

# DirectoryServices error: Authentication mechanism is unknown: Solution

*Source:* <http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.general/2004-02/1813.html>

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Hello

I posted a thread about this a while back, but I can't actually find it again so I can reply to it with the solution I found, so I'm making a new thread and hoping it goes to the top of the Google search results for the error like the previous thread.

This is actually a solution to a problem, not a call for help, so you can stop reading now unless you're actually interested in the solution :)

Problem:

When connecting to Active Directory using a DirectoryEntry object, and passing username and password credentials, returns an error when binding. (Binding occurs once you try to execute something, such as a search, or access connection properties). The error message is "The authentication mechanism is unknown".

Example code:

```
// Bind to Active Directory using LDAP Protocol
DirectoryEntry entry = new DirectoryEntry("LDAP://DOMAIN", "myusername",
"mypassword", AuthenticationTypes.Secure);
System.DirectoryServices.PropertyCollection props = entry.Properties;
foreach(string propName in props.PropertyNames)
{
    Console.WriteLine( "{0} = {1}", propName, props[propName] );
}
```

Diagnosis:

In general, this code will work and you'll get a list of the AD LDAP properties. However, you might get the "The authentication mechanism is unknown" error. When I searched for help on this error everywhere I could find, nobody could supply a solution, or even an explanation of what was happening.

microsoft.public.dotnet.general: DirectoryServices error: Authentication mechanism is unknown: Solution

What I have found is that it is almost certainly a problem with security permissions. More specifically, if you are running under a system account rather than an account that belongs to the domain you're connecting to. And mostly, you will probably only get this problem when you're running ASP.NET. To help you test what account may be causing problems for you, add this line of code before you do any DirectoryEntry operations:

```
Console.WriteLine("Current Identity = {0}, IsSystem={1},  
IsAuthenticated={2}, AuthenticationType={3}, Token={4}", identity.Name,  
identity.IsSystem, identity.IsAuthenticated, identity.AuthenticationType,  
identity.Token.ToString() );
```

When the problem occurred for me, I got this output:

```
Current Identity = NT AUTHORITY\SYSTEM, IsSystem=True, IsAuthenticated=True,  
AuthenticationType=NTLM, Token=10228
```

If you're getting this, check your machine.config located in  
%SYSTEMROOT%\Microsoft.NET\Framework\vx.x.xxx\CONFIG e.g.  
c: