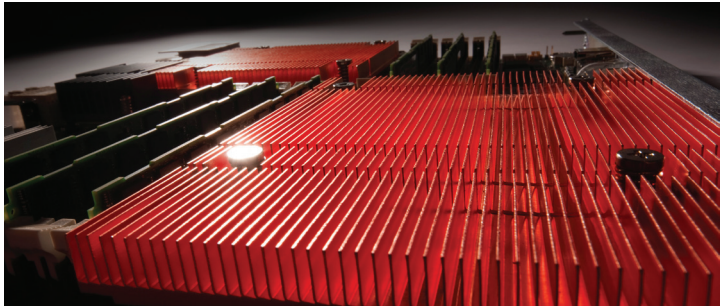


# PERIMETA SESSION BORDER CONTROLLERS

6320 MEDIA SESSION CONTROLLER



- Security
- Policing
- Quality-of-Service
- Accessibility
- Interworking
- Analysis

INFRASTRUCTURES ARE EVOLVING, MESSAGES ARE INCREASING AND TRAFFIC PATTERNS ARE CHANGING. PERIMETA REPRESENTS THE FIRST IN A NEW GENERATION OF SESSION BORDER CONTROLLER (SBC) PLATFORMS CAPABLE OF MEETING THE DEVELOPING ACCESS AND INTERCONNECT REQUIREMENTS OF NEXT GENERATION WIRELINE AND WIRELESS NETWORKS.

## PERIMETA

Purpose-built for distributed deployments within both the control and transport layers of emerging next-generation networks, the Perimeta architecture comprises two distinct components: a Signaling Session Controller (SSC) and Media Session Controller (MSC). Data volumes are intensifying and the relationship between signaling and media is becoming increasingly divided. Conforming to 3GPP specifications for decomposed SBC functions, our unique solution enables independent, cost effective scaling of these critical control elements.

Where consolidation of these individual components is preferred, the Perimeta Integrated Session Controller (ISC) combines both SSC and MSC elements within a single platform, without sacrificing performance or scalability.

## DISTRIBUTED

The 6320 Media Session Controller is specifically designed to handle the rapidly rising data rates and number of IP endpoints in next generation networks. Decoupled from the task of processing an everincreasing number of SIP signaling messages, the MSC is ideally suited for media-rich unified communications environments, where not only wideband audio but bandwidth-intensive high definition video is making up a larger percentage of fixed and mobile broadband calls.

MSC platforms perform the role of an IMS-AGW or Tr-GW function. The MSC is controlled by Metaswitch Perimeta Signaling Session Controllers over a standard H.248 reference interface.

Scaled independently of the signaling controller, Perimeta Media Session Controllers may be either collocated with the SSC function or geographically dispersed around an access network. As the MSC is scaled independently of the signaling controller, network operators can realize significant cost saving when building-out next generation networks.

**PERFORMANCE**

Offered exclusively on a high availability commercial off-the-shelf (COTS) ATCA platform, the 6320 has been designed for performance. Leveraging interrupt mitigation and zero copy packet extraction techniques, the MSC’s multi-core, multi-threaded software architecture delivers superior packet throughput while performing high-touch functions such packet marking and remarking.

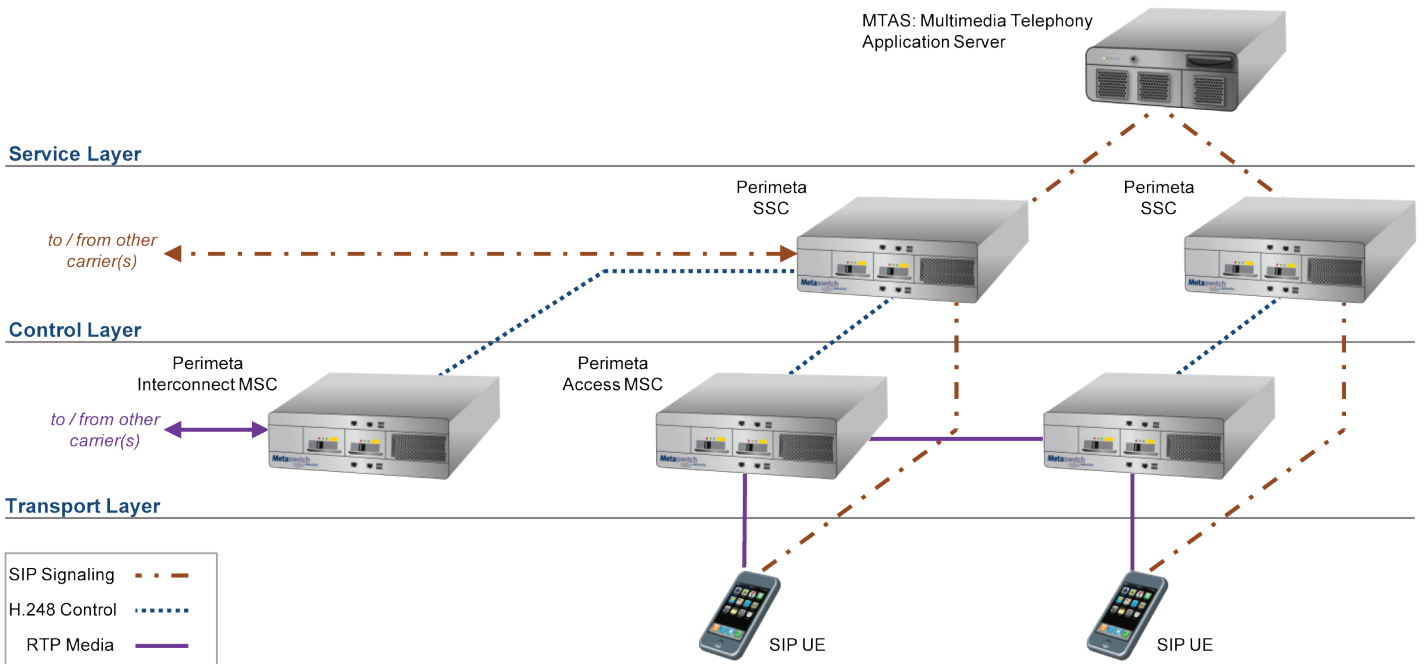
Featuring 1:1 redundancy, a single 6320 MSC can scale to sustain 16,000 concurrent RTP sessions with a combined throughput of 3Gbps. With sub 1ms latency across the platform, a single 6320 can support 1 million busy hour call attempts (BHCA).

**CONTROL**

The Perimeta session control solution provides granular connection admission control and rate limiting; enabling the 6320 MSC to intelligently manage and restrict bandwidth utilization by both interconnect peers and individuals. Critical when maintaining strict quality of service guarantees, the MSC can also read, then mark or re-mark the IP differentiated services code point (DSCP) field. This ensures the expedited forwarding of voice and assured forwarding of video streams by upstream and downstream network switch/router elements.

**ANALYSIS**

Perimeta is the first session border controller platform to export detailed unsampled call quality records to the MetaView Service Assurance Server. Combining these with records collected from other network elements and endpoints, MetaView can provide objective quality of experience measurements while delivering a comprehensive end-to-end view of overall network performance. The 6320 MSC delivers total visibility without degrading router performance or implementing costly network analytics components.



Analysis: Bounce / Ladder Diagram from MetaView SAS

## 6320 MSC SPECIFICATIONS

### PLATFORM

- Perimeta CH6010 ATCA 2-Slot Chassis
- Height: 5.2" / 13.2cm (3RU)
- Width: 19" / 48.3cm
- Depth: 15.5" / 42cm
- Weight: 46.95lbs / 21.3kg
- Power: AC or DC options
- VDC Power: Nominal range -48V to -60V, 18A. (40V to -72V, fused 20A max range)
- VAC Power: 100V to 240V and 8.5A. (90V to 254V range)
- International Network Equipment-Building Systems and Standards (NEBS) compliant
- Service Interfaces: 12 x 100/1000 Ethernet
- Management Interfaces: 2 x 100/1000 Ethernet

### REDUNDANCY

- High-Availability (HA) Chassis
- 1:1 redundant service interface
- 1:1 redundant management interface

### CAPACITY

- 16,000 simultaneous P2P media flows
- 5,300 (MSC 6320) to 13,300 (MSC 6340) RTP/SRTP interworking streams
- 1,600,000 packets per second media throughput

### SECURITY

- Bandwidth policing
- Topology hiding
- SRTP
- Alarm on attack
- Separation of management and data traffic

### SIGNALING & CONTROL

- H.248

### MEDIA

- IPv6-IPv4 Interworking
- QoS and Bandwidth Enforcement
- SRTP-RTP Interworking
- SRTP Pass-through
- DTMF Interworking
- NAT Traversal
- 3GPP IMS-AGW and Tr-GW

### MANAGEMENT

- Command-line interface
- SNMPv2c
- Secured management access (SSH, SFTP, SCP)
- Bulk configuration (configuration cloning, export and restore of configuration snapshot)
- VQM reporting