

# Integrating a Service Delivery Platform in to Evolved Packet Core

- A Case Study



Policy control of network resources is helping operators deliver customized services and to monetize such services. This requires closer integration between different functions like Packet Gateway and OSS/BSS. Point products have started giving way to integrated solutions. LCN's Diameter APIs can make this integration

smooth and effortless, as shown by the following case study. The product has completed acceptance tests and has been deployed at two networks already, with many more deployments planned in the next few quarters.

## Customer

The customer is a leading vendor of mobile service delivery platform. The platform has been deployed in a number of mobile operator networks in multiple countries. It allows an operator to maximize the network utilization by a combination of policy based control and traffic optimization and bandwidth management techniques. Operators gain by delaying the infrastructure upgrades, thus saving on capex. Subscribers get a superior quality of experience (QoE), thus reducing the churn.

## Challenge

The service delivery platform enables policy based control of the data network. It has a policy engine, as well as the policy enforcement capability. The enforcement point (PCEF) does deep packet inspection to collect detailed subscriber traffic information and uses a number of techniques like compression and prioritization to provide effective bandwidth management.

Though the product has been well received by the customers, there is a critical new requirement to interoperate with products from other vendors. Current version uses a proprietary interface between the policy engine (PCRF) and the PCEF. Specific requirements and challenges are,

- Provide standard interfaces between PCRF and PCEF. Applicable 3GPP based Diameter interfaces should be used.
- Support available vendor specific extensions
- Allow supporting of extensions that become available in future, without having to bring down the platform.
- Interoperate with other systems in the network, especially Ericsson Charging Control Node (CCN).
- Support up to a million subscriber sessions simultaneously

## LCN Solution

LCN Compass Toolkit offers standard 3GPP interfaces as C-callable API. The Policy Control Diameter Interface Gx was used to replace the existing interface between PCRF and PCEF. The interface was enhanced to support additional vendor specific extensions from key equipment vendors. Further, the dynamic dictionary update feature allows the addition of new extensions at run-time.

3GPP Gy Interface was offered to connect to Ericsson CCN. This was enhanced to support Ericsson-specific SCAPv2 protocol.

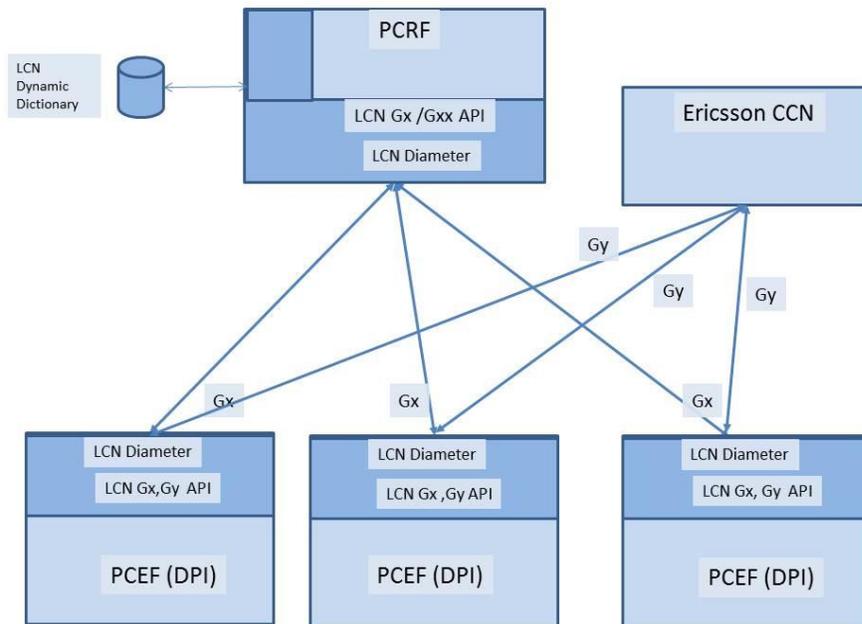


Figure 1 Service Data Platform

## The Result

LCN Compass Toolkit enabled the customer to meet the new requirements out-of-the-box. The application got insulated from vendor specific issues. Interoperability with Ericsson CCN was achieved without any extra work by the customer. The project was executed by the customer's R&D team with very little hand holding from LCN.

## Contact

Please write to us at [info@lcnpl.com](mailto:info@lcnpl.com) for more information.

Our URL: <http://www.lcnpl.com>