



# HOLODECK

# Virtual Reality for the Construction Industry

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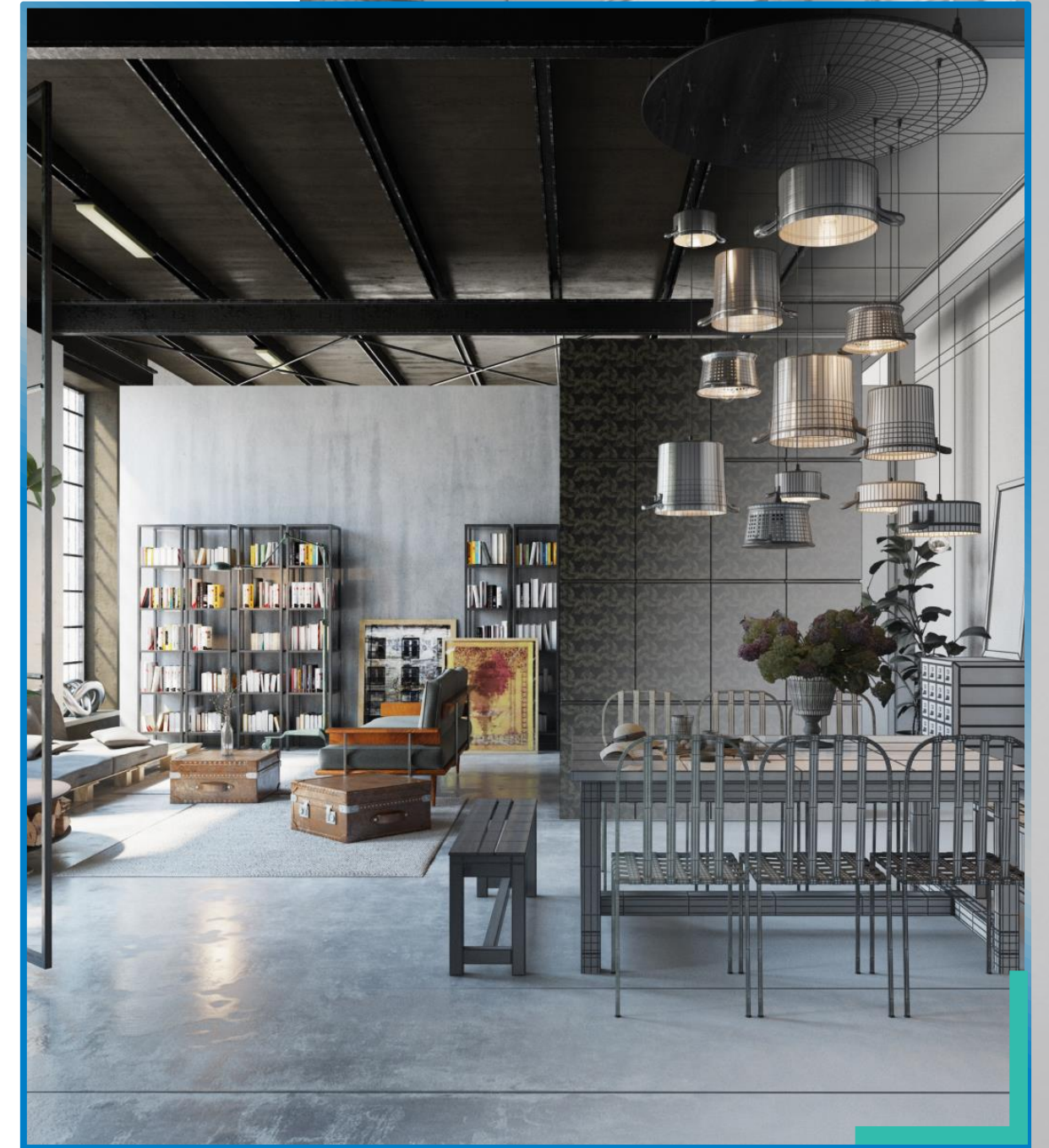






# Learning Objectives

- Create a VR scene using Revit LIVE
- Edit the VR in 3ds Max (Interactive) using animation and basic FLOW editing (no scripting!)
- Investigate usecases like design phases / LODs / BIM data / timeline



# VR / AR Usecases

## INTERNAL



**VIRTUAL  
REALITY**



**AUGMENTED  
REALITY**



Product  
Showcase

Customer  
experience



Marketing

Advertising



Digital sales

Product  
Integration



Customer support

## EXTERNAL

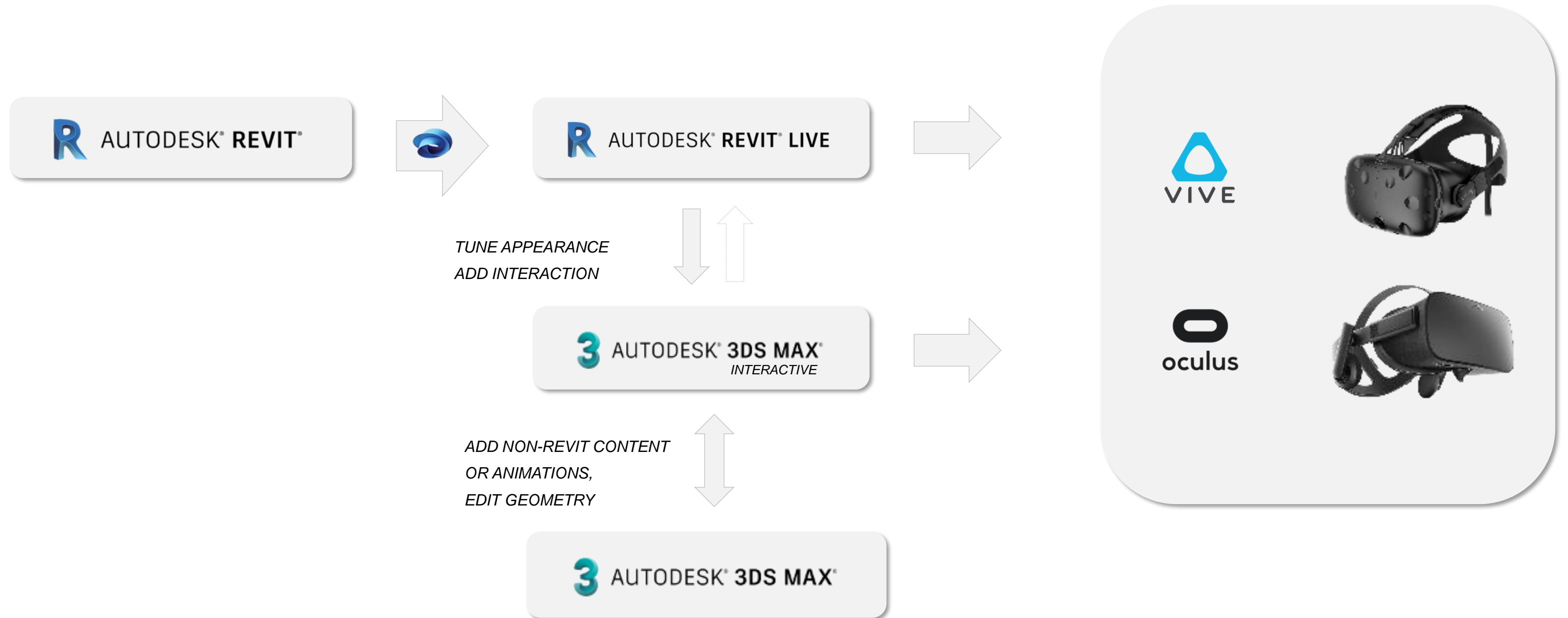


# LIVE Design



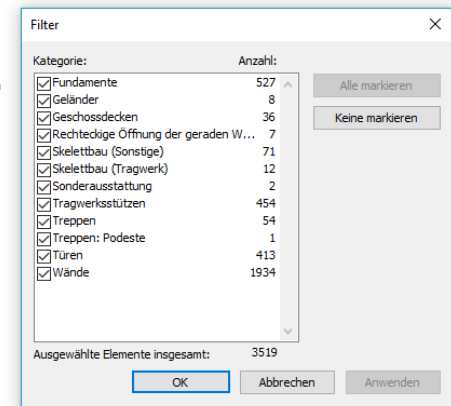
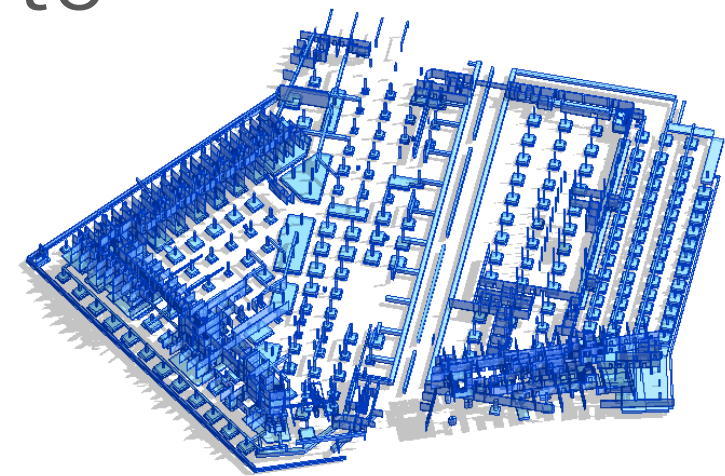
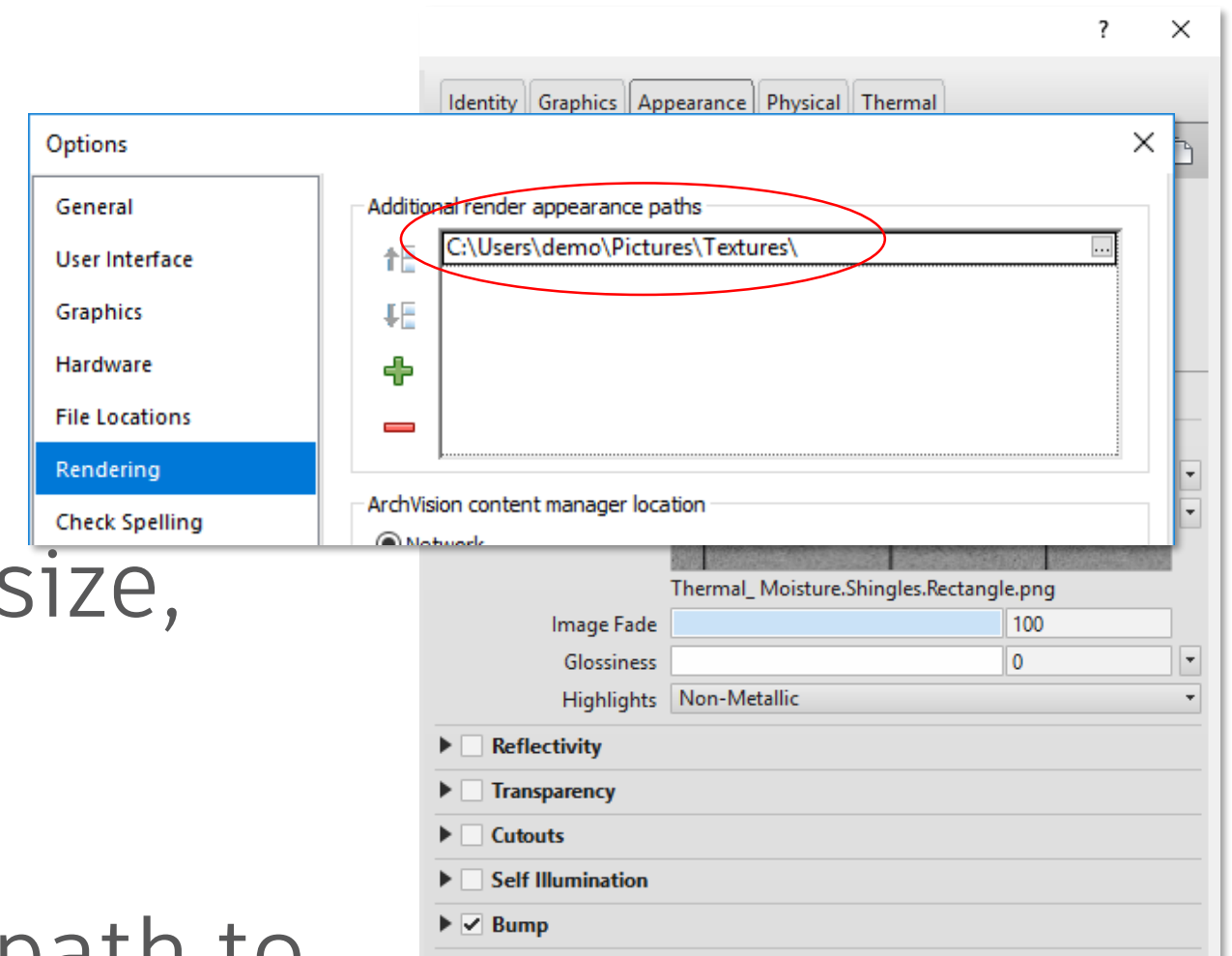


# LIVE Design



# Model Preparation

- Assign Materials with Appearance
- Use GPU-friendly textures (reasonable size, power of two: 512 x 512, 512 x 1024)
- When adding custom textures, add the path to Revit options
- Hide Elements which are not visible in VR



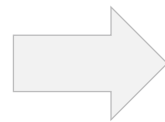
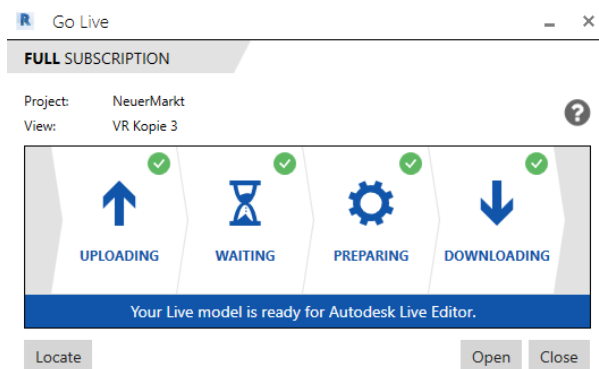
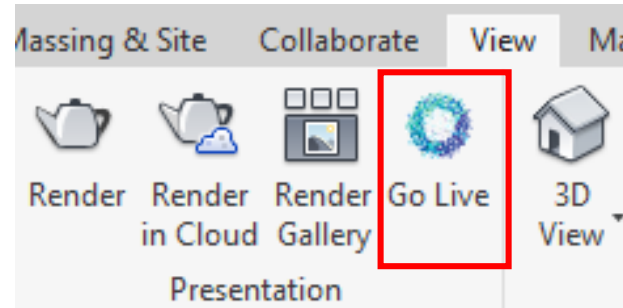


# Shopping Mall *Neuer Markt*





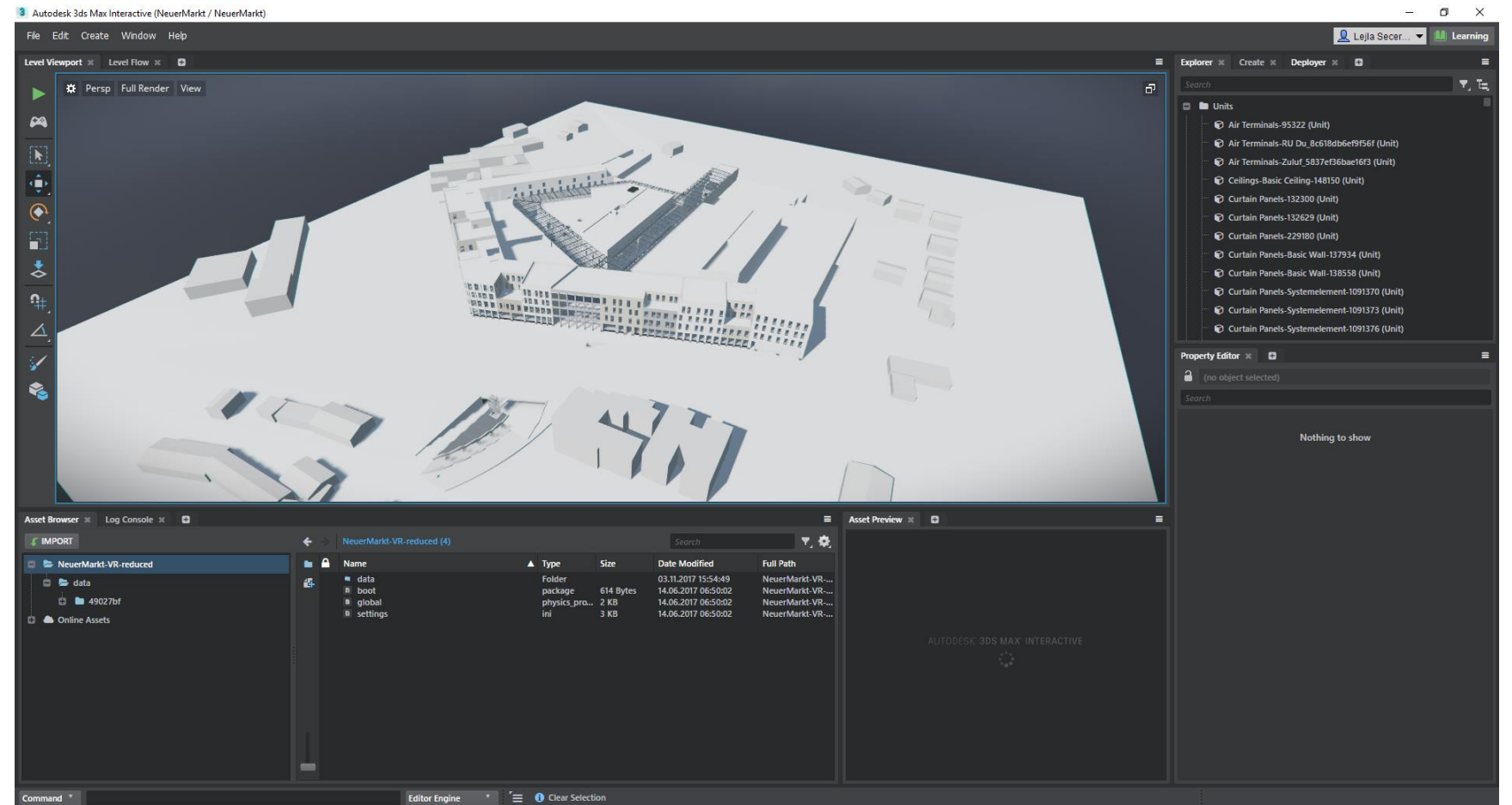
# Revit LIVE Model





# Open LIVE Project in 3ds Max Interactive

- Rename .lvmd to .zip
- Unzip
- Open Stingray, Add Project and open!





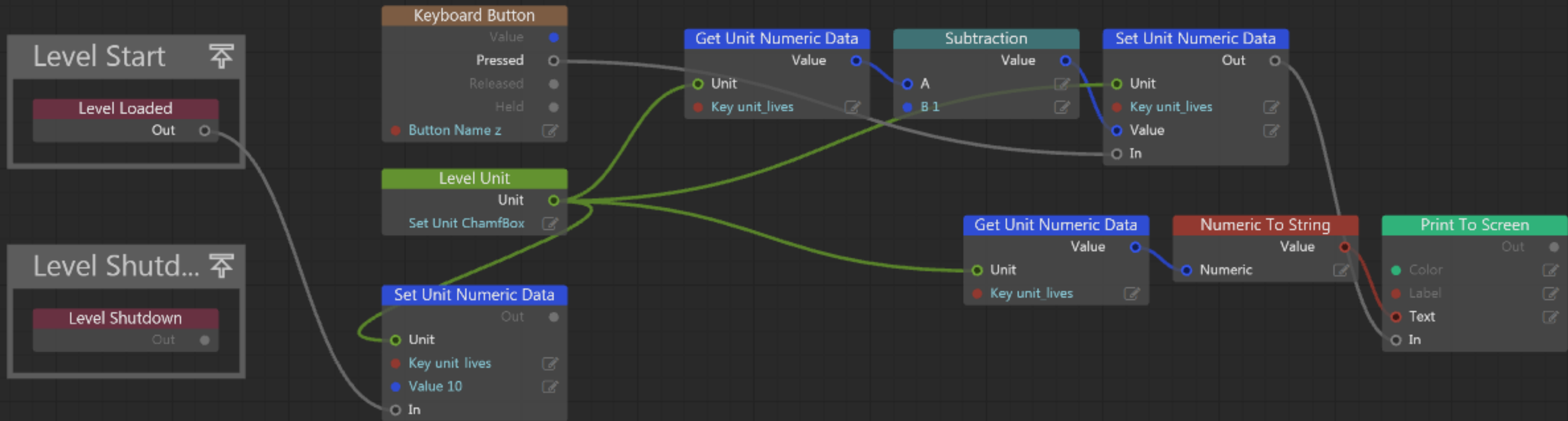
# Boosting the visual appearance

- Assign / edit materials
- Generate UV maps and perform lightbaking
- Create reflection probes





# Adding interaction elements with FLOW



The background features a complex, organic wireframe mesh in a light gray color, set against a white background. The mesh forms a series of interconnected, flowing shapes that resemble a stylized, abstract landscape or a network of paths. A solid blue gradient bar, transitioning from a darker blue on the left to a lighter blue on the right, spans the bottom portion of the image. The text "LIVE DEMO" is centered within this blue bar in a white, bold, sans-serif font.

LIVE DEMO



