SBC

## Session Border Controller

The FracTEL SBC is an enterprise class Session Border Controller (SBC) based on a Back-to-Back User Agent (B2BUA) signaling gateway. It uses a patent pending Virtual Machine architecture for maximum security and performance. The FracTEL SBC is recommended for use with FracTEL SIP Trunking to support legacy or SIP enabled premises systems, or with FracTEL Cloud PBX to provide local QoS as well as survivability in the event of a WAN outage. The FracTEL SBC is powerful, flexible, and secure.

Hypervisor — WAN Firewall — B2BUA — LAN Firewall — Wide Area Network — Local Area Network
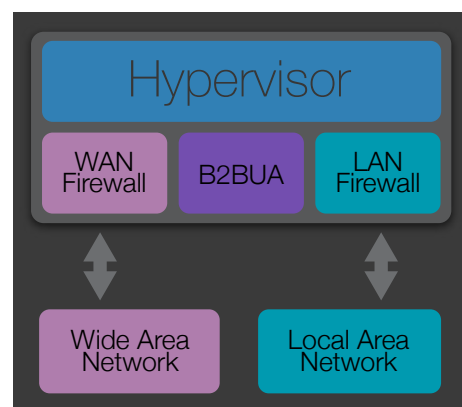
B2BUA Model

The FracTEL SBC is based on a Back-to-Back User Agent (B2BUA) signaling gateway. With a B2BUA, connections are defined on both the LAN side and WAN side of the SBC. When a connected user makes a request to establish a session with another connected user, instead of simply forwarding the request, the B2BUA establishes two sessions, referred to as "legs", with each of the two connected users. The SBC then establishes a "bridge" to connect the two "legs". By assuming the role of mediator and translator, the SBC allows each connection to transparently communicate with every other connection using the signaling and codec that it prefers. It also provides a platform for implementing sophisticated business rules and policies for the routing of requests.

Secure Architecture

The FracTEL SBC has a unique and patent pending architecture that utilizes a Virtual Machine Hypervisor to provide a signaling pipeline with three entirely distinct and totally secure processing components: WAN firewall, SIP Back-to-Back User Agent (B2BUA), and LAN Firewall. Because LAN and WAN network interfaces each have a separate firewall and because the B2BUA has no direct network interfaces, the system affords the maximum level of security and protection available in any commercial SBC.

FracTEL®

SBC
Session Border Controller

Key Features

- B2BUA Signaling Gateway
- Highly Secure Hypervisor Architecture
- Supports up to 2000 Concurrent Sessions
- Unlimited Number of Connections
- 8 Programmable 1GB LAN/WAN Network Interfaces
- Highly Configurable SIP Endpoint Definition
- Flexible Call Routing
- Support for SIP Registration and Peering
- DNIS and CLI Rewrite
- DTMF Conversion
- Integrated Firewall
- WAN Load Balancing and Auto-failover
- SIP Load Balancing and Auto-failover
- AES Encryption Support (TLS/SRTP)
- Codec Transcoding (Hardware Acceleration Optional)
- WAN Traffic Shaping
- LAN QoS Packet Tagging
- Enhanced Business Continuity with FracTEL Cloud PBX
- Can be Paired with Second FracTEL SBC for Redundancy

Available Options

Telco Interfaces

- Connects Legacy Telco Equipment
- Provides Telco Circuit Failover Connectivity
- Available in Analog up to 24 ports
- Available in PRI up to 16 spans

Codec Transcoding

- Hardware Acceleration for G.711 <-> G.729 Transcoding
- Available up to 2000 Sessions

Cellular WAN Failover (Q3 2016)

- AT&T Wireless
- Provides Failover Data Connection

Hardware Specifications

Processor	Intel® Core i7 4Ghz Quad Core 8MB SmartCache
Memory	16GB Dual Channel DDR3L 1600Mhz
Storage	250GB Samsung 850 EVO SATA III SSD
Network	8 x 1Gb LAN/WAN ports
Size (mm)	430 wide x 450 deep x 44 high (1U)
Weight (kg)	3.7
Power	350W
Certification	CE, FCC, UL, CCC, RoHS, CISPR 22 CLASS B, UL60950-1, TUV EN 60950-1, CB

FracTEL®
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