

# Theory of Operation

- What is an SBC
  - Session
  - Border
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- Why use an SBC
- B2BUA Explained
  - What are User Agents?

## What is an SBC

SBC stands for Session Border Controller

- Simplified Explanation
  - SIP Firewall
  - SIP Security Device

## Session

- Real time interactive communications
- Voice, Video, multimedia
- SIP or H323 Signaling

## Border

- IP to IP network border
- SIP trunks to service providers
- Remote worker access
- Internal Enterprise / External Enterprise

## Control

- Security & SLA assurance
- Revenue & cost optimization
- Compliance

## Why use an SBC

SBC are installed at the edge of VoIP Networks to facilitate end to end VoIP transmission without compromising network security

Essential for Several reasons:

- New security issues introduced with SIP protocol
- Fix Interoperability issues
- Implementation of UC/Collaboration features

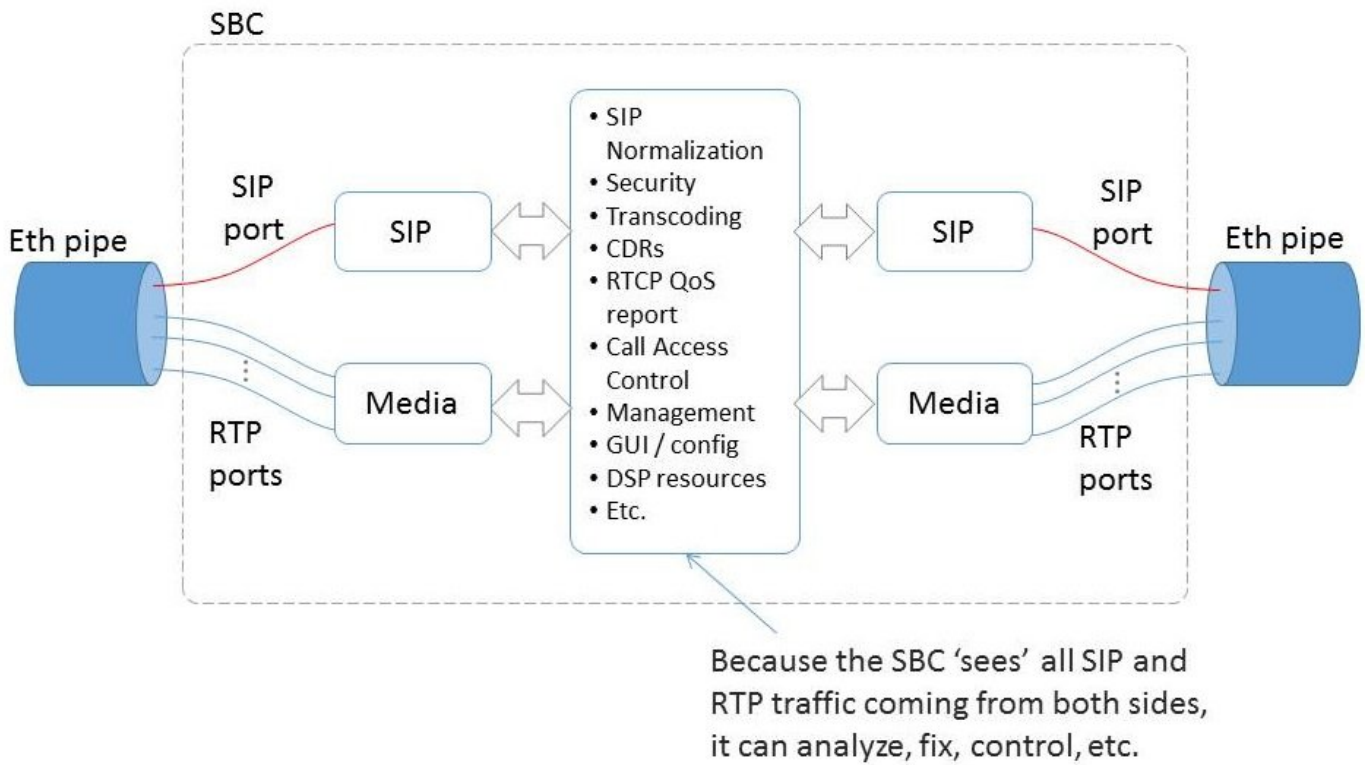
SBC are typically implemented as Back to Back User Agents (B2BUA)

- All SIP and Media (voice) traffic transit through SBCs

## B2BUA Explained

- A back to back user agent (B2BUA) is a logical network element in the Session Initiation Protocol (SIP) applications
- It operates between two endpoints in a communication session and divides the communication channel into two different call legs

- It mediates SIP signalling between both ends of the call
- B2BUAs are often implemented within media gateways



## What are User Agents?

