

# KnowledgeLake Connect 2010

Microsoft SharePoint Desktop  
Integration for any Application

KnowledgeLake, Inc.

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## Introduction & Executive Summary

Microsoft SharePoint products and technologies have emerged as a successful new generation of Enterprise Content Management (ECM) software. This whitepaper is aimed at organizations that have implemented SharePoint and are interested in creating even more information worker productivity through the use of creative technology.

Today SharePoint is successful due to its low cost, extensive capabilities, and tight integration with Microsoft Office. Electronic document management capabilities are at the core of SharePoint and are the primary, critical component of any successful ECM solution. This whitepaper will discuss the challenges with deploying production electronic document management, and how KnowledgeLake Connect significantly enhances SharePoint's native ability to acquire and manage electronic content.

KnowledgeLake Connect is built around core SharePoint API's. This paper uses the term "SharePoint" as a broad definition for various forms of the same technology that KnowledgeLake Connect supports. KnowledgeLake Connect currently supports the following Microsoft products:

- Microsoft Windows SharePoint Services 2003 (WSS 2.0)
- Microsoft Windows SharePoint Portal Server 2003 (SPS)
- Microsoft Windows SharePoint Services 2007 (WSS 3.0)
- Microsoft Office SharePoint Server 2007 (MOSS 2007)
- Microsoft SharePoint Foundation 2010 (MSF 2010)
- Microsoft SharePoint Server 2010 (MSS 2010)
- Microsoft SharePoint Online

Finally, this paper will unveil an easy solution from KnowledgeLake and Fujitsu that enables users to enjoy many of the benefits of KnowledgeLake Connect that are bundled with Fujitsu scanners.

## The Eternal Struggle of Electronic Document Management

Electronic Document Management (EDM) has been a lofty, but mostly unattainable goal of every organization since the original creation of the word processor. Why has it been unattainable? Frankly put, it is just too much trouble. Users find it quick and easy to randomly save documents to their local hard drive even when EDM software is at their fingertips. The promise of being able to easily locate documents through a search interface or access documents via the web browser, typically does not outweigh the daily pain of having to manually import documents and painstakingly add metadata properties. This labor is what would eventually produce the benefits that all users' desire and some organizations require.

Today, SharePoint users who have Microsoft Office 2007 and 2010 enjoy robust integration and access to the document metadata via the ribbon bar. These users also appreciate that Microsoft Office 2007/2010 connects to SharePoint via web technology and allows them to save their documents directly to SharePoint much like saving to the local hard drive. This integration works the same whether the user is attached to the SharePoint server locally or remotely via the Internet. In contrast, users who create document content using non-Microsoft Office applications are required to complete the following steps, manually, to save a document into SharePoint:

1. Save the document locally
2. Open the browser
3. Navigate to the proper SharePoint site
4. Provide login credentials
5. Choose the proper document library and folder
6. Upload the document which requires navigating back to the document in the file system
7. Edit the document properties to apply the proper indexing information

These challenges, however, are not unique to SharePoint. All other ECM systems struggle with the same set of issues. The others use complex macro integrations which must be managed on each user's desktop. These macros must be created and managed not only for each application, but for each version of each application.

Simply put, the struggle is to provide tight integration to all of the user's desktop applications directly to the ECM system. Furthermore, to provide stable, low maintenance desktop integration to any application without complex macros or custom programming.

Enter KnowledgeLake Connect...

## Value Proposition

KnowledgeLake Connect enables any desktop application to integrate tightly with SharePoint. This tight integration provides organizations the following benefits:

- Creating additional information worker productivity

- Allowing users to easily add metadata insures that all content will be easier to find later – no lost documents
- Ease of use helps mitigate business and legal risk by insuring that documents are stored in a central and secure location

The following list of features and benefits create the overall value proposition of KnowledgeLake Connect:

### **Saving Documents**

KnowledgeLake Connect enables any desktop application to save documents directly to SharePoint. Specifically, any application that can save a file to the file system, can save directly to any SharePoint document library, folder, or document set, with the user prompted for any required metadata configured in SharePoint. This allows any application to function much like Microsoft Word 2007 or 2010, to be tightly integrated with Microsoft SharePoint. KnowledgeLake Connect does this by creating a "hot folder" called "My Connect Cache" in the user folder. Any file saved to this folder initiates the Save process in KnowledgeLake Connect. We have found this extremely beneficial for adding document imaging functionality to SharePoint.

### **Editing Documents**

KnowledgeLake Connect enables the user to save documents back to SharePoint seamlessly after opening. This seems obvious, but a (non-Office) file opened from SharePoint is downloaded to the user's local hard drive in the "Temporary Internet Files" folder. Once a user has changed the document, they must manually save that document back to SharePoint which requires multiple steps. KnowledgeLake Connect eliminates that requirement by monitoring the "Temporary Internet Files" folder and automatically saving changed documents back to SharePoint. This can be configured by file type. Most common file types are .PDF, .TIF, .DWG, etc. This functionality is somewhat dependent on the application; however we have found that almost all applications function this way.

### **Microsoft Office Integration**

When using Microsoft Word, Excel, or PowerPoint, users can quickly index and upload the current document directly to a specific SharePoint location through the KnowledgeLake tab contained in the Microsoft Office 2007/2010 Ribbon Bar. Within Microsoft Outlook, users also have the ability to leverage the KnowledgeLake tab to index and upload email messages, email attachments, or both.

### **Send To**

Connect provides a Windows "Send To" function for easy SharePoint integration, providing a single sign-on across predefined sites that prompt the user for document metadata.

### **Browse To**

With KnowledgeLake Connect, the user can easily navigate to a specific site, document library, folder, or document set by right-clicking on the tree in KnowledgeLake Connect and choosing "Browse To". This

function creates tremendous productivity by putting all of the user's needed sites, libraries, document sets, or folders directly at their fingertips.

### **Line of Business Integration**

KnowledgeLake Connect provides integration to many line-of-business applications, including Microsoft Dynamics and other third-party applications. This integration can be set up without a single line of code, via a simple point-and-shoot interface. Scan, search and retrieve integration is just a click away using a shortcut key, an image button or a text button. With KnowledgeLake Connect, the end user can take advantage of these features for line of business integration:

- Associate metadata from third party applications
- Scan integration provides the ability to scan content directly from a third party application
- Screen Capture takes a snapshot of a portion of a screen
- File Import enables selection of any file to import
- Search integration provides the ability to search either a SharePoint site or a document library directly from a third party application. The search values can even be derived from a third party application.
- Ability to customize and create your own integrations, extracting and inserting data to and from virtually any application.

### **Extend SharePoint for Enterprise Document Imaging**

KnowledgeLake provides solutions that will extend SharePoint into a robust ECM platform for Document Imaging. For many organizations, KnowledgeLake Connect is just one piece of the ECM solution. KnowledgeLake provides an affordable, platform based solution for managing your company's unstructured content right within SharePoint. KnowledgeLake is an enterprise scalable and comprehensive SharePoint ECM solution for scanning, searching and viewing, securing, routing and annotating your company's mission critical paper and electronic content.

### **How KnowledgeLake Connect Works**

KnowledgeLake architects and engineers were challenged to develop a solution for a very difficult problem – seamlessly integrating ANY application with Microsoft SharePoint. Oddly enough, the solution was the file system. While many applications have the ability to be customized using macros, scripting languages, custom API's, etc., all of them have one single thing in common: the ability to save a file.

Upon installation, KnowledgeLake Connect creates a folder in the user's Documents folder called "My Connect Cache". While running, KnowledgeLake Connect will continuously monitor this folder for files to arrive. As an application saves a file to "My Connect Cache", KnowledgeLake Connect wakes up and prompts the user to select a site and content type and apply indexing metadata.

When launching a file from SharePoint, it is automatically downloaded to the “Temporary Internet Files” folder on the user’s local hard drive. Again, KnowledgeLake Connect continually watches this folder for changes. When a file is saved, KnowledgeLake Connect transfers the document changes back to SharePoint without any user intervention. This creates the same seamless functionality provided by Microsoft Office 2007/2010, for any desktop application.

After understanding the fundamental underpinnings of how KnowledgeLake Connect works, it is easy to comprehend how some of the ancillary features operate. For example, the button added to Outlook 2007/2010 simply saves the highlighted email file (.MSG) to the “My Connect Cache” folder. Connect takes over from there. The “Send To” integration functions the same way.

KnowledgeLake Connect communicates with SharePoint using the same Remote Procedure Calls (RPC) as Microsoft Office 2007/2010. KnowledgeLake Connect (like Office 2007/2010) works seamlessly with SharePoint whether local or over the public Internet. KnowledgeLake released version 1 of Connect in July 2005 after a rigorous design and beta-testing program. Now five years later, Connect is in its fourth released version and benefits thousands of customers worldwide in home offices, small businesses and in many Fortune 1000 enterprises.

## **Fujitsu “Scan to Microsoft SharePoint”**

### **Overview**

KnowledgeLake is partially owned by PFU Limited (a Fujitsu subsidiary) and has an exceptionally close working relationship with Fujitsu and its many subsidiary companies. In 2007, KnowledgeLake entered into an OEM agreement with PFU Limited so that they could distribute a “lite” version of KnowledgeLake Connect with all Fujitsu scanner products. This “lite” version is named “Scan to Microsoft SharePoint” and was developed on the same code base as KnowledgeLake Connect; therefore providing the same user experience. It can also be easily upgraded to the full version.

### **Scan to Microsoft SharePoint Features**

Scan to Microsoft SharePoint is purely focused on being a “SharePoint on-ramp” for Fujitsu scanner products. All Fujitsu scanners are bundled with full SharePoint integration right in the box. With Scan to Microsoft SharePoint, users are given many of the benefits of KnowledgeLake Connect. However the following functionality is only available in the full version of Connect:

- **Editing Documents** – The “automatic” update of saved documents opened from SharePoint. Scan to Microsoft SharePoint is solely focused on “on-ramping” content to SharePoint.
- **Microsoft Office Integration** – Microsoft Office integration for saving email to SharePoint.
- **File Types** – Save any file type to SharePoint. Scan to Microsoft SharePoint only supports PDF, TIF and JPG files.

## Conclusion

Microsoft has created a truly world-class ECM platform with SharePoint. It is well documented that Microsoft greatly relies on Independent Software Vendors (ISV's) such as KnowledgeLake to fill the gaps left in their platform technologies to create solutions to business problems. KnowledgeLake has years of experience in creating ECM solutions for organizations large and small. KnowledgeLake Connect is just one example of a creative and innovative application designed to greatly enhance information worker productivity by allowing any desktop application to directly integrate with SharePoint. Connect is in many ways just like SharePoint... solid, cost effective technology designed to change the world for the common user.

We hope you will join the discussion at [twitter](#), [facebook](#), and [LinkedIn](#).

For more information about SharePoint and KnowledgeLake, visit [www.knowledgelake.com](http://www.knowledgelake.com) or call 888.898.0555.

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