

# System.Func<-T,+TResult> Delegate

```
[ILAsm]
.class public sealed System.Func`2<-T,+TResult> extends
System.MulticastDelegate

[C#]
public delegate TResult Func<in T,out TResult>(T arg);
```

## Assembly Info:

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

## Summary

Encapsulates a method that has one parameter and returns a value of the type specified by the *TResult* parameter.

## Parameters

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

## Inherits From: System.MulticastDelegate

**Library:** BCL

## Returns

The return value of the method that this delegate encapsulates.

## Description

You can use this delegate to represent a method that can be passed as a parameter without explicitly declaring a custom delegate. The encapsulated method must correspond to the method signature that is defined by this delegate. This means that the encapsulated method must have one parameter that is passed to it by value, and that it must return a value.

[*Note:* To reference a method that has one parameter and returns `void`, use the generic `System.Action`1<T>` delegate instead.

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3     When you use the `System.Func`2<T1,TResult>` delegate, you do not have to explicitly  
4     define a delegate that encapsulates a method with a single parameter.

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6     You can use the `System.Func`2<T1,TResult>` delegate with anonymous methods in C#.  
7     (For an introduction to anonymous methods, see the C# standard.)

8