

# PeykAsa DSC

## Benefits in Brief

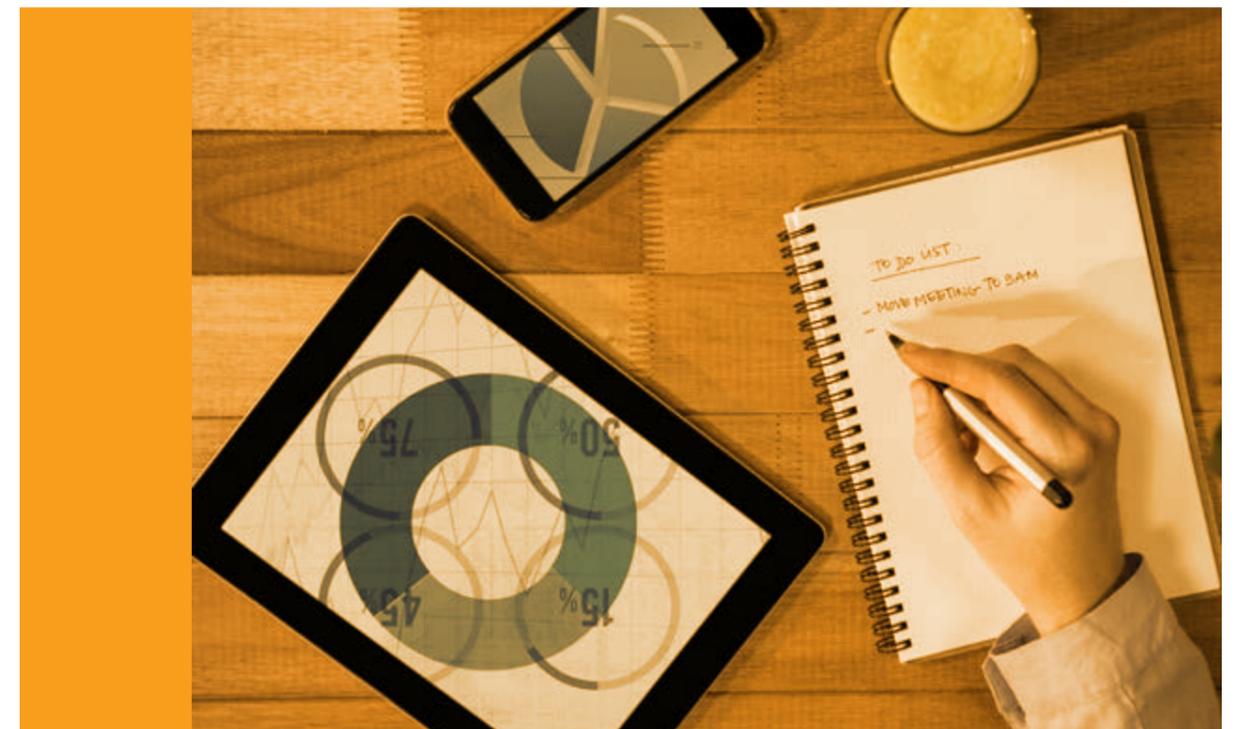
- ▶ Decrease Integration Cost
- ▶ Reduce Network Complexity
- ▶ Multi-Functional Diameter Agent
- ▶ Fast and Convenient Deployment, Reduced Costs and less Complexity
- ▶ Topology Hiding, Congestion Prevention and Security at the Edge of Diameter Network



## Diameter Protocol

The incredible proliferation of smartphones and the mass market penetration of mobile broadband have made operators to transform their network to 4G. The excellent speed of 4G networks have led to increase in mobile signaling transactions and consequently generate network management issues for operators. It also puts high demands on various data roaming services, including voice, data, and multimedia. Thus, operators require providing their subscribers with high quality, seamless roaming services.

To communicate with other LTE networks, operators use Diameter protocol as a common language among their servers and software. Diameter is a signaling protocol which is used internally in EPC, additionally, as a connectivity option for exchanging data packets between operators' elements such as MME, HSS, etc. This massive signaling growth has driven many mobile operators to apply solutions to address the network configuration complexity, traffic congestion in very high signaling load and also malicious security attacks.



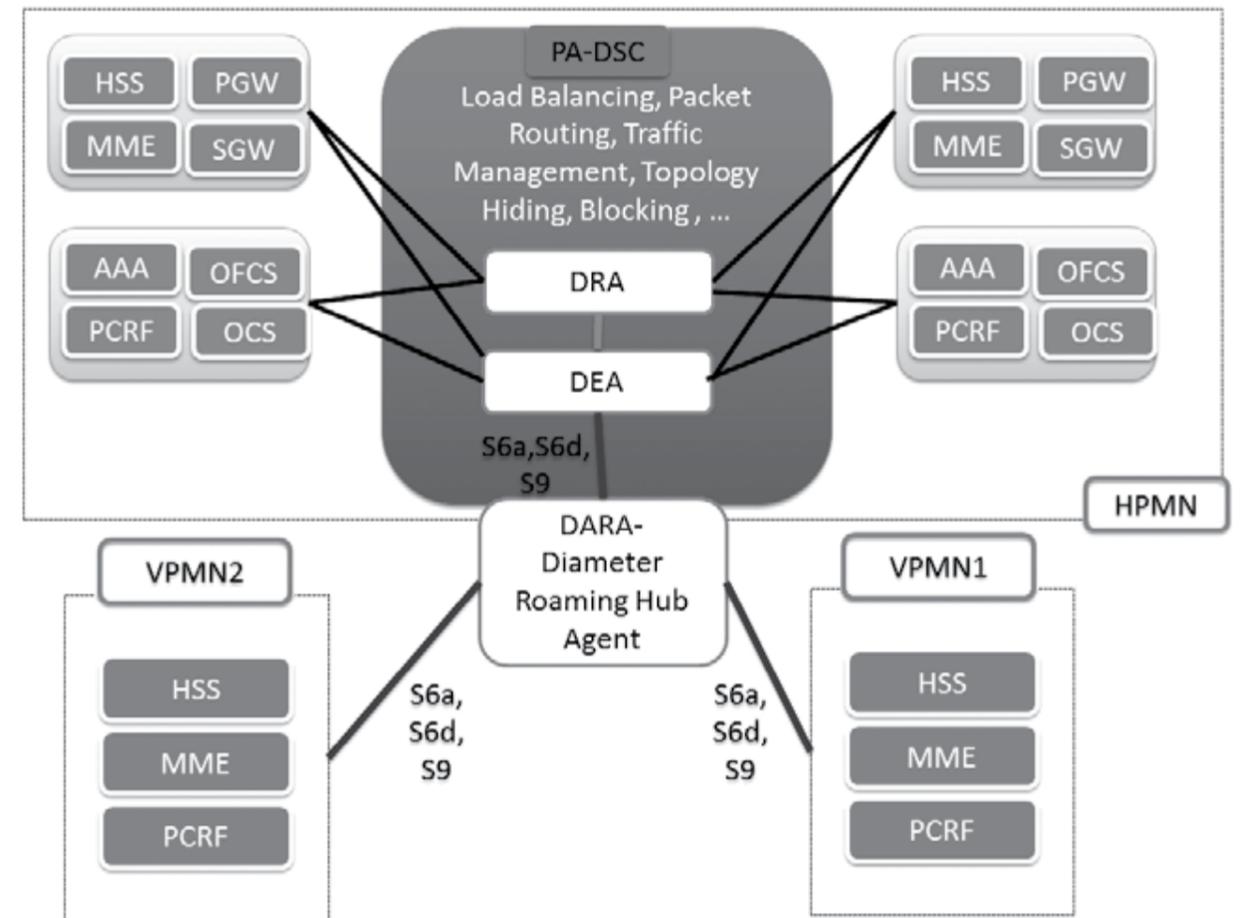
## PeykAsa Diameter Signaling Controller (PA-DSC)

PeykAsa Diameter Signaling Controller (**PA-DSC**) meets all these requirements by providing a flexible, scalable and robust framework which plays a vital role in securely interconnecting Diameter elements in 3G, IMS & LTE networks as well as policy deployment.

PeykAsa Diameter Signaling Controller is a modular platform that consists of the Diameter Edge Agent (PA-DEA) which manages activity at the edge of the network, the Diameter Routing Agent (PA-DRA) that is responsible for routing traffic in the core network, and the Diameter Advanced Roaming Hub Agent (PA-DARA) that provides roaming functionalities for exchanging LTE/4G roaming packets in real-time.

## PA-DSC MEETS WHAT YOU NEED

- ▶ As a Diameter proxy, PA-DRA acts like a traffic cop which efficiently routes the signaling messages within the IP network. It also manages the traffic load to ensure that the load is distributed properly between Diameter nodes.
- ▶ PA-DEA sits on the edge of the network and controls IP packets which are exchanged between the network and its roaming partners. It provides the security of the network by topology hiding and ensures that only supported content is passed through the network.
- ▶ PA-DARA is one of the most enhanced Diameter Roaming Hub Solutions which is based on IR.88 GSMA standard and provides various functionalities including:
  - Routing packets based on each packet field that is determined by the operator
  - Real-Time configuration which means operators can reconfigure the solution without cessation the service
  - Flexible load sharing in the way that packets can be routed under consideration of customized capacities per each node



## Secure communication by PeykAsa LTE Firewall

**PA-DSC** provides a high-performance LTE signaling firewall to address security issues for IP-Based packets. It can recognize and block specific packets by pre-defined rules that are set by operators. This solution guarantees the security of the network against unauthorized and malicious packets by re-

al-time monitoring and controlling network at multiple levels including TLS, firewall and access control lists.

## PA-DSC at a glance

- ▶ Advanced Routing Functions
- ▶ Load Distribution and Congestion Control
- ▶ Effective Topology Hiding
- ▶ Flexible Transport Layer by Providing Multi-Connections with Separate Port Numbers
- ▶ Supporting S6a/S6d and S9
- ▶ Simple Web-Based Dashboard
- ▶ Real-Time Packet Tracing
- ▶ Quick Alarm Shooting
- ▶ Powerful Monitoring and Reporting System for Performance