

# XDoc.PDF Developer Guide – Optimization Module

## Analyze a PDF file and create a report

C#

```
PDFOptimizeOptions ops = new PDFOptimizeOptions();
ops.DiscardOptions.DiscardAllLinks = true;
ops.DiscardOptions.DiscardAnnotations = true;
ops.DiscardOptions.DiscardBookmarks = true;
ops.DiscardOptions.DiscardDocumentInfo = true;
ops.DiscardOptions.DiscardFormFields = true;
ops.DiscardOptions.DiscardPageThumbnails = true;

String inputFilePath = @"input.pdf";
String outputFilePath = @"output.pdf";

try
{
    PDFOptimizer.Optimize(inputFilePath, outputFilePath, ops);
}
catch (PDFException pdfEx)
{
    Console.WriteLine("[Warning]: " + pdfEx.Message);
}
catch (Exception ex)
{
    Console.WriteLine("[Error]: unexpected exception - " + ex.Message);
}
```

VB

## Optimize an exist PDF file

C#
<pre>String inputFilePath = @"D:\source.pdf"; String outputFilePath = @"D:\output_optimized.pdf";  // create optimizing options PDFOptimizeOptions ops = new PDFOptimizeOptions(); //--Options for Monochrome Image -- // to enable downsampling for those images with resolution higher than 300 dpi to 150 dpi ops.MonochromeImageOptions.DownsamplingMode = ImageDownsamplingMode.Bicubic; ops.MonochromeImageOptions.MaxResolutionLimit = 300F; ops.MonochromeImageOptions.TargetResolution = 150F; // to change image compression mode to JBIG2 ops.MonochromeImageOptions.KeepCompressionMode = false; ops.MonochromeImageOptions.Compression = PDFCompression.JBIG2Decode; // -- Options for Grayscale Image -- // to enable downsampling for those images with resolution higher than 120 dpi to 96 dpi ops.GrayscaleImageOptions.DownsamplingMode = ImageDownsamplingMode.Bilinear; ops.GrayscaleImageOptions.MaxResolutionLimit = 120F; ops.GrayscaleImageOptions.TargetResolution = 96F; //// to change image compression mode to DCT ops.GrayscaleImageOptions.KeepCompressionMode = false; ops.GrayscaleImageOptions.Compression = PDFCompression.DCTDecode; // set quality level, only available for compression mode DCT ops.GrayscaleImageOptions.JPEGImageQualityLevel = JPEGImageQualityLevel.Medium; //// -- Options for Color Image -- //// to enable downsampling for those images with resolution higher than 120 dpi to 96 dpi ops.ColorImageOptions.DownsamplingMode = ImageDownsamplingMode.Bicubic; ops.ColorImageOptions.MaxResolutionLimit = 120F; ops.ColorImageOptions.TargetResolution = 96F; //// to change image compression mode to DCT ops.ColorImageOptions.KeepCompressionMode = false; ops.ColorImageOptions.Compression = PDFCompression.DCTDecode; //// set quality level, only available for compression mode DCT ops.ColorImageOptions.JPEGImageQualityLevel = JPEGImageQualityLevel.Medium;  ops.DiscardOptions.DiscardAllLinks = true; ops.DiscardOptions.DiscardAnnotations = true; ops.DiscardOptions.DiscardBookmarks = true; ops.DiscardOptions.DiscardDocumentInfo = true; ops.DiscardOptions.DiscardFormFields = true;  // remove un-used embed resource, such as font data ops.DiscardOptions.DiscardUnusedResourcesInPage = true;  // apply optimizing PDFOptimizer.Optimize(inputFilePath, outputFilePath, ops);</pre>
VB