System.Net.CredentialCache Class

```
[ILAsm]
.class public CredentialCache extends System.Object implements
System.Net.ICredentials, System.Collections.IEnumerable


[C#]
public class CredentialCache: ICredentials, IEnumerable
```

Assembly Info:

- *Name:* System
- *Public Key:* [00 00 00 00 00 00 00 00 04 00 00 00 00 00 00 00]
- *Version:* 2.0.x.x
- *Attributes:*
    - ○ CLSCompliantAttribute(true)

Implements:

- **System.Net.ICredentials**
- **System.Collections.IEnumerable**

Summary

Provides storage for multiple credentials.

Inherits From: System.Object

Library: Networking

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

Description

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

CredentialCache() Constructor

```
[ILAsm]
public rtspecialname specialname instance void .ctor()


[C#]
public CredentialCache()
```

Summary

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

Description

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

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

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
uriPrefix	A `System.Uri` that contains the URI prefix of resources to which *cred* grants access.
authType	A `System.String` containing the authentication type used by the resource named in *uriPrefix*. This string is required to be identical to the `System.Net.IAuthenticationModule.AuthenticationType` of the authentication module that uses the credential.
cred	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 *uriPrefix* or *authType* parameter is `null`.
System.ArgumentException	The cache already contains a credential for the specified *uriPrefix* and *authType.*

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

```
[ILAsm]
.method public final hidebysig virtual class
System.Net.NetworkCredential GetCredential(class System.Uri
uriPrefix, string authType)

[C#]
public NetworkCredential GetCredential(Uri uriPrefix, string
authType)
```

Summary

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

Parameters

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

Return Value

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

Description

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

[*Note:* The following table shows the matches for a set of URI prefixes (assuming the 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.

]

Exceptions

Exception	Condition
System.ArgumentNullException	The *uriPrefix* or *authType* parameter is `null`.

CredentialCache.GetEnumerator() Method

```
[ILAsm]
.method public final hidebysig virtual class
System.Collections.IEnumerator GetEnumerator()


[C#]
public IEnumerator GetEnumerator()
```

Summary

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

Return Value

A `System.Collections.IEnumerator` for the current
`System.Net.CredentialCache` instance.

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

```
[ILAsm]
.method public hidebysig instance void Remove(class System.Uri
uriPrefix, string authType)


[C#]
public void Remove(Uri uriPrefix, string authType)
```

Summary

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

Parameters

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

Description

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

CredentialCache.DefaultCredentials Property

```
[ILAsm]
.property class System.Net.ICredentials DefaultCredentials { public
hidebysig static specialname class System.Net.ICredentials
get_DefaultCredentials() }


[C#]
public static ICredentials DefaultCredentials { get; }
```

Summary

Gets the system credentials in use for the current process.

Property Value

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

Description

This property is read-only.

Permissions

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