BTL CERTIFICATIONS
New MACH-Pro and
RC-Studio milestones

THE ISA PROJECT
Remote access to the
timeless Aussie Outback

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RUNtime

The Official Quarterly Newsletter of Reliable Controls Corporation

Q4 - 2012

HQ

Open For Business

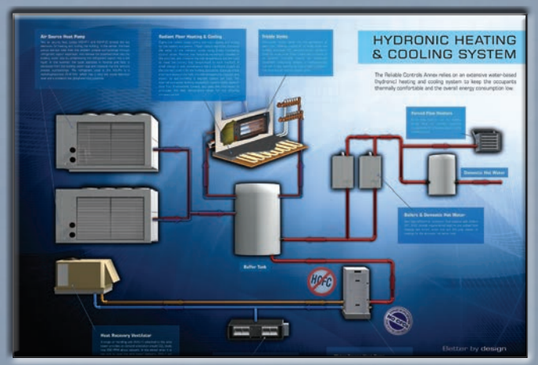
HQ

Open For Business

The new Reliable Controls® HQ was officially opened at a ribbon cutting ceremony on October 18th. The event was well attended by local dignitaries and individuals close to the project. The 8 million dollar annex to the existing Reliable Controls® building is a targeted LEED Platinum facility that will be instrumental in showcasing Reliable Controls® products. The origins of the new Reliable Controls® HQ date back to a feasibility study conducted in June of 2008, and after completing schematic designs and submitting development permits, the shovels finally hit the dirt in April of 2011.

Flash forward to October 18th, 2012, and the building's official opening. With the threat of rain hanging over the freshly cleaned courtyard between the pre-existing North wing and new South wing, the opening ceremonies were moved into the North wing's recently vacated R&D area. Well over 100 invited VIPs and Reliable Controls® personnel filled the cozy space to listen to master of ceremonies and Executive Vice President of Sales and Marketing, Tom Zaban, and the assembled guest speakers. Throughout the one hour ceremony a vivid portrayal of the green building movement was painted – from last century's pipe dream to today's necessity – with speakers often conveying a sense of urgency and proud ownership. To all in attendance, the new facility was framed as one small accomplishment toward a global retooling of the construction industry and ultimately a step toward reversing the destructive prevalence of unbridled consumerism in our society.

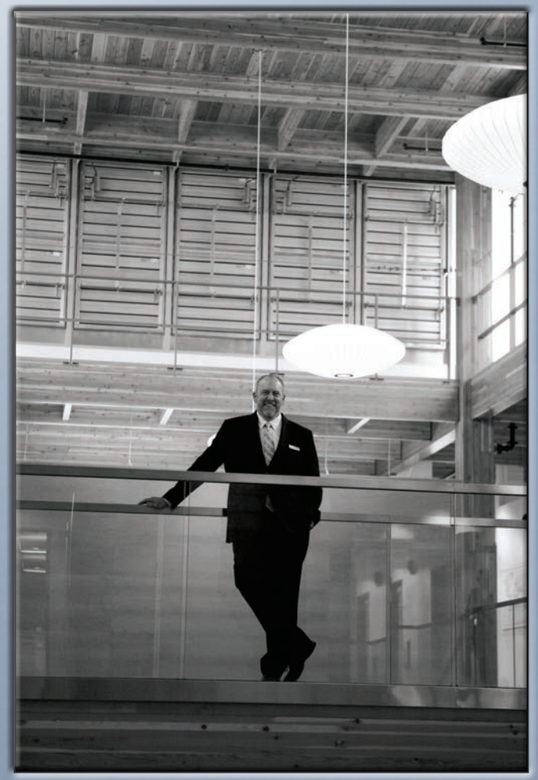
As Tom noted in his welcoming address, "This LEED Platinum targeted annex is a demonstration of our collective commitment to sustainability. Our ability to demonstrate leadership, to show that we can work together, to implement a process that results in products and services that will endure, that will minimize pollution, minimize waste, and provide a lasting benefit to the community we live in."



After the official ribbon cutting ceremony, the attendees were divided into smaller groups and escorted by tour guides through the entire Reliable Controls® facility, stopping at 13 LEED learning stations manned by experts in the pillars of green building techniques. LEED topics included an accounting of the targeted LEED credits in the arenas of Sustainable Sites, Water Efficiency, Energy and Atmosphere, Material and Resources, and Indoor Environmental Quality. Attendees came away from the event with a concrete understanding of the design and construction principles used to create the building and how the building's LEED status is verified by an independent third party. The following day saw a well-attended general Open House for family, friends, and neighbours. Going forward, the LEED learning stations will be the centerpieces in self-guided tours of the facility for parties interested in witnessing the green building movement first-hand.

For a comprehensive account of the new building, an overview of the Triple Bottom Line approach to green building, and the Reliable Controls® HQ LEED scorecard, please visit...

www.reliablecontrols.com/corporate/facility/



New DEALERS

BASS Solutions & Services
Hanoi, Vietnam

Top Technology Controls
Medina, Saudi Arabia

R.W. Lapine
Kalamazoo, MI, United States

Nguyen Phat
Ho Chi Minh City, Vietnam

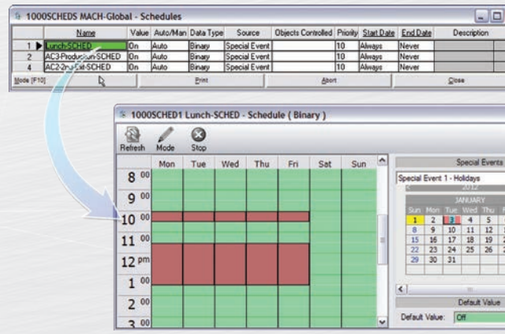
Midland Electric Alberta
Lethbridge AB, Canada

Pro Controls
Bow, NH, United States

Certus Controls of New Jersey
Cranford, NJ, United States

DBS
Etobicoke, ON, Canada

Leading With BACnet



Reliable Controls® is pleased to announce three new BACnet Testing Laboratories (BTL) certifications for the MACH-ProAir™, MACH-ProZone™, and RC-Studio® 2.0.

The MACH-ProAir™ and MACH-ProZone™ have both been awarded BACnet Building Controller (B-BC) listings at the highest level of the BTL grading scale, Revision 12. The MACH-ProAir™ and MACH-ProZone™ bring the number of Reliable Controls® B-BC certifications to ten, joining the previously certified MACH-ProWebSys™, MACH-ProWebCom™, MACH-ProSys™, MACH-ProCom™, MACH2™, MACH1™, MACH-Global™, and ETHER-Link™.

RC-Studio® 2.0 update 1.76 improved its BTL certification from BACnet Operator Workstation (B-OWS) to BACnet Advanced Operator Workstation (B-AWS), the highest possible workstation grade.

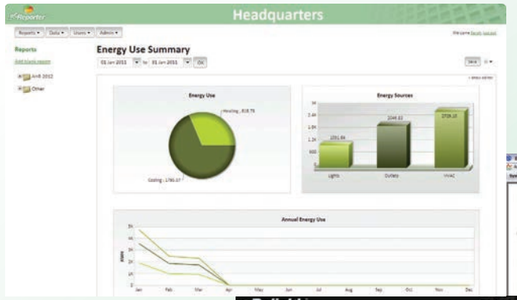
BACnet Testing Laboratories was established by BACnet International to support compliance testing and interoperability testing activities.

RC-Archive Version 3 Gets The Green Light

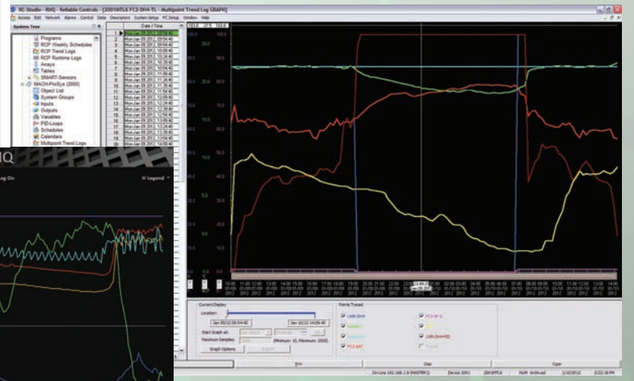
RC-Archive™ version 3 officially shipped on September 26th, making it the first of our software products to make the jump from version 2.0 to version 3. And while version 3 features an updated interface and an exciting green color theme, there are also many big ticket items under the hood, namely:

- All MACH-System logs can be archived, including BACnet Single-point, Multipoint, and Runtime, as well as, Reliable Controls Protocol Trend Logs and Runtime Logs,
- A three step data save process ensures data is not lost (Logs are initially saved to a data file, then written to the SQL database before the original data file is deleted. This three step process overcomes problems experienced with RC-Archive™ 2.0 when the SQL database was not able to accept data.),
- BACnet® listing is pending and highly anticipated based on BACnet Automated Trend Retrieval BIBB support,
- Third-party BACnet® product supported,
- Configurable scheduled update times ensure system data is transferred to the SQL database before needed, and
- RC-Archive™ version 3 is RC-Reporter™ ready.

The RC-Archive™ version 3 project entered the Concept Gate on September 4th, 2009 and since October of 2010 the project consumed 90 weeks, 1 day, 1 hour, and 20 minutes of development time split between two full-time developers.

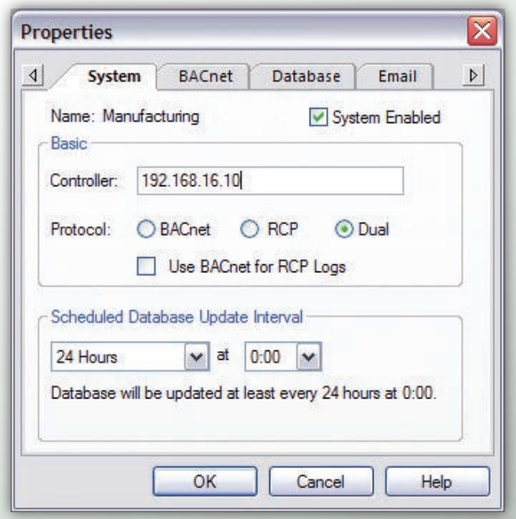


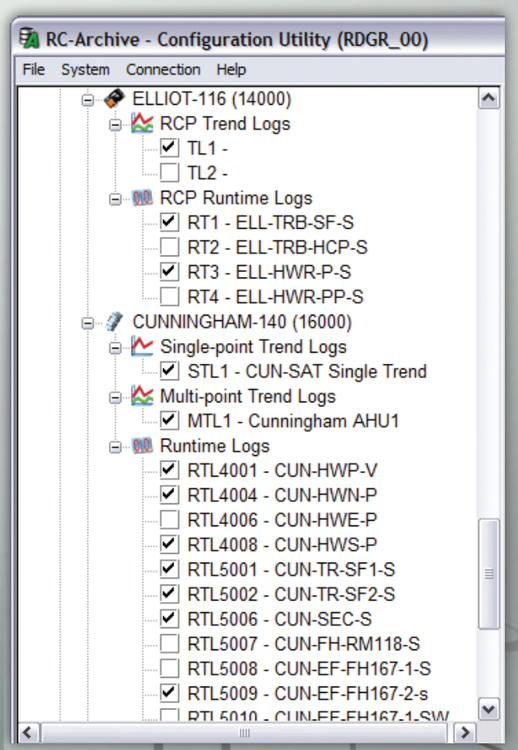
RC-Archive™ data in RC-Reporter™



RC-Archive™ data in RC-Studio™

RC-Archive™ data in MACH-ProWeb™ User Interface





For more information on RC-Archive™ version 3, please visit...

www.reliablecontrols.com/RCAR

The Isa Project

In the remote western deserts of Queensland, Australia, a speck of civilization clings to a rock set like a pearl in a drained landscape. Mount Isa, known simply as "The Isa" by the locals, is the administrative centre for an area the size of a small European country, but with more wealth than Greece, jokes AUSTEC associate Dave Adam. A full-time resident of Brisbane's surf and golden glimmer 1,800 km to the east, Dave has flown into town to pay a visit to the Mount Isa Hospital job site. A combination of new construction and refurbishment, the paperwork for the Mount Isa Hospital project was signed back in September of 2009 but given the perfect storm of a challenging project environment and long distance logistics, the mirage of a February 2011 completion date has long since slipped away into shifting sands. Dave is back at his hotel, thankful that he was able to get a round of golf in with reps from the hospital – 6:30 AM tee off to get 18 in before the pounding heat attacks the town after mid-morning. The locals say he's lucky – there was a heat wave before he arrived and the summer hasn't hit yet. 37 ^{O}C will do just fine for now.

It's Sunday, his 30th wedding anniversary, but Dave has made the two and a half hour flight from Brisbane because the local mechanical rep has told him conditions are right to commission their latest round of work. On the Isa Project, it is rare when conditions are right, and windows of opportunity can be quickly broken. Builders milestone dates have proven to be wishful thinking when mixed with extreme realities. The project begins and ends with severe weather – endless drought conditions are occasionally smashed by flash floods and temperatures can quickly swing between freezing and boiling. These natural conditions make inconsistent deliveries a lone constant on the Isa Project, but add into the mix a lack of qualified workers and problems are magnified. All the good tradesmen in Mount Isa earn triple the going wages when working for the mines that drive the local economy. To put this into perspective, the builder went through six roofing contractors before the roof on just the first building was complete – the local talent pool was so thin that one of the contractors hailed from Western Australia, some 4,000 km away (that's 50 hours of nonstop driving through a whole lot of nothing). Progress on the project has also been slowed by having to accommodate the demands of an operational hospital, which in many respects, has proven to be the biggest challenge for the builder, continually delaying dates. For the existing buildings, age has been a major factor – accurate documentation has disappeared over the last 50 years leaving a mine-field of costly surprises strewn across the project's landscape. On the Isa Project, even the most basic fundamentals that are usually taken for granted in large urban centers must not be overlooked. As an example, the date for power connection to mechanical switchboards is dependent solely on the availability of an electrical inspector – everybody waits for him to fly into town. Dave suspects there must be a severe shortage of inspectors – on a recent coal mine BMS job site, Rio Tinto trucked in a large temporary generator to allow for the commissioning of a building until a permanent power source could be approved.

AUSTEC building automation Queensland

On the phone with his wife back in Brisbane, Dave's doing his best to deliver on being a reliable husband, but for the Isa Project, the Reliable Controls® Authorized Dealer knows delivery has been a challenge as there are few regular truck routes from Brisbane to Mount Isa. There is one truck route from Townsville, but it takes a week for goods and materials to reach the job site because the truck's priorities reside with the cashed-up mines along the way. Mount Isa exists solely for the Xstrata lead/copper/zinc and silver mine which dominates the town – looking west from anywhere in town it is impossible to miss The Isa's central hill entirely covered in a complex string of functional buildings punctuated with huge pipes and three massive smoke stacks that rise high above the approach to the local airport. From his motel one kilometer away, Mount Isa at night looks like a ghostly fairy tale of industrial light and primitive earth magic. There's a highway running through The Isa's heart. On the one side it's tidy homes, subdued stores, and civil institutions – on the other, the sprawling monster of a mine complex. Every breath of air is an elemental experience when the wind is right, and thankfully Dave has been lucky to go without sampling the sour mechanical air. But there's no way to avoid the rumble – twice a day, and every day, between 7:55 AM to 8:05 AM and 7.55 PM to 8.05 PM, no matter where you are in the town, you feel the unsettling vibrations of controlled underground explosions.

The revitalization of The Isa's hospital carries obvious benefits to the wider community, but there are also many points of the project that reside on a human scale. Take the hospital engineer who prior to AUSTEC's installation of the Reliable Controls® MACH-System regularly visited the many remote hospital annexes spread throughout the hundreds of kilometers of raw outback. With RC-Studio® 2.0 installed on his laptop, the engineer was pleased to be given the option of using his PC to remotely access the annex facilities using wireless modem. The long term vision is to connect all remote sites to the Mount Isa hospital's BMS so he can visit his own home more often.

Dave hangs up the phone, thankful he has an understanding wife. It'll be another week in the motel but he realizes he has been very fortunate that the mechanical services and mechanical electrical commissioning techs who work along side him operate as a team with the singular goal of getting home ASAP. In a remote site, demarcation is death. One of Dave's saving graces on the Isa Project is that AUSTEC's company director, Andy Henderson, had the foresight to purchase wireless routers to allow for communication with the site's BMS from AUSTEC's Brisbane office, dramatically reducing the need for AUSTEC personnel to be on site in Mount Isa. This remote touch has proved to be critical for the hospital staff and local consultants in addressing the very few complaints that have arisen with the project's Trend Logs. The complaints have been very rare, however when they do occur, they require instant answers when asked by medical staff.

The Reliable Controls® MACH-System installed at the Mount Isa Hospital is the closest thing to a miracle that The Isa has seen in some time.

Reliable Controls® equipment installed at the Mount Isa Hospital...

1 MACH-ProWebSys™	16 SMART-Sensor™ LCD (-ND-H)
2 MACH-ProCom™	35 SPACE-Sensor™ Temperature
8 MACH-ProPoint Input™	45 MACH-ProPoint™
13 MACH-ProSys™	55 SPACE-Sensor™ Temperature (-O-S-L)
14 MACH-Air™	56 SPACE-Sensor™ Temperature (-S)

Alamosa School District

Alamosa, CO, USA

Education

The Golden Rule

Alamosa is an agricultural-based community in south central Colorado, 40 miles from the New Mexico border. The area is rich in diversity but is geographically isolated by the San Juan and Sangre de Cristo mountain ranges. In 2012, three new LEED Gold schools were added to the Alamosa School District to allow for the closure of outdated facilities.

Project Details

Three outdated and overcrowded elementary schools in the Alamosa School District lacked community accessible facilities. In addition, energy and operating costs for the aging schools were far above today's acceptable levels. Reliable Controls® Authorized Dealer, HVAC Solutions, won the contract to install modern Building Automation Systems into three new schools for the Alamosa School District that would serve as community centers and provide safe and welcoming environments.

Along with the flexibility offered by the BACnet-based Reliable Controls® MACH-System installed in all three schools, the new facilities employ innovative energy saving techniques, such as reflective roofs and hardscapes, unrestricted daylighting in classroom spaces, high efficiency water fixtures, recycled materials, and FSC certified woods. Construction waste was recycled to create new onsite playgrounds. As a result of these innovative building techniques, the three new schools of the Alamosa School District achieved the lowest cost per square foot of total energy consumption of any modern K-12 educational facility in the state of Colorado.

Mechanical equipment connected to the Reliable Controls® MACH-Systems include 6 multizone air handling units using demand control ventilation, 96 variable air volume controllers (cooling only and hydronic reheat), and 4 high efficiency multistage boilers.

To learn more about projects using Reliable Controls® visit
www.reliablecontrols.com/projects/overview

Project Type:
New Construction

Installation Type:
Boiler, CO_2 Monitoring, Fan Coil Unit, HVAC, Power Monitoring, and VAV

Total Area:
148,000 m² (1,593,060 ft²)

Equipment Installed:
2 MACH-ProSys™
8 MACH-ProPoint™
12 MACH1™
96 MACH-Air™
96 SPACE-Sensor™ Temperature CO2

Network:
LAN

Integration:
BACnet®

Total System Points:
152 points

Reliable Controls® Dealer:
HVAC Solutions

www.reliablecontrols.com

LEED

BACnet