brainbox
BY
graymatter
NETWORKS

RESPONSIVE TELECOMMUNICATION SERVICES WITH ADAPTABLE FEATURES

BrainBox by GrayMatter Networks is a software-based PBX system tailored for the hospitality industry. Designed specifically for hotel communications, BrainBox offers a no-license model that significantly reduces costs while enhancing operational efficiency.

PURPOSE

Our innovative approach ensures complete phone call ownership from handset to termination, empowering hotels with unmatched control and reliability. BrainBox solves all of your PBX issues with exceptional flexibility and the ability to add and remove features according to your needs.

DESCRIPTION

We offer solutions that guarantee a no-license model reducing costs by 40-60%, a single vendor for end-to-end communications, tailored solutions for your property, devoted and passionate support, stability and ease of use which saves time in operations.

YOUR SYSTEM GETS SMARTER WITH A BRAIN

Voicemail Configuration/IVR/Caller ID, Company Directory Support-Ready
Call Flow Control
Softphone Client-Capable

4PRI Server Chassis
BrainBox Base Software
PRI-SIP Trunk
Direct In Dial (DID) Line

Circuit Mapping & Provisioning
Black2Back™ Failover
Voicemail Setup & Configuration
Bucket Routing
Least Cost Routing
Enhanced Notification*
Gate Routing*

* These features are enabled using BrainBox with proper coordination and access to legacy switching platforms.

228 East Route 59 Suite #146, Nanuet, NY 10954
+1 646.401.0830
sales@graymatternetworks.com

HARDWARE DESCRIPTION

The BrainBox on-prem platform is a compact network appliance designed to function as a firewall, router, and virtualization platform. It is especially suitable for high packet rates required by VoIP and firewall applications. Featuring four 2.5 G network ports, it runs on a low-power yet versatile Intel Celeron J6412 CPU, which supports AES-NI for hardware-accelerated encryption.

The BrainBox SFF (Small Form Factor) uses standard Intel components, including Intel network ports, ensuring compatibility with various operating systems that make up the BrainBox solution. Its fanless design means there are no moving parts, making it extremely durable and suitable for challenging environments. The all-aluminum enclosure acts as a large heat sink, effectively keeping the CPU cool without the need for plastic components.

SYSTEM ARCHITECTURE

The BrainBox module is a FreePBX-based module designed to integrate seamlessly with Sangoma's FreePBX ecosystem. When installed on FreePBX versions 15 and 16 (with support for version 17 comping soon), it provides hospitality features such as PMS Interface, Call Accounting, Hospitality Voicemail, Hospitality Wake Up Call, and more.

This software solution, built on Linux (currently Centos, with version 17 on Debian), Mysql, Asterisk, Apache and PHP, is hardware agnostic. It can run on off-the-shelf hardware, including all popular virtualization platforms.

SECURITY PROFILE

At GrayMatter Networks, we strongly believe in the "zero footprint" security profile. Our system is designed with no Internet exposure, eliminating the need for external IP addresses or NAT/PAT. Upon bootup, the BrainBox establishes SSL-based VPN tunnels to Graymatter Network's colocation facilities. All functionalities, including updates, management, monitoring, SIP, and RTP, operate through these secure tunnels. This service leverages the customer's WAN connectivity and includes a secured backup 5G/LTE WAN connection through our partners.

Hotel staff are granted minimal access, limited to what is necessary for their roles. We continuously reinforce our security policies with our support team through training schedules, monitoring access, and a zero-trust approach. Access to hotel, guest, and employee personally identifiable information (PII) and proprietary information is strictly controlled.