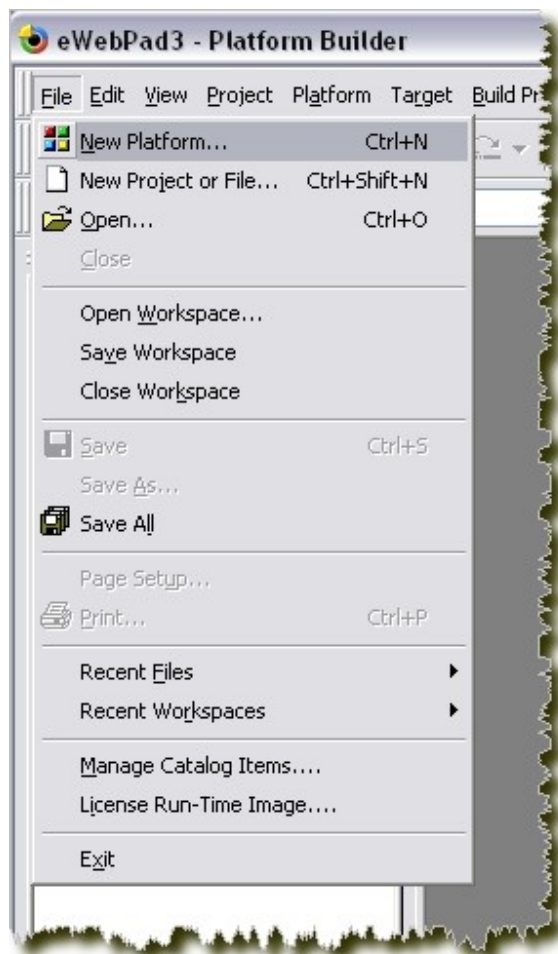# SJJ Embedded Micro Solutions

Windows CE Tip: Avoiding PBWorkspaces Directory Tree Corruption when Creating New Platforms

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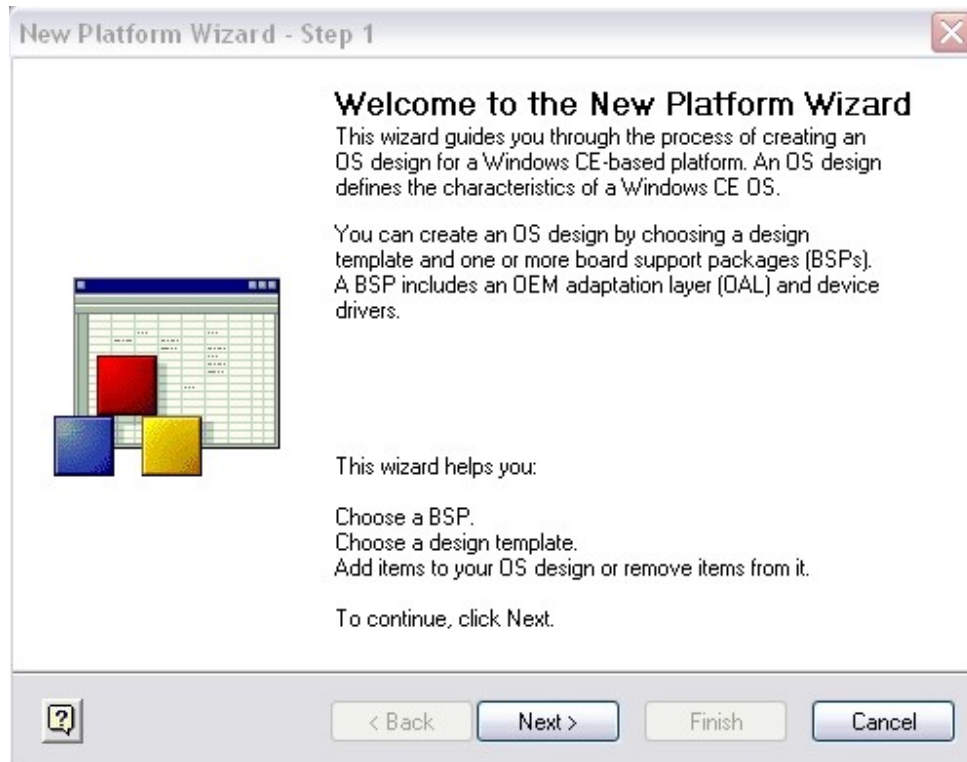SJJ Embedded Micro Solutions

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When creating a new platform in Platform Builder 5.0, the New Platform Wizard will often create an unexpected corrupted directory tree under \WINCE500\PBWorkspaces, which will render the new workspace build tree unusable. When this happens very strange build errors will be produced when the new platform is sysgened and built for the first time. Complaints of missing files are common errors that are indicative of this corruption. Let's examine an incident of this directory tree corruption and look at a simple way to keep it from happening.

An example of such an error that actually happened is show below. The New Platform Wizard was used to create a new custom platform called "CustomTest1". The wizard was invoked by selecting *<File><New Platform…>* from the PB 5 dropdown.
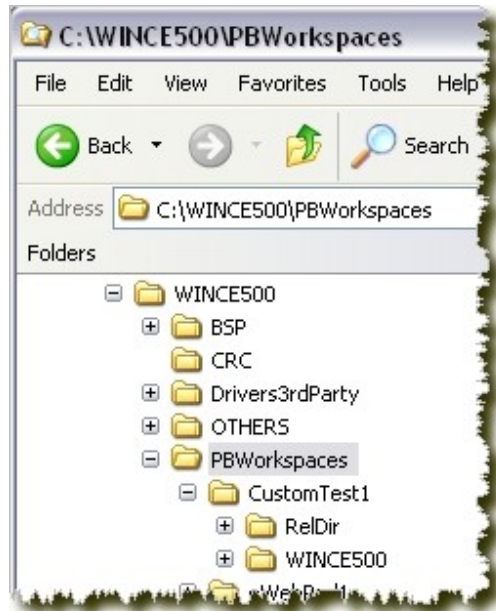
The Wizard was launched:

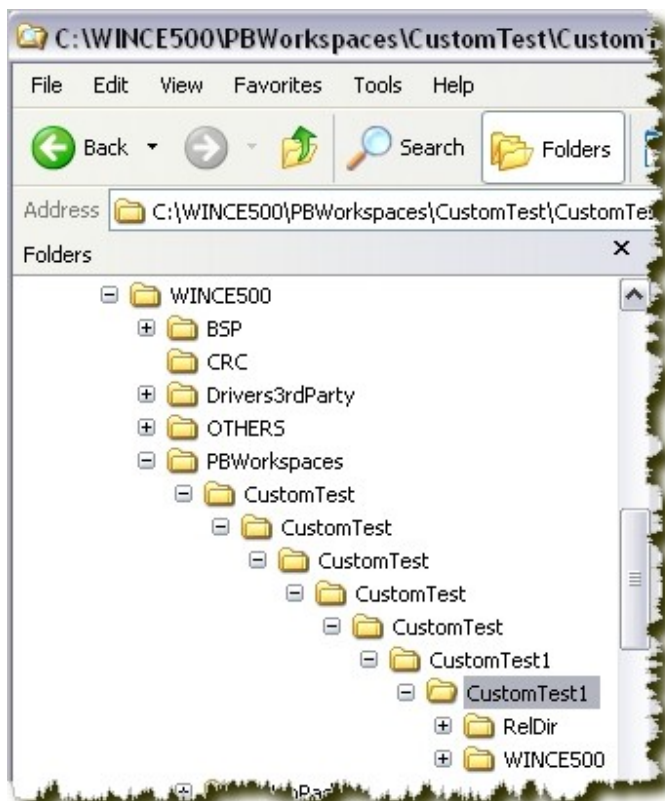The name of the new platform was selected:

The Wizard was then used to selected components and services for the custom build and seemed to complete successfully. The first attempted build yielded many errors relating to missing files. Wondering how this could be, the directory tree was examined and the cause of the problem became obvious. The proper directory structure that was expected would look like this:

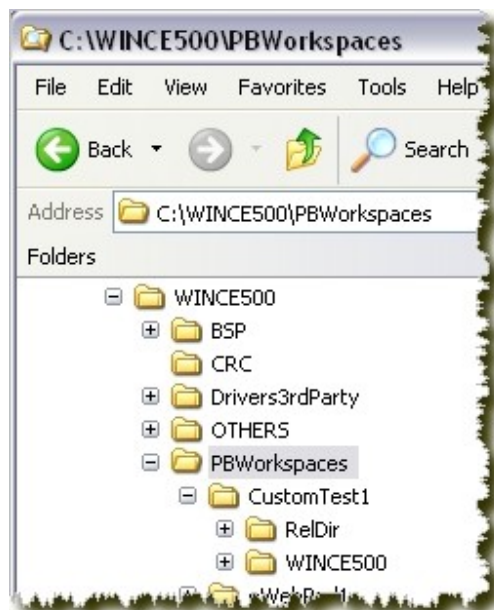Instead, my examination showed the directory structure to look this:

I have seen the Wizard create corrupted directory structures on more than one occasion, but this case that I snapshotted was one of the more bizarre and clearly illustrates the problem. When Platform Builder generates the workspace files, it puts in a number of directory references. Some of the build directives use relative file locations referenced from the root directory of the new workspace and would allow some of the files to be found even in this corrupted directory structure. Other build directives use absolute file locations referenced from the root of the drive, and these references were expecting to the files in the correct locations. Due to the bizarre recursive generation of subdirectories, those files could not be found, leading to the build errors.

The solution to this problem is to create the root directory of the new workspace build tree before using the New Platform Wizard. Therefore, creating \WINCE500\PBWorkspaces\CustomTest1\

using Windows Explorer and then running the New Platform Wizard to create the CustomTest1 Platform results in the proper build directory structure for the new platform:

Note: After creating the new workspace directory, close Windows Explorer before running the New Platform Wizard. If the new directory is opened in Explorer, the Wizard may error with file/directory access errors.

Conclusion:

The New Platform Wizard in Platform Builder 5.0 can cause workspace directory corruption under the PBWorkspaces folder. Even when the workspace directory is corrupted, the New Platform Wizard appears to complete successfully. It isn't until a build of the new workspace is attempted that there is an indication of a problem. This problem manifests itself as missing file errors during the build process. A simple fix of this problem is to create the directory for the new workspace under PBWorkspaces using Windows Explorer before running the New Platform Wizard.