

1 System.Net.CredentialCache Class

```
2 [ILAsm]  
3 .class public CredentialCache extends System.Object implements  
4 System.Net.ICredentials, System.Collections.IEnumerable  
  
5 [C#]  
6 public class CredentialCache: ICredentials, IEnumerable
```

7 Assembly Info:

- 8 • *Name:* System
- 9 • *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00]
- 10 • *Version:* 2.0.x.x
- 11 • *Attributes:*
 - 12 ○ CLSCompliantAttribute(true)

13 Implements:

- 14 • **System.Net.ICredentials**
- 15 • **System.Collections.IEnumerable**

16 Summary

17 Provides storage for multiple credentials.

18 Inherits From: System.Object

19
20 **Library:** Networking

21
22 **Thread Safety:** All public static members of this type are safe for multithreaded operations.
23 No instance members are guaranteed to be thread safe.

24 25 Description

26 The `System.Net.CredentialCache` class stores credentials for multiple Internet
27 resources. Applications that need to access multiple resources can store the credentials
28 for those resources in a `System.Net.CredentialCache` instance that then provides the
29 proper set of credentials for a given resource when required. When the
30 `System.Net.CredentialCache.GetCredential` method is called, it compares the URI
31 and authentication type provided with those stored in the cache, and returns the first set
32 of credentials that match.

33

1 CredentialCache() Constructor

```
2 [ILAsm]  
3 public rtspecialname specialname instance void .ctor()  
4 [C#]  
5 public CredentialCache()
```

6 Summary

7 Constructs and initializes a new instance of the `System.Net.CredentialCache` class.

8 Description

9 This constructor creates a `System.Net.CredentialCache` instance with its
10 `System.Net.CredentialCache.DefaultCredentials` property initialized to the system
11 credentials of the current process.

12
13 [*Note:* Use the `System.Net.CredentialCache.Add` method to add additional credentials
14 to the `System.Net.CredentialCache` instance.]
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17

CredentialCache.Add(System.Uri, System.String, System.Net.NetworkCredential) Method

```
[ILAsm]
.method public hidebysig instance void Add(class System.Uri uriPrefix,
string authType, class System.Net.NetworkCredential cred)

[C#]
public void Add(Uri uriPrefix, string authType, NetworkCredential cred)
```

Summary

Adds a System.Net.NetworkCredential instance to the credential cache.

Parameters

Parameter	Description
<i>uriPrefix</i>	A System.Uri that contains the URI prefix of resources to which <i>cred</i> grants access.
<i>authType</i>	A System.String containing the authentication type used by the resource named in <i>uriPrefix</i> . This string is required to be identical to the System.Net.IAuthenticationModule.AuthenticationType of the authentication module that uses the credential.
<i>cred</i>	A System.Net.NetworkCredential to add to the credential cache.

Description

The cache stores credentials in the order in which they are added.

[Note: Use the System.Net.CredentialCache.GetCredential method to retrieve System.Net.NetworkCredential instances.]

Exceptions

Exception	Condition
System.ArgumentNullException	The <i>uriPrefix</i> or <i>authType</i> parameter is null.

System.ArgumentException

The cache already contains a credential for the specified *uriPrefix* and *authType*.

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1 CredentialCache.GetCredential(System.Uri, 2 System.String) Method

```
3 [ILAsm]  
4 .method public final hidebysig virtual class System.Net.NetworkCredential  
5 GetCredential(class System.Uri uriPrefix, string authType)  
  
6 [C#]  
7 public NetworkCredential GetCredential(Uri uriPrefix, string authType)
```

8 Summary

9 Returns the System.Net.NetworkCredential instance associated with a URI and
10 authentication type.

11 Parameters

Parameter	Description
<i>uriPrefix</i>	A System.Uri that contains the URI prefix of resources for which the client will be authenticated.
<i>authType</i>	A System.String containing the authentication type used by the resource named in <i>uriPrefix</i> . This string is required to be identical to the System.Net.IAuthenticationModule.AuthenticationType of the authentication module that uses the credential.

12 13 Return Value

14 A System.Net.NetworkCredential, or null if there is no matching credential in the
15 cache.

16 Description

17 This method searches the System.Net.CredentialCache and returns the
18 System.Net.NetworkCredential instance for the specified URI prefix and
19 authentication type. This method uses the longest matching URI prefix in the cache to
20 determine which credentials to return for an authentication type.

21
22 [Note: The following table shows the matches for a set of URI prefixes (assuming the
23 URI prefixes are all cached for the specified authentication type).

URI Prefix	Matches
http://www.contoso.com/portal/news.htm	Matches only requests for

	http://www.contoso.com/portal/news.htm.
http://www.contoso.com/portal/	Matches requests for all resources in the portal path, except for requests for the http://www.contoso.com/portal/news.htm page.
http://www.contoso.com/	Matches requests for all resources at www.contoso.com, except those in the portal path.

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2]

3 Exceptions

Exception	Condition
System.ArgumentNullException	The <i>uriPrefix</i> or <i>authType</i> parameter is null.

4

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1 CredentialCache.GetEnumerator() Method

```
2 [ILAsm]  
3 .method public final hidebysig virtual class  
4 System.Collections.IEnumerator GetEnumerator()  
5 [C#]  
6 public IEnumerator GetEnumerator()
```

7 Summary

8 Returns an enumerator that iterates through credentials stored in the current
9 System.Net.CredentialCache instance.

10 Return Value

11 A System.Collections.IEnumerator for the current System.Net.CredentialCache
12 instance.

13

1 CredentialCache.Remove(System.Uri, 2 System.String) Method

```
3 [ILAsm]  
4 .method public hidebysig instance void Remove(class System.Uri uriPrefix,  
5 string authType)  
  
6 [C#]  
7 public void Remove(Uri uriPrefix, string authType)
```

8 Summary

9 Deletes a System.Net.NetworkCredential instance from the cache.

10 Parameters

Parameter	Description
<i>uriPrefix</i>	A System.Uri that specifies the resources for which the credential is used.
<i>authType</i>	A System.String containing the authentication type used by the resource named in <i>uriPrefix</i> . This string is required to be identical to the System.Net.IAuthenticationModule. AuthenticationType of the authentication module that uses the credential.

11

12 Description

13 The System.Net.CredentialCache.Remove method locates and removes the
14 System.Net.NetworkCredential instance that is cached for the specified URI prefix and
15 authentication type. If there is no match found in the cache for the specified values, this
16 method has no effect. The *uriPrefix* and *authType* values are required to exactly match
17 the values supplied at the time the credential was added to the cache. [Note: For
18 additional information, see System.Net.CredentialCache.Add.]
19
20

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1 CredentialCache.DefaultCredentials Property

```
2 [ILAsm]  
3 .property class System.Net.ICredentials DefaultCredentials { public  
4 hidebysig static specialname class System.Net.ICredentials  
5 get_DefaultCredentials() }  
  
6 [C#]  
7 public static ICredentials DefaultCredentials { get; }
```

8 Summary

9 Gets the system credentials in use for the current process.

10 Property Value

11 A `System.Net.ICredentials` instance that represents the system credentials in use for
12 the current process.

13 Description

14 This property is read-only.

15 Permissions

Permission	Description
System.Security.Permissions.EnvironmentPermission	Requires read access to the environment variable that contains the user name. See <code>System.Security.Permissions.EnvironmentPermissionAccess.Read</code> .

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