

ECC Connection

Fall 2005

Gresham-Barlow School District recognized as National Leader in ENERGY STAR Program

The Gresham-Barlow School District was recently honored as the first organization in the nation to be awarded the U.S. Environmental Protection Agency's (EPA) ENERGY STAR Leader award. The district received this prestigious award for improving the average energy efficiency of all its buildings by 30 percent over their baseline and raising the average efficiency of all their buildings to the top twenty-five percentile on EPA's Energy Performance Rating System.

The Gresham-Barlow District's buildings use about 40 percent less energy than the national average for K-12 school buildings. That means it will cost the district about 40 percent less to heat, cool, and light the buildings than average schools in the area. These achievements have stemmed from the Gresham-Barlow District's vision and district-wide commit-

ment to Resource Conservation Management (RCM), a management practice that incorporates improving energy and resource efficiency into the district's day-to-day operations. The district has been proactive in identifying and implementing measures to reduce energy use while maintaining the building's comfort and services. Since the beginning of its RCM program in 1999, Gresham-Barlow School District has saved a total of \$4.3 million and avoided utility costs of \$1.1 million for this past school year of 2004/2005. The District has also decreased its overall energy use by 46 percent. Last year's savings alone represent the salaries of approximately 22 teaching positions.

To read the press release in its entirety, please visit the EPA's website at: www.epa.gov.

What makes our energy program successful

Contributed by Dave Cone, Asst. Facilities Supervisor Gresham-Barlow School District

People have asked us what makes our energy program so successful. Of course we would say first and foremost, a commitment by the entire organization to reduce our energy consumption. However, we believe the tools we have available to us deserve a considerable amount of credit as well. One of these tools is our Alerton DDC control system and accompanying software we have in a number of our buildings, provided by Environmental Controls Corp.

We began our program late in 1998 by tracking our energy bills. As we came across facilities with extraordinary energy use we would always use the Alerton control system to investigate what was happening with our air-delivery and conditioning systems. Sitting at our com-

puter interface we are able to quickly trouble-shoot issues and make adjustments and improvements as needed. Most often we find that mechanical equipment is not running as intended. Without Alerton's controls and software, we would have had to physically inspect each building, spending considerable time and man-hours trying to determine why a certain facility was using so much energy, even though the schedules were set correctly.

While we are more than happy with the Alerton system, we are especially pleased with our relationship with ECC. It is important to our organization to work with people who provide an exceptional level of service and support. Sales and service technicians must be highly informed and



Gresham-Barlow School District continued

knowledgeable about their products as well as trends in the industry. This is crucial in order for us to meet our energy efficiency goals.

We have found ECC to be extremely conscientious and attentive to our needs. They first listen to our concerns, then construct cost-effective solutions that are tailored to meet our specific needs. This process provides us with a method of obtaining a value based solution, rather than simply selling us a control system that may have a high margin for them.

Service plays an enormous role in choosing our partners. Working with a knowledgeable technical support staff that is capable of trouble-shooting complex issues over the phone or on-site is critical for our environment. This is an area where ECC stands out from other controls companies.



Gresham-Barlow School District receiving ENERGY STAR Leader Award.

While Gresham-Barlow has been recognized as a national leader in energy conservation, we did not accomplish this alone. We appreciate ECC for their leadership, service & support, and quality products they have provided over the years to help make this achievement possible.

If you would like more information about this project, please contact Cliff Nielson, P.E. Sales Manager for ECC at 503-620-4228. Dave Cone, Asst. Facilities Supervisor for Gresham-Barlow School District can be reached at 503-667-6497.

Web-Based Automated Service Requests

Contributed by David Lee, DDC Service Manager

In an effort to provide our customers with a high level of service and support, ECC has implemented a web based service work order dispatching system called Corrigo. We have been using this system throughout the year and have found many benefits for both customers and our organization.

Here's how it works

When a customer calls ECC and requests service for their Alerton DDC or Mechanical system, we input the details of the service into the Corrigo web based dispatch system, which sends it directly to the assigned technician. All of our technicians have Sprint enabled Treo 650 mobile phones, which allow them to receive the service work order details on the phone, over the web, while out in the field. The technician then takes the dispatch and proceeds to the customer's site and completes the service or repair.

Once the technician completes the service, they update the information (labor hours, material used, repair performed) at ECC's Corrigo website. Here the information is compiled and reviewed to pro-

vide accurate and informative invoicing for our customers, as well as maintain a history of work performed.

Topher Edwards, one of our DDC Tech/Electricians, has noted that Corrigo has improved his efficiency, allowing him to see more customers on a daily basis.

Rich McGinnis, Mechanical Service Supervisor, likes how easy it is to share accurate information between the office and the field.

How customers can utilize the ECC Corrigo web portal

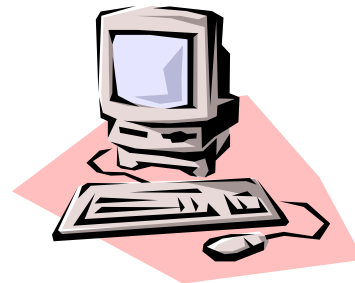
With this new web-based dispatch system, customers have the option to receive their completed work orders via email. In addition, customers can initiate a service work order and track the status, via the web and our ECC Corrigo web portal.

If your organization would like to use this web-based feature, please contact David Lee at 503-620-4228, to obtain your username and password, to access the ECC Corrigo web portal.



Tech Corner

Getting into the details with ECC Engineering



A Review of Your Alerton System Security

Contributed by Kent Stidham, Programming Engineer

From time to time, we get questions from the Information Technology (IT) people regarding Alerton system security. We are all familiar with the ongoing attempts by others to access computers that they shouldn't be accessing. It is important to know that inherent in the Alerton control system, there are broad measures to assure that the system remains secure.

Envision for BACtalk provides four methods for accessing the controls system: through a direct COM port, a modem via dial-up, an Ethernet/IP connection (referred to as an Annex J connection from the ASHRAE BACnet spec) or the WEBtalk IPort, a standalone web server designed to provide access from anywhere without having the BACtalk software resident on the remote connecting workstation.

First line of defense for all the methods (except through the IPort) requires a connecting computer to have the Alerton software installed. In addition, the computer must have the facility display screens in order to "see" any of the information from the controllers. The IPort, as an internet device includes more security measures.

Direct connections require a person to have access to the facility and to the global controllers. Modem connections require that the user know the phone number of the site. Annex J or IP (internet protocol) connections require that the user know the IP address of the global controller (although, typically the IT department provides the final path from the IP router to the global controller). WEBtalk access requires knowledge of the URL in order to "point" your browser to the IPort.

In all of these methods, the system software utilizes an Authorized User list that is created at the time of facility start-up and which can be modified only by those with adequate security levels. This list is checked upon an attempt by a remote user to connect to the controls system. Careful assignment of privileges provides the limits necessary to what an

authorized user has access. Without a User profile, the software simply prohibits access to the system.

Advantages and Disadvantages:

Direct connections require that the user be on site, connected directly to the global controller. However, if the user is on site, then it is most advantageous to simply use the server workstation. This connection is rarely used unless, for instance, an Alerton Viewport is installed in a mechanical room and is used to access the system to perform troubleshooting measures in the area of interest.

Modems provide a stable and secure connection from anywhere although the connection could be subject to speed limitations depending on line quality and modem compatibility. This is not to say modems are discouraged; on the contrary, most remote connections are made in this fashion.

Annex J/IP connections provide the best all around speed to look over the control system, edit schedules, view trendlogs and alarms. They do require more initial interfacing with the IT department, but once the network aspects are defined and the connection is made, end users could abandon their modems and save the monthly cost for a dedicated phone line. If there was a drawback, it would be that not every location has internet access; however this becomes less of an issue as the world gets more "wired".

WEBtalk IPorts also provide the same global access as an IP connection and introduce a primary security layer at the web browser level prior to ever accessing the BACtalk server data. Again, close coordination with the IT people is required initially, but once complete, provides a reliable path to the features of the Alerton BACtalk control system.

For more information on any of these connection methods, please contact me or Alan Kendall in our Service Department at 503-620-4228.



ECC Welcomes New Employees



Don Lawrence joined us as a Project Manager in the Portland, Oregon office. His home in Salem also makes him readily available for projects being built out of the Eugene office. Don brings to ECC an impressive resume of successful project management that range in all sizes and transcends a variety of building types to include complex and challenging projects. In his free time, Don enjoys scuba diving, white water rafting, riding ATV's, back packing, and ocean fishing. He has lived in the Pacific Northwest most of his life and has raised 4 children. One son is a fisherman in Alaska, another son works for Halliburton in Afghanistan, and another son just started high school. His Daughter lives in Salem.



Eric Stotts recently joined us as a Project Manager. He has worked in the industry since 1994 in the design, manufacturing, installation, testing, balancing, and commissioning of many types of HVAC systems and equipment. Eric says, "Controls is one area that I really enjoy. The part of my job as a test and balance engineer that I enjoy the most is tuning systems with controls technicians and overcoming intricate problems with control sequences on the more complicated jobs". Eric is well experienced with hospitals, labs, microelectronic fabs, cleanrooms, office buildings, high-rise buildings, prisons, water and sewage treatment, and manufacturing plants.



Dale Nolen joins us as a Service Account Salesman, from a local competitor in the controls business. He has been in the controls business since 1971. He has been involved with various controls businesses and Tektronix, serving as an engineer, project manager, and sales & maintenance management. He spends his spare time working on his 5 acres, traveling with his wife, and working on his 1956 Chevy. He has a married daughter living in Phoenix, Arizona.

Environmental Controls Corporation

Portland Office
15860 SW Upper Boones Ferry Road
Portland, OR 97035
Phone: 503-620-4228
Fax: 503-968-1029

Eugene Office
2460 West 11th Avenue, Suite 201
Eugene, OR 97402
Phone: 541-344-4069
Fax: 541-344-5012

