D1
Studios

... Where Worlds Meet

OUR SERVICES

Virtual Production & XR Stage
Hybrid shooting, LED wall, real-time rendering, camera tracking, 360 3D.

Realistic and expressive animations
MoCap (Motion Capture), including Face MoCap

Creation of high-fidelity 3D models (Assets)
3D Scans (Photogrammetry), TMAC Scanner (Material Scanning)

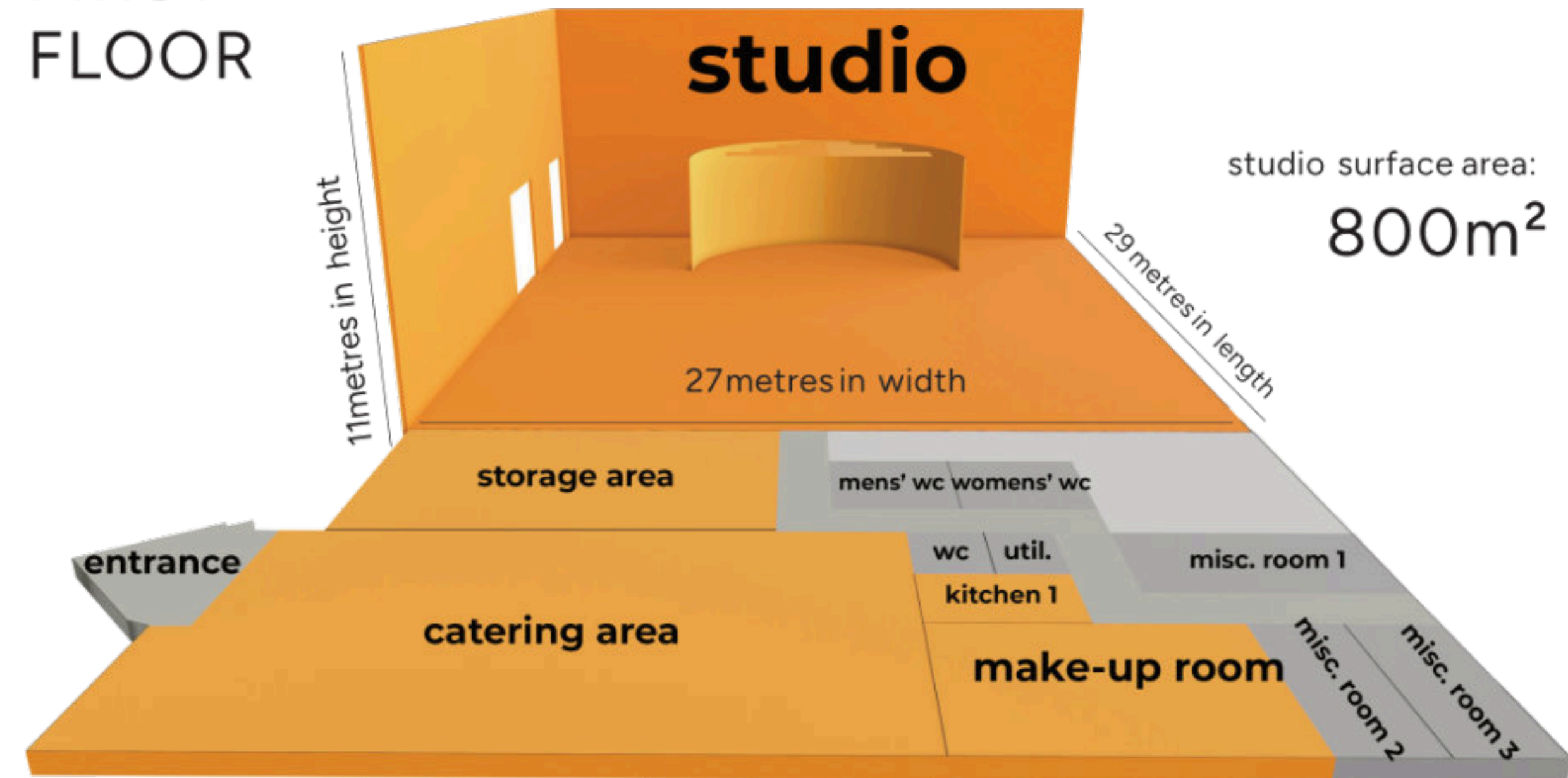## Creation of dynamic environments and volumetric media
Gaussian Splatting, Virtual Production (VP)

Live capture of interactive characters (Immersive Media)
Volumetric Video (Character Capture), 3D Scans

D1 Studios

FIRST FLOOR

studio

studio surface area:
800m²

11 metres in height
29 metres in length
27 metres in width

storage area
mens' wc womens' wc
entrance
wc util. misc. room 1
kitchen 1
catering area
make-up room
misc. room 2
misc. room 3

Virtual Production & XR Stage

Where reality ends and the digital world begins.

HYBRID FILMMAKING — thanks to our generous studio space, we enable a seamless fusion of physical foreground sets and digital backgrounds into a single, coherent world. Active LED lighting and precise camera parallax tracking create a flawless illusion of depth and true three-dimensional space.

D1 Studios Technology

The Creative Engine:
Unreal Engine seamlessly integrated with the PIXERA media server.

XR Stage & 360° Worlds:
Actors are no longer surrounded by green screens, but by fully realized digital worlds that react to camera movement, light, and performance.

From Reality to Digital:
We merge motion capture, 3D scanning, and Gaussian Splatting into a single visual language — transforming real actors, spaces, and performances into cinematic digital environments.
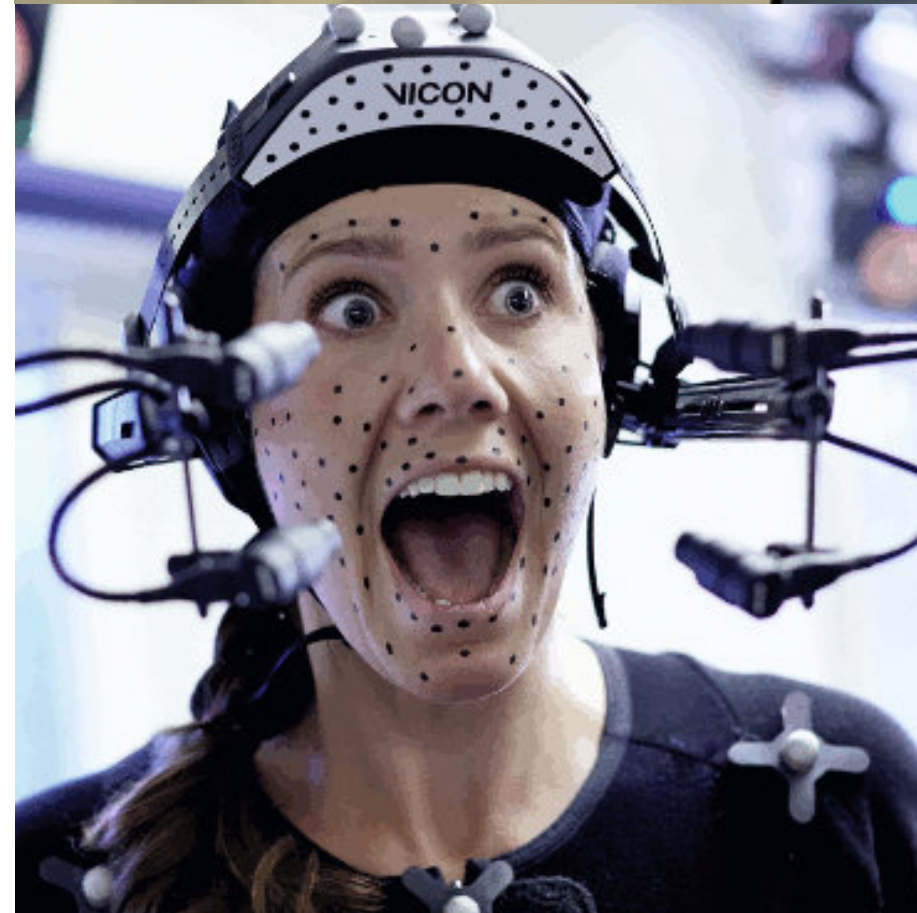
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Realistic and expressive animations

One of the biggest time and financial challenges is creating compelling animations for characters (both main and NPC). Players today expect fluid and emotionally faithful movement.

MoCap (Motion Capture), Face MoCap

allows the transfer of acting performances, choreographies, and complex facial expressions (emotional displays) onto digital characters in real-time. This dramatically reduces the time and cost of manual (keyframe) animation and ensures the authenticity of the movement.

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# Creation of high-fidelity 3D models (Assets)

Game studios need thousands of high-resolution objects, props, vehicles, and environment assets (e.g., for AAA titles where photorealism is required).

3D Scans (Photogrammetry)

Rapid creation of digital copies of real-world objects, buildings, or props with precise geometry and textures. It ensures the high level of detail (LOD) necessary for immersive VR and 4K/8K gaming.

TMAC Scanner (Material Scanning)

Accurate replication of PBR (Physically Based Rendering) materials. TMAC scans physical samples and generates digital textures (Albedo, Roughness, Normal, Metallic, Displacement maps) that behave realistically in the engine under any lighting. This is crucial for achieving photorealism in textures of skin, fabric, wood, or metal.

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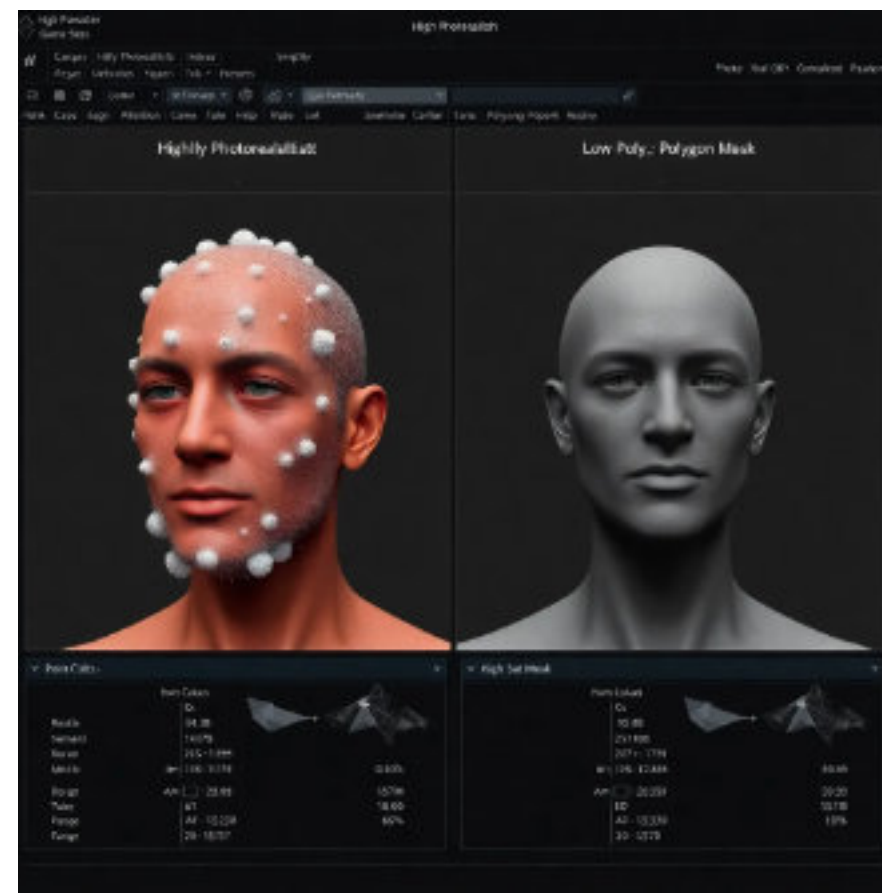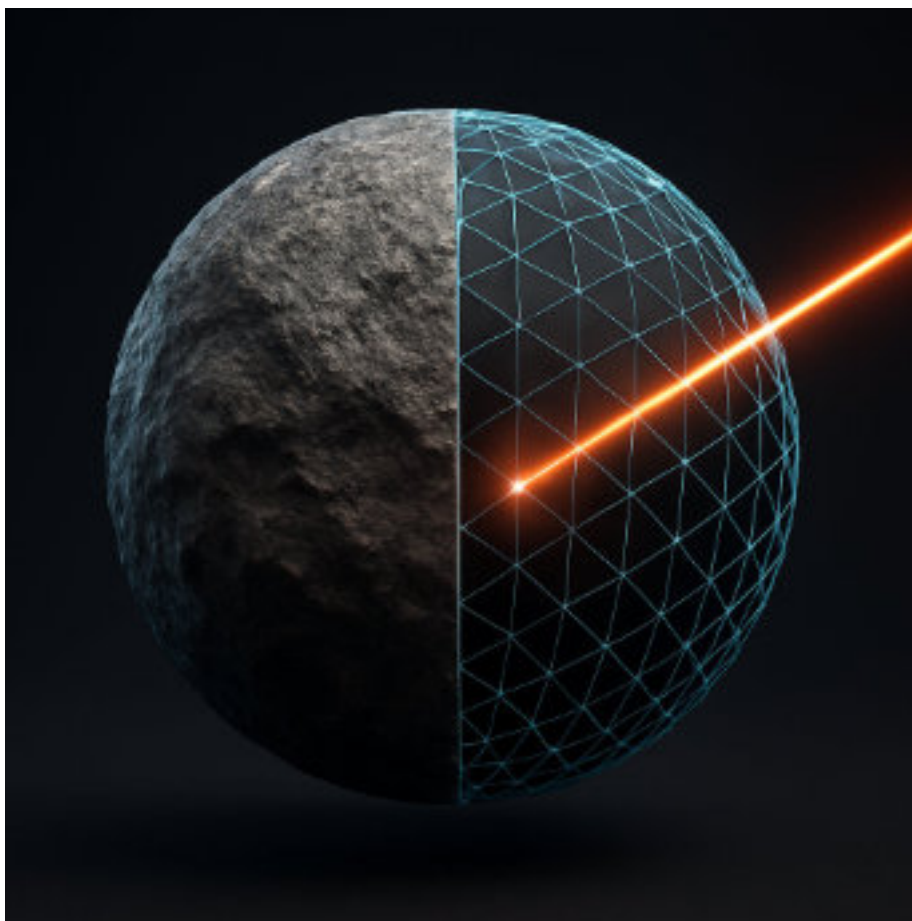
Creation of dynamic environments and volumetric media

In the field of VR/AR and new game engines (e.g., Unreal Engine 5, Unity), the demand for unconventional methods of visualizing the real world that are more efficient than traditional photogrammetry is growing.

Gaussian Splatting

Creating dynamic 3D character assets (Volumetric video) or entire environments (Gaussian Splatting) with low data requirements and excellent visual quality. Extremely fast generation of 3D scenes from 2D photos or videos, integration of real-world exteriors into game engines.

Virtual Production (VP)

While VP is primarily for film, its key components (large LED walls and real-time rendering) are ideal for game studios to test lighting and integrate game scenes in real-time, and for creating video assets and trailers directly from the game environment (In-Camera VFX).

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Live capture of interactive characters (Immersive Media)

Projects in VR and AR require characters that behave as "live data" and are visible from 360 degrees.

Volumetric Video (Character Capture)

It allows capturing the entire 3D character in motion and playing it back as volumetric video in a game environment or VR headset. This is ideal for interactive NPCs, digital guides in AR/VR applications, or for creating realistic training simulations.

3D Scans

It provides the basic geometric data and textures to create a digital avatar. The scan is often the first step in creating a complete game character, which is then animated using MoCap.

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The goal of Virtual Production at D1 Studios is **not to reduce quality**, but to **eliminate risk, save time, and remove unpredictability** from the production process. The D1 Studios team offers a comprehensive hub for creating **high-fidelity, production-ready virtual environments** that serve as the foundation for modern Virtual Production and **cinematic storytelling**.

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SPECIAL SERVICES

VR/360/180 high-end 12K+ shooting

Virtual Environments and props

3D location scanning

3D face/body scanning

3D printing

PBR texture maps - TMAC

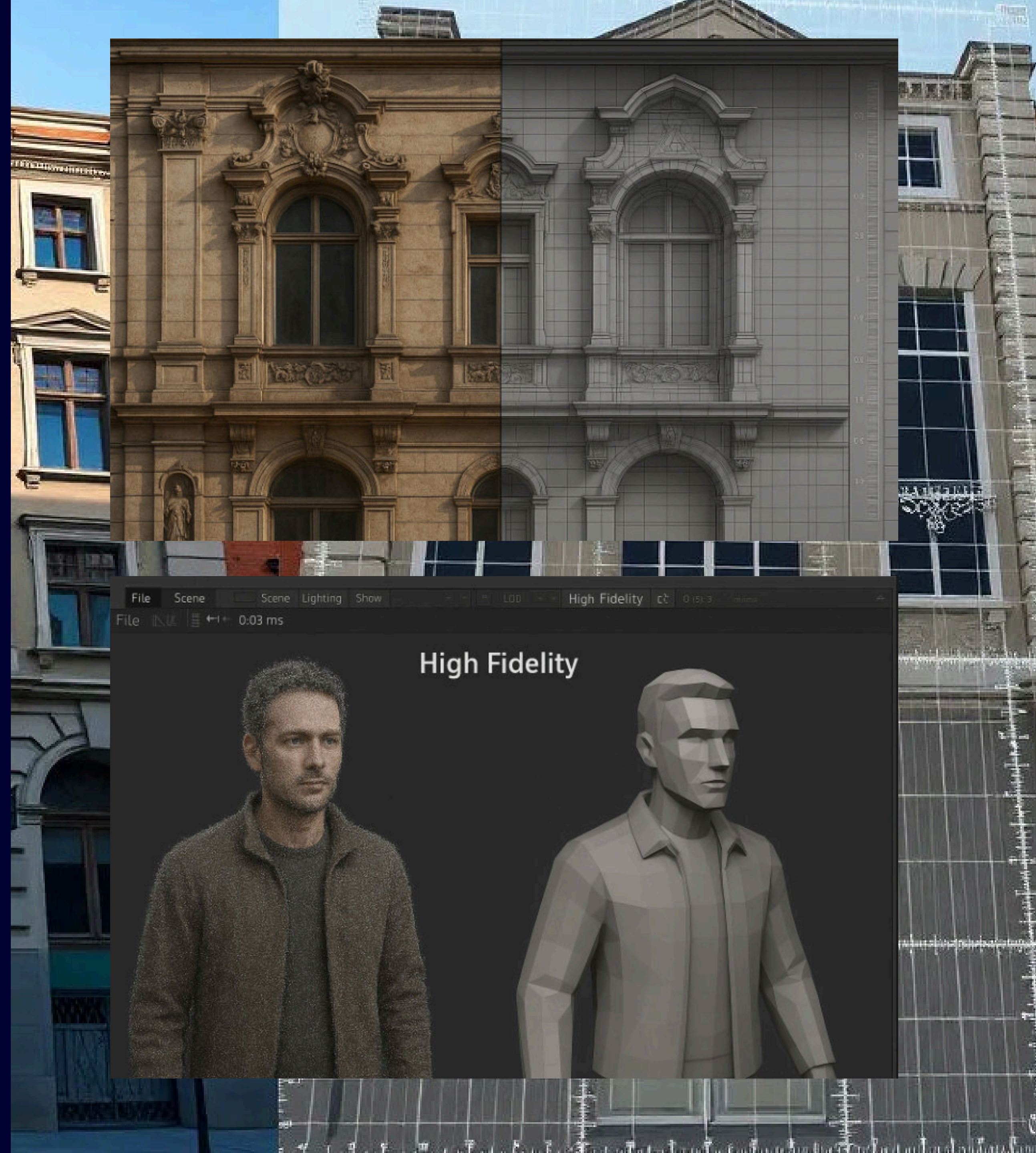Volumetric video - creation of dynamic 3D character assets

Motion Capture

Digital Twins

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STUDIO CAPABILITIES

Studio: Floor space 29m x 27m, 11m height, secure prep rooms inside the studio, makeup, catering, offices.....

LED wall: P2.6 1000nits, curves inward 180°, 14m diameter (24m x 6m), movable ceiling, dimensions can be extended depending on technical needs.

3D rendering: AMD-NVIDIA Render Cluster with RTX 6000 ADA GPUs.

Editing + Playback: Unreal Engine, Pixera, Chaos V-Ray, Resolume Arena, DaVinci resolve, realtime color grading with Tangent Element control panel, Genlock & TC sync.

Tracking, MoCap: full body motion tracking, Vicon Shogun+Evoke software, Vicon SuperNova, ,Vicon tracking cameras, Vicon Lock sync system, GPOsync.

3D scan: Photogrammetry rig scanner and Artec scanner. Scans of body, head, hand, weapon. Retopo models of head, hand.

TMAC Scanner: Accurate replication of PBR (Physically Based Rendering) materials

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LED wall

r = 7,16

29m

Height of the hall: 11m

27m
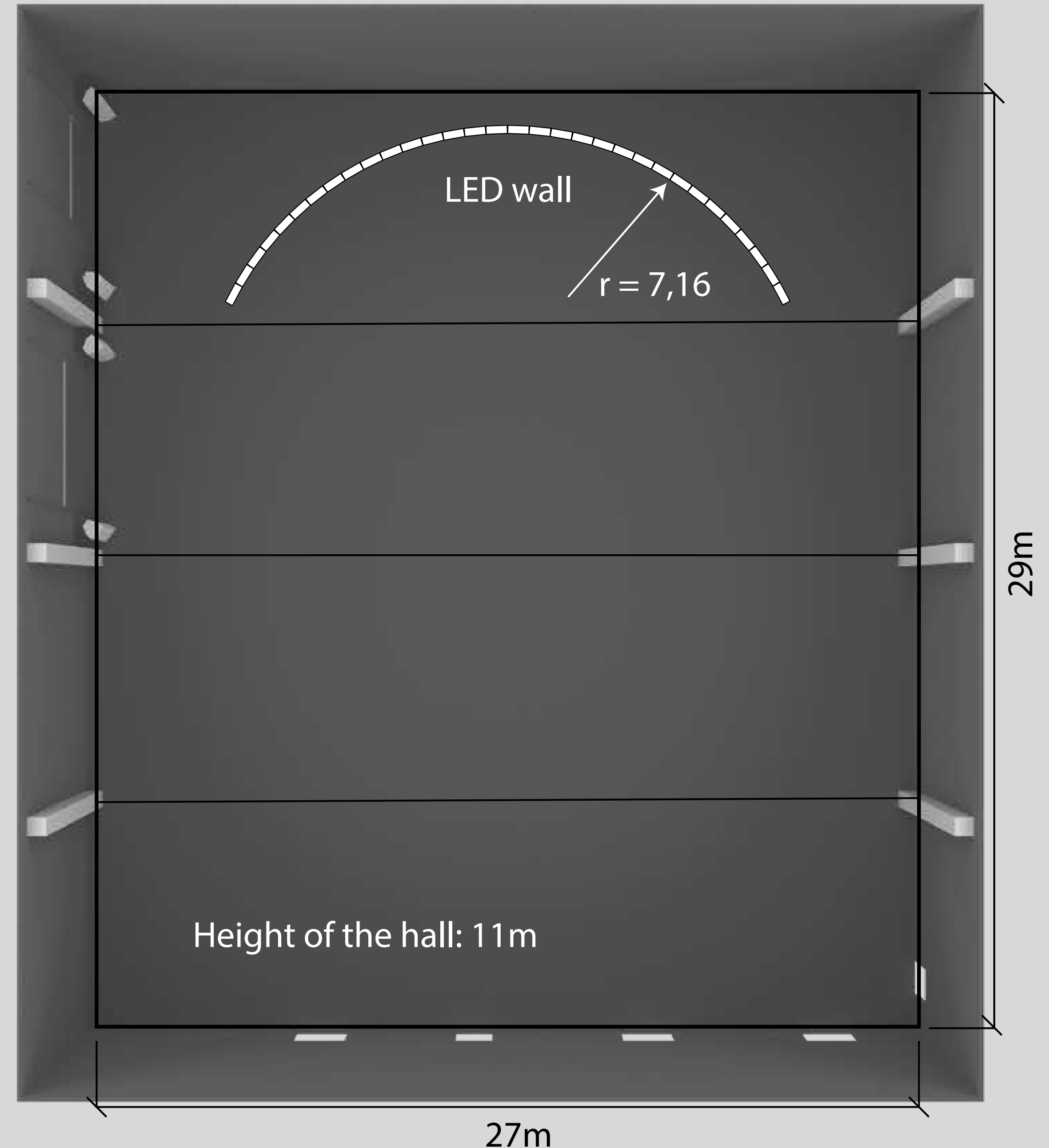
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