Lawo HOME mc² DSP

At a special online event, Lawo today introduced the HOME mc² DSP app, the microservice-based equivalent of Lawo's unrivaled A__UHD Core. A new member of the HOME Apps family, the ultra-low-latency HOME mc² DSP app is a server-based, agile audio engine. With an instantly familiar feature set, it combines the superior flexibility of the HOME Apps platform in terms of connectivity and scalability with Lawo's legendary audio processing quality.

The HOME mc² DSP app can be used together with mc² mixing consoles or to instantiate a (virtual) mixing system at the press of a button wherever audio processing is required at short notice. HOME mc² DSP is the audio processing companion of choice for converging video/audio production environments. With all features known from the A__UHD Core FPGA processing platform in a CPU-based package, it allows operators to spin up mc²-grade DSP processing with hitherto unthinkable granularity.

As a member of the HOME Apps platform, the HOME mc² DSP app benefits from the agility afforded by the abstraction of processing functionality from the hardware: it leverages Lawo's Flex licensing and subscription model, allowing users to reallocate subscription credits to any available HOME App, whether audio or video, for tight budget control. It is also easy to "move" from one location—the production hub, say—to another, such as an OB truck or a remote location.

HOME mc² DSP's primary purpose is to provide audio processing in situations where

no A__UHD Core is available or where remaining within the HOME Apps realm is more practical. With this app, spinning up a processing core with the required number of DSP channels for a variety of use cases becomes a breeze.

Despite its CPU-based technology, the HOME mc² DSP app performs at the same ultra-low latency as its hardware companion. All capabilities and characteristics are so similar that operators are unable tell whether their console surface or headless mixer controls a hardware-based A__UHD Core or the mc² DSP app. Switching between the two - and back - is possible at the push of a button in the HOME UI.

The HOME mc² DSP app automatically scales with future CPU developments and can provide several thousand DSP channels where needed. With support for mono, stereo, 5.1, and NGA Immersive Mixing formats; a flexible number of AUX, GRP, and SUM busses; and much more, HOME mc² DSP is the app-based alter-ego of the A__UHD Core. Any HOME App can be stopped at any time, freeing up server capacity, Flex Subscription credits, and reducing power consumption in the process.

"HOME mc² DSP leverages the unique granularity and flexibility of the HOME Apps platform regarding input and output media transport protocols," said Christian Struck, Lawo's Senior Product Manager, Audio Infrastructure. "It will support mixed-format SMPTE ST2110, NDI, and SRT production environments, and newer formats that may become relevant further down the line. There are no plans to discontinue the A__UHD Core as it remains the processing tool of choice for audio-only workflows in a live-sound context."

Lucas Zwicker, Senior Director, Workflow and Integration, CTO Office at Lawo, said: "The introduction of the HOME mc² DSP app is the next milestone in Lawo's audio history. This is not a lift-and-shift implementation of an existing product: HOME mc² DSP has been carefully reengineered from scratch to cope with tomorrow's requirements regarding converged audio, video and commodity-based processing infrastructures. Of course, we deliver the sonic performance our customers have come to expect from mc² mixers."

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