



Orange is an international telecom company. It aims to be a trusted partner giving everyone the keys to a responsible digital world.

Industry

Telecommunications

Strategic priorities

- Cloud Infrastructure

VMware footprint

- VMware® Cloud Foundation™
- VMware Aria Automation™
- VMware Aria Operations™
- VMware vSphere®
- VMware ESXi™
- VMware Professional Services

Orange France Stays Ahead with Fast and Sustainable IT

Orange France, part of Orange Group, is a leading telecom company. Faced with a pressing need to accelerate time to market for new services while reducing its environmental footprint, the organization turned to VMware Professional Services. By implementing VMware Cloud Foundation and VMware Aria Automation, Orange France built a private cloud that transformed IT services delivery and optimized IT resources. This has increased the pace of product innovation while significantly reducing the hardware and carbon footprint across its data centers.

Leading the competition through sustainable growth

Orange is a leading international telecom company present in 26 countries. The Group strategically focuses on sustainable growth—reinventing itself and adapting to a constantly changing world while delivering exemplary performance on social and environmental issues.

Orange in France serves 26 million customers with 79,000 employees, generating EUR €18 billion of revenue in 2021. It is committed to leading the market, transforming each year to ensure the organization remains ahead of the competition. “The telecoms industry has always been dynamic, but the pace of technological change is now faster than ever. We need to anticipate what’s coming,” says Mathias Rousselet, head of virtualization innovation cloud, Orange France.

“VMware Cloud Foundation allowed us to take the first big step toward automation. Through the orchestration capabilities of the SDDC Manager, we’ve been able to modernize and automate the infrastructure layer, the physical layer and the software deployment. The day-to-day operational efficiencies are significant.”

David Varusio, IT Cloud Project Manager, Orange France



Accelerating time to market

To maintain its competitive edge and align with the Group's sustainability strategy, Orange France needed to both accelerate time to market for new services and improve its environmental footprint.

From an IT perspective, that required boosting the innovation speed and success of the company's developer, sales and marketing teams. "We have a large and complex IT environment with thousands of apps and VMs. We lacked automation, so the provision of IT resources was slow and convoluted," says David Varusio, IT cloud project manager, Orange France. "We needed to improve. IT shouldn't be a bottleneck; it needs to be an enabler of the business."

The second challenge for Orange France was to optimize the IT infrastructure from both an environmental and financial perspective. It had already embarked on a journey to consolidate and close 17 legacy data centers, moving to three newly built, highly energy-efficient data centers by 2030. This presented the team with a big migration task. It needed to move huge volumes of apps and data—including business and residential customer data and services, as well as its in-house information system—to the new facilities. It also needed to optimize the running of workloads that would remain in the legacy infrastructure for the short term.

Simplifying IT with a private cloud

Orange France engaged VMware Professional Services at the outset of the project. Together they designed and configured a simplified IT environment, defined a migration strategy and began to move workloads to the new data centers. "They worked with us in our office throughout the process," says Rousselet.

"If there was a problem or a question, there was always a VMware Professional Services expert on hand which proved invaluable in resolving issues quickly."

The team used VMware Cloud Foundation to create a private cloud spanning the new data centers and the remaining legacy data centers. VMware Aria Automation was deployed for the delivery of self-service IT.

"VMware Cloud Foundation allowed us to take the first step toward automation. Through the orchestration capabilities of the SDDC Manager, we've been able to modernize and automate the infrastructure layer, the physical layer and the software deployment," says Varusio. "The day-to-day operational efficiencies are significant."

The team built a new, self-service IT portal using VMware Aria Automation. Users across the company can now request IT resources through a comprehensive product catalog. This has significantly accelerated provisioning—VMs are now delivered in minutes rather than days—which is increasing the pace of innovation.

Orange France also deployed VMware Aria Operations to support capacity and cost optimization. The roll-out of the VMware solutions was smooth. "The advantage of Professional Services is that they spend time with us, and they learn about our ecosystem and environment. VMware products have many possibilities, but they teach us how to make them work best for Orange," says Rousselet.

"The telecom industry has always been dynamic, but the pace of technological change is now faster than ever. We need to anticipate what's coming."

Mathias Rousselet, Head of Virtualization Innovation Cloud, Orange France

Transforming IT service delivery while increasing energy efficiency

The new IT services model was well-received and quickly adopted across the business. "VMware Aria Automation has been a game-changer. The ability to easily access resources in real time, without having to ask for them, is enormously appreciated by our users. Ultimately, IT isn't a worry for them anymore," says Varusio.



The shift to infrastructure as a service means that developers, marketers and other lines of business can be more responsive to market changes. “Developers can now devote their time to driving innovation, bringing new products to market faster and keeping the businesses agile,” says Rousselet.

The team has migrated more than a third of its applications to the private cloud, including part of its mobile billing and call center systems. “We’ve significantly reduced the cost of developing and running our apps, as well as our infrastructure,” says Varusio.

The combination of the new data centers’ energy efficient design and VMware solutions is having a tangible impact on the environmental footprint of the company’s IT operations. With VMware Cloud Foundation, all the hardware resources—compute, networking and storage—have been virtualized, with physical silos replaced with logical silos. This has reduced the requirement for servers tenfold, providing significant energy savings.

VMware Aria Automation has automated end-to-end lifecycle management, optimizing the consolidation and consumption of application loads. VMware Aria Operations equips the team to track and delete unused resources in the environment, such as idle or powered-off VMs. Orange France estimates this results in approximately 1,800 reclaimed VMs a year. “We also use features like Host Power Management in VMware vSphere to optimize our servers’ energy consumption and VMware ESXi to pause CPU or server usage when they’re not being used,” says Varusio.

VMware solutions have enabled the company to improve IT energy consumption. Orange reports that the average workload in its private cloud consumes significantly less energy than it did in the virtualized legacy infrastructure. And with a Power Usage Effectiveness (PUE) estimated at 1.3, the data centers rank among the most efficient in France.

“VMware Cloud Foundation and Aria Automation help us optimize IT resources to reduce our carbon emissions,” says Varusio. “We’ve reduced our hardware footprint across computing, storage and networking, there is better sizing of IT environments from the outset, and we’re running the same number of applications on 10 times fewer servers.”

The Orange Group aims for net zero carbon emissions by 2040, 10 years ahead of the rest of the telecom sector, with a 30 percent reduction in direct emissions by 2025. “It’s important we remain on track. We are conscious of how IT can contribute to our sustainability commitments,” says Rousselet.

“The advantage of Professional Services is that they spend time with us, and they learn about our ecosystem and environment. VMware products have lots of possibilities, but they teach us how to make them work best for Orange.”

Mathias Rousselet, Head of Virtualization Innovation Cloud, Orange France

Collaborating through the cloud journey

As a next step, the team is focused on scaling the private cloud and adding more services, such as infrastructure as a code, to the self-service IT portal. Simultaneously, more automation will be added to assist with day-to-day operations. This will partly be achieved by switching to VMware Aria Automation Cloud, a SaaS rather than an on-premises solution.

“We count on VMware for new developments that will enable us to automate more, to go further, to go even faster. We also count on VMware to help us migrate from one solution to another, ultimately making our users’ journeys as peaceful as possible,” says Rousselet. “We’re excited about our collaboration as we continue our cloud journey.”