

Condominium Developer Builds Future-ready and ‘connected’ Condo Living

Tridel uses video and IP networks to change life experiences for residents and provide next-generation condominium services

EXECUTIVE SUMMARY

TRIDEL

Industry: Real Estate/Residential Condominiums

Locations: Greater Toronto Area, ON

Number of Employees: 500

CHALLENGE

- Maintain status as industry leader and innovator in residential building
- Incorporate next-generation technology into building construction to support mandate to build greener communities
- Enable new telecommunications services and building automation for condominium residents

SOLUTION

- Cisco TelePresence C40 creates first-of-its-kind Virtual Concierge in downtown condominium
- Cisco routers and switches provide network infrastructure for the showcase NEXT Living EcoSuite
- Cisco IP network infrastructure incorporated into architectural designs prior to construction

RESULTS

- Future-ready building design includes robust IP network infrastructure to provide enhanced services and experiences to residents
- Three Hundred Front to be first Tridel condominium full designed and built with Cisco network throughout

Challenge

Tridel is Canada’s largest residential condominium developer. Founded in the 1930s as a single-family home developer before moving into the condominium market in the 1960s, Tridel is now Canada’s leading developer and builder of condominiums, ranked highest in Customer Satisfaction by J.D. Power & Associates four times since 2005. In Ontario, Tridel has received eleven Tarion Awards of Excellence, in recognition of its outstanding service to new homeowners. Tridel credits its success to consistently staying ahead of construction trends, ground-breaking technology, and exceptional customer service.

The last four decades have seen minor additions to the homebuilder’s toolkit. For the most part, the fundamentals in building engineering remain the same as they were in the 1960s, when improvements in elevator and HVAC (heating, ventilation and air conditioning) technology revolutionized the industry and led to the widespread construction of high-rise buildings. However, within the last five years, a growing number of green initiatives within the industry are heralding what Tridel believes will be the next wave of innovation in homebuilding.

Tridel began looking at “smart building” five years ago, when the trend began in the commercial construction space. The ultimate goal was to plan and build futuristic smart communities that will, when completed, provide Tridel building residents with enhanced communications and connectivity services. To this end, Tridel strived to become one of the first residential builders in North

America to introduce smart and connected buildings. Using next-generation technology, smart building design will change the way Tridel homes are planned, designed, and built, and will provide a greener and more automated home experience to residents.

“We can now have a future-ready building that offers new capabilities to residents. We’ve built a better building that can evolve with technology and provide services years from now that would not be possible if we hadn’t made the investment.”

- Ted Maulucci, chief information officer, Tridel

“When we saw smart building technology five years ago, we knew it was the next thing in condominiums and had to go after it,” says Ted Maulucci, CIO of Tridel. “Aside from the immediate technological benefits to residents, this solution also enables Tridel to follow its mandate to build greener communities. It will reduce street congestion by providing an easy solution for telecommuters and reduce our carbon footprint

through improved energy-efficient designs, automation, and alternative energy solutions.”

To build a smart and connected building requires intricate planning. An IP network, the backbone of a smart and connected building, must be designed prior to breaking ground, so that it can be implemented early and provide connectivity throughout the building.

Solution

Tridel turned to Cisco to successfully execute its next-generation building strategy. Evaluating an existing Tridel condominium, Tridel and Cisco engineers worked together for six months to analyze the logistics of smart building. The results were impressive. By deploying a Cisco® IP network in new buildings during construction, Tridel could change residents’ life experiences by providing better telecommunications services and automated building systems, enabling features not available in traditionally constructed homes.

“We can now have a future-ready building that offers new capabilities to residents. We’ve built a better building that can evolve with technology and provide services years from now that would not be possible if we hadn’t made the investment,” says Maulucci.

“The Virtual Concierge is tapped into all integral building systems and can do everything a person sitting at the desk would. The interaction with people trying to access the building or ask a question works beautifully.”

- Jim Ritchie, senior vice president, Tridel

Results

The first foray into smart and connected building construction began with Tridel’s downtown Toronto condominium Rêve, already under construction when the analysis was completed. Rêve features a Virtual Concierge, which consists of two Cisco TelePresence® C40 Codec units. By installing a TelePresence C40 Codec and high-definition monitor, camera, and speakers in the front lobby, and one in the office of Tridel service provider UCIT Online Security, one concierge staff member can remotely monitor up to three separate buildings. In addition, off-site monitoring functions are tied into essential building systems, helping ensure that the concierge is aware of activities in the common areas of the building.

“The interaction with people trying to access the building or ask a question works beautifully,” says Jim Ritchie, vice president of marketing at Tridel. “On the backend, the Virtual Concierge is tapped into all integral building systems and can do everything a person sitting at the desk would.”

Rêve is also home to the NEXT Living EcoSuite, which demonstrates Tridel’s expertise and capabilities for green building environments. Located on the penthouse floor of the 13-storey Rêve, the NEXT Living EcoSuite is one-of-a-kind in the Toronto market, designed as a fully automated suite built on a Cisco IP network.

A Cisco SG300-10P Managed Switch and Linksys® E4200 Dual-Band N Router provide the NEXT Living EcoSuite’s network infrastructure, with home automation technology supplied by Cisco Smart+Connected Communities Ecosystem partner Control4. Running on the Control4 OS 2.1 platform, the automated system provides the ability for touch commands to control lighting and blinds, and is equipped with various remote control systems, IP cameras, an automated thermostat, an integrated home entertainment system, and a built-in iPod docking station.

“The suite is representative of what’s possible when you IP-enable a condominium,” says Ritchie. “From a technology perspective, it’s amazing. From a design perspective, it’s amazing. Technology doesn’t mean you can’t have great design.”

Next Steps

Looking forward, Three Hundred Front Street, a luxury condominium building in Toronto's downtown Entertainment District, will be the first Tridel smart and connected building. The 49-storey condominium will have a Cisco-designed IP network connecting the building in a way never done before in a high-rise development.

When Three Hundred Front Street opens for occupancy in 2013, every suite in the building will be wired onto the Cisco network, enabling Tridel to provide value-added services such as high-speed Internet, IP-enabled in-suite environment controls, and one-touch amenities reservation to residents. Fibre will be at the core of Three Hundred Front Street's network and run throughout the building.

"There will be a Cisco Ethernet solution in place with fibre infrastructure at its core providing connectivity for building systems and delivering high speed services to the suites," Maulucci says.

In a world where telecommuting is becoming more common, the connectivity built into Three Hundred Front Street will make it easy for residents to work at home through faster and more reliable Internet services, contributing to lower traffic congestion in the streets and a lower overall carbon footprint.

The ultimate benefit, however, is the world of technology that an IP network will make available to Three Hundred Front Street residents.

"The network at the fundamental level provides connectivity and scalability," Maulucci says. "It's allowing us to build the building differently, to match what we want it to do in the future. Without the network, the building can't go beyond what it is today. But once the infrastructure is there, the world opens up, and the possibilities are endless."

PRODUCT LIST
Switches and Routers <ul style="list-style-type: none"> • Cisco SG300-10MP Managed Switch • Linksys E4200 Dual-Band N Router
Collaboration <ul style="list-style-type: none"> • Cisco TelePresence C40 Codec

FOR MORE INFORMATION

For more information about Cisco TelePresence, visit:

<http://www.cisco.com/web/CA/products/telepresence.html>.

For more information about Cisco's Smart+Connected Real Estate, visit

http://www.cisco.com/web/CA/solutions/strategy/smart_connected_communities.html.

For more information on Tridel, visit <http://tridel.com/>.

For more information about Cisco, visit <http://www.cisco.com/web/CA/index.html>.



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