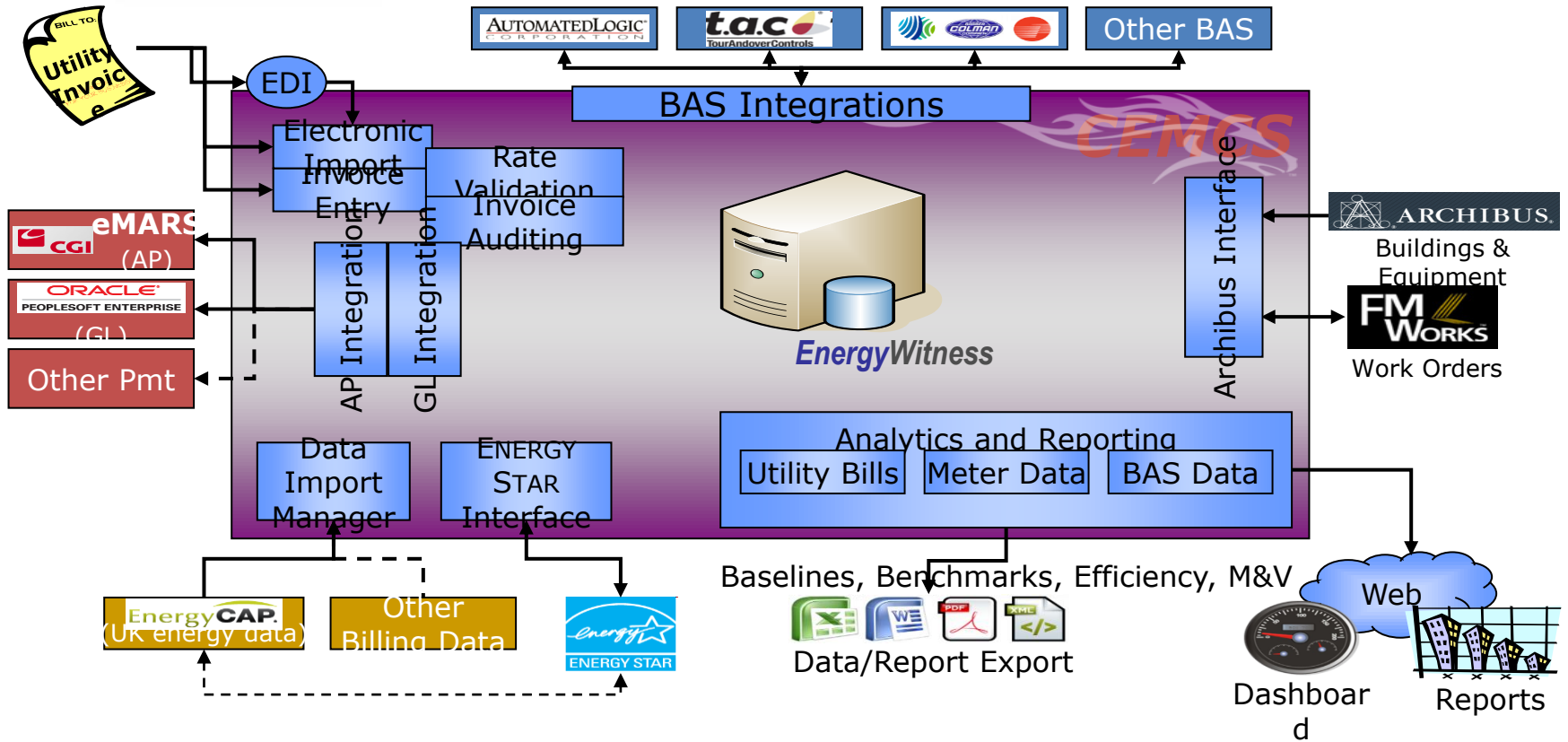


# Architecture Diagram



September 28-October 1  
The Omni in Nashville, Tennessee





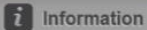
## Commonwealth Energy Management and Control System



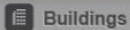
**CEMCS**



Home



Information



Buildings

Welcome to the Commonwealth Energy Management and Control System (CEMCS) public dashboard. This dashboard tracks the progress of energy and cost savings initiatives for buildings throughout Kentucky. The CEMCS is an innovative software application which is integrated to utility company billing, building automation systems and statewide accounting systems. The data collected from these sources enables the identification of energy-saving opportunities and verification of corrective actions that reduce energy use, and thus allows the Commonwealth to operate as much as 25% more efficiently in integrated facilities.



Total Buildings

82



Square Footage

6,306,131



Total Occupants

13,706



Percentage Energy Savings

12.4%



On track to meet 2015 goal



On track to meet 2025 goal

Current energy consumption compared to baseline year (2009), normalized for variations in weather.



Annual Utility Cost Savings

\$2,041,049

All utilities (energy + water) compared to baseline year (2009), weather normalized.



## Data Flows for CEMCS

### Building Automation System Data:

Automated Logic  
Tridium  
Johnson  
TAC  
Andover  
Allerton

### Electronic Data Interchange:

Xebec edi 810-xm12  
Kentucky Utilities  
Louisville Gas and Electric  
Frankfort Plant Board  
Stand Energy Corporation

### Interval Data:

MV-90  
Frankfort Plant Board  
Kentucky Utilities  
Louisville Gas and Electric  
Columbia Gas  
American Electric Power  
Internal Process:  
Bill Pay- EFT, eMARS, treasury check  
Posting Utility Bills- manual or electronic  
Publishing  
Benchmarking  
eMARS batching  
People Soft General Ledger  
Energy Star  
Error Reconciliation (all accounts)

Excel, project, html, sql server, ftp  
MoveIT  
Database familiarity  
EDI transmissions  
BAS systems and data capture  
SharePoint, file versioning,  
Excel Services (SP) InfoPath (SP)  
Familiarity with utility rates/meters  
Familiarity with HVAC a plus  
Public Facing Dashboard  
Silver Light?  
Html5