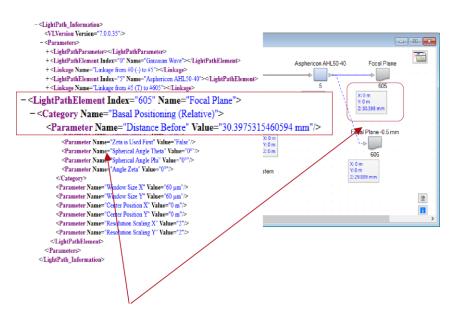


Light Path Diagram Information Export

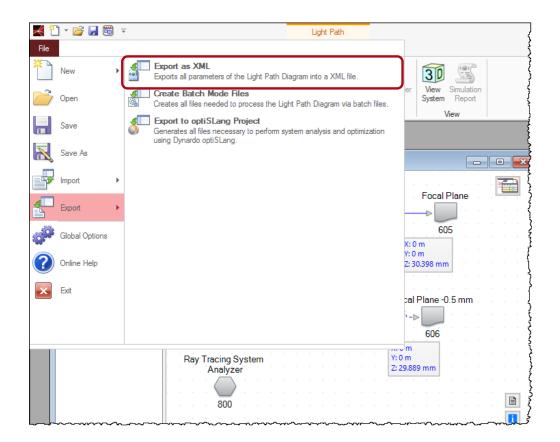
Abstract



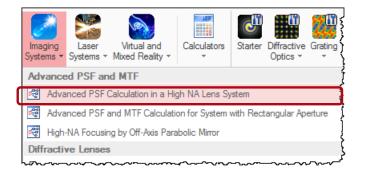
In VirtualLab Fusion, users define the optical system by the light path diagram. You can export a summary of all system parameters in the light path diagram into an XML File. In the generated file all parameters of system are given with name and value. Using a standard web browser allows the user friendly display of the content of the XML file. This use case shows how to export the parameters and how to visualize the parameter file within a text editor and a web browser.

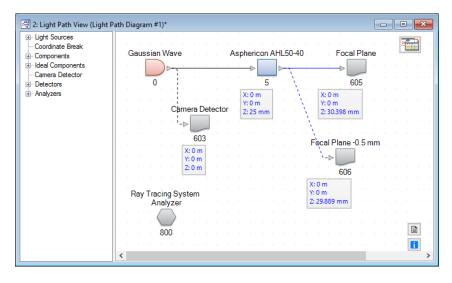
Modeling Task

• how to export the light path diagram parameters into XML file, and open it by text editor or internet browser.



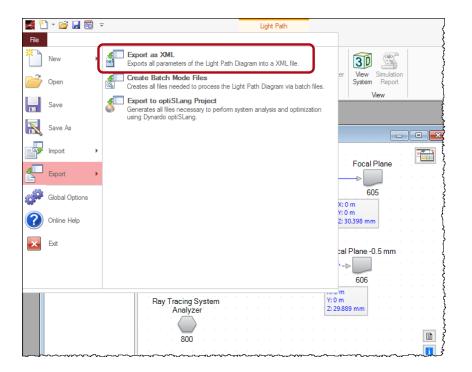
System Setup





 For demonstration of the export operation use take the use case "Advanced PSF Calculation with High NA Lens System" as an example. The export functionality is supported by any optical setup.

Export as a XML-File



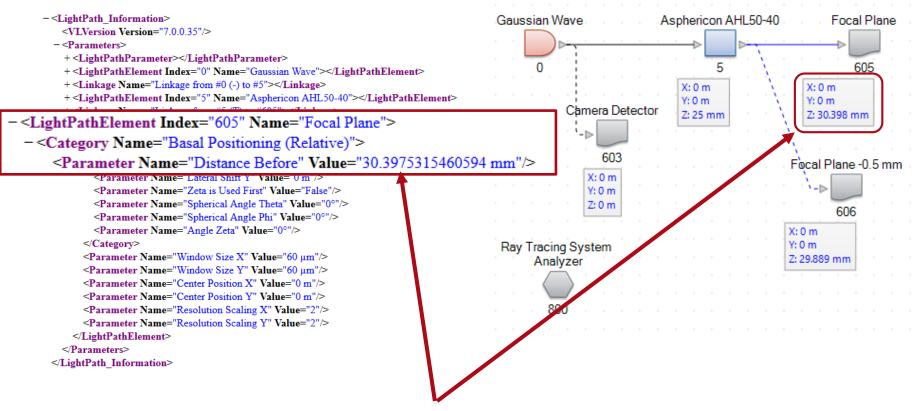
- Select the light path diagram and we will export its parameters in what follows.
- Go to File/Export/Export as XML and save the XML file.

Open with Text Editor or Internet Browser

 You can open the resulting XML file with a text editor or a internet browser for extended features, like a structurable menu.

tor n Formst Ansicht ?	- C X
<parameter name="Accuracy Factor (Tubes)" value="1"></parameter>	
arameter Name="Oversampling Factor" Value="1" />	C ① file:///C:/Yang/Technician%20Group/use%20case/Feature_Export%20of%20LPD%20System%20Information/Light%20
Name="Field Size Factor" Value="1" />	
	This XML file does not appear to have any style information associated with it. The document tree is shown below.
="5" Name="Asphericon AHL50-40">	
ference Point Input Channel" Value="First Vertex" />	<pre>w<lightpath information=""></lightpath></pre>
rence Point Output Channel "R"" Value="First Vertex" />	<pre></pre> <
Output Channel "T"" Value="Last Vertex" />	w (Parameters)
Positioning (Relative)">	<pre>v(iptPathParameter></pre>
nce Before" Value="25 mm" />	
ift X" Value="0 m" />	<pre>v<category name="Simulation Settings"></category></pre>
Shift Y" Value="0 m" />	<parameter name="Use one accuracy factor for the complete light path" value="False"></parameter>
a is Used First" Value="False" />	<parameter name="Use one deviation threshold for the complete light path" value="False"></parameter>
cal Angle Theta" Value="0°" />	<parameter name="Analysis for one member only" value="False"></parameter>
erical Angle Phi" Value="0°" />	<parameter name="Try to optimize field before propagating" value="True"></parameter>
Zeta" Value="0°" />	<parameter name="Tilt Threshold" value="1°"></parameter>
	<pre><parameter name="Determine pilot ray direction from analytical data only" value="False"></parameter></pre>
(Absolute)">	<pre><parameter name="Sampling Accuracy (Field Tracing 2nd Generation)" value="3"></parameter></pre>
,	<parameter name="Fourier Transformation Accuracy (Field Tracing 2nd Generation)" value="1"></parameter>
	<pre><clearcory name="Environment"></clearcory></pre>
	<pre></pre>
merical Interface)">	
a (Shape)" Value="Elliptic" />	<parameter name="Air Pressure" value="101.325 kPa"></parameter>
rea (Size X)" Value="50 mm" />	
Area (Size Y)" Value="50 mm" />	
caling x-Direction" Value="1" />	<pre>w<lightpathelement index="0" name="Gaussian Wave"></lightpathelement></pre>
ing y-Direction" Value="1" />	<pre>w<category (air="" -"="" channel="" homogeneous="" in="" medium)"="" name="Medium at "></category></pre>
ling z-Direction" Value="1" />	<pre>v<category name="Material (Air)"></category></pre>
Curvature" Value="31.075 mm" />	<parameter name="Constant Absorption Coefficient" value="0"></parameter>
Constant" Value="-1" />	
al Parameter 1" Value="0" />	
spherical Parameter 2 [mm^(-1)]" Value="0" />	<parameter name="Wavelength" value="532 nm"></parameter>
al Parameter 3 [mm^(-2)]" Value="0" />	<parameter name="Weight" value="1"></parameter>
cal Parameter 4 [mm^(-3)]" Value="1.502E-06" />	<pre><parameter name="Polarization Angle" value="8°"></parameter></pre>
pherical Parameter 5 [mm^(-4)]" Value="0" />	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
1 Parameter 6 [mm^(-5)]" Value="-7.96E-11" />	<pre></pre>
pherical Parameter 7 [mm^(-6)]" Value="0" />	<pre><pre>certainecer kame= Lateral Offset Y Value="0 m//></pre></pre>
ical Parameter 8 [mm^(-7)]" Value="-1.68E-13" />	
	<parameter name="Density Hexapolar Ray Selection" value="31"></parameter>
ace #2 (Plane Interface)">	<parameter name="Oversampling Factor" value="1"></parameter>
nition Area (Shape)" Value="Elliptic" />	<parameter name="Field Size Factor" value="1"></parameter>
ion Area (Size X)" Value="50 mm" />	<parameter name="Relative Edge Width" value="10 %"></parameter>
	Y (Parameter Name="Generate Cross Section" Value="None"/>

Parameters in XML File



All system configuration parameters like positioning, orientation, component sizes and component specific properties can be found in the XML file.

Document Information

title	Light Path Diagram Information Export
version	1.0
VL version used for simulations	7.0.3.4
category	Feature Use Case