

NeuralMesh™ for M&E: Built for Every Frame, Render, and Stage of Production

WEKA's NeuralMesh™ delivers petabyte-scale data concurrency, ultra low latency, and complete GPU saturation to accelerate creative production, eliminate redundant data copies, and reduce infrastructure costs for media and entertainment (M&E) organizations creating the best content in the world.

Key Benefits of NeuralMesh in Media & Entertainment

Support Ultra-Resolution Playback Across Teams

- Prevent dropped frames
- Handle 8K and 16K streams
- Maintain peak load IOPS

Remove Data Copy Requirements

- Ingest directly to compute
- Use POSIX, NFS, SMB, or S3
- Sync global creator workflows

Scale Concurrent Clients and Creative Teams

- Burst on demand for renders
- Grow capacity on the fly
- Connect Linux, Mac, Windows

Unify Cloud, On-Prem, and Hybrid Access

- Deploy anywhere, any region
- Standardize global outputs
- Move data without lock-in

Enable Concurrent Access

- Feed thousands of render nodes simultaneously
- Remove access limitations
- Serve hundreds of creators

Maximize GPU Utilization

- Boost GPU utilization from 30% to greater than 90%
- Keep compute fully saturated
- Cut idle GPU time and waste

Reduce Cloud Storage Costs

- Scale seamlessly without overprovisioning
- Cut cloud costs up to 75%
- Tier hot data automatically

Accelerate AI Training Runs

- Stream data to every GPU node in the cluster
- Cut startup time up to 40x
- Trim training runs up to 20x

40x

Faster AI training and project startup times

>75%

Reduction in overall cloud storage costs

400+ GB/s

Live video displayed with 16K x 16K resolution

>95%

Overall GPU utilization, up from under 30%

15x

More cloud storage capacity at 80% of the cost

Media & Entertainment Use Cases

Generative AI

NeuralMesh removes the I/O gap between compute and storage via kernel and DRAM bypass, enabling faster multimodal training and inference at scale

High-Quality Post-Production

NeuralMesh handles high volumes of small files and concurrent CPU and GPU access, removing proxy workflows and pre-fetch requirements

Color Correction & Visual Effects (VFX) Rendering

NeuralMesh delivers ultra-low latency playback and high IOPS for uncompressed 4K, 8K, and 16K without dropped frames

Immersive Live Entertainment

NeuralMesh streams petabytes of data in real time, powering 16,000+ video and 36,000+ audio live channels at scale

GUNPOWDER
upstage
Picture
SHOP

 **synthesia**
preymaker
ElevenLabs

 **Dolby**
sphere
U2:UV
 **Luma AI**