

System.DBNull Class

```
[ILAsm]
.class public serializable sealed beforefieldinit System.DBNull extends
System.Object implements System.Runtime.Serialization.ISerializable,
System.IConvertible

[C#]
public sealed class DBNull: IConvertible,
System.Runtime.Serialization.ISerializable
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- *Version:* 4.0.0.0
- *Attributes:*
 - CLSCompliantAttribute(true)

Implements:

- **System.IConvertible**
- **System.Runtime.Serialization.ISerializable**

Summary

Represents a nonexistent value. This class cannot be inherited.

Inherits From: System.Object

Library: BCL

Description

The `System.DBNull` class represents a nonexistent value. In a database, for example, a column in a row of a table might not contain any data whatsoever. That is, the column is considered to not exist at all instead of merely not having a value. A `System.DBNull` object represents the nonexistent column.

The `System.DBNull` type is a singleton class, which means only one `System.DBNull` object exists. The `System.DBNull.Value` member represents the sole `System.DBNull` object. `System.DBNull.Value` can be used to explicitly assign a nonexistent value to a database field. You can determine whether a value retrieved from a database field is a `System.DBNull` value by passing the value of that field to the `DBNull.Value.Equals` method.

Do not confuse the notion of `null` in an object-oriented programming language with a `System.DBNull` object. In an object-oriented programming language, `null` means the absence of a reference to an object. `System.DBNull` represents an uninitialized variant or nonexistent database column.

DBNull.Value Field

```
[ILAsm]  
.field public static initonly class System.DBNull Value  
  
[C#]  
public static readonly DBNull Value
```

Summary

Represents the sole instance of the `System.DBNull` class.

Description

`System.DBNull` is a singleton class, which means only this instance of this class can exist.

If a database field has missing data, you can use the `System.DBNull.Value` property to explicitly assign a `System.DBNull` object value to the field. However, most data providers do this automatically.

To evaluate database fields to determine whether their values are `System.DBNull`, you can pass the field value to the `DBNull.Value.Equals` method.

DBNull.GetObjectData(System.Runtime.Serialization.SerializationInfo, System.Runtime.Serialization.StreamingContext) Method

```
[ILAsm]
.method public hidebysig newslot virtual final instance void
GetObjectData(class System.Runtime.Serialization.SerializationInfo info,
valuetype System.Runtime.Serialization.StreamingContext context) cil
managed

[C#]
public void GetObjectData (System.Runtime.Serialization.SerializationInfo
info, System.Runtime.Serialization.StreamingContext context)
```

Summary

Implements the System.Runtime.Serialization.ISerializable interface and returns the data needed to serialize the System.DBNull object.

Parameters

Parameter	Description
<i>info</i>	A System.Runtime.Serialization.SerializationInfo object containing information required to serialize the System.DBNull object.
<i>context</i>	A System.Runtime.Serialization.StreamingContext object containing the source and destination of the serialized stream associated with the System.DBNull object.

Exceptions

Exception	Condition
System.ArgumentNullException	<i>info</i> is null.

DBNull.GetTypeCode() Method

```
[ILAsm]  
.method public hidebysig newslot virtual final instance valuetype  
System.TypeCode GetTypeCode() cil managed  
  
[C#]  
public TypeCode GetTypeCode ()
```

Summary

Gets the System.TypeCode value for System.DBNull.

Return Value

The System.TypeCode value for System.DBNull, which is System.TypeCode.DBNull.

DBNull.System.IConvertible.ToBoolean(System.IFormatProvider) Method

```
[ILAsm]  
.method private hidebysig newslot virtual final instance bool  
System.IConvertible.ToBoolean(class System.IFormatProvider provider) cil  
managed
```

```
[C#]  
bool IConvertible.ToBoolean (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToByte(System.IFormatProvider) Method

```
[ILAsm]
.method private hidebysig newslot virtual final instance uint8
System.IConvertible.ToByte(class System.IFormatProvider provider) cil
managed

[C#]
byte IConvertible.ToByte (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToChar(System.IFormatProvider) Method

```
[ILAsm]
.method private hidebysig newslot virtual final instance char
System.IConvertible.ToChar(class System.IFormatProvider provider) cil
managed

[C#]
char IConvertible.ToChar (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DbNull</code> type.

DBNull.System.IConvertible.ToDateTime(System.IFormatProvider) Method

```
[ILAsm]
.method private hidebysig newslot virtual final instance valuetype
System.DateTime System.IConvertible.ToDateTime(class
System.IFormatProvider provider) cil managed

[C#]
DateTime IConvertible.ToDateTime (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToDecimal(System.IFormatProvider) Method

```
[ILAsm]
.method private hidebysig newslot virtual final instance valuetype
System.Decimal System.IConvertible.ToDecimal(class System.IFormatProvider
provider) cil managed

[C#]
decimal IConvertible.ToDecimal (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToDouble(System.IFormatProvider) Method

```
[ILAsm]  
.method private hidebysig newslot virtual final instance float64  
System.IConvertible.ToDouble(class System.IFormatProvider provider) cil  
managed  
  
[C#]  
double IConvertible.ToDouble (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToInt16(System.IFormatProvider) Method

```
[ILAsm]  
.method private hidebysig newslot virtual final instance int16  
System.IConvertible.ToInt16(class System.IFormatProvider provider) cil  
managed
```

```
[C#]  
short IConvertible.ToInt16 (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DbNull</code> type.

DBNull.System.IConvertible.ToInt32(System.IFormatProvider) Method

```
[ILAsm]
.method private hidebysig newslot virtual final instance int32
System.IConvertible.ToInt32(class System.IFormatProvider provider) cil
managed

[C#]
int IConvertible.ToInt32 (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToInt64(System.IFormatProvider) Method

```
[ILAsm]  
.method private hidebysig newslot virtual final instance int64  
System.IConvertible.ToInt64(class System.IFormatProvider provider) cil  
managed  
  
[C#]  
long IConvertible.ToInt64 (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToSByte(System.IFormatProvider) Method

```
[ILAsm]
.method private hidebysig newslot virtual final instance int8
System.IConvertible.ToSByte(class System.IFormatProvider provider) cil
managed

[C#]
sbyte IConvertible.ToSByte (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToSingle(System.IFormatProvider) Method

```
[ILAsm]
.method private hidebysig newslot virtual final instance float32
System.IConvertible.ToSingle(class System.IFormatProvider provider) cil
managed

[C#]
float IConvertible.ToSingle (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToType(System.Type, System.IFormatProvider) Method

```
[ILAsm]  
.method private hidebysig newslot virtual final instance object  
System.IConvertible.ToType(class System.Type 'type',class  
System.IFormatProvider provider) cil managed  
  
[C#]  
object IConvertible.ToType (Type type, IFormatProvider provider)
```

Summary

Converts the current `System.DBNull` object to the specified type.

Parameters

Parameter	Description
<i>type</i>	The type to convert the current <code>System.DBNull</code> object to.
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface and is used to augment the conversion. If <code>null</code> is specified, format information is obtained from the current culture.

Return Value

The boxed equivalent of the current `System.DBNull` object, if that conversion is supported; otherwise, an exception is thrown and no value is returned.

Description

Three conversions are supported: If the *type* parameter specifies `System.Object` or `System.DBNull`, the return value is the current `System.DBNull` object itself. If the *type* parameter specifies `System.String`, the return value is the string returned by the `System.DBNull.ToString` method.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

System.ArgumentNullException	<i>type</i> is null.
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DBNull.System.IConvertible.ToInt16(System.IFormatProvider) Method

```
[ILAsm]
.method private hidebysig newslot virtual final instance uint16
System.IConvertible.ToInt16(class System.IFormatProvider provider) cil
managed

[C#]
ushort IConvertible.ToInt16 (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToInt32(System.IFormatProvider) Method

```
[ILAsm]  
.method private hidebysig newslot virtual final instance uint32  
System.IConvertible.ToInt32(class System.IFormatProvider provider) cil  
managed  
  
[C#]  
uint IConvertible.ToInt32 (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.System.IConvertible.ToUInt64(System.IFormatProvider) Method

```
[ILAsm]  
.method private hidebysig newslot virtual final instance uint64  
System.IConvertible.ToUInt64(class System.IFormatProvider provider) cil  
managed  
  
[C#]  
ulong IConvertible.ToUInt64 (IFormatProvider provider)
```

Summary

This conversion is not supported. Attempting to make this conversion throws an `System.InvalidCastException`.

Parameters

Parameter	Description
<i>provider</i>	An object that implements the <code>System.IFormatProvider</code> interface. (This parameter is not used; specify <code>null</code> .)

Return Value

None. The return value for this member is not used.

Exceptions

Exception	Condition
System.InvalidCastException	This conversion is not supported for the <code>System.DBNull</code> type.

DBNull.ToString() Method

```
[ILAsm]  
.method public hidebysig virtual instance string ToString() cil managed  
  
[C#]  
public override string ToString ()
```

Summary

Returns an empty string (System.String.Empty).

Return Value

An empty string (System.String.Empty).

DBNull.ToString(System.IFormatProvider)

Method

```
[ILAsm]  
.method public hidebysig newslot virtual final instance string  
ToString(class System.IFormatProvider provider) cil managed  
  
[C#]  
public string ToString (IFormatProvider provider)
```

Summary

Returns an empty string using the specified `System.IFormatProvider`.

Parameters

Parameter	Description
<i>provider</i>	The <code>System.IFormatProvider</code> to be used to format the return value.-or- null to obtain the format information from the current locale setting of the operating system.

Return Value

An empty string (`System.String.Empty`).