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Régulvar

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Advances in technology

Upgrading building automation systems

Building automation systems were introduced in the 1980s. Since then, they've become an essential part of property management, allowing owners and managers to control energy consumption in response to economic and environmental imperatives.

The development of building automation systems has always gone hand in hand with digital technologies. Regulvar incorporated digital technologies into its business model in 1985 and, in 1987, completed its first project using the Delta Controls product line. As a result, thousands of the systems we've installed for our clients are now over thirty years old.



Avoiding potential pitfalls

Although we're very satisfied with the performance and durability of the systems we installed over twenty years ago, we know they're at a critical juncture in their lifespan, given their aging components and out-of-date software and hardware.

There are several drawbacks to maintaining aging technologies. First, they're less reliable because of potential malfunctions and breakdowns. Second, they don't perform as well, since they're not compatible with new devices, they can't support the latest software versions, and it is impossible to integrate advanced functions.

By carefully planning a system upgrade, companies can avoid unexpected failures and associated inconveniences such as high, unbudgeted costs.

Upgrading from V2 to V4: looking ahead

The Delta Controls product line has significantly evolved since 1987. Although the company has always been careful to ensure compatibility between new products and previous versions, we've reached a point where current technologies can no longer support older ones. It is therefore in many of our clients' best interest to upgrade their building automation systems using V4 products.

◦ Hardware implications

V2 series devices have not been manufactured for the past 15 years, which means it's impossible to replace them with new devices in case of a breakdown. In addition, these devices don't have the capacity to handle the growing complexity of sequences related to energy savings, analytics and LEED type certifications, and they don't have sufficient memory to

process the huge amounts of data involved. Finally, they weren't designed to support system interoperability.

Although companies can opt to install a V3 retrofit controller to update their system, this is simply a stopgap measure, since the product will eventually become obsolete. Furthermore, circuit boards only allow a limited set of functions.

◦ Software implications

First off, it's important to note that the ORCAview software has not been updated since 2012.

There are therefore many benefits to switching to enteliWEB: it's much more powerful than previous software solutions; it offers more functions; and it can easily accommodate third-party BACnet devices, including those

A customized transition strategy

containing Web pages. It is the only programming environment on the market that is specifically geared to buildings, and it allows for the development of applications in PHP and the integration of Web applications in HTML5.

The centralized, virtualized enteliWEB environment allows managers to make a single software solution available to multiple users rather than installing it on each workstation. It also ensures redundancy in case of a breakdown.

• IT implications

It is impossible to connect V2 devices on the same RS-485 pair of wires as V3 and V4 devices, since the former use a proprietary V2-Micronet network and the latter an open BACnet-MS/TP network.

To get the devices to communicate with each other, you need to add a new pair of wires—a more complex and cost-intensive operation. In addition, the V2 network is too slow to support current open systems in which all devices must communicate with one another.

The BACnet-MS/TP protocol will soon be replaced by BACnet-IP, necessary for analytics. All of Delta Controls V3 and V4 products come in the IP version.

Finally, when IT departments upgrade your operating system (2017-2018), ORCAview will no longer be supported and will no longer work.

Since emergency measures are usually costly and inconvenient, it's a good idea to plan upcoming changes. By being proactive, you'll have more options than simply dismantling your system and replacing it with an entirely new one, which is what many suppliers recommend.

Regulvar can analyze your current systems, free of charge, and propose a transition strategy that meets your specific needs. Once you've assessed the situation, you can decide on the most appropriate measures for a full or partial upgrade. You can also prioritize actions and spread them over a given period to control costs, ensure equipment and staff availability, and limit the impact on operations.

As a preferred partner of Delta Controls, we have the expertise to evaluate potential solutions. We can also rapidly supply products, since we store a large inventory at our Laval warehouse.

Feel free to contact one of our representatives today to discuss your situation and make an appointment.

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In the spirit of the holiday season, we gratefully express our appreciation for your trust and constructive business relationships. May the end of this year be an opportunity to celebrate your successes, and the upcoming one bring you motivating projects.

Happy Holidays!
The team at Regulvar



	In Laval (French)	In Ottawa (English)
ORCAVIEW Beginner	Upon request	Upon request
ORCAVIEW Intermediate	February 6 • 7	To be announced
ORCAVIEW Advanced	February 8 • 9	To be announced
GCL PROGRAMMING	February 13 • 14 • 15	To be announced
CREATING GRAPHICAL INTERFACES	February 21 • 22	To be announced
INTRODUCTION TO WIRELESS CONTROL	February 28 • March 1	To be announced

For more information, visit our Website

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