SuperSonic Session Border Controller

OptimalPath's i720 is a well-tested mid-range platform for enterprises and service providers. The 2RU i720 features OptimalPath's custom hardware design tightly integrated with CentOS Linux to provide the critical controls for delivering trusted, first-class communications voice across IP network borders.

Designed for both smaller service providers and mid-sized enterprises, the i720 platform delivers most of the same functions and features as other high-end platforms. Redundant power supplies that meet NEBS compliance, and a system architecture that leverages OptimalPath's advanced software are just a few of the attributes that make the i720 an excellent choice when reliability and performance are needed for heavy weight production call volumes.

Flexible hardware deployment options include on premise or remotely hosted. Software only deployments are available in the Amazon cloud for lower call volumes.

Multi-Tenant

Extreme power and performance on the SSBC i720 allows for head room that can be partitioned off to a third party or for customers who need to share capacity. Our proprietary software supports Multi-Tenant configuration to resell services on the SBC and partition it with capacity thresholds and throughput caps per tenant.

The SSBC i720 session border controller comes pre-configured for the entire OptimalSuite of products including dynamic routing, reporting and Billing. The SSBC i720 can also run standalone integrating seamlessly with in an existing infrastructure.

Overview OptimalPath SSBC

✓ Carrier-class functionality for both small to large-size systems
✓ Advanced system design delivers robust controls at network borders
✓ Horizontal scalability through server clustering
✓ Stateful High availability and fault tolerance
✓ Live Traffic Monitoring
✓ Enterprise level SBC
✓ Session routing proxy (SRP)
✓ Integrated Cavium Mediacard with Proprietary Microcontroller code written for extreme performance

Key Features

✓ Multi-processor architecture
✓ Supports up to 32,000 signaled sessions per server
✓ Supports standard voice compression codec types
✓ High availability, redundant components
✓ NEBS compliant

Benefits

✓ Cost savings with expected industry functionality
✓ Flexibility: multiple configuration & deployment options
✓ Scale: small to high-end services & applications
✓ Adaptability: wide variety of applications & services

Sessions / Ports

➢ Each call or session takes two ports (one port for in bound media and one port for out bound media)

➢ 64000 Ports per server (scales with server clustering)
➢ 32000 SIP sessions
➢ 32000 calls
➢ Up to 32000 transcoded sessions (based upon codec type) 22000 sessions with typical mix

Call Set-Up

➢ Maximum call setup rate: 700 cps

Media Services

➢ Between 16,000 - 32,000 concurrent calls: with G.711, G.726, G.729A/B, G.723, G.722
➢ Wireline, wireless, wideband and clear channel codec pass through
➢ NAT on media
➢ DTMF Trigger Detection and Notification
➢ Generic audio codec relay

Signaling

➢ Back to Back User Agent (B2BUA)
➢ SIP, SIP-I/ SIP-T
➢ SIP protocol normalization/ protocol repair; SIP message manipulation
➢ NAT on signaling
➢ SIP Compliant with RFC 3261, 3264, 3325, 4457
➢ SIP Signaling Parameterization and Header manipulation
➢ Static & registration based SIP Trunks

Protocol Support

➢ SSH; sFTP
➢ SNMP; NETCONF; NTP
➢ HTTP/HTTPS
➢ RTP/RTCP
➢ UDP, TCP
➢ DNS

Routing

➢ Supports standalone static routing
➢ Optional full featured Dynamic Routing with OptimalRoute. (See the OptimalRoute Data sheet for details)

Security

➢ Session-aware firewall; Topology hiding
➢ Line rate DoS/DDoS and Rogue RTP protection
➢ Line rate malformed packet protection
➢ TLS, IPsec (IKEV1) for signaling encryption
➢ Secure RTP/RTCP for media encryption

Billing

➢ Custom CDR formatting of the SSBC i720 allows for easy integration with existing billing system
➢ Optional Billing Package includes robust, extreme performance billing easily handles up to 100 Million CDRs per hour (See OptimalBill Data Sheet for details)
  o Domestic and international Rating and wholesale Billing
  o Prepaid support (requires custom service work for set up and installation)

OptimalPath

SSBC i720

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