

Internet Data Centres

The foundation for business agility and competitive edge



In 2012, TELUS and IDC interviewed 200 Canadian business and IT executives to gain insight into their sourcing strategies. The findings were telling.

Fifty one per cent of respondents cite quick response to changing business needs as a key concern driving investment. Yet, 71 per cent of Canadian enterprises aren't open to alternative IT delivery models that can enable that quick response - risking agility and competitive edge.¹

But the sourcing mix is diversifying, whether Canadian enterprises are open to embracing it or not. Growing virtualization and managed services, cloud maturity and greater adoption of IP-based communication and collaboration are paving the way for new IT approaches. As a result, data centres that drive IT enablement and provide a foundation for agile IT services will become even more critical.

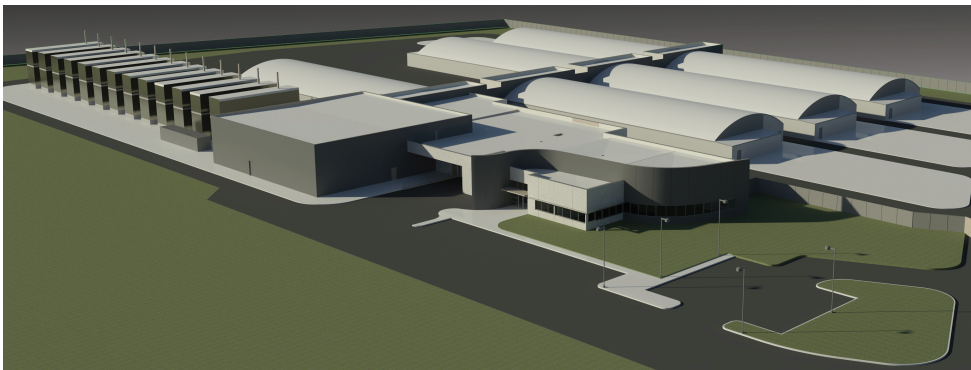
Investing in IT enablement

Since 1991, TELUS has been enabling business strategies and competitive edge by managing IT infrastructure and services on behalf of clients in our state-of-the-art data centres. Building on that 20-year legacy, TELUS has committed to a multi-million dollar investment in two new 'super' data centres in British Columbia and Quebec, Canada.

Complementing and augmenting TELUS' existing data centre footprint, these new facilities will amplify TELUS' strategic ability to support next-generation cloud computing and unified communications solutions. Designed around an advanced foundation of security, privacy and reliability, the new data centres will become a new benchmark for efficiency and scalability in Canada, with capacity for more than 200,000 servers. The customized, inherently redundant, modular design guarantees an unprecedented industry leading 1.15 Power Usage Effectiveness (PUE)², which will drive efficiencies in performance and environmental sustainability.

“The agile design approach with Skanska has provided TELUS with required flexibility in a constantly changing IT world – we can optimize capital deployment and minimize total cost of ownership while ensuring required reliability, security and scalability, all in an incredibly efficient design to support our clients’ evolving business needs.”

— Lloyd Switzer, SVP
Network Transformation, TELUS



Modular design guarantees scalability and flexibility

¹ IDC and TELUS Enterprise Cloud Study, 2012: Three Misconceptions Curb Competitiveness

² Based on responses from 1100 data centre owners and operators: “The average global, self-reported PUE from this survey was between 1.8 and 1.89.”

Uptime Institute 2012 Data Center Industry Survey, Matt Stansberry and Julian Kudritzki, March/April 2012



Four fundamental data centre drivers:



Efficiency

- Industry leading PUE of 1.15
- Hot aisle cold aisle separation
- Free cooling more than 99% of the year
- Leadership in Energy and Environmental Design (LEED) Gold standard

Sustainability

- Modular design that supports varying cabinet density guarantees scalability
- Scalable to 30 MW of power capacity, with capacity for more than 100,000 servers
- Adaptable to the latest in power, cooling, network and IT infrastructure during its life cycle
- Large scale capacity expansion in four to six months
- Design eliminates the need for cooling towers and reduces water consumption by more than 3.5 million gallons per year³

Reliability

- Tier 3 certified design (Uptime Institute rating)
- Redundant and diverse power, cooling and networks built to a minimum of N+1 redundancy
- Integrated Data Centre Infrastructure Management (DCIM) system
- Modular design enables the addition of new modules and routine maintenance without any disruption to existing, ongoing operations

Security

- Robust physical security including biometrics and smartcard access
- 24/7/365 interior and exterior surveillance monitoring facility access
- Logical security including firewall, intrusion detection and prevention and denial of service attack protection
- SSAE 16, CAAS 3416 and PCI compliance

A trusted, secure foundation

By investing seriously, partnering strategically and recommitting to our vision daily, TELUS is achieving its goal of having highly reliable, sustainable and efficient data centres. Leveraging this trusted, secure foundation, Canadian enterprises can diversify their IT sourcing mix confidently -- adopting sourcing models that position IT to respond quickly, promote agility and support the business in its quest for competitive edge.

³ TELUS Rimouski – Carbon and Water Savings, Skanska System, March 15, 2012