

French Service Provider Invests in Cisco Cloud Control

Cisco ISR G2, ASR routers with AVC anchor SFR Business Team’s Application Visibility Service.

EXECUTIVE SUMMARY
<p>Customer Name: SFR Business Team</p>  <p>Industry: Service provider (SP) Location: Headquartered in Paris, France Customers: 165,000 businesses; 300 SP partners</p>
<p>BUSINESS CHALLENGE</p> <ul style="list-style-type: none"> • Business customers want better visibility into application usage and behavior and network segment traffic flow to use bandwidth more effectively • SFR Business Team needs cost-effective multitenant solution that is easy to deploy and manage for tens of thousands of customers
<p>NETWORK SOLUTION</p> <ul style="list-style-type: none"> • Cisco ISR G2 Series and ASR 1000 Series routers with Cisco AVC provide computing power and deep-packet inspection capability • Living Objects network management software provides data collection and mining capabilities and reporting tools • Cisco design and support engineers help SFR Business Team develop, test and launch their service
<p>BUSINESS RESULTS</p> <ul style="list-style-type: none"> • Secure web portal gives customers exactly what they ask for: instantly understandable graphics of application and bandwidth use and traffic flow • Cloud-based Application Visibility Service is a competitive differentiator in the SP market • Multitenant solution enables SFR Business Team to securely and efficiently manage traffic flows and make changes on a huge scale

Business Challenge

French service provider SFR Business Team, the enterprise business unit of SFR, is on the forefront of the worldwide demand for improving bandwidth efficiency. One of the largest alternative telecommunications operators in Europe, the company currently holds 35 percent of the business mobile users market and 20 percent of the telecommunications operator market in France. The provider delivers a range of services, such as Multiprotocol Label Switching (MPLS) VPN, Internet mobile and fixed data and voice, as well as video communication, security, machine-to-machine (M2M), and cloud services.

SFR Business Team always listens closely to what its customers have to say. An internal survey of its 165,000 enterprise customers revealed that bandwidth demands were doubling every two years. But while most French businesses consider cloud services a possible solution to accommodate bandwidth growth, they have deeper concerns. Enterprise customers want a cloud service that can clarify and characterize actual application bandwidth use. Chief among the abilities requested:

- Viewing percentage of business-related traffic versus personal-use (recreational or leisure) traffic
- Viewing applications by type and name, including web URLs
- Assigning and verifying bandwidth by application
- Measuring application performance to evaluate user experience
- Identifying slow spots in network traffic flow (WAN, LAN, or

application) that affect application response

“Our customers want to move from ‘How many’ to ‘What’ visibility. In the past we provided statistics on how much bandwidth they used, but they want to see what is actually being transported,” says Olivier Moll, metrology product manager at SFR Business Team.

The new cloud-based service also had to meet SFR Business Team's tough design parameters. The service had to interoperate with diverse existing network topologies and data services, integrate with other metrics (such as SNMP and IP/SLA), require no supplementary customer premise equipment (CPE), and maintain high overall network performance.

With customer input and design specifications in hand, the SFR Business Team went to work with Cisco Systems and Living Objects to develop a reliable, cost-effective new service.

Network Solution

SFR Business Team's Application Visibility Service is the result of close collaboration between the three partners:

- Cisco supplies the CPE to power the solution and provide end-to-end deep packet inspection capability.
- Living Objects supplies the collection and data mining capabilities, graphical network management interface and tools.
- SFR Business Team integrates the solution components and delivers the application-aware data services in the cloud to its enterprise customers.

Cisco engineers worked with SFR Business Team service engineers and Living Object network management system designers from early in the development process. Months of work went into ensuring that components would work together smoothly and that the solution would truly meet the needs of customers and SFR Business Team executives.

“Wow!” That is the reaction we get from our business customers when they see our Cisco-based Application Visibility Service in action.”

— Olivier Moll, metrology product manager, SFR Business Team

Cisco Sets Stage for SFR Business Team Application Visibility Service

Cisco® ISR G2 or Cisco ASR routers with secure connectivity, Cisco Application Visibility and Control (AVC) form the critical foundation for the new service.

Using the intelligence and computing power of the routers, Cisco AVC peers into network traffic using deep-packet inspection (DPI) to collect performance metrics such as bandwidth use, response time, and latency per application - key customer needs. AVC also identifies flow direction down to the packet level and measures performance and delay on various network segments. Cisco Wide Area Application Services (WAAS) optimization tools accelerate applications over the WAN and provide local hosting of IT services.

The choice of router models varies by customer premise site: Cisco ISR G2 880 Series and 890 Series routers are deployed in small and mid-size businesses; Cisco ISR G2 2900 Series, 3900 Series and Cisco ASR 1000 Series routers are deployed in larger enterprises. All are equipped with the same robust capabilities and access to the management interface web portal.

Cisco has since introduced the application-centric Cisco ISR-AX, which combines Cisco ISR G2 or Cisco ASR routers with secure connectivity, Cisco AVC, and Cisco WAAS into a single-box platform that provides all the application services needed for the router.

Cisco helped SFR Business Team define the service requirements. Says Moll, “They were very responsive to our requests, and it was a really great collaboration: there was a constant technical exchange between Cisco engineers and our engineers.”

In turn, Cisco appreciated SFR Business Team's "real-world" end-customer perspective and experience managing tens thousands of routers. Says Bob Nusbaum, product manager for Cisco AVC, "SFR Business Team's input was invaluable for helping us define the next release of AVC."

Network Management Presents "Face" of the Service to Customers

SFR Business Team had three requirements for its web-based network management system:

- Smooth interoperability with the underlying Cisco AVC technology
- Multitenant capability to efficiently monitor and manage customer accounts on a huge scale
- Reporting tools that would satisfy everyone from engineers to CEOs and small business owners

With its extensive experience in data mining for large networks, Living Objects knew the kinds of data to collect and could adapt the data to many customers. Its multitenant platform provides a secure portal where customers can see their own traffic but no one else's, and allows SFR Business Team to centrally manage policies and changes. That flexibility enabled the SP to create one tool that could meet widely different customer needs.

Moll says, "We also worked very hard on the 'look and feel' of the user interface because it is the 'face' of the service and SFR Business Team. It demonstrates our leadership in providing innovative solutions to our customers."



The Proof is in Testing

Once the components were integrated, extensive functional and performance testing was required. SFR Business Team hired the Cisco Advanced Services (AS) team to lead the testing and document the results.

The ongoing process was divided into three stages:

- Hands-on functional and performance testing at Cisco headquarters in San Jose to make sure the features were easily scalable for large markets
- Comprehensive, in-depth feature and performance testing to make sure the service worked over diverse topologies and application profiles

- Beta testing with customers to make sure the tools and interface provided what businesses wanted

Business Results

“Wow! That is the reaction we get from our business customers when they see our Cisco-based Application Visibility Service in action,” says Moll.

SFR Business Team is the first SP in France to offer this kind of service. With their well-designed offering, the company can clearly demonstrate to perspective customers the advantages of moving from a classical network to a cloud-based network model.

When customers log into the web portal, they get instant visibility into what applications are running on their network and how those applications are behaving. Easy-to-grasp graphics allow them to troubleshoot problems faster and make more informed decisions on bandwidth control and capacity planning. The multitenant capability allows SFR Business Team to manage their service securely and cost-effectively and scale to meet a range of business environments and growth needs.

Moll is enthusiastic about Cisco contributions to the success of SFR Business Team’s Application Visibility Service. He says, “Cisco has helped us create a leading-edge solution and has provided valuable go-to-market tools to ensure a successful release.”

SFR Business Team will continue to innovate and take advantage of their application visibility design investment to deliver more revenue-generating services in the future, backed by Cisco products and expertise.

PRODUCT LIST	
Solution	<ul style="list-style-type: none">• Cisco ISR G2 880 Series, ISR G2 890 Series, ISR G2 2900 Series, ISR G2 3900 Series, or Cisco ASR 1000 Series routers• Cisco AVC service on ISR G2 or ASR 1000 routers• Cisco WAAS WAN optimization on ISR G2 or ASR 1000 routers
Services	<ul style="list-style-type: none">• Cisco Services for Borderless Networks

For More Information

- To learn more about Cisco ISR-AX, go to <http://www.cisco.com/go/ax>.
- To learn more about Cisco ISR G2s, go to <http://www.cisco.com/go/isrg2>.
- To learn more about Cisco AVC, go to <http://www.cisco.com/go/avc>.
- To learn more about Cisco WAAS, go to <http://www.cisco.com/go/waas>.
- To learn more about Cisco Services for Borderless

Networks, go to <http://www.cisco.com/web/services/portfolio/index.html>.



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