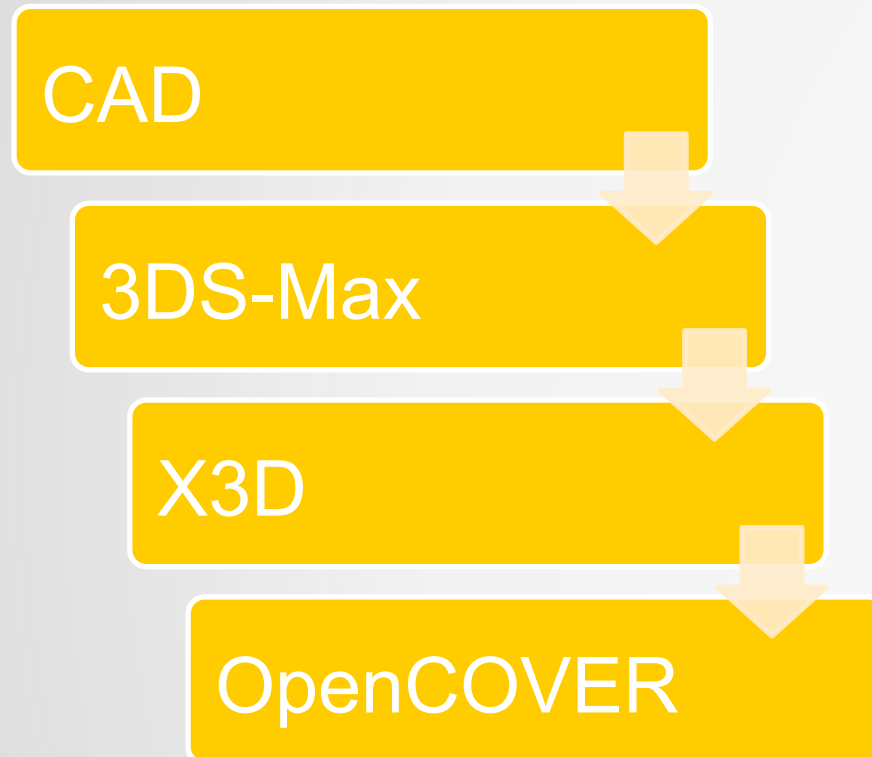


# Autodesk 3DS-Max VRML97/X3DV Plugin

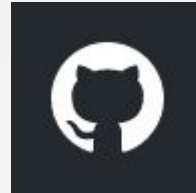
Dr. Uwe Wössner

# Typical VR Workflow



# VRML Export Plugin

Source Code on GitHub



- <https://github.com/hlrs-vis/covise>

Binary Download

- <https://www.hlrs.de/covise/support>

Based on API Sample



# Functionality

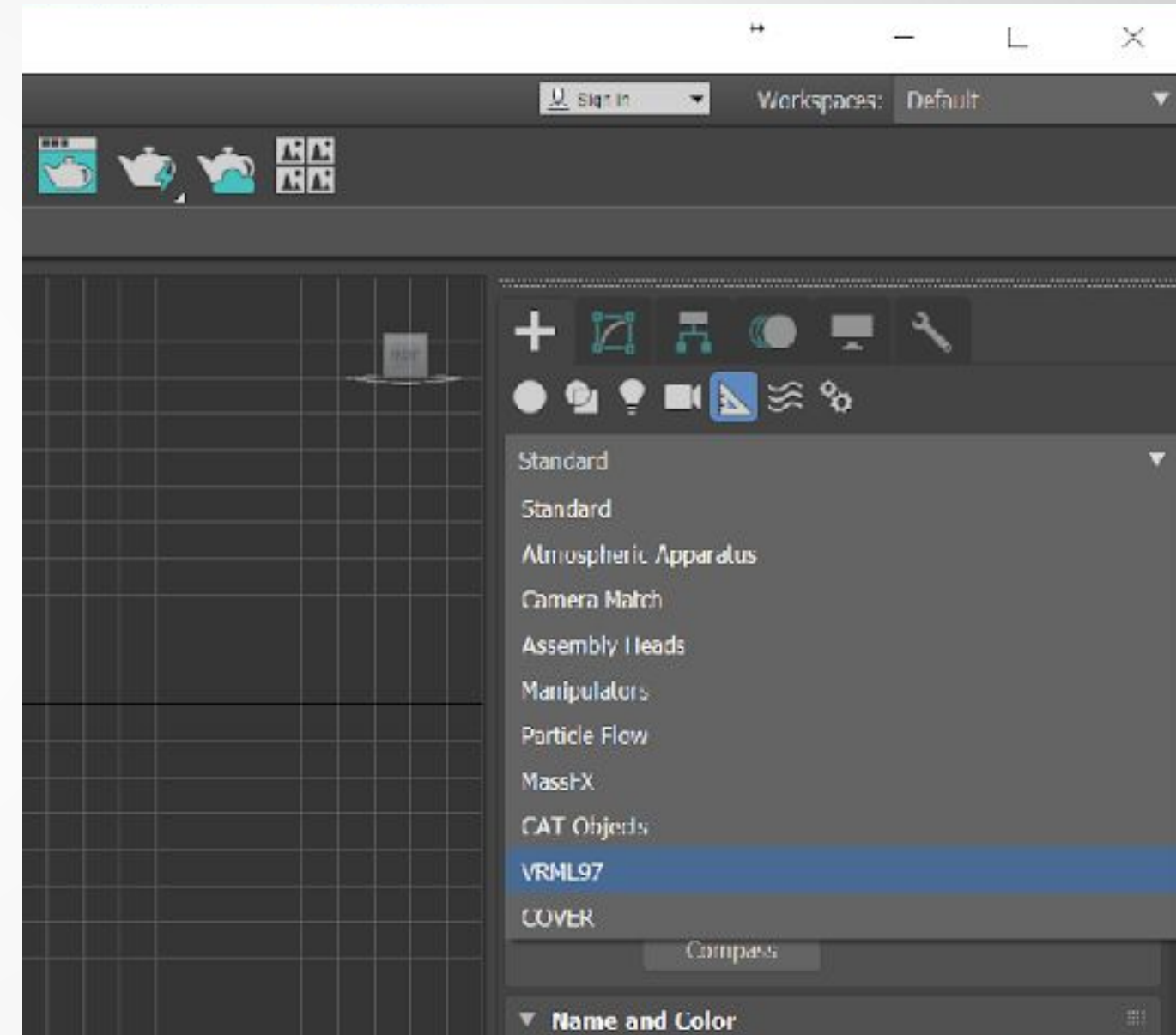
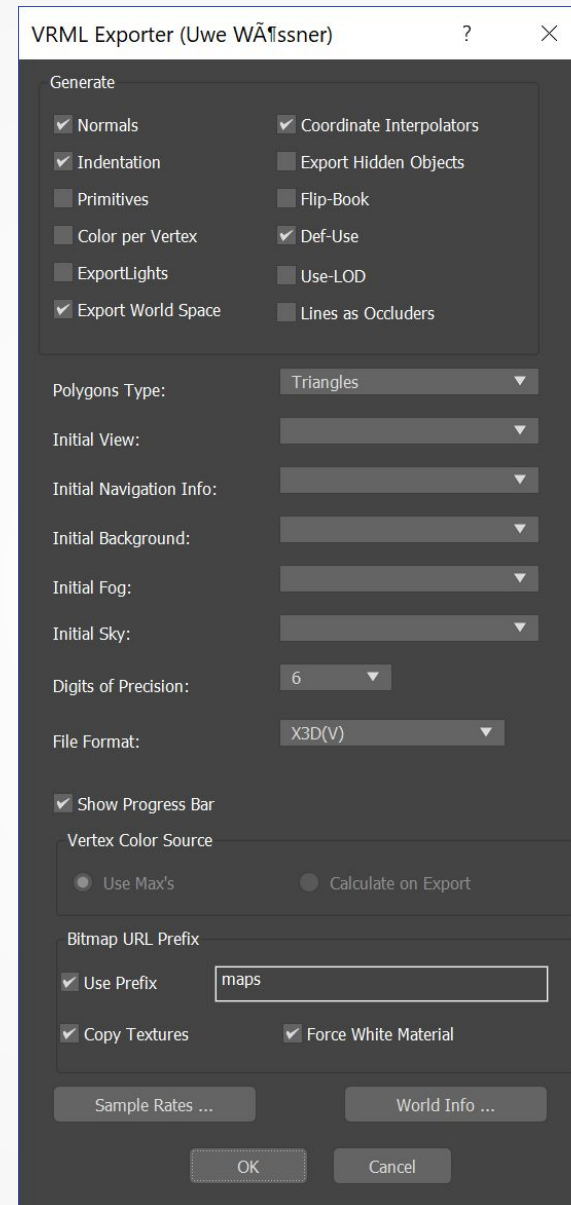
## Four file formats

- Inventor(VRML1.0)
- VRML97
- VRML97 with OpenCOVER extensions
- X3D

## Many Bug Fixes

- Export selected
- Animations
- Instances
- Shell Materials
- Per Face Materials

Improved Speed (X50)



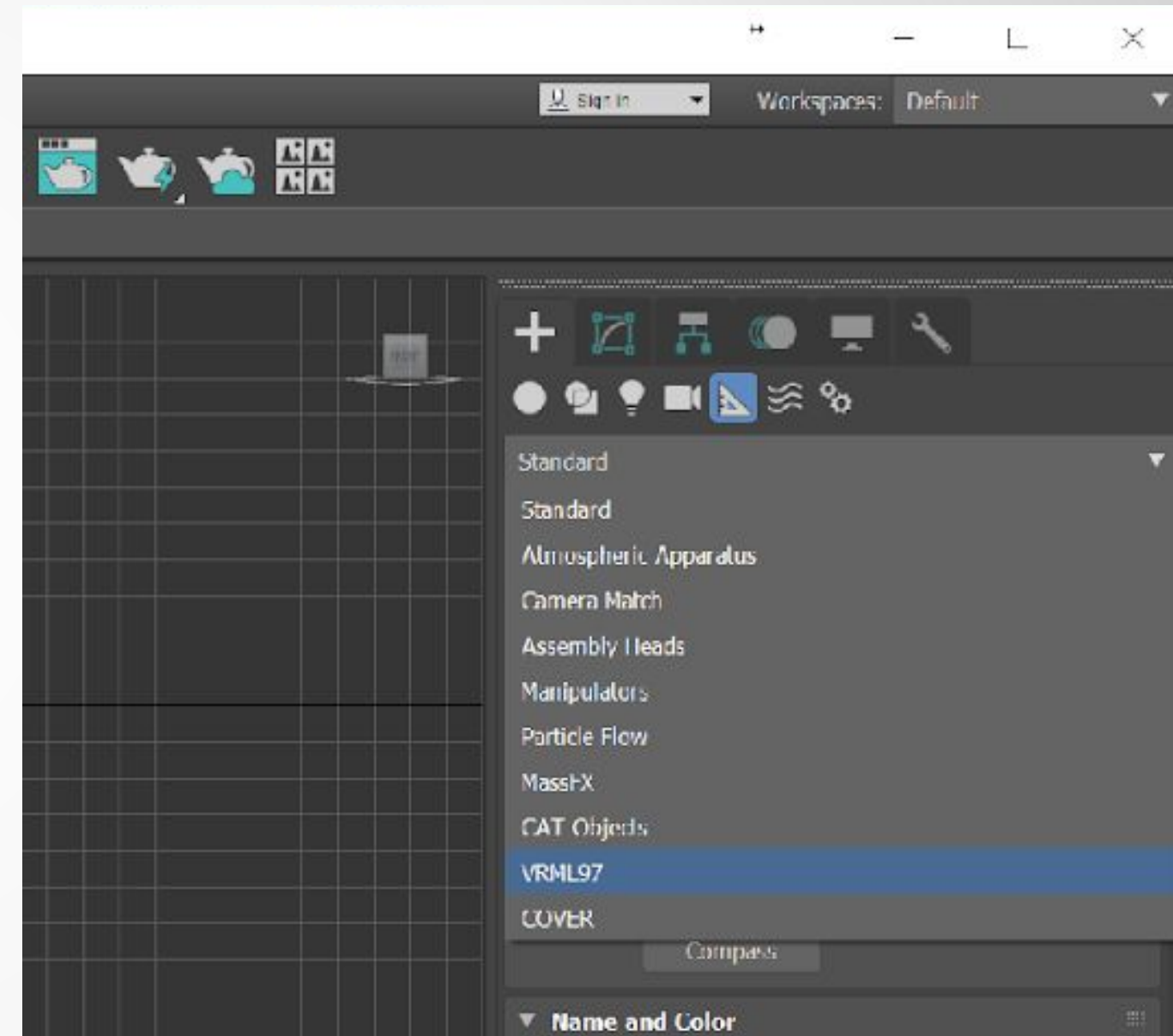
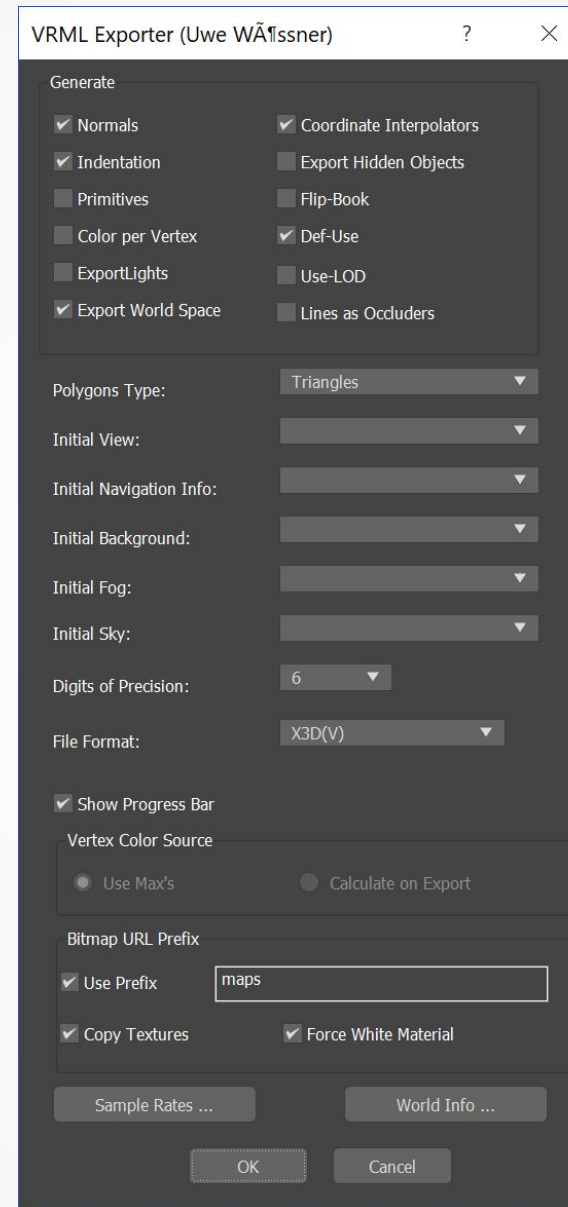
# Functionality

## New Features

- Support instances of geometry
- Material instances
- More Precision on export
- Export white material for textured geometry
- Copy texture files to destination folder

## New or extended Helpers

- Working LODs
- Switch
- OnOff
- Proximity Sensor (Trigger on exit)
- Script
- Fog
- TimeSensor (Realtime)



# Compiling from source

## Prerequisites

- CMake 3.9
- 3DS-Max API
- Cal3D
- VisualStudio 2017 Community Edition

Clone COVISE source from <https://github.com/hlrs-vis/covise.git>

Exporter source is located in `covise/src/tools/vrmlexp`

Create a build directory

Grant write access to `.../Autodesk/3ds Max 2018/stdplugs`

Set `3DSMAXINSTALLDIR` environment variable to your Max installation directory

Run `cmake-gui` for `CMakeLists.txt` in `covise/src/tools/vrmlexp`

set `3DSMAX_INCLUDE_DIR` if not found automatically

set `CAL3D_INCLUDE_DIR` if not found automatically

Create a project file and compile it.

If 3DS-Max is not running it is automatically installed in `stdplugs`

# Install binaries

## Prerequisites

- Visual Studio 2017 runtime libraries

Download binaries from <https://fs.hlr.de/projects/covise/support/download/>

Copy vrmlexp.dle to ../Autodesk/3ds Max 2018/stdplugs

Copy cal3d.dll to ../Autodesk/3ds Max 2018

Replace the original vrmlexp.dle, do not rename it.

# Demo