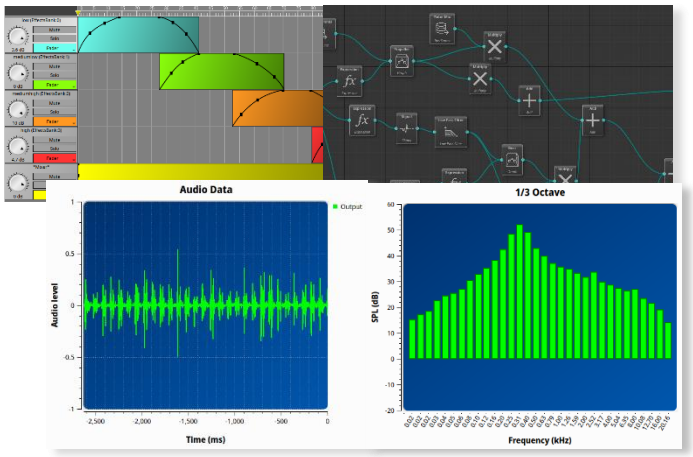
Product Brief

OmniAudio Modelling Design Studio

Level-D capable of sound modelling tools for military grade simulation environments

- More than 40 signal processing components
- Easy to use graphical interface
- Ready to use models



Level of authenticity for a flight simulator depends on how
aircraft and environmental sounds are generated. These sounds include:

- Platform (Land vehicles, aircrafts, ships) jet/turbine engines, rotors and transmission
- Propellers, blades, fans with configurable characteristics
- Other components like landing gear, missiles
- Ground contact for aircrafts, noise and vibrations for land vehicles
- Intake and exhaust sounds
- Cabin specific noise such as air-conditioning, hissing

Fidelity of sounds generated is especially an important factor for commercial and military flight simulators, which require mandated FAA Level-D certification. Level-D being the highest level of certification for simulators requires that sounds generated for a platform should match with real environment to a specific degree. This requirement mandates developing complex models as well as comparison of generated sounds with real life sounds.

OmniAudio Modelling Design Studio communicates with OmniAudio Server REST API to accurately model and simulate entities specified in the model. Changes made to model are directly updated on the simulation server.

OmniAudio provides Modelling Software which helps modelling of complex systems with various building blocks. Following are the main blocks provided:

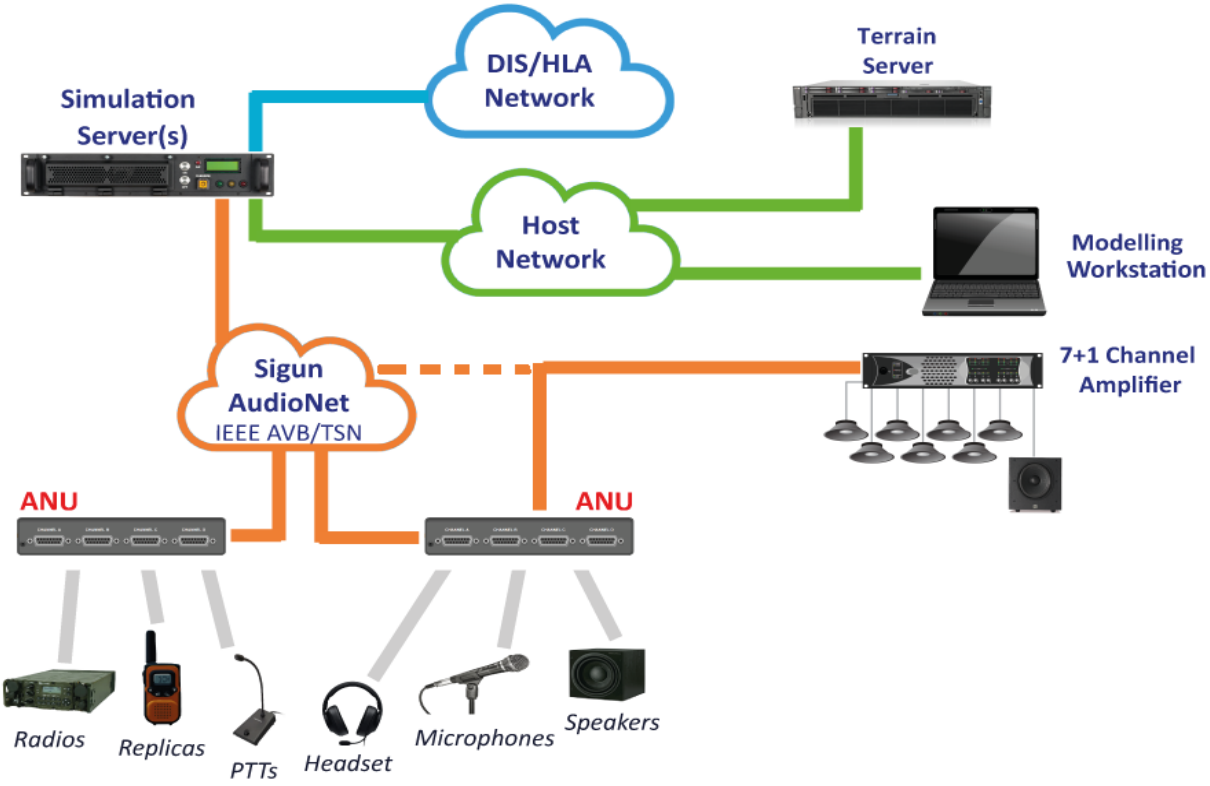
- Math operations
- Source generation
- Filters
- Transformations
- Communication Blocks
- Sound file block with Time & Pitch Manipulation

With the use of profiles, reusability of model components has been ensured.

OmniAudio Modelling Design Studio also provides advanced user interface where graphical data flow of blocks can be simultaneously executed.

OmniAudio Modelling Design Studio is capable of defining interfaces between OmniAudio Server and external simulation system, as well as the configuration of Audio Network Unit - ANU.

OmniAudio Simulation Environment



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