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## **NEW ORLEANS-AREA 911 CENTER INKS MULTIYEAR APEX DEAL WITH CARBYNE TO REPLACE CALL-HANDLING SYSTEM**



*Written by Donny Jackson – 12th June 2021*

Orleans Parish Communications District (OPCD), one of the largest 911 centers in the U.S., will replace its existing call-handling system with APEX, the cloud-native call-management platform from Carbyne to integrate many next-generation 911 (NG911) capabilities within the normal call-flow process, according to an OPCD official.

OPCD Executive Director Tyrell Morris said the New Orleans-area 911 center has been using an over-the-top, cloud-based Carbyne product to augment the voice-centric call-taking system with multimedia functionality, but the APEX platform also will handle emergency voice calls.

“Right now, we’re using [Carbyne] Universe product, which sits on top of the existing call-handling solution,” Morris said during an interview with IWCE’s Urgent Communications. “The Carbyne solution that we use today does not actually deliver the live 911 call; we manage that in a different system.

“What APEX will do is it will replace our call-handling solution, so we will actually be delivering the physical 911 call from the network to Carbyne to deliver it to our call-takers. All of that functionality that we have had on top of that existing platform will be integrated into one single solution—enhanced data, connected vehicles, audio transcription in real time.”

Migrating to the APEX call-management system means OPCD telecommunicators only will have to view one system on their screen, instead of the split-screen environment that have today, Morris said. Adopting the cloud-native APEX platform also is expected to make the 911 center more reliable, particularly under the most trying circumstances, he said.



"This is a 100% cloud-based solution, which makes the resiliency of the center itself incredibly strong," Morris said. "With on-prem solutions, the risk you run is that, if something happens to this building, [we have] to bug out to a backup center that doesn't have all of the infrastructure, and we lose some functionality—at our backup center, we lose the ANI/ALI functionality that we would have on site.

"After we move to Carbyne, when we do move to a backup center or open a second center for any large events, we can maintain the same level of functionality, so there's no degradation in service."

Moving to the APEX platform also makes financial sense. OPCD will incur one-time costs associated with installation of a new system, but the annual costs should result in savings over the life of the multiyear deal, particularly when maintenance factors are considered, according to Morris.

"Since this is hosted solution, we just have to provide a computer and an Internet connection," he said. "The other [on-premise call-handling] solutions get very expensive, because we have to maintain hardware and servers, and we have to constantly update those things. All of that is managed by Carbyne now.

"So, I'm saving some money on the maintenance side and from the human-capital side, where my technology team on site can focus on pieces of other mission-critical solutions or technology, as opposed to the call-handling software and network."

Morris expressed confidence that the APEX platform would be operational by the end of the year. OPCD personnel are beginning user testing of the system as the center wrestles with some work-flow questions that the 911 industry has debated for years in anticipation of NG911 capabilities.

"To be honest with you, this is one element that we're learning together," Morris said. "When you start presenting live video and pictures to a 911 call-taker, the industry hasn't quite figured out what is the best way to handle that data to really protect the call-taker.

"Do we let the call-taker see the video, or do we have a specially trained data analyst in a separate position looking at all multimedia? Those are uncharted waters for the industry, so we're being very responsible, as far as how we do that. So, a lot of this user testing will help us make those decisions about what is the best operational decision to not only increase maximum efficiency for the incident but also protect the mental health of our staff."

Moti Elkaim, Carbyne's head of marketing, said the APEX platform was developed with the idea of simplifying the call-management process as much as possible. In addition to being able to receive communications from the public, the enhanced data can be populated automatically into any computer-aided-dispatch (CAD) system through Carbyne's open API.

"The less action that we can have the call-taker perform, the easier it is for the call-taker, so one of the core capabilities for APEX is to integrate with the CAD, in order to get all of that information translated immediately," Elkaim said during an interview with IWCE's Urgent Communications.



Carbyne already has a deal to have its rich data sets automatically populate into CentralSquare CAD systems, and the company is in discussions with other CAD vendors in an effort to reach similar agreements, Elkaim said.

In addition to integrating with CAD systems, APEX also is designed to make it easier for telecommunicators to make rich data information available to responders in the field.

"You have the ability to share the information from APEX—whether it is the video, the location or the chat—that the call-taker is seeing with the first responders," Elkaim said. "By simply sending them a link to their tablet, iPhone or MDTs [mobile data terminals] out in the field, they'll now be able to passively view everything that the call-taker is managing.

"They won't be able to manage it, because the call-taker owns the management of the call. But imagine an officer coming onto a shooting scene or a very complex incident where they have a visual of the event before approaching. We've actually seen a lot of use cases for our video by EMS. They were able to provide medical support even before arriving on site—even treatment, literally—before they arrive through our solutions."

Carbyne has its APEX platform hosted in the AWS GovCloud and Microsoft Azure environments and is flexible enough to work in both traditional and NG911 environments that leverage IP-based ESInet architecture, Elkaim said.

"This can be deploy in an ESInet or non-ESInet state. We can do it as a full cloud, as a semi-cloud—kind of a hybrid, where we can rely on your existing network if you do not have an ESInet yet, like we've done in Fayetteville, Georgia," Elkaim said, noting that the OPCD will be a "full cloud" deployment.

Carbyne's goal in developing the APEX platform was to provide many key NG911 capabilities to 911 centers in their current environments, instead of waiting for the deployment of ESInets and new equipment on site, according to Elkaim.

"Everything you wanted [from NG911], you've got with APEX," he said. "There's a saying that we like to say: 'Carbyne is delivering on the industry's promise.'

"We've been talking about next-generation 911 for a decade. We need text-to-911. We need NLP [natural language processing]. We need video. We need chat. We need accurate location. Well, it's in your hands right now [with Carbyne APEX]—we've delivered on the industry's promise ... It's here, it's operating and it's working. It's not PR hype."

In addition to the New Orleans-area 911 center, Carbyne's APEX platform already is fully operational in Fayetteville, Ga., and will be deployed "in multiple agencies" by the end of the year, Elkaim said. Directors of call centers are embracing the capabilities that APEX enables, he said.

"APEX is a cloud call-management solution that—for the very first time—allows call centers to have the one-screen-fits-all tool that unifies into it rich data, including live video from the caller, instant chat, text to 911, natural language processing that provides captions with translation from the caller, in case the call-taker cannot hear very well—all into a single UI (user interface)," Elkaim said.



Our thought process behind APEX is that we've heard and we've seen from the industry for so long that each and every company that develops a solution is working in a silo. What happens is that, at the end of the day, a call-taker is facing a station with more and more screens added to it, because each screen represents a product."

This more holistic approach to emergency communications from the public is what Carbyne officials describe as call management, which the company distinguishes from call management, according to Elkaim.

"Really, what [legacy systems] are doing is call-taking—the only input from the caller to the call-taker is verbal, through the call-handling system," he said. "With APEX, we have the ability now to send them a link, get their location—with their permission, of course—and start an instant-chat or video session with them. We have the ability to do the same for 311 calls, admin calls, emergency calls—any type of call that is coming into the center.

"Now, APEX not only quadruples the channels of communications that the call-taker has with the caller, it also has the ability to get all these essential life-saving tools in any type of calls in the 911 center ... We want to make sure that the call-takers have the right tools at their disposal when they need to use them to save lives."