



How PRTC Secured Their CAD/AVL System in the Cloud

Potomac & Rappahannock Transportation Commission (PRTC)

Bus

Vontas OnRoute
Vontas Cloud

“As far as our customers go, we should always be giving them top-of-the-line service. To be able to get their information faster, our customer service agents and our dispatchers should be able to manage the buses and keep our on-time performance at a high level.”

Carl Roeser,
Manager of Information
Technology, PRTC

Background

Potomac & Rappahannock Transportation Commission (PRTC) needed an upgrade for their Vontas OnRoute (formerly TransitMaster) CAD/AVL system and recognized the value of migrating their infrastructure into Vontas Cloud. Vontas helped them accomplish this on schedule over the span of six months.

“The main driver was I wanted to get off of on premise servers” and “it was time to get OnRoute to the Cloud,” said Carl Roeser, Manager of Information Technology. “Along with that, we were in desperate need of an upgrade so it seemed like the natural thing to do: move to the cloud and throw an upgrade on top of it.”

This was PRTC’s first implementation with Vontas and it went very well. “Better than I had anticipated,” and better than other projects, according to Roeser.

With a new upgrade comes new training, which was met with a positive reception among the dispatchers. Roeser highlighted the enthusiasm among them at the new features and benefits.

“It really put a sense of newness to it,” said Roeser. “A tool that they can really use and know how to use.”

Donicia Thornton, Dispatcher for PRTC, praised the map on the new version as one of her favorite features. “It’s more intricate and there’s a lot more things that you can do and I’m learning to do,” said Thornton.

“I do like that it helps us find buses a lot easier. It gives us a lot more information which is a big help, especially if someone is lost or anything like that.”

Keeyanah Sims, Transit Application Specialist for PRTC, believes the upgrade and migration to cloud was a great benefit. “We never had this many people actually use the system or eager to try to use it and they are using it now. I receive less calls from customer service about OnRoute. Less calls from dispatch, believe it or not.”

Challenges

Before the upgrade and cloud migration, one issue PRTC faced was getting the buses to download files. According to Joy Walker, Transport Planner, “they had to be in the yard and they have to be close to the antenna and if one was off-site, it didn’t get the files until it was brought back to the yard.”

“Now one of the greatest things is that we can drop files on buses wherever they are: they could be on route or at a shop down in Florida. As soon as it hooks up to the internet, it gets the files.”

This type of immediacy is also useful for announcements. Walker detailed a situation where a recorded announcement needed to be fixed. In the past, it would’ve taken at least two days to get off the bus. “But when we moved to the cloud,” said Walker, “we were able to get it off the buses that afternoon so that people that heard the announcement in the morning did not hear it in the afternoon when they were coming home.”

Moving Into the Vontas Cloud

With Vontas Cloud, PRTC opted for the Disaster Recovery option, giving them the ability to achieve higher availability and contribute to their overall business continuity strategy.

Ryan Goff, Cloud Architect at Vontas, elaborates on this process further: “Microsoft Azure has deployed many regions or data centers across North America, allowing for flexible deployment. Vontas works with PRTC to determine the best region pair that offers optimal deployment and latency for their business.”

Vontas provides several cloud native services to assist with delivering a Disaster Recovery solution:

- Azure Site Recovery is a native Disaster Recovery as a service (DRaaS) which offers ease of deployment, cost effectiveness, and dependability. This service replicates the Virtual Machines running the workstation and server components.
- Azure SQL Managed instance offers Failover Groups which replicates databases from one region to another and allows for instant failover with minimal impact to the applications.
- Azure Entra ID Domain Services offers replicates to ensure that authentication is available at both regions.
- Virtual Private Network (VPN) Gateways and Firewalls are deployed to each region which ensures successful connectivity for the fleet and on-premises services requiring remote access; such as integration with third party products.

Microsoft Azure has many offerings and services that are cost efficient and highly available and secure, which allows agencies to focus on their business rather than infrastructure.

Results

PRTC’s riders will receive information more quickly than before. “Now that OnRoute is in the cloud,” said Walker, “it is easier for our dispatchers to access so they are using it more frequently, which provides better real-time information to our passengers.”

“As far as our customers go, we should always be giving them top-of-the-line service,” said Roeser. “To be able to get their information faster, our customer service agents and our dispatchers should be able to manage the buses and keep our on-time performance at a high level.”