How Interxion Is Growing its Data Center Operations with Scalable, Agile DCI Networks

When Interxion decided to expand its operations in Marseille, real-estate and power constraints led the company to build a second data center two and a half miles from the original site, and connect the two facilities with a super-fast Data Center Interconnect (DCI) network. This allowed Interxion to create a single virtualized data center campus, giving its clients light-speed access to subsea cables, platforms, connectivity providers and other partners at both sites.

Challenge: Interxion wanted to expand its data center operations in Marseille, but no suitable real estate and power source were available next to its original location

Marseille is a hugely important communications center, connecting North Africa, Middle East, and Asia to the whole of Europe thanks to terrestrial connections to Frankfurt, London, Amsterdam, and Paris (FLAP). With 14 subsea cables landing there, the city has transformed from a transit hub to a lively content hub where cloud and digital media content are created, stored, and distributed to 43 countries across EMEA and APAC. In addition, the rapidly growing local market for data center services presents major revenue opportunities.

For these reasons, leading carrier and cloud-neutral data center operator Interxion made Marseille a strategic focus for its business. Mike Hollands, Interxion's Director of Market Development & Strategy, says, "We acquired a 6,200 m2 data center in the middle of Marseille in 2014, which is called MRS1. With over $54 million of investment, we built out the facility and increased the number of tenants from around 50 back then, to nearly 200 today. Our clients exchange services with one another, including high-speed metro and long-haul connectivity across Europe. Interconnections with Google, Amazon AWS, and Microsoft Azure are also available within the data center."

With MRS1 attracting major content companies, cloud providers, and subsea cable providers, the facility quickly reached its capacity limits, both in terms of available

What Our Customers Are Saying

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Mike Hollands
Interxion's Director of Market Development & Strategy

space and energy resources. Our customers needed additional space and power, but there were no suitable sites next to the existing facility.

"There was no way we could grow our operations next to MRS1, so we decided to look for suitable sites in other parts of the city. A key challenge was how to connect the new data center to MRS1 to provide a seamless experience for customers."

The solution: Interxion built a new data center in another area of Marseille, and connected it to MRS1 with a high-speed, resilient DCI network

After considering all the options, Interxion found a suitable 4,350 m2 site for a new data center on land belonging to the Marseille Port Authority, approximately two and a half miles away from MRS1.

"We knew the only way to maximize success in MRS2 was to give clients seamless access to all the subsea cables, Internet exchanges, and cloud interconnect services already available in MRS1," says Hollands. "We also had to reassure subsea cable providers that any new connections at MRS2 would also be able to serve existing clients at MSR1."

To provide seamless connectivity between the two data centers, Interxion decided to deploy a next-generation DCI solution from Ciena. "When we evaluated all available DCI options, we found that the Ciena solution was able to deliver the fast, scalable connectivity we needed between MRS1 and MRS2," says Mike.

The benefits: Data center connectivity as an enabler for future growth and success

By connecting its data centers in Marseille using Ciena technology, Interxion can provide a seamless experience for clients—whether they are hosted in MRS1 or MRS2. With high-speed, scalable, reliable interconnections between data centers, the company can also expand its network of data centers, even if no sites are available next to their existing locations.

Support for future expansion in Marseille—with no more real-estate limitations
With the ability to quickly turn up high-speed interconnections between data centers, Interxion has greater flexibility in where it may choose to locate future data centers.

"Our DCI solution allows us to expand our network of data centers, even if no real estate is available next to our existing facilities," says Hollands. "In the near future, we plan to open our third Marseille data center—MRS3—next to the MRS2 building in an old World War II submarine base. However, if we choose to expand elsewhere in the city, we will be able to connect our data centers to create a single 'logical' data center that gives clients access to the subsea cables, platforms, connectivity providers, and other partners they need."

Scalability to support a rapidly growing community of clients
Working with Ciena, Interxion has been able to efficiently use its fibers that connect the facilities.

"Ciena's DCI solution allows us to scale many wavelengths on a single fiber pair," says Hollands. "That means we can stay ahead of clients' interconnection needs for years to come and manage our fiber capacity efficiently."

Connectivity that clients trust implicitly
To accelerate clients to its new data centers, Interxion needs to ensure that interconnections between its facilities have very high levels of reliability.

"Most of our clients are very sophisticated, and they want to know what the solution is built on before they trust us with their mission-critical apps," says Hollands. "When they find out that our DCI network is built on Ciena technology, we have far fewer questions to answer. The field-proven reliability of Ciena equipment and Ciena's resilient and diverse network designs are well known in the industry, and it's a great selling point for us."

New connectivity economies of scale for Interxion and its clients
Interxion has to ensure there are no disadvantages for clients who are housed in newer data centers by requiring very low-cost interconnections between facilities.

"Because we can deploy multiple high-speed wavelengths on the same fiber pair, we can reduce the cost our clients incur for interconnections between data centers" says Hollands. "In fact, we charge clients a single monthly fee that includes both interconnections between and within data centers, with route diversity in-built as standard to the service." Inter-site connectivity is over diverse routes and diverse infrastructure for the highest availability.

Fast, simple interconnect provisioning for clients

With Interxion's DCI network, clients can self-provision new interconnections quickly and easily.

"The DCI solution is integrated into our existing self-service portal, which allows clients to provision new interconnections or scale up their existing services with just a few clicks," says Hollands. "We have a three-day Service Level Agreement (SLA) at the back end for plugging in the new interconnections, and there's a one-day option available if clients need a new connection urgently."

Rapid deployment for the DCI network

Interxion was able to connect MRS1 and MRS2 quickly and effectively with end-to-end project support from Ciena.

"Once we figured out some technical issues to do with the shape of our rooms and logistical aspects, it was all very easy and went very smoothly," says Hollands. "We got end-to-end project support from Ciena, with regular biweekly progress calls. We were really pleased with how the project went, which was great news as we now know we can collaborate effectively with Ciena on future projects."

Support for Interxion's planned interconnect solution expansion across its European operations

Interxion's Marseille DCI network is a test case for a much wider interconnect solution expansion in multiple European cities.

"Marseille was basically our test case for a much wider deployment strategy for this kind of interconnect solution," says Hollands. "We now plan to deploy Ciena networks in cities where our data centers are more than a mile apart, which is the case in Amsterdam, Brussels, Dublin, and Paris," he adds. "We are currently working with Ciena to see how they can help us expand our operations in all of these cities, where the best available sites are not next to our existing data centers. At Interxion, our main focus is to create connected communities of customers across our footprint, and the solution provided by Ciena fully support this vision."

For more information about Ciena's DCI solutions and how they can support your own growth strategy, visit https://www.ciena.com/insights/data-center-interconnect.

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