



DATASHEET

ONeSBC

Enterprise SBC Software for pCPEs Certified for Microsoft Teams Direct Routing



The ONeSBC enables fixed line operators, mobile operators and ISPs to overcome the challenges inherent in routing SIP-based calls between their network and customer premise equipment.

It provides a easy to use and cost-effective solution for signal interworking, media interworking, address translation, network demarcation, Quality of Service (QoS) and security. The ONeSBC provides SIP signaling resolution, SIP proxy and session border control (SBC) capabilities for SIP based PBXs and SIP phones, ensuring trouble free operation of SIP Centrex and SIP Trunking services to SMEs. The Microsoft-certified SBC offers a secure and perfect connectivity with Microsoft Phone System environment.

The ONeSBC technology is available as a software option for the ONE Series Multi-Service Access Routers (MSAR). It brings a set of features needed to fully interact with cloud-based UCaaS (Unified Communications as a Service) phone systems.



- SIP Centrex and SIP Trunking
- SIP Proxy and SBC capabilities
- Ground-breaking per session price point
- Enhanced interoperability and security
- Certified Microsoft Teams Direct
 Routing
- SIP Connect 2.0 compliant
- High Availability with call maintain
- Fax support
- QoS and bandwidth management
- Up to 1200 desks

SIP Centrex and SIP Trunking Services

The ONeSBC has two main modes of operation, providing service assurance, network optimization and security for a variety of SIP based services. A first mode optimized for hosted SIP services (aka. Centrex) manages SIP phone authentication and registration to the service provider's network. In that mode, the SBC ensures media anchoring to make sure the RTP stream follow the optimum path and provides call survivability, should one connection to the SIP AS or hosted PBX become unavailable.

A back to back mode ensures interoperability of SIP-based PBXs with the service provider network for SIP Trunking services. Transcoding makes sure incompatible media can be interworked with the network. The selective transcoding mode is an enhanced back-to-back mode that releases DSP resources when no transcoding is required. This mode enables a solution optimization and improves the scalability of the product.

Enhanced Interoperability

The ONeSBC translates between the various SIP implementations on SIP based PBXs, SIP phones and the service provider's network, providing 'plug and play' functionality for SIP Centrex and SIP Trunking services. This avoids unnecessary engineering integration costs or capital expenditure on more complex, larger scale SBC solutions for SMEs. In addition, it enables service providers to offer and support a broad range of SIP phones, which connect directly and seamlessly to their SIP services.

The ONeSBC provides media interworking and transcoding for voice, DTMF and FAX calls, providing analog service migration and convergence with IP services. Advanced QoS capabilities in the ONeSBC and the ONE Series Multi-Service Access Routers, such as packet classification, marking/tagging, Diffserv, traffic conditioning, traffic shaping and congestion avoidance, ensure voice quality with SIP Trunking and SIP Centrex services.

Security

The ONeSBC provides a comprehensive range of network interconnection, caller, session and IP security features. It acts as a border between customer premise and service provider networks, hiding the network topology between IP networks. The ONeSBC securely manages SIP sessions, NAT translation and firewall transversal, SIP phone registration, and protects itself from DoS attacks.



Enterprise SBC Software for pCPEs

On Premise Disaster Recovery

The ONeSBC enables service providers to offer on-premise business continuity for SIP based services, automatically detecting network failure and assuming local call control functions. Internal on-site calls can be made and outbound/inbound calls can be delivered via alternative ISDN and analog voice trunks on OneAccess routers. Once the trunk network is restored, the ONeSBC hands back control to the service provider's network.

High Availability (HA) eliminates points of failure to enable voice applications to continue operating with an uptime at least 99.99% annually. Ekinops SBC offers two main High availability strategies

- Redundancy topology with two SBC devices connected to the WAN/IMS network
- High availability through failover where the SBC has multiple WAN/IMS connectivity

SBC allows enabling High availability (HA) in Master/Slave or Active/Standby mode depending on the customer need. Calls can be maintained during the detection of the failure and the execution of the fail-over mechanism.

Reducing Total Cost of Ownership

As well as opening the door to new revenue opportunities, the ONeSBC helps achieve long term cost savings. The ONeSBC integrates SBC/SIP proxy capabilities within a single, flexible multi-service access router, which means reduced capital costs and simpler logistics and operations.

In addition, for SIP trunking services, no unwanted SIP header, SDP or media will be sent to the service provider network avoiding operational and support issues. Advanced troubleshooting and monitoring tools make it simpler to manage. ONeSBC enables secure, standardized SIP services assuring a positive end-user experience.

Technical Features

		ss Router Support ing OneOS6)	ONE421 ONE521 ONE531 ONE2501	ONE526 ONE526L	ONE1526	ONE2515 2P	ONE2515 4P	ONE2520	ONE-5G ONE621 ONE2560 ONE2561
Centrex	Number of SIP Phones (seats)		200	200	200	1200	1200	1200	1200
	Number of simultaneous Centrex calls (no transcoding)		100	100	100	600	600	600	600
Trunking B2BUA	Max number of SIP Trunks		200	200	200	200	200	200	200
	Max simultaneous Trunking calls for UDP/TCP		100	100	100	600	600	600	600
	Max simultaneous calls with TLS - SRTP		60	60	60	400	400	400	400
	Max simultaneous transcoded Trunking calls		-	8	15	35	70	-	-
		ONeSBC-10	✓	✓	1				
Licenses (*)		ONeSBC-25	✓	✓	1				
		ONeSBC-50	✓	✓	1	✓	✓	✓	✓
		ONeSBC-60	✓	✓	1				
		ONeSBC-100	1	1	1	1	1	1	✓
		ONeSBC-200				/	✓	1	✓
		ONeSBC-500							✓
		ONeSBC-600				1	✓	1	1

^(*) The «ONeSBC-x» license activates all ONeSBC features with up to 'x' simultaneous calls, within the limit of the maximum number of calls that can be performed by the selected service.



Technical Features

		SIP Centrex	SIP Trunking
Network Optimization	Back to back media agent		✓
	SIP proxy transparent bridge	✓	
	Explicit local registrar		✓
	SIP-SIP signalling	✓	✓
	Transparent to SIP services	✓	
	Local SIP service logic		✓
	End-end media negotiation	✓	
	Per-leg media negotiation		✓
	Media transcoding		✓
	DTMF transcoding		✓
	FAX transcoding		✓
	QoS marking/remarking	✓	✓
	SIP parsing	√	✓
	Session handling	✓	✓
Security	Two step registration		✓
	Transparent registration	✓	
	IP level filtering	✓	✓
	Anti-flooding mechanism	✓	✓
Se	DoS self protection	✓	✓
	Hide core topology	✓	✓
	Address translation	✓	✓
	NAT pinhole management	✓	✓
	Hosted NAT traversal	✓	✓
Voice Services SIP-SIP	Basic call	✓	✓
	Call hold / retrieve / suspend / resume	✓	✓
	Call transfer	✓	✓
	Call forward	✓	✓
	Message waiting indication	✓	
	Notify- XML content type	✓	
Management	Debugging and troubleshooting (events)	1	✓
	Secure device access (SSH, RADIUS, TACAS+)	✓	✓
	Reporting / statistic / CDR	✓	✓
	Monitoring (jitter, delay, packet loss, MOS)	✓	✓

Features

- SIP header manipulation
- Backup / Survavibility
- Call Admission Control (CAC)
- Hosted NAT traversal / Anti-tromboning
- Protection of Core SIP network against attacks and overload conditions
- Legacy interface management
- Endpoint monitoring
- Intrusive mode



About





Ekinops is a leading provider of open, trusted and innovative network connectivity solutions to service providers around the world. Our programmable and highly scalable solutions enable the fast, flexible, and cost-effective deployment of new services for both high-speed, high-capacity optical transport as well as virtualization-enabled managed enterprise services.

Our product portfolio consists of three highly complementary product and service sets: EKINOPS360, OneAccess and Compose.

- EKINOPS360 provides optical transport solutions for metro, regional and long-distance networks with WDM for high-capacity point-to-point, ring, and optical mesh architectures, and OTN for improved bandwidth utilization and efficient multi-service aggregation.
- OneAccess offers a wide choice of physical and virtualized deployment options for Layer 2 and Layer 3 access network functions.
- Compose supports service providers in making their networks software-defined with a variety of software management tools and services, including the scalable SD-WAN Xpress and SixSq Edge-to-Cloud solutions.

As service providers embrace SDN and NFV deployment models, Ekinops enables future-proofed deployment today, enabling operators to seamlessly migrate to an open, virtualized delivery model at a time of their choosing.

A global organization, Ekinops (EKI) - a public company traded on the Euronext Paris exchange operates on four continents.





