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
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.
Questions?

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