Дизайн на 3D модели

Програмни средства за 3D моделиране.
Файлови формати

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Системи за Геометрично Моделиране

Видове програмни средства

- Създаване и обработка на 3D изображения (3D моделиране);
- Създаване и обработка на 3D анимация;
- Специални ефекти.

3D Моделиране и Анимация

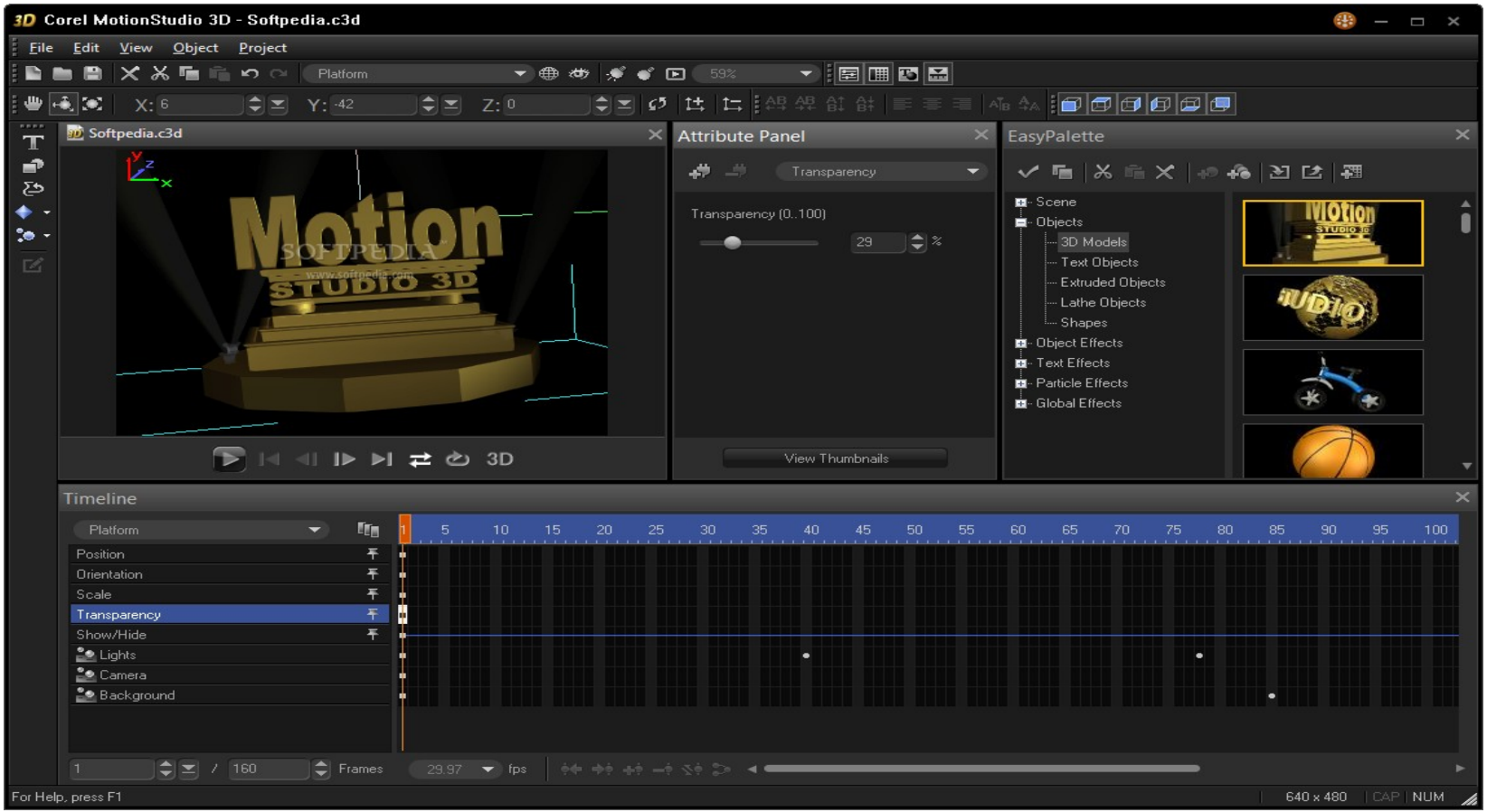
Системи за 3D Моделиране

- Blender (Win, Linux, Mac) GPL
- Autodesk 3ds Max, Maya, MotionBuilder (Win, Mac)
- Corel MotionStudio 3D (Win)
- Cinema 4D (Win, Mac)
- Electric Image Animation System (Win, Mac)
- Houdini (Win, Linux, Mac)
- LightWave 3D (Win, Mac)
- Messiah (Win)
- Zbrush (Win, Mac)

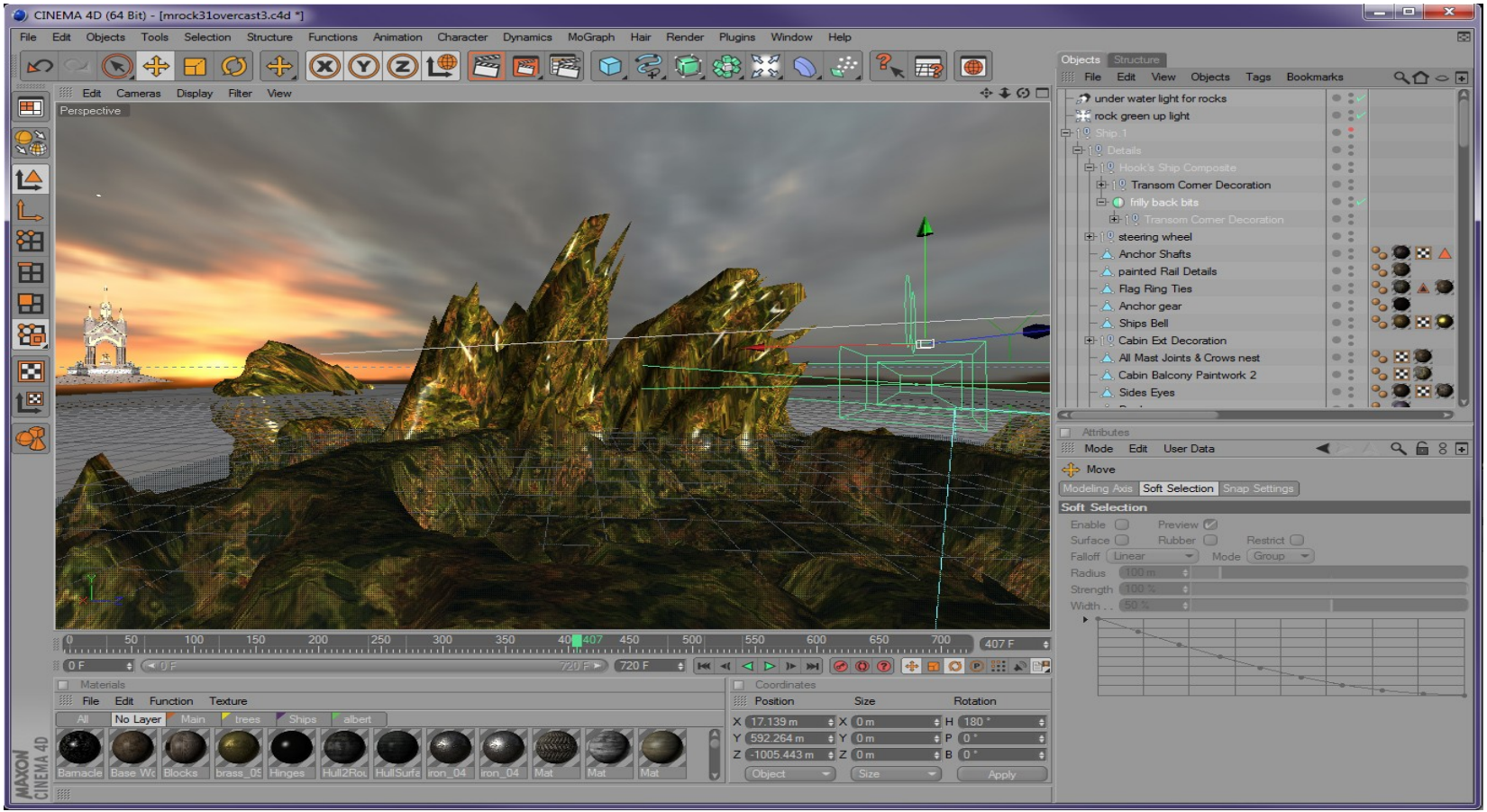
Autodesk 3ds Max

Autodesk Maya

Corel MotionStudio 3D



Cinema 4D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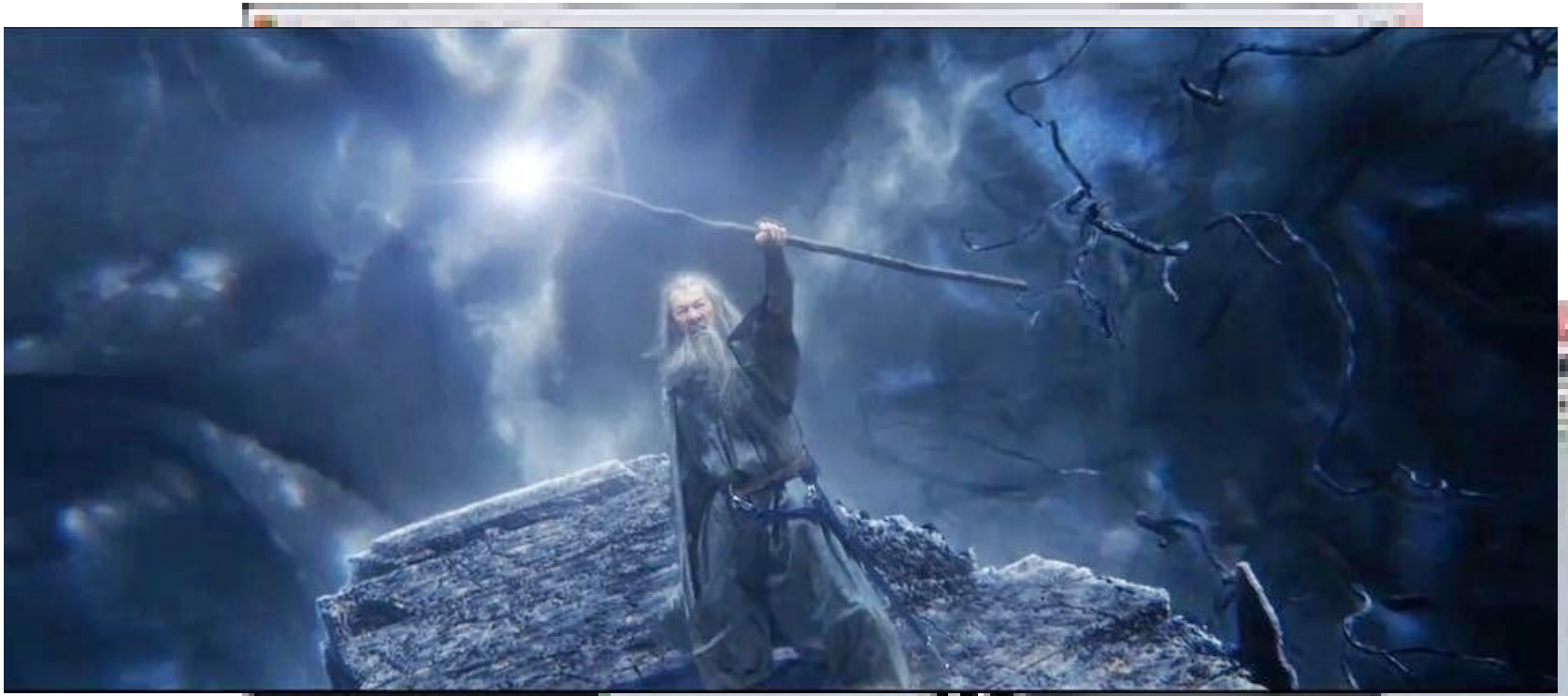
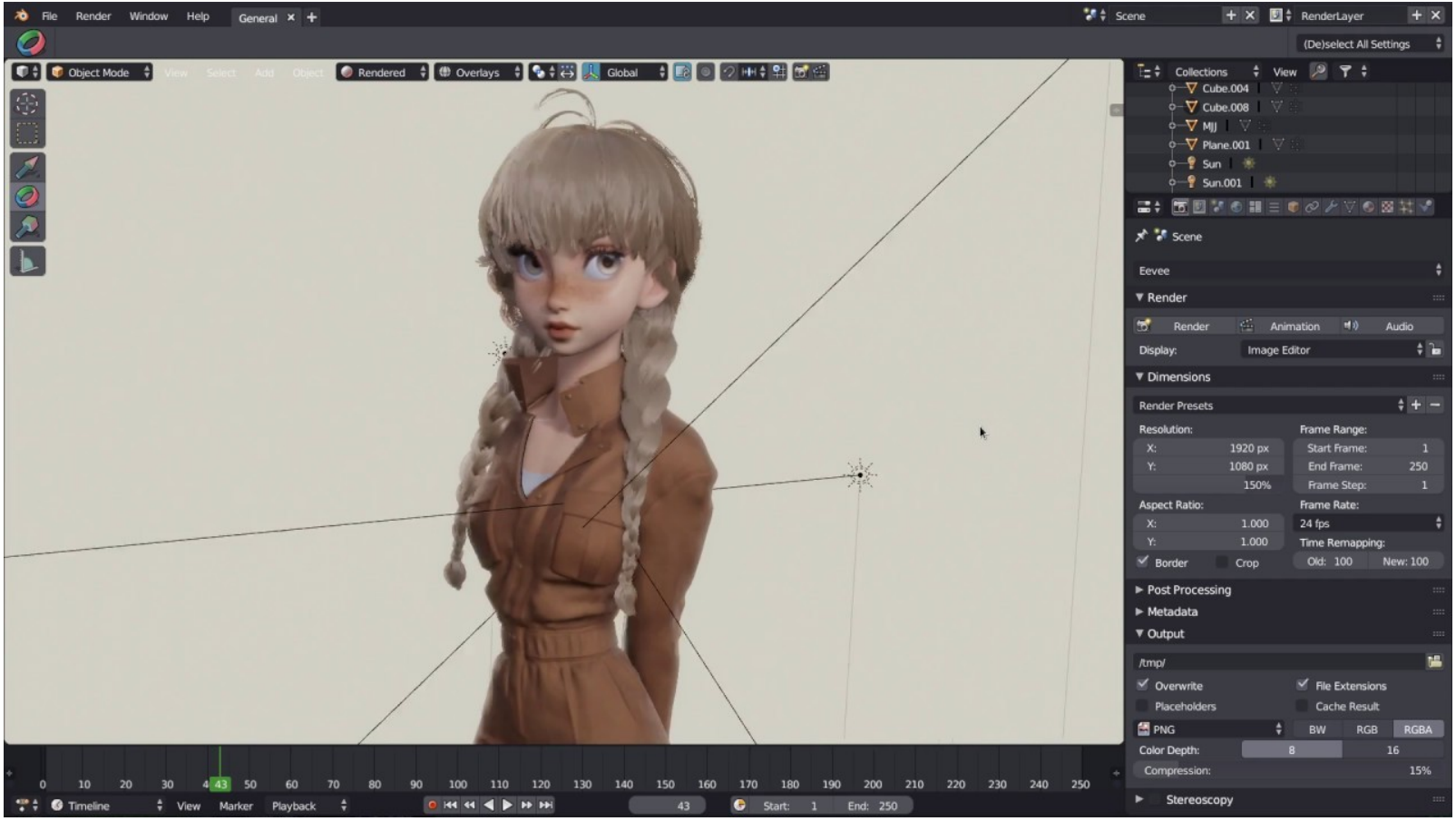
MAXON CINEMA 4D

Houdini

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Animation
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Display:
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Render Presets
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Y: 1080 px
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End Frame: 250
Frame Step: 1
Aspect Ratio:
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Y: 1.000
Frame Rate:
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Time Remapping:
Old: 100
New: 100
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Crop
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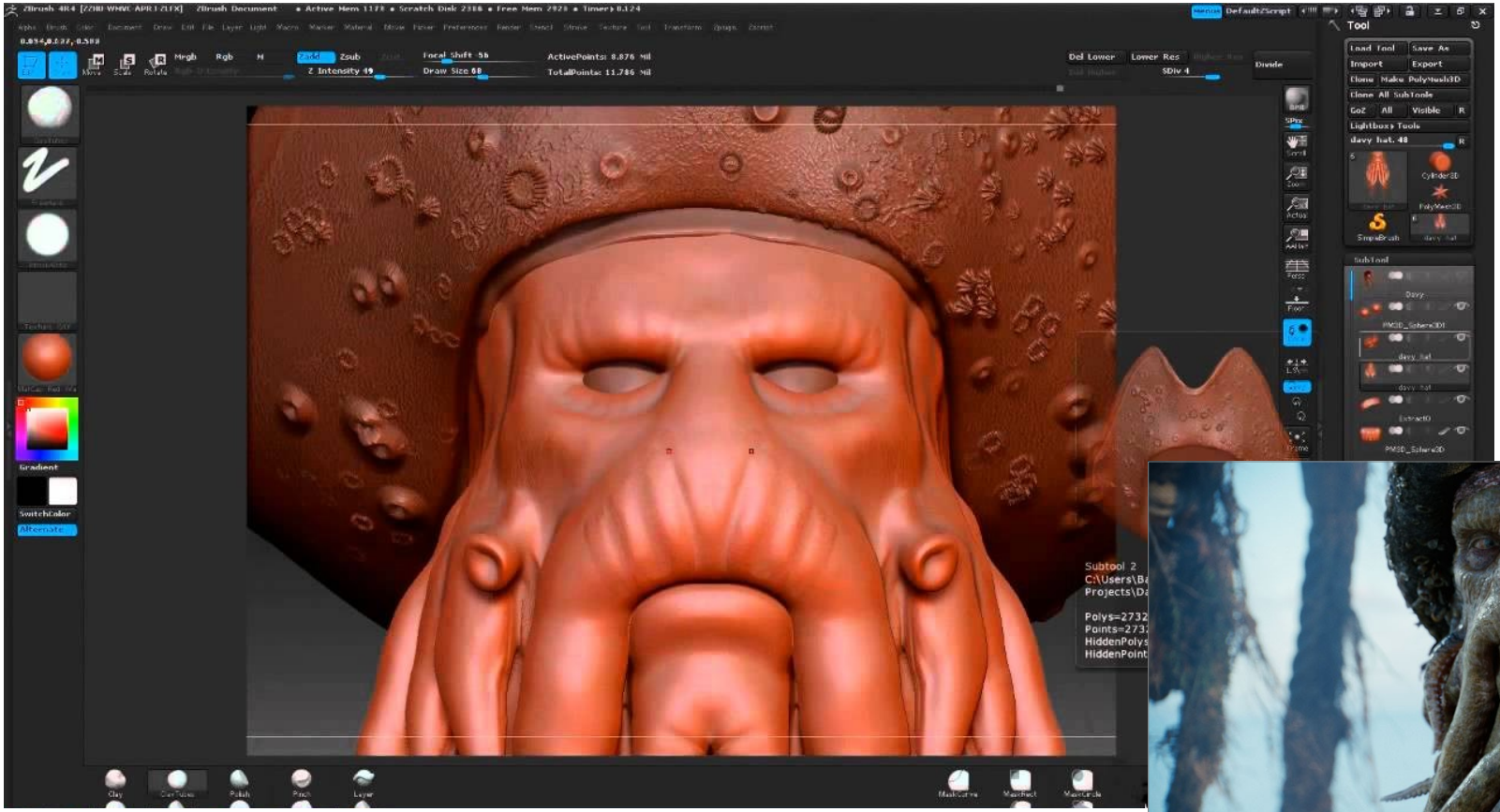
ZBrush



Файлови Формати

Стандартизация

Стандартизацията на графичният Вход/Изход е много важен аспект при създаването и използването на системи за графично/геометрично моделиране

(в частност системите за 3D)

Файловите формати са важна част от тази стандартизация.

Необходимост

- Съществуват много програмни системи;
- Съществува много различен графичен хардуер (входни и изходни устройства);
- Модела трябва да може да се съхранява и обменя – използват се множество графични (2D, 3D, анимация, видео, ...) файлови формати.

За какво служат

- За съхранение на модела;
  на външен носител
- За съхранение на крайния резултат;
  много често това е дигитално видео
- За обмен между различни системи.

2D/3D Формати

Файлови Формати

- 3DS – Файлов формат на 3ds Max (.3ds, .max)
- Alembic (.abc)
- Apple 3DMF (.3dm, .3dmf)
- Autocad (.dwg)
- Autodesk Exchange (.fbx)
- Blender (.blend)
- Collada (.dae)

Файлови Формати

- DirectX 3D Model (.x)
- Drawing Interchange Format (.dxf)
- DXF Extensible 3D (.x3d)
- Google Earth (.kml, .kmz)
- Maya ASCII/Binary (.ma, .mb)
- OpenInventor (.iv)
- Raw Faces (.raw)

Файлови Формати

- Sketchup (.skp)
- Stanford PLY (.ply)
- VRML (.wrl)
- Wavefront (.obj)
- X3D Extensible 3D (.x3d)
- Zbrush (.ztl)

Други Файлови Формати

AC3D (.AC), Caligari Object (.cob), DEC Object File Format (.off), Form-Z (.fmz), GameExchange2-Mirai (.gof), HOOPS HSF (.hsf), LightWave (.lwo / .lws), Lightwave Motion (.mot), MicroStation (.dgn), Nendo (.ndo), Okino Transfer File Format (.bdf), OpenFlight (.flt), Pro Engineer (.slp), Radiosity (.radio), RenderWare Object (.rwx), Revit (.rvt), Softimage XSI (.xsi), STEP (.stp), Stereo Litography (.stl), Strata StudioPro (.vis), TrueSpace (.cob), trueSpace (.cob, .scn), Universal (.u3d), VectorWorks (.mcd), VideoScape (.obj), Viewpoint (.vet), Wings 3D (.wings), Xfig Export (.fig), ...

Въпроси?

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