**IQueryable Interface**

**.NET Framework 4.5**

[Other Versions](javascript:;)

Description: http://i.msdn.microsoft.com/Areas/Epx/Content/Images/ImageSprite.png

* [.NET Framework 4](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable(d=printer,v=vs.100).aspx)
* [.NET Framework 3.5](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable(d=printer,v=vs.90).aspx)
* [Silverlight](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable(d=printer,v=vs.95).aspx)

Provides functionality to evaluate queries against a specific data source wherein the type of the data is not specified.

**Namespace:**  [System.Linq](http://msdn.microsoft.com/en-us/library/system.linq(v=vs.110).aspx)  
**Assembly:**  System.Core (in System.Core.dll)

[Syntax](javascript:void(0))

C#

[C++](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable(d=printer,v=vs.110).aspx?cs-save-lang=1&cs-lang=cpp#code-snippet-1)

[F#](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable(d=printer,v=vs.110).aspx?cs-save-lang=1&cs-lang=fsharp#code-snippet-1)

[VB](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable(d=printer,v=vs.110).aspx?cs-save-lang=1&cs-lang=vb#code-snippet-1)

public interface IQueryable : IEnumerable

The IQueryable type exposes the following members.

[Properties](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Description: Public propertyDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [ElementType](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable.elementtype(v=vs.110).aspx) | Gets the type of the element(s) that are returned when the expression tree associated with this instance of IQueryable is executed. |
| Description: Public propertyDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [Expression](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable.expression(v=vs.110).aspx) | Gets the expression tree that is associated with the instance of IQueryable. |
| Description: Public propertyDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [Provider](http://msdn.microsoft.com/en-us/library/system.linq.iqueryable.provider(v=vs.110).aspx) | Gets the query provider that is associated with this data source. |

[Methods](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Description: Public methodDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [GetEnumerator](http://msdn.microsoft.com/en-us/library/system.collections.ienumerable.getenumerator(v=vs.110).aspx) | Returns an enumerator that iterates through a collection. (Inherited from [IEnumerable](http://msdn.microsoft.com/en-us/library/system.collections.ienumerable(v=vs.110).aspx).) |

[Extension Methods](javascript:void(0))

|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Description: Public Extension MethodDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [AsParallel](http://msdn.microsoft.com/en-us/library/dd413237(v=vs.110).aspx) | Enables parallelization of a query. (Defined by [ParallelEnumerable](http://msdn.microsoft.com/en-us/library/system.linq.parallelenumerable(v=vs.110).aspx).) |
| Description: Public Extension MethodDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [AsQueryable](http://msdn.microsoft.com/en-us/library/bb353734(v=vs.110).aspx) | Converts an [IEnumerable](http://msdn.microsoft.com/en-us/library/system.collections.ienumerable(v=vs.110).aspx) to an IQueryable. (Defined by [Queryable](http://msdn.microsoft.com/en-us/library/system.linq.queryable(v=vs.110).aspx).) |
| Description: Public Extension MethodDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [Cast<TResult>()](http://msdn.microsoft.com/en-us/library/bb341406(v=vs.110).aspx) | Overloaded. Casts the elements of an [IEnumerable](http://msdn.microsoft.com/en-us/library/system.collections.ienumerable(v=vs.110).aspx) to the specified type. (Defined by [Enumerable](http://msdn.microsoft.com/en-us/library/system.linq.enumerable(v=vs.110).aspx).) |
| Description: Public Extension MethodDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [Cast<TResult>()](http://msdn.microsoft.com/en-us/library/bb301460(v=vs.110).aspx) | Overloaded. Converts the elements of an IQueryable to the specified type. (Defined by [Queryable](http://msdn.microsoft.com/en-us/library/system.linq.queryable(v=vs.110).aspx).) |
| Description: Public Extension MethodDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [OfType<TResult>()](http://msdn.microsoft.com/en-us/library/bb360913(v=vs.110).aspx) | Overloaded. Filters the elements of an [IEnumerable](http://msdn.microsoft.com/en-us/library/system.collections.ienumerable(v=vs.110).aspx) based on a specified type. (Defined by [Enumerable](http://msdn.microsoft.com/en-us/library/system.linq.enumerable(v=vs.110).aspx).) |
| Description: Public Extension MethodDescription: Supported by Portable Class LibraryDescription: Supported in .NET for Windows Store apps | [OfType<TResult>()](http://msdn.microsoft.com/en-us/library/bb344857(v=vs.110).aspx) | Overloaded. Filters the elements of an IQueryable based on a specified type. (Defined by [Queryable](http://msdn.microsoft.com/en-us/library/system.linq.queryable(v=vs.110).aspx).) |

[Remarks](javascript:void(0))

The IQueryable interface is intended for implementation by query providers. It is only supposed to be implemented by providers that also implement [IQueryable<T>](http://msdn.microsoft.com/en-us/library/bb351562(v=vs.110).aspx). If the provider does not also implement [IQueryable<T>](http://msdn.microsoft.com/en-us/library/bb351562(v=vs.110).aspx), the standard query operators cannot be used on the provider's data source.

The IQueryable interface inherits the [IEnumerable](http://msdn.microsoft.com/en-us/library/system.collections.ienumerable(v=vs.110).aspx) interface so that if it represents a query, the results of that query can be enumerated. Enumeration causes the expression tree associated with an IQueryable object to be executed. The definition of "executing an expression tree" is specific to a query provider. For example, it may involve translating the expression tree to an appropriate query language for the underlying data source. Queries that do not return enumerable results are executed when the [Execute](http://msdn.microsoft.com/en-us/library/system.linq.iqueryprovider.execute(v=vs.110).aspx) method is called.