

How to select region and perform OCR in C# and ByteScout Premium Suite

Continuous learning is a crucial part of computer science and this tutorial shows how to select region and perform OCR in C#

We made thousands of pre-made source code pieces for easy implementation in your own programming projects. ByteScout Premium Suite can select region and perform OCR. It can be applied from C#. ByteScout Premium Suite is the bundle that includes twelve SDK products from ByteScout including tools and components for PDF, barcodes, spreadsheets, screen video recording.

Want to save time? You will save a lot of time on writing and testing code as you may just take the C# code from ByteScout Premium Suite for select region and perform OCR below and use it in your application. Simply copy and paste in your C# project or application you and then run your app! Use of ByteScout Premium Suite in C# is also described in the documentation included along with the product.

You can download free trial version of ByteScout Premium Suite from our website with this and other source code samples for C#.

FOR MORE INFORMATION AND FREE TRIAL:

[Download Free Trial SDK \(on-premise version\)](#)

[Read more about ByteScout Premium Suite](#)

[Explore API Documentation](#)

[Get Free Training for ByteScout Premium Suite](#)

[Get Free API key for Web API](#)

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

Source Code Files:

```

namespace SelectRegionAndPerformOCR
{
    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; otherwise, false; otherwise, false if disposing = true, a call to Dispose(bool) on any object which is a member of this container will automatically dispose the object.
        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()
        {
            System.ComponentModel.ComponentResourceManager resources = new System.ComponentModel.ComponentResourceManager(typeof(Form1));
            this.toolStrip1 = new System.Windows.Forms.ToolStrip();
            this.toolStripButton1 = new System.Windows.Forms.ToolStripButton();
            this.pdfViewerControl1 = new Bytescout.PDFViewer.PDFViewerControl();
            this.btnRunOCR = new System.Windows.Forms.Button();
            this.label1 = new System.Windows.Forms.Label();
            this.toolStrip1.SuspendLayout();
            this.SuspendLayout();
            //
            // toolStrip1
            //
            this.toolStrip1.Items.AddRange(new System.Windows.Forms.ToolStripItem[] {
            this.toolStripButton1});
            this.toolStrip1.Location = new System.Drawing.Point(0, 0);
            this.toolStrip1.Name = "toolStrip1";
            this.toolStrip1.Size = new System.Drawing.Size(971, 25);
            this.toolStrip1.TabIndex = 0;
            this.toolStrip1.Text = "toolStrip1";
            //
            // toolStripButton1
            //
            this.toolStripButton1.Font = new System.Drawing.Font("Tahoma", 8.25F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(0)));
            this.toolStripButton1.Image = ((System.Drawing.Image)(resources.GetObject("toolStripButton1.Image")));
            this.toolStripButton1.ImageTransparentColor = System.Drawing.Color.Magenta;
            this.toolStripButton1.Name = "toolStripButton1";
        }
    }
}

```

```

this.toolStripButton1.Size = new System.Drawing.Size(114, 22);
this.toolStripButton1.Text = "Load document";
this.toolStripButton1.Click += new System.EventHandler(this.toolStripButton
//
// pdfViewerControl1
//
this.pdfViewerControl1.Anchor = ((System.Windows.Forms.AnchorStyles)(System.Windows.Forms.AnchorStyles.Left
| System.Windows.Forms.AnchorStyles.Right)));
this.pdfViewerControl1.BorderStyle = System.Windows.Forms.BorderStyle.Fixed
this.pdfViewerControl1.Location = new System.Drawing.Point(12, 28);
this.pdfViewerControl1.MouseMode = Bytescout.PDFViewer.MouseMode.Selection
this.pdfViewerControl1.Name = "pdfViewerControl1";
this.pdfViewerControl1.RegistrationKey = null;
this.pdfViewerControl1.RegistrationName = null;
this.pdfViewerControl1.ResetRotationOnPageChange = false;
this.pdfViewerControl1.Scale = 100;
this.pdfViewerControl1.SelectionColor = System.Drawing.Color.Red;
this.pdfViewerControl1.ShowImageObjects = true;
this.pdfViewerControl1.ShowTextObjects = true;
this.pdfViewerControl1.ShowVectorObjects = true;
this.pdfViewerControl1.Size = new System.Drawing.Size(766, 490);
this.pdfViewerControl1.TabIndex = 1;
//
// btnRunOCR
//
this.btnRunOCR.Anchor = ((System.Windows.Forms.AnchorStyles)(System.Windows
this.btnRunOCR.Enabled = false;
this.btnRunOCR.Font = new System.Drawing.Font("Tahoma", 8.25F, System.Draw
this.btnRunOCR.Location = new System.Drawing.Point(784, 77);
this.btnRunOCR.Name = "btnRunOCR";
this.btnRunOCR.Size = new System.Drawing.Size(175, 39);
this.btnRunOCR.TabIndex = 2;
this.btnRunOCR.Text = "Run OCR";
this.btnRunOCR.UseVisualStyleBackColor = true;
this.btnRunOCR.Click += new System.EventHandler(this.btnRunOCR_Click);
//
// label1
//
this.label1.Anchor = ((System.Windows.Forms.AnchorStyles)(System.Windows.
this.label1.Font = new System.Drawing.Font("Tahoma", 8.25F, System.Drawing
this.label1.Location = new System.Drawing.Point(784, 28);
this.label1.Name = "label1";
this.label1.Size = new System.Drawing.Size(175, 46);
this.label1.TabIndex = 3;
this.label1.Text = "Load document, select region and press \"Run OCR\" but
//
// Form1
//
this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleModeMode.Font;
this.ClientSize = new System.Drawing.Size(971, 530);
this.Controls.Add(this.label1);
this.Controls.Add(this.btnRunOCR);
this.Controls.Add(this.pdfViewerControl1);
this.Controls.Add(this.toolStrip1);
this.Name = "Form1";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "Form1";
this.toolStrip1.ResumeLayout(false);

```

```

        this.toolStrip1.PerformLayout();
        this.ResumeLayout(false);
        this.PerformLayout();

    }

    #endregion

    private System.Windows.Forms.ToolStrip toolStrip1;
    private System.Windows.Forms.ToolStripButton toolStripButton1;
    private Bytescout.PDFViewer.PDFViewerControl pdfViewerControl1;
    private System.Windows.Forms.Button btnRunOCR;
    private System.Windows.Forms.Label label1;
}
}

```

Form1.cs

```

using System;
using System.Drawing;
using System.Windows.Forms;
using Bytescout.PDFExtractor;

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

        private void toolStripButton1_Click(object sender, EventArgs e)
        {
            using (OpenFileDialog openFileDialog = new OpenFileDialog())
            {
                openFileDialog.Title = @"Open Document";
                openFileDialog.Filter = @"All Supported Formats|*.pdf;*.jpg;*.jpeg;*.p

                if (openFileDialog.ShowDialog() == DialogResult.OK)
                {
                    pdfViewerControl1.InputFile = openFileDialog.FileName;

                    btnRunOCR.Enabled = true;
                }
            }
        }

        private void btnRunOCR_Click(object sender, EventArgs e)

```

```

{
    TextExtractor extractor = new TextExtractor();
    extractor.RegistrationName = "demo";
    extractor.RegistrationKey = "demo";

    // Load sample PDF document
    extractor.LoadDocumentFromFile(pdfViewerControl1.InputFile);

    // Enable Optical Character Recognition (OCR)
    // in .Auto mode (SDK automatically checks if needs to use OCR or not)
    extractor.OCRMode = OCRMode.Auto;

    // Set the location of "tessdata" folder containing language data files
    extractor.OCRLanguageDataFolder = @"c:\Program Files\Bytescout PDF Extractor";

    // Set OCR language
    extractor.OCRLanguage = "eng"; // "eng" for english, "deu" for German, "fra" for French
    // Find more language files at https://github.com/tesseract-ocr/tessdata/

    // Set PDF document rendering resolution
    extractor.OCRResolution = 300;

    // Set the extraction area to the viewer's selection rectangle
    RectangleF[] selection = pdfViewerControl1.SelectionInPoints;
    if (selection.Length > 0)
        extractor.SetExtractionArea(selection[0]);

    // Show wait cursor
    Cursor = Cursors.WaitCursor;

    try
    {
        // Perform OCR and save result to file
        extractor.SavePageTextToFile(pdfViewerControl1.CurrentPageIndex, "result.txt");
    }
    finally
    {
        // Revert cursor to default
        Cursor = Cursors.Default;
    }

    // Cleanup
    extractor.Dispose();

    // Open output file in default associated application
    System.Diagnostics.Process.Start("result.txt");
}
}
}

```

```

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

namespace SelectRegionAndPerformOCR
{
    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());
        }
    }
}

```

SelectRegionAndPerformOCR.sln

```

Microsoft Visual Studio Solution File, Format Version 12.00
# Visual Studio 15
VisualStudioVersion = 15.0.27703.2047
MinimumVisualStudioVersion = 10.0.40219.1
Project("{FAE04EC0-301F-11D3-BF4B-00C04F79EFBC}") = "SelectRegionAndPerformOCR", "SelectRegionAndPerformOCR\SelectRegionAndPerformOCR.csproj", "{FAE04EC0-301F-11D3-BF4B-00C04F79EFBC}"
EndProject
Global
    GlobalSection(SolutionConfigurationPlatforms) = preSolution
        Debug|Any CPU = Debug|Any CPU
        Release|Any CPU = Release|Any CPU
    EndGlobalSection
    GlobalSection(ProjectConfigurationPlatforms) = postSolution
        {6A7F695C-A9C0-4A00-8E07-57DBB26EB5EB}.Debug|Any CPU.ActiveCfg = Debug|Any CPU
        {6A7F695C-A9C0-4A00-8E07-57DBB26EB5EB}.Debug|Any CPU.Build.0 = Debug|Any CPU
        {6A7F695C-A9C0-4A00-8E07-57DBB26EB5EB}.Release|Any CPU.ActiveCfg = Release|Any CPU
        {6A7F695C-A9C0-4A00-8E07-57DBB26EB5EB}.Release|Any CPU.Build.0 = Release|Any CPU
    EndGlobalSection
    GlobalSection(SolutionProperties) = preSolution
        HideSolutionNode = FALSE
    EndGlobalSection
    GlobalSection(ExtensibilityGlobals) = postSolution
        SolutionGuid = {B4740E27-9001-4E5D-AABF-0EE4D43A2AC8}
    EndGlobalSection

```

VIDEO

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

ON-PREMISE OFFLINE SDK

[60 Day Free Trial](#) or [Visit ByteScout Premium Suite Home Page](#)
[Explore ByteScout Premium Suite Documentation](#)
[Explore Samples](#)
[Sign Up for ByteScout Premium Suite Online Training](#)

ON-DEMAND REST WEB API

[Get Your API Key](#)
[Explore Web API Docs](#)
[Explore Web API Samples](#)

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

[visit www.PDF.co](http://www.PDF.co)

www.bytescout.com