

# XML Data Import

## Intro

Parse an XML file and put the data into arrays for use in an ExcelTemplate report.

The *parseXml* method of this demo reads an XML file and parses it using XML DOM. The data is read into an array of type `Object[][]`, and then bound to the report with the *BindData* method.

### Requirements

This sample requires OfficeWriter Enterprise Edition to be installed because the OfficeWriter Grouping and Nesting is only available in the Enterprise Edition of the product.

## Code

```
public class XmlImport
{
    ///<summary>
    ///Build the report with ExcelTemplate
    ///</summary>
    public void GenerateReport()
    {
        //These are the names of the values in WeatherData array
        string[] colNames = { "Date", "Temp", "Humidity", "Wind" };

        //Read the XML document into an object array
        object[][] weatherData = ParseXml();

        //Create an instance of SoftArtisans ExcelTemplate
        ExcelTemplate xlt = new ExcelTemplate();

        //Open the template workbook
        string templatePath = @"..\..\ExcelTemplateFiles\XMLImportTemplate.xlsx";
        xlt.Open(templatePath);

        //Bind the WeatherData array to the template
        // %=Weather.Date, %=Weather.Temp
        // %=Weather.Humidity, %=Weather.Wind

        DataBindingProperties bindingProperties =
xlt.CreateDataBindingProperties();
        bindingProperties.MaxRows = ExcelTemplate.ALL_ROWS;
        bindingProperties.Transpose = true;
        xlt.BindData(weatherData, colNames, "Weather", bindingProperties);

        //Process the template to populate it with the Data Source data
        xlt.Process();

        //Save the report
        xlt.Save(@"..\..\ExcelOutputFiles\XmlWeatherReport_output.xlsx");
    }

    ///<summary> Load the XML weather report data into a 2-D
    ///Object array.
    ///</summary>
```

```

/// <returns> Parsed XML data to be used with ExcelTemplate
/// </returns>

private object[][] ParseXml()
{
    //Create an array with an element for each day of weather
    // reported in the XML document
    // There will be four elements in the first dimension
    // to hold "Date", "Temp", "Humidity", and "Wind" data
    // and one element in the second dimension for every day
    // reported in the XML document

    XmlDocument doc = new XmlDocument();
    doc.Load(@"..\..\ExcelData\XMLWeatherData.xml");

    int NodeCount = doc.DocumentElement.ChildNodes.Count;

    string[][] WeatherData = new string[4][];

    for (int i = 0; i < WeatherData.Length; i++)
        WeatherData[i] = new string[NodeCount];

    //Loop through the days of weather

    for (int i = 0; i < NodeCount; i++)
    {
        XmlNode DayNode = doc.DocumentElement.ChildNodes[i];

        //Read the weather values from the XML document into the array
        if (DayNode.Name == "today")
            WeatherData[0][i] = DateTime.Now.ToString("d");
        else
            WeatherData[0][i] = DateTime.Now.AddDays(i).ToString("d");

        WeatherData[1][i] = DayNode.SelectSingleNode("temperature").InnerText;

        WeatherData[2][i] =
(Convert.ToDouble(DayNode.SelectSingleNode("humidity").InnerText) / 100).ToString();
        WeatherData[3][i] = DayNode.SelectSingleNode("wind").InnerText;
    }
    return WeatherData;
}
}

```



## Downloads

- Template: [XMLImportTemplate.xlsx](#)
- Output: [XmlWeatherReport\\_output.xlsx](#)
- Data: [XmlWeatherData.xml](#)