

CASE STUDIES

Aspose.Words for .NET Mail Merge - Case Study



Risk Compliance Performance Solutions

Using Aspose.Words

Sean Diamond, VP of Software Development, March 10, 2015

About RCP Solutions

(RCP) specializes in risk management, compliance, communications and outreach programs that drive performance and positively impact the bottom line. Our executive team has more than 100 years of combined experience in a variety of industries and disciplines bringing a wealth of knowledge, excellence and innovation to all of our services. Driven by state-of-the-art technology solutions, we integrate the many facets of business, risk, compliance and management to achieve the best results for our clients. <http://www.rcp-solutions.com/>

Problem

RCP Solutions has a need to generate thousands of merged Word documents yearly. The data source is our proprietary CRM system which allows users to requests merged documents for large groups of records. In addition, the business needs the ability to modify the templates on a constant basis in a familiar tool such as Microsoft Word.

The RCP Solutions development team was struggling with Microsoft Word Automation. The issues included:

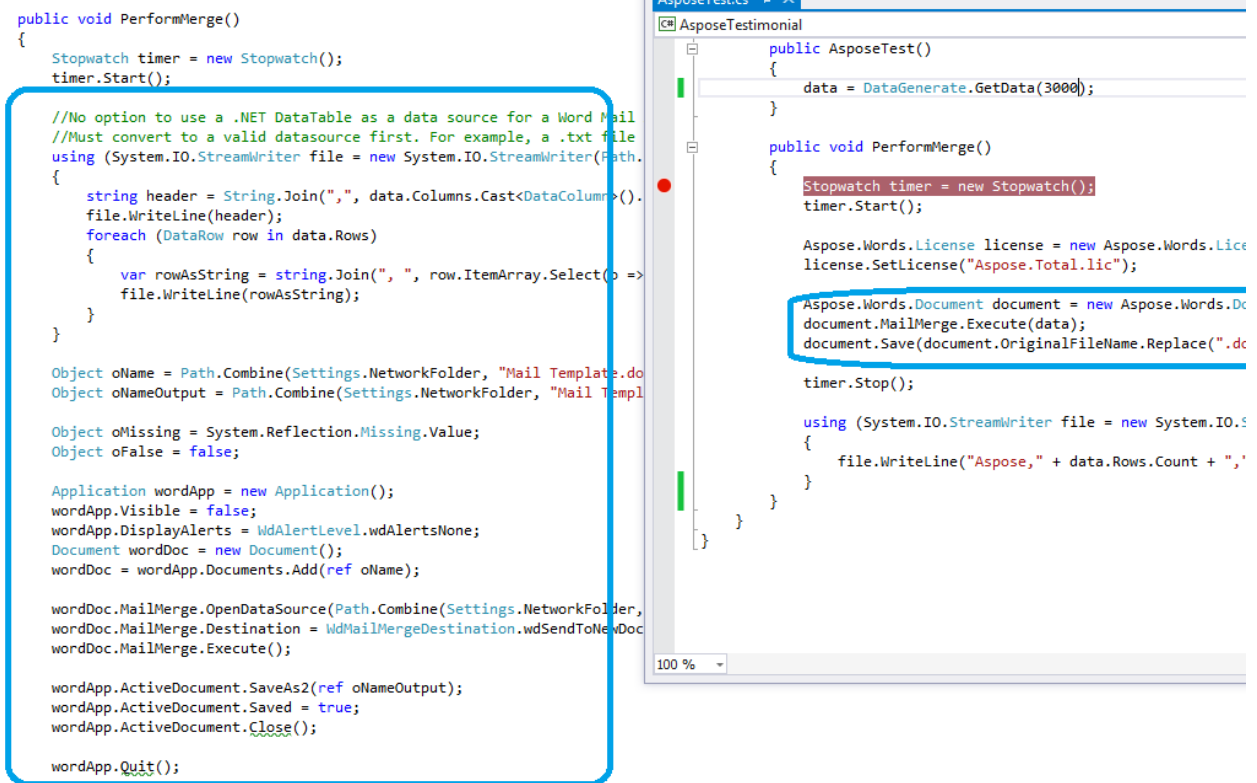
- Requirement to have Microsoft Word installed on the server
- Word Object Model has limited method overloads and a lack of consistent online examples. For example, it's not possible to directly perform a mail merge using a `System.Data.DataTable` as the data source in Word Automation
- Performance limitations

Solution

RCP Solutions evaluated the Aspose Word product and was immediately impressed with the robust programming API and performance. We were immediately able to create mail merged Word documents with little effort. In addition, the time it took for merged documents to generated using Aspose was significantly faster than using Word Automation.

The screenshot below shows a side by side comparison of how we could perform a Word mail merge using Word Automation compared to Aspose Words. The relative sections of code are circled in blue.

| Word Automation | Aspose mail merge |
|-----------------|-------------------|
|-----------------|-------------------|



```

public void PerformMerge()
{
    Stopwatch timer = new Stopwatch();
    timer.Start();

    //No option to use a .NET DataTable as a data source for a Word Mail
    //Must convert to a valid datasource first. For example, a .txt file
    using (System.IO.StreamWriter file = new System.IO.StreamWriter(Path.
    {
        string header = String.Join(",", data.Columns.Cast<DataColumn>().
        file.WriteLine(header);
        foreach (DataRow row in data.Rows)
        {
            var rowAsString = string.Join(" ", row.ItemArray.Select(p =>
            file.WriteLine(rowAsString);
        }
    }

    Object oName = Path.Combine(Settings.NetworkFolder, "Mail Template.docx");
    Object oNameOutput = Path.Combine(Settings.NetworkFolder, "Mail Template.docx");

    Object oMissing = System.Reflection.Missing.Value;
    Object oFalse = false;

    Application wordApp = new Application();
    wordApp.Visible = false;
    wordApp.DisplayAlerts = WdAlertLevel.wdAlertsNone;
    Document wordDoc = new Document();
    wordDoc = wordApp.Documents.Add(ref oName);

    wordDoc.MailMerge.OpenDataSource(Path.Combine(Settings.NetworkFolder,
    wordDoc.MailMerge.Destination = WdMailMergeDestination.wdSendToNewDoc
    wordDoc.MailMerge.Execute();

    wordApp.ActiveDocument.SaveAs2(ref oNameOutput);
    wordApp.ActiveDocument.Saved = true;
    wordApp.ActiveDocument.Close();

    wordApp.Quit();
}

AsposeTest()
{
    data = DataGenerate.GetData(3000);
}

public void PerformMerge()
{
    Stopwatch timer = new Stopwatch();
    timer.Start();

    Aspose.Words.License license = new Aspose.Words.License();
    license.SetLicense("Aspose.Total.lic");

    Aspose.Words.Document document = new Aspose.Words.Document();
    document.MailMerge.Execute(data);
    document.Save(document.OriginalFileName.Replace(".docx", ".docx"));

    timer.Stop();

    using (System.IO.StreamWriter file = new System.IO.StreamWriter(Path.
    {
        file.WriteLine("Aspose," + data.Rows.Count + ",");
    }
}
  
```

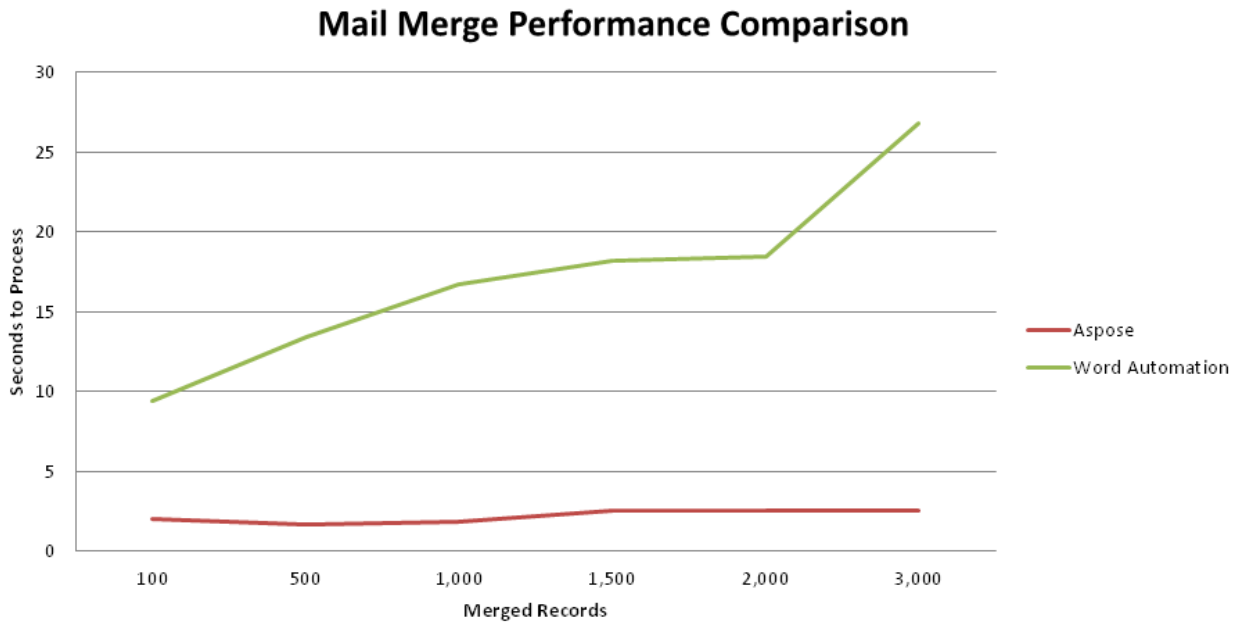
Caption: Word Automation vs Aspose Mail Merge

The Aspose version offers the following advantages:

- Microsoft Word does not have to be installed on the server
- Aspose programming model is concise and easy to understand
- Improved Performance

Performance:

We ran a performance comparison of executing a mail merge using Aspose vs Word Automation. There is a significant performance difference:



Caption: Time (sec) to merge database records into a mail merge template, Aspose vs Word Automation

For example, to perform a mail merge of 3,000 records, Word Automation took over 26 seconds, compared to Aspose completing the merge in 2.5 seconds!

RCP Solutions performs thousands of mail merges every year. The amount of time savings that we gain from increased performance in document generation saves our team many hours of time each year.

Experience

Finding a solution: RCP utilized the Aspose free trials prior to purchase. The free trials were an excellent resource to allow us to evaluate the tools and compare to Word Automation. It didn't take long after using the trial that we knew this was the right tool for us.

Implementation: Implementing Aspose Words and Cells is extremely fast and easy. Our developers are no longer concerned with Office Automation and our network staff does not have to maintain Office installations on the servers.

Next Steps

RCP Solutions currently utilizes Aspose.Words and Aspose.Cells throughout its proprietary software applications. These components have saved significant development time and processing time and allowed us to integrate Microsoft Office document features into our applications in a quick and efficient manner. We are currently evaluating additional Aspose products such as Aspose PDF and Email.

Summary

RCP Solutions would absolutely recommend Aspose for the excellent .NET components. In addition, Aspose maintains an active knowledge base and support forum. We have discovered answers to all of our questions using these resources.