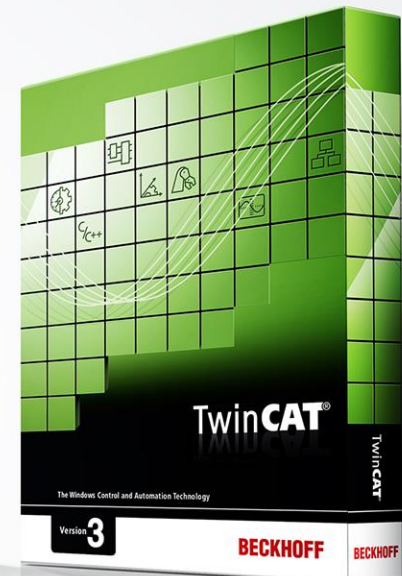
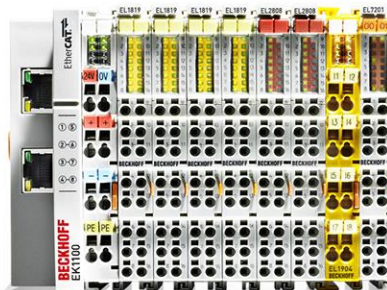




BECKHOFF

TwinCAT HMI Control Attributes

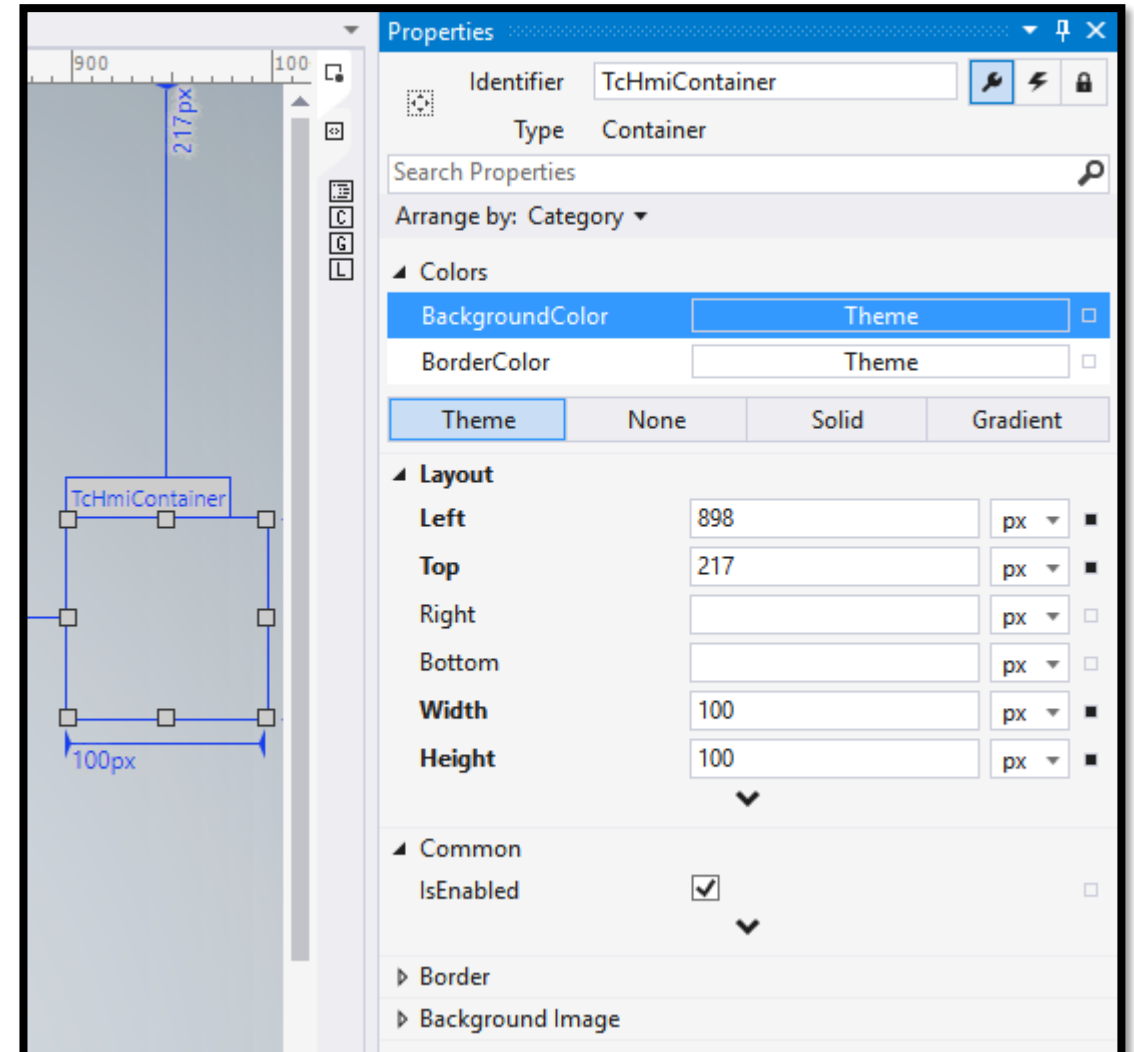
Training

21.02.2024

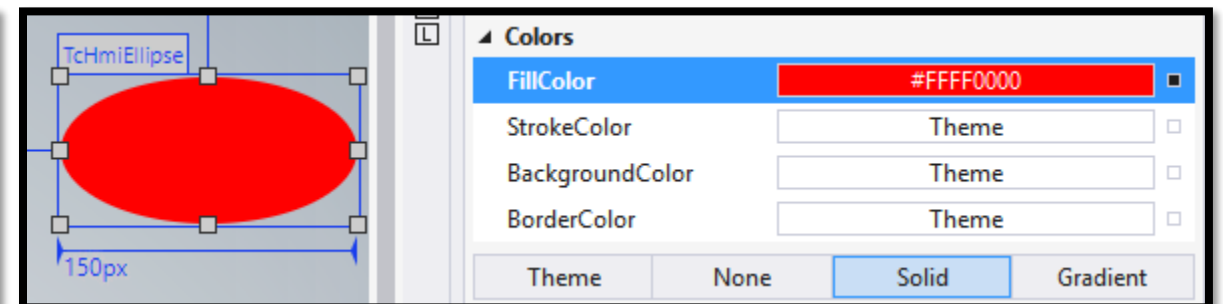
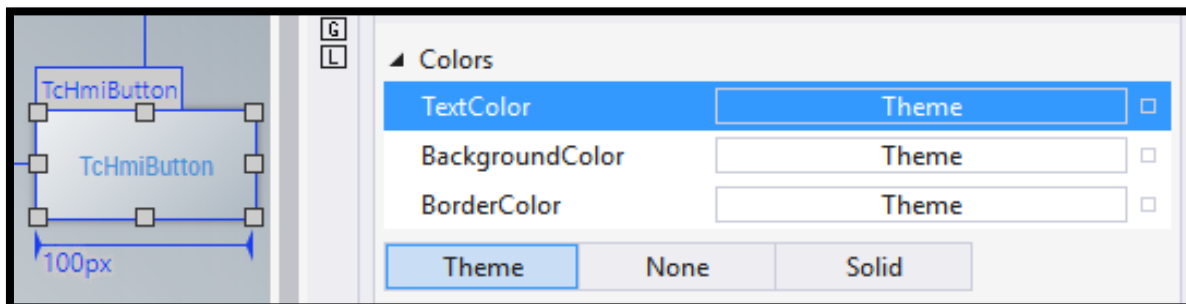


- All TwinCAT HMI Controls have attributes
- Attributes describe to the control how to
 - Display
 - Structure or Parse Data
 - Communicate with other controls or server extensions
- Attributes can be edited in the Engineering environment
- Attributes can be changed while the HMI is live

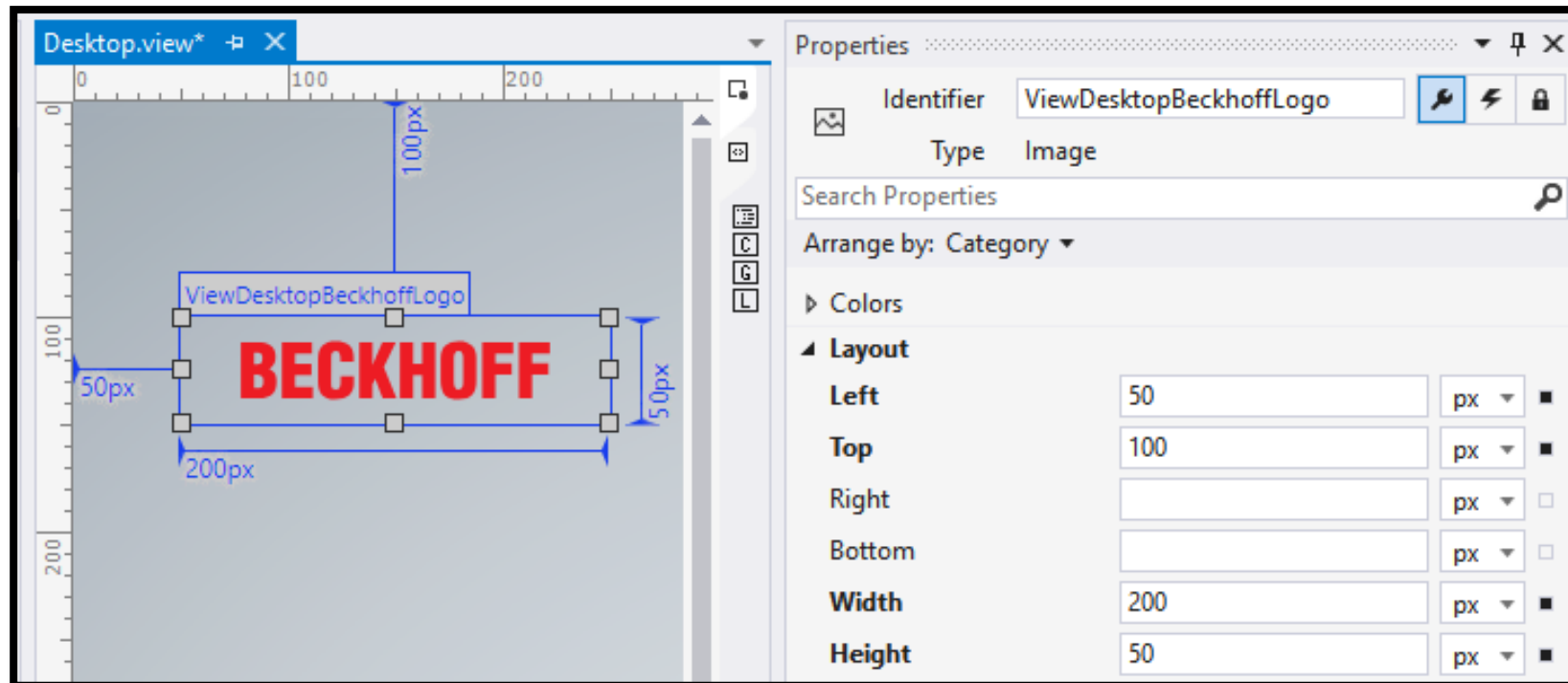
- Attributes are displayed in the Properties windows, while a control is selected in the Designer
- Attributes are organized by category, some are hidden under a drop down
- All controls have the following categories
 - Colors
 - Layout
 - Common
 - Border
 - Background Image



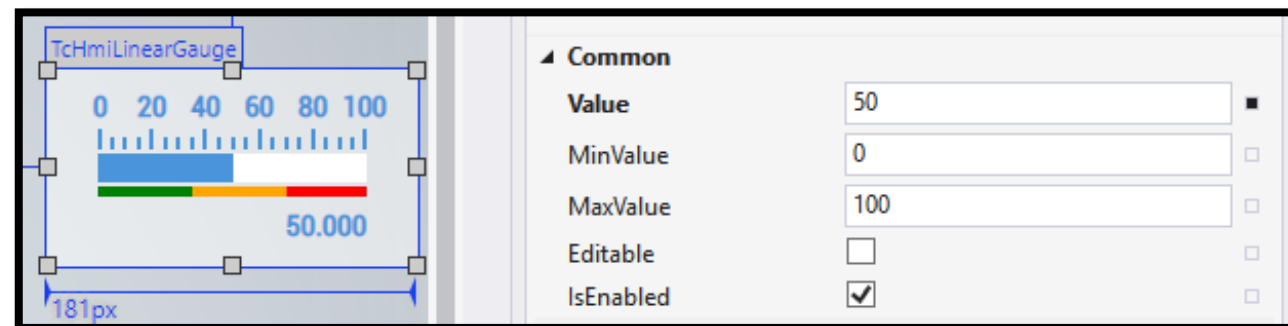
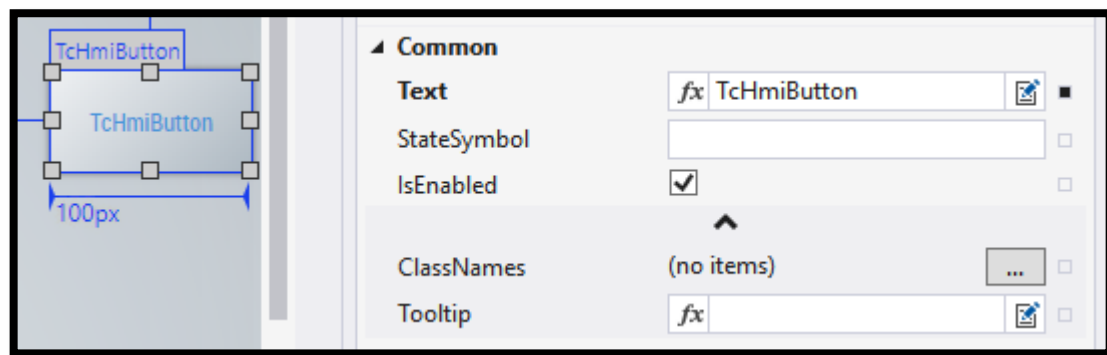
- All controls have:
 - Background Color – the control element background color
 - Border Color – the border color of the control element
 - Must have the border enabled to view
- Some controls have other color attributes for styling like TextColor or FillColor



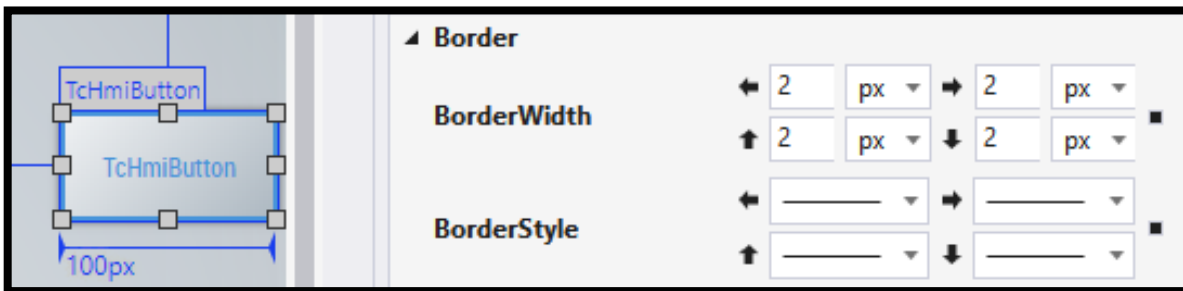
- All controls have the same set of Layout attributes
 - Top, Left, Bottom, Right are all relative to the top left corner of the control's parent
 - Width and Height are the control's size



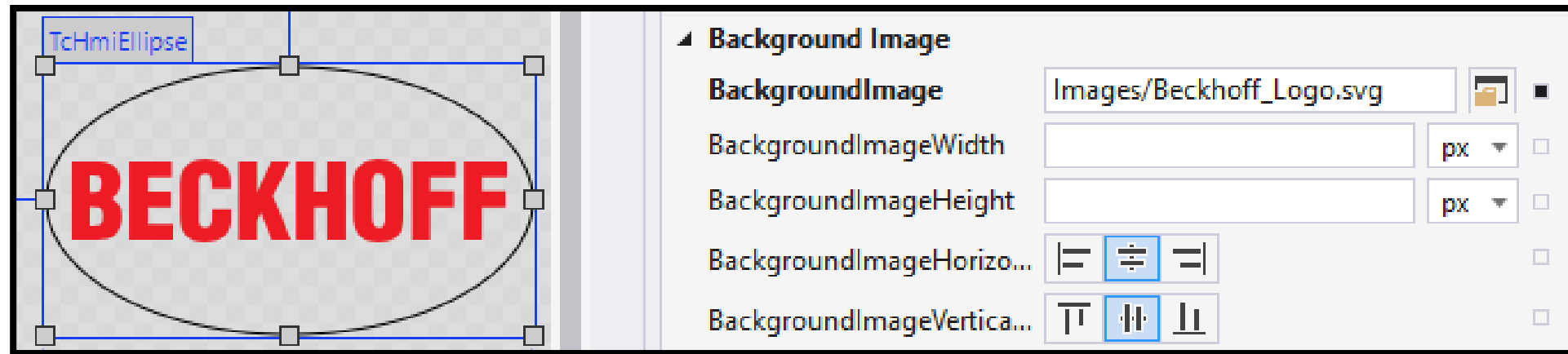
- All controls have the Common attributes of:
 - IsEnabled – Enables or disables the control
 - Tooltip – on mouse hover opens a tooltip above the control
 - Class Names – applies themed styles based on the name given
- Some controls will have attributes here that would be the most common edited attribute on that control. Such as the text of a button, or the value of a gauge.



- All controls have the Border attributes which describe how the control renders it's instance border
- This may be different than the control's inner element rendering
 - Example – The Ellipse has a seperate attribute for its stroke width

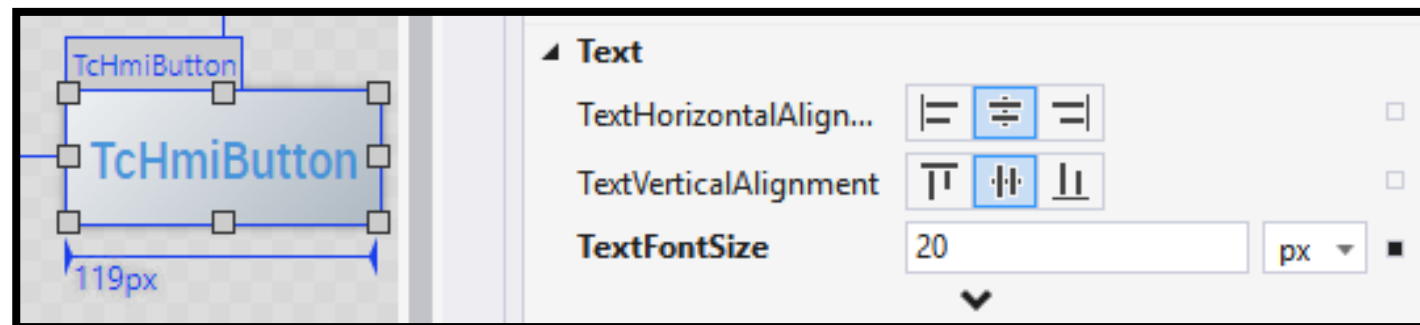
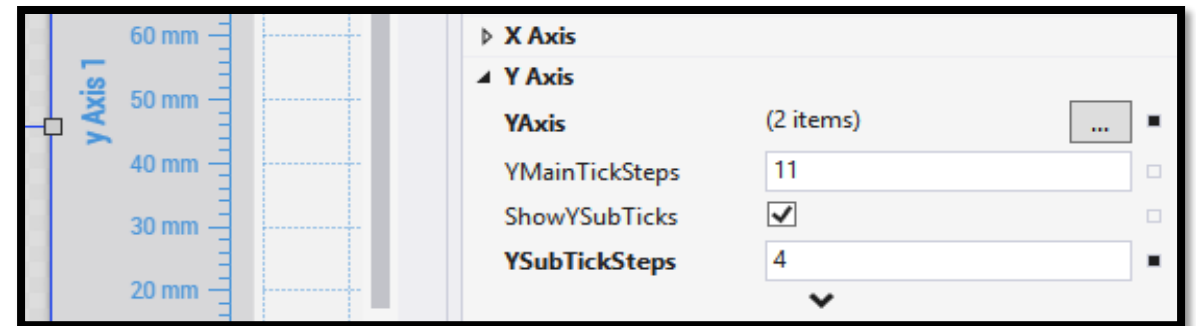
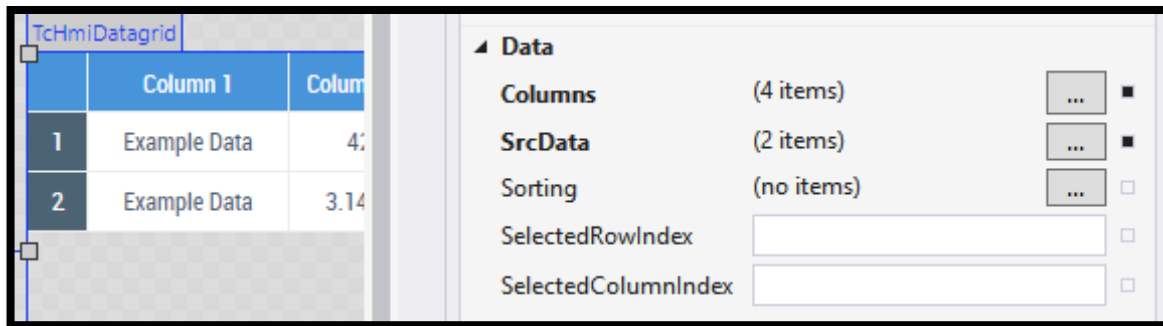


- All controls have Background Image attributes that position an image behind the control instance
 - Background Image will render ontop of the Background Color



Control Attribute – Other Categories

- Some Controls have their own categories containing control specific attributes
 - Data of the attribute and how to display it
 - Axis descriptions for charts
 - Text for text styling and font size



Beckhoff Automation LLC

Headquarters Canada
Beckhoff Automation Ltd.
4 Schiedel Court, Unit 1-3
Cambridge ON N3C 0H1, Canada

Phone: 1 226 765 7700
E-Mail: sales@beckhoff.ca
Web: <https://www.beckhoff.ca/>

Beckhoff Automation GmbH & Co. KG

Global Headquarters
Huelshorstweg 20
33415 Verl
Germany

Phone: +49 5246 963-0
Fax: +49 5246 963-198
E-Mail: info@beckhoff.com
Web: www.beckhoff.com

© Beckhoff Automation GmbH & Co. KG

All images are protected by copyright. The use and transfer to third parties is not permitted.

Beckhoff®, TwinCAT®, EtherCAT®, EtherCAT G®, EtherCAT G10®, EtherCAT P®, Safety over EtherCAT®, TwinSAFE®, XFC®, XTS® and XPlanar® are registered trademarks of and licensed by Beckhoff Automation GmbH. Other designations used in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owners.

The information provided in this presentation contains merely general descriptions or characteristics of performance which in case of actual application do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.