

The E911 Experts.



# Service Provider Emergency Gateway Data Sheet

The Service Provider Emergency Gateway (SP-EGW) is a multitenant platform that enables carriers and service providers using BroadSoft BroadWorks to offer automated E911 management from the cloud. Service providers can automatically administer, update and provision IP phones for multiple tenants, differentiating their offering in the marketplace by providing customers with industryleading E911 capabilities.



# How it Works

When 911 is dialed, the Service Provider Emergency Gateway (SP-EGW) captures the precise location of the caller and delivers it to 911 Enable's Emergency Routing Service (ERS).



- **1.** A 911 call is placed by a user within the tenant's network.
- 2. The 911 call, along with the IP address of the device and/or the tenant location public IP address, are delivered to the service provider's BroadWorks switch.
- **3.** The BroadWorks switch delivers the call to the service provider's SP-EGW. The SP-EGW uses the device IP address and/or the tenant location public IP address delivered along with the call, to determine the location of the 911 caller.
- **4.** The SP-EGW sends the 911 call and the caller's location information to the ERS for call routing.
- **5.** The ERS delivers the 911 call and its location information to the appropriate Public Safety Answering Point (PSAP).

#### Automatic IP Device Tracking

Automatically tracks and assigns locations to tenant IP devices as they move on the corporate network, using layer 3 discovery.

#### **Support for Device Mobility**

Ensures accurate E911 services for employees that move IP devices between locations, share line appearances between multiple devices, and log into IP devices on the fly.

#### Security Desk Routing and Notification

Delivers 911 calls, custom email alerts, and screen pop notifications to tenant on-site security personnel, informing them of the emergency and providing them with the caller's precise location details.

#### Carrier-grade Design

Ensures robust and reliable E911 support with NEBS level 3 redundant hardware and support for segregated voice and management traffic.

#### **Additional Features**

Makes advanced E911 call management and reporting features available to both service providers and their tenants, including 911 misdial protection and call recording, to help improve solution performance and administration.

# **Specifications and Features**

### Software

Operating System	Hardened version of Red Hat Enterprise Linux 5 (RHEL5)
Supported IP-PBX Systems	BroadSoft BroadWorks R16, R17
Telephony	<ul> <li>Signaling Protocols: SIP/UDP, SIP/TCP</li> <li>Payload: RTP/UDP, G.711</li> <li>Capacity: 40 concurrent calls</li> </ul>
Layer 3 Discovery	<ul> <li>Supported Protocols: IPv4</li> <li>Supported Service Provider/Carrier SBC: Acme Packet</li> <li>Supported Service Provider/Carrier Customer SBC: Acme Packet, Edgemarc, or any other SBC that supports adding P-Access-Network-Info header</li> </ul>
Capacity	<ul> <li>Maximum ERLs: 1,000,000</li> <li>Maximum endpoints: 1,000,000</li> <li>Maximum number of IP-PBX servers: 64</li> </ul>
Alerting Capabilities	<ul> <li>Crisis Alert Email - includes time, location, and callback number of caller</li> <li>Security Desk Direct Call Delivery</li> <li>Three-way call monitoring with PSAP (includes mute/ unmute capabilities)</li> <li>Pop-up screen (requires Desk Alert software)</li> </ul>
Redundancy	<ul> <li>Deployed in redundant pairs</li> <li>Hot Standby Mode</li> <li>Load Balancing Mode</li> </ul>
Reporting	<ul> <li>Call Detail Records - includes location data information, exportable as CSV or flat text file</li> <li>Call Recording (wav file format)</li> <li>Emergency Response Location Reports</li> <li>Test Call status</li> <li>Integration with third-party private ALI systems</li> </ul>
Provisioning	<ul> <li>Real-time Address Validation Tool (requires ERS)</li> <li>ERL batch file provisioning (FTP)</li> <li>ERL using real time web services (SOAP/XML)</li> <li>Tenant provisioning using real time web services (SOAP/ XML)</li> <li>Network map provisioning using real time web services (SOAP/XML)</li> </ul>
Operation and Maintenance	<ul> <li>Email alerts and alarms</li> <li>Syslog support</li> <li>Active monitoring</li> <li>SNMP (hardware events only)</li> <li>Test mode</li> <li>Encrypted web-based interface</li> <li>Pre-configured user access levels</li> </ul>
Additional Features	<ul> <li>Misdial protection</li> <li>Integration with third-party ALI systems</li> <li>Support for multiple dial plans</li> <li>NENA 2 report generation with ELIN filtering options</li> <li>Configurable digit manipulation for incoming DIDs</li> </ul>

## Other

Product Number	HW911-EGWCEA - EGW hardware plus 2,500 user license     SW911-EGWALF - 2,500 additional user license
Package Contents	<ul> <li>Two (2) preconfigured EGW appliances</li> <li>Two (2) rack mount hardware kits</li> <li>Two (2) 911 Enable red front bezels</li> <li>Hardware support guides</li> </ul>
Licensing	<ul> <li>Perpetual License to run on EGW hardware</li> <li>2,500 base user license plus additional user licenses to an unlimited number of users</li> </ul>
Maintenance/ Support	Includes one (1) year maintenance and support
Documentation	<ul> <li>EGW System Guide (Planning and Configuration)</li> <li>EGW Networking Interface Description</li> <li>911 Enable Product Support Policies</li> </ul>

## Hardware

Form Factor	•	2U rack
Primary Processors	•	Quad Core Intel® Xeon® X5650, 2.66Ghz, 12MB Cache, Turbo, HT, 1333MHz Max Mem
Additional Processors	•	Quad Core Intel® Xeon® X5650, 2.66Ghz, 12MB Cache, Turbo, HT, 1333MHz Max Mem
Memory	•	12GB (6 x 2GB), 1066MHz, Dual Ranked LV UDIMMs
Primary Hard Drive	•	146GB, SAS, 2.5in Hotplug, 15K RPM
Secondary Hard Drive	•	146GB, SAS, 2.5in Hotplug, 15K RPM
Primary Controller	•	RAID Controller PERC6/i
Network Adapter (Voice Traffic)	•	Dual Embedded Broadcom* NetXtreme II 5708 Gigabit Ethernet NIC
Network Adapter (Management Traffic)	•	Dual Embedded Broadcom <sup>*</sup> NetXtreme II 5708 Gigabit Ethernet NIC
Hard Drive Configuration	•	Integrated SAS RAID 1
Management Network Adapter	•	Remote Management Embedded Ethernet NIC
AC Power Supply	•	Redundant power supply
	•	BTU total: 1614 BTU/hr
	•	Power draw: 473W
DC Power Supply (optional)	:	Redundant NEBS power supply -48V DC
	:	BTU total: 1770 BTU/hr
Podundancy		
Reduitancy	•	Can be deployed at separate data centers
Chassis Configuration	•	Rack Chassis with Sliding Rails, Universal
Chassis	•	2U Rack-mountable chassis 26.80" (68.07cm) D x 17.44" (44.31cm) W x 3.40" (8.64cm) H without bezel attached Rack Weight 57.54 lbs (26.1 Kg) Gray Chassis Red front bezel
Chassis Ports	•	2U Rack-mountable chassis 26.80" (68.07cm) D x 17.44" (44.31cm) W x 3.40" (8.64cm) H without bezel attached Rack Weight 57.54 lbs (26.1 Kg) Gray Chassis Red front bezel Rear: 2 x UISB 2.0 ports 2 x Dual R I-45 connectors 1 x
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Chassis Ports Environmental	· · · ·	<ul> <li>2U Rack-mountable chassis</li> <li>26.80" (68.07cm) D x 17.44" (44.31cm) W x 3.40"</li> <li>(8.64cm) H without bezel attached</li> <li>Rack Weight 57.54 lbs (26.1 Kg)</li> <li>Gray Chassis</li> <li>Red front bezel</li> <li>Rear: 2 x USB 2.0 ports, 2 x Dual RJ-45 connectors, 1 x</li> <li>RJ-45 connector for Remote Access</li> <li>Front: 2 x USB 2.0 ports</li> <li>Temperature: <ul> <li>Operating: 10°C to 35°C (50°F to 95°F) with a maximum temperature gradation of 10°C per hour</li> <li>Note: For altitudes above 2950 feet, the maximum operating temperature is derated 1°F/550 ft</li> <li>Storage: -40° to 65°C (-40° to 149°F) with a maximum temperature gradation of 20°C per hour</li> <li>Relative Humidity: <ul> <li>Operating: 0% to 80% (noncondensing) with a maximum humidity gradation of 10% per hour</li> <li>Storage: 5% to 95% (noncondensing) with a maximum humidity gradation of 10% per hour</li> <li>Storage: 5% to 95% (noncondensing) with a maximum humidity gradation of 10% per hour</li> <li>Storage: 1.54 Grms at 10 - 250Hz in all orientations</li> <li>Storage: 1.54 Grms at 10 - 250Hz in all orientations Maximum Shock:</li> <li>Operating: Half sine shock in all operational orientations of 31G +/- 5% with a pulse duration of 2.6ms +/-10%</li> <li>Storage: Half sine shock on all six sides of 71G +/- 5% with a pulse duration of 2.76 with velocity change @</li> </ul> </li> </ul></li></ul>
Chassis Ports Environmental	· · · ·	2U Rack-mountable chassis 26.80° (68.07cm) D x 17.44° (44.31cm) W x 3.40° (8.64cm) H without bezel attached Rack Weight 57.54 lbs (26.1 Kg) Gray Chassis Red front bezel Rear: 2 x USB 2.0 ports, 2 x Dual RJ-45 connectors, 1 x RJ-45 connector for Remote Access Front: 2 x USB 2.0 ports Temperature: - Operating: 10°C to 35°C (50°F to 95°F) with a maximum temperature gradation of 10°C per hour - Note: For altitudes above 2950 feet, the maximum operating temperature is derated 1°F/550 ft - Storage: -40° to 65°C (-40° to 149°F) with a maximum temperature gradation of 20°C per hour Relative Humidity: - Operating: 0% to 80% (noncondensing) with a maximum humidity gradation of 10% per hour - Storage: 5% to 95% (noncondensing) with a maximum humidity gradation of 10% per hour - Storage: 5% to 95% (noncondensing) with a maximum humidity gradation of 10% per hour Asimum Vibrations: - Operating: 0.26 Grms at 5 - 350Hz in operational orientations - Storage: 1.54 Grms at 10 - 250Hz in all orientations Maximum Shock: - Operating: Half sine shock in all operational orientations of 31G +/- 5% with a pulse duration of 2.6ms +/-10% - Storage: Half sine shock on all six sides of 71G +/- 5% with a pulse duration of 2 ms +/-10% Square wave shock on all six sides of 27G with velocity change @ 235 in/sec or greater Altitude: - Operating: -16 to 3048m (-50 to 10,000ft) - Note: For altitudes above 2950 feet, the maximum operating temperature is derated 1°F/550 ft.
Chassis Ports Environmental	· · · ·	<ul> <li>2U Rack-mountable chassis</li> <li>26.80" (68.07cm) D x 17.44" (44.31cm) W x 3.40"</li> <li>(8.64cm) H without bezel attached</li> <li>Rack Weight 57.54 lbs (26.1 Kg)</li> <li>Gray Chassis</li> <li>Red front bezel</li> <li>Rear: 2 x USB 2.0 ports, 2 x Dual RJ-45 connectors, 1 x</li> <li>RJ-45 connector for Remote Access</li> <li>Front: 2 x USB 2.0 ports</li> <li>Temperature: <ul> <li>Operating: 10°C to 35°C (50°F to 95°F) with a maximum temperature gradation of 10°C per hour</li> <li>Note: For altitudes above 2950 feet, the maximum operating temperature is derated 1°F/550 ft</li> <li>Storage: -40° to 65°C (-40° to 149°F) with a maximum temperature gradation of 20°C per hour</li> <li>Relative Humidity: <ul> <li>Operating: 0% to 80% (noncondensing) with a maximum humidity gradation of 10% per hour</li> <li>Storage: 5% to 95% (noncondensing) with a maximum humidity gradation of 10% per hour</li> </ul> </li> <li>Storage: 1.54 Grms at 10 - 250Hz in all orientations Maximum Shock: <ul> <li>Operating: 0.31G +/- 5% with a pulse duration of 2.6m s+/-10%</li> <li>Storage: Half sine shock on all six sides of 71G +/- 5% with a pulse duration of 2.8m s+/-10% Square wave shock on all six sides of 27G with velocity change @ 235 in/sec or greater</li> </ul> </li> <li>Altitude: <ul> <li>Operating: -16 to 30.48m (-50 to 10,000ft)</li> <li>Note: For altitudes above 2950 feet, the maximum operating temperature is derated 1°F/550 ft.</li> </ul> </li> </ul></li></ul>



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