

# **FRAFOS**

**FRAFOS ABC Session Border Controller  
and WebRTC Gateway**

# FRAFOS ABC SBC and WebRTC Gateway

## Combining Security and Media Services

With the ABC SBC and WebRTC Gateway operators deploy scalable border control solutions that were designed to secure peering with other operators, integrate WebRTC applications as well as establish a secure access point for the operator's subscribers. The ABC platform does not only offer secure border control, signaling mediation, WebRTC support and call routing but also advanced media server applications such as announcements and recording. This makes the ABC platform the perfect tool for addressing the rapidly changing business and network requirements of VoIP and NGN operators. The need to support different and often contradicting customer requirements has led FRAFOS to develop the ABC solution as an open and powerful framework that enables the easy adaptation of the FRAFOS solutions according to the exact needs of our customers. With the knowledge that no solution fits all scenarios, the ABC platform is designed as a customizable platform that achieves its performance not through specialized hardware but by efficient implementation. The ABC platform is the first SBC and WebRTC solution that was designed to scale horizontally as well as vertically by either scaling the performance of the used hardware or the number of used installations.

### STRONG SIP INTEROPERABILITY

Standards compliant with highly configurable SIP normalization options. The ABC SBC can mediate between different flavors of SIP on the SIP transaction and session level as well the transport level.

### SECURE BORDER CONTROL

High level of secure peering and border control through topology hiding on signaling and media layers. The ABC SBC provides DoS protection through rate limiting, call rejection and SLA monitoring.

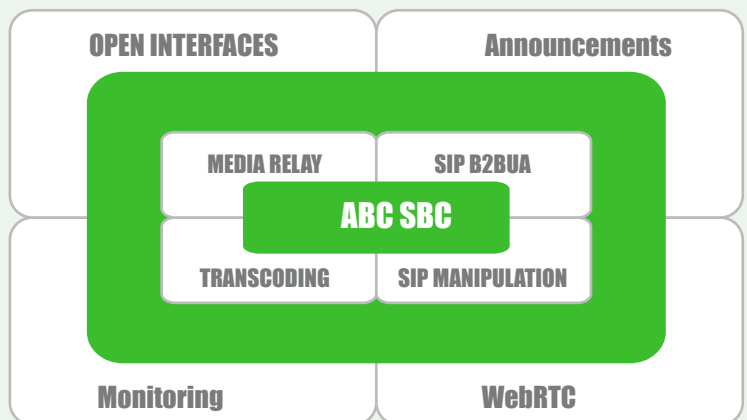
### SCALABLE DESIGN

To accommodate the various needs and performance requirements of operators of all sizes the ABC SBC was developed to be deployed over different hardware platforms. This enables FRAFOS to offer the SBC as an integrated piece of software running over a mini router running at a customer's premises. For higher performance requirements the ABC SBC runs on top of high end hardware platforms.

### SIMPLICITY OF DEPLOYMENT

ABC stands for simplicity of deployment that hides complex network aspects. In three steps, it is possible to formulate the policies for A) handling inbound traffic, B) routing it and C) handling outbound traffic.

Further in order to ease the administration and location of network errors, the ABC SBC offers powerful and detailed monitoring and call tracing capabilities.



### ABC SBC

- + Topology hiding
- + SIP mediation
- + Transport mediation
- + Billing support
- + Session control
- + Call routing
- + Secure peering
- + Announcements and recording
- + Open interfaces
- + Hardware independent
- + Software based transcoding
- + Registration handling and caching
- + Call monitoring and tracing
- + WebRTC support

### ABOUT FRAFOS

FRAFOS GmbH provides session border control and WebRTC solutions, deployable on virtual machines, hardware and on top of different cloud technologies. The technology provides for safe and robust interconnection between SIP devices, PBXs, PSTN gateways and WebRTC. The product line is a serial industry award winner and has recently collected the Internet Telephony 2015 WebRTC Product of the Year award.

### OPEN APPLICATION PLATFORM

The ABC SBC provides a built-in programmable and open media server platform for supporting conferencing, announcements and real-time web applications. These applications are highly programmable and offer open interfaces to enable a seamless and rapid integration with the operator's service delivery platform.

### WebRTC Support

The ABC WebRTC gateway connects web-clients to SIP telephony in a transparent manner. The gateway anchors signaling and media and performs translation between different standards for WebRTC and SIP, particularly security, codecs and signaling protocols.

### CUSTOMIZABLE POLICIES

Different peering partners will have different requirements in terms of used transport protocols, media codecs, SLAs, SIP signaling and session control. The ABC SBC enables the operator to customize the peering behavior of the SBC in accordance with his own policies as well as those of his peering partners.

# TECHNICAL SPECIFICATIONS

## SIGNALING FEATURES

- SIP RFC compliant
- B2BUA
- Per source/destination configurable SIP header manipulation
- Local registration information
- WebRTC

## MEDIA SERVICES

- Software based transcoding (G711u/a, G726, GSM, iLBC, L16, G722, Speex; on request: G729a, G729a/b, AMR)
- Dynamic jitter control
- NAT/NAPT on media
- Audio codec relay
- Video codec relay
- RTP inactivity monitoring
- Codec filtering

## MEDIA APPLICATIONS

- WebRTC conferencing
- Announcement services
- Media and signaling Recording
- Call transfer, hunt groups

## MANAGEMENT CAPABILITIES

- GUI based configuration and monitoring
- Secure embedded web-based GUI
- SSH access
- SNMP V2 status and logs
- Local logging of alarms, events and statistics

## QOS CONTROL

- Bandwidth limitation and management
- Call admission control per peering partner/trunk

## CALL ROUTING

- Call blocking and filtering
- Embedded routing engine
- Least cost routing
- Table based routing

## PROTOCOL SUPPORT

- SIP
- RTP, RTCP
- UDP, TCP, SCTP
- Translation between transport protocols
- Per source/destination transport layer mediation
- SNMP, NTP, SSH
- DNS
- SRTP, DTLS, ICE

## SECURITY

- Signaling topology hiding
- Media topology hiding
- RTP DoS protection
- Call rejection under DoS
- Call rate limitation

## HIGH AVAILABILITY

- Active/Hot Standby redundancy model

## Monitoring

- Display of call and system KPIs
- Listing of active calls
- Call sequence
- Collection of PCAP traces fro signaling and media

## SUPPORTED PLATFORMS

- Linux

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