

## SharePoint for Document Management Top 10 Frustrations

This paper describes some typical frustrations experienced by users in organisations that are attempting to use 'out-of-the-box' Microsoft SharePoint 2007 for document and message management. The paper outlines how these difficulties can be addressed by better understanding of SharePoint and by combining SharePoint with add-ons such as WISDOM DMF and WISDOM Message from MacroView.

### 1. Microsoft Outlook Integration

*"You'd think that it would be easier to save an email to Microsoft SharePoint from Microsoft Outlook."*



Organisations around the world are looking to use SharePoint as a better means of managing their Outlook email messages. With its native document management capabilities, SharePoint does make sense as a web-enabled, central store for email messages. However users in many organisations report frustration as they attempt to save email messages to SharePoint using the integration facilities that are built into Outlook (even Outlook 2007). These frustrations include:

- By default, email messages are saved in .EML format, which means that when clicked they do not re-open in Outlook.
- Attachments are split off and saved separately.
- Saved messages are named based on their Subject.
- If you save to SharePoint via an Outlook Managed Folder you are not prompted for any additional metadata as you save.

There are numerous third-party add-ons available in the market, which are all designed to improve the user experience when saving emails from Outlook to SharePoint. One of these is **WISDOM Message** from MacroView. WISDOM Message is part of the WISDOM Document Management Framework, which provides an upgrade path if you want to use SharePoint to manage documents and files generally, and not just email messages.

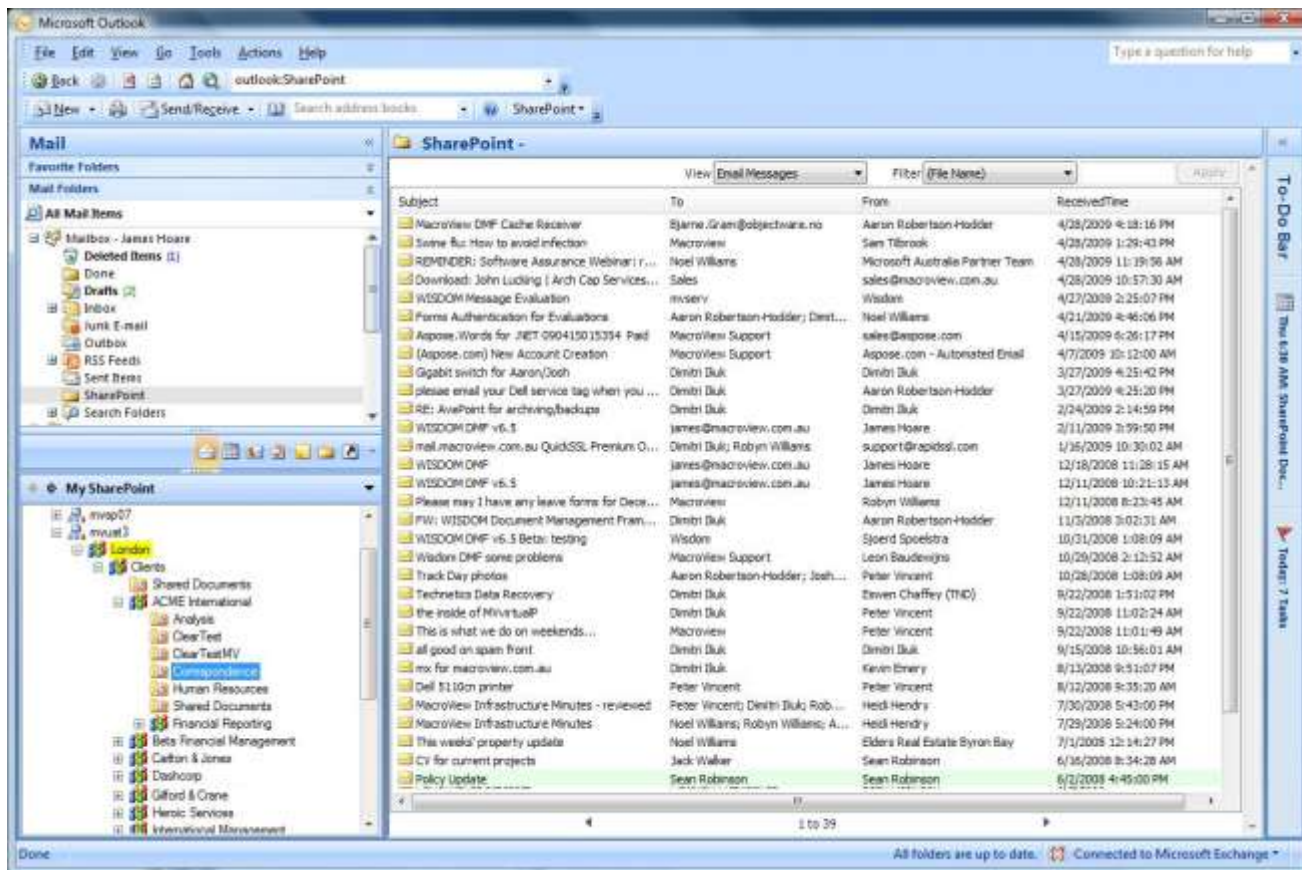
WISDOM adds a new pane to your Outlook environment that provides an intuitive tree-view display of all parts of the SharePoint document store for which you have access permission. With WISDOM you can **drag-and-drop to save one or multiple messages to any document library or folder** – you do not first need to make that library or folder a Favorite or Sync any Site (as is required by many of the other add-ons).

WISDOM Message and WISDOM DMF have a number of features that serve to eliminate the frustration of managing Outlook messages in SharePoint:

- Saved messages are saved in MSG format, so that attachments are preserved and saved messages re-open in Outlook when you click them in SharePoint.
- Saved messages are named uniquely to avoid creating duplicate copies of any message in a one document library.
- WISDOM automatically records Outlook attributes (To, CC, BCC, From, Subject, Sent, Received, Importance, Sensitivity and Attachment count) in like-named metadata columns present in the destination library.
- The user is prompted for any additional metadata columns defined in the destination library as the message is saved.
- Email Messages view shows messages in the same way as they would appear in Outlook, including sorting by Conversation Topic.

*There is no better product available that enables Outlook to communicate properly with SharePoint than WISDOM Message.*

**Michael Auschrat,**  
Cohos Evamy, Canada.



WISDOM Message adds a new pane to your Microsoft Outlook environment, which lets you view and save messages in Microsoft SharePoint.

WISDOM also provides excellent support for retrieving files from SharePoint to insert as attachments (or links) in a new Outlook message.

## 2. Saving PDFs Direct from Adobe Reader or Acrobat

*"You open a PDF in Adobe Reader, but you can't then save that PDF straight to SharePoint."*

PDFs are used extremely widely, but you cannot save them to SharePoint directly from out-of-the-box Adobe Reader or Adobe Acrobat Professional. Instead you need to save the PDF to a folder on a local drive or file share and then go into the web browser and upload to SharePoint (and ideally tidy up by deleting the temporary copy of the PDF). The process is also frustrating if you are using Adobe Acrobat Professional.

Given the above it is not surprising that the ability to save PDFs direct to SharePoint from Adobe Reader or Adobe Professional is one of the most frequent requests that we receive.

There is a free plug-in available (Omtool Swiftwriter) that does allow you to save to SharePoint directly from Adobe Reader or Acrobat, but market feedback is that this does not work if you attempt to save to a document library that contains more than 300 files.

The **WISDOM PDF SharePoint Save** plug-in available from MacroView lets you save your PDFs to Microsoft SharePoint direct from Adobe Reader or Adobe Acrobat Professional – including to document libraries with large numbers of file. WISDOM presents you with an intuitive tree-view display of your available SharePoint environment, so that you can efficiently navigate to a select the destination document library or folder.

WISDOM will prompt for any custom metadata columns that are defined in the destination library. The WISDOM metadata prompting experience is the same when you are saving any kind of file. WISDOM supports all metadata column types that come standard with SharePoint 2007, including Business Data columns.

### 3. Folders in SharePoint

*“Why can’t I simply replace the folders in my file share with folders in a big SharePoint library?”*

When they hear that SharePoint 2007 supports folders, including nested folders, it is not uncommon for new SharePoint adopters jump to the conclusion that they can simply do a one-for-one replacement of the folders in their existing File Shares with folders in SharePoint. Unfortunately this approach leads to frustrations, including:

- Exceeding 255 character limit on file URLs
- Cannot Search using Folder Names

The URL for a file in SharePoint contains folder names. If these folder names are long, and especially if the folders are nested to several levels, the URL can easily exceed the limit of 255 characters. In SharePoint a preferable approach to using nested folder structures is to use nested sites, each with one or more document libraries. The URL can then be a concatenation of the URL for each sub site, which can be much shorter than the displayed names of folders.

Having carefully chosen to store their documents in a specific folder many users are frustrated to learn that they cannot use the name of the folder to help them locate the documents when they are searching in SharePoint. You can do a search to retrieve the names of all folders in a library, but not to retrieve only the files in a particular Folder.

It is true that you can write .Net code in an Event Handler that will automatically set values in custom metadata columns to reflect the folder wherein a document is stored. However a much simpler approach that does not require any coding is to use multiple document libraries (e.g. in a nested site structure) and have Calculated column(s) in each library pre-defined to reflect the library. Users can then search on those metadata columns.

A somewhat dubious advantage of the nested folder approach is that the user can remain in a single document library while they navigate the nested folders in that library. This can be easier than navigating a site tree if you are using the out-of-the-box browser UI for SharePoint (or ‘My Network Places’). For more information on how to resolve this issue see “Viewing and Navigating SharePoint Document Store”, below.

### 4. MetaData Overload

*“I hate the way SharePoint asks so many questions every time I save a file.”*

Some organisations avoid the trap of using folders, and instead make heavy use of custom metadata columns in their SharePoint 2007 document libraries. The advantage of capturing additional metadata for each file as it is stored to SharePoint is that the file can be retrieved more flexibly:

- by sorting or filtering on a column in a Library;
- by searching based on metadata using Advanced Search

However when it comes to metadata (as with other things in life) it is definitely possible to have too much of a good thing! In a SharePoint document store this happens when a document library has too many custom metadata columns. Users find it frustrating to be prompted for values of many metadata columns every time they save a file to SharePoint,

We have seen some organisations take the idea of metadata to the extreme of having only one or two document libraries, each with dozens of Content Types, each containing with 10 – 12 metadata columns. While this approach does enable a high degree of retrieval flexibility, it certainly is far from popular with users, who see the new SharePoint-based document store as having way more overheads than the previous file share environment. To lessen the pain, users will tend to supply values for only Required columns, and be less than careful as they do so. Ironically the effect is to reduce the potential for flexible searching that the meta-data-heavy design was intended to achieve.

A handy technique for reducing the user overhead associated with metadata is to capture metadata 'automatically' by use of Calculated-type columns in document libraries. Calculated columns, like all metadata columns, are defined at the document library level, so this technique requires that you use more document libraries. As noted above in the discussion of frustration with Folders, you might want to have a tree of sites each with document libraries, each with its own specific values in its Calculated columns.

Computed columns can be used in much the same way. While they require changes at the XML schema level Computed columns are more flexible.

A number of add-ons that improve the integration of Outlook with SharePoint reduce user frustration with metadata by automatically recording Outlook attributes (such as To, From, Subject, Sent date/time and Received date/time, etc) in like-named metadata columns as they save email messages from Outlook to SharePoint. In addition to automatically recording Outlook attributes MacroView's **WISDOM DMF** and **WISDOM Message** add-ons also assign a unique file name to the saved message and set Subject so that stored messages will sort by Conversation Topic.

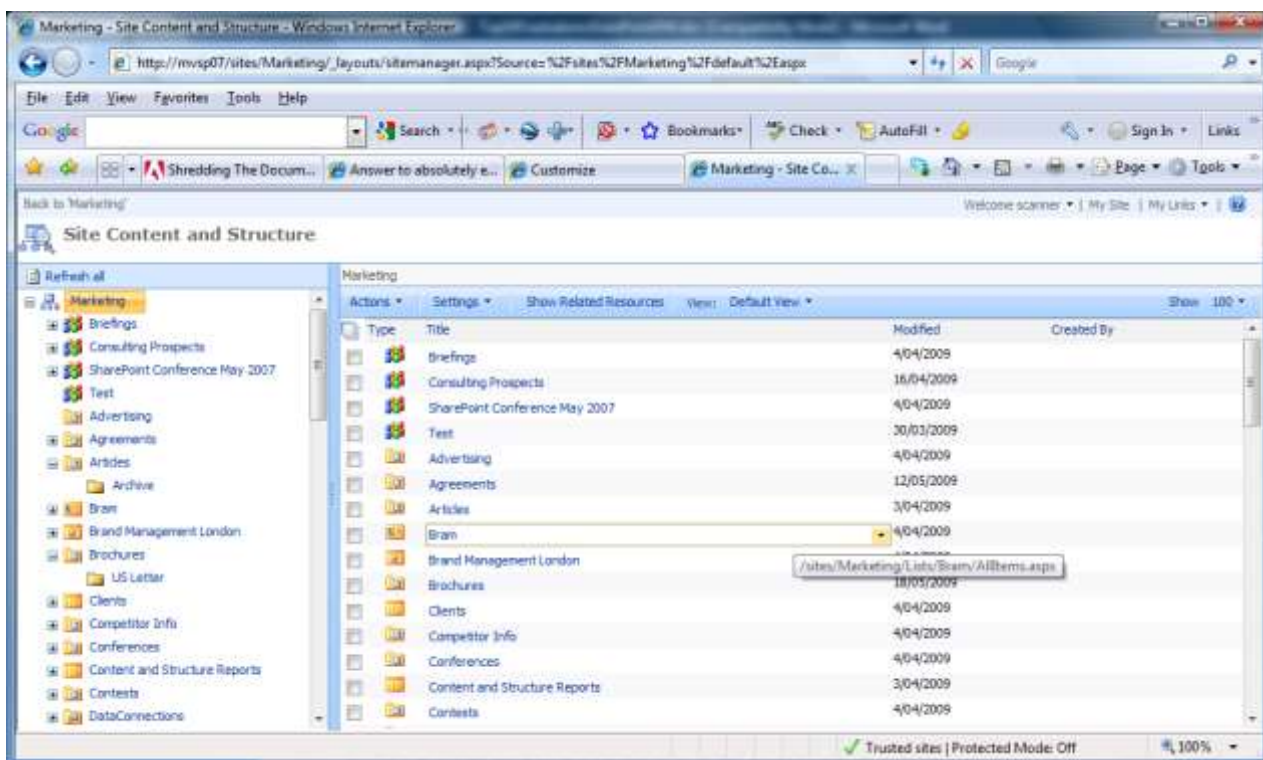
## 5. Viewing and Navigating the SharePoint Document Store

*"Viewing the document store in SharePoint is harder than it used to be with Windows Explorer."*

Microsoft positions SharePoint as the logical next step beyond the File Share as a means for storing files that need to be shared by multiple users in an organisation. SharePoint certainly does provide additional capabilities that are relevant to better management and sharing of files, such as check out, versioning, alerts, web-enabled access, extended metadata and searching, but ironically it lacks a feature that users relied on in the File Share environment – a tree-view display that lets an end-user visualise the overall document store.

It is interesting to note that MOSS does provide a tree-view display, but it:

- shows at most only one Site Collection;
- is not that readily accessed in the menu structure;
- does not cope with 'broken inheritance'.



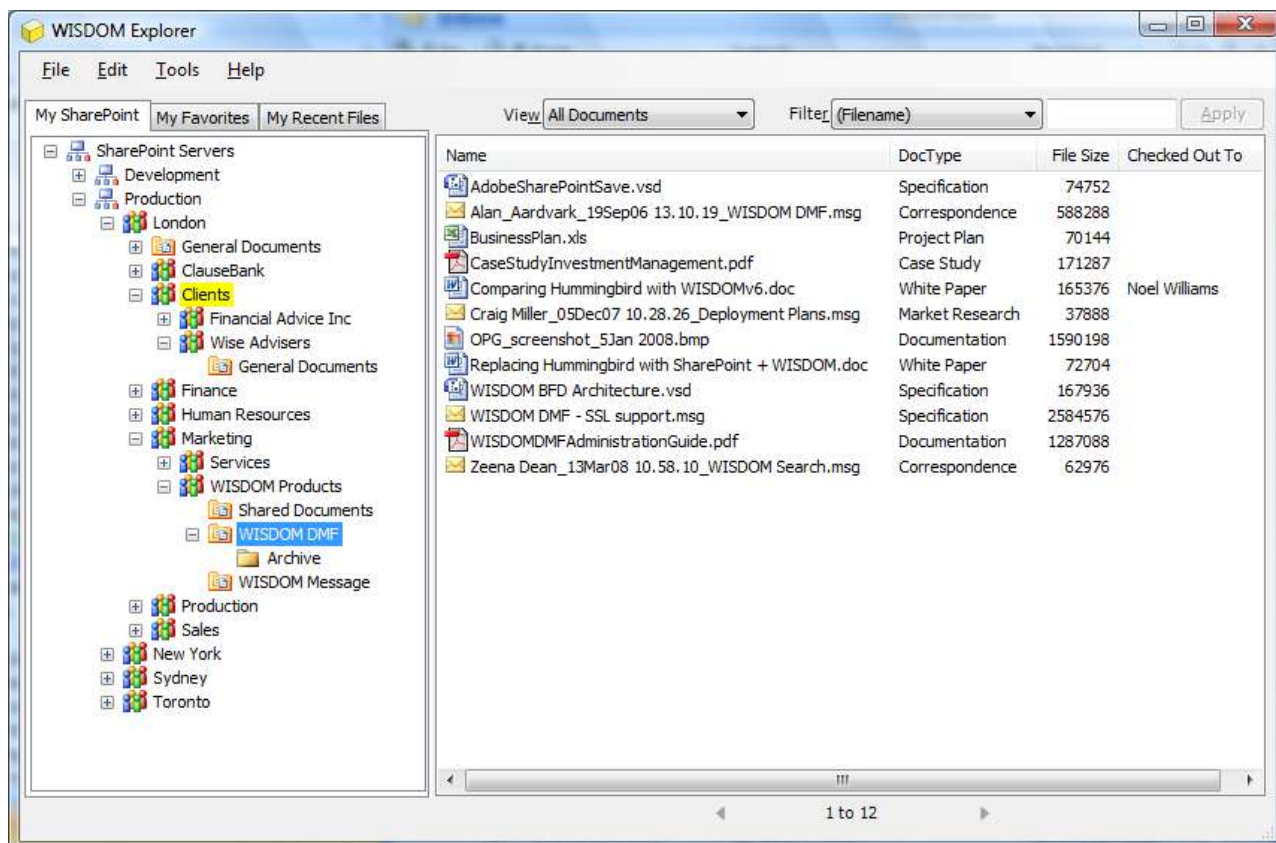
Tree-view display of a Site Collection using Site Actions,...Site Content and Structure

The result that this tree-view is of little use to non-Administrator users. Such users find that they need to navigate by clicking in the breadcrumb or by entering the URL of a wanted site or library. Visualising and navigating a large SharePoint document store (one with multiple Site Collections - e.g. for Personal Sites) or multiple servers (web applications) is particularly frustrating.

There are a number of SharePoint add-ons available that provide an improved tree-view display of the site collections, sites, libraries and folders that make up a SharePoint document store. Many of these are web browser based; some run within the Windows environment – e.g. in applications such as Microsoft Outlook (see “Microsoft Outlook Integration” above).

The **WISDOM Document Management Framework** from MacroView provides a tree-view of a SharePoint document store that is highly functional and intuitive:

- Available directly in popular client applications - Outlook, Word, Excel, PowerPoint, Adobe Reader, Adobe Acrobat and Windows Explorer.
- Shows the complete SharePoint document store - all Site Collections (including Personal Sites for Colleagues), across multiple servers (web applications) if necessary.
- Respects the SharePoint Permissions model - the user can see or access only those documents that they would be able to see or access using the standard SharePoint web browser UI.
- Copes with broken inheritance - intervening nodes are displayed (with no content) if required for navigation, with accurate ‘+’ expansion icons.
- Provides a number of features to make navigation efficient (in terms of both human user effort and machine resources), even when working with very large SharePoint document stores.
- Enables drag and drop and right-click access to a range of file management functionality, including uploading, opening, renaming, deleting, setting permissions, viewing version history, etc



WISDOM Explorer provides an intuitive tree-view experience for viewing and managing files in SharePoint.

The objective of the WISDOM DMF add-on is to make viewing and navigating a SharePoint document store as easy and familiar as using Windows Explorer for viewing and navigating a File Share.

## 6. Working with Large Document Libraries

*“Is there really a limit of 2,000 files in a SharePoint document library?”*

A source of frustration for organisations new to SharePoint is uncertainty associated with the capacity and performance of document libraries. Do we need to avoid having more than 2,000 files in a document library? Can you have more documents in a library if you use more folders? Why can't we have one big library for storing all our documents?

Some of the confusion stems from guidance provided by Microsoft that individual folders or views in SharePoint lists should not contain more than 2,000 items. This guidance applies to the built-in web parts and views – the performance of the out-of-the-box SharePoint UI does start to degrade when individual folders or views contain more than 2,000 items.

Microsoft states explicitly<sup>1</sup> that the maximum number of supported items in a list is 5 million. In other words a Document Library can contain way more than 2,000 files. Having heard the good news some organisations then consider going to the other extreme, which is to have a small number of really BIG libraries. This is a typical arrangement in traditional DM systems such as Interwoven or Hummingbird, so perhaps is not surprising when organisations look to do something similar in SharePoint.

If you are looking to work with large document libraries, you should consider deploying a custom user interface for viewing and navigating the SharePoint document store.

One option is to develop a custom UI in house, with your own query logic using the CAML syntax in the SharePoint Object Model and surfacing the results in a custom web part, application page, or other presentation-layer object. Such development is a complex, expensive undertaking. You need to be aware that some of the standard Microsoft-supplied web service methods are quite general purpose in nature and so tend to do a lot of processing and return large amounts of XML.

For most organisations a far preferable approach is to buy a third party add-on for SharePoint DM, which provides an intuitive UI and which handles large SharePoint document libraries and site trees efficiently. Some of the commercially available add-ons for SharePoint DM work well with smaller document libraries and site trees (such as you might have when you are first starting out with SharePoint as a DM platform) but are very frustrating when the document store grows large (as it tends to do in almost all organisations).

MacroView's **WISDOM DMF** is a SharePoint DM add-on that has been specifically **designed to be efficient** (in both human user effort and machine resources) when viewing and navigating **large SharePoint document stores**. WISDOM Message (the subset of WISDOM DMF that runs in Microsoft Outlook) is relevant if your requirement is just to manage email messages in SharePoint. WISDOM has been shown to perform well with document libraries that contain:

- large numbers of files
- large number of Folders, including deeply nested folder structures
- 30+ Content Types

WISDOM also works well with Document Stores that span multiple web applications and contain large numbers of Site Collections and / or deeply nested Site / sub-Site structures.

---

<sup>1</sup> <http://blogs.msdn.com/sharepoint/archive/2007/07/25/scaling-large-lists.aspx>

## 7. Moving Files in SharePoint

*“When you move a file from one document library to another you lose both metadata and version history.”*

If you are using out-of-the-box Microsoft SharePoint you can move and copy files from one document library to another by cutting and pasting in the Explorer View or by opening in Windows Explorer. Unfortunately this does not preserve any Version History on the files and neither does it prompt for any meta-data required in the destination library. Users are frustrated by the loss of this metadata and version history information, and by the resulting decrease in search-ability and restorability.

WISDOM Explorer from MacroView does a great job on moving and copying files around in SharePoint. WISDOM Explorer is part of the MacroView WISDOM Document Management Framework (WISDOM DMF). WISDOM Explorer displays an intuitive tree-view of your SharePoint environment so that you can visualise all the document libraries that you have permission to access. WISDOM Explorer lets you **drag-and-drop to move (or copy)** files from one document library to another. As it does the move or copy WISDOM can **re-use any meta-data** that it already recorded for the file(s) and will prompt for any new meta-data columns that are defined in the destination document library. WISDOM supports all the meta-data column types that are available in SharePoint, including Business Data columns (if you have the MOSS Enterprise CAL).

WISDOM will also **preserve any Version History** that is available on the file(s) that you move between document libraries (provided of course that Version History is configured for the destination library).

## 8. Document Level Security

*“As a Contributor-level user I can save and edit files but I cannot set document-level permissions.”*

SharePoint 2007 supports document-level security, but only for users with Design or Administrator roles. In a typical SharePoint document management deployment most users needing to save and edit documents will be assigned Contributor role. Contributor level users are frustrated that they need to ask a ‘power user’ to set document-level permissions for a document, even though they have saved and edit the document themselves.

**WISDOM Enhanced Document Level Security** is a server-based add-on from MacroView that allows Contributor level users to set document level security easily. As the document is saved the user simply checks a Secure Document metadata column, which triggers WISDOM to set permissions so that only the current user and a nominated Author have any rights to the document. This is a very convenient option for a Secretary or Assistant who is saving a sensitive document on behalf of a Manager or Executive.

The screenshot shows the WISDOM DMF dialog box with the following information:

- URL:** http://dmfprouat/Clients/1003/10415/Top10FrustrationsSharePointDM.doc
- Library:** 10415 - OHS Claims
- Title:** WISDOMDMFv6.5NewFeatures

**File Details**

Name	Value
FIRST CREATED	7/05/2009 9:40:00 AM
ORIGINAL CREATED	7/05/2009 9:40:00 AM
ORIGINAL AUTHOR	MacroView Business Technology

**Author:** MACROVIEW\james

**Secure Document:**

\* indicates a required field

Buttons: OK, Cancel

By simply checking 'Secure Document', a Contributor can set document-level permissions

## 9. Unique Document Numbering

*“SharePoint assigns a unique number to each file, but only within each document library.”*

‘Traditional’ Document Management systems (e.g. from Autonomy / Interwoven or Open Text / Hummingbird) assign a unique ID to each file as it is saved or uploaded. They also arrange for the Unique ID to be visible in the footers of Office documents that are opened from the document store. SharePoint does assign an ID number to each file as it is saved, but those IDs are only unique within a document library.

Organisations that are considering the use of SharePoint as an alternative to a traditional DM are frustrated by this lack of full document numbering support. Their users rely on the unique document number as a key means for retrieving documents, email messages and other files.

**WISDOM Unique Document Numbering** from MacroView provides full-function unique document numbering for SharePoint-based document stores. WISDOM assigns the next available document ID to each file that is saved or uploaded to any document library in a nominated Site Collection or Web Application. The unique Document ID is available as a custom Document Property in Word, Excel and PowerPoint documents that are opened from SharePoint. MacroView also supplies a Word customisation that automatically adds the relevant Footer to display the unique Document ID.

Unique document IDs are preserved as documents are moved from one document library to another (even a library on another Site Collection or web application) by using WISDOM DMF (see “Moving Files in SharePoint” above).

## 10. Searching for Documents Based on their Metadata

*“The Advanced Search page in SharePoint does not make it easy to search for documents based on their metadata.”*

Support for additional metadata about stored files is one of the strengths of SharePoint as a document management platform. Users respond to prompts for this additional metadata as files are saved, uploaded or edited. The payoff for this extra effort as save / upload time is that there will be more flexibility when it comes time to retrieve the files. Specifically you can search for files in SharePoint on the basis of their metadata.

The frustrating thing is that the out-of-the-box search UI that comes with MOSS is not as functional or user-friendly as users expect. Shortcomings of the MOSS Advanced Search UI include:

- You need to pick Managed Properties from a drop down list, rather than use specific controls for each Property on the Search page.
- You need to key enter the value of search criteria, rather than select one or more valid values.
- Limited support for Boolean and none for wild cards in search criteria.
- No support for saving of searches so that you can easily re-run them at a later date.

You could develop your own custom search UI to the MOSS Search Engine. But a more cost effective approach is to use an add-on such as **WISDOM Enterprise Search** from MacroView, which provides intuitive some attractive search UIs out-of-the-box (such as an Email Message search) and also allows you to define and maintain your own custom interfaces to the MOSS Search Engine. The WISDOM search interfaces support Boolean operators and wild cards in search criteria and also allows you to save and re-run your searches.

■

### For more information about WISDOM solutions, contact:



MacroView  
Business Technology P/L  
ACN 081 117 777  
ABN 29 081 117 777

Level 12,  
171 Clarence Street  
Sydney NSW 2000  
Australia

Correspondence:  
GPO Box 5149  
Sydney NSW 2001  
Australia

T: +61 2 9249 2700  
F: +61 2 9279 4111  
E: sales@macroview.com.au  
www.macroviewwisdom.com

