

Industry » Service Provider

The Challenge:
Increase performance of
monitoring tools and avoid
any 'blind-spots'

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Network Performance Management with complete visibility using Cubro's packet brokers

Introduction

In today's competitive world, communication service providers (CSP) focus on customer-centric approach rather than company-centric approach. To provide the best customer experience and be a preferred provider, requires consideration of aspects like Service Quality Management (SQM), Service-level agreement (SLA) monitoring, quick troubleshooting and performance monitoring with respect to network planning and network management. Monitoring network and understanding network behaviour is important to detect any abnormalities in the network and proactively reduce the time requirement to solve any network issues.

About the CSP

The communication service provider is a leading player in the European market with the most powerful 4G network covering most of the population in the country. The company offers a fully integrated full-service provider for fixed network, mobile network, TV, broadband access and IT services and thus creates new, innovative offerings for private and business customers.

The Challenge

Increase performance of monitoring tools and avoid any 'blind-spots'

Mobile data networks are highly complex and it is a challenge to ensure their efficient performance. There are two main use cases of monitoring the network. The first is to maintain the quality of service by troubleshooting customer complaints and the second is to check the network behaviour and monitor the overall network proactively in order to ensure that it is working properly. Mobile operators have to be able to monitor mobile data networks in real time and at all times to detect any issues which might require troubleshooting.

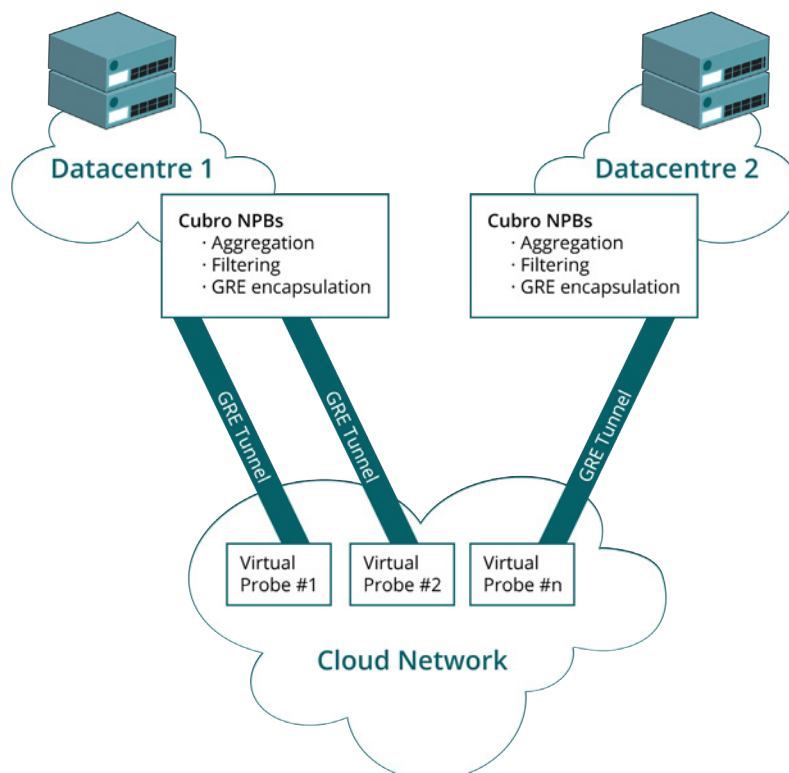
An important aspect of mobile communication is signaling messages that are exchanged between its network elements. Signaling monitoring involves capturing, decoding and correlation of complex signaling message flows. It requires access to different signaling interfaces to ensure complete call flows.

This data is required for monitoring but this data cannot be sent directly to the various probes because each of these probes require specific data. For instance, some probes deal with specific core protocols only while others are used for roaming traffic or security applications. Therefore, the CSP required the right solution that could aggregate the tapped traffic and filter it before sending it to the probes.

The Solution

The operator decided to deploy Cubro's network packet brokers as a solution for aggregating and filtering the traffic. Cubro's advanced network packet brokers provide full visibility of the network for various monitoring systems. Cubro's NPBs receive data from multiple network links, aggregate and filter it before forwarding it efficiently to the right probe.

The CSP is also using the GRE tunneling feature of Cubro's NPBs. The new monitoring solution is virtualized and running in the cloud. Thus, they need to send the filtered traffic from the Cubro NPBs into their cloud network. By using the GRE encapsulation function of the NPBs the service provider is able to send the filtered data to its final destination into the cloud where its virtual probes are located.



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The Outcome

By using Cubro's network packet brokers the service provider was able to manage the distribution of packets to monitoring tools centrally or per site, whether the tools are used for troubleshooting, network management, customer experience management or any other purpose. They could also manage the centralized distribution of packets that made it easy to expand monitoring capabilities without the need of re-architecting the visibility and monitoring. As a result, the NPBs helped the CSP to improve the effectiveness of its monitoring solution and deliver service with high quality, high availability and better performance.

The main business benefits include:

- Improved management of services including Service level agreements (SLAs)
- Ability to deliver high quality customer service for end-users
- Real-time network traffic analysis and network performance for faster troubleshooting
- Optimised infrastructure and better network management