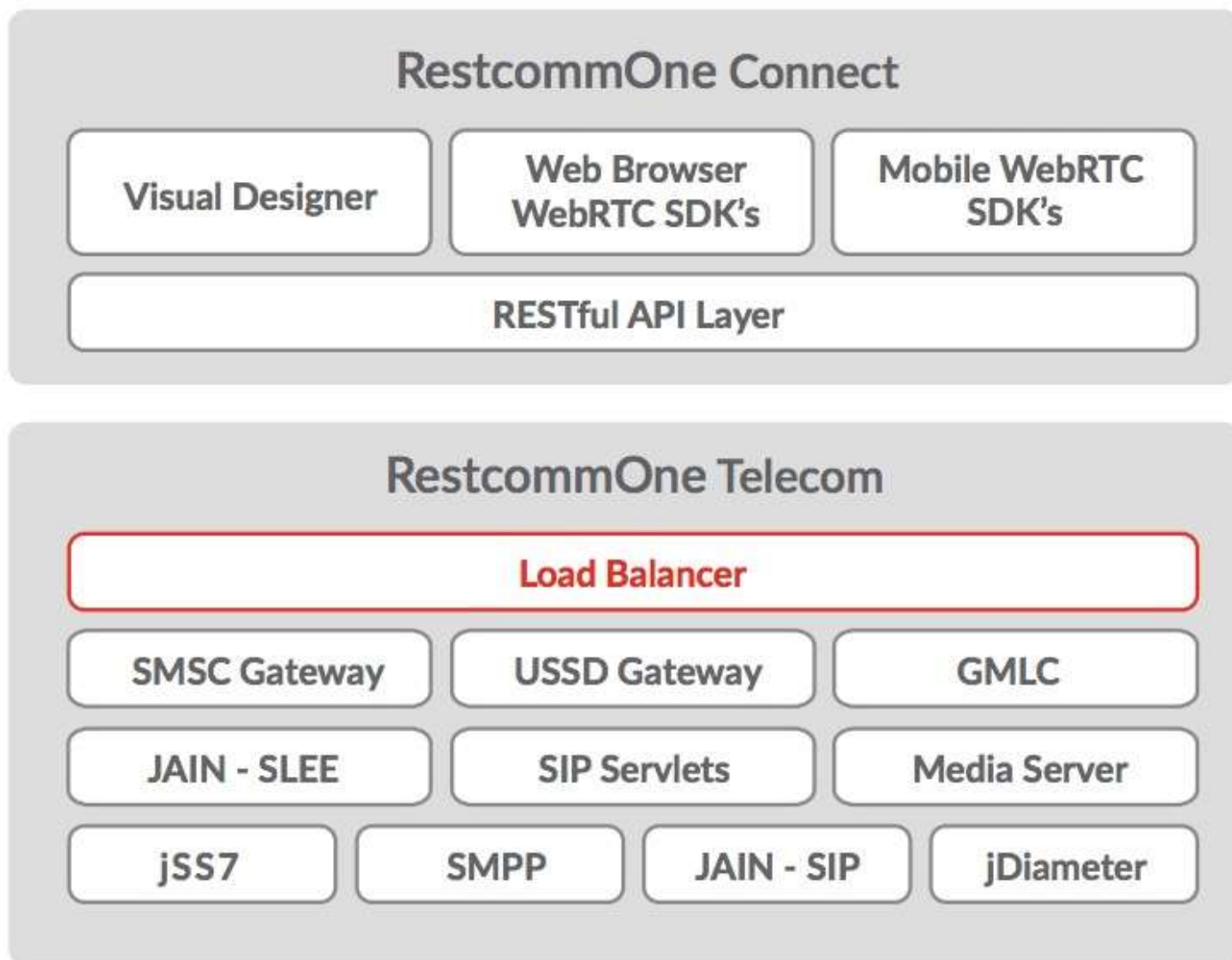


RestcommONE Load Balancer

RestcommONE Core Components



RestcommONE Load Balancer

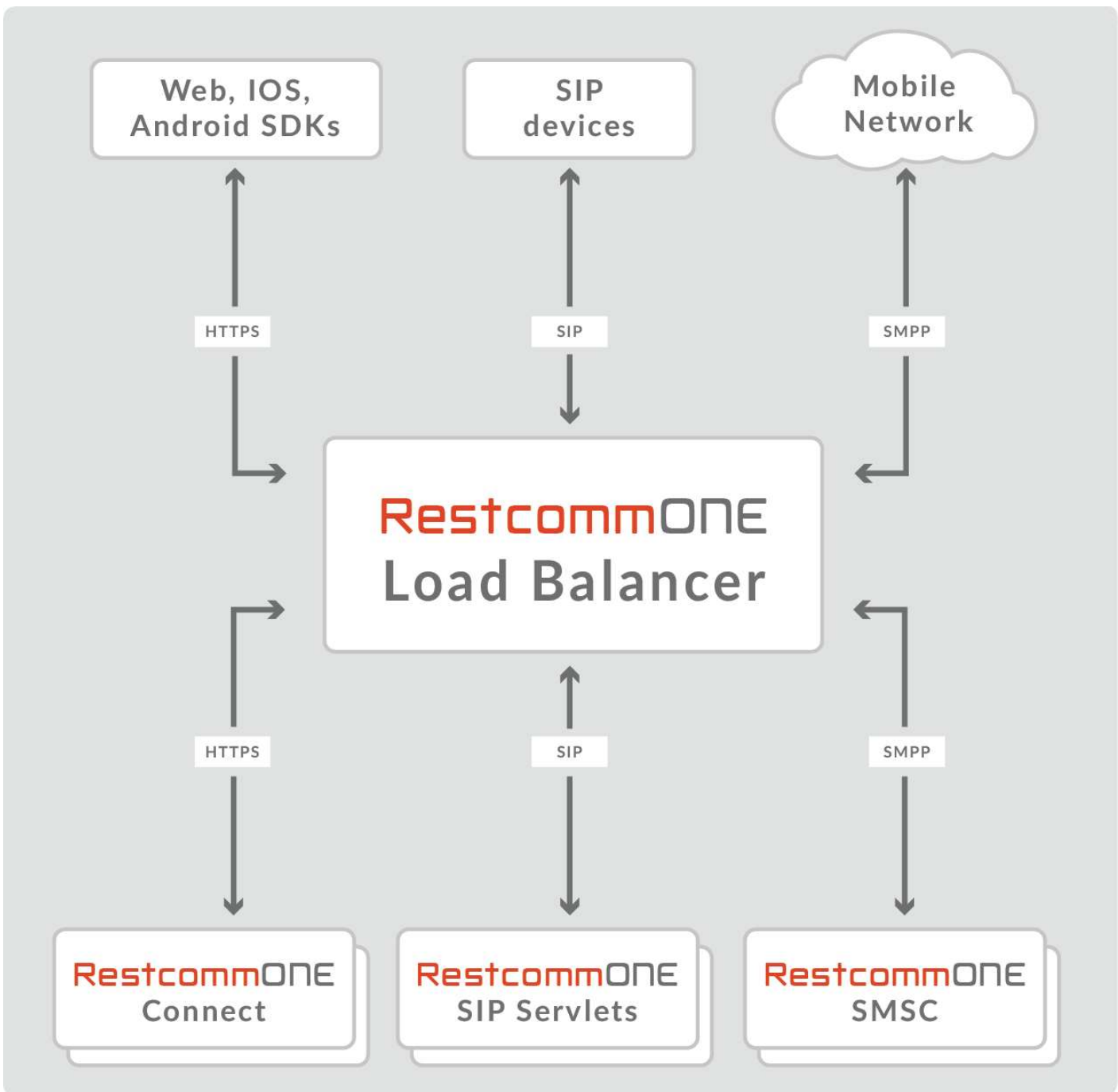
The **Restcomm Load Balancer** is a stateless proxy that intelligently forwards SIP, HTTP/S, SMPP and websocket session requests from web, IOS and Android clients. Requests are forwarded over the Internet to HTTP/S servers, SIP servers or short message peer to peer server (SMPP) servers sitting behind a firewall or session border controller (SBC). The RestcommONE Load Balancer enhances the scalability, performance and reliability of all RestcommONE components that communicate using SIP, HTTP/S, and SMPP. These include RestcommONE Connect, RestcommONE SMSC, RestcommONE USSD, RestcommONE SIP Servlets and RestcommONE JAIN-SLEE.

A major advantage of the **RestcommONE Load Balancer** is support for tunneling SIP traffic over websockets to disguise voice, video and messaging sessions. This prevents identification and blocking of

apps and services based on the RestcommONE WebRTC SDKs. In addition, tunneling also makes a RestcommONE based solution on far less likely to be discovered and exploited by malicious hackers.

The **RestcommONE Load Balancer** works with the individual RestcommONE nodes to monitor and report on health status with periodic SIP OPTIONS “heartbeats”. The load balancer creates and maintains a list of all available and unavailable nodes in the cluster. This enables auto-scaling with no down time of individual nodes, no manual configuration and no downtime during updates to a node in a cluster behind the Load Balancer. The load balancer algorithms support midsession and mid-call messages. In the case of a node failure, an active session or call will be moved to a healthy node without the user ever being aware of a service disruption.

The **RestcommONE Load Balancer** provides full support of IPv6, which makes it especially effective in building and supporting over the top (OTT) mobile services using the RestcommONE WebRTC SDKs for web, IOS and Android apps.



Key Features and Benefits

- **Stateless proxy for SIP, HTTP/S, SMPP and websockets** enables automatic, bidirectional forwarding and conversion between SIP, SMPP and WebRTC endpoints and SIP Servlets and SIP-JAIN based services.
- **SIP over websockets tunneling** disguises SIP and WebRTC voice, video and messaging application traffic to prevent discovery and blocking by firewalls or malicious hacking attempts.
- **Automatically builds and maintains node lists** to simplify configuration and reporting on service availability and node health.
- **High resiliency and availability** through configurable polling intervals for either RMI or SIP "heartbeats" methods and support for mid-session and mid-call messages.

- **On premise and cloud deployment** options provide outstanding flexibility for service provider and enterprise applications. Fully self-contained and highly optimized, the media gateway supports both network functions virtualization (NFV) and clustered virtual machine (VM) deployments.
- **Flexible Operations and Monitoring** support using industry standard protocols including scriptable API and command line interfaces with full transaction logging and auditing reporting capabilities.
- **Open Source software** is well-documented allowing your staff the opportunity to learn, optimize and customize the load balancer to your evolving requirements free from vendor lock-in.