

1 System.Action<T> Delegate

```
2 [ILAsm]  
3 .class public sealed serializable System.Action`1<T> extends  
4 System.MulticastDelegate  
  
5 [C#]  
6 public delegate void Action<in T>(T obj);
```

7 Assembly Info:

- 8 • *Name:* mscorlib
- 9 • *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- 10 • *Version:* 4.0.0.0
- 11 • *Attributes:*
 - 12 ○ CLSCompliantAttribute(true)

13 Summary

14 Encapsulates a method that has a single parameter and does not return a value.

15 Parameters

Parameter	Description
<i>obj</i>	The parameter of the method that this delegate encapsulates.

16 Inherits From: System.MulticastDelegate

17
18
19 **Library:** BCL

21 Description

22 You can use the `System.Action`1<T>` delegate to pass a method as a parameter
23 without explicitly declaring a custom delegate. The encapsulated method must
24 correspond to the method signature that is defined by this delegate. This means that the
25 encapsulated method must have one parameter that is passed to it by value, and it
26 must not return a value. Typically, such a method is used to perform an operation.

27
28 [*Note:* To reference a method that has one parameter and returns a value, use the
29 generic `System.Func`2<T1, TResult>` delegate instead.

30]

31
32
33 When you use the `System.Action`1<T>` delegate, you do not have to explicitly define a
34 delegate that encapsulates a method with one parameter.

35
36 You can also use the `System.Action`1<T>` delegate with anonymous methods in C#.

1 (For an introduction to anonymous methods, see the C# standard.)
2
3 The `System.Collections.Generic.List<T>.ForEach` and
4 `System.Array.ForEach<T>` methods each take an `System.Action<T>` delegate as a
5 parameter. The method encapsulated by the delegate allows you to perform an action
6 on each element in the array or list.

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