Rackspace modernized its contact center using Amazon Connect, enabling it to easily optimize call flows without specialized engineering skills. Rackspace is one of the world’s largest IT managed services providers. The company uses Amazon Connect as its contact center, Amazon Kinesis and Amazon Redshift for data ingestion and warehousing, and Amazon CloudWatch to monitor call characteristics.

Maintaining a Position as a Customer Support Leader
Rackspace uses its results-obsessed customer support to maintain a position as one of the world’s largest managed IT services providers. However, its telephony solution was getting in the way. “The contact center has always been the lifeblood of customer support, which is our key differentiator,” says Kerry Bowley, product manager at Rackspace. “When we tried to modernize on top of our legacy system, we hit roadblock after roadblock.”

Franco Lazzarino, software developer at Rackspace, concurs: “Our team’s development skill set was not highly aligned with the telecom niche. Even basic call control and monitoring required significant engineering effort.”

Then, Rackspace discovered Amazon Connect—the self-service, cloud-based contact center service built on Amazon Web Services (AWS). Amazon Connect is based on the same contact center technology used by Amazon customer service associates around the world.

Engineering Excellence Made Easy
The critical nature of support at Rackspace meant the team had to come up with a careful migration strategy. The company decided to migrate its lowest-spend customers first to test the system and ensure everything was working properly. “We got a lot of feedback from our initial rollout that allowed us to iron out call flows and processes.”

Developers moved their desks to the contact center floor to sit next to support engineers and adapt the system in real time. “Instead of opening a ticket, the support engineer could just message a developer and have the change made in moments,” says Bowley.

The traditional telecom programming model did not allow for this kind of responsiveness. “In a legacy environment, our developers were spending too much time on basic tasks. With Amazon Connect, they spend 90 percent of their time on tasks that improve the experience of end users.”

This is also due to the modern, standards-based nature of AWS. “With AWS, it’s easy to add value for users,” says Lazzarino. “AWS services are not telecom-specific, meaning we don’t have to cultivate highly specialized skills to use them as part of our Amazon Connect solution. We don’t have to build as much from scratch, so the amount of value we deliver per person-hour is much greater than we could achieve before.”

Saved $10,000 in labor cost in a single incident.
Optimizing with Data
Using Amazon Connect, Rackspace gained in-depth visibility into call queues and service characteristics, enabling it to predict and rapidly address call- and service-quality issues. The company relies on Amazon Kinesis to ingest real-time data into a Managed Elasticsearch cluster and corporate data warehouse. "With Amazon Connect, there are no data silos," says Bowley. "It all goes into our data warehouse, and it plugs right into our dashboards with no barriers."

The team uses Amazon CloudWatch to monitor metrics such as hold times and generate incidents and alerts and Amazon Simple Notification Service (Amazon SNS) to communicate these issues. "Amazon CloudWatch lets you view ‘total packet loss’ in Amazon Connect, which is an indicator of call quality. When it crosses a threshold, Amazon SNS alerts our telecom team that owns the relevant processes. That’s something we couldn’t do in real time with our previous system."

The visibility empowers Rackspace to always be optimizing. "Using Amazon Connect, we have a holistic view of support operations so we can manage them effectively," says Bowley. "Amazon Connect gives us all the data we need via APIs so we can visualize call queues and gain insights that help us deliver better service."

Agile and Responsive
Rackspace can now create sophisticated call routing and support processes faster than ever before. For example, customers of a specific Rackspace service would hit the phones when an outage occurred, but support engineers could only confirm that an outage was happening.

The company added a prompt for these customers to verify the outage without waiting for a support engineer. "Implementing a call flow is incredibly simple in Amazon Connect," says Lazzarino. "Our team got on a video call, and within 10 minutes we had executed the change. Our call queue went back to normal in a matter of minutes."

The results can be significant. "We were able to deflect 1,800 calls in 24 hours, which saved us $10,000 in overtime we would have needed to maintain our SLAs," says Bowley. "Additionally, we avoided having to provide credits for breaking those SLAs, which gets very expensive."

Data-Driven Decision Making
Data makes it easier to identify value-added use cases for developers to focus on. When a member of a frontline team asks whether something is possible, the team can prove or disprove the business value easily.

For example, the company hypothesized that automatically transferring some customers to a specific department would provide a better experience. "Because we could quantify how many people were transferred and where, we were able to demonstrate the positive impact before implementing the new flow," says Bowley. The change resulted in automatic transfer of almost 10 percent of calls, meaning those customers did not need to be handled, verified, and transferred but could go immediately to the Rackspace support engineer who could help them.

The company has also been able to reduce the impact of telemarketing and other unwanted calls that take up the agents’ valuable service time. Before adopting Amazon Connect, the company’s telecom department manually managed a banned-numbers list. Now, agents can add bad numbers to the list via an integrated chatbot. Using AWS Lambda serverless computing, numbers are compared to a ban list and bad calls are routed to an automated message.

All these improvements were implemented quickly and easily using Amazon Connect. For a company that depends on differentiated customer service, the advantages are obvious. "If our legacy contact center was a railroad, Amazon Connect is a rocket ship," says Bowley. "It helps us go further, faster in serving customers and living up to our promises."

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Kerry Bowley, Product Manager, Rackspace

To learn more, visit aws.amazon.com/connect.