How Multi User Collaborative VR is Changing the Way Architects Design Spaces

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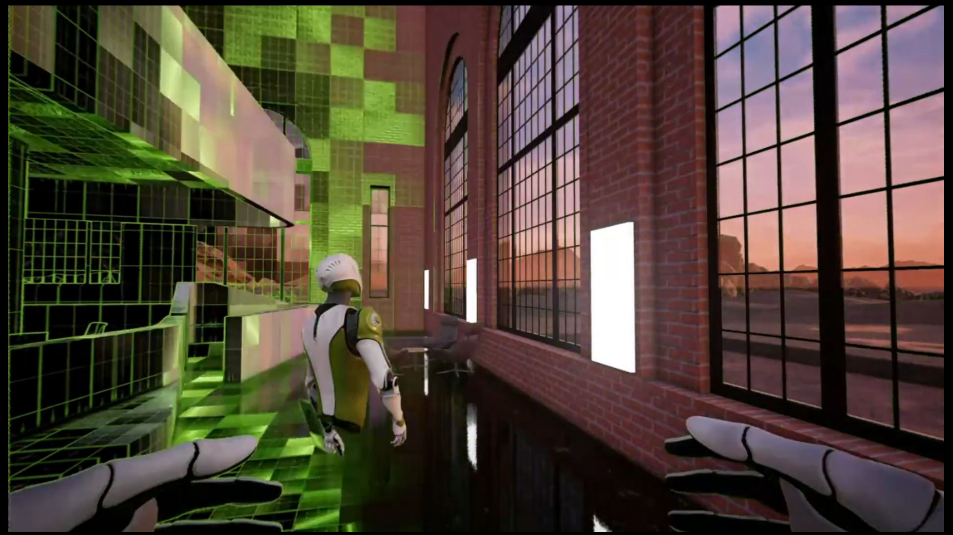
From still to immersive



VR is a lonely experience

So what makes this different?

Next level collaboration

Artifacts of the design process

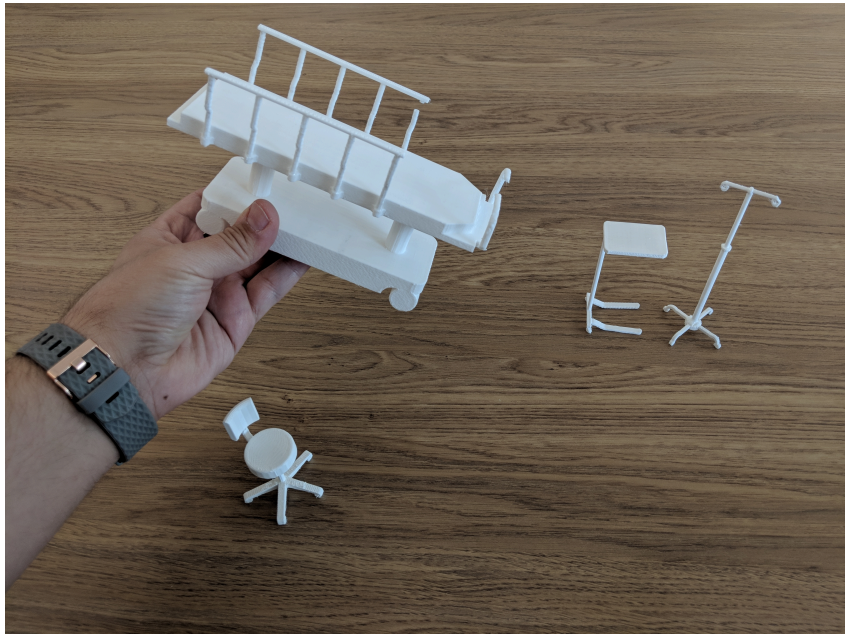
Interactivity with models in new ways

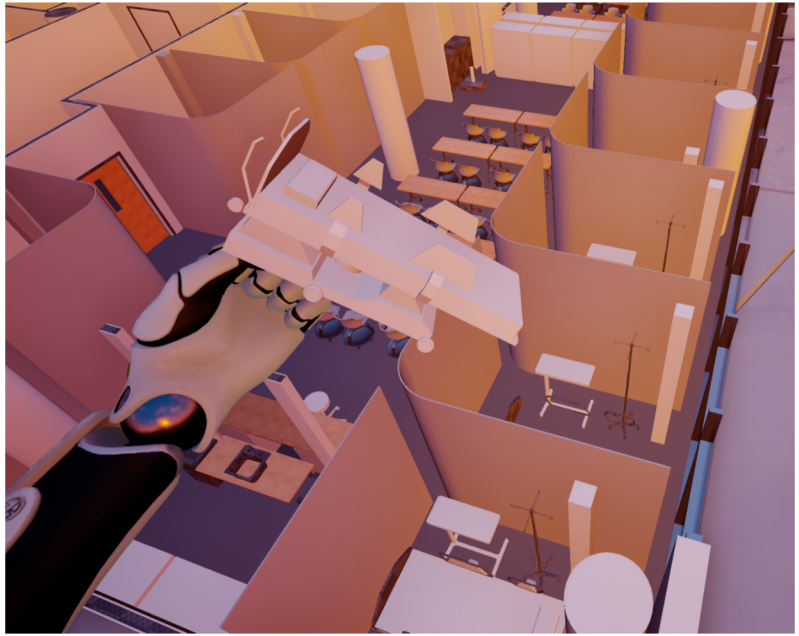

Next Level Collaboration:
Removing the limitations of physical location, and allowing the equivalent of face to face communication and interaction during the design process

Client Collaboration: virtual participation in design process

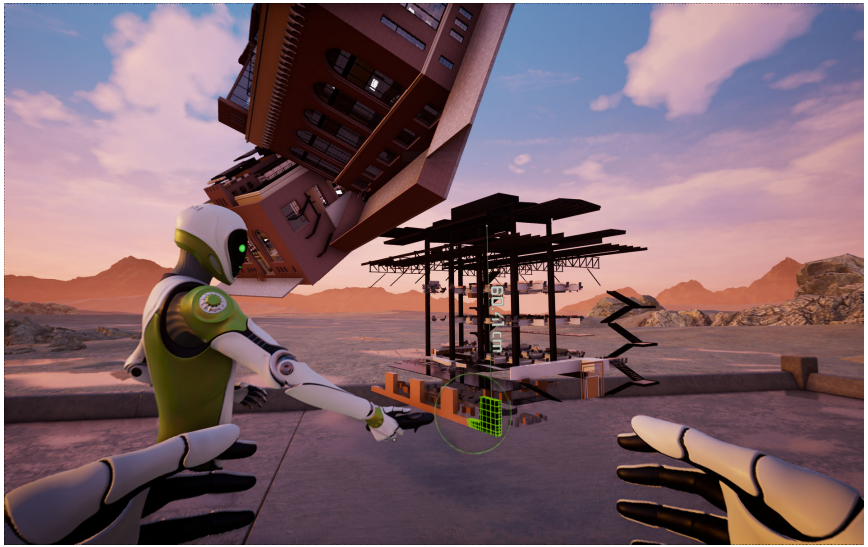
Actionable artifacts from the design process

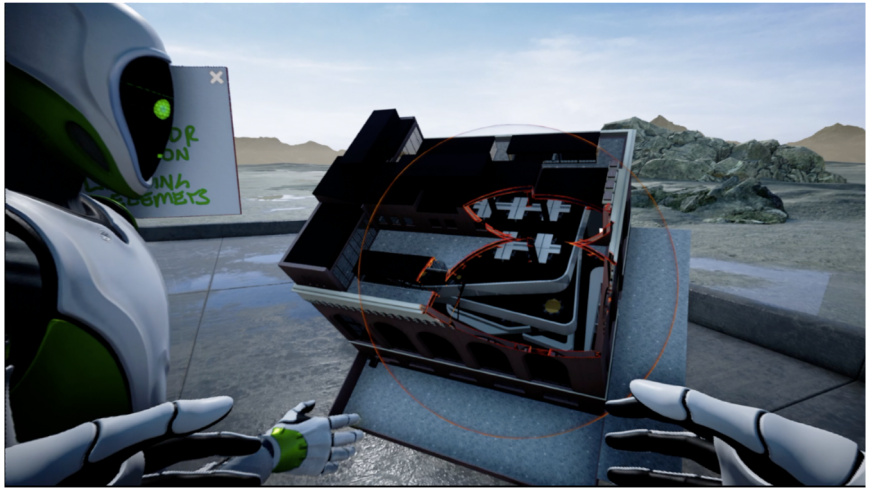
Photos from Holodeck design sessions



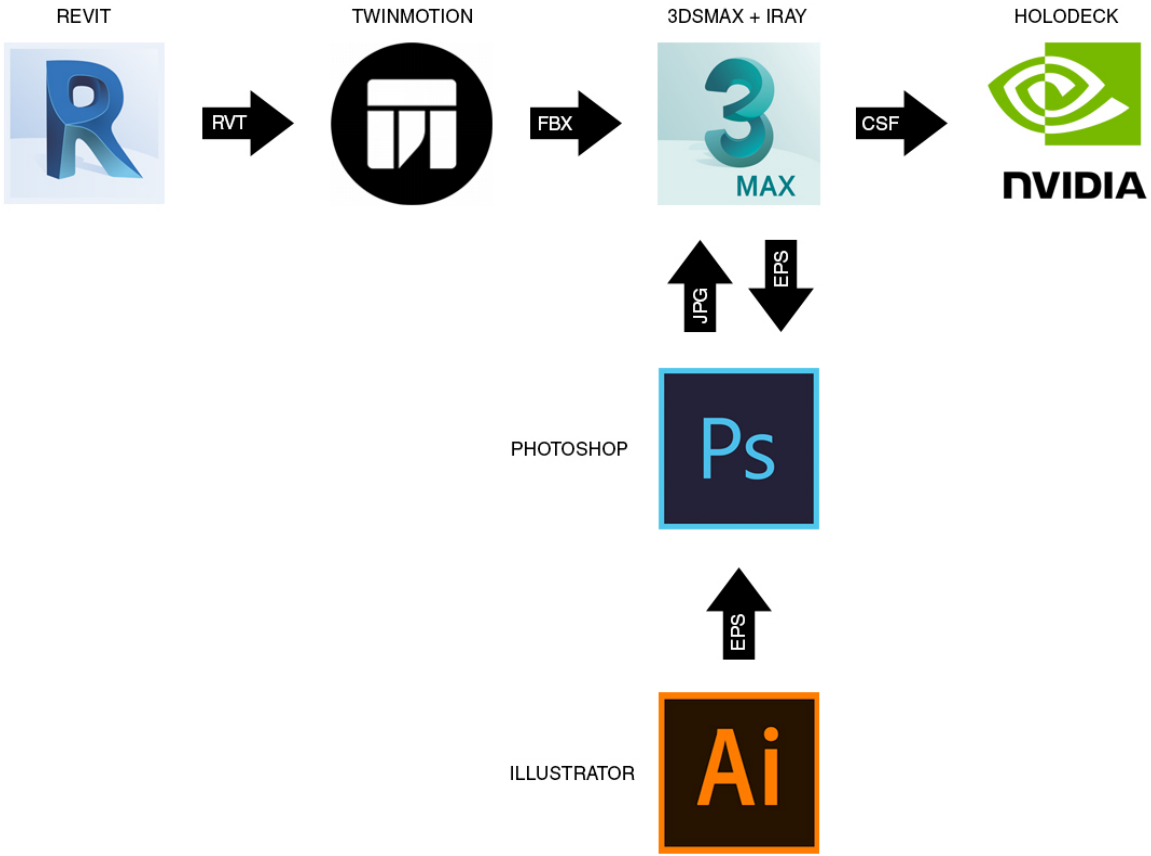


Traditional Interactivity

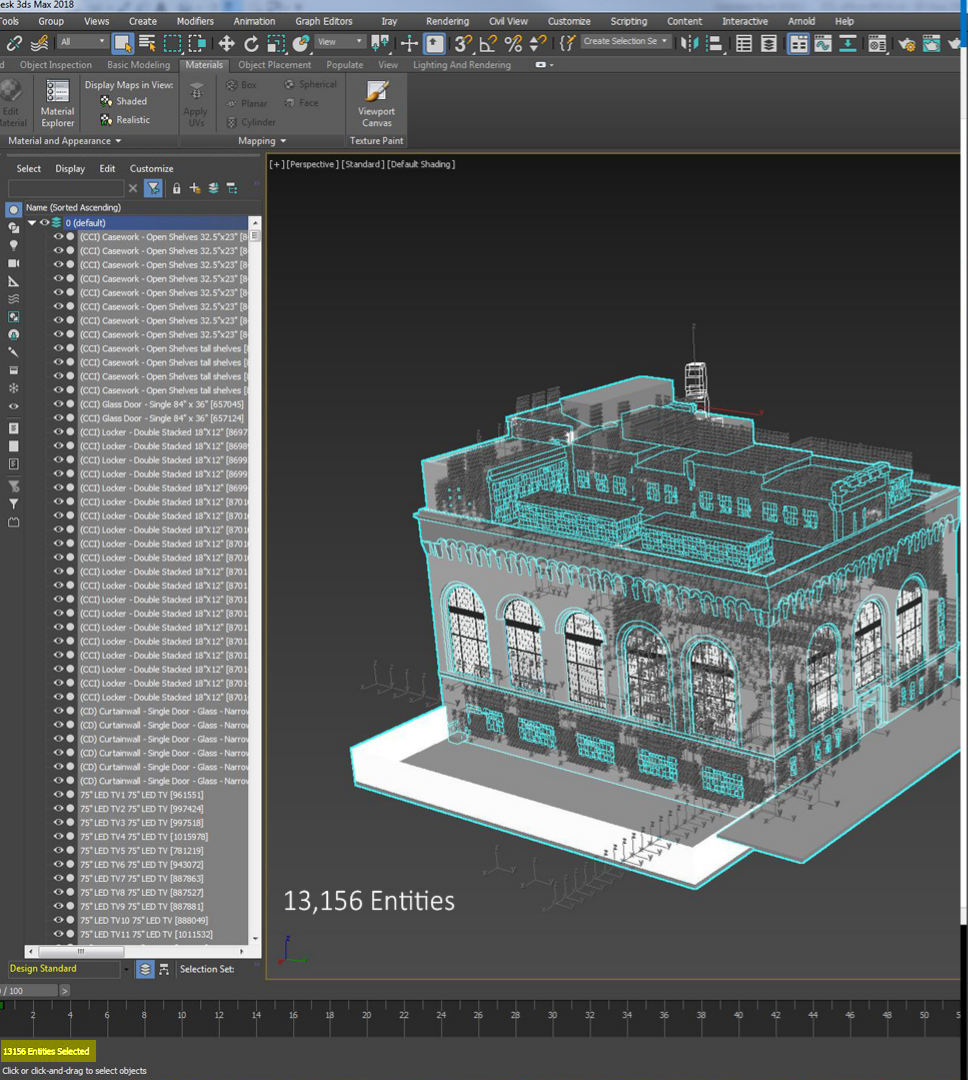


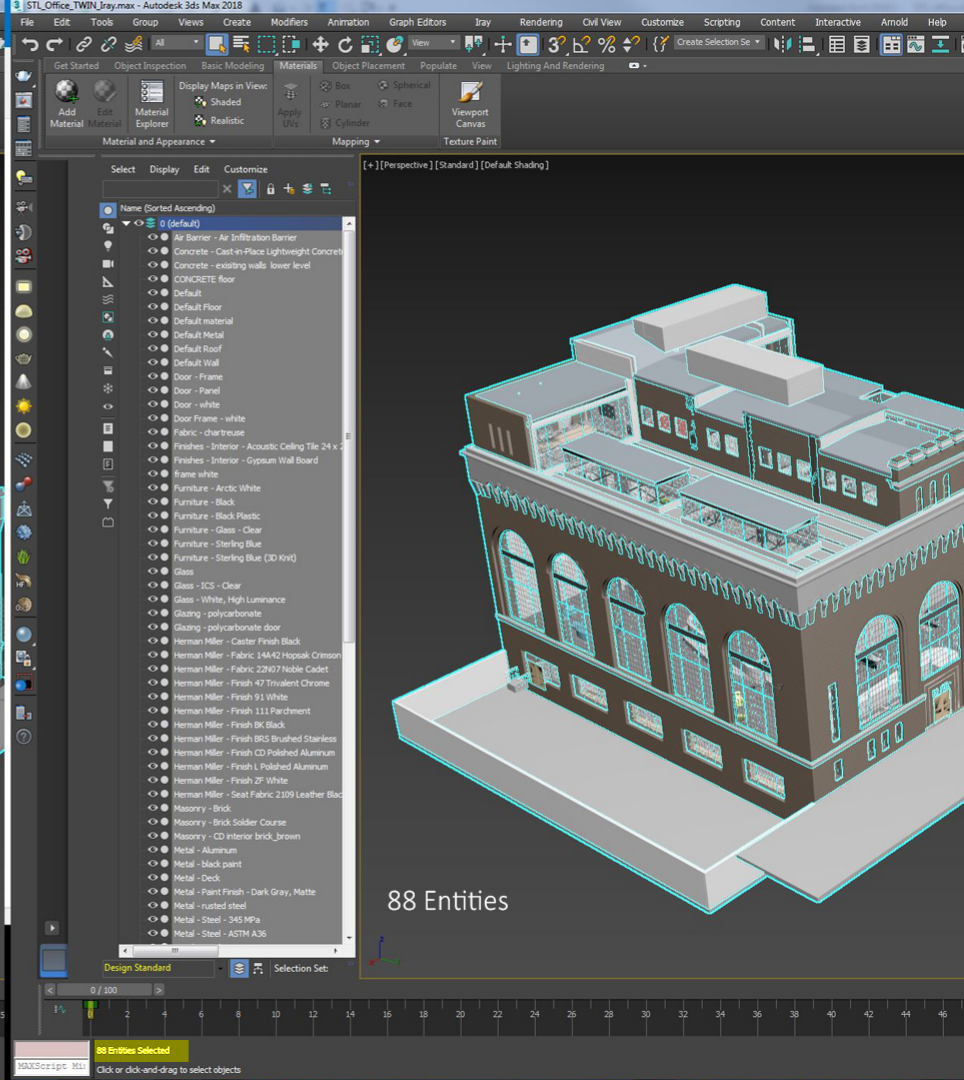


Next Level Interactivity

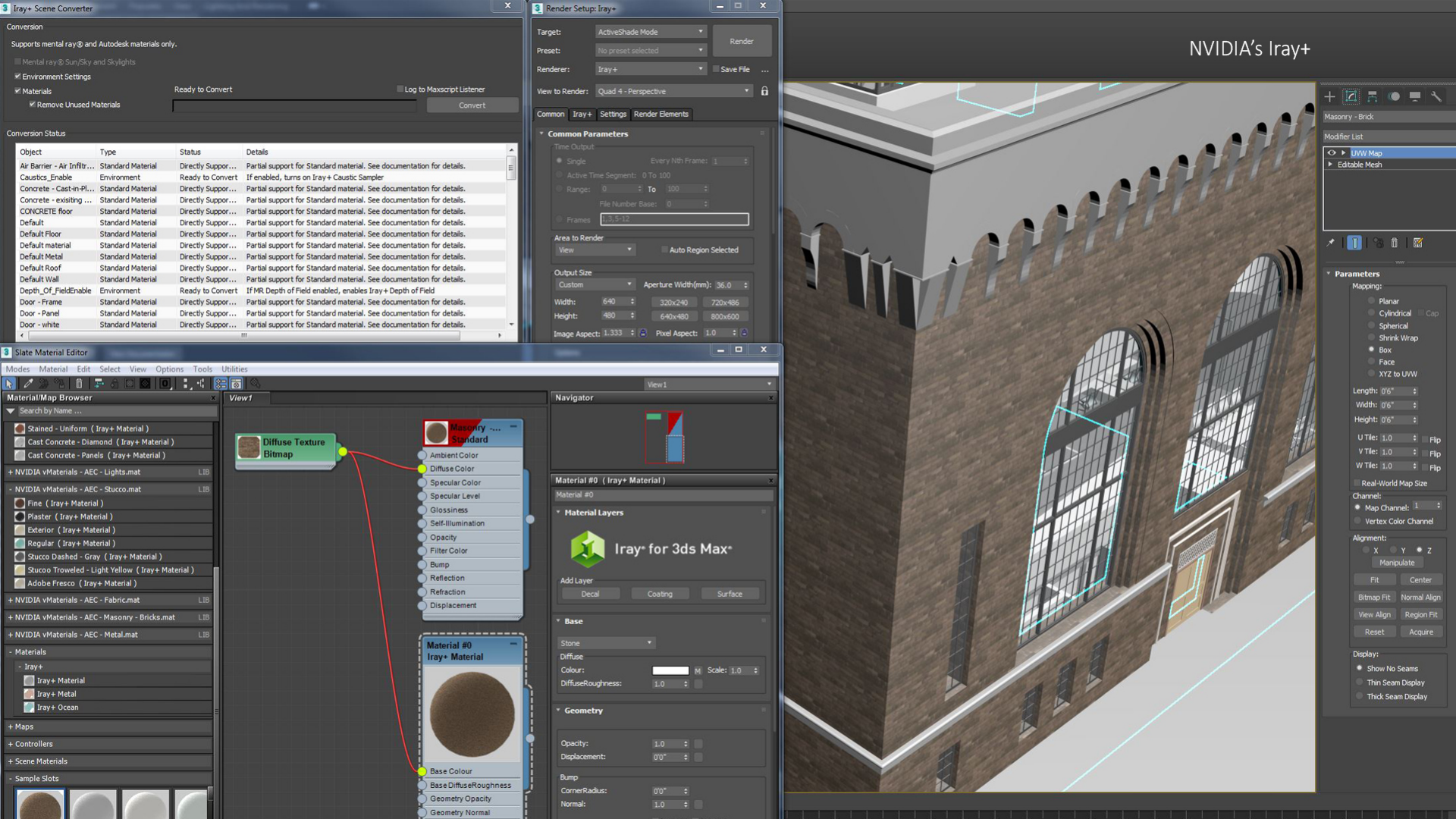


Holodeck process


13,156 Entities


88 Entities

NVIDIA's Iray+



WHAT YOU NEED

PC Requirements

Make sure your PC meets the following minimum requirements:

- Single NVIDIA Quadro P6000, Geforce GTX 1080Ti, or TitanXp
- Intel Core i7-6700k or higher
- 80GB free disk space on a SSD or very fast HDD
- 16GB RAM or higher
- HTC Vive headset and controllers
- Windows 10 64 bit SP1
- Separate Steam account for each system

PERFORMANCE

Due to the nature of real-time rendering, hard limits on triangle counts, etc. cannot be directly dictated. Differences in materials and the amount of on-screen drawn triangles can all affect your performance.

With that said, the rendering engine in NVIDIA Holodeck is made to tackle a large number of triangles efficiently to reduce time spent optimizing and allow more time for designing.

Basic recommendations are:

- Recommended Polycount Limit = 50 million triangles
- Recommended Object Limit = 30k objects
- Recommended Maximum Unique Materials = 64

These are not hard limits, but rather recommendations to reach 90 hz (the recommended refresh frequency on an HMD) on the target hardware.

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Questions?

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