System.Runtime.CompilerServices.RuntimeHelpers Class

```
[ILAsm]
.class public sealed serializable RuntimeHelpers extends System.Object

[C#]
public sealed class RuntimeHelpers
```

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(true)

Summary

Implements static methods and properties that provide special support for compilers.

Inherits From: System.Object

Library: RuntimeInfrastructure

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:* The types in `System.Runtime.CompilerServices` are intended primarily for use by compilers, not application programmers. They allow compilers to easily implement certain language features that are not directly visible to programmers.]

RuntimeHelpers.InitializeArray(System.Array, System.RuntimeFieldHandle) Method

```
[ILAsm]
.method public hidebysig static void InitializeArray(class System.Array
array, valuetype System.RuntimeFieldHandle fldHandle)


[C#]
public static void InitializeArray(Array array, RuntimeFieldHandle
fldHandle)
```

Summary

Provides a fast way to initialize a `System.Array` from data stored in a module.

Parameters

Parameter	Description
array	The `System.Array` to be initialized.
fldHandle	A `System.RuntimeFieldHandle` specifying the location of the data used to initialize *array*.

Description

This method is for compiler use only.

RuntimeHelpers.RunClassConstructor(System.RuntimeTypeHandle) Method

```
[ILAsm]
.method public hidebysig static void RunClassConstructor(valuetype
System.RuntimeTypeHandle type)

[C#]
public static void RunClassConstructor(RuntimeTypeHandle type)
```

Summary

Runs a specified class constructor method.

Parameters

Parameter	Description
type	A `System.RuntimeTypeHandle` specifying the class constructor method to run.

RuntimeHelpers.OffsetToStringData Property

```
[ILAsm]
.property int32 OffsetToStringData { public hidebysig static specialname
int32 get_OffsetToStringData() }


[C#]
public static int OffsetToStringData { get; }
```

Summary

Gets the number of bytes between the start of a `System.String` and the first
`System.Char` in the string.

Property Value

A `System.Int32` containing the number of bytes between the start of a `System.String`
and the first `System.Char` in the string.

Description

This property is read-only.

[*Note:* This property is deprecated; its design is considered unnecessarily inflexible. It is
expected that an improved design can be incorporated into the next revision of this
Standard.

Compilers use this property for unsafe, but efficient, pointer operations on the
characters in a managed string. Compilers should pin the string against movement by
the garbage collector prior to use. Note that strings are immutable: their contents can
be read but not changed.

The contents of these offset bytes are implementation-defined.

]