

UseCase.0009 (1.0)

# **Usage of the Property Browser**

**Keywords:** information, document specific, view, properties

## **Description**

- The property browser can be used to access additional information for the active document.
- This use case explains the general structure of the property browser.
- By default the property browser window is located on the right side of the VirtualLab main window.
- Its window is moveable and can be adapted for your needs.
- The property browser will be discussed on the example for 2D data arrays.

## **Property Browser of the Data Array**

Property Brow	ser	
View Object	ct Selections	
⊿ General		
▷ Window S	Size	500, 500
⊿ Aspect I	Ratio	
True To S	Scale	True
	okup Table	
Color Loc	okup Table	Midnight Sun
⊿ Data		
Auto Scal	ling of Data	True
Format of	f color scale	Engineering
⊿ Labels		
Font Size	3	10
▲ Selectio	n (General)	
Selection	Mode	Rectangle or Elipse
	n (Line)	
Display L	ine Marker	False
▲ Selectio	n (Point)	
Display F	'oint Marker	False
▲ Selectio	n (Region)	
Display F	ectangular or Ellip	ptic Faise
▲ View Mo	de	<b>F</b> 1
3D Mode		False
▲ X-Axus		E
Format of	X-Axis	Engineering
Minimum	Number of Licks	2
X-Axis Ri A Ania	ange	[-554.59 µm; 554.59 µm]
T-AXIS	V Avia	Encineering
Format of Minimum	Number of Ticks	2
Ninimum	Number of ficks	2 [.554.59.um; 554.59.um]
P PAKIS N	ange	[-554.55 µm, 554.55 µm]
Window Size The size of th	e ie document windo	w.
VirtualLab E	xplorer Proper	ty Browser

- The property browser can be used to access document specific information of the active VirtualLab document.
- Each document type has different entries within the property browser.
- The general structure of the setup of the property browser is always the same.

### **Property Browser – General Setup**

Property Browser						
View Object Select	tions					
⊿ General						
▷ Window Size	500, 50	00				
True To Scale	True					
Color Lookup Ta	ble					
Color Lookup Tab	e 📕 Mi	dnight Sun				
⊿ Data						
Auto Scaling of Da	ta Irue					
Format of color so	ale Engine	enng				
▲ Labels	10					
A Selection (Gener	-0					
Selection Mode	aı) Bectan	ale or Ellipse				
▲ Selection (Line)	noordin					
Display Line Mark	er False					
▲ Selection (Point)						
Display Point Mar	ker False					
▲ Selection (Regio	n)					
Display Rectangu	ar or Elliptic False					
⊿ View Mode						
3D Mode	False					
⊿ X-Axis						
Format of X-Axis	Engine	ering				
Minimum Number	of Ticks 2					
X-Axis Range	[-554.5	9 µm; 554.59 µm]				
▲ Y-Axis	E					
Format of T-Axis	of Ticks 2	enng				
Minimum Number	ILSS Z	9 um: 554 59 um]				
P T-Axis halige	[-334.3	5 µm, 554.55 µmj				
Window Size						
The size of the docum	ent window.					
VirtualLab Explorer	Property Browser					

- On the top of the property browser window the main categories can be accessed.
- The following categories are typical available for a document
  - View
  - Object
  - Selections

## **Property Browser – General Setup**

Prop	perty	Browser	r		<b>Р</b>
Viev	w	Object	Selecti	ons	
4	Ter	neral			
6	Win	dow Siz	е		500, 500
4	Asp	ect Rat	io		
	True	e To Sca	le		True
⊿	Col	or Look	up Tab	e	
	Colo	or Looku	ip Table	•	Midnight Sun
4	Dat	a			-
	Auto	Scaling	g of Dat	a 1-	
4	Lab	natorco ole	olor sca	le	Engineering
-	Eon	Size			10
4	Sel	ection (	Genera	Ð	
	Sele	ction M	ode		Rectangle or Elipse
⊿	Sel	ection (	Line)		
	Disp	olay Line	e Marke	r	False
⊿	Sel	ection (	Point)		
	Disp	olay Poir	nt Mark	er	False
4	Sel	ection (	Region	)	
	Via	biay Rec	tangula	ir or Ellipti	False
4	30.1	W Mode Mode			False
4	X-A	xis			1 0130
	For	nat of X-	Axis		Engineering
	Mini	mum Nu	umber o	f Ticks	2
⊳	X-A	kis Rang	je		[-554.59 µm; 554.59 µm]
⊿	Y-A	xis			
	Forr	mat of Y-	Axis		Engineering
	Mini	mum Nu	umber o	fTicks	2
⊳	Y-A	us Rang	je		[-554.59 µm; 554.59 µm]
N					
Wi The	ndov e size	<b>v Size</b> e of the o	docume	nt window	r.
Vir	rtuall	ab Expl	orer	Property	Browser

- In the middle of the document a list of properties is given.
- Some properties are read-only (marked by gray coloring) others can be edited.
- The properties are organized in subcategories for a userfriendly usage.

## **Property Browser – General Setup**

Prop	erty Browse	r			- P
Viev	W Object	Selections			
⊿	General				
$\triangleright$	Window Siz	e		500, 500	
⊿	Aspect Ra	tio			
	True To Sca	ale		True	
⊿	Color Loo	cup Table			
	Color Look	up Table		Midnight Sun	
⊿	Data				
	Auto Scalin	g of Data		True	
	Format of c	olor scale		Engineering	
⊿	Labels			10	
	Font Size	(CP		10	
4	Selection	(General)		Destande en Oliene	
	Selection M	ode		Rectangle or Ellipse	
4	Display Lin	a Markar		Falsa	
4	Selection	(Point)		Faise	
-	Display Poi	nt Marker		False	
4	Selection	(Region)		1 0130	
-	Display Red	ctangular or	Ellipti	False	
⊿	View Mode				
	3D Mode			False	
⊿	X-Axis				
	Format of X	-Axis		Engineering	
	Minimum N	umber of Tic	:ks	2	
$\triangleright$	X-Axis Ran	ge		[-554.59 µm; 554.59 µm]	
⊿	Y-Axis				
	Format of Y	-Axis		Engineering	
	Minimum N	umber of Tic	cks	2	
$\triangleright$	Y-Axis Ran	ge		[-554.59 µm; 554.59 µm]	
<b>Wii</b> The	ndow Size e size of the	document w	indow.		
Vir	rtualLab Exp	lorer Pro	operty	Browser	

- At the bottom of the property browser an additional description is displayed.
- Depending on the currently selected entry within the property browser, VirtualLab shows here some additional description of the parameter.

## **Property Browser – View Tab**

Property Browser	<del>.</del>
View Object Select	ions
▲ General	
Window Size	500, 500
A Aspect Ratio	
True To Scale	True
Color Lookup Tab	ke
Color Lookup Table	e Midnight Sun
⊿ Data	-
Auto Scaling of Dat	
Format or color sca	ale Engineering
Font Size	10
A Selection (General	al)
Selection Mode	Rectangle or Ellipse
▲ Selection (Line)	
Display Line Marke	er False
▲ Selection (Point)	
Display Point Mark	er False
Selection (Region)	ı)
Display Rectangula	ar or Elliptic False
⊿ View Mode	
3D Mode	False
▲ X-Axis	<b>F</b> 1 1
Format of X-Axis	Engineering
Minimum Number o	I FEA EQ um: EEA EQ um]
A Y-Axis hange	[-334.33 µm, 334.33 µm]
Format of Y-Axis	Engineering
Minimum Number o	of Ticks 2
Y-Axis Range	[-554.59 µm; 554.59 µm]
Window Size	
The size of the docume	ent window.
Virtual ab Explorer	Property Browser

- The view tab of the property browser can be used to set up view parameters.
- Typical view parameters are
  - Window size
  - Color options
  - Font sizes
  - Show selection marker
  - Formatting of x and y axis (at least for 2D data arrays)

# **Property Browser – Object Tab**

	Array Size X Coordinate Boundaries X Coordinate Boundaries Y	1.0897 mm [-554.59 µm; 554.59 µm]						
ightarrow	Coordinate Boundaries X Coordinate Boundaries Y	[-554.59 µm; 554.59 µm]						
Þ	Coordinate Boundaries Y	-JJ4.JJ [[1], JJ4.JJ [[1]]						
V	Coordinate Doundaries 1	[-554 59 um: 554 59 um[						
	Coordinate Extent X	1 1092 mm						
	Coordinate Extent X	1 1092 mm						
	No of Data Subsets	1						
4	Interpretation							
_	Complex or Real	Complex-valued data						
	Subset Index	1						
	Subset Meaning	Field U						
	Subset Precision	Double						
	Subset Property	Electric Field Strength						
	X Coordinate Meaning	X						
	X Coordinate Property	Length						
	Y Coordinate Meaning	Y						
	Y Coordinate Property	Length						
۵	Sampling							
	Equidistant in X	True						
	Equidistant in Y	True						
$\triangleright$	No of Data Points	(57; 57)						
	First X Coordinate	-544.86 µm						
	First Y Coordinate	-544.86 µm						
	Sampling Distance X	19.459 µm						
	Sampling Distance Y	19.459 µm						
	Interpolation in X	Nearest Neighbor						
	Interpolation in Y	Nearest Neighbor						

- The object tab gives an overview of the important parameters of the active document.
- For data arrays you can get here information about
  - Dimensions (array size, number of subsets, ...)
  - Interpretation (subset & coordinate meaning, ...)
  - Sampling (equidistant, sampling distance, number of points)

# **Property Browser – Selections Tab**

ropert	y Browser	r								J
/iew	Object	Select	ions							
4 2	election (	Genera	al)							
Co	oordinate	Snappir	ng Selection	True						
Se	election M	ode		Poin	t					
⊿ Se	election (	Line)								
Di	splay Line	e Marke	er	True	•					
⊳ St	art Coordi	nates		(-544	4.86 µ	m; ·	-544.	86 µ	m)	
⊳ En	nd Coordin	nates		(544	.86 µ	m; 5	44.8	6 µm	)	
Le	ngth			1.541	1 mm					
⊿ Se	election (	Point)		_						
Di	splay Pou	nt Mark	er	True	•					
Us	se Own In	terpolat	tion Method	False	e					
⊳ Da	ata Point li	ndices		(42;	21)					
⊳ Po	oint Coord	inates		(2/2	.43 μ	m; -	136.2	22 µr	n)	
Va	alue (Real	Part) a	t Point	91.02	26 μV/r	m				
Va	ilue (imag	inary P	art) at Point	01.02						
Va	alue (Ampi	itude) a	at Point	91.02	26 μV/I	m				
	alue (Phas	Degion		Urad						
2 30 Di	enlav Rec	region tangula	/ ar or Elliptic Ma	True						
FI	lintic Sele	ction	ar or Emptione	Ealer						
N X-	Ranne	Cuon		1.301	5 162 i	- ·	18 6/	9	-1	
× Ŷ-	Range			[87 4	568 u	m · 3	10.04 160 u	ոյ այ		
⊳ Da	ata Point li	ndices	of Lower Left C	(13.3	131	, J	, <b>оо</b> ра			
	ata Point li	ndices	of Upper Right	(30.4	(5) (6)					
1 00		luices	or opper ragin	(30, 4	10)					
Displ Visibil	<b>ay Line M</b> ity of the I	<b>arker</b> ine sele	ection marker.							
Virtua	alLab Expl	orer	Property Brow	vser						

- On the selections tab the user can specify the visibility of the selections tools as well as the active selection to use.
- For each selection tool information on the selection are given.
- The user can also enter coordinates to set up the parameters of the selection (e.g. the position of the point marker).



- The property browser concept allows the user to access additional information dependent on the currently selected (active) document.
- Typically it is structured in a standardized way to access
  - View settings
  - Object information
  - Selection specification
- The property browser can be used to view and also to modify settings or properties of the active document. (Typically there are also ribbon items that allow these configurations.)