

# Telecom Company Improves Cloud Performance with Cisco and RedCannon



## Executive Summary

- **Customer Name:** Orange Silicon Valley (a division of Orange)
- **Industry:** Telecommunications
- **Location:** San Francisco, California

## Challenge

- Establish infrastructure to provide effective cloud-based solutions
- Reduce costs and streamline management of cloud infrastructure
- Deliver new services and solutions for clients

## Solution

- Deployed RedCannon CloudSLA running on Cisco UCS
- Implemented unified, flexible solution across cloud infrastructure and applications throughout physical and virtual environments

## Results

- Cut infrastructure deployment time by approximately 50 percent
- Reduced time to identify and solve cloud issues
- Centralized management and enhanced visibility into virtual and physical devices and applications

## Technology / Application Partner

- RedCannon

Orange Silicon Valley deployed RedCannon CloudSLA and Cisco UCS solutions to streamline cloud application management.

## Challenge

Orange is one of the world's leading telecommunications operators, offering mobile and Internet services to more than 232 million customers worldwide. Headquartered in France, Orange now operates with 166,000 employees in 220 countries and territories. Orange Silicon Valley (OSV) is Orange's Strategy and Development presence in Silicon Valley, focused on partnering with innovation leaders and start-ups, and on co-development with the ecosystem. Being immersed in the valley, OSV has been at the forefront of disruptive innovations such as cloud computing, and makes these capabilities available to all Orange companies, and selectively, to customers of Orange Business Services.

While looking at major industry trends, OSV recognized that more customers are looking for cloud experiences, which are becoming a core part of IT strategy for many large enterprises. Seeing the success of cloud services such as Unified Communications as a Service (UCaaS), OSV is targeting value creation at the application level in addition to Infrastructure as a Service (IaaS) offerings. "Customers are turning to cloud-based solutions as part of a cost-efficient, low-friction IT strategy," says Gabriel Sidhom, vice president of technology development at Orange Silicon Valley. "We see an opportunity to concentrate on value-added services supported by a flexible and stable infrastructure."

OSV recognized that an end-to-end solution from a single provider had the potential to reduce costs through an integrated, reliable infrastructure. Already used in many business units across Orange, Cisco® Unified Data Center infrastructure was a top contender for its unified environment and centralized management over the infrastructure. For superior application management, however, OSV also looked for a complementary application performance monitoring (APM) solution to reduce downtime in the cloud by managing applications and performance.

“RedCannon and Cisco UCS deliver a high-performance, low-touch environment that we can set up straight out of the box. During testing, deployment took half the time compared to normal environments.”

– **Shishir Garg**  
Director of IT and platforms  
Orange Silicon Valley

RedCannon CloudSLA, a product compatible with Cisco technologies, delivers a next-generation APM that combines centralized application-based monitoring with cloud service orchestration solutions for performance-based high availability and scalability of applications and workloads. As a Cisco partner, the RedCannon CloudSLA is built for a Cisco Unified Computing System™ (UCS®) environment.

“We found that together, RedCannon and Cisco deliver a converged infrastructure solution that provides end-to-end performance balancing across hardware and application solutions,” says Shishir Garg, director of IT and platforms at Orange Silicon Valley. “Of the solutions we evaluated, this seamless solution gave us the best level of detail and control.”

## Solution

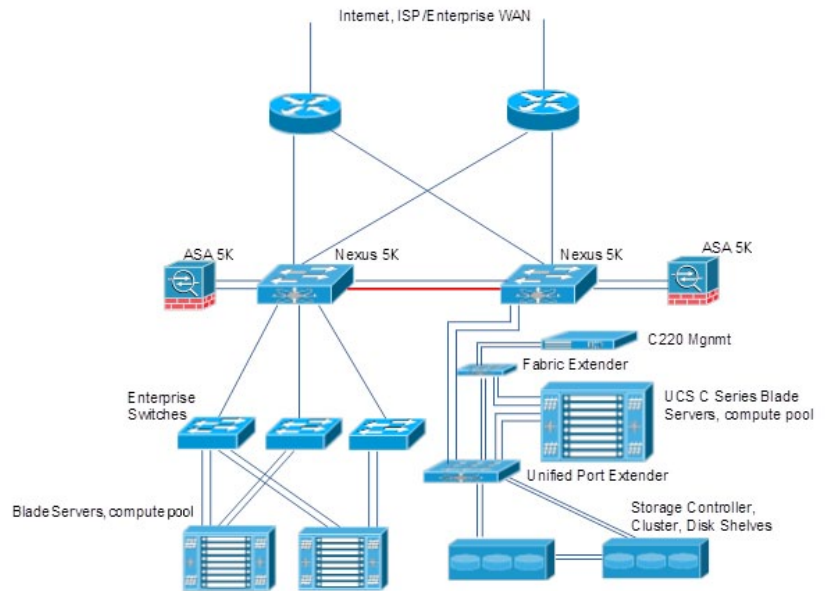
OSV selected the RedCannon CloudSLA solution to prototype cloud SLA services implemented with Cisco UCS servers and switches. Six Cisco UCS C240 M3 Rack Servers and one Cisco UCS C220 M3 Rack Server provide a compact solution taking up a little less than half a data center rack. Both types of Cisco UCS Rack Servers are designed for performance and density over a wide range of business workloads. Outstanding memory density also enables the Cisco infrastructure to provide superior cloud performance when virtualized with VMware.

The Cisco UCS servers integrate smoothly with the Cisco network, connected by Cisco UCS 6248UP Fabric Interconnects and Cisco Nexus® 2232 TP Fabric Extenders. The integrated fabric serves as centralized management points for the Cisco UCS servers, reducing the complexity and improving the manageability of the infrastructure. Cisco Nexus 5548 Switches deliver high performance and a wide variety of connectivity options over the network. The Cisco Nexus 5548 Switches, in particular, feature unified ports that support 10 Gigabit Ethernet, Fibre Channel, and Fibre Channel over Ethernet.

Cisco UCS Manager provides complete control and visibility into every aspect of the infrastructure, both physical and virtual. Automatic configurations greatly reduce the time needed to set up components, increasing the scalability and agility of the data center environment. The RedCannon CloudSLA solution complements the manageability of the Cisco environment by adding detailed monitoring and performance-balancing the applications running on the virtual cloud.

Not only does the solution adjust resources and trigger alerts to correct or prevent downtime, but it helps OSV quickly identify where problems are occurring and take action. Rather than manually logging into numerous management systems, OSV IT, through RedCannon CloudSLA, can centralize and streamline management to apply remediation faster.

“Cisco UCS and RedCannon CloudSLA have similar views on centralized, seamless management,” says Vimal Vaidya, CEO at RedCannon. “UCS provides converged infrastructure, and CloudSLA delivers performance-balanced convergence of workloads in UCS environments. By bundling our product with a Cisco UCS environment, we give Cisco UCS customers a single solution that is easy to use out of the box and not only provides an end-to-end view of the data center and application performance but also enables dynamic distribution of resources for optimal data center performance.”



## Results

Using the RedCannon CloudSLA solution on Cisco UCS, OSV can combine information from the APM solution, including resource usage on virtual machines and performance of database servers, web platforms, business apps, and other enterprise applications, with data from the virtual and physical infrastructure. Bringing this management information together, OSV can more easily spot issues such as poor resource usage in the data center, identify the location of issues on both physical and virtual servers, and quickly take corrective steps. By reducing downtime and providing dynamic SLA provisioning and management, RedCannon and Cisco enable OSV to deliver higher availability and optimal application performance for customers.

The integrated environment significantly reduced deployment time for the new infrastructure. Often, adding a new environment requires significant pre-planning to set configurations and anticipate future growth. In particular, complex cloud environments can require significant thought to appropriately balance resources on virtual and physical machines. The flexible Cisco UCS environment deployed with RedCannon streamlines connections and automatically configures components for highly efficient setup. “RedCannon and Cisco UCS deliver a high-performance, low-touch environment that we can set up straight out of the box,” says Garg. “During testing, deployment took half the time compared to normal environments.”

Working with RedCannon CloudSLA and Cisco UCS Manager, OSV gains unified management across the cloud environment. Typically, staff might work with multiple consoles and management interfaces to track performance across devices and applications. This process may be time consuming, which can be particularly harmful when attempting to analyze the cause of an issue.

The ability to use single-pane-of-glass management solutions to track and resolve issues is key to delivering superior service to customers. “Using a centralized management platform, we can pinpoint issues faster than with traditional management methods,” says Garg.

## Product List

### Data Center Solutions

- Cisco Unified Computing System (UCS)
- Cisco UCS C220 M3 Rack Servers
- Cisco UCS C240 M3 Rack Servers

### Routing and Switching

- Cisco Nexus 5548 Switches

### Fabric Interconnects

- Cisco UCS 6248UP Fabric Interconnects
- Cisco Nexus 2232 TP Fabric Extenders

### Network Management

- Cisco UCS Manager

### Security and VPN

- Cisco ASA Adaptive Security Appliance

### Virtualization

- VMware ESX

### Applications

- RedCannon CloudSLA



### Storage

- NetApp

## Next Steps

The RedCannon CloudSLA solution running on Cisco UCS is primarily being used internally. OSV is building upon these initial successes to demonstrate to stakeholders, both internal customers in other business units and paying external customers, the benefits from using the new cloud management solution. In addition to pushing adoption internally at Orange, OSV believes popular applications such as Cisco Unified Communications can benefit from the RedCannon environment. OSV is also considering ways to leverage RedCannon CloudSLA to provide customer-facing solutions.

## For More Information

To find out more about Cisco Unified Data Center, please visit:

[www.cisco.com/go/unifieddatacenter](http://www.cisco.com/go/unifieddatacenter).

To find out more about Cisco UCS, please visit: [www.cisco.com/go/ucs](http://www.cisco.com/go/ucs).

To find out more about RedCannon CloudSLA, please visit:

<https://marketplace.cisco.com/catalog/companies/redcannon-inc>.



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