

# RE: Checking Folder Access Permissions

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*Source:*

<http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.framework/2006-07/msg00362.html>

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  - *Date:* Mon, 17 Jul 2006 06:22:36 GMT
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Hi Jeff,

Thanks for your post!

Based on my understanding, your File Manager application wanted to manage and check certain user's NTFS access to a folder in .Net.

In Windows security world, all the objects are protected with DACL in Security Descriptor. The DACL contains a list of ACEs, which describes which account can/can't access this object. So is the Folder object.

The Windows DACL security feature is not supported in .Net1.1, but is partial added in .Net2.0. To dump out the DACL of a folder, you may use `Directory.GetAccessControl` method to get the `DirectorySecurity` class, and then loop through the result set from `DirectorySecurity.GetAccessRules` to dump each ACE content. The figure3 in the article below provides some sample regarding dumping DACL of a file, which is easy to modified into folder:

"Manage Access to Windows Objects with ACLs and the .NET Framework"  
<http://msdn.microsoft.com/msdnmag/issues/04/11/AccessControlinNET/>

To programmatically access check if a user has certain access right to a folder, Windows provides `AccessCheck` API for this purpose. However, based on my research, I found .Net2.0 did not provide support for this API, so you have to p/invoke this win32 API to achieve what you want. Actually, in ..Net world, the simplest way of access checking is performing the folder accessing directly and catch the access deny exception to indicate the failure, or the accessing is granted. `AccessCheck` API is a somewhat complex API, if you want to p/invoke to it, please refer to the article below for more information:

"The Windows Access Control Model Part 3"  
<http://www.codeproject.com/csharp/accessctrl3.asp>

Finally, the article below provides a rude way of doing access checking in ..Net. That is he simulate the work of `AccessCheck` API in .Net by checking each ACE for grant/deny information, if you do not like the complexibility of p/invoke `AccessCheck` and throw exception with direct access, this is another choice for you:

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"Testing file access rights in .NET 2.0"

<http://www.codeproject.com/useritems/UserFileAccessRights.asp>

Hope this helps.

If you need further help or other concern, please feel free to tell me, thanks!

Best regards,  
Jeffrey Tan  
Microsoft Online Community Support

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