

Models in 3D Scene

SuperMap Software Co., Ltd.



SuperMap

TO BE THE GLOBAL LEADING GIS

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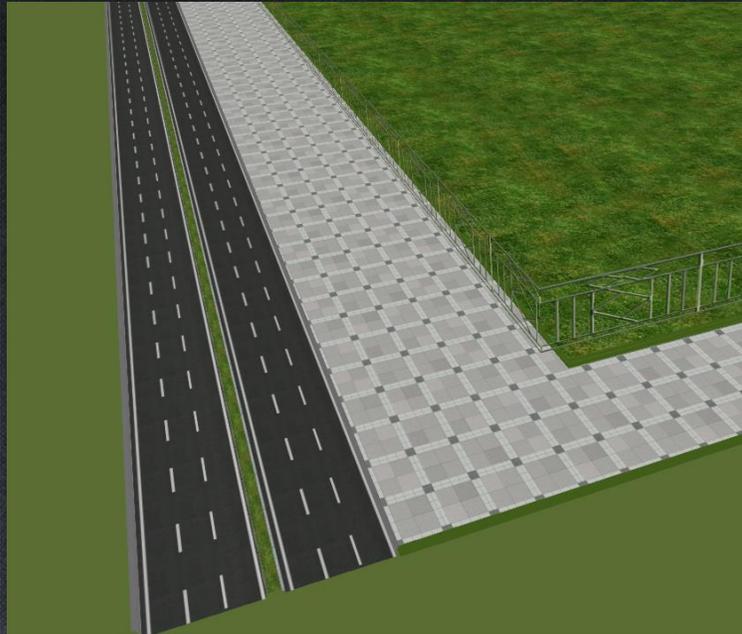
BIM

3D Symbolization

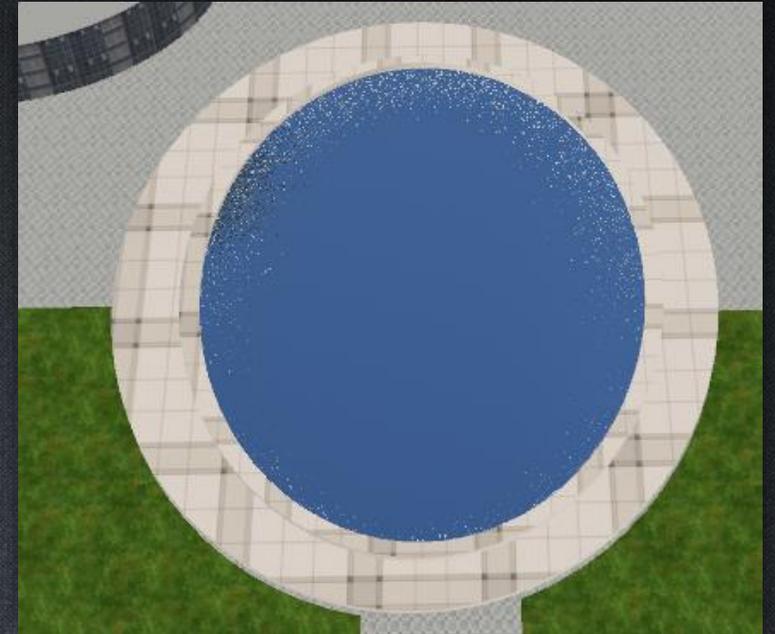
- Vector rendering
 - 3D Symbolization of point, line and polygon



Symbolize 2D Point



Symbolize 2D Line



Symbolize 2D Polygon

Exercise:

- Data for exercise: \Data\RapidModeling\Rapidmodeling.smwu
- Open RapidModeling workspace, add all datasets in the RapidModeling datasource into a new spherical scene and reorder the layers
- Render the **StreetLamp** point layer by Right Click -> **Layer Style Settings...**
- Import the marker symbol library from the Data\SymbolResources to help rendering
- Render the **Tree** point layer by Right Click -> **Create Thematic Map...**
- Render the **Car** point layer and the **Trashcan** point layer

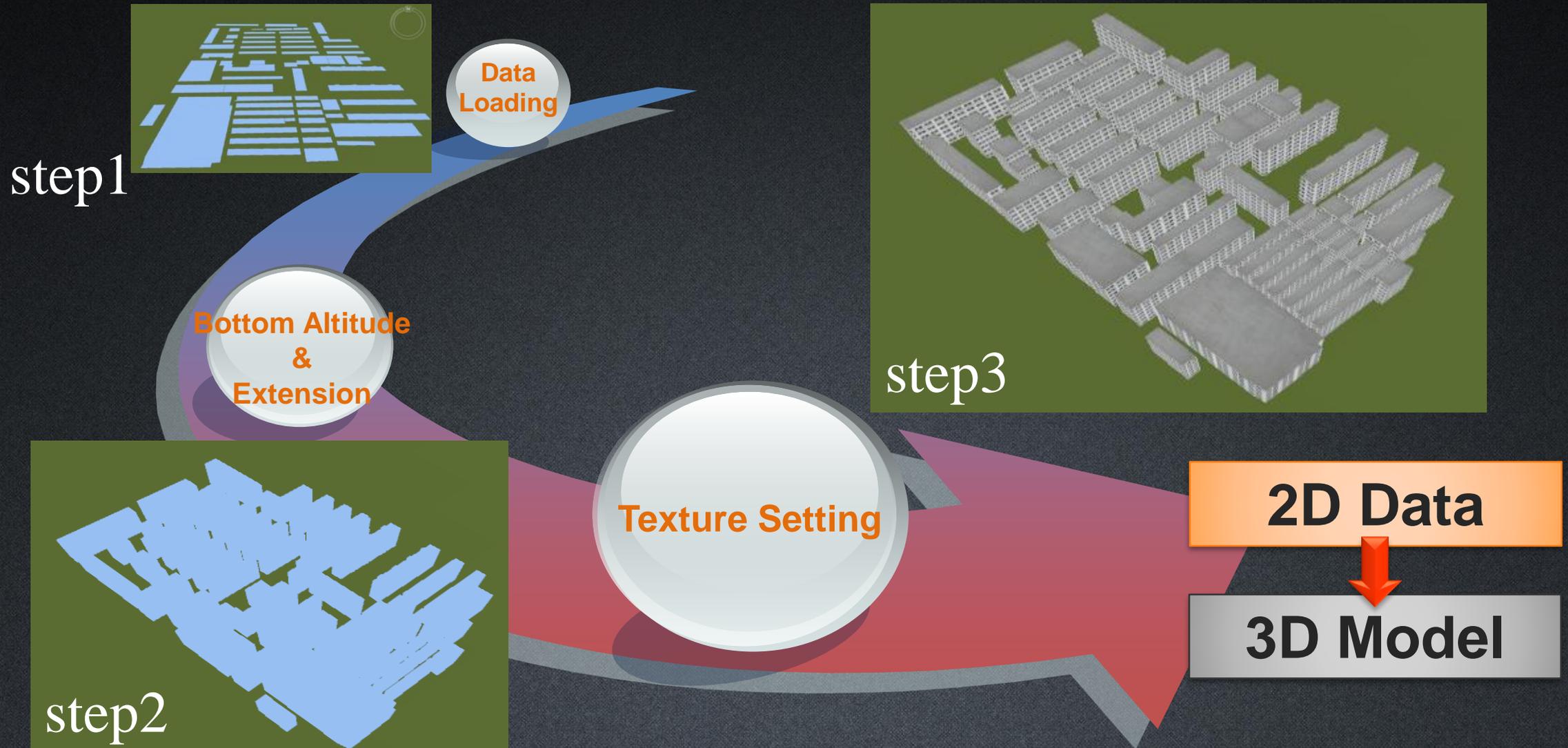
Exercise:

- Render the **Road** layer by Right Click -> **Layer Style Setting...**
- Import the line symbol library from the Data\SymbolResources to help rendering

- Render the **Water** layer by Right Click -> **Layer Style Setting...**
- Import the fill symbol library from the Data\SymbolResources to help rendering
- Set the Water layer's **Altitude Mode** under the Styles menu to **Absolute**

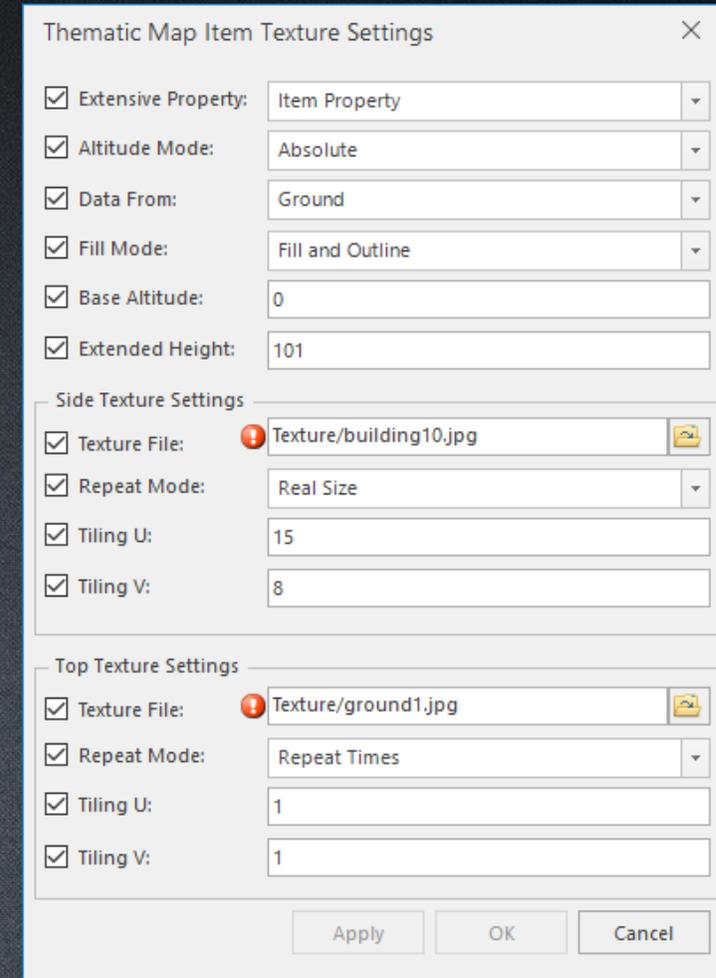
- Render the **ParkingSpace** layer

Rapid Modeling By Vector Stretching



Exercise:

- Make some models by vector stretching.
 - Fence layer
 - Building_2 layer
 - Ground layer
 - PoolEdge layer
- Make unique thematic map, stretch each item and set their textures
 - Building_1 layer



The image shows a dialog box titled "Thematic Map Item Texture Settings". It contains several sections of settings:

- Extensive Property:** Item Property
- Altitude Mode:** Absolute
- Data From:** Ground
- Fill Mode:** Fill and Outline
- Base Altitude:** 0
- Extended Height:** 101

Side Texture Settings

- Texture File:** Texture/building10.jpg
- Repeat Mode:** Real Size
- Tiling U:** 15
- Tiling V:** 8

Top Texture Settings

- Texture File:** Texture/ground1.jpg
- Repeat Mode:** Repeat Times
- Tiling U:** 1
- Tiling V:** 1

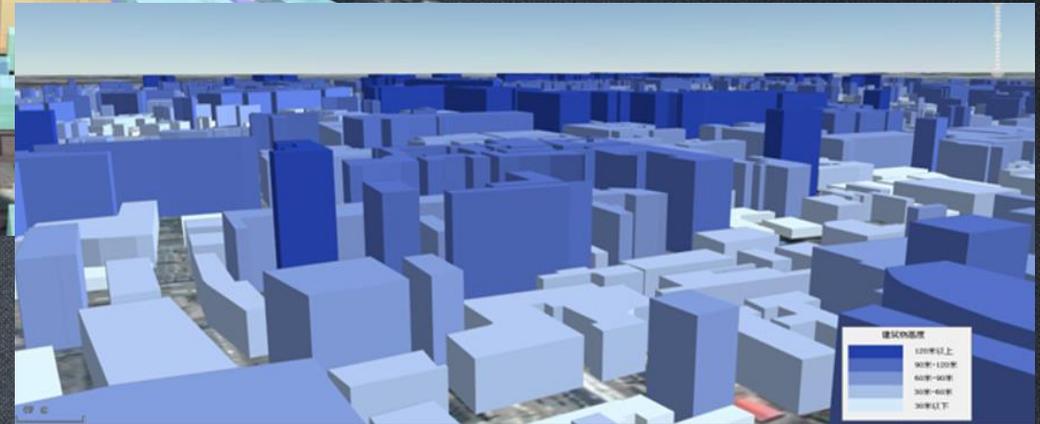
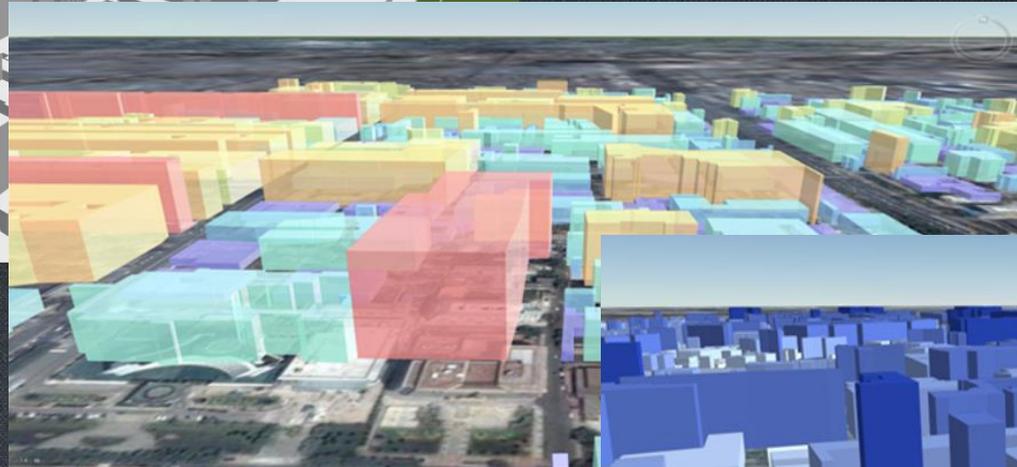
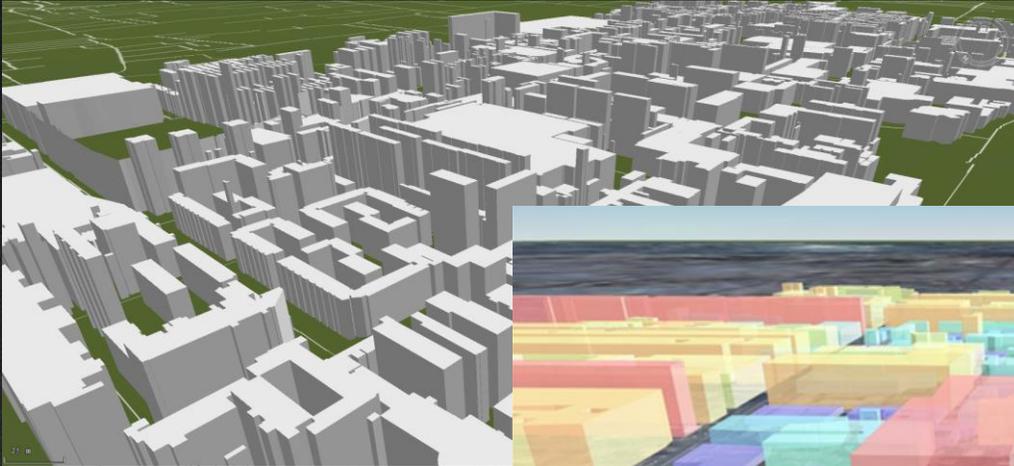
Buttons: Apply, OK, Cancel

Preparation for vector stretch Modeling

- Data preparation :
 - 1. Make/Get the 2D vector dataset
 - 2. Take the texture images of actual buildings
 - 3. Edit the texture images in Photoshop, especially the pixels
 - 4. Add fields for datasets and edit their values like:
bottom altitude, extension height, top and side texture paths, etc.

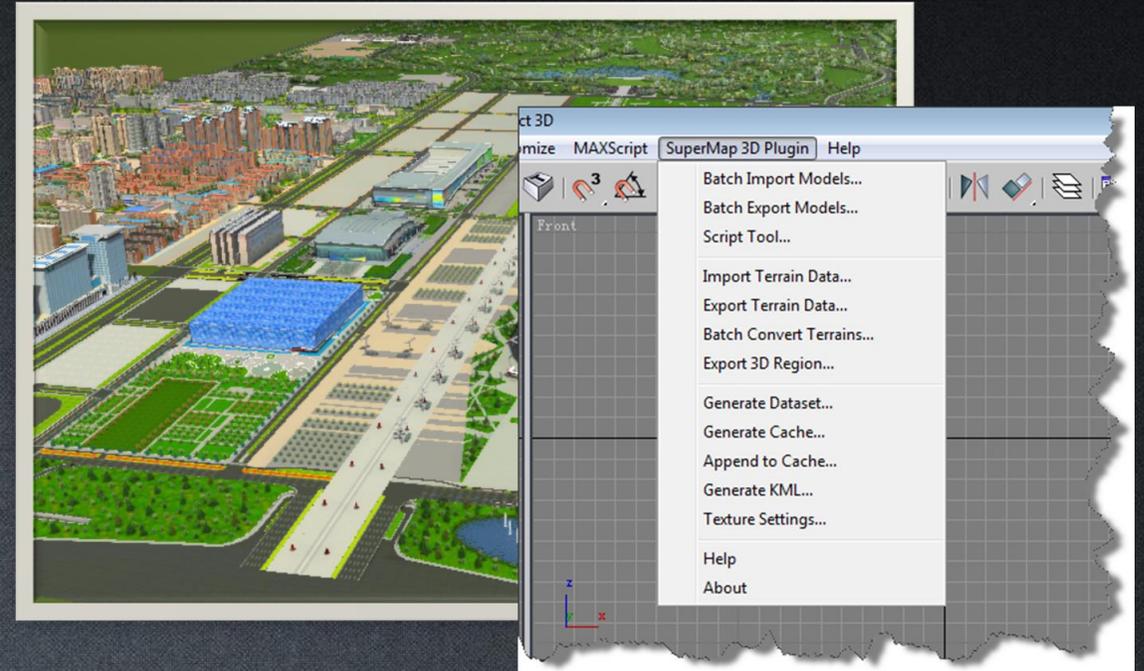
Rapid Modeling By Vector Stretching

- Applicable to the data of large and non-important area

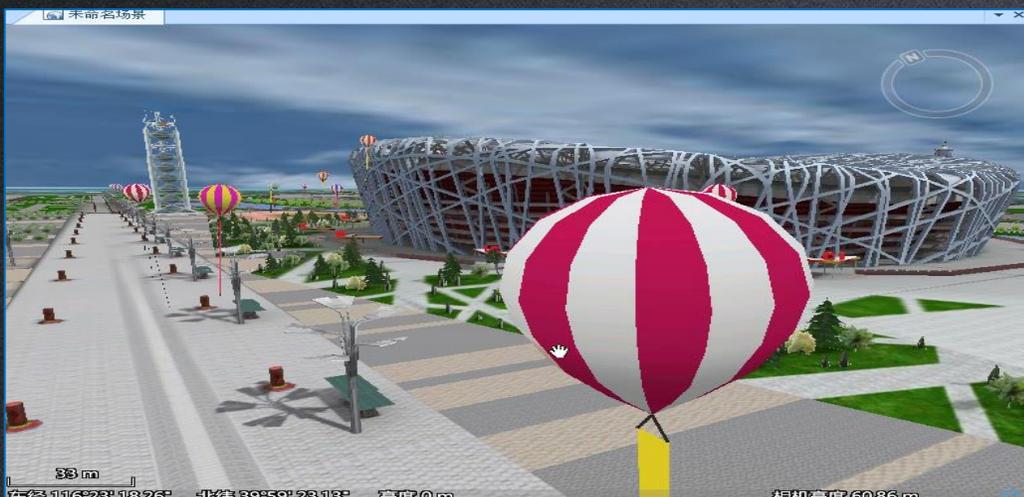


3Ds Max Model

- Applicable to important buildings in a small area
- Process to apply the 3Dx Max model
 - Make models in 3Ds Max
 - Install SuperMap 3D Plugin in 3Ds Max
 - Export models into the dataset saved in a file datasource
 - Add the dataset which stores models into a 3D Scene
- Download link:
 - <http://support.supermap.com.cn/DownloadCenter/ProductAuxiliary.aspx>

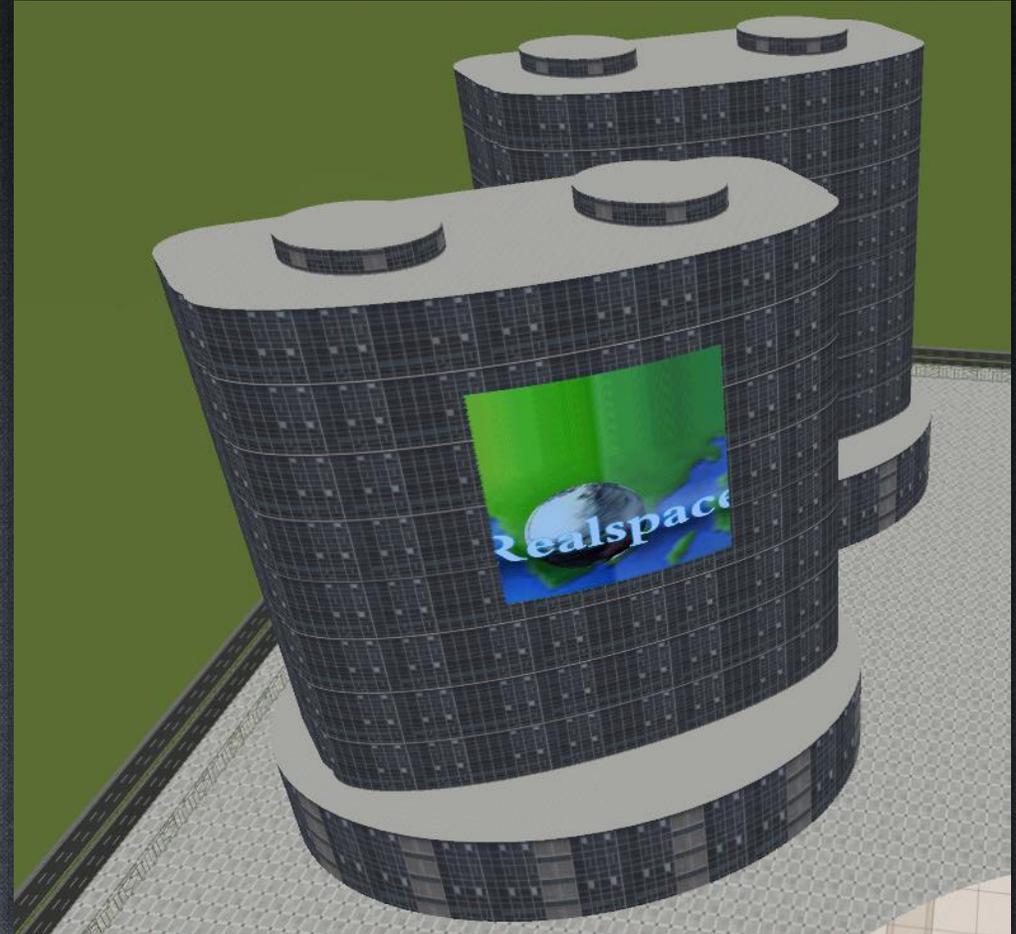


Animation Model



Exercise:

- Render the **Adboard** layer by vector stretching
 - Set the layer's **Altitude Mode** to **Absolute**
 - Set its **Bottom Altitude** as 80
 - Set its **Extension value** as 50
 - Set its texture path as:
`\\Data\RapidModeling\Texture\Realspace.gif`



Oblique Photographic Model

- S3M/OSGB files -> Generate OSGB Config File -> Add OSGB Cache Layer

名称	类型	大小
Tile_008_006_2_037.osgb	OSGB 文件	289 KB
Tile_008_006_2_038.osgb	OSGB 文件	226 KB
Tile_008_006_2_039.osgb	OSGB 文件	222 KB
Tile_008_006_2_040.osgb	OSGB 文件	253 KB
Tile_008_006_2_041.osgb	OSGB 文件	259 KB
Tile_008_006_2_042.osgb	OSGB 文件	263 KB
Tile_008_006_2_043.osgb	OSGB 文件	263 KB
Tile_008_006_2_044.osgb	OSGB 文件	234 KB
Tile_008_006_2_046.osgb	OSGB 文件	279 KB
Tile_008_006_2_047.osgb	OSGB 文件	263 KB
Tile_008_006_2_048.osgb	OSGB 文件	263 KB
Tile_008_006_2_049.osgb	OSGB 文件	289 KB
Tile_008_006_2_050.osgb	OSGB 文件	266 KB
Tile_008_006_2_051.osgb	OSGB 文件	237 KB
Tile_008_006_2_052.osgb	OSGB 文件	271 KB
Tile_008_006_2_053.osgb	OSGB 文件	260 KB
Tile_008_006_2_054.osgb	OSGB 文件	305 KB

```
F:\SampleData\OSGB\compressed.scp - Notepad++
File Edit Search View Encoding Language Settings Macro Run Window ?
compressed.scp
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <SuperMapCache_Unicode xmlns:sml="
3 http://www.supermap.com/SuperMapCache/vectorltile">
4 <sml:Version>1.000000</sml:Version>
5 <sml:Position>
6 <sml:X>43.296388888889</sml:X>
7 <sml:Y>5.37</sml:Y>
8 <sml:Z>-30</sml:Z>
9 </sml:Position>
10 <sml:OSGFiles>
11 <sml:FileName>.\Tile_008_005\Tile_008_005.osgb
12 </sml:FileName>
13 <sml:FileName>.\Tile_008_006\Tile_008_006.osgb
14 </sml:FileName>
15 <sml:FileName>.\Tile_009_005\Tile_009_005.osgb
16 </sml:FileName>
17 <sml:FileName>.\Tile_009_006\Tile_009_006.osgb
18 </sml:FileName>
19 </sml:OSGFiles>
20 </SuperMapCache_Unicode>
```



BIM

1. Use specific plugin to export the BIM models into a file datasource
2. Open the dataset which stores the BIM models in iDesktop
3. Optimize the BIM models in iDesktop
4. Add the BIM models into a 3D scene



Thank You!

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