

Case Study

Grupo Anaya Achieves 75% Reduced Latency for e-Learning Platform via Direct Interconnection with OCI, PlatformDIGITAL®, and Oracle FastConnect

Rapid deployment of Oracle and Digital Realty solutions improved end-user performance and reduced network costs by 75%

Challenge

Based in Madrid, Spain, Grupo Anaya is a publishing house with a focus on developing educational materials for children and teenagers. In 2019, as part of a strategic shift to capture the growing number of students going online to learn, Grupo Anaya chose Oracle Cloud Infrastructure (OCI) as their deployment platform of choice and began implementing OCI as the foundation for their e-learning platform.

Grupo Anaya enlisted Quistor, an award-winning IT consultancy and Oracle partner, to manage the deployment of the e-learning platform. Implementation started on-premises at Grupo Anaya's Madrid headquarters and connected internationally to OCI in Frankfurt, Germany.

The migration to colocation was originally planned for 2023, but the COVID-19 pandemic rapidly accelerated the need for digitalization, prompting Grupo Anaya to deploy their e-learning platform much earlier. Grupo Anaya's IT team and Quistor needed to rapidly scale the platform to accommodate an influx of new users in September 2020.

"It was challenging to compress the project timeline from four years to eight weeks, but we knew thousands of students were waiting to use the e-learning platform in September," said Luis Mediero, Cloud and Data Solutions Director at Quistor.



About Grupo Anaya

Grupo Anaya specializes in the publication of textbooks, supplementary materials, and teaching resources. Since 1959, it has been a benchmark in the field of education and is currently committed to intelligent learning and the application of Information and Communication Technology (ICT) in teaching.

Industry

Education

Headquarters

Madrid, Spain

Customer Use Cases

Network Optimization
Hybrid Private & Public Cloud
Data Sovereignty

Partners

Oracle and Quistor

Outcomes from using Digital Realty products and services and partner solutions

Colocation on PlatformDIGITAL® with Oracle Cloud Infrastructure (OCI) and FastConnect and Quistor IT Consultancy

75%

Reduction in Latency

28 milliseconds vs. 110 milliseconds*

75%

Reduction in Network Costs

Oracle FastConnect vs. international network service provider

40%

Performance Improvement

Based on end-user feedback

25%

Faster Deployment

Three years vs. four years

Grupo Anaya had several key requirements for a colocation partner:

Enable scale and performance to address growing digital business

With more users on Grupo Anaya's e-learning platform, the volume of data and international network traffic continued to grow. The e-learning platform had to meet the high-quality standards teachers, schools, and students expected from traditional learning materials.

To achieve performance at scale, Grupo Anaya decided to move most of their compute and storage to the public cloud. They chose OCI as their public cloud infrastructure provider. The IT team also recognized they needed to place the e-learning content in Madrid, close to their end users.

"We knew the e-learning platform would have to be compelling and robust to help exemplify the Grupo Anaya brand," said Marcos Atienza, Head of System Architecture & Operations at Grupo Anaya. "This meant the performance of the platform had to scale efficiently and we needed low latency to secure a good end-user experience. At the time, we were utilizing an international network connection, which was costly, and more importantly, impeded the performance of our workloads in OCI."

Grupo Anaya connected internationally to OCI in Frankfurt through a service provider, and networking costs had rapidly risen in tandem with the increase in users after September 2020. Worse still, international network performance couldn't be concurrently scaled to match end-user demand because the infrastructure on-site in Madrid was aging and required significant investments to upgrade. This was a challenge for Grupo Anaya as it needed the flexibility to scale performance to the platform up or down, independently of the backend workloads in OCI.

Improve and secure end-user experience

While end-user growth was increasing, the complexities of owning and maintaining on-premises equipment weren't justifiable. End-user performance was already suffering, and connecting to OCI in Frankfurt also required strict adherence to data sovereignty laws to protect end-user information back in Spain.

"Our students frequently go offline during seasonal breaks," said Silvestre Rivero, Network Architecture at Grupo Anaya. "OCI allowed us to scale our compute and storage needs efficiently during these times. However, we also needed the capability to manage end-user network performance during times of intermittent access, such as when students access assignments during the evenings or weekends."

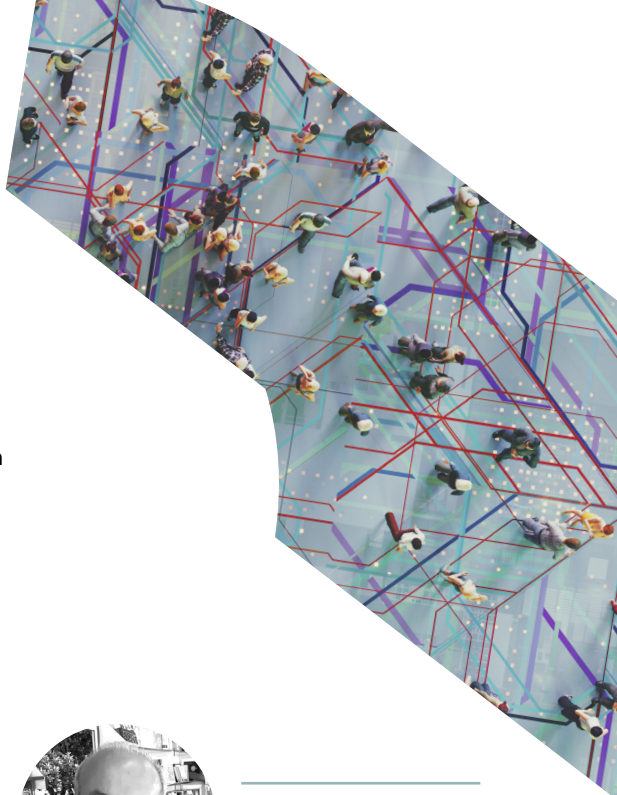
Solution

With the assistance of Quistor and Oracle, Grupo Anaya identified Digital Realty as a trusted partner to deploy colocation on PlatformDIGITAL® in Madrid, Spain and connect via an Oracle FastConnect port to OCI in Frankfurt, Germany.

Colocation on PlatformDIGITAL® enables performance at scale

Digital Realty's global data center platform, PlatformDIGITAL®, supports Grupo Anaya across the full spectrum of data center infrastructure requirements. With 300+ locations globally, PlatformDIGITAL® enabled Grupo Anaya to scale IT resources quickly in their preferred location, Madrid.

Digital Realty's Pervasive Datacenter Architecture (PDx®) solution



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Silvestre Rivero

Network Architecture
Grupo Anaya



methodology helped guide the optimal placement of Grupo Anaya's digital infrastructure.

Colocation on PlatformDIGITAL® enables Grupo Anaya to create a center of data exchange, which helped further reduce latency caused by running network traffic internationally to OCI in Frankfurt. By deploying essential workloads within PlatformDIGITAL®, Grupo Anaya can now build virtual infrastructure at scale among all of their global cloud partners, including OCI, and in proximity to their end users across Spain.

Oracle FastConnect on PlatformDIGITAL® provides superior performance and efficiency

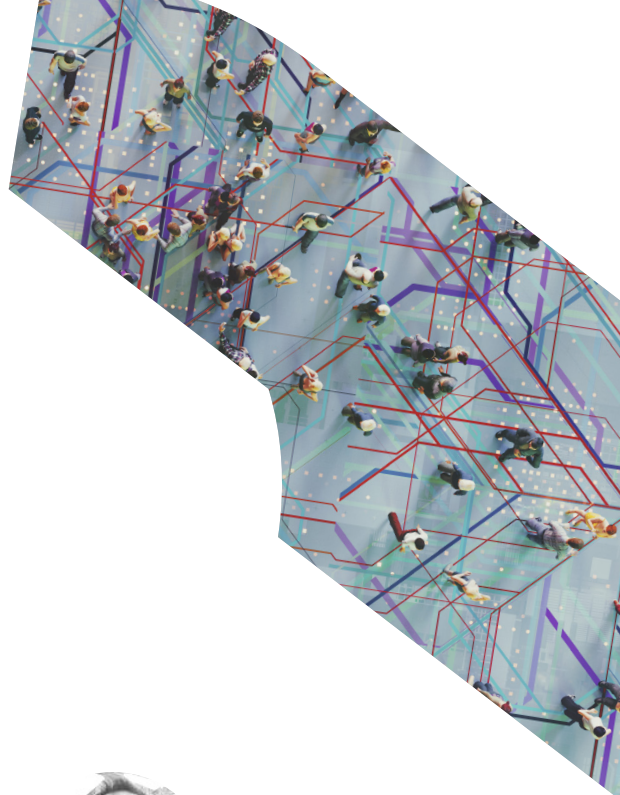
Oracle FastConnect on PlatformDIGITAL® was enabled, eliminating the need to send traffic to OCI through the public internet. FastConnect enabled improved privacy and security, prevented additional bandwidth costs, lowered connection latency, and did not require any unnecessary expansion and increased complexity of the Grupo Anaya network architecture.

Before moving to colocation, Grupo Anaya had an IT infrastructure and networking solution that was charged based on SLAs with almost no flexibility to scale. With the new solution leveraging the Oracle FastConnect presence on the Digital Realty Madrid campus, Grupo Anaya can scale seamlessly up or down based on their business needs. Leveraging Oracle FastConnect to OCI increased performance for their most demanding workloads and reduced Grupo Anaya's overall networking costs.

Outcomes

By leveraging colocation on PlatformDIGITAL® and Oracle FastConnect, Grupo Anaya reduced latency from 110 milliseconds to 28 milliseconds* — a 75% reduction in latency.

A direct, secure connection between the colocation deployment in Madrid and OCI in Frankfurt via Oracle FastConnect reduced networking costs by 75% compared with leveraging an international carrier. Once Grupo Anaya started using Oracle FastConnect on PlatformDIGITAL®, end users immediately reported 40% better performance.



“There was never any question

about partnering with Digital Realty for our Hybrid IT needs. Oracle FastConnect on PlatformDIGITAL® enables us to quickly transfer large amounts of data to OCI in Frankfurt, which allows us to quickly increase performance for our e-learning platform by 40% and reduce latency by 75% compared with our previous solution.”

Marcos Atienza

Head of System Architecture
& Operations
Grupo Anaya

Grupo Anaya's e-learning platform is in safe hands with Digital Realty's 24/7 security and environment monitoring and 99.999% global uptime SLA. Due to Digital Realty's robust compliance program, Grupo Anaya has now found a colocation partner to not only meet their needs for interconnectivity, but also their stringent data security and privacy requirements.

As a result of the collaboration between Oracle, Quistor, and Digital Realty, Grupo Anaya deployed colocation a year ahead of schedule — 25% faster than the original plan. This move helped proactively prevent end-user attrition due to poor user experience.

"There was never any question about partnering with Digital Realty for our Hybrid IT needs," said Atienza. "Oracle FastConnect on PlatformDIGITAL® enables us to quickly transfer large amounts of data to OCI in Frankfurt, which allows us to quickly increase performance for our e-learning platform by 40% and reduce latency by 75% compared with our previous solution."

Key Insights

Context

In 2019, Grupo Anaya began developing a Hybrid IT environment to host their e-learning platform, with a projected timeline of four years.

Challenge

The pandemic rapidly accelerated the need for digitalization, leading Grupo Anaya to quickly deploy their e-learning platform and identify performance, complexity, and cost issues when connecting to OCI.

Solution

Leveraging Oracle FastConnect on PlatformDIGITAL®, implemented by Quistor, enabled Grupo Anaya to achieve scale and flexibility for their e-learning platform.

Outcome

Grupo Anaya reduced latency and network costs by 75% and improved end-user performance by 40%, all one year ahead of schedule.

About Oracle

Oracle offers integrated suites of applications plus secure, autonomous infrastructure in the Oracle Cloud. For more information about Oracle (NYSE: ORCL), please visit us at www.oracle.com.

About Quistor

As a managed services provider and Oracle Partner, Quistor provides IT consultancy services to 250+ international JD Edwards, Oracle Infrastructure as a Service, Oracle Platform as a Service, Oracle Autonomous Data Warehouse, Oracle Analytics Cloud customers daily. Quistor has Delivery Centers in The Netherlands, Spain, and the Czech Republic.

About Digital Realty

Digital Realty supports the world's leading enterprises and service providers by delivering the full spectrum of data center, colocation, and interconnection solutions. PlatformDIGITAL®, the company's global data center platform, provides customers with a trusted foundation and proven Pervasive Datacenter Architecture (PDx®) solution methodology for scaling digital business and efficiently managing Data Gravity challenges. Digital Realty's global data center footprint gives customers access to the connected communities that matter to them with 300+ facilities in 50+ metros across 25+ countries on six continents. To learn more about Digital Realty, please visit digitalrealty.com or follow us on [LinkedIn](#) and [X](#). To learn more about Digital Realty's global data center footprint, email sales@digitalrealty.com.