Integrated networking solutions

– **Up to 3000 simultaneous calls**
– **Business process security**
– **Efficient management**
– **Hardware redundancy**

Session border controller

Eltex SBC is an element of VoIP network that process as session border controller. The device provides signal protocol normalization, statistics collection and network protection against unauthorized access and attacks.

Application

Eltex SBC is deployed at the border of the IP networks:
– between service providers' networks;
– between service provider network and Client's corporate network;
– between service provider network and a public network.

Features:

– Ensuring of the security for service provider networks
– Public IP addresses translation[1]
– Flexible distribution of the redundancy routes
– Extended Firewall settings
– Statistics gathering
– Media streams transcoding[1]
– Alarm log
– Linear scaling[1]
– Control of access to RADIUS
– Operation with subscribers behind NAT
– SDP analysis and verification
– end-to-end SLA[1]
– Fail2ban security mechanism
– RTCP control
– RTP sessions management
– Efficient management
– Black and white lists
– Quality of Service (QoS)[1]
– Integration with Eltex.EMS
– Signaling protocol conversion[1]
– Load balancing between trunks
– Trunks with registration
– Flexible calls distribution according to established rules
– 1+1 redundancy

Bypassing NAT

NAT bypassing is a necessary feature that provides transparent transmission of voice and video traffic over IP networks. Different types of NAT are supported.

Security

Eltex SBC provides network protection against unauthorized access and DoS attacks. Intellectual access management, limiting of ingress load and network topology hiding ensure the security of a network.

Network topology hiding

Eltex SBC allows providing access to a carrier or corporate network from untrusted connection, ensuring the security of the Company business data.
The following mechanisms are used:
– intellectual IP addresses translation for signaling and media traffic
– full B2BUA provides required level of network isolation.

Redundancy

Complete redundancy is ensured by cluster redundancy scheme and presence of backup power modules.

Interconnect

Eltex SBC provides the opportunity of interaction of termin devices that have non-intersecting codec packs and differen SIP versions and extensions.

	SBC-1000	SBC-2000
Load	up to 500 calls	up to 3000 calls

[1] *Not supported in the current firmware version 1.8.0*

Features and capabilities

Signaling protocols
– SIP, SIP-T/I

SIP functionality
– SIP L5 NAT/Topology hiding
– SIP dialogue transparency
– SIP RFC-3326 Reason w/Cause
– SIP transit of unrecognized headers[1]
– B2BUA as defined in RFC-3261
– RFC-2833 (Telephone Event)
– RFC-3264 (Offer/Answer)
– RFC-3204 (MIME Support)
– RFC-4028 (Session Timers)
– RFC-3326 (Reason Field)
– SIP RFC-2833 relay
– RFC-3262 (PRACK)
– RFC-3372 (SIP-T)
– B2BUA peering
– B2BUA access
– RFC-1889 (RTP)
– RFC-4566 (SDP)
– RFC-3261
– RFC-3581
– RFC-3515 (Refer Method)
– RFC-3265 (Subscribe)

Media protocols
– RTP and RTCP

Media modes
– Flow-through
– Flow-around[1]

Transport protocols
– TCP
– UDP
– TCP/UDP interworking

Network protocols
– LACP
– IPv4
– IPv6[1]

Video codecs
– H.263
– H.263-1998
– H.264

Capacity
– Up to 500 simultaneous calls (SBC-1000)
– Up to 3000 simultaneous calls (SBC-2000)

Redundancy
– Warm-standby 1+1 redundancy
– Automatic switching to a backup
– Automatic synchronization of primary and backup equipment settings

Security
– Up to 40 VLAN (up to 500 on SBC-2000)
– VPN (L2TP, PPTP)
– Rogue RTP detection
– Toll-free, fraud protection[1]
– Protection against DoS - SIP/ICMP flood
– DDoS[1]
– Protection against overloading, based on registration
– IP address filtering according to geographic criterion

Fax transmission
– T.38
– G.711

Voice codecs
– G.711 (a-law, μ-law), G.729, G.729 (A/B), G.723.1, G.722, G.728, G.726

Quality of Service (QoS)
– IP priority mechanism[1]
– Differentiated Services Code Point (DSCP) marking[1]

Interfaces (SBC-1000)
IP
– 2 x 1000Base-X ports (2 slots for SFP modules)
– 3 x 10/100/1000Base-T (RJ-45) ports
USB port, 2 e-SATA ports
– Alarm logging
– Billing data recording

Interfaces (SBC-2000)
IP
– 2 x 10/100/1000Base-T (RJ-45)/1000Base-X(SFP) ports
– 2 x 10/100/1000Base-T (RJ-45) ports
USB port, 2 slots for SATA HDD, form factor - 2,5''
– Alarm logging
– Billing data recording

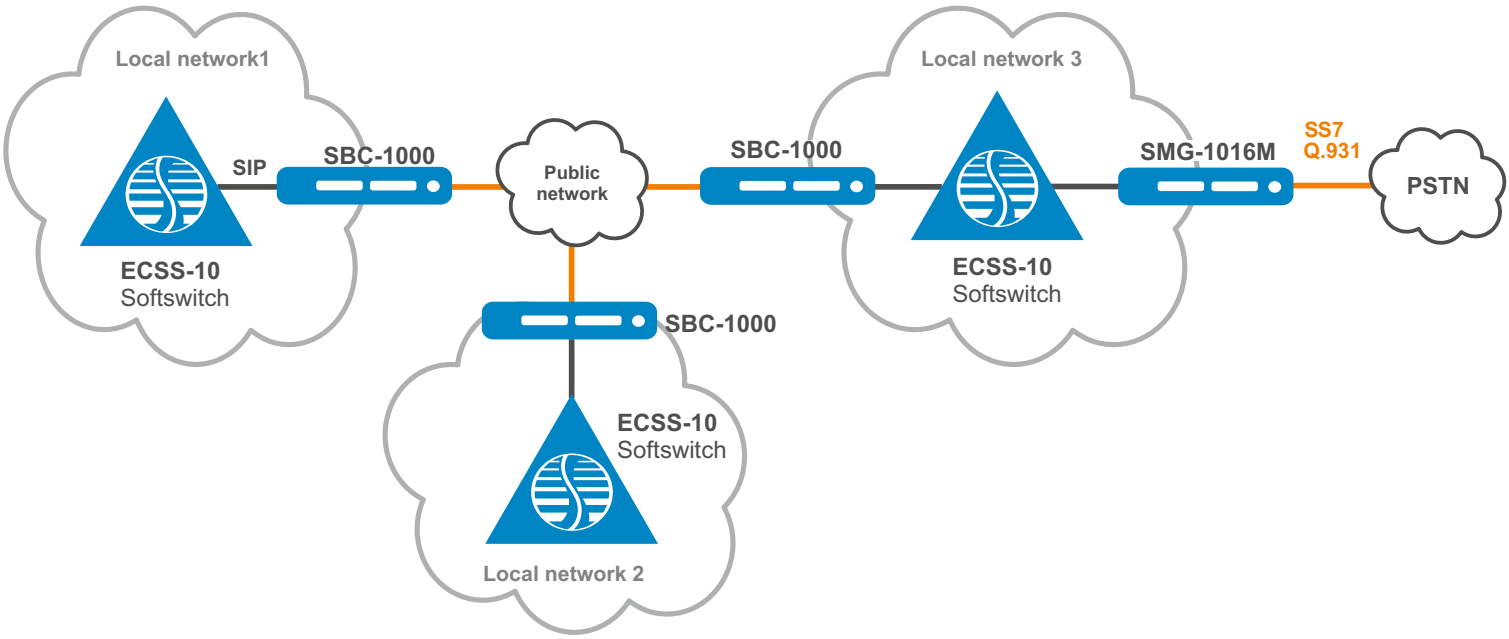
Statistics of connections
– CDR files are kept on the SATA storage
– CDR files are stored on the remote FTP server
– Transmission of data on connections via AAA protocol[1]

Management
The following management means provides access right differentiation:
– MML console (SSH/Telnet)
– Web interface
– Monitoring and editing of active registration list
– Possibility of integration with Eltex.EMS (SNMP)

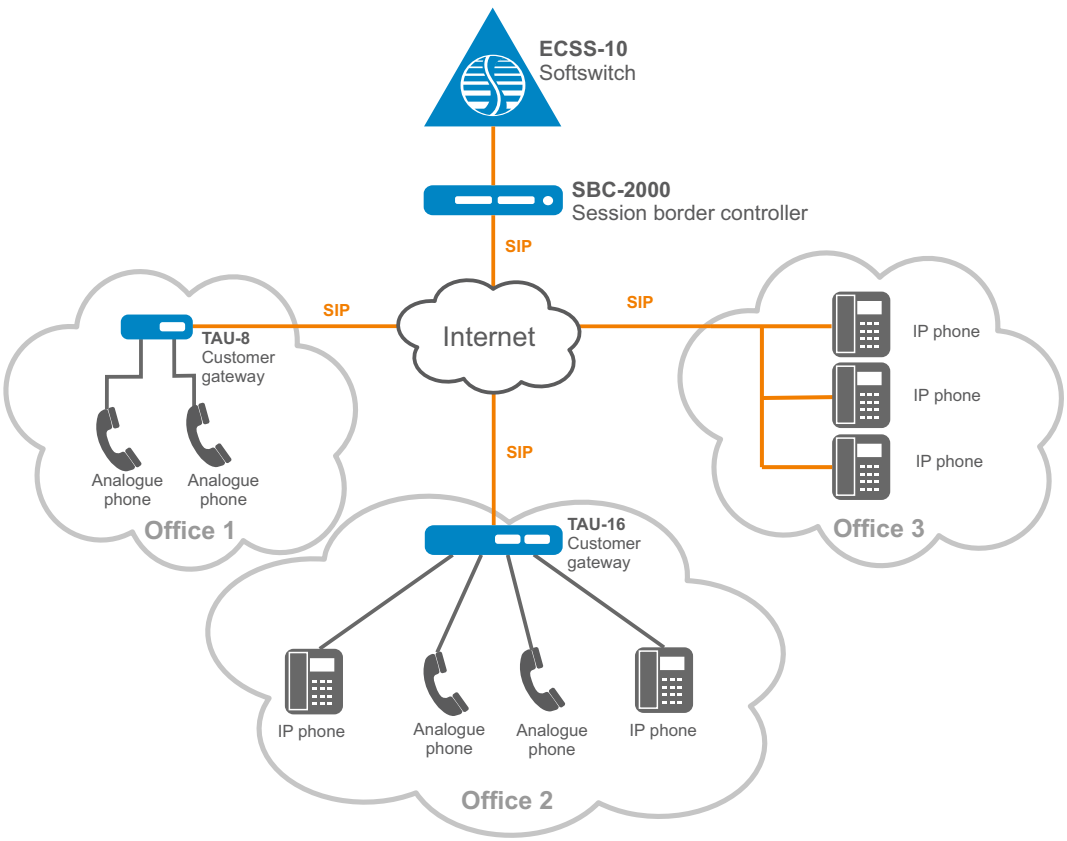
[1] *Not supported in the current firmware version 1.8.0*

Application

Service providers' interaction



«Virtual PBX» service



Integrated networking solutions

Ordering information

Name	Description
	Session border controller
SBC-1000	Session border controller SBC-1000
SBC-2000	Session border controller SBC-2000
	Supplementary modules
PM160-220/12	Power module PM160-220/12, 220 VAC, 150W
PM75-48/12	Power module PM75-48/12, 48 VDC, 75W
	Options
SBC1-SW-500	Up to 500 simultaneous calls for SBC-1000
SBC2-SW-500	Up to 500 simultaneous calls for SBC-2000
SBC2-SW-1000	Up to 1000 simultaneous calls for SBC-2000
SBC1-RESERVE	Redundancy activation for SBC-1000
SBC2-RESERVE	Redundancy activation for SBC-2000
SBC2-VLAN-500	500 VLAN support for SBC-2000

Contact Us

+7 (727) 320 18 38

info@eltexalatau.kz

www.eltexalatau.kz

About EltexAlatau

EltexAlatau company is one of the first communication equipment manufacturers in Kazakhstan established in 2012. The main focus of the enterprise is a set of solutions and the opportunity of their seamless connection to the customer's infrastructure.