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Windows CE TIP: Windows CE File Access Error

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Problem: You have created a workspace using WinCE Platform Builder 5.0 and are working on system software modifications and additions when you start to get build errors after making some simple modifications. You look in the Build window to see where the offending line of code is and find out that Platform Build is failing on the most fundamental file deletes and copies long before it even gets to trying to rebuild your code. You might think that things have gotten out of synch with the sysgen files, especially if you have done a number of edits and component builds prior to this current build attempt, so you might be tempted to try a full sysgen and build. To your amazement, even more errors are generated as the system files are copied to the workspace tree from the system tree. How could the build have gotten this corrupted? Then to add insult to injury, if you try to close Platform Builder it claims it can't save your workspace; that file access is denied. What could have access to these files? In a desperate attempt to save your work, you decide to save the workspace under a different name, hoping to sort out the problem when you restart Platform Builder, but again you get an error that you do not have rights to create the workspace files in the workspace tree. You have lost all rights to create, delete, or modify files in the workspace.

Analysis: When Platform Builder does a build, it deletes a lot of previously generated intermediate files both in the platform tree and the workspace tree. Then it generates the new files for the current build and copies those it needs for the final system build to the workspace tree, where the kernel is finally build. In the scenario above, if you experiment with creating or deleting files in various locations in any of the folders in the workspace, platform, public, trees etc, you will find that you have lost create, delete, and modify rights to all files from the WINCE500 root folder. Even if you throw your hands up in despair and decide to delete the WinCE installation and install it, again, and start over, you will find that you cannot delete any of the files or folders in the complete WINCE500 tree.

Solution: Platform Builder has managed to usurp the rights of your entire WinCE installation leaving you with what appears to be read-only access to the files. If you look at the file properties, you will see that the files are not marked as read-only. The folders are marked as read-only but the normal attribute for folders is read-only even though you can freely delete them. If you try to change the read-only property on any of the folders, the operation will fail.

All is not lost, though. There are two things you can do. First, since you have read access to the whole tree, you can copy the whole tree (to a different root, of course) and you will find that you now have full rights to the copy. Even though you don't have create, delete, or modify rights in the original tree, believe it or not, you can rename the folders. If you rename the original "WINCE500" folder to something like "WINCE500.ORIG", you can now move your copy of the WINCE500 tree to the root of the drive, and you will find that you are back in business. You now have a working WinCE installation with all your existing files that will build properly, again.

The only problem is you now have two WinCE 5.0 installations eating up disk space: one you can use and one that is a good doorstop. The second thing to do: We already know we can't delete the old one, or can we? It turns out that you can delete the old installation:

1. Right-click on the renamed original WinCE root (in the example above it was "WINCE500.ORG") select **Sharing and Security**.
2. In **Network Sharing and Security** click the **Share this folder on the network** box, and then click the **Allow network users to change my files box**.

3. When it gives you the choice to apply the share to only this folder or all files and folders in the tree, select the all files and folder option.

When this operation completes, you will now have the ability to delete the tree. To delete the original tree:

1. Right-click on the renamed original WinCE root ("WINCE500.ORIG"), choose **Properties**, and then uncheck the **Read-only** property.
2. When it gives you the choice to apply the change to just his folder or the whole tree, choose to apply it to the whole tree.

You will see that the change is successfully applied to the whole tree, which should verify that you really have regained control of these renegade files and folders. Now, select the WINCE500.ORIG folder and while holding the shift key (we don't want all of these files going into the Recycle Bin) hit Delete, verify that you really want to delete this folder and all subfolders and files, and the deletion will begin. You will be prompted the first time that an exe-file is to be deleted whether you really want to delete and executable file. If you select the delete all option, the deletion process will complete without further prompting. At the completion of the delete process, you will have your working copying of the WinCE 5.0 installation that can be used to continue your development, and you will have successfully deleted the original installation that had become locked and regained that file space on your hard drive.