

Ensuring Unified Communications Availability with Cisco Unified Operations Manager

EXECUTIVE SUMMARY
<p>RENAULT GROUP</p> <ul style="list-style-type: none"> • Industry: Automobile manufacturing • Location: Headquarters in France • Number of Employees: 129,000 employees worldwide, present in 118 countries <p>Note: This Case Study is about the European and Moroccan Deployment (30K IP Phones today)</p>
<p>BUSINESS CHALLENGE</p> <ul style="list-style-type: none"> • Help ensure service quality across multiple sites with multiple Unified Communications products and varying product releases • Need view-at-glance of system health for rapid issue identification • Deploy more efficient, accurate monitoring solution
<p>SOLUTION</p> <ul style="list-style-type: none"> • Cisco Unified Operations Manager 2.1 across five clusters • Cisco Unified Service Monitor 2.1 with five Cisco 1040 sensors
<p>RESULTS</p> <ul style="list-style-type: none"> • 20 engineers using Cisco Unified Operations Manager to provide 24-hour monitoring to help ensure service quality • Single monitoring solution for multiple sites and across various Unified Communications products and releases • Reduced time to address issues

Business Challenge

Renault Group is a car manufacturing company headquartered in France, with locations in 118 countries and 129,000 employees worldwide. Renault represents three brands: Renault, Dacia, and Nissan. Renault currently has Cisco® Unified Operations Manager monitoring Europe and Morocco across 30,000 end points today. This report describes the current deployment. Based on current success with Cisco Unified Operations Manager, further deployments are in progress or planned in India, Brazil and the North America.

Prior to the implementation of the Cisco® Unified Communications Suite, Renault used a combination of Cisco and third-party products to monitor the Unified Communications deployment, including CiscoWorks IP Telephony Environment Monitor (ITEM), Cisco® Real-Time Monitoring Tool (RTMT), and a third-party network monitoring solution. Although these tools allowed Renault IT staff to do their jobs, there were shortcomings that affected efficiency and productivity. Renault needed a single monitoring solution to cover all sites, with numerous Unified Communications products and applications and various levels of releases across these products.

Describing the limitations of the previous tools, Cedric Morin, the voice IT manager at Renault, says, "ITEM didn't have a good user interface, and didn't provide topological representation, which is mandatory for us. Cisco RTMT is a good troubleshooting tool but with limitations; it

does not scale to multiple clusters, each Cisco Unified Communications Manager release needs its associated Cisco RTMT release, and it can monitor only Communications Manager without covering other components such as Cisco Unity and Unified Communications Contact Center Express (UCCX). We tried to monitor the France cluster using a third-party network management product but had issues with false alarms. That tool generated around 14000 false positive alerts per day for each subscriber!"

Morin adds: "Basically, we did not have an efficient monitoring solution, and our challenge was to provide 24-hour monitoring for the entire Unified Communications infrastructure using the least number of resources. We needed a single tool to cover all the Unified Communications devices across multiple clusters, and we needed coverage of a wide range of product versions since Renault has deployments running various versions of Cisco Unified Communications Manager, Cisco Unity®, and other Unified Communications devices. And we needed a good topology view to enable the IT managers to get a view at a glance of the health of the system."

Solution

Renault purchased Cisco Unified Operations Manager for real-time monitoring of the entire network and Cisco® Unified Service Monitor with 1040 sensors to proactively monitor voice quality.

Renault has 15 clusters worldwide. Cisco Unified Operations Manager has been deployed successfully to manage five of them for a total of 30,000 IP phones across Europe and Morocco.

- **Cluster 1 (Nissan Division)** Six CallManagers 4.1.3, two Unity messaging solutions, two Unified Contact Center Enterprise servers, 11,000 IP phones, and 100 gateways.
- **Cluster 2 (Top level management)** Two Communication Managers 6.1.2, one Unity messaging solution, one gateway, and 50 IP phones.
- **Cluster 3 (Transit Center)** One CallManager 6.1.3, no IP phones, 66,608 voice gateways, five other IOS gateways, and 15 ICT.
- **Cluster 4 (Europe)** Five CallManagers 6.1.3, one Unity messaging solution, five Unified Contact Center Enterprise servers, 1000 IP phones, and 13 gateways.
- **Cluster 5 (France dedicated)** 11 CallManagers 4.1.3, two Unity messaging solutions, four Unified Contact Center Enterprise servers, 17,500 IP phones, and 42 gateways.

RENAULT UNIFIED COMMUNICATIONS DEPLOYMENT
<p>Renault devices:</p> <ul style="list-style-type: none"> • 60 Communication Managers • Various Communications Manager versions from 4.1.3 to 6.1.3 • 11 Cisco Unity servers • 2 IPCC Express, 2 IPCC Enterprise • 45,000 IP Phones • 300+ H323/MGCP/Gateways: • Multi-site Distributed Call Processing Model

Cisco Unified Operations Manager is deployed in the network operations center (NOC) to monitor the operational status of all components of the Cisco Unified Communications system, including Cisco Unified Communications Managers, Cisco Unity, Cisco IPCC Express, IPCC Enterprise, Voice Gateways, and IP phones.

Renault has 20 IT engineers using Operations Managers, with up to 10 engineers using the system at any one time.

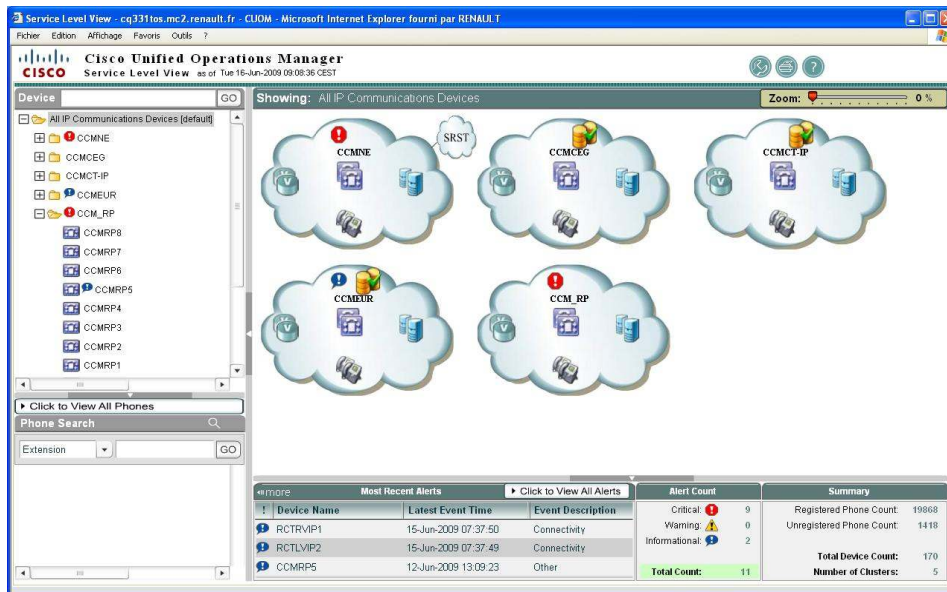
Level 1 NOC operators (outsourced to the Dimension Data) monitor all the Unified Communications components 24 hours a day, seven days a week, using Cisco Unified Operations Manager as a central monitoring console and alarm system. These operators use the

service-level topology view to quickly assess the health of the system and see alarms. They also use the Cisco Unified Operations Manager notification capability for remote notification and escalation of alarms to other teams.

When an alert is identified on the Service Level View, a Level 1 operator drills down to diagnose the issue. If it's a network infrastructure issue, he or she can correlate the alert with the network infrastructure tool, LMS. If no evidence is found, the Level 1 operator escalates to Level 2 support. Level 2 support (from Dimension Data) dives deeper into the diagnostics capabilities of Operations Manager and also leverages component-specific tools like Cisco RTMT and the Cisco Unified Communications Manager interface to complete the diagnosis and fix the issue. If Level 2 support fails to diagnose and fix the issue, the issue is escalated to Renault internal Voice Experts Team. In all cases, each critical alert is automatically notified by email to the Voice Experts using the Cisco Unified Operations Manager Notification Subsystem.

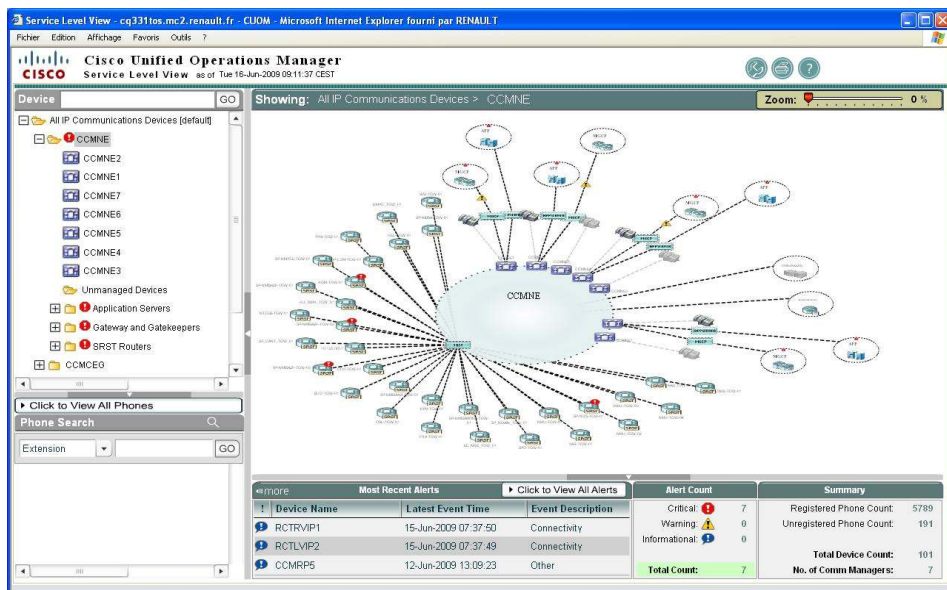
The Service Level View in Figure 1 shows a graphical representation of the five Renault Clusters managed by Cisco Unified Operations Manager. IT staff can quickly see if there are issues in the Unified Communications environment or underlying transport later with an alarm on this graphical view of the network.

Figure 1. Service Level View: Five Voice Clusters Managed by a Single Operations Manager at Renault



From the Service Level view above, the IT staff can drill down to find the particular component with the issue and to help isolate the fault condition, Figure 2.

Figure 2. Service Level View: Detailed View of One of the Voice Clusters at Renault



Results

Implementation of Cisco Unified Operations Manager allowed Renault to build a 24-hour monitoring solution for the company's Unified Communications environment.

“The old management platform we tried to install previously on only one cluster reported about 14,000 false positives alarms per day for each subscriber. Today, our network operators receive about 40 alerts per day from the Cisco Unified Operations Manager, for the complete solution, which allows us to focus on resolving real issues”

— Cedric Morin, Renault Voice Expert, Renault Group

Next Steps

PRODUCT LIST

- Cisco Unified Operations Manager 2.1
- Cisco Unified Service Monitor 2.1
- Cisco 1040 Sensors

Based on the success in deploying Cisco Unified Operations Manager in Europe and Morocco, other deployments are in progress or planned for India, Brazil, and North America. Renault will leverage Cisco Unified Service Monitor with sites upgraded from Cisco Unified Communications Manager 4.x, which will enable the use of CVTQ for

MOS scoring. Renault is also interested in longer-term historical reporting and will look to Cisco® Unified Service Statistics Manager for Unified Communications reporting and analysis to help Renault optimize their Unified Communications resources and forecast for future needs. Renault is also evaluating Cisco® Unified Provisioning Manager to reduce the total cost of ownership for deployments and ongoing moves, adds, and changes.

For More Information

To find out more about Cisco Unified Operations Manager, go to:

<http://www.cisco.com/en/US/products/ps6535/index.html>.



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