

WO Aurora: A New Age of Automation

WideOrbit's automation platform for radio broadcasters is now more flexible, mobile and accessible

RADIOWORLD WIDEORBIT

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WO Aurora is the new, cloud-powered evolution of WO Automation for Radio.

It's designed to allow broadcasters to reduce their capital outlays by moving the critical automation function to the cloud if they choose to do so, driving down per-user costs and creating new redundancies to ensure business continuity.

Broadcasters today increasingly employ remote or distributed teams. They're looking to reduce their real estate footprints. Those with stations in multiple markets also want scalability.

These enterprises are building hyper-efficient, streamlined air chains in which traditional studios can be replaced by local station offices equipped with simple touchscreens. Some may wish to feed their transmitter sites directly.

WO Aurora is built for this new paradigm.

Cloud benefits

When operating in the cloud, WO Aurora eliminates upfront costs formerly associated with automation.

"With the traditional on-prem approach, you have to buy computers, you have to put them in the rack," said WideOrbit Vice President and Managing Director William "Dub" Irvin.

"You also need redundant HVAC, redundant power and redundant internet, as well as someone there to fix it when it breaks."

These involve costs many radio enterprises no longer wish to carry, or may not be able to afford.

"We also know that radio engineering talent is not easy to find these days, and they're really expensive when you do find them," he said.

"Now you can leverage technology and simplify your operation without impacting the quality of your on-air product."

When WideOrbit, working with Amazon Web Services, handles the hosting, you are no longer responsible for managing patches to the operating system, Irvin said.

"You're also not responsible for upgrading to current versions of the software. You're not responsible for buying the computers or related costs.

"We deliver an HLS stream that is sent to your transmitter, where you typically connect it to your audio processor. And for your website and mobile app, we can express those directly out of AWS, with Nielsen PPM encoding added." The latter is made possible by a technical partnership with Telos Alliance.

With this infrastructure in place, an enterprise can operate all of its stations and playlists from one cloud-based system, unlocking collaboration opportunities and workflow efficiencies.

Now work doesn't have to be done 100 times in 100 places — it can be done once, in one place, and flow to all of your stations.

But which approach is best?

The name WO Aurora was chosen because of its connotations of light, clarity and freedom from boundaries. It reflects the fact that broadcasters can deploy the system in a way that best fits their business context.

Below
WO Aurora Web Studio enables talent to broadcast live and record voice tacks from anywhere using just a browser.



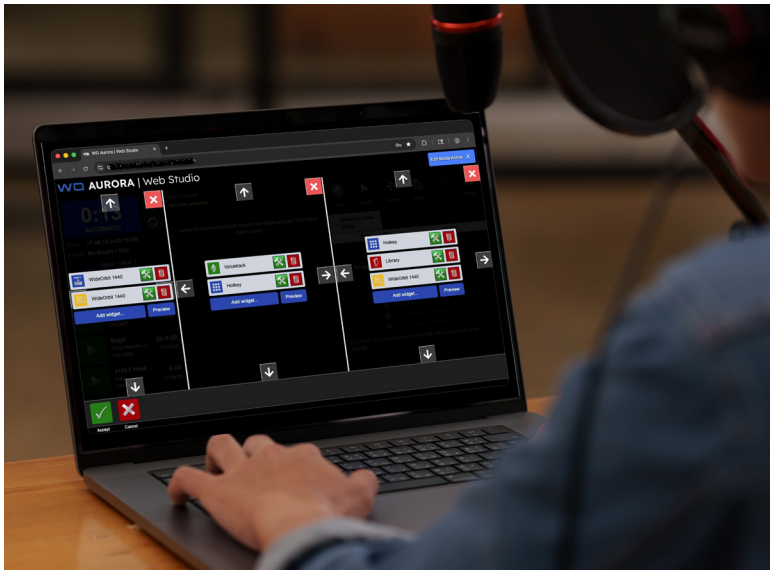
> **Now you can leverage technology and simplify your operation without impacting the quality of your on-air product.**
>
> **— William "Dub" Irvin, WideOrbit Vice President and Managing Director**



How it is hosted is up to you, offering unprecedented flexibility:

- Operation in the cloud offers an economical and future-proof approach for those who need freedom from hardware and geographical constraints.
- Hosting on-premise is a familiar solution for those looking for more control and oversight in administering and troubleshooting their automation. Control stays within your organization and your building.
- A hybrid configuration can be a powerful option, useful if you are "cloud-curious," transitioning, or want the best of both worlds. WideOrbit's hybrid options can place the playout engine in the cloud or in the local market via edge playout, depending on your needs.
- WO Aurora also can run a station directly from the cloud on an emergency basis, protecting you in the event of hurricane, fire, ransomware or other unanticipated hazards.

Below
Talent can configure WO Aurora Web Studio with just the tools they need using WideOrbit's familiar containers and widgets design.



Breaking the desktop chains

An important new component of WO Aurora is the browser-based Web Studio.

WideOrbit sought to create a platform that can accommodate a range of devices, operating systems and user expertise, while requiring less time for your talent and engineers to bring it onboard.

"Traditionally, WideOrbit has been a desktop app," said Product Manager Andrew Salive.

"It needed to be installed, and if you were going to work remotely, you needed VPN access to connect and be able to interface with the radio station."

With Web Studio, WideOrbit aims to lower those barriers. On-air talent can access the software with standard login credentials in a web browser.

"Whether you are sitting in a hotel lobby somewhere, voice tracking in your home office or working an eight-hour day in an office building, you can simply log in and take control of your station," Salive said.

A feature in Web Studio called Live Mic empowers air talent to broadcast live from anywhere, without separate codecs or local engineering support.

Salive, a former broadcast engineer, recalls that setting up remote broadcasts could be "a royal pain in the backside." It required a board op at the studio to coordinate the feed, complex tie lines and a producer.

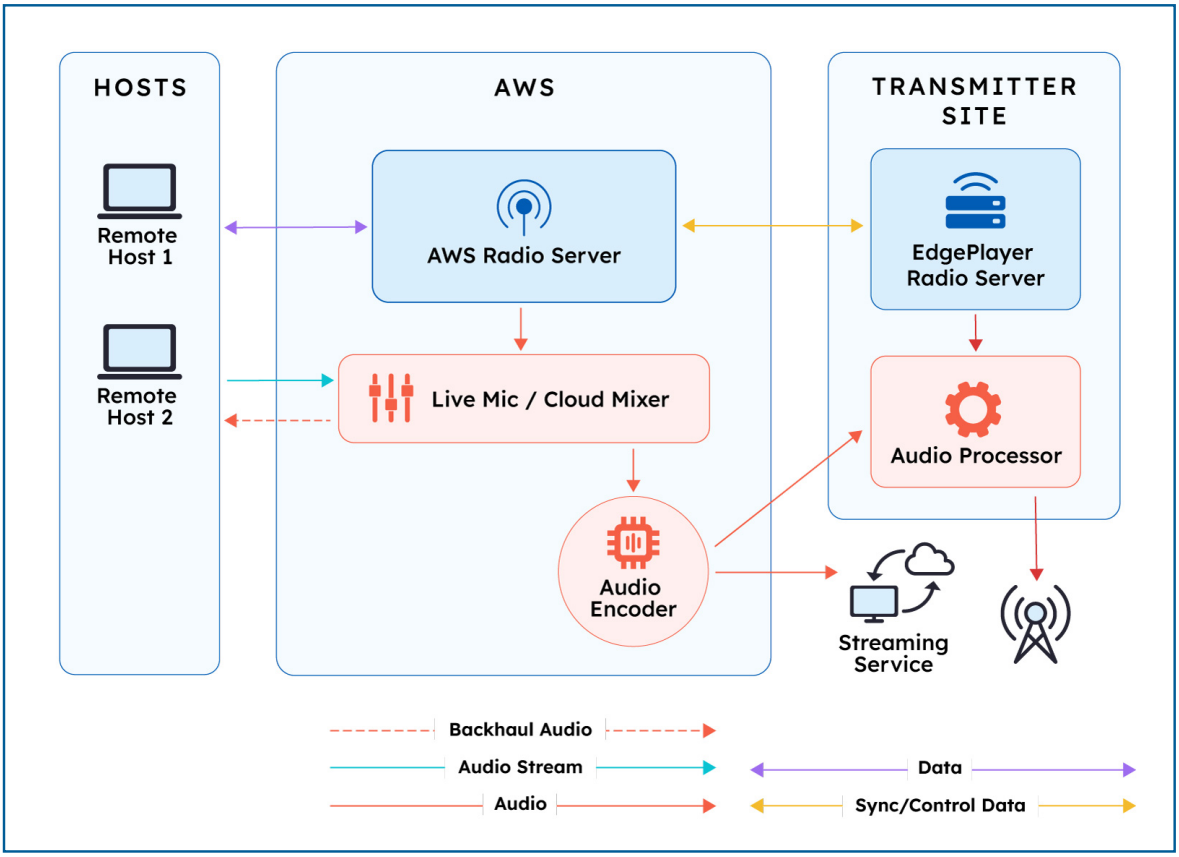
Web Studio condenses that workflow into a browser tab.

"I no longer need to install software on my computer. As long as I have the proper credentials and the URL, I can pull it up. We have the Live Mic feature built right in. You configure the URL into your browser page. You've set your microphone input, and you can open up your mic and go live."

Whether broadcasting from home or from a remote sports venue, your talent has control of the stack and the playlist from their screen.

"If I'm the DJ, I take a Mac, Windows or Linux laptop,

Right
WO Aurora system diagram.



plug in a microphone and I'm ready to go live, complete with a mix-minus feed. I've got control of my station. I've got control of my playlist. I open my mic and I do my live break. When I'm done, I turn off my mic, put my system back in automatic mode, and walk away or wait to the next break."

WideOrbit believes that WO Aurora's Web Studio will allow stations to onboard talent more easily from anywhere, unlocking a much larger talent pool for a given station by making access as easy as opening that browser.

Familiar tools

What should current users of WideOrbit automation know?

"We call WO Aurora 'the next generation of WO Automation for Radio,'" said Irvin, "because we are not orphaning our existing customer base. All new features will be available to our current customers too, whether they keep their on-prem system or migrate to cloud."

For current on-prem users of WO Automation for Radio, WO Aurora will be delivered in their next software upgrade. If they want its expanded feature set without migrating to the cloud, Salive emphasized, they can continue to operate on-premise.

"We're going to maintain support for those systems and continue to upgrade them to make sure our customers have all the latest features."

Users will not have to learn a new system. "We designed and laid out the interface for Web Studio with the look and feel of the tools you're already using on-prem," Salive said.

That means your playout stack, hot keys and voice tracker can be managed via containers and widgets just as they are in the desktop application.

"We've gone a long way to ensure that the user experience is carried over to the web experience."

WO Automation for Radio supported certain remote functionality using iOS devices via WideOrbit's Mobile Gateway and (for VPN users) its Universal Radio Client, and those capabilities remain.

But WO Aurora makes remote operation much more powerful and flexible; and it enables live broadcasting without a separate codec.

WO Aurora also will continue to provide the Central Server function, which stores your configurations and audio and is used to edit your playlists or process new audio. It also retains the Radio Server playout engine, which holds your playlists and executes play comments; it's the part of the system your staff uses to produce their shows. And a Device Server interacts with any external devices or AoIP components.

"Our playout engine will continue to work in the radio station if you want — for instance, if you have analog equipment there, we can still interface with it," Salive said.

> **Whether you are sitting in a hotel lobby somewhere, voice tracking in your home office or working an eight-hour day in an office building, you can simply log in and take control of your station.**
>
> **— Andrew Salive, WideOrbit Product Manager**



In a cloud-based configuration, WideOrbit also provides an encoder that sends your audio output to the transmitter as an Icecast stream with "now playing" metadata in HLS.

And like its predecessor, WO Aurora integrates tightly with WO Traffic as well as with third-party music scheduling and traffic systems.

In short, WO Aurora is an evolution, building on a known, tested platform while providing future-facing flexibility and innovation.

Security and resilience

A pain point for many broadcasters who want to enable more remote work is to do so without opening new security risks.

Web Studio is designed with this in mind. The platform is hosted securely in Amazon Web Services via HTTPS, so there's no need for a customer-supplied virtual private network.

There are multiple benefits.

For instance, in the past, a broadcast group that wanted to hire remote talent under contract would have to provide a computer to each person to accommodate the company VPN.

"With Web Studio, we manage the security and it doesn't touch the broadcaster's infrastructure," Irvin said. "So the contractor can now use their own computer to do work for the company. That's a material savings for the broadcaster."

To Do

Click this note to book an appointment with a WideOrbit Automation representative to discover how much more freedom WO Aurora will add across your workforce without sacrifice.

What about reliability?

Irvin said cloud services can fail on occasion — that it's not a question of "if" but "when."

Such internet outages might total only a few hours per year, comparable to how long a traditional airchain might lose due to human error. Nevertheless, business continuity is a key consideration for WideOrbit.

"WO Aurora operates with multiple availability zones in the cloud," said Salive. "If one zone goes down, we're operational from another zone."

WideOrbit also offers edge solutions that allow your audio to be expressed locally. In the event of dropouts or unexpected network degradation, a "Shadow Mode" can take over, playing your audio from a device at the transmitter site. The system knows where you were in the playlist, making the transition seamless.

"So even if the cloud did go away entirely, you still have a playlist being expressed to your transmitter site or your streaming providers."

Takeaways

In short, WO Aurora supports cloud, on-premises and hybrid deployments so you as the broadcaster can deploy the system in the way that best fits your infrastructure.

It also enables live broadcasting from anywhere, empowering your talent to create at the speed of real life, not just from a studio.

And with browser-based access, WO Aurora eliminates the hassles of desktop apps and makes the platform effortless to use from any device.

It's a flexible, mobile, accessible platform designed for the future of radio.

WIDEORBIT

Founded in 1999, WideOrbit helps media companies transact more business by making it easier to sell advertising. We offer a platform that ties everything together, from pitch to playout to payment, across digital, linear and cross-platform advertising. For more information visit *wideorbit.com*.