**What is new in ASP.NET 3.5**

Microsoft released ASP.NET 3.5 on November 19, 2007. Along with it, was released Visual Studio 2008. This evolution from ASP.NET 2.0 to ASP.NET 3.5 is quiet gradual. ASP.NET 3.5 uses the same engine as that of ASP.NET 2.0, with some extra features added on top of it. In this article, we will explore the new features added to ASP.NET 3.5. This article assumes that you have been working on ASP.NET 2.0.

**New Features in ASP.NET 3.5**

**ASP.NET AJAX**

In ASP.NET 2.0, ASP.NET AJAX was used as an extension to it. You had to download the extensions and install it. However in ASP.NET 3.5, ASP.NET AJAX is integrated into the .NET Framework, thereby making the process of building cool user interfaces easier and intuitive.

The integration between webparts and the update panel is much smoother. Another noticeable feature is that you can now add ASP.NET AJAX Control Extenders to the toolbox in VS2008. Even though this is an IDE specific feature, however I feel it deserves a mention over here for developers, who had to add extenders using source view earlier. It is also worth noting that Windows Communication Foundation (WCF) now supports JSON along with other standard protocols like  SOAP, RSS and POX.

**New Controls**

The ListView and DataPager are new controls added along with a new datasource control called the LinqDataSource.

ListView

The ListView control is quiet flexible and contains features of the Gridview, Datagrid, Repeater and similar list controls available in ASP.NET 2.0. It provides the ability to insert, delete, page (using Data Pager), sort and edit data. However one feature of the ListView control that stands apart, is that it gives you a great amount of flexibility over the markup generated. So you have a complete control on how the data is to be displayed. You can now render your data without using the <table> tag. You also get a rich set of templates with the ListView control.

DataPager

DataPager provides paging support to the ListView control. The best advantage is that you need not have to keep it ‘tied’ with the control on which the paging is being done. You can keep it anywhere on the page.

DataPager gives you a consistent way of paging with the controls that support it. Currently only ListView supports it as it implements the IPageableItemContainer. However support is likely to be added to other List controls as well.

**LINQ**

LINQ (Language Integrated Query) adds native data querying capability to C# and VB.NET along with the compiler and Intellisense support. LINQ is a component of .NET 3.5. LINQ defines operators that allow you to code your query in a consistent manner over databases, objects and XML.  The ASP.NET LinqDataSource control allows you to use LINQ to filter, order and group data before binding to the List controls.

You can learn more about LINQ over [here](http://www.asp.net/learn/linq-videos/).

**ASP.NET Merge Tool**

ASP.NET 3.5 includes a new merge tool (aspnet\_merge.exe). This tool lets you combine and manage assemblies created by aspnet\_compiler.exe. This tool was available earlier as an add-on.

**New Assemblies**

The new assemblies that would be of use to ASP.NET 3.5 developers are as follows:

         System.Core.dll - Includes the implementation for LINQ to Objects

         System.Data.Linq.dll - Includes the implementation for LINQ to SQL

         System.Xml.Linq.dll - Includes the implementation for LINQ to XML

         System.Data.DataSetExtensions.dll - Includes the implementation for LINQ to DataSet

         System.Web.Extensions.dll: Includes the implementation for ASP.NET AJAX (new enhancements added) and new web controls as explained earlier.

**Some Other Important Points**

1.    ASP.NET 3.5 provides better support to IIS7. IIS7 and ASP.NET 3.5 modules and handlers support unified configuration.

2.    You can have multiple versions of ASP.NET on the same machine.

3.    For those who are wondering what happened to ASP.NET 3.0, well there isn’t anything called ASP.NET 3.0.

4.    VS 2002 worked with ASP.NET 1.0, VS 2003 worked with ASP.NET 1.1, and VS 2005 worked with ASP.NET 2.0. However VS 2008 supports multi-targeting, i.e it works with ASP.NET 2.0, and ASP.NET 3.5.