Mapping CLR Parameter Data

**SQL Server 2008 R2**

[Other Versions](javascript:;)

http://i3.msdn.microsoft.com/Areas/Epx/Content/Images/ImageSprite.png

7 out of 9 rated this helpful - [Rate this topic](http://msdn.microsoft.com/en-us/library/ms131092%28v=sql.105%29.aspx#feedback)

The following table lists Microsoft SQL Server data types, their equivalents in the common language runtime (CLR) for SQL Server in the **System.Data.SqlTypes** namespace, and their native CLR equivalents in the Microsoft .NET Framework.

|  |  |  |
| --- | --- | --- |
| **SQL Server data type** | Type (in System.Data.SqlTypes or Microsoft.SqlServer.Types) | **CLR data type (.NET Framework)** |
| **bigint** | **SqlInt64** | **Int64, Nullable<Int64>** |
| **binary** | **SqlBytes, SqlBinary** | **Byte[]** |
| **bit** | **SqlBoolean** | **Boolean, Nullable<Boolean>** |
| **char** | None | None |
| **cursor** | None | None |
| **date** | **SqlDateTime** | **DateTime, Nullable<DateTime>** |
| **datetime** | **SqlDateTime** | **DateTime, Nullable<DateTime>** |
| **datetime2** | None | **DateTime, Nullable<DateTime>** |
| **DATETIMEOFFSET** | **None** | **DateTimeOffset, Nullable<DateTimeOffset>** |
| **decimal** | **SqlDecimal** | **Decimal, Nullable<Decimal>** |
| **float** | **SqlDouble** | **Double, Nullable<Double>** |
| **geography** | **SqlGeography**  **SqlGeography** is defined in Microsoft.SqlServer.Types.dll, which is installed with SQL Server and can be downloaded from the SQL Server 2008 [feature pack](http://go.microsoft.com/fwlink/?LinkId=131220). | None |
| **geometry** | **SqlGeometry**  **SqlGeometry** is defined in Microsoft.SqlServer.Types.dll, which is installed with SQL Server and can be downloaded from the SQL Server 2008 [feature pack](http://go.microsoft.com/fwlink/?LinkId=131220). | None |
| **hierarchyid** | **SqlHierarchyId**  **SqlHierarchyId** is defined in Microsoft.SqlServer.Types.dll, which is installed with SQL Server and can be downloaded from the SQL Server 2008 [feature pack](http://go.microsoft.com/fwlink/?LinkId=131220). | None |
| **image** | None | None |
| **int** | **SqlInt32** | **Int32, Nullable<Int32>** |
| **money** | **SqlMoney** | **Decimal, Nullable<Decimal>** |
| **nchar** | **SqlChars, SqlString** | **String, Char[]** |
| **ntext** | None | None |
| **numeric** | **SqlDecimal** | **Decimal, Nullable<Decimal>** |
| **nvarchar** | **SqlChars, SqlString**  **SQLChars** is a better match for data transfer and access, and **SQLString** is a better match for performing String operations. | **String, Char[]** |
| **nvarchar(1), nchar(1)** | **SqlChars, SqlString** | **Char, String, Char[], Nullable<char>** |
| **real** | **SqlSingle** | **Single, Nullable<Single>** |
| **rowversion** | None | **Byte[]** |
| **smallint** | **SqlInt16** | **Int16, Nullable<Int16>** |
| **smallmoney** | **SqlMoney** | **Decimal, Nullable<Decimal>** |
| **sql\_variant** | None | **Object** |
| **table** | None | None |
| **text** | None | None |
| **time** | None | **TimeSpan, Nullable<TimeSpan>** |
| **timestamp** | None | None |
| **tinyint** | **SqlByte** | **Byte, Nullable<Byte>** |
| **uniqueidentifier** | **SqlGuid** | **Guid, Nullable<Guid>** |
| **User-defined type(UDT)** | None | The same class that is bound to the user-defined type in the same assembly or a dependent assembly. |
| **varbinary** | **SqlBytes, SqlBinary** | **Byte[]** |
| **varbinary(1), binary(1)** | **SqlBytes, SqlBinary** | **byte, Byte[], Nullable<byte>** |
| **varchar** | None | None |
| **xml** | **SqlXml** | None |