

How to change PDF selection options and use custompaint in C# with ByteScout PDF Viewer SDK

The tutorial shows how to change PDF selection options and use custompaint in C#

ByteScout tutorials are designed to explain the code for both C# beginners and advanced programmers. What is ByteScout PDF Viewer SDK? It is the component that helps in adding pdf viewer into your desktop WinForms application. User may select multiple areas with mouse, can use keyboard shortcuts and zoom in or zoom out and change scaling. You may read coordinates, handle custom painting code and retrieve text inside selection area. It can help you to change PDF selection options and use custompaint in your C# application.

C# code samples for C# developers help to speed up coding of your application when using ByteScout PDF Viewer SDK. In your C# project or application you may simply copy & paste the code and then run your app! Code testing will allow the function to be tested and work properly with your data.

ByteScout PDF Viewer SDK free trial version is available on our website. C# and other programming languages are supported.

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[visit www.Bytescout.com](http://www.Bytescout.com)

Source Code Files:

```

using Bytescout.PDFViewer;

namespace Example
{
    partial class Form1
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }

        #region Windows Form Designer generated code

        /// <summary>
        /// Required method for Designer support - do not modify
        /// the contents of this method with the code editor.
        /// </summary>
        private void InitializeComponent()
        {
            this.pdfViewerControl1 = new Bytescout.PDFViewer.PDFViewerControl();
            this.toolStrip1 = new System.Windows.Forms.ToolStrip();
            this.tsbOpen = new System.Windows.Forms.ToolStripButton();
            this.cbLockSelection = new System.Windows.Forms.CheckBox();
            this.cbAllowResizeSelection = new System.Windows.Forms.CheckBox();
            this.cbMultiSelectMode = new System.Windows.Forms.CheckBox();
            this.toolStrip1.SuspendLayout();
            this.SuspendLayout();
            //
            // pdfViewerControl1
            //
            this.pdfViewerControl1.AllowResizeSelectionRectangles = true;
            this.pdfViewerControl1.Anchor = ((System.Windows.Forms.AnchorStyles
| System.Windows.Forms.AnchorStyles.Left)
| System.Windows.Forms.AnchorStyles.Right));
            this.pdfViewerControl1.BackColor = System.Drawing.SystemColors.Window;
            this.pdfViewerControl1.BorderStyle = System.Windows.Forms.BorderStyle.FixedSingle;
            this.pdfViewerControl1.Location = new System.Drawing.Point(12, 12, 100, 100);
            this.pdfViewerControl1.MouseMode = Bytescout.PDFViewer.MouseMode.ReadOnly;
            this.pdfViewerControl1.MultiSelectMode = true;
            this.pdfViewerControl1.Name = "pdfViewerControl1";
            this.pdfViewerControl1.RegistrationKey = null;
            this.pdfViewerControl1.RegistrationName = null;
        }
    }
}

```

```

this.pdfViewerControl1.Size = new System.Drawing.Size(1153, 568);
this.pdfViewerControl1.TabIndex = 0;
this.pdfViewerControl1.SelectionChanged += new SelectionChangedEventHandler(this.pdfViewerControl1_SelectionChanged);
this.pdfViewerControl1.CustomPaint += new System.Windows.Forms.PaintEventHandler(this.pdfViewerControl1_CustomPaint);
//
// toolStrip1
//
this.toolStrip1.Items.AddRange(new System.Windows.Forms.ToolStripItem[] {
this.tsbOpen});
this.toolStrip1.Location = new System.Drawing.Point(0, 0);
this.toolStrip1.Name = "toolStrip1";
this.toolStrip1.Size = new System.Drawing.Size(1177, 25);
this.toolStrip1.TabIndex = 1;
this.toolStrip1.Text = "toolStrip1";
//
// tsbOpen
//
this.tsbOpen.Image = global::Example.Properties.Resources.folder;
this.tsbOpen.ImageTransparentColor = System.Drawing.Color.Magenta;
this.tsbOpen.Name = "tsbOpen";
this.tsbOpen.Size = new System.Drawing.Size(80, 22);
this.tsbOpen.Text = "&Open PDF";
this.tsbOpen.Click += new System.EventHandler(this.tsbOpen_Click);
//
// cbLockSelection
//
this.cbLockSelection.AutoSize = true;
this.cbLockSelection.Location = new System.Drawing.Point(12, 74);
this.cbLockSelection.Name = "cbLockSelection";
this.cbLockSelection.Size = new System.Drawing.Size(95, 17);
this.cbLockSelection.TabIndex = 2;
this.cbLockSelection.Text = "Lock selection";
this.cbLockSelection.UseVisualStyleBackColor = true;
this.cbLockSelection.CheckedChanged += new System.EventHandler(this.cbLockSelection_CheckedChanged);
//
// cbAllowResizeSelection
//
this.cbAllowResizeSelection.AutoSize = true;
this.cbAllowResizeSelection.Checked = true;
this.cbAllowResizeSelection.CheckState = System.Windows.Forms.CheckState.Checked;
this.cbAllowResizeSelection.Location = new System.Drawing.Point(12, 100);
this.cbAllowResizeSelection.Name = "cbAllowResizeSelection";
this.cbAllowResizeSelection.Size = new System.Drawing.Size(178, 17);
this.cbAllowResizeSelection.TabIndex = 3;
this.cbAllowResizeSelection.Text = "Allow resize selection rectangles";
this.cbAllowResizeSelection.UseVisualStyleBackColor = true;
this.cbAllowResizeSelection.CheckedChanged += new System.EventHandler(this.cbAllowResizeSelection_CheckedChanged);
//
// cbMultiSelectMode
//
this.cbMultiSelectMode.AutoSize = true;
this.cbMultiSelectMode.Checked = true;
this.cbMultiSelectMode.CheckState = System.Windows.Forms.CheckState.Checked;
this.cbMultiSelectMode.Location = new System.Drawing.Point(12, 126);
this.cbMultiSelectMode.Name = "cbMultiSelectMode";
this.cbMultiSelectMode.Size = new System.Drawing.Size(108, 17);
this.cbMultiSelectMode.TabIndex = 4;
this.cbMultiSelectMode.Text = "Multi-select mode";
this.cbMultiSelectMode.UseVisualStyleBackColor = true;
this.cbMultiSelectMode.CheckedChanged += new System.EventHandler(this.cbMultiSelectMode_CheckedChanged);

```

```

//
// Form1
//
this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(1177, 677);
this.Controls.Add(this.cbMultiSelectMode);
this.Controls.Add(this.cbAllowResizeSelection);
this.Controls.Add(this.cbLockSelection);
this.Controls.Add(this.pdfViewerControl1);
this.Controls.Add(this.toolStrip1);
this.Name = "Form1";
this.Text = "Form1";
this.toolStrip1.ResumeLayout(false);
this.toolStrip1.PerformLayout();
this.ResumeLayout(false);
this.PerformLayout();

}

#endregion

private Bytescout.PDFViewer.PDFViewerControl pdfViewerControl1;
private System.Windows.Forms.ToolStrip toolStrip1;
private System.Windows.Forms.ToolStripButton tsbOpen;
private System.Windows.Forms.CheckBox cbLockSelection;
private System.Windows.Forms.CheckBox cbAllowResizeSelection;
private System.Windows.Forms.CheckBox cbMultiSelectMode;
}
}

```

Form1.cs

```

using System;
using System.Collections.Generic;
using System.Drawing;
using System.Windows.Forms;
using Bytescout.PDFViewer;

namespace Example
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        protected override void OnLoad(EventArgs e)

```

```

    {
        pdfViewerControl1.InputFile = "sample.pdf";

        base.OnLoad(e);
    }

private void tsbOpen_Click(object sender, EventArgs e)
{
    using (OpenFileDialog openFileDialog = new OpenFileDialog())
    {
        openFileDialog.Title = @"Open PDF Document";
        openFileDialog.Filter = @"PDF Files (*.pdf)|*.pdf|All Files (*.*)|*.*";

        if (openFileDialog.ShowDialog() == DialogResult.OK)
        {
            this.Text = openFileDialog.FileName;

            Cursor = Cursors.WaitCursor;

            try
            {
                pdfViewerControl1.InputFile = openFileDialog.FileName;
            }
            catch (Exception exception)
            {
                MessageBox.Show(exception.Message);
            }
            finally
            {
                Cursor = Cursors.Default;
            }
        }
    }
}

private void cbMultiSelectMode_CheckedChanged(object sender, EventArgs e)
{
    pdfViewerControl1.MultiSelectMode = cbMultiSelectMode.Checked;
}

private void cbAllowResizeSelection_CheckedChanged(object sender, EventArgs e)
{
    pdfViewerControl1.AllowResizeSelectionRectangles = cbAllowResizeSelection.Checked;
}

private void cbLockSelection_CheckedChanged(object sender, EventArgs e)
{
    pdfViewerControl1.LockSelection = cbLockSelection.Checked;
}

List<String> _labels = new List<string>();

private void pdfViewerControl1_SelectionChanged(object sender, SelectionChangedEventArgs e)
{
    if (pdfViewerControl1.Selection.Length > _labels.Count)
    {
        for (int i = _labels.Count; i < pdfViewerControl1.Selection.Length; i++)
        {
            _labels.Add(new Random().Next().ToString());
        }
    }
}

```

```

    }
}

private void pdfViewerControl1_CustomPaint(object sender, PaintEventArgs e)
{
    // Paint labels
    for (int i = 0; i < pdfViewerControl1.Selection.Length; i++)
    {
        Rectangle r = Rectangle.Round(pdfViewerControl1.Selection[i].Rectangle);
        r = pdfViewerControl1.TranslateRectangleToViewport(r);

        Size textSize = TextRenderer.MeasureText(_labels[i], Font);
        Rectangle textRectangle = new Rectangle(r.Left, r.Top + textSize.Height, r.Right, r.Top + textSize.Height);

        e.Graphics.FillRectangle(Brushes.DarkBlue, textRectangle);
        TextRenderer.DrawText(e.Graphics, _labels[i], Font, textRectangle.Left, textRectangle.Top, textSize.Width, textSize.Height);
    }
}
}
}

```

Program.cs

```

using System;
using System.Collections.Generic;
using System.Windows.Forms;

namespace Example
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        [STAThread]
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
            Application.Run(new Form1());
        }
    }
}

```

VIDEO

<https://www.youtube.com/watch?v=NEwNs2b9YN8>

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