

How can I control which parts of the shell namespace the `INamespaceWalk::Walk` operation will walk into?

devblogs.microsoft.com/oldnewthing/20171108-00

November 8, 2017



Raymond Chen

The `INamespaceWalk::Walk` method initiates a depth-first traversal of the shell namespace, subject to constraints controlled by the various parameters (such as maximum search depth). If you pass an object which implements the `INamespaceWalkCB` interface, you can monitor the progress of the namespace walk and also influence how it proceeds.

The `EnterFolder` method is called when the namespace walk finds an object in the shell namespace with the `SFGAO_FOLDER` attribute. You can perform whatever actions you wish in response to this callout, and you can provide limited feedback to the namespace walk operation:

- Return `S_OK` to allow the namespace walk to recurse into the folder. The folder is eligible to be reported by `INamespaceWalk::GetIDArrayResult`.
- Return `S_FALSE` to prevent the namespace walk from recursing into the folder. The folder is eligible to be reported by `INamespaceWalk::GetIDArrayResult`.
- Return a COM error `HRESULT` to abandon the namespace walk operation. The error code you return will be the return value of the `INamespaceWalk::Walk` method.

The `FoundItem` method is called when the namespace walk finds an object in the shell namespace without the `SFGAO_FOLDER` attribute. Again, you can perform whatever actions you wish in response to this callout, and you can provide limited feedback to the namespace walk operation:

- Return `S_OK` to allow the namespace walk to continue. The item will be reported by `INamespaceWalk::GetIDArrayResult`.
- Return a COM error `HRESULT` to abandon the namespace walk operation. The error code you return will be the return value of the `INamespaceWalk::Walk` method.

Note that “allow the namespace walk to recurse into the folder” and “eligible to be reported by `INamespaceWalk::GetIDArrayResult`” are both conditional upon how the namespace walk is configured. For example, if recursing into the folder would exceed the recursion

depth, then recursion won't occur even if you say "Sure, go ahead" in your `EnterFolder` handler.

The `LeaveFolder` method is called when the namespace walk has finished enumerating the contents of a folder. It is the counterpart to `EnterFolder`. This is your chance to perform any cleanup or other actions. (For example, if you are counting the number of items in each folder, this tells you that the enumeration of a folder is complete, and you can save the totals to wherever you intend to save them.) The return value here does not affect the namespace walk.

Let's go with the table again:

Operation	<code>S_OK</code>	<code>S_FALSE</code>	COM error
<code>EnterFolder</code>	Allow recursion Allow reporting Continue	Block recursion Allow reporting Continue	Block recursion Block reporting Abandon
<code>FoundItem</code>	Allow reporting Continue	Not allowed	Block reporting Abandon
<code>LeaveFolder</code>	Continue	Not allowed	Continue

The boxes marked "Not allowed" indicate that returning `S_FALSE` is not allowed for those methods.

Exercise 1: A customer had the following question. Maybe you can answer it.

We are using `INamespaceWalk::Walk`, and we're passing the `NSWF_TRAVERSE_STREAM_JUNCTIONS` flag so that it recurses into CAB folders, but it's also recursing into ZIP folders. How can we stop it from recursing into ZIP folders?

Exercise 2: Suppose you want to process at most the first 100 files. How would you stop the namespace walk operation after 100 files have been processed?

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