A New Dragon Takes Speech Recognition Tech to the Cloud

Officers now have a thin client option for creating voice-to-text documentation that will increase efficiency and the efficacy of their incident reports.

Many officers rely on technology, like smart speakers, in their personal lives to turn on lights, play music, or review their grocery lists. With the release of Nuance Communication's Dragon® Professional Anywhere, officers will use robust cloud-based speech recognition technology — powered by artificial intelligence — to efficiently complete and share reports.

The time was right to launch a cloud-based product for law enforcement, explains Michael Millward, Senior Product Manager at Nuance.

"Consumer-based voice applications and smart speakers have driven awareness and acceptance of speech recognition in the workplace, especially with cloud-based solutions," he says. "We see this technology as a key enabler to drive adoption of, and extend existing investments in, enterprise business and law enforcement applications."

Dragon Professional Anywhere takes over where Dragon Law Enforcement leaves off. Dragon Law Enforcement provides officers with a fast, accurate way of using their voice to complete reporting and documentation tasks in the squad car and at the police station. With Dragon Professional Anywhere, agencies can now more easily deploy speech recognition technology at scale across the organization while saving IT departments time and resources. Dragon Professional Anywhere moves speech recognition from a "fat client" (local device-based) installation to a thin client (cloud-based) installation.

"We now offer agencies a choice of how to deploy and access Dragon software," Millward says. Agencies choose from a device- or cloud-based installation, each of which works well in specific use cases. As the U.S. builds out 5G networks and more agencies access FirstNet, now is the ideal time for law enforcement agencies to take advantage of Dragon Professional Anywhere to easily and quickly fulfill reporting requirements."

Benefits of a Cloud Solution

Because Dragon Professional Anywhere proactively pushes out updates, officers always use the latest software version. This is often not the case with local installations where IT staff must install updates with device-based software; a step that sometimes gets overlooked in the busy law enforcement environment.

"Agencies may have officers working with multiple versions of the software," Millward says. "When this happens, some officers may have access to features others do not. Also, software administration can be more cumbersome with device-based software, as updates must be made at the individual client level. This challenge is effectively addressed with a cloud-based option because everyone automatically receives the latest version.

"Using Dragon Professional Anywhere allows agencies to reduce capital expenditures because they are not purchasing hardware and back-end servers. We take care of that for you."

Agencies pay a predictable monthly rate, which is beneficial for agencies with limited budgets.

Dragon Professional Anywhere installs within minutes with a single click. Because the speech processing happens through the secure cloud platform, minimal data gets loaded onto the officer's mobile data computer—saving computer processing power and hard drive space.

"With Dragon Professional Anywhere, the RAM consumption is negligible because you utilize the processing power of our cloud servers instead of using your local system's resources, which then sends the resulting text back to your desktop within seconds," explains Millward.

Dragon Professional Anywhere relies on 256-bit encryption to secure data in transit and at rest. And the Microsoft Azure platform on which this solution is hosted features 99.5% uptime and runs on geographically dispersed, redundant (active-active), data centers.

And with the Nuance Management Center, it takes just seconds to create a new form and push it out. "Imagine being able to distribute the latest form to 500 officers instantly," Millward says. "You no longer have to worry from a version control perspective; you know every officer has the right form."

Officers Use Smartphones to Dictate Critical Information

Dragon Professional Anywhere is bundled with Dragon Anywhere Mobile, a professional-grade dictation tool for iOS and Android devices, enabling officers to use their smartphones and tablets to capture critical information on-scene.

"Patrol officers and detectives no longer need to take notes by hand, then dictate them into Dragon Law Enforcement once they are back in their patrol car or at the station," Millward says. "Once officers begin to dictate, they capture narratives with immediacy, all while gathering detail they might miss if they wrote it out by hand or were recalling from memory. This is particularly critical when providing incident reports to prosecutors or for investigations, as officers may not know at the scene which particular detail will prove relevant weeks or months down the road. Hence, the ability to capture more details while fresh in their minds is critical."

With officers able to dictate from the field, Nuance understands the need to synchronize customizations between Dragon Professional Anywhere and Dragon Anywhere Mobile. Because Nuance hosts both applications in Microsoft Azure, the system automatically syncs customizations — like an AutoText of a specific form — created on an iOS or Android device and makes the same customization available using Dragon Professional Anywhere on a Windows client. Dragon Anywhere Mobile also allows officers to easily share information with fellow officers via email or other cloud-based sharing apps, like Microsoft OneDrive or Dropbox.

Customized for Law Enforcement

Dragon Professional Anywhere gives officers secure access to a custom language model specific to law enforcement, enabling them to dictate a narrative and auto-populate forms with the vocabulary they need. "This is speaker-dependent technology, which means Dragon gets to know your voice — and just your voice—and this continues to improve accuracy the more you use it," Millward says. "Therefore, you don't share your license with anyone else. Consumer-based apps work great for short, simple requests (like looking up the weather) from multiple users, but officers must create long narratives with specialized vocabulary, making the high accuracy afforded by speaker-dependent technology essential."

Adding a Nuance PowerMic III with Dragon Professional Anywhere increases convenience and accuracy by ensuring clear speech is transcribed with accurate detail. The tool is both a mouse and a noise-canceling microphone with familiar "push to talk" functionality.

Dragon Law Enforcement and the PowerMic III expedite reporting and documentation tasks, all while keeping officers safer while working in their patrol cars. Dragon Professional Anywhere takes things a step further by simplifying the acquisition, deployment, and administration of enterprise-grade speech recognition technology, enabling officers to efficiently dictate and edit reports wherever they go.

To see a demo of Dragon Professional Anywhere in action and hear more from Dragon technical expert, Michael Millward, register for our webinar *Speech Recognition Tech Extends How Officers Can Be Productive Anywhere* on August 20, 2020, at

https://event.webcasts.com/starthere.jsp?ei=1349811