

# Financial Services Industry Optical Network Use Cases

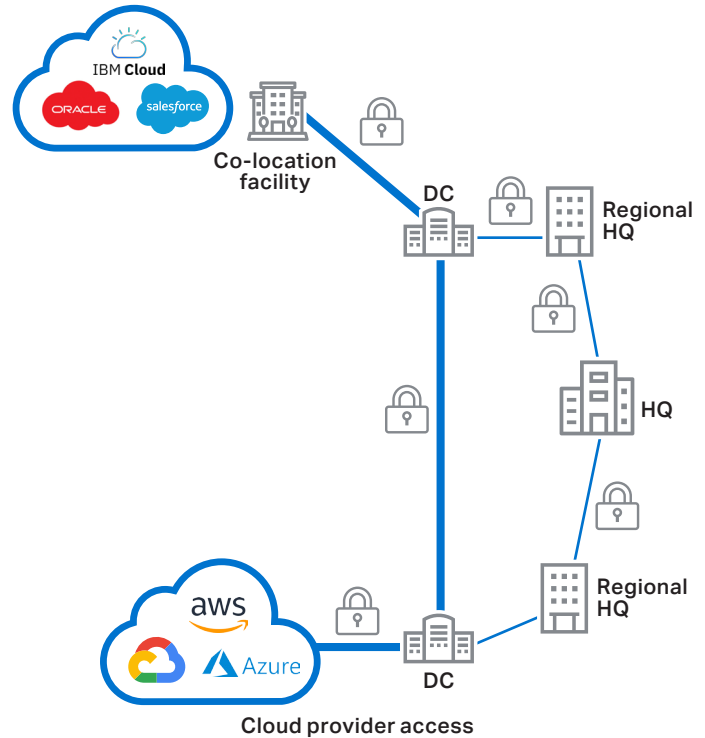
## Multi-cloud Core Interconnectivity

As institutions in the financial services industry combine innovative digital banking applications with big data and Machine Learning (ML), cloud strategy decisions become more complex. Deciding on whether to host application and data workloads in a private or public cloud requires a balance between latency sensitivity, bandwidth capacity, resiliency, security, and cost. That’s why many financial services institutions are evolving towards a hybrid, multi-cloud environment utilizing private data centers, co-location facilities, and public cloud providers.

In many investment and retail banks, core banking systems, customer-facing applications, and personally identifiable information is housed in private data centers. Back-office applications are typically housed in public clouds. Despite using multiple private and public clouds, financial services institutions do not appear to position individual applications across multiple clouds.

According to the 2022 Flexera *State of the Cloud Report*, digital applications siloed on different clouds is the most common multi-cloud implementation. The second most common multi-cloud architecture is used to enhance disaster recovery and failover.<sup>1</sup> This approach places greater importance on bandwidth capacity as well as on security and resiliency of the interconnection network between the private data centers with, co-location facilities with, and public cloud networks—which are collectively referred to as ‘multi-cloud core interconnectivity’.

Digital transformation in the financial services industry is driving a huge volume of data, growing to the zettabyte level. This onslaught of data must be quickly, securely, and cost-effectively transmitted across an institution’s cloud ecosystem.



Ciena’s software-defined packet optical platforms provide the massive bandwidth capacity, scale, optimization, analytics, intelligence, and automation required by today’s multi-cloud core interconnectivity networks. With the ability to scale from 100 Gb/s to 400 Gb/s, financial services institutions can leverage the power of Ciena’s platforms to deliver the highest capacity at the lowest cost and power usage to meet the bandwidth needs of the most demanding multi-cloud applications and data workloads. Adding network-layer encryption ensures security and privacy of data as it transits the multi-cloud core.

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<sup>1</sup> Flexera, “State of the Cloud Report”, 2022