

eApps builds highly available OnApp cloud for AGENT511

Distributed TEXTBLUE hosting helps U.S. emergency services get the message

Founded in 1996, eApps® Hosting has evolved into a premier provider of application hosting services for clients across the public and private sectors. One such customer is AGENT511, whose TEXTBLUE platform enables U.S. citizens to get help from emergency services via text and multimedia messages – vital for people who are unable, or for whom it is unsafe to make a phone call.

"Text-to-911" capability is becoming more and more widespread, and is actively encouraged through legislation from the FCC, America's Federal Communications Commission.

AGENT511's TEXTBLUE platform aggregates SMS and MMS messages to emergency services, from any phone or network and performs geospatial location routing to the most relevant 911 center.

Critical application hosting

Hosting such a critical system demanded the highest availability possible, and AGENT511 turned to eApps, an Atlanta-based managed service provider, to design the right solution.

The OnApp cloud platform has been a core component of eApps solutions since 2011, and once again provided the foundation of the distributed cloud environment that eApps designed for AGENT511's TEXTBLUE platform.

"Every client's needs are different, and over the last ten years we've worked closely with AGENT511 to deploy a number of critical communication services," said Richard Lingsch, president of eApps Hosting. "For the TEXTBLUE project, our focus was on extremely high availability, which was vital owing to the nature of the application, and we worked closely with AGENT511 teams to design the right solution around our OnApp cloud infrastructure."

eApps designed and delivered an ultra-robust distributed hosting solution for TEXTBLUE using the OnApp cloud platform as the core of the system, combined with Percona XtraDB Cluster, for database synchronization, and an independent Cloud Load Balancer from Total Uptime Technologies. This 'best of breed' approach was essential to ensuring high availability and scalability of the system.



AGENT511

OnApp products: OnApp Cloud platform

OnApp client: eApps - Managed Service Provider

End user client: AGENT511

Use case: High availability application hosting

Summary: eApps uses OnApp as the core of a

distributed, highly available cloud environment for AGENT511's 'Textto-911" application, TEXTBLUE



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Richard Lingsch President, eApps Hosting

Cloud automation and resilience

The OnApp cloud platform handles the provisioning, operation, administration, and communication between the various web, application, database and security components that make up TEXTBLUE. At the server level, OnApp automates resource allocation and enables autoscaling to ensure TEXTBLUE components are running at peak efficiency; and through OnApp's automatic failover and recovery systems, ensures that the core compute and storage infrastructure for TEXTBLUE is highly redundant and resilient.

"The TEXTBLUE application uses Java, MySQL, and security technologies on standard Linux servers," says Lingsch. "AGENT511 can deploy and configure their application quickly using OnApp's intuitive user interface, with essential cloud automation and uptime taken care of by the OnApp platform. In addition, OnApp simplifies the way we manage the infrastructure for TEXTBLUE, making it easy for us to standardize and clone core server technologies, to ensure accuracy and consistency of deployment."

Adding geographic redundancy

For true high availability, however, the TEXTBLUE cloud environment also required geographic redundancy, and the eApps solution uses cloud load balancing and advanced data synchronization technologies to replicate the TEXTBLUE platform across multiple locations. This architecture ensures resiliency while creating a seamless experience for AGENT511's agency partners.

"TEXTBLUE is currently hosted at our datacenters in Atlanta, Georgia and Richmond, Virginia. This is an active/active configuration, which means that the data is current in both locations", says Lingsch. "Being able to scale to additional locations was another important requirement: if AGENT511 wants to increase geographical redundancy, we have to be able to host across additional datacenters while maintaining synchronous replication."



"AGENT511, in partnership with eApps over the last ten years, has deployed numerous critical communication services that allow utilities, enterprises, and public safety agencies to cost-effectively connect with their constituents.

Cloud load balancing, with geographic spanning, ups the ante by maximizing technical design flexibility and redundancy."

Jay Malin Founder and managing director, AGENT511

Since deployment, hundreds of text messages have been received, including urgent service requests such as domestic violence, and alerts about persons of interest. With the scalable, highly available cloud solution created by eApps, AGENT511 is able to support mission-critical public safety services, and is keen to support other agencies who are moving to adopt text-based communications.

For more information, visit: **eapps.com**, **agent511.com** and **onapp.com**



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