

System.TypedReference Structure

```
[ILAsm]
.class public sequential sealed serializable TypedReference extends
System.ValueType

[C#]
public struct TypedReference
```

Assembly Info:

- *Name:* mscorlib
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 2.0.x.x
- *Attributes:*
 - CLSCompliantAttribute(false)

Summary

Describes an object that contains both a managed pointer to a location and a runtime representation of the type that can be stored at that location.

Inherits From: System.ValueType

Library: Vararg

Thread Safety: All public static members of this type are safe for multithreaded operations. No instance members are guaranteed to be thread safe.

Description

[*Note:* This type is not CLS-Compliant.]

A `System.TypedReference` is a type/value combination used to support variable argument lists (as used by C++, for example), among other things. `System.TypedReference` is a built-in value type that can be used for parameters and local variables.

Arrays of `System.TypedReference` cannot be created.

A `System.TypedReference` cannot be boxed as it contains `ByRefs`, so it cannot reside on the heap.

1 TypedReference.Equals(System.Object)

2 Method

```
3 [ILAsm]  
4 .method public hidebysig virtual bool Equals(object obj)  
  
5 [C#]  
6 public override bool Equals(object obj)
```

7 Summary

8 Determines whether the current instance and the specified `System.Object` represent the
9 same type and value.

10 Parameters

Parameter	Description
<i>obj</i>	The <code>System.Object</code> to compare to the current instance.

12 Return Value

13 `true` if *obj* represents the same type and value as the current instance; otherwise,
14 `false`.

15 Description

16 [*Note:* This method overrides `System.Object.Equals`.]
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TypedReference.GetTargetType(System.Type dReference) Method

```
[ILAsm]
.method public hidebysig static class System.Type GetTargetType(valuetype
TypedReference value)

[C#]
public static Type GetTargetType(TypedReference value)
```

Summary

Returns the type of the target of the specified `System.TypedReference`.

Parameters

Parameter	Description
<i>value</i>	The value whose target's type is to be returned.

Return Value

The `System.Type` of the target of the specified `System.TypedReference`.

TypedReference.MakeTypedReference(System.Object, System.Reflection.FieldInfo[])

Method

```
[ILAsm]
.method public hidebysig static valuetype TypedReference
MakeTypedReference(object target, class System.Reflection.FieldInfo[]
flds)

[C#]
public static TypedReference MakeTypedReference(object target, FieldInfo[]
flds)
```

Summary

Makes a `System.TypedReference` for a field identified by a specified object and list of field descriptions.

Parameters

Parameter	Description
<i>target</i>	An object that contains the field described by the first element of <i>flds</i> .
<i>flds</i>	A list of field descriptions where each element describes a field that contains the field described by the succeeding element. Each described field must be a value type.

Return Value

A `System.TypedReference` for the field described by the last element of *flds*.

Description

This method returns a `System.TypedReference` to the terminal field, where the *target* parameter contains the field described by the first element of *flds*, the field described by the first element of *flds* contains the field described by the second element of *flds*, and so on, until the terminal field is reached.

Exceptions

Exception	Condition
System.ArgumentException	The <i>flds</i> array has no elements.

	<p>-or-</p> <p>An element of <i>flds</i> is not a <code>System.Reflection.FieldInfo</code>.</p>
System.ArgumentNullException	<p><i>target</i> or <i>flds</i> is null.</p> <p>-or-</p> <p>An element of <i>flds</i> is null.</p>
System.MissingMemberException	<p>Parameter <i>target</i> does not contain the field described by the first element of <i>flds</i>, or an element of <i>flds</i> describes a field that is not contained in the field described by the succeeding element of <i>flds</i>.</p> <p>-or-</p> <p>The field described by an element of <i>flds</i> is not a value type.</p>

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TypedReference.SetTypedReference(System.TypedReference, System.Object) Method

```
[ILAsm]  
.method public hidebysig static void SetTypedReference(valuetype  
TypedReference target, object value)  
  
[C#]  
public static void SetTypedReference(TypedReference target, object value)
```

Summary

Converts the specified value to a `System.TypedReference`.

Parameters

Parameter	Description
<i>target</i>	The target of the conversion.
<i>value</i>	The value to be converted.

Description

This method converts *value* to *target*.

Exceptions

Exception	Condition
System.ArgumentNullException	<i>value</i> is null.
System.InvalidCastException	The requested conversion is not possible.

TypedReference.TargetTypeToken(System.TypedReference) Method

```
[ILAsm]  
.method public hidebysig static valuetype System.RuntimeTypeHandle  
TargetTypeToken(valuetype TypedReference value)  
  
[C#]  
public static RuntimeTypeHandle TargetTypeToken(TypedReference value)
```

Summary

Returns the internal metadata type handle for the specified `System.TypedReference`.

Parameters

Parameter	Description
<i>value</i>	The <code>System.TypedReference</code> for which the type handle is requested.

Return Value

The internal metadata type handle for the specified `System.TypedReference`.

1 2 TypedReference.ToObject(System.TypedRefer 3 ence) Method

```
4 [ILAsm]  
5 .method public hidebysig static object ToObject(valuetype TypedReference  
6 value)  
7 [C#]  
8 public static object ToObject(TypedReference value)
```

9 Summary

10 Converts the specified `System.TypedReference` to a `System.Object`.

11 Parameters

Parameter	Description
<i>value</i>	The <code>System.TypedReference</code> to be converted.

12 13 Return Value

14 The `System.Object` that results from the conversion of the specified
15 `System.TypedReference`.

16 Description

17 [*Note:* This might involve a boxing operation.]
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