OCAD UNIVERSITY CAMPUS

TORONTO, ON, CANADA

Overview

OCAD University was established in 1876 by the Ontario Society of Artists, and incorporated as the Ontario College of Art in 1912, becoming the first school in Canada exclusively dedicated to the education of professional artists in fine and commercial art. In 1996, the name changed to the Ontario College of Art and Design, reflecting the growth of design programs. In 2010, to reflect the institution's status as a university granted in 2002, the school became officially known as OCAD University.

PROJECT DETAILS

OCAD University encompasses 10 individual buildings, networked via an internally managed IT backbone. With the cooperation of the IT group, a dedicated VLAN was created to accommodate the building automation network. Fiber optic cables link the sites together, while copper CAT6 networks serve the individual TCP/IP connected hardware. Multiple BACnet[®] MS/TP networks connect the many roof top units and variable air volume equipment controllers.

Mechanical equipment layouts vary from building to building. Common systems include hydronic heating boiler plants, domestic hot water heating plants, roof top units, packaged air handling systems, variable air volume boxes, fan powered boxes, heat pumps, and heat pump hydronic loops. The use of an EnWave steam delivery system at one site is an example of some of the more unique mechanical systems employed in this project.

In early 2017, a campus-wide upgrade was planned, with phase 1 completed in March 2018. Highlights of this project include the upgrade of legacy controllers, the conversion of many sub-networks to BACnet, standardization of alarm configurations using hierarchical logic to reduce nuisance alarming, and a major campus-wide graphics package revitalization.

Phase 1 of the upgrade brought with it a major change to the way the operators interacted with the system. A migration from RC-Studio® to RC-WebView® created some understandable anxiety amongst the operations team. A combination of training sessions and remote support allowed operators to utilize and appreciate some of the enhanced features like Enterprise Scheduling, audit trail, and the integration of RC-Archive®. Having the ability to easily review past trended information and seamlessly navigate from one building to the next using a single sign-on, has been a welcomed addition to the system.

With the implementation of RC-WebView as the main operator interface, OCAD University has positioned itself well to take advantage of the platform's upcoming features. Planning and implementation of future upgrades are already underway, with both OCAD University and Setpoint Building Automation continuously looking to identify opportunities to improve energy consumption.

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







PROJECT TYPE: Retrofit

INSTALLATION TYPE: Boiler, CO₂ Monitoring, Heatpump, HVAC, VAV

NETWORK: EIA-485, WAN, VLAN, BACnet®

POINTS: 10,000+ (including variables)

EQUIPMENT INSTALLED:

15 MACH-ProCom[™] 85 MACH-ProAir[™] 20 MACH-ProZone[™] 3 MACH-Pro1[™] 3 MACH-Pro2[™] 2 MACH-Global[™] 1 MACH-1[™] 3 MACH-2[™] 164 MACH-Air[™] 11 MACH-Zone[™]

RELIABLE CONTROLS[®] DEALER: Setpoint Building Automation Inc.

