Opportunities at the Gate

How American Cloud Providers Can
Succeed Using Canadian Networks

BCE Global
A BELL CANADA COMPANY

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Cloud providers are setting up shop in Canada

The Canadian market has become increasingly compelling for American cloud providers, both for new entrants looking for economically appealing expansion, and for stalwart providers seeking a strong backbone with built-in redundancies and top-tier network provisioning.

With the rise of 5G, artificial intelligence (AI) and the Internet of Things (IoT), the cloud has become a major strategic asset for any company.

As usage surges, the power to drive that traffic can be significantly less expensive north of the border, given a high share of renewable energy and a more cost-effective labor market.

Against that backdrop, companies that provide cloud services with an eye toward Canada are using several approaches to "work the cloud" within and alongside the concepts of data residency and data sovereignty.

Public vs. private vs. hybrid

The public versus private cloud debate continues.

Public

Top public cloud providers Amazon Web Services (AWS), Microsoft Azure and Google Cloud tout their over-the-top services for their ease of use, pay-for-what-you-use scalability, security, data analytics and AI/machine-learning capabilities.

Private

On-premise private cloud and hosted private cloud champions, meanwhile, cite the need to address security, governance and regulatory compliance issues in addition to their control and customization abilities.

Hybrid

Now, there is a new entry — hybrid. Hybrid cloud is a cloud-computing environment that uses a mix of on-premise private cloud and third-party public cloud services with orchestration between the two platforms. Decision-makers at enterprises and small-to-mid sized businesses are weighing and scrutinizing the cost and efficacy of their in-house technology staffs, data control, security and other factors. Ultimately, many are going with a path that combines the best of both, i.e. a hybrid solution.

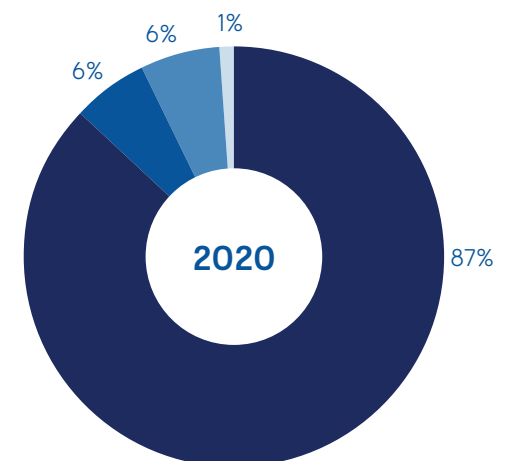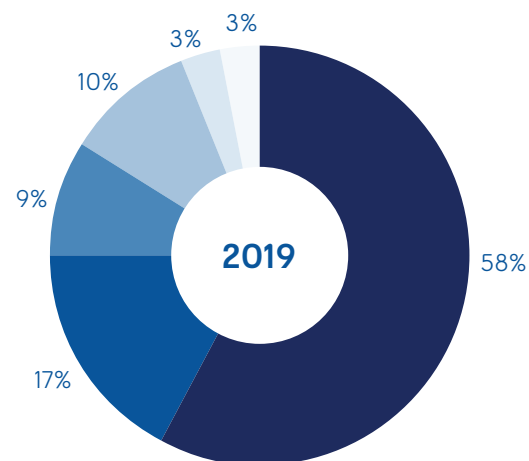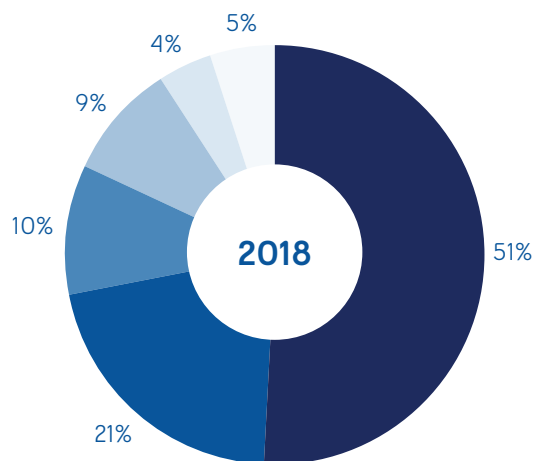# Enterprise cloud strategy worldwide from 2018 to 2020, by cloud type.

In fact, Rightscale reports that 87 percent of enterprises globally have a hybrid cloud strategy, a 50 percent increase over the last four years.

Additional Information: Worldwide first quarter 2020: 554 Enterprise (more than 1,000 employees) professionals across a cross-section.

● Hybrid cloud   ● Multiple public   ● Multiple private

● Single public   ● Single private   ● No plans
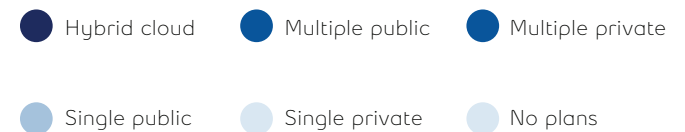
Share of respondents

Sources: Rightscale:
Flexera Software
© Statista 2020

2018

5%
4%
9%
10%
21%
51%

2019

3%
3%
10%
9%
17%
58%

2020

1%
6%
6%
87%

Data security and redundancy are critical

Data sovereignty in Canada is not just a workaround for American companies. It's a leading-edge, vibrant, successful vehicle to help ensure end-to-end data security for a cloud provider. And its importance will continue to grow as data privacy laws evolve and large enterprise and government organizations place data privacy at the forefront of their security policies.

*Smarter With Gartner "Gartner Top 9 Security and Risk Trends for 2020," 22 June 2020.
https://www.gartner.com/smarterwithgartner/gartner-top-9-security-and-risk-trends-for-2020/

When working within the Canadian marketplace, American companies should be mindful of the concept of data sovereignty, the concept that data is subject to a country's laws when it is stored within certain borders. It can be a challenge for businesses as they move to the cloud, but it can also be an opportunity.

Those regulations can impose some major restrictions for cloud providers that conduct business across international borders.

Gartner* suggests "the shortage of technical security staff, the rapid migration to cloud computing, regulatory compliance requirements and the unrelenting evolution of threats continue to be the most significant ongoing major security challenges."

Choosing a partner like BCE Global, a Bell Canada company, can help **organizations** comply with data sovereignty and data residency requirements with two coast-to-coast, diverse routes that remain within Canada – once data arrives in Canada, you can be confident it can stay 100% inside the country.

Geographic redundancy helps to tackle the security issue by replicating data between two or more physically disparate and redundant locations and

is an essential concept when working in the cloud space. Ideally, data-center locations are separated by enough space that an event such as a natural disaster affecting one place will not also affect the other.

In particular, data centers should be highly available, and network traffic split among locations for geo-redundancy. The massive amount of affordable power in Canada keeps the data centers buzzing.

A company like BCE Global also offers additional resilience via three coast-to-coast fiber routes, including multiple three-path regional rings – a "triversity" of sorts. The multiple diverse paths – the triversity – helps to ensure data delivery, whichever path is used.

A vertical path

The typical consumers of cloud services are those in fields that rely heavily on compliance (healthcare, finance, government systems) and those whose workloads have inherent challenges of complexity and scalability in terms of data storage, networking and security – in addition to compute or software as a service (SaaS). Those with only scalable computing needs are more likely to rely purely on the public cloud.

Major companies in key vertical markets are at the leading edge of cloud computing in the U.S. market and beyond. Leaders in retail, financial services, entertainment, publishing and government have firmly staked flags in the cloud space.

According to a recent Omdia report[+], enterprises in North America perceive Internet and cloud providers are the best positioned to provide IoT services and solutions. It also points to the emerging relevance of vertical specialist players as IoT suppliers, marking something of a shift in

the IoT marketplace toward "verticalization".

As the Canadian marketplace evolves, American cloud providers will look to carriers across North America that are prepared to capitalize on trends in cloud computing, such as fog computing, cloud containers or JeOs (just enough operating systems). As international traffic grows, the market opens for U.S. cloud providers to extend their network reach north of the border to service not only growing Canadian cloud customers, but also their U.S. base.

+ IoT Enterprise Insight Survey 2019/2020: |North America, Omdia

Approximatively 72%
of the Canadian population
live below the 49th parallel.

BCE Global, a Bell Canada company, is the network provider of choice for cloud providers expanding into the U.S. and Canadian markets.

BCE Global leverages the Bell Canada network, the largest fiber network in Canada, spanning over 165,000 miles (enough to circle the globe nearly seven times). The Bell network offers additional resiliency via three diverse, low-latency, coast-to-coast fiber routes and access to secure, leading-edge data centers across the country.

American cloud companies can take advantage of BCE Global's 11 points of presence in the U.S. as resources to enable mission-critical operations real-time.

Contact inquiry@bceglobal.net to gain the cloud advantage in the North, and beyond.