**ManagementObjectSearcher Class**

**.NET Framework 4.5**

[Other Versions](javascript:;)

http://i3.msdn.microsoft.com/Areas/Epx/Content/Images/ImageSprite.png?v=635533092500576233

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Retrieves a collection of management objects based on a specified query. This class is one of the more commonly used entry points to retrieving management information. For example, it can be used to enumerate all disk drives, network adapters, processes and many more management objects on a system, or to query for all network connections that are up, services that are paused, and so on. When instantiated, an instance of this class takes as input a WMI query represented in an [ObjectQuery](http://msdn.microsoft.com/en-us/library/system.management.objectquery%28v=vs.110%29.aspx) or its derivatives, and optionally a [ManagementScope](http://msdn.microsoft.com/en-us/library/system.management.managementscope%28v=vs.110%29.aspx) representing the WMI namespace to execute the query in. It can also take additional advanced options in an [EnumerationOptions](http://msdn.microsoft.com/en-us/library/system.management.enumerationoptions%28v=vs.110%29.aspx). When the [Get()](http://msdn.microsoft.com/en-us/library/67a77ef1%28v=vs.110%29.aspx) method on this object is invoked, the ManagementObjectSearcher executes the given query in the specified scope and returns a collection of management objects that match the query in a [ManagementObjectCollection](http://msdn.microsoft.com/en-us/library/system.management.managementobjectcollection%28v=vs.110%29.aspx).

[**Inheritance Hierarchy**](javascript:void(0))

[System.Object](http://msdn.microsoft.com/en-us/library/system.object%28v=vs.110%29.aspx)   
  [System.MarshalByRefObject](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject%28v=vs.110%29.aspx)  
    [System.ComponentModel.Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx)  
      System.Management.ManagementObjectSearcher

**Namespace:**  [System.Management](http://msdn.microsoft.com/en-us/library/system.management%28v=vs.110%29.aspx)  
**Assembly:**  System.Management (in System.Management.dll)

[**Syntax**](javascript:void(0))

C#

[C++](http://msdn.microsoft.com/en-us/library/system.management.managementobjectsearcher%28v=vs.110%29.aspx?cs-save-lang=1&cs-lang=cpp#code-snippet-1)

[F#](http://msdn.microsoft.com/en-us/library/system.management.managementobjectsearcher%28v=vs.110%29.aspx?cs-save-lang=1&cs-lang=fsharp#code-snippet-1)

[VB](http://msdn.microsoft.com/en-us/library/system.management.managementobjectsearcher%28v=vs.110%29.aspx?cs-save-lang=1&cs-lang=vb#code-snippet-1)

public class ManagementObjectSearcher : Component

The ManagementObjectSearcher type exposes the following members.

[**Constructors**](javascript:void(0))

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|  |  |  |
| --- | --- | --- |
|  | **Name** | **Description** |
| Public method | [ManagementObjectSearcher()](http://msdn.microsoft.com/en-us/library/46h8d6sa%28v=vs.110%29.aspx) | Initializes a new instance of the ManagementObjectSearcher class. After some properties on this object are set, the object can be used to invoke a query for management information. This is the default constructor. |
| Public method | [ManagementObjectSearcher(ObjectQuery)](http://msdn.microsoft.com/en-us/library/3x6at5a0%28v=vs.110%29.aspx) | Initializes a new instance of the ManagementObjectSearcher class used to invoke the specified query for management information. |
| Public method | [ManagementObjectSearcher(String)](http://msdn.microsoft.com/en-us/library/d11sdysc%28v=vs.110%29.aspx) | Initializes a new instance of the ManagementObjectSearcher class used to invoke the specified query for management information. |
| Public method | [ManagementObjectSearcher(ManagementScope, ObjectQuery)](http://msdn.microsoft.com/en-us/library/a09cw6yz%28v=vs.110%29.aspx) | Initializes a new instance of the ManagementObjectSearcher class used to invoke the specified query in the specified scope. |
| Public method | [ManagementObjectSearcher(String, String)](http://msdn.microsoft.com/en-us/library/438s6ddc%28v=vs.110%29.aspx) | Initializes a new instance of the ManagementObjectSearcher class used to invoke the specified query in the specified scope. |
| Public method | [ManagementObjectSearcher(ManagementScope, ObjectQuery, EnumerationOptions)](http://msdn.microsoft.com/en-us/library/ms143644%28v=vs.110%29.aspx) | Initializes a new instance of the ManagementObjectSearcher class to be used to invoke the specified query in the specified scope, with the specified options. |
| Public method | [ManagementObjectSearcher(String, String, EnumerationOptions)](http://msdn.microsoft.com/en-us/library/thfx82tf%28v=vs.110%29.aspx) | Initializes a new instance of the ManagementObjectSearcher class used to invoke the specified query, in the specified scope, and with the specified options. |

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[**Properties**](javascript:void(0))

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| --- | --- | --- |
|  | **Name** | **Description** |
| Protected property | [CanRaiseEvents](http://msdn.microsoft.com/en-us/library/system.componentmodel.component.canraiseevents%28v=vs.110%29.aspx) | Gets a value indicating whether the component can raise an event. (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |
| Public property | [Container](http://msdn.microsoft.com/en-us/library/system.componentmodel.component.container%28v=vs.110%29.aspx) | Gets the [IContainer](http://msdn.microsoft.com/en-us/library/system.componentmodel.icontainer%28v=vs.110%29.aspx) that contains the [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx). (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |
| Protected property | [DesignMode](http://msdn.microsoft.com/en-us/library/system.componentmodel.component.designmode%28v=vs.110%29.aspx) | Gets a value that indicates whether the [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx) is currently in design mode. (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |
| Protected property | [Events](http://msdn.microsoft.com/en-us/library/system.componentmodel.component.events%28v=vs.110%29.aspx) | Gets the list of event handlers that are attached to this [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx). (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |
| Public property | [Options](http://msdn.microsoft.com/en-us/library/system.management.managementobjectsearcher.options%28v=vs.110%29.aspx) | Gets or sets the options for how to search for objects. |
| Public property | [Query](http://msdn.microsoft.com/en-us/library/system.management.managementobjectsearcher.query%28v=vs.110%29.aspx) | Gets or sets the query to be invoked in the searcher (that is, the criteria to be applied to the search for management objects). |
| Public property | [Scope](http://msdn.microsoft.com/en-us/library/system.management.managementobjectsearcher.scope%28v=vs.110%29.aspx) | Gets or sets the scope in which to look for objects (the scope represents a WMI namespace). |
| Public property | [Site](http://msdn.microsoft.com/en-us/library/system.componentmodel.component.site%28v=vs.110%29.aspx) | Gets or sets the [ISite](http://msdn.microsoft.com/en-us/library/system.componentmodel.isite%28v=vs.110%29.aspx) of the [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx). (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |

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[**Methods**](javascript:void(0))

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| --- | --- | --- |
|  | **Name** | **Description** |
| Public method | [CreateObjRef](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject.createobjref%28v=vs.110%29.aspx) | Creates an object that contains all the relevant information required to generate a proxy used to communicate with a remote object. (Inherited from [MarshalByRefObject](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject%28v=vs.110%29.aspx).) |
| Public method | [Dispose()](http://msdn.microsoft.com/en-us/library/3cc9y48w%28v=vs.110%29.aspx) | Releases all resources used by the [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx). (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |
| Protected method | [Dispose(Boolean)](http://msdn.microsoft.com/en-us/library/d9yzd5cx%28v=vs.110%29.aspx) | Releases the unmanaged resources used by the [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx) and optionally releases the managed resources. (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |
| Public method | [Equals(Object)](http://msdn.microsoft.com/en-us/library/bsc2ak47%28v=vs.110%29.aspx) | Determines whether the specified object is equal to the current object. (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object%28v=vs.110%29.aspx).) |
| Protected method | [Finalize](http://msdn.microsoft.com/en-us/library/az5741fh%28v=vs.110%29.aspx) | Releases unmanaged resources and performs other cleanup operations before the [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx) is reclaimed by garbage collection. (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |
| Public method | [Get()](http://msdn.microsoft.com/en-us/library/67a77ef1%28v=vs.110%29.aspx) | Invokes the specified WMI query and returns the resulting collection. |
| Public method | [Get(ManagementOperationObserver)](http://msdn.microsoft.com/en-us/library/0w3ak0sb%28v=vs.110%29.aspx) | Invokes the WMI query asynchronously, and binds to a watcher to deliver the results. |
| Public method | [GetHashCode](http://msdn.microsoft.com/en-us/library/system.object.gethashcode%28v=vs.110%29.aspx) | Serves as the default hash function. (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object%28v=vs.110%29.aspx).) |
| Public method | [GetLifetimeService](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject.getlifetimeservice%28v=vs.110%29.aspx) | Retrieves the current lifetime service object that controls the lifetime policy for this instance. (Inherited from [MarshalByRefObject](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject%28v=vs.110%29.aspx).) |
| Protected method | [GetService](http://msdn.microsoft.com/en-us/library/system.componentmodel.component.getservice%28v=vs.110%29.aspx) | Returns an object that represents a service provided by the [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx) or by its [Container](http://msdn.microsoft.com/en-us/library/system.componentmodel.container%28v=vs.110%29.aspx). (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |
| Public method | [GetType](http://msdn.microsoft.com/en-us/library/system.object.gettype%28v=vs.110%29.aspx) | Gets the [Type](http://msdn.microsoft.com/en-us/library/system.type%28v=vs.110%29.aspx) of the current instance. (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object%28v=vs.110%29.aspx).) |
| Public method | [InitializeLifetimeService](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject.initializelifetimeservice%28v=vs.110%29.aspx) | Obtains a lifetime service object to control the lifetime policy for this instance. (Inherited from [MarshalByRefObject](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject%28v=vs.110%29.aspx).) |
| Protected method | [MemberwiseClone()](http://msdn.microsoft.com/en-us/library/system.object.memberwiseclone%28v=vs.110%29.aspx) | Creates a shallow copy of the current [Object](http://msdn.microsoft.com/en-us/library/system.object%28v=vs.110%29.aspx). (Inherited from [Object](http://msdn.microsoft.com/en-us/library/system.object%28v=vs.110%29.aspx).) |
| Protected method | [MemberwiseClone(Boolean)](http://msdn.microsoft.com/en-us/library/ms131262%28v=vs.110%29.aspx) | Creates a shallow copy of the current [MarshalByRefObject](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject%28v=vs.110%29.aspx) object. (Inherited from [MarshalByRefObject](http://msdn.microsoft.com/en-us/library/system.marshalbyrefobject%28v=vs.110%29.aspx).) |
| Public method | [ToString](http://msdn.microsoft.com/en-us/library/z819d1t5%28v=vs.110%29.aspx) | Returns a [String](http://msdn.microsoft.com/en-us/library/system.string%28v=vs.110%29.aspx) containing the name of the [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx), if any. This method should not be overridden. (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |

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[**Events**](javascript:void(0))

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| --- | --- | --- |
|  | **Name** | **Description** |
| Public event | [Disposed](http://msdn.microsoft.com/en-us/library/system.componentmodel.component.disposed%28v=vs.110%29.aspx) | Occurs when the component is disposed by a call to the [Dispose](http://msdn.microsoft.com/en-us/library/system.componentmodel.component.dispose%28v=vs.110%29.aspx) method. (Inherited from [Component](http://msdn.microsoft.com/en-us/library/system.componentmodel.component%28v=vs.110%29.aspx).) |

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[**Version Information**](javascript:void(0))

**.NET Framework**

Supported in: 4.6, 4.5, 4, 3.5, 3.0, 2.0, 1.1, 1.0

**.NET Framework Client Profile**

Supported in: 4, 3.5 SP1

[**Platforms**](javascript:void(0))

Windows 8.1, Windows Server 2012 R2, Windows 8, Windows Server 2012, Windows 7, Windows Vista SP2, Windows Server 2008 (Server Core Role not supported), Windows Server 2008 R2 (Server Core Role supported with SP1 or later; Itanium not supported)

The .NET Framework does not support all versions of every platform. For a list of the supported versions, see [.NET Framework System Requirements](http://msdn.microsoft.com/en-us/library/8z6watww%28v=vs.110%29.aspx).

[**Thread Safety**](javascript:void(0))

Any public static (Shared in Visual Basic) members of this type are thread safe. Any instance members are not guaranteed to be thread safe.

[**See Also**](javascript:void(0))

**Reference**

[System.Management Namespace](http://msdn.microsoft.com/en-us/library/system.management%28v=vs.110%29.aspx)