

Oracle Enterprise Virtualized Session Border Controller

Oracle's Enterprise Virtualized Session Border Controller (E-vSBC) helps connect disparate SIP-based real-time communications networks while mitigating security threats, curing interoperability problems, and ensuring reliable communications. As a virtualized network function, the E-vSBC can be located where it will be most effective and least expensive to operate, enabling enterprises to address their increased need for flexible and agile voice, video and Unified Communications (UC) infrastructures while reducing CAPEX and OPEX. The E-vSBC is an extension of Oracle's market leading appliance E-SBC product portfolio, but is specifically for virtualized deployments.

OVERVIEW

The E-vSBC leverages the same code base as Oracle's appliance based E-SBCs. It provides the strong security, reliability and scalability that enterprises and contact centers rely on for their real-time communications. Starting at 25 sessions, the E-vSBC can be deployed by small to very large enterprises for use cases including: SIP trunking, unified communications & collaboration (UC&C), contact centers (CC), hosted voice services, and connecting remote workers. The E-vSBC is both horizontally and vertically scalable depending on capacity and performance requirements, and can be deployed on a wide range of hypervisors and public clouds. There is also the option of Oracle's network wide licensing (NWL) model which enables license rebalancing and capacity redistribution for efficient use of virtualization resources.

The E-vSBC is designed to fit into Oracle's mission to see data in new ways, discover insights, and unlock endless possibilities. Our E-vSBC aligns to Oracle's Network Function Virtualization (NFV) vision, offering the simplified manageability, orchestration, and integrated analytics synonymous with a cloud native architecture. Oracle's E-vSBC is certified with leading UC&C, CC and hosted telephony platforms, including Microsoft Teams and Genesys PureEngage.

The E-vSBC also comes in a *Small Footprint* version with scaled down capacity and performance to support the vCPE market, which is critical for MSP efficient and cost-effective operations.

COMMON DEPLOYMENT MODELS



On-Premise & Private Clouds: Virtualized instances deployment in the enterprise's network on vCPEs or hypervisors such as KVM, VMware, OVM, Hyper-V and OpenStack.

Public Clouds: Virtualized instances on public cloud platforms such as Amazon Web Services, Microsoft Azure and Oracle Cloud Infrastructure.

Oracle Advantage

- Common code base with appliance E-SBCs
- Feature parity from small to large scale deployments
- DSP support for high scale transcoding
- Varied hypervisor support:
 - KVM, VMware, OVM, Hyper-V, OpenStack
- Support for the leading cloud providers:
 - Microsoft Azure
 - Amazon AWS
 - Oracle OCI
- Small Footprint E-vSBC for MSPs
- FIPS and JITC Compliant
- Microsoft Teams Certified.
- Genesys PureEngage contact center certified
- Automation via industry standard HEAT Templates
- Configuration and Life Cycle Management through REST APIs
- Built-in Oracle Enterprise Operations Monitor probe
- Pooled Network Wide Licensing

E-VSBC SPECIFICATIONS AND CAPACITIES

	Oracle Small Footprint E-vSBC	Oracle E-vSBC
Hypervisor	KVM, VMware	KVM, VMware, Hyper-V, OVM
Public Cloud Support	AWS, MS Azure, OCI	AWS, MS Azure, OCI
OpenStack	✓	✓
Encryption	Software SRTP/TLS	Software SRTP/TLS
Min. Requirements	1 core/2vCPUs 4GB RAM 20GB	3 cores/4vCPUs 16GB RAM 40GB
Media Sessions (Min-Max)*	25 - 1,600	25 - 60,000
Max. SRTP-RTP Sessions	600	28,000
Max. Transcoding Sessions	NA	5,600 (SW); 10,800 (DSP)
Max. CPS	120	1,800

CRITICAL E-VSBC FEATURES & CAPABILITIES

Feature	Capabilities
Security	<ul style="list-style-type: none"> Granular access control IP address and SIP signaling concealment Layer three through five topology hiding and signaling overload controls IP telephony spam protection Stateful deep packet inspection Signaling and media encryption FIPS Compliant including MSRP FIPS for E-vSBC JITC Compliant and being validated.
Interoperability	<ul style="list-style-type: none"> SIP message normalization Response code translation SDP and Dual Tone Multi-Frequency (DTMF) manipulation Number and uniform resource identifier (URI) manipulation Header manipulation rules (HMR) SIP / H.323 signaling interworking Protocol interworking: Transmission Control Protocol (TCP), User Datagram Protocol (UDP) Encryption interworking: Transport Layer Security (TLS), Mutual TLS, Secure Real-time Transport Protocol (SRTP), IP Security (IPsec) Network address translation (NAT) and firewall traversal IP address translation: private/public, IPv4/IPv6 Transcoding IETF standard SIP Recording (SIPREC) interface Support for Microsoft ELIN Gateway and Avaya Personal Profile Manager proxy RFC3389 – RTP payload for Comfort Noise
Reliability	<ul style="list-style-type: none"> Standby SIP registrar with caching for remote site survivability Stateful signaling and media failover Quality of service (QoS) marking, virtual local area network (VLAN) mapping Registration storm avoidance Call rate limit enforcement Trunk load balancing Stateful session routing QoS-based routing
Regulatory compliance	<ul style="list-style-type: none"> Session prioritization for emergency services IETF SIPREC interface Call detail records (CDRs) with local or remote storage via RADIUS
Cost management	<ul style="list-style-type: none"> Least cost routing CODEC renegotiation
Management	<ul style="list-style-type: none"> Embedded Oracle Enterprise Operations Monitor probe Browser-based GUI SIP monitoring and tracing tool SNMP agent, XML configuration files, Syslog, SFTP, RADIUS interfaces Subnet masks for SNMP Secure WebGUI access with HTTPS HEAT Templates REST API Support for configuration and life cycle management

Key Business Benefits

- Enables E-SBC functionality to be placed where most effective and least expensive to operate
- Simplifies and accelerates service deployment
- Reduces CAPEX and OPEX
- Protects real-time communications against cyber-attacks

Applications

- Private and Public cloud based deployments
- SIP Trunking
- IP Enabled Contact Centers
- Unified Communications
- Hosted IP Communication Services
- Remote Workers and Offices

Related Products

The following products support Oracle Enterprise Virtualized Session Border Controller:

- Oracle Enterprise Session Border Controller
- Oracle Enterprise Operations Monitor
- Oracle Communications Telephony Fraud Monitor
- Oracle Enterprise Communications Broker
- Oracle Communications Interactive Session Recorder
- Oracle Communications WebRTC Session Controller

CONNECT WITH US

Call +1.800.ORACLE1 or visit oracle.com/communications

Outside North America, find your local office at oracle.com/contact.

 blogs.oracle.com/oracle-communications

 facebook.com/oraclecommunications

 twitter.com/oraclecomms

Integrated Cloud Applications & Platform Services

Copyright © 2020, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0220