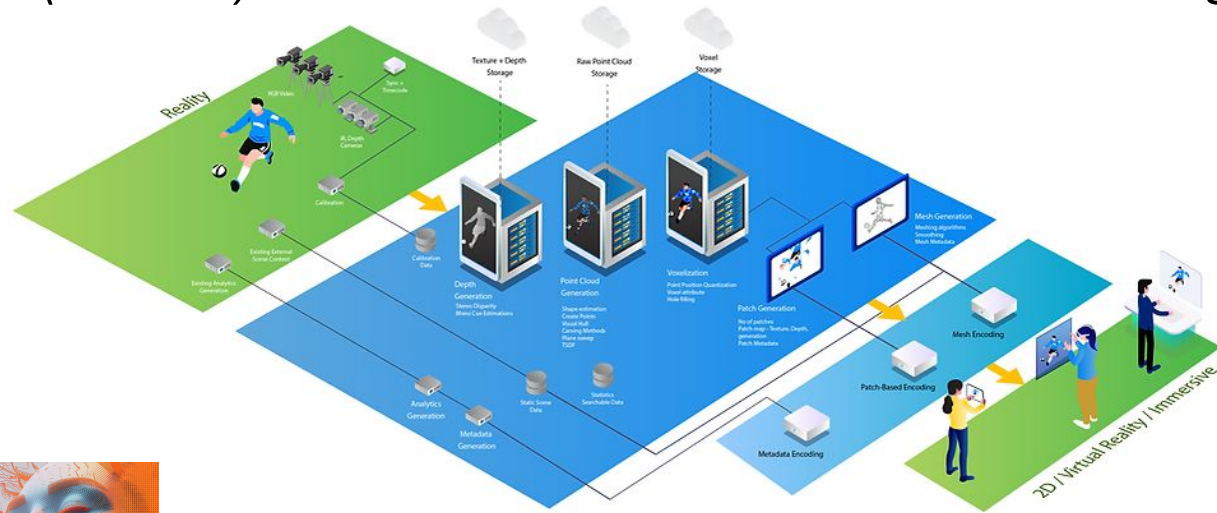


# The Volumetric Format Association

*Ian Williams (NVIDIA) – Co-Chair Volumetric Solutions Working Group*



Volumetric Media  
Town Hall

November 26 at 7AM PT

Taking volumetric media ecosystem to the next level



Volumetric Format Association

# VFA Goal

To drive the development of volumetric video as the next revolution for content creation, editing 3D content, distribution of 3D content and creating entirely new ways to tell stories and communicate with each other.



Image courtesy of



Image courtesy of Canon



# VFA Members



Canon



RED

## Enterprise

Leading companies at the forefront of technological innovation



SONY

TRICKSHOT

Magicbox

## Production

Studios and system integrators



MEDIAPRO

FearlessProductions.tv



## Community

Companies engaged in various aspects of the creative industry



# Target Use Cases



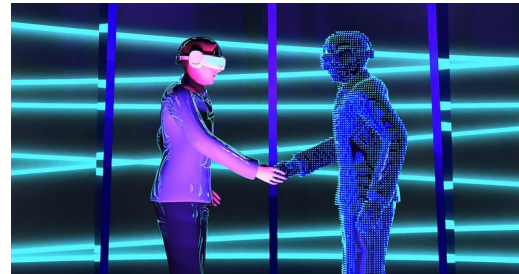
**Live Sports**



**Immersive Experiences**

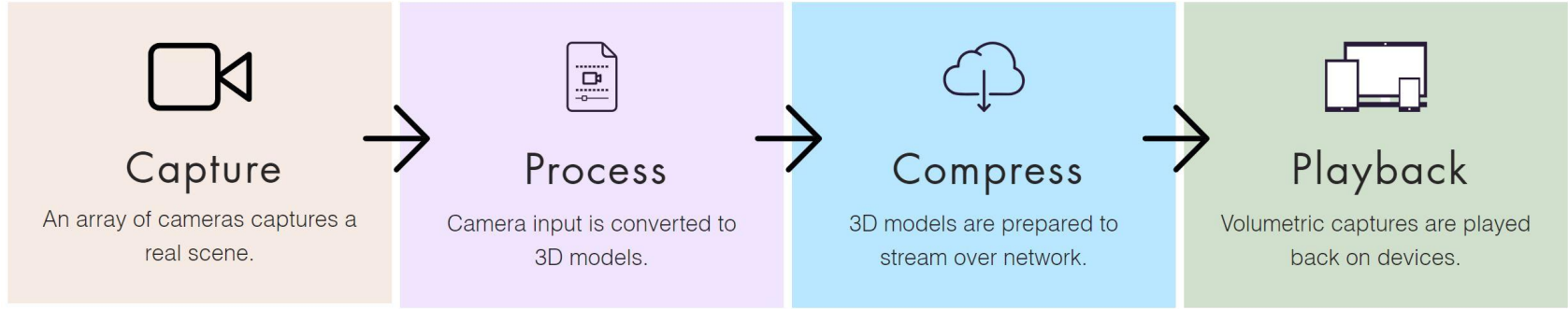


**SFX and Virtual Production**



**XR and the Metaverse**

## VFA Scope



## Published Specifications and Whitepapers

### Specifications:

VFA Specification Version 1.1

### Whitepapers:

Capture Stages  
Camera Array Design – Introduction  
Video Capture System Setup



# Current Work – VFA Specification 2.0

## Server-side Rendering

Streamed interactive volumetric experience

Assorted clients:

*HMD, Glasses, Tablet, Phone, TV, Web browser*

Minimum application experience

## Continue to build on existing standards

ITU-T H.265 and ISO/IEC 23008-2 (H.265)

MPEG-2 Part 1 (Systems) (ISO/IEC 13818-1) and ITU-T H.222.0

ISO/IEC 14496-12 - ISO BMFF

ISO/IEC 23090-5 – V-PCC

3GPP

OpenXR

.....



# Current Work - Capture Specification

Flexible and extensible format/description to describe volumetric capture configurations as well as all associated data and metadata necessary for down stream processing

Human- and machine-readable JSON

Support inside-out, outside-in, off-line and live capture

Facilitates easy verification of database integrity and queries to generate sub-set of data



## Current Work – Processing Pipeline Description

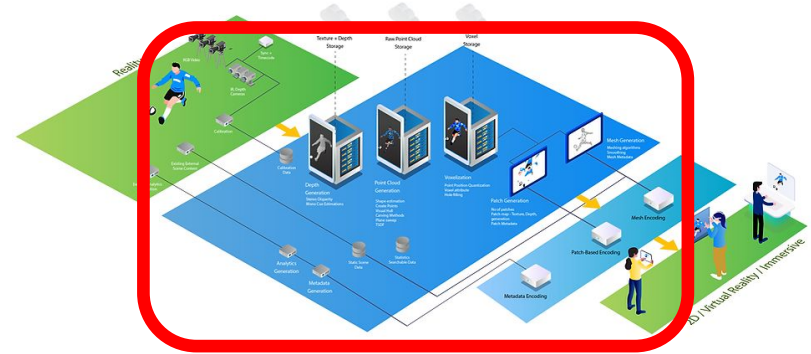
## Node based graph description of processing pipeline

## Supports multiple streams and parallel processing

## Flow control, status

## No IP disclosure

## Version 1 descriptive versus programmatic





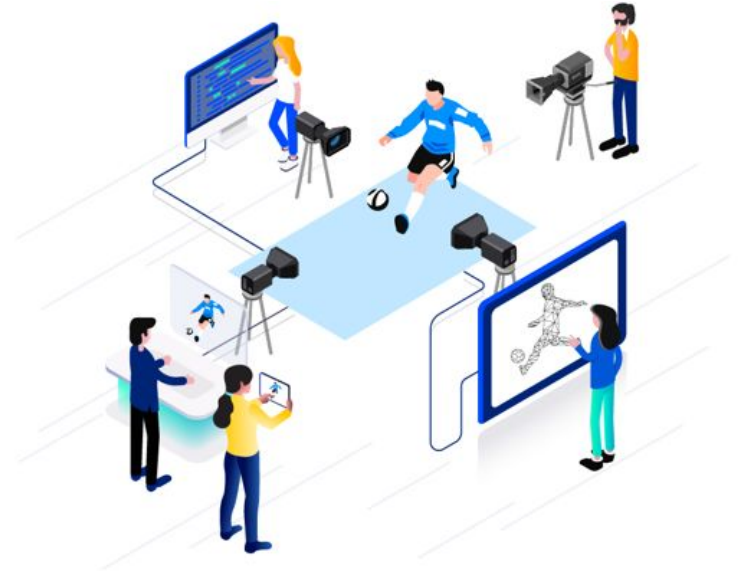
# Current Work – Best Practices

Leverage existing infrastructure

Assessing quality

What would define broadcast quality?

.....



# Want to learn more about the VFA?

<http://volumetricformat.org>

<https://www.volumetricformat.org/podcast>

<https://www.volumetricformat.org/events>

<https://www.linkedin.com/company/volumetric-format-association/>

**Get In Touch**

[info@volumetricformat.org](mailto:info@volumetricformat.org)

