

Feature.0005

# Export Systems and Components into STL / IGES Format

How to export system (like lens system, prism system and mirror system) and components (like lens, prism and mirror) from VirtualLab Fusion into STL and IGES format?

#### **About This Use Case**

- The following toolbox is required
  - Starter toolbox
- This use case was produced using VirtualLab Fusion (Build 7.0.0.35).
- Get your free Trial Version <u>here</u>!

#### This Use Case Shows...

- how to export components, e.g. a spherical lens, to STL and IGES files?
- how to export systems, e.g. a chain of prisms system, to STL and IGES files?



#### **Overview**

- STL format is widely used in 3D printing software.
- IGES format is widely used for the digital exchange of information in the field of Computer-Aided Design (CAD).
- VirtualLab supports the export of lens, prism, mirror system and components in STL format and in IGES format.

# **View of Component**

- Each real component can be modified via the edit dialog of the component.
- For illustration purpose we use the default spherical lens as an example.
- Click View button to generate the 3D View.

		Edit Spherical Ler	าร		>
Geometry / Channels Position / Orientation	Lens Specification Diameter Center Thickness First Surface Type	20 mm 4.3 mm Plano V	Second Surface Type Radius	Convex v 51.9480631 mm	
Structure / Function	Medium of Lens Mater N-BK7_Schott_2015 i Dad	rial in Homogeneous Medium // E	Edit	Q View	
	Name No Coating	532 nm	Q. Definition Effect	tive Focal Length v	
	Copy from Calculator		Ōĸ	<u>C</u> ancel <u>H</u> elp	
		3D View: Spherical Lens	E.	× ×	
		Sphwical Lens (1)		N N	

# **Export Component to STL/IGES File**

- Right click on the 3D view window and select *Export* to STL/IGES.
- Then name your file and store it.
- It is now possible to open it in your STL/IGES viewer of choice.





## **View of Optical System**

 For a given optical system, in this example a chain of prisms, click *View System* to generate the 3D View.





## **Export Optical System to STL/IGES File**

- Right click on the 3D view window and select *Export* to STL/IGES.
- Then name your file and store it.
- It is now possible to open it in your STL/IGES viewer of choice.





#### **Document & Technical Info**

code	Feature.0005
version of document	1.0
title	Export Systems and Components into STL / IGES Format
category	Tools & Handling
author	Rui Shi (LightTrans)
used VL version	7.0.0.35
last modified on	September 7, 2017