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Acme Packet 1100 Enterprise Session Border Controller (E-SBC)

ORACLE COMMUNICATIONS

The Acme Packet 1100 is an enterprise-session border controller appliance optimized for small to medium-sized business (SMB) and remote offices of large organizations. The compact appliance provides critical controls for delivering trusted, first-class real-time communications—voice, video, and multimedia sessions—across Internet Protocol (IP) network borders.

APPLICATIONS

- Small and medium-sized business and branch office enterprise-session border controller
- SIP trunk demarcation device
- Hosted UC services

KEY FEATURES

- Turn-key, small form factor appliance
- Industry-leading session border control features
- Hardware-assisted transcoding for optimal performance
- Per session QoS measurement
- Enterprise Operations Monitor probe
- TDM fallback for dial-out survivability
- Redundant HA configurations
- Supports up to 360 signaled sessions and 5000 registered devices

KEY BENEFITS

- Cost savings with uncompromised functionality
- Straightforward deployment and operation
- High service quality and reliability
- Supports centralized, distributed or hybrid SIP trunking deployment models

Overview

The Acme Packet 1100 is specifically designed to meet the unique price-performance and manageability requirements of the small to medium-sized enterprise and remote office/ branch office. Ideal for small site border control and Session Initiation Protocol (SIP) trunking service termination applications, the Acme Packet 1100 delivers Oracle's industry-leading E-SBC capabilities in a small form-factor appliance. With support for high availability (HA) configurations, TDM fallback, hardware-assisted transcoding and Quality of Service (QoS) measurement, the Acme Packet 1100 is a natural choice when uncompromising reliability and performance are needed in an entry-level appliance.

With models designed for the smallest branch office to the largest data center, the Acme Packet E-SBC product family supports distributed, centralized, or hybrid SIP trunking topologies.

Features

Acme Packet 1100 addresses the unique connectivity, security, and control challenges enterprises often encounter when extending real-time voice, video, and UC sessions to smaller sites. The appliance also helps enterprises contain voice transport costs and overcome the unique regulatory compliance challenges associated with IP telephony.

TDM fallback capabilities ensure continuous dial-out service at remote sites in the event of WAN or SIP trunk failures. Stateful high availability configurations protect against link and hardware failures. An embedded browser-based graphical user interface (GUI) simplifies set-up and administration.

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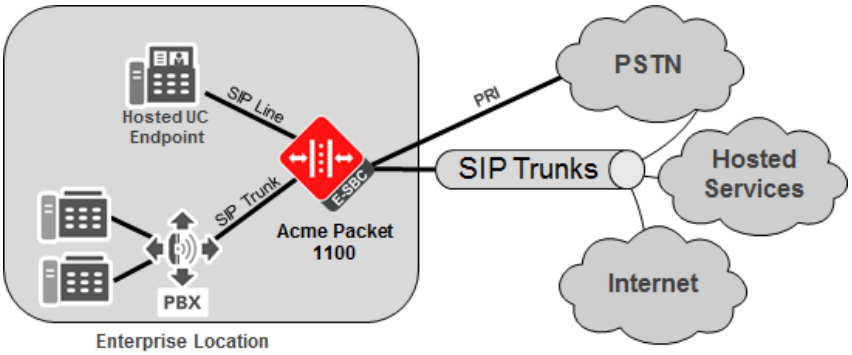

Figure 1. Acme Packet 1100 supports a wide range of deployment models and resiliency options, ensuring high service availability for small to medium sized business and remote office locations.

Capabilities

ACME PACKET 1100 E-SBC FEATURES AND CAPABILITIES

Feature	Capabilities
Security	• *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*
Interoperability	• *SIP message normalization* • *Response code translation* • *Session Description Protocol (SDP) and Dual Tone Multi-Frequency (DTMF) manipulation* • *Number and uniform resource identifier (URI) manipulation* • *Signaling message header manipulation* • *Signaling interworking (SIP, H.323)* • *Protocol interworking: Transmission Control Protocol (TCP), User Datagram Protocol (UDP), Stream Control Transmission Protocol (SCTP)* • *Encryption interworking: Transport Layer Security (TLS), Mutual TLS, Secure Real-time Transport Protocol (SRTP)* • *Network address translation (NAT) and firewall traversal* • *IP address translation: private/public* • *Transcoding* • *Support for Microsoft ELIN Gateway and Avaya Personal Profile Manager proxy* • *Session routing based on Microsoft Active Directory query*
Reliability	• *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, access control* • *Registration storm avoidance* • *Call rate limit enforcement* • *Trunk load balancing* • *Stateful session routing* • *QoS-based routing*
Regulatory Compliance	• *Session prioritization for emergency services* • *Internet Engineering Task Force (IETF) standard SIP Recording (SIPREC) interface* • *Call detail records (CDRs) with local or remote storage via RADIUS*

ACME PACKET 1100 E-SBC FEATURES AND CAPABILITIES (CONTINUED)

Feature	Capabilities
Cost Management	• *Least cost routing* • *Codec renegotiation*
Management	• *Browser-based GUI* • *SIP Monitoring and tracing tool* • *SNMP, Syslog, SFTP, RADIUS interfaces*

NETWORK SESSION DELIVERY AND CONTROL INFRASTRUCTURE

Oracle's network session delivery and control infrastructure enables enterprises and service providers to manage the many challenges in the delivery of IP voice, video, and data services and applications.

Distributed enterprises leverage Acme Packet 1100 as a cost-effective, reliable, feature-rich remote office E-SBC that is easy to install and administer.

Service providers leverage Acme Packet 1100 as customer premise equipment (CPE) to enable SIP trunking and hosted communications services. The appliance serves as a flexible and resilient service demarcation point that can be easily managed from the service provider Network Operations Center (NOC).

System Capacity, Performance, and Availability

Acme Packet 1100 supports up to 360 sessions, offers high availability (HA) operation for nonstop service, and supports hardware-assisted transcoding and quality of service (QoS) measurement.

ACME PACKET 1100 E-SBC SYSTEM CAPACITY, PERFORMANCE, AND AVAILABILITY

Capability	Description
Session capacity[a]	• *Up to 360 simultaneous signaled sessions*
Subscriber capacity	• *Up to 5000 registered subscribers(UDP/TCP/TLS)*
HA configuration	• *Active/standby systems (1-to-1 redundancy) with checkpointing of signaling, media, and configuration state for no loss of service*
SRTP capacity	• *Up to 180 call legs*
Transcoding capacity	• *Up to 360 transcoded sessions (with optional hardware assist module)*

a. Performance and capacity vary by signaling protocol, call flow, codec, configuration, and feature usage.

Hardware

Acme Packet 1100 combines remote office session processing and capacity, with the system throughput and redundancy features typically found in higher-end systems. The compact unit can be rack-mounted (1RU), wall-mounted, or installed on a tabletop.

Hardware Options

Onboard Transcoding Module

Acme Packet 1100 supports an optional hardware module for onboard media transcoding. The module offloads processor-intensive functions, enabling high-performance transcoding without compromising end-user quality of experience.

One Port T1/E1 TDM Fallback Module

Acme Packet 1100 supports an optional one port T1/E1 interface module for TDM fallback. In centralized SIP trunking topologies the module preserves voice services in the event of a corporate WAN connectivity failure. In distributed SIP trunking topologies the module preserves dial-out voice services in the event of a local SIP trunk interface failure.

Acme Packet 1100 Specifications

ACME PACKET 1100 E-SBC SPECIFCATIONS

Physical	
Dimensions (not including mounting hardware)	• *Height: 4.45 cm (1.75 in.)* • *Width: 28.57 cm (11.25 in.)* • *Depth: 21.54 cm (8.48 in.)*
Weight	• *1.81 Kg (4.0 pounds)*
Temperature	• *Operating: 32ºF to 104ºF, 0ºC to +40ºC*
Relative humidity	• *Storage: -4ºF to 149ºF, -20ºC to +65ºC*
Airflow	• *10% to 85%, noncondensing*
Chassis	• *Chassis 1U, rack mount, table top, wall mount* • *Rear: Four 10/100 Mbps Ethernet copper ports (RJ-45 connector) dedicated to WAN, LAN and management functions* • *Optional brackets for wall mount or rack mount in 19" racks*
Power and Memory	
External AC power supply	• *Power: 60W, max* • *Voltage: Auto ranging 100-240 VAC* • *Frequency: 50/60 Hz* • *Current: 2A, max* • *Cable: C-13 connector and country-dependent power cords*
Memory	• *32 GB fast mSATA drive for runtime image, backup configurations and local call detail record (CDR) backup*
Hardware Options	
Onboard transcoding module	• *Hardware-assisted transcoding* • *Transcoding supported between any of the following: G.711µ-Law, G.711A-Law, G.722, G.722.2, G.723.1, G.726, G.729 Annex A, G.729 Annex B, (AMR), Global System for Mobile – Full Rate (GSM-FR), Internet Low Bitrate Codec (iLBC), Enhanced Variable Rate Codec (EVRC), EVRC-B* • *T.38 transcoding to/from G.711µ-Law, G.711A-Law only*
One port T1/E1 module	• *One T1/E1 port (RJ48) for TDM fallback, dial-out only*

ACME PACKET 1100 E-SBC SPECIFICATIONS (CONTINUED)

Regulatory	
Regulatory[1,2]	• *Product Safety: UL/CSA 60950-1, EN 60950-1, IEC 60950-1 CB Scheme with all country differences* • *EMC* » *Emissions: EN55022, EN61000-3-2, EN61000-3-3 or EN61000-3-11, EN61000-3-12* » *EN55024* • *Emissions and Immunity: EN300 386*
Certifications[2]	• *North America (NRTL)* • *Japan (VCCI)* • *Korea (KCC)* • *Taiwan (BSMI)*
European Union Directives	• *2006/95/EC Low Voltage Directive* • *2004/108/EC EMC Directive* • *2011/65/EU RoHS Directive* • *2012/19/EU WEEE Directive*

1. All standards and certifications referenced are to the latest official version. For additional detail, please contact your sales representative.
2. Other country regulations/certifications may apply

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CONTACT US

For more information about the Acme Packet 1100, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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