Introduction

The key function of a document management system is the storage and retrieval of information in a structured but efficient form. If information cannot be found it has no value. The purpose of this white paper is to explain the FileHold approach to filing hierarchy.

Many document and record management systems provide unlimited folder levels. This probably comes from the idea of storing physical documents - if there was a need to store more information more cabinets were acquired, more rooms were built and another tier of structure was created. Electronic data can be stored very efficiently and therefore we can have different practices relative to organizing and retrieving information.

Today's users of document and knowledge management systems expect to find whatever they want when they want it. To meet this expectation FileHold believes the trend today is toward flatter filing systems and more extensive tagging of documents with metadata (data about data). The use of metadata when combined with powerful full text gives users the power and speed they are seeking. This belief is born out by the popularity of Search engines such as Google and even the Google Appliance that provides search no matter how documents are stored. In this regard FileHold provides unlimited metadata definition and capture and has a powerful search capability allowing users to find information of importance with little effort.

FileHold Document Management Software (DMS) is intuitive and easy to use. The filing structure is designed to mirror the physical office filing system that everyone is familiar with. FileHold provides 5 levels of filing hierarchy: cabinets / drawers / folder groups (categories) / folders / documents. FileHold believes that in document management "best practices" this is the optimum that users can easily work with and sustain usability.

To validate the FileHold approach and provide domain expertise for our customers we asked several industry experts (consultants and practitioners) to comment on the FileHold approach to filing hierarchy. The question and the answers follow:

Question: FileHold provides 5 levels of folder nesting. Please comment; based on your experience and knowledge of the document management industry, if the current design of 5 levels is in accordance with your beliefs about "best practices"?

Answer- Mick Pavnica, President Professional Business Automation Technology:

"I recommend the fewer the better and often configure for only 4 levels. My emphasis is on using metadata to find things. In (unnamed competitive product) there are unlimited levels but I have only had one customer who went deeper than 5 and it turned out to be a disaster."

Answer - Steve Wade, ISP, CBCP, PMP Logistics & Special Projects Manager

Enforcement Division: "Our experience is that for our Records Management System to be used effectively by staff it has to be as simple as possible, requiring a minimum of information for classification.

In our system we have a five level hierarchy that equates directly to what FileHold uses;

Primary/Secondary/Tertiary/Folder/Document. This structure maps directly to the records management policies of Government (ARCS/ORCS).

This is then supplemented by metadata to enhance the searchability of a specific document. In our case the only mandatory metadata fields are document name, classification and document type.

To further enhance usability we create group favorites for the first four levels of the hierarchy so that staff who work in specific areas need only; pick a classification, name the document and fill in the metadata.

"...beyond 5 levels in a folder/file hierarchy increases confusion for users and increases the time it takes to retrieve the file."

Dr. Nick Bontis, Fortune Magazine
IMHO an organization that is looking for a deeper hierarchy (especially an unlimited one) is not going to benefit from the power of a document management system. All you will be doing is transferring the folder structure from Windows Explorer (and associated management headaches) to the document management system.

**Answer - Eric Posa, President DocuSyst:**
"This is often a major issue of discussion when dealing with a Document Structure setup: here are my thoughts. I am a very large advocate of "Less is More". I have done many installs where customers have wanted to have subfolders underneath folders and even another level of sub-folders. I believe that this defeats the purpose of a document management system.

A perfect example is a company that uses Microsoft Windows Explorer to save their files. If you give a user the ability, they will create their own structure, naming convention, and so on. My biggest selling point to upper level employees is you take that ability out of the users hands and set up a simple structure that forces the user to store documents a certain way. Now, when an employee leaves, their knowledge of how documents are stored and named does not leave with them and it is the same for all users.

I have installed many systems where the staff gives 50+ types of document categories. Many of these individuals also want to put different types in specific subfolders and come up with many different logic statements for storage. The problem is that there is too much ambiguity and too much control given to a user. A user has to know where documents are supposed to go in order for it to go there or they will decide on where they think it should go...defeating the purpose of the setup. My expert opinion was to use the meta-data as the means to find the specific document. More often than not, the users are most interested in the description field to find out what they need to know.

I would be extremely hesitant to create the ability to have subfolders upon subfolders as it defeats the simplicity of your product. One of the best concepts of FileHold is that you can't get too crazy with the creation of folders. The metadata is all you really need to find what you are looking for."

**Answer: Kevin McArthur, VP Sales FileHold Systems:**
"Based on all of the projects I have worked on where this issue cropped up, I can tell you that in most cases deeper levels were not necessary. In my mind, the primary argument for deep levels of folders and subfolders is based on limitations found in paper based filing systems. Since there was no good way to isolate specific document types, the only way to ensure that distinct documents could be found quickly was to separate them out into sub folders. One of the primary selling points of any document management systems is that the power of the search engines does the work for you. If you have identified a document type as requiring distinction or isolation, you can simply flag it with the appropriate metadata or index fields to quickly find what you are looking for.

I had a CPA firm that absolutely required us to help them in supporting a deep hierarchical system. We explained to them that for every level deeper that we go, we run the risk of losing the power of the search engines and naming conventions. They refused, telling us that their system was required by "the board" to be done on this way. A year or so later during a follow up visit, the project manager confided in me that now they wished they had listened to us in the beginning. In my mind, it was not their fault. We did not do a good job of educating them as to the new technology. We have the benefit of understanding this technology and if it is explained correctly, the argument for deep levels starts to fade.

**Answer: Merv Richter, President Eloquent Systems:**
Much of my experience is with archival holdings as well as records management. The software we developed at Eloquent Systems can have any number of hierarchies and each with the ability to go down any number of levels. I have worked closely with several Records Management consultants who had me configure a package for them to standardize on for their clients.

The key issue for most consultants is the classification scheme (with retention schedule.) Some insist in making it fit in a minimum number of levels (3-4). That may be because their past experience was with software lacking flexibility. Others; insisted that as you go down the tree you should never get more than a manageable number of branches.

Problems usually result from using one hierarchy for more than one thing. In a large organization you have several: one for management reporting structure, one for physical location of things: building, room, cabinet, drawer, etc; one for locations in the warehouse; and logical structures such as classification schemes containing business rules such as retention and destruction. The software doesn't have to represent all of them with a single hierarchy. It should integrate several simple ones and have searches that combine several access points.
Five levels should provide an adequate structure for filing electronic documents. The librarian setting up the structure can follow the rule of limiting the branches to a maximum of 12-20 for ease of filing; but no limit in the bottom level where the documents reside. That level is usually presented in some intuitive sequence such as chronological or alphabetical and usually can be sorted on other columns after it is presented. Users can be given the ability to restrict the search with additional search parameters against the metadata.

Sample FileHold Library Tree
When users logon to FileHold the library tree appears to provide user access to the different views of the library.

This screenshot shows the expanded library tree including:
- the Outbox (mass file tagging / upload utility)
- the My FileHold personal views (of the users checked out documents, alerts, reminders etc)
- the users personal workflow task list and status report
- links to the library search utility
- the users personal virtual folders
- the library itself containing sample cabinets, drawers, categories, folders and documents.

More information
To learn more about FileHold Document Management go to www.filehold.com or to contact the author for more information Sales@FileHold.com