This page is specific to

Microsoft Visual Studio 2010/.NET Framework 4

.NET Framework Class Library

**SqlDbType Enumeration**

Specifies SQL Server-specific data type of a field, property, for use in a [SqlParameter](http://msdn.microsoft.com/en-us/library/system.data.sqlclient.sqlparameter.aspx).

**Namespace:** [System.Data](http://msdn.microsoft.com/en-us/library/system.data.aspx)  
**Assembly:** System.Data (in System.Data.dll)

Description: http://i.msdn.microsoft.com/Global/Images/clear.gifSyntax

Visual Basic

Public Enumeration SqlDbType

C#

public enum SqlDbType

Visual C++

public enum class SqlDbType

F#

type SqlDbType

Description: http://i.msdn.microsoft.com/Global/Images/clear.gifMembers

|  |  |  |
| --- | --- | --- |
|  | **Member name** | **Description** |
| Description: Supported by the XNA Framework | **BigInt** | [Int64](http://msdn.microsoft.com/en-us/library/system.int64.aspx). A 64-bit signed integer. |
| Description: Supported by the XNA Framework | **Binary** | [Array](http://msdn.microsoft.com/en-us/library/system.array.aspx) of type [Byte](http://msdn.microsoft.com/en-us/library/system.byte.aspx). A fixed-length stream of binary data ranging between 1 and 8,000 bytes. |
| Description: Supported by the XNA Framework | **Bit** | [Boolean](http://msdn.microsoft.com/en-us/library/system.boolean.aspx). An unsigned numeric value that can be 0, 1, or **nullNothingnullptr**a null reference (**Nothing** in Visual Basic). |
| Description: Supported by the XNA Framework | **Char** | [String](http://msdn.microsoft.com/en-us/library/system.string.aspx). A fixed-length stream of non-Unicode characters ranging between 1 and 8,000 characters. |
| Description: Supported by the XNA Framework | **DateTime** | [DateTime](http://msdn.microsoft.com/en-us/library/system.datetime.aspx). Date and time data ranging in value from January 1, 1753 to December 31, 9999 to an accuracy of 3.33 milliseconds. |
| Description: Supported by the XNA Framework | **Decimal** | [Decimal](http://msdn.microsoft.com/en-us/library/system.decimal.aspx). A fixed precision and scale numeric value between -10 38 -1 and 10 38 -1. |
| Description: Supported by the XNA Framework | **Float** | [Double](http://msdn.microsoft.com/en-us/library/system.double.aspx). A floating point number within the range of -1.79E +308 through 1.79E +308. |
| Description: Supported by the XNA Framework | **Image** | [Array](http://msdn.microsoft.com/en-us/library/system.array.aspx) of type [Byte](http://msdn.microsoft.com/en-us/library/system.byte.aspx). A variable-length stream of binary data ranging from 0 to 2 31 -1 (or 2,147,483,647) bytes. |
| Description: Supported by the XNA Framework | **Int** | [Int32](http://msdn.microsoft.com/en-us/library/system.int32.aspx). A 32-bit signed integer. |
| Description: Supported by the XNA Framework | **Money** | [Decimal](http://msdn.microsoft.com/en-us/library/system.decimal.aspx). A currency value ranging from -2 63 (or -9,223,372,036,854,775,808) to 2 63 -1 (or +9,223,372,036,854,775,807) with an accuracy to a ten-thousandth of a currency unit. |
| Description: Supported by the XNA Framework | **NChar** | [String](http://msdn.microsoft.com/en-us/library/system.string.aspx). A fixed-length stream of Unicode characters ranging between 1 and 4,000 characters. |
| Description: Supported by the XNA Framework | **NText** | [String](http://msdn.microsoft.com/en-us/library/system.string.aspx). A variable-length stream of Unicode data with a maximum length of 2 30 - 1 (or 1,073,741,823) characters. |
| Description: Supported by the XNA Framework | **NVarChar** | [String](http://msdn.microsoft.com/en-us/library/system.string.aspx). A variable-length stream of Unicode characters ranging between 1 and 4,000 characters. Implicit conversion fails if the string is greater than 4,000 characters. Explicitly set the object when working with strings longer than 4,000 characters. Use **NVarChar** when the database column is **nvarchar(max)**. |
| Description: Supported by the XNA Framework | **Real** | [Single](http://msdn.microsoft.com/en-us/library/system.single.aspx). A floating point number within the range of -3.40E +38 through 3.40E +38. |
| Description: Supported by the XNA Framework | **UniqueIdentifier** | [Guid](http://msdn.microsoft.com/en-us/library/system.guid.aspx). A globally unique identifier (or GUID). |
| Description: Supported by the XNA Framework | **SmallDateTime** | [DateTime](http://msdn.microsoft.com/en-us/library/system.datetime.aspx). Date and time data ranging in value from January 1, 1900 to June 6, 2079 to an accuracy of one minute. |
| Description: Supported by the XNA Framework | **SmallInt** | [Int16](http://msdn.microsoft.com/en-us/library/system.int16.aspx). A 16-bit signed integer. |
| Description: Supported by the XNA Framework | **SmallMoney** | [Decimal](http://msdn.microsoft.com/en-us/library/system.decimal.aspx). A currency value ranging from -214,748.3648 to +214,748.3647 with an accuracy to a ten-thousandth of a currency unit. |
| Description: Supported by the XNA Framework | **Text** | [String](http://msdn.microsoft.com/en-us/library/system.string.aspx). A variable-length stream of non-Unicode data with a maximum length of 2 31 -1 (or 2,147,483,647) characters. |
| Description: Supported by the XNA Framework | **Timestamp** | [Array](http://msdn.microsoft.com/en-us/library/system.array.aspx) of type [Byte](http://msdn.microsoft.com/en-us/library/system.byte.aspx). Automatically generated binary numbers, which are guaranteed to be unique within a database. **timestamp** is used typically as a mechanism for version-stamping table rows. The storage size is 8 bytes. |
| Description: Supported by the XNA Framework | **TinyInt** | [Byte](http://msdn.microsoft.com/en-us/library/system.byte.aspx). An 8-bit unsigned integer. |
| Description: Supported by the XNA Framework | **VarBinary** | [Array](http://msdn.microsoft.com/en-us/library/system.array.aspx) of type [Byte](http://msdn.microsoft.com/en-us/library/system.byte.aspx). A variable-length stream of binary data ranging between 1 and 8,000 bytes. Implicit conversion fails if the byte array is greater than 8,000 bytes. Explicitly set the object when working with byte arrays larger than 8,000 bytes. |
| Description: Supported by the XNA Framework | **VarChar** | [String](http://msdn.microsoft.com/en-us/library/system.string.aspx). A variable-length stream of non-Unicode characters ranging between 1 and 8,000 characters. Use **VarChar** when the database column is **varchar(max)**. |
| Description: Supported by the XNA Framework | **Variant** | [Object](http://msdn.microsoft.com/en-us/library/system.object.aspx). A special data type that can contain numeric, string, binary, or date data as well as the SQL Server values Empty and Null, which is assumed if no other type is declared. |
| Description: Supported by the XNA Framework | **Xml** | An XML value. Obtain the XML as a string using the [GetValue](http://msdn.microsoft.com/en-us/library/system.data.sqlclient.sqldatareader.getvalue.aspx) method or [Value](http://msdn.microsoft.com/en-us/library/system.data.sqltypes.sqlxml.value.aspx) property, or as an [XmlReader](http://msdn.microsoft.com/en-us/library/system.xml.xmlreader.aspx) by calling the [CreateReader](http://msdn.microsoft.com/en-us/library/system.data.sqltypes.sqlxml.createreader.aspx) method. |
| Description: Supported by the XNA Framework | **Udt** | A SQL Server 2005 user-defined type (UDT). |
| Description: Supported by the XNA Framework | **Structured** | A special data type for specifying structured data contained in table-valued parameters. |
| Description: Supported by the XNA Framework | **Date** | Date data ranging in value from January 1,1 AD through December 31, 9999 AD. |
| Description: Supported by the XNA Framework | **Time** | Time data based on a 24-hour clock. Time value range is 00:00:00 through 23:59:59.9999999 with an accuracy of 100 nanoseconds. Corresponds to a SQL Server **time** value. |
| Description: Supported by the XNA Framework | **DateTime2** | Date and time data. Date value range is from January 1,1 AD through December 31, 9999 AD. Time value range is 00:00:00 through 23:59:59.9999999 with an accuracy of 100 nanoseconds. |
| Description: Supported by the XNA Framework | **DateTimeOffset** | Date and time data with time zone awareness. Date value range is from January 1,1 AD through December 31, 9999 AD. Time value range is 00:00:00 through 23:59:59.9999999 with an accuracy of 100 nanoseconds. Time zone value range is -14:00 through +14:00. |

Description: http://i.msdn.microsoft.com/Global/Images/clear.gifRemarks

When setting command parameters, the **SqlDbType** and [DbType](http://msdn.microsoft.com/en-us/library/system.data.dbtype.aspx) are linked. Therefore, setting the **DbType** changes the **SqlDbType** to a supporting **SqlDbType**.