

CAPGEMINI AND AWS

DELIVER A SCALABLE SOLUTION FOR AN UNPRECEDENTED TIME



The North Carolina Department of Commerce, Division of Employment Security (DES) has a critical mission: administering unemployment benefits to claimants across the state who have lost employment due to no fault of their own. In an average year, DES receives about 3,000 new claims a week through its website and a customer call center.

Handling the pandemic influx

At the onset of the pandemic in March 2020, DES experienced a massive increase in claims as businesses shut down throughout North Carolina and the rest of the country.

"We had an unprecedented surge in claims. On a single day in April, we received 55,000 claims, which was around one-third of our volume in an entire year," says Raju Gadiraju, Chief Information Officer of the Division of Employment Security. "We went from less than 200,000 claims the prior year to more than a million claims in a few months. This posed two distinct technology challenges: platform scaling and rapid business/IT operations scaling."

The division realized it needed more scalable claims and callcenter solutions to ensure it could process the large number of claims, pay people on time, and detect and prevent fraud.

DES engaged Capgemini to deploy a modernized technology solution that runs on AWS. During the pandemic, AWS and Capgemini collaborated to migrate the agency's in-house call-center agents to an Amazon Connect-based platform in only a few weeks that, along with automation and self-service capabilities, helped cut down overall call volume.

Built for flexibility

The division addressed its scalability challenge by turning to Capgemini, a global leader in consulting, technology services, and digital transformation. Capgemini had already helped DES modernize its unemployment benefit system on AWS in 2018 as part of the Southeast Consortium for Unemployment Benefits Integration (SCUBI) project.

Now North Carolina's modernized unemployment insurance benefits system can be scaled to meet increased demand and it provides critical information security.

"AWS offers secure and scalable cloud technology, and we leveraged our collaboration with AWS to work seamlessly to build and deploy this solution," says Prasad Allampalli, North America Public Sector Lead, State and Local Government, Capgemini.

Using its AWS-based unemployment insurance benefits system, DES easily scaled to support a claims surge that was 30 to 50 times the normal volume. With the Amazon Connect call-center platform, coupled with third-party services, DES managed calls coming in at the rate of 200,000 per day, compared to 15,000 calls a week prior to the pandemic.

The new platform incorporated an interactive voice response (IVR)-based, self-service "claim status" module users could access online or over the phone at any time. "The automated self-service solution for checking claim status helped us deflect up to 20 percent of calls that otherwise would have been directed to call-center agents," Gadiraju says. "That reduced wait times for callers and made it possible for us to serve more customers.

"We couldn't have responded to the large call surge if we hadn't been on the modern AWS-based platform Capgemini helped us implement. Technology scaling to meet the demand was easier because of the elasticity of AWS."

Additionally, DES implemented Amazon WorkSpaces to provide virtual desktop capabilities to more than 600 remote employees, including contractors. This was critical because 90 percent of DES employees had to work seamlessly and securely from home.



AWS offers secure and scalable cloud technology, and we leveraged our collaboration with AWS to work seamlessly to build and deploy this solution."

Prasad Allampalli

North America Public Sector Lead, State and Local Government, Capgemini



Adding new functionality

DES was also able to quickly implement six new benefit programs during the pandemic, on top of three programs that the system was already built to handle, because of the scalability and reliability of AWS. North Carolinians could therefore access the additional unemployment benefits that were implemented because of the pandemic.

Capgemini also enhanced the existing DES anti-fraud solution by adding digital analytical dashboards to help DES identify anomalies and day-to-day call fluctuations. With the anti-fraud detection and prevention solution on AWS, DES can recognize and deny fraudulent claims more easily.

In late 2022, Capgemini and DES again partnered to replace a third-party document-management application with an internally developed solution built on Amazon Simple Storage Service (Amazon S3).

"We replaced that app with a native AWS app, which is the first native cloud-build app we've built here. We believe in continuous improvement, and we're working toward a roadmap where we make the solutions at DES fully cloudnative and focused on microservices," says Allampalli.

The modernized technology platforms mean DES can better serve North Carolina workers eligible for unemployment benefits.



Thanks to Capgemini and AWS, we were able to process and pay claimants at a time when they needed it most. We have had a long collaborative relationship with Capgemini."

Raju Gadiraju

Chief Information Officer, North Carolina DES





About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided every day by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 360,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering, and platforms. The Group reported in 2022 global revenues of €22 billion (about \$23 billion USD at 2022 average rate).

Get the Future You Want | www.capgemini.com

The information contained herein is provided for general informational purposes only and does not create a professional or advisory relationship. It is provided without warranty or assurance of any kind.