Globberry

GLOBBERRY DIAMETER ROUTING AGENT (DRA)

TAKE YOUR BSS EASY

Scalable tool for Diameter message distribution and routing for various signaling flows of the CSP networks. DRA helps operators deal with the exponential growth of Diameter message traffic, which will explode even further with the wide introduction of 5G. DRA is intended to be the dispatch hub of Diameter messaging, ensuring translation, enrichment, load balancing, anonymizing and routing of the messages to the proper destinations. Globberry DRA is a part of the pre-integrated Globberry Policy Management Suite, but can be deployed as a standalone solution integrated with the operator's BSS environment

Benefits

- **Simplification of Diameter Signaling Flows:**

  Replacing the full-mesh connectivity with a dispatch hub will simplify the addition of new nodes, integrating with non-standard Diameter implementations and network upgrades

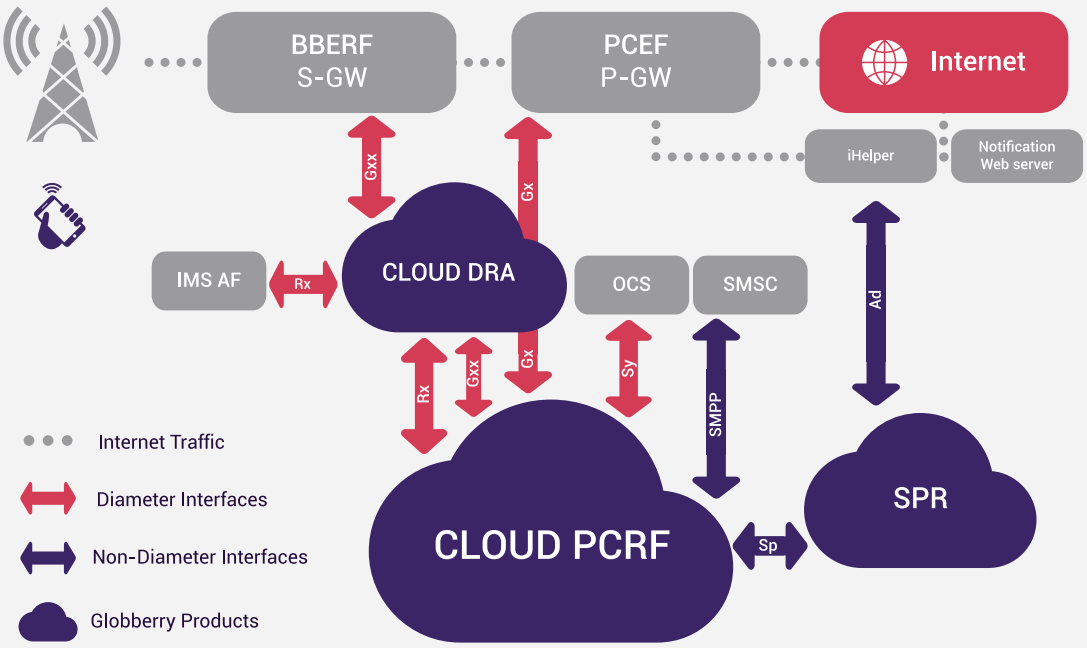
- **Flexibility of BSS:**
  Easy reconfiguration of Diameter routing rules lets operators split policy application and charging among different network components, based on criteria such as region, subscriber category or personalized services

- **Improved Scalability:**

  Modular microservice architecture lets operators increase the overall DRA performance by horizontal scaling of its components without system redeployment and without any interruption to the data service

- **CAPEX Reduction:**

  The product is built on top of open source software frameworks. No additional CAPEX for 3rd-party software



With Globberry DRA You Can

- Facilitate and accelerate modifications to the Diameter routing topology when adding new network components and subsystems
- Achieve uniform and consistent management of the routing rules for different implementations of the Diameter protocols used in the telecommunications industry, such as Gx, Gy, Sy, Rx, Rf, Ro, S6a/S6d, S9 and S13
- Forward all messages related to a single data transfer session to the same set of network components, regardless of the Diameter interface being used
- Optimize network resources usage through dividing the subscriber base by home location or any other criteria, and service each of the subscriber groups using the subset of network components allocated specifically for that group
- Decrease the number of connections between components, by an order of magnitude
- Easily scale the existing network with growing Diameter load by further subscriber segmentation, horizontal scaling of the components and by centralized reconfiguration of the Diameter signaling topology inside DRA
- Protect from malicious intrusions by fully concealing the internal network topology, through anonymizing the realms and host addresses of all network components receiving and processing Diameter requests
- Seamlessly integrate network components from different vendors using different Diameter “dialects” – including “dialects” with proprietary AVPs – by adjusting the contents of the Diameter messages at the time of their routing
- Enrich Diameter messages with subscriber and/or session attributes known to the service provider, but absent in the incoming messages, for various reasons
- Introduce components with RADIUS interfaces into the networks with Diameter-based signaling
- Collect statistical and performance data (KPIs) for all Diameter signaling interfaces within the operator’s network from a single location

Key Product Features

- **Message Relay:** Distributing Diameter messages transmitted over various signaling interfaces to the target network components
- **Subscriber-Dependent Routing:** Distributing Diameter messages to the target components responsible for servicing a specific subscriber group
- **Session Binding:** Routing of all related messages for the same data transfer session to the same set of service components
- **Host/Realm Anonymizing:** Deleting the host/realm data from the Diameter responses, thereby preventing external systems from discovering the equipment type and host addresses of any components inside the operator’s network, except for the DRA itself
- **Mediation:** Modifying certain attributes inside the routed Diameter messages, with the purpose of maintaining compatibility between various equipment types and/or enriching the messages with session and subscriber information
- **Interworking:** Converting RADIUS messages to the Diameter format, and vice versa
- **Throttling:** Limiting the load on internal network components during unexpected peaks/bursts of incoming Diameter messages