



**THE ORACLE AND MICROSOFT
CLOUD PARTNERSHIP:**

TESTING THE CONNECTION



The rapid evolution of the cloud has made it a fundamental technology for companies that want to innovate, modernize systems, accelerate time to market and cut costs. Oracle has been a key part of that evolution, as it has moved its database technology to the cloud.

But Oracle's cloud technology is not the only option available. Companies have a number of cloud providers to choose from, and they are exercising that choice: In a recent survey of IT professionals, 84 percent of respondents said that they have a multi-cloud strategy. The survey also found that enterprises are using nearly five different clouds, on average.¹

In short, most companies are working with a heterogeneous cloud landscape. However, tying those various platforms together can be difficult and expensive.

Recognizing that reality, Oracle and Microsoft have forged a cloud interoperability partnership that offers a simple but powerful approach to connecting their two clouds—Microsoft Azure and Oracle Cloud. To assess this approach, Accenture looked at the ease of linking the two clouds and ran tests to gauge the effectiveness of these cloud connections. The findings show that they provide solid performance and open a new path for moving ahead in a world where multiple clouds have become the norm.

THE NEED TO CONNECT CLOUDS

For businesses today, a multi-cloud strategy is essentially inevitable. Different cloud providers offer different capabilities and cloud services in areas such as artificial intelligence (AI), machine learning and the Internet of Things (IoT).

Companies naturally want to take advantage of the most attractive features of various clouds—which leads them to employ multiple clouds. They may also pursue multi-cloud strategies to spread workloads across platforms to mitigate risk, gain flexibility in terms of vendors, or optimize cost and performance. By working with several types of cloud, organizations can come up with the best solution for their needs, rather than simply picking one cloud and trying to force it to meet all their needs.

At the same time, of course, companies need these clouds to “talk” to one another and work in concert to support the business. But achieving this in a way that provides a fast, reliable and secure solution has been difficult, time-consuming and complicated. The Oracle and Microsoft partnership was formed specifically to address that problem. To understand how it helps, it’s useful to contrast three traditional methods of connecting clouds with the new approach that is enabled by the partnership:

01

Traditionally, the simplest way to connect clouds has been via VPN over internet, but that leaves the company subject to the limitations of the public internet and tends to provide a relatively low upper limit in terms of bandwidth. This might be fine for sporadic connections and very limited integration between clouds, but it’s typically not suitable for organizations making a shift to the cloud in a major way.

02

Another option: Contract directly with a Telco provider to set up a dedicated connection. However, this tends to be very costly and complex. It is also relatively slow to execute. The contracting, procurement, design and actual setup can take as long as 12 weeks—and organizations should be ready to spend additional time troubleshooting because each issue will involve two cloud providers and the Telco. What’s more, this approach makes the company entirely dependent on a handful of dedicated, managed routers at each cloud data center. If one of those pieces of equipment fails, there is likely to be degraded performance or even an outage. In addition to procuring dedicated port from the cloud providers in the form of FastConnect, Express Route, etc., the company still needs to pay the Telco provider on top of those industry standard cloud solutions.

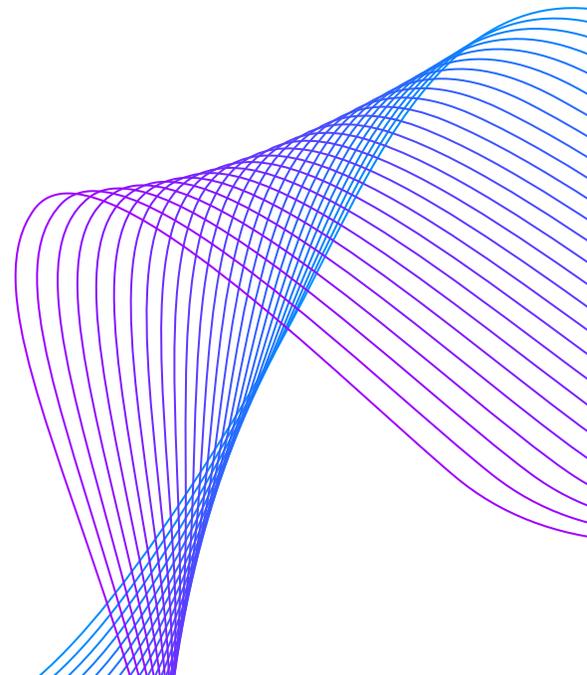
Some Telcos offer a service that connects clouds across their own backbones. While this does not involve the set-up time or complexity of a totally dedicated connection, it still has its drawbacks because it involves a third party in the support process as well as the additional cost for the backbone on top of the necessary dedicated port. Based on Accenture's experience in client engagements, working with a Telco to set up this type of a connection can cost as much as \$100,000 per year in recurring charges. What's more, that doesn't include additional costs stemming from setup, management or troubleshooting. That means the yearly cost of \$100,000 is only the beginning of the expenses involved.

03

The Oracle and Microsoft partnership, on the other hand, simplifies the whole process. It enables companies to connect Microsoft Azure and Oracle Cloud seamlessly, giving customers a direct interconnect between both clouds. In Accenture's tests, it took just minutes to set up this connection—as opposed to the weeks traditionally needed.

The solution relies on Microsoft Express Route and Oracle FastConnect for the connection, which means it provides the features associated with those services. For example, companies can pick from a wide array of speeds to meet their needs; connectivity is fully redundant between the two clouds, increasing reliability; and because it is a private connection, there's no need to traverse the public internet between the two cloud estates.

The partnership streamlines multi-cloud operations in other ways as well. It offers unified identity and access management, and a collaborative support model in which companies can call either the Oracle or Microsoft support organization, open a ticket and those two organizations will work together to get the issue resolved.

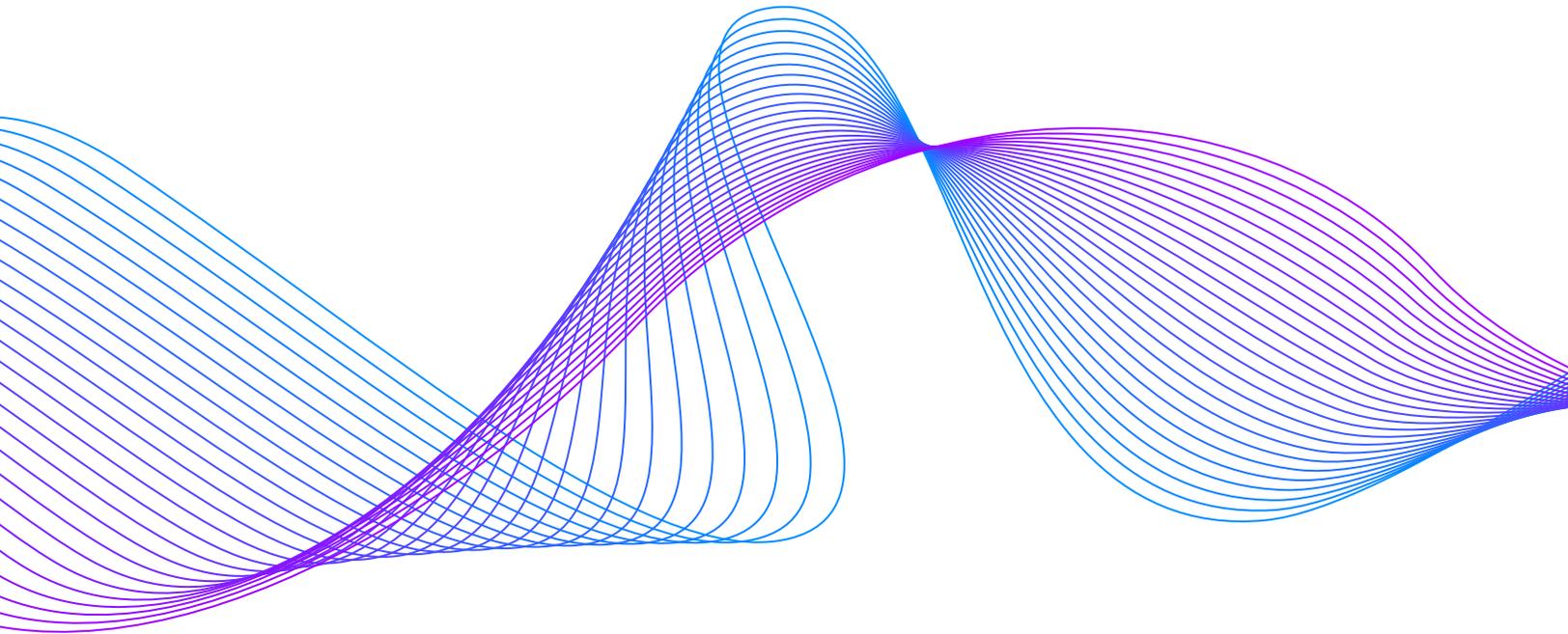


HOW WELL DOES IT WORK?

The ease of linking clouds is important. But when considering the use of the Oracle and Microsoft approach, companies will also need to weigh the performance and value of running databases on Oracle Cloud in conjunction with Microsoft Azure services.

The first aspect that Accenture's tests examined was the speed of the connection between Oracle Cloud Infrastructure (OCI) and Microsoft Azure. The tests consistently showed a latency of less than 1.5ms round trip time (RTT), on average, between the two clouds. In order to get consistent results, Accenture engineers ran a continual test for more than two weeks, collecting more than 32,000 data points, to confirm the RTT.

When combined with the bandwidth options, the overall network performance provides a myriad of options to the enterprise. Oracle and Microsoft can both support up to 10gbps per connection, and with the right architecture, multiple connections can be combined to surpass the 10gbps threshold. That means that moving data between OCI and Microsoft Azure is now faster than it is with some clouds that move data between their own data centers in the same geographic region.



ORACLE CLOUD INFRASTRUCTURE AND ORACLE DATABASES

In recent years, Accenture has conducted a number of tests on Oracle's database products in the cloud—tests that showed that those products perform well. The latest set of tests reviewed data warehouse-type workloads and considered the best options for running complex datasets.

The testing further underscored the fact that the partnership between Microsoft and Oracle is a critical factor for companies moving complex enterprise workloads to the cloud. (For more information on these tests, see the Accenture paper "[Destination: Autonomous](#)").

SUMMARY

The partnership between Oracle and Microsoft gives customers new options and ways to access OCI's performant databases. Because of this partnership, customers can easily move their databases (without complicated transformation) to the cloud.

They can take advantage of pay-per-use database licensing to help manage costs. They can eliminate the busy work that traditionally ties up data experts. On top of that, they can leverage the Microsoft Azure tools in which they have already invested to access and make better use of their data—all in the cloud.

Overall, the Oracle and Microsoft approach, and the performance it delivers, opens the door to more organizations leveraging the best of both Azure and OCI across clouds. They can, for example, draw on the power of the AI, IoT and blockchain services of Azure in combination with Oracle technologies, such as Exadata and ADW, running on the Oracle Cloud. In short, companies can more easily tailor their cloud landscapes to meet their needs.

Accenture's engineering team, made up of Azure and OCI experts, was able to quickly deploy a full PeopleSoft financials database to ADW and connect Microsoft PowerBI. From that investigation, the team

found that when running PowerBI desktop in Azure with an historic ERP dataset, they could quickly use known tools with the power of Oracle Database. That means organizations looking to move to Oracle ERP Cloud have the opportunity to move their legacy data to the cloud and leverage their favorite tools for data mining.

The Oracle and Microsoft approach to connecting clouds should be considered by companies exploring their options in a multi-cloud environment. It streamlines the connection of clouds, saving time and money. At the same time, it opens up new opportunities for modernizing the IT. Companies can easily connect proprietary features across the Oracle and Microsoft cloud ecosystem—a significant impact, considering the more than 430,000 organizations using Oracle globally.²

Altogether, this innovative partnership is a powerful move by two vendors that historically did not partner—one that benefits the customers of both Oracle and Microsoft, and broadens the options that companies have as they explore new ways to use the cloud to support their business.

Author

Chris Pasternak

Managing Director, Accenture

Based in Wisconsin, Chris is Accenture's North America Oracle Technology Lead, with responsibility for Accenture's work and business related to Oracle Technology in North America, including Oracle IaaS and PaaS. Chris is responsible for Accenture's work on Autonomous Database in North America and the expansion of cloud native development on Oracle Cloud Infrastructure for Accenture.

References

1. media.flexera.com/documents/rightscale-2019-state-of-the-cloud-report-from-flexera.pdf
2. www.oracle.com/us/corporate/oracle-fact-sheet-079219.pdf

About Accenture

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world's largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 492,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

This document makes descriptive reference to trademarks that may be owned by others. The use of such trademarks herein is not an assertion of ownership of such trademarks by Accenture and is not intended to represent or imply the existence of an association between Accenture and the lawful owners of such trademarks.

Copyright © 2019 Accenture.
All rights reserved.

Accenture and its logo are trademarks of Accenture.
Oracle is a registered trademark of Oracle and/or its affiliates.