MARBEN DIAMX ROUTER

THE RELIABLE SOLUTION FOR THE DIAMETER SIGNALLING STORM

CARRIER GRADE DIAMETER ROUTER WITH GSMA DEA AND 3GPP DRA/IWF FUNCTIONS TO SUPPORT INCREASING SERVICE AND TRAFFIC DEMANDS FOR THE LTE NETWORK.

SIMPLIFY MANAGEMENT OF COMPLEX DIAMETER TRAFFIC – *INTELLIGENT ROUTING AND CONGESTION MANAGEMENT.*

INTELLIGENT ROUTING AND CALL DISTRIBUTION

- Dynamic Route Discovery
- Session binding capabilities
- Several Calls Distribution methods
- Pluggable and Complex user defined Algorithms
- Multiple options for Managing and Monitoring Congestions

PEER MANAGEMENT AND MESSAGE FILTERING

- Manage Hundreds of Peers
- Peer Access Control and Automatic Routes Switching
- Route selections based on Message filters

HIGHLY FLEXIBLE DIAMETER SIGNALING PLATFORM – *IWF/DEA/DRA*

INTER WORKING FUNCTION (IWF)

- Interworking according to ETSI 129.305 (MAP – Diameter)
- IOT compliancy guaranty by standard follow-up
- Proprietary high speed conversion algorithm

VOLTE AND LTE ROAMING COMPLIANT

TOPOLOGY HIDING AND ON THE FLY MESSAGE MODIFICATION

OPEN AND EXTENSIBLE SOLUTION

- Standards openness for allowing Operators to extend Diameter Application and 3GPP Releases
- Customized AVP to increase Interoperability

CARRIER GRADE AND SCALABLE – *FACE HIGH PEAK RATE OF TRAFFIC.*

HIGH CLUSTER SCALABILITY AND SECURITY
- Virtual nodes and Active/Active Back-end processing for real-time Cluster Scalability in production ensuring zero downtime.
- Extends intrinsic Diameter protocol security mechanisms by supporting SCTP, IPSec, TLS, DTLS and other Protocols

OPERATIONAL CAPABILITIES

- Monitor, report and troubleshoot with logs, statistics, call tracking, CDR generation, KPI generation
- Configure and run through OAM web portal
- Comprehensive graphical user interface
- Easy command line interface and API for fast integration

TARGET APPLICATIONS

Diameter Router and Edge Agent in MNO and IPX Service Providers network,
Front End of IMS/EPC platforms e.g. OCS, PCRF, AAA, HSS, SGSN for overloading and congestion management,
LTE Roaming Gateway.
Inter Working Function between 2G/3G and 4G networks

About Marben

A leading provider of key software solutions for next generation service-driven networks.

More than 30 years of experience

Delivers interoperable, robust and efficient signaling, routing and AAA solutions to accelerate the delivery of network services.

Marben Customers

Airbus, Be-Mobile, Bosch, Ciena, Cisco, Continental, CSG, Ericsson, ESA, Fujitsu, GMV, HP, Nokia, NEC, Oracle, Siemens, Sprint, Telstra, Valeo, Verizon, Volvo …
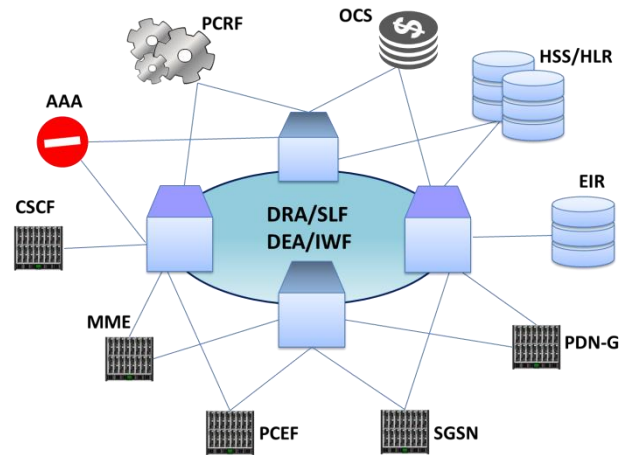
MARBEN DIAMX ROUTER

TECHNICAL OVERVIEW

MARBEN DiamX Router is the most efficient way to take advantage of the upcoming diameter signaling growth into increased revenue. Carriers are facing technical challenges in their new IP signaling. GSMA supported by Mobile Networks Operators (MNOs) has defined clear roles and distributed functions for facing such new burst and booming signaling traffic: Diameter Router Agent (DRA) for routing and managing congestion and Diameter Edge Agent (DEA) for interconnecting mobile networks.

Marben offers DiamX Router product that comprises of DRA, DEA, IWF and SLF solutions. Marben has been in business of developing complex protocol suites including Diameter Protocol stack for over 30 years that brings expertise of complex design and development of efficient and highly robust product for Telecom Operators, Equipment Manufacturer and Integrators.

Marben includes following advanced features to its DiamX Router product:

- Supports Interworking Functions (IWF) between SS7/SIGTRAN MAP & Diameter.
- Rules Management on any Diameter Attribute Value Pair (AVP)
- Supports Virtual DEA/DRA/SLF/IWF functions for Network Function Virtualization (NFV) Architecture
- Supports Server Locator Function
- Load Balancer and Session Binding
- Changing standard AVP descriptions on the fly
- Supports High Volume Diameter Signaling traffic with Scalability and Switchover Management
- Monitor, report and troubleshoot with logs, statistics, call tracking, CDR generation, KPI generation
- Operational, Administration and Monitoring of DiamX Router using Portal and CLI interface for central management of system
- Supports High Availability

With a Single Instance, MARBEN DiamX Router can simultaneously handle hundreds of peer connections in Operator's Network. In active/active Back-End mode DiamX Router can support thousands of messages per second (MPS), with minimal overhead and latency in proxy role within LTE Roaming. Please contact Marben representative for performance benchmark details.

Thanks to Marben's deep knowledge and expertise in Diameter protocol stack development and a proven track record in interoperability tests with its MARBEN DiamX stack, Marben ensures the successful interconnection with all the equipment already deployed in the field. By trusting Marben you will protect your investment and you will benefit a best in class support in the long term.

CONTACTS

Marben Products
30 rue Pasteur
92150 Suresnes, FRANCE
Phone: +33 1 7962 1018

Artifex Solutions, Ltd.
3883 Rogers Bridge Road,
Suite 504 - Duluth,
Georgia 30097 - USA
Phone: +1 770 709 7238

Sales information:
sales@marben-products.com
www.marben-products.com

CONFORMANCE

Proxy and Relay agent role from Diameter Base Protocol: RFC 3588 and RFC 6733.
Diameter Routing Agent (DRA): 3GPP TS 29.213.
Diameter Edge Agent (DEA) – GSMA IR.88,

- Advanced Diameter routing decisions and topology hiding,
- Static and dynamic peer discovery per S-NAPTR.

Diameter Interworking Function (IWF): ETSI TS 129 305
Diameter Subscriber Location Function: 3GPP TS 23.228, 24.228, 29.228, 29.229
Diameter Update Capabilities Application: RFC 6737
Diameter Routing Message Priority: RFC 7944
Diameter Overload Indication Conveyance: RFC 7683

Java MBean management and monitoring.
SNMP management and monitoring

SYSTEM REQUIREMENTS

Runs on any x86 integrated platform or virtual container where either Sun Java RE (v1.7, v1.8 or v1.9) or Open JDK (v1.7, v1.8 or v1.9) is available.

RELATED OFFERS

MARBEN DiamX Gateway,
Consulting, Training,
Professional Services,
Turnkey projects.