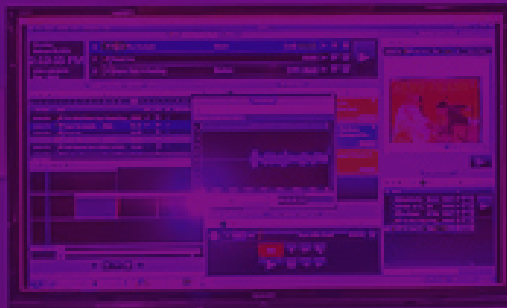


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SiriusXM Workflow powered by Zetta



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With advanced features from RCS Zetta, SiriusXM Satellite Radio replaced legacy systems and made it easier for talent and programmers to collaborate nationwide. Live logs enable immediate changes on hundreds of stations. Other new Zetta features include improved delay functions, a new preview module, and flexible pitch control. With Zetta2GO, users can access almost all Zetta functions from any web browser.

Introduction

When you're running 250 radio stations from nearly a dozen locations around the country, having the right automation system matters. When SiriusXM Satellite Radio wanted to unify the two very different systems it had inherited from the merger of its predecessors, RCS Zetta was the choice to replace the previous legacy systems—Dalet at the former XM plant in Washington, DC, and RCS NexGen at Sirius in New York City.

“We needed one system to combine our major hubs and to continue to develop our smaller studios,” says Paul Bachmann, SiriusXM’s senior director of media engineering. “It’s a unique environment,” Bachmann says of his company’s requirements for the move to Zetta, which started in late 2014 and took over three years to complete. “The challenge was developing systems that could combine the assets of essentially three different legacy systems and compiling them into one that could be understood by a centralized playout system. If that sounds hard, it’s because it is.”

For Bachmann and SiriusXM, the challenge was more than just merging New York and Washington operations. It was also in bringing in material from other, smaller studio locations around the country. “We have subscribers across the country, and when we can program our radio stations in the same places where people are subscribing, then we’re better off,” he says. That’s where replication comes in: a functionality that Bachmann says has been a game changer for SiriusXM.

“We used to have to do some real somersaults and cartwheels around the origination of radio stations,” he recalls about the network’s earlier systems. “SiriusXM used to have to relocate personnel and their families to the location where a program director wanted to run a station. One of their goals as they made the switch to Zetta was to be able to make changes happen locally so that origination no longer matters.”

That’s a complex task, and it required close cooperation with the RCS Zetta development team to meet all of SiriusXM’s needs. “The replication scheme is not just for the asset-level like audio and metadata, but also for schedules as well,” Bachmann says. “Being able to transfer the schedules that play the assets is just as important as the assets themselves.”

At RCS, Zetta product manager Martin Blazek says live logs are an important new feature. “You could be making changes [to the log], and a different user at a different computer at a different Zetta site will see those changes happen live. So multiple people can actually collaborate on the same station, same log, at the same time, without running into conflict because all the changes are synchronized live, in real time”.

At SiriusXM, Bachmann says live logs have made a big difference—especially for channels that have staff operating from multiple locations around the country. “When we started replication, what we were able to do was make a change in the schedule and blast out that change for the same day where you were sending the whole log. That sounds like a really good idea,” he says. “But what we saw in the early days was that it could create conflicts and confusion. I could be moving some stuff around and if I didn’t publish my log right away, someone working on a different hour of the day could hit ‘publish’ and change something right in front of my eyes.”

Working with RCS developers, SiriusXM has evolved that workflow in Zetta so now individual programmers can collaborate simultaneously at the very same part of the log without the risk of losing each other’s changes.

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— Paul Bachmann,
Senior director of
media engineering,
SiriusXM

Zetta®

The Magic of Metadata

Metadata is another important part of the SiriusXM workflow, with song titles, artists and artwork all being pushed out to dashboard screens and mobile users—in addition to internal metadata that customizes individual pieces of audio for specific channels across the system. With its new Zetta system, Bachmann says individual users at remote sites now have access to much more of that metadata and therefore they have more flexibility to get the assets they need to make their shows better.

“Imagine,” he says, “that country star Carrie Underwood is singing the national anthem at a game where her hockey-star husband is playing. That might be covered by our hockey channel. But if you’re on one of our country channels, you might want to grab that audio, and you don’t need to scrape around online for it. We likely have it, and so what we can do in the moment is to do a query and channelize that audio (to the country channel), and lo and behold, replication brings it right in and they’re off and running.”

“It all happens in a few seconds. That’s the magic of it,” says Bachmann. With Zetta, SiriusXM can make a query for specific content, reach out to where it is and pull down the content for use on the channel where it’s needed. “That’s what we’ve found to be incredibly powerful,” he adds.

It goes beyond individual audio cuts and their metadata, too. With Zetta’s replication features, Bachmann says SiriusXM can move entire channels to other locations when the need arises. “Say our *Hits1* channel wanted to be in Orlando for a week doing stuff over at our studios at Universal,” he says. “We could basically build them their library and everything they need while they’re on the flight to Orlando. You’re only restricted by the size of the Internet pipe going into that site.”

Bachmann says SiriusXM’s Zetta architecture has become more cloud-like, which also brings with it benefits for disaster recovery. As logs are updated at any site around the country, whether at the Washington or New York headquarters, at smaller studios in places like Nashville, or even at individual talent locations scattered around the country, they immediately update at every other replication site. “From a disaster recovery level, it’s really powerful,” Bachmann says.

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— *Martin Blazek,*
Zetta product
manager,
RCS



Powerful Functionality

Zetta product manager, Martin Blazek, identifies still more powerful functions beneath the hood of the latest Zetta versions. The popular and flexible feed-through routing feature has been enriched with capture and delay playback, making it easier for multiple stations in a cluster to use timely audio like network newscasts and traffic reports on their own individual schedules.

Unlike earlier versions, the newest versions of Zetta can capture audio on one machine and play it back on air or for auditioning at any other location. Blazek says multiple users or stations can even access the audio simultaneously, while playing it back at different times or from different locations within the file, all while it's still being captured at the original machine.

A new pitch control allows for audio cuts to be played back with different pitch adjustments, depending on anything from daypart to format. "If you only want to pitch up audio during the morning show, you can just turn the pitch on or off and adjust the percentage during the course of the day," Blazek says.

There's also a new auditioning module designed to make it easier for Zetta users to find exactly the assets they need as quickly as possible. "Making sure the auditioning of content in Zetta was smooth was very important to us in this process," Blazek says. "So we completely revamped our auditioning capacity, and it's extremely flexible. We created a new auditioning module and also a new auditioning minibar. You can blow up that minibar into a full-sized audition module. If you want to jump into a song's intro very quickly, or if you want to jump to the hook or hear the ending of the song, everything's very convenient. Any marking point you use, you can jump to it at the touch of a button and you can completely customize your experience."

Struggling with audio that's in the wrong format for a playout system is not an issue with Zetta. Blazek says the system now handles pretty much any audio format that a user can throw at it. "We made sure that no matter how you store your audio, you can mix and match different sample rates, different bit rates. Zetta can take it all. The auditioning just works."

That's especially important for users on the move who take advantage of Zetta2GO, the mobile browser-based version of Zetta. Because most browsers can't handle audio formats such as MPEG-1 Audio Level 2 ("MP2"), the Zetta team built a transcoder that can render audio on the fly in a browser-friendly format.

In general, Blazek says, the goal is to give Zetta2GO users all the same functionality that their desktop-bound colleagues enjoy. "Sometimes I really have to think hard when I'm looking at the screen: is this Zetta proper or Zetta2GO? The user interface looks the same; the user experience is the same; it's very, very similar."

Conclusion

With an international development team reviewing all of Zetta's new features to make sure they meet local customer demand, Blazek says the team's goal is to be as thorough as possible with every new release. "I'm proud of the flexibility we're putting into the system," he says. "We try to make sure it meets everyone's needs." ■

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