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Programming with the .NET Framework Including Asynchronous Calls

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This documentation is archived and is not being maintained.

Asynchronous Method Signatures

.NET Framework 1.1

The method signature is the ordering of the parameter types in a method. The rules for the **BeginInvoke** asynchronous method signature are:

- Include all //V parameters.
- Include all *OUT* parameters.
- Include all IN/OUT parameters.
- Include all *ByRef* parameters.

- Take **AsyncCallback** and **AsyncState** (available through the **AsyncState** property on the **IAsyncResult** interface) as the last two parameters.
- Return IAsyncResult.

The rules for the **EndInvoke** asynchronous method signature are:

- Include all /N/OUT parameters.
- Include all *OUT* parameters.
- Include all *ByRef* parameters.
- Take **IAsyncResult** as last parameter.
- Return the original return type from the original method signature.

The result object (**IAsyncResult**) is returned from the begin operation, and can be used to obtain status on whether the asynchronous begin operation has completed. The result object is passed to the end operation, which returns the final return value of the call. An optional callback can be supplied in the begin operation. If the callback is supplied, when the call completes, the callback will be called; and code in the callback can call the end operation.

See Also

<u>Asynchronous Design Pattern Overview</u> | <u>IAsyncResult Interface</u> | <u>AsyncCallback</u> <u>Delegate for Asynchronous Operations</u> | <u>Asynchronous Programming</u>

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