Architecture

Table of Contents

Restcomm USSD GATEWAY is based on robust and proven Restcomm JAIN SLEE 1.1 Server and Restcomm jSS7 Stack.

Restcomm JAIN SLEE Server is a highly scalable event-driven application server with a robust component model and fault tolerant execution environment. It provides a set of connectors to a variety of networks elements: SS7 MAP, TCAP, INAP, ISUP, SMPP, XMPP, SIP, MGCP, HTTP, XDM, XCAP, Diameter and many others. It is fully compliant with JSR 240 (JSLEE 1.1).
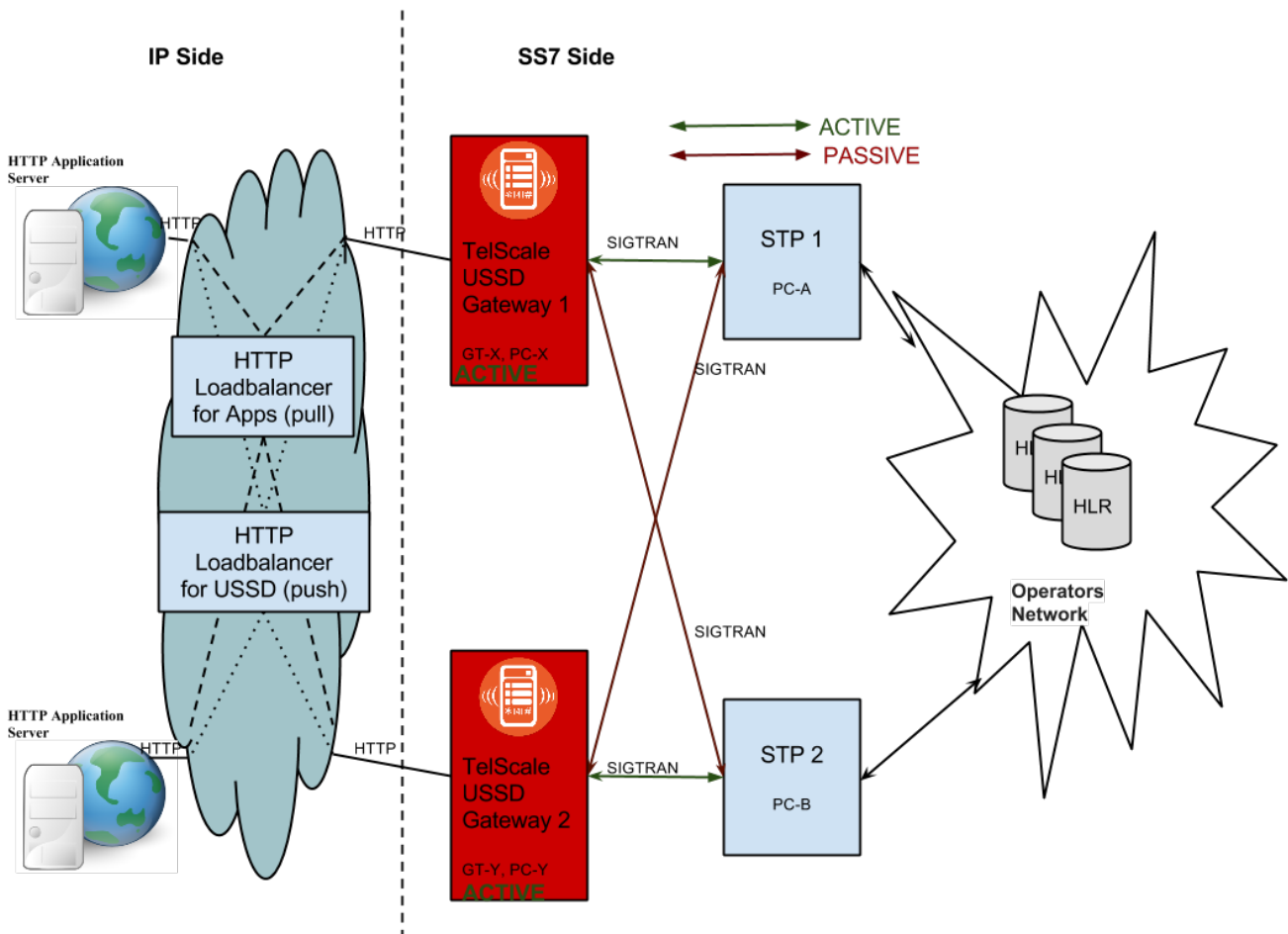
Restcomm jSS7 is a software based implementation of the SS7 protocol. It provides implementation for Level 2 and above in the SS7 protocol Stack. Restcomm jSS7 Stack User Guide is bundled within and you can refer to the guide for more details on the Stack.

The diagram below depicts top design overview:

Restcomm USSD GATEWAY provides Load Balancing and Fault Tolerance. Two or more third-party Application Servers can be paired to provide Fault-Tolerance on the Gateway and GSM Network level.

Geographic Redundancy can be achieved as shown in the diagram below:

Below diagram shows how to achieve load-balancing by connecting to two STP's from Operator side.

As of now, the Gateway supports the following protocols for proxying:

- HTTP
- SIP