## Integrated Search Strategies for the **Modern Law Firm**

Abstract: This article by Rob Martin addresses the issue of effectively managing the searching of enterprise information systems in law firms. It discusses the relative merits of federated, enterprise and integrated search and includes a case study of the combined solution adopted by City law firm, Ashurst.

Keywords: enterprise information management; integrated search; federated search; enterprise search; law firms

#### Introduction

The explosion in the availability of online information, combined with the need to seamlessly access content across all internal resources, has left many firms struggling to deliver a fully integrated search solution. The resultant frustration of fee earners is evident, especially when they are presented with an expanding array of resources each with their own unique approach to access and searching.

In my many years experience of delivering search solutions to corporate law firms, working with fee earners in particular, I often hear the demand for a 'Google-like' search facility that delivers the right results from the right resources at the right time. This may sound simple, but the reality is far from it. Google and similar products rely on large scale content capture and indexing, a fact that many end users fail to appreciate; they simply want the information at their fingertips.

Many information management and IT departments are now re-evaluating their search strategies and in doing this they are actively looking at both enterprise and Federated search solutions. This article outlines why an effective and integrated search strategy is needed and explores the two often competing, but as I will show are in fact complementary, approaches to delivering the right solution.

## The need for an effective search strategy

Ineffective search strategies can have a serious impact on the efficiency and competitiveness of your firm. Consider the October 2006 report from the Butler Group (http:// www.butlergroup.com/) entitled Enterprise Search and Retrieval. This concluded that "ineffective search and

discovery strategies are hampering business competitiveness, impairing service delivery and putting companies at risk." Specifically, the research firm contends that as much as 10% of a company's salary costs is "frittered away," as employees scramble to find adequate and accurate information to fulfil their roles and complete assigned tasks.

For law firms the reality can be worse than this report highlights, as information and knowledge is the bedrock of all law firms. Consider the following within your own firm:

- 1. How long does it take fee earners to find information when they don't know where to start looking? The content they require may be in the document management system, the know how database, the library system or within an online subscription resource. It may even be available in multiple formats in multiple
- When fee earners do know where to look, how much time is spent by them and support staff searching the relevant databases and asking questions of others that may have been answered already?
- What happens after the required information is located? It may be printed and filed, a link added to a favourites list on a web browser or an email sent to a colleague with the details. Finding the same information in the future can pose problems and waste
- 4. Finally, how much time is spent by technical, information support and PSLs managing content and organising it so that it is easy to find?

Given the facts, the huge content volumes and the pressures surrounding effective information management and searching, I firmly believe that no organisation, and specifically no law firm can (or should attempt to) capture, organise and index all of the material that they need and use on a day to day basis. In a recent article for

this journal, (7(3) p156) Adrian Dale quoted some interesting statistics as follows:

"We are now creating more digital information than we can store"

Source: EMC Executive VP Mark Lewis

"161 billion gigabytes of digital content created in 2006, 231 gigabytes for every person in the USA today"

Source: USA Today - March 2007

The specifics in terms of content volumes for your firm will be unique, but rest assured the volume and complexity of the information is growing at a rapid rate year on year.

## **Enterprise vs. Federated Search**

Before you can really understand what is meant by an integrated search strategy it is best to review what is meant by the terms Enterprise and Federated search.

Enterprise Search is the practice of identifying and enabling specific content across the enterprise to be indexed, searched, and displayed to authorised users.

Source: Wikipedia

Traditionally, the business objective of providing users with one stop search has been approached as a content consolidation exercise. Firms purchase and deploy an enterprise search vendor's software and implement a number of distinct information feeds into the one consolidated index. Examples of such feeds include file-system and web-site spidering (crawling and indexing), e-mail public folder indexing, relational database indexing, document management system integrations and much more. This approach brings a high cost of ownership and deployment/management and, whilst providing a partial one stop search capability, it brings with it certain issues that include latency of information (the index is only as current as the last indexing crawl) and major network and infrastructure expenditure.

The impact of implementing such an enterprise level solution includes the need for application upgrades and/or complete replacement, changes to existing working practices and the management of major infrastructure process changes, including high availability and disaster recovery of the proprietary index. For these reasons major corporate content consolidation projects take many man-months and in many cases years to implement. When completed, this type of solution is never 100% comprehensive, as not all content you access can be captured and indexed in this way.

Where enterprise search solutions are implemented correctly they can have significant benefits for the organisation. However, one myth relating to enterprise search is that the content that exists in your many disparate systems cannot be effectively searched unless it is re-indexed by the new and often expensive enterprise search software. This is not always the case and a careful review of all internal systems and their existing content indexes is recommended prior to deployment of any enterprise search software.

Federated Search is the <u>simultaneous search</u> of <u>multiple</u> online <u>databases</u> ... It is also often referred to as a <u>portal</u>, as opposed to simply a Web-based search engine.

Source: Wikipedia

Federated search solutions actively seek to solve the business requirement for *one stop search* by configuring a range of connectors to the required content, including internal databases, intranets and online services. By doing this the software can provide a single search capability to multiple content resources quickly, provided the content to be searched is indexed within the native systems. Both the cost of the initial ownership and the ongoing maintenance are relatively low, and require few changes in working practice and only small infrastructure investments. Couple this with the advantage of real-time search and no index latency and you have a potential winning solution to the one stop search requirement.

Federated search has often been described, by some IT directors in particular, as an inferior approach to solving the problems associated with delivering integrated search solutions. This is not a true reflection of what the technology is attempting to deliver. Federated search is quite different to the traditional approach that revolves around document capture and indexing. It is, in my view, an approach that complements and builds upon your existing investments in document management, enterprise search and online subscription services.

## The landscape

All law firms maintain and use different systems for different purposes and this is not going to change anytime soon. Each system is designed with a specific objective in mind and, in many cases, these systems are not effectively linked together and they can be perceived as being complex or difficult to operate for the occasional user.

A not atypical law firm might have the following systems accessed by fee earners on a daily basis:

Internal:

Library, document management, know how, intranet, PMS, CRM, file systems, email etc

Online:

Subscription services such as LexisNexis, Sweet & Maxwell, Justis, PLC, Informa etc Free legal, government and regulatory services such as the FSA, the DTI, Companies House, Inland Revenue, BAILII etc

News & current awarness services, such as The FT, The BBC, Google News etc

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In some cases the different online resources that are used are competing head-to-head with competitor products in their own market. Each new release of these services adds functionality, increases content volumes and, in some cases, increases complexity for the user. Keeping pace with the changing interfaces and the different approaches is becoming more and more difficult and, however good or poor an interface, when users get used to it any change is considered to be a disruption and one that is not always appreciated.

The new breed of lawyer is much more technically aware, but for many the choice of what to use and when to use it can be daunting. The result is that they fall back on their preferred resources or, in some cases, resort to searching online with services such as Google. The results of this approach can be inconsistent at best and extremely costly for the firm at worst.

## **Considering Enterprise Search?**

When considering an approach that relies upon content from different systems, internal and online, being captured and re-indexed it is vital to consider the following:

#### I. The content that is to be indexed

- Do you produce, own and manage the content that is to be indexed?
- Is the content dynamic and changing on an hourly, daily, weekly or other basis?
- Is the content secured within the existing systems and will this security be fully honoured/supported by the selected indexing technology?
- What data volumes are involved and what can be supported, 100s of MB's, 100s of GB's or more?
- Will users get different results from the new enterprise search index compared to searching the content directly using the existing native interface? Is this satisfactory for your organisation?
- Are agreements in place to index external content, specifically if subscription content is to be considered?
  What do these agreements cost the firm?

#### 2. The infrastructure required

- How many servers will be required to support the indexes that you plan to create?
- Who will define, create and manage the indexes that you require?
- How will the indexes be backed up and restored? Will this affect your current backup/restore policies?

- What happens when the online service, internal database or content being indexed is restructured, moved or altered in any way?
- What is the cost to the firm in the event the indexes are inaccessible for a period of time, or if they are simply out of step with the live content?
- What additional bandwidth is required to support indexing and how regularly are indexes refreshed and updated?

Before embarking on an approach that requires content to be re-indexed, it is sensible to carefully consider the content in question and review whether the existing indexes can be used. If these indexes are not fit for purpose, you need to question why and discover if future product/service upgrades will resolve the issues for you.

Where a resource, subscription service or even a website has an existing index, it is generally best to ensure that you maximise the value of what is in place before deciding to re-index. If you subscribe to content, ensure you maximise the value of your subscription and discuss how to improve the service with the content provider before embarking on an approach that requires you to start taking ownership of the index.

## **Considering Federated Search?**

Federated search technologies are designed to sit above existing applications, databases, content indexes and web services. They support the searching of the existing indexes held within these disparate systems and return results that are consistent with those returned when searching the different systems directly. Where you have decided to re-index content from systems or websites that do not provide a useful or usable index, a federated search solution can integrate searching of this additional index with those resources that are already searchable.

When deploying a federated search solution careful consideration needs to be given to the following:

#### I. The content that is to be searched

- What content is to be searched and are there different requirements for the different work groups, practice areas or jurisdictions that you operate in?
- Is there an effective search interface and index available?
- Is the content secured within the existing systems and can the federated search tool search the system as a named user?
- Can the software be configured to target searches to specific sub-sections of content and can searches be further targeted to specific fields within the individual content resources?

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- Does the supplier of the software have established relationships with the primary resources that you will need access to?
- What will be the full cost of deployment, infrastructure, software, consultancy and other fees?

#### 2. Infrastructure

Infrastructure is less of an issue for a federated search solution as the technology is typically deployed on a single server with no requirement to create and manage indexes.

From experience of having implemented both enterprise and federated search solutions, I have come to the conclusion that in most cases a hybrid approach is what is required.

Content that you produce, control and manage needs to be indexed effectively and, where this is not possible or achievable in your existing systems, additional third party indexing technology needs to be considered. For content that you do not produce, control or manage, a federated search approach is recommended to minimise risk, maximise existing investments and deliver the solution quickly and cost effectively. The result, when done well, is an effective integrated search strategy for the firm.

## **An Integrated Search Strategy**

In delivering a truly Integrated Search solution you need to focus primarily on the business requirements and what fee earners need, as opposed to technology and what specific features one supplier offers over another.

Integrated Search is the practice of providing specific and targeted searching across all resources. It ensures that users know what they are searching and get the results they need and expect in a consistent and easy to use format.

Source: Wikipedia

Before you can start the process of designing and implementing an integrated search solution it is important that you consider the following:

- Define the key information resources for each work group/practice area/office/ jurisdiction within your firm
- Organise resources into different groupings/ collections as appropriate to the needs of each group
- Prioritise resources within the different groupings such that the higher value resources are accessible first
- Simplify the search interface such that it can simultaneously search all necessary resources with

- minimal effort, returning results in the same order as the native resource where appropriate and possible
- Maximise reuse of content and previous searches through effective personalisation, such as saved searches and content bookmarks and collections that can be shared across the firm.

Having considered these points, you are now ready to decide what technologies are required and how they should be deployed.

## Case study

Ashurst, with a team of over 190 partners in 12 countries, is an example of a firm that has taken the bull by the horns when it comes to delivering integrated search across the firm. The solution that they have developed evolves around various collections/databases of internally managed content/know how. These resources are searched as a single entity, but the results are presented segmented by document type and office. From the results page of the internally managed resources, the ability to extend the search to incorporate specific online legal resources is provided. In the case of Ashurst the online resources are organised by type, i.e. Legislation, Case Law and Commentary. An example of the web browser interface that is presented to fee earners is shown in Figure 1.

In the above approach it is easy to see how materials from internal know how repositories are returned, grouped by type (shown on the left) and by office (individual tabs). The bottom left of the results page enables the search to be broadened to include all required online Legislation (searching by title), Case Law (searching by party name) and Commentary resources. The result is a solution that puts the fee earners in control of what they search and how they search. An example of the results from a set of external resources, including LexisNexis and CLI, is shown in Figure 2.

At Ashurst the internal content is captured, organised and indexed using systems appropriate to this task and selected by the firm. The external search capability uses a federated approach built upon the Solcara SolSearch (http://www.solcara.com/solcara\_products\_ Solsearch.htm) product, and the complete solution is an integral part of the firms intranet.

#### What does the future hold?

Content volumes will continue to expand, internal and online systems will become more sophisticated and further mergers between firms will result in a broader array of internal and online systems. Given this situation, new thinking will be required on how to deliver effective and integrated search solutions.

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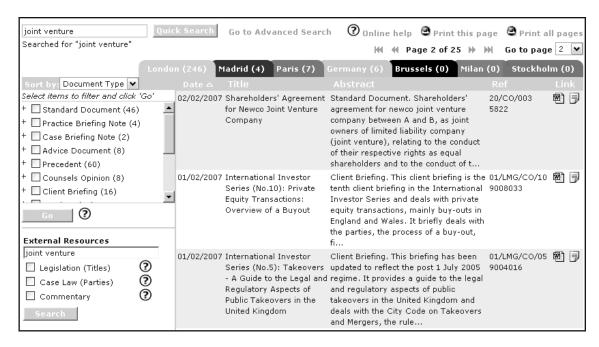


Figure 1: Internal Know How Results

The semantic web (http://en.wikipedia.org/wiki/ Semantic\_Web) is evolving to deliver an approach that will be adopted by more and more organisations. It aims to add meaning to content such that it can be exposed to different products. The result is the ability for content to be discovered without the need for the user to understand the underlying technologies or even specify where they wish to search. Exploiting the potential of the semantic web and applying the same approach to all internal and online information systems will in the near future deliver significant additional benefits to those organisations that embrace it.

A new generation of federated search technologies are also emerging and future knowledge management and search strategies are being reviewed as part of the EU funded X-Media project (http://www.x-media-project.org/).

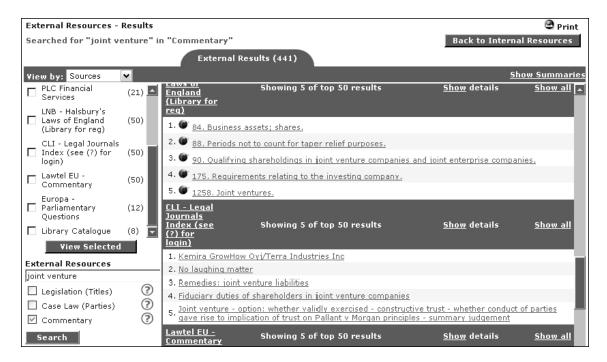


Figure 2: External resources results

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The outcome will be to make it possible to publish in a semantically reusable way the context of a firm's internal content along with the content itself. For example, each document in your document management system could be described in a format to make it available to services able to share and exploit semantic content. End users

will no longer need to know where to search and instead simply concentrate on what to search. After all, end users care little about the technology being used to support an effective search strategy, they simply want to ensure that they find what they need from a trusted resource when they need it.

## **Biography**

Rob Martin is a founding Director of Solcara Ltd (http://www.solcara.com), a firm that specialises in designing, delivering and supporting innovative information management and search solutions. His role involves a high level of consultation with law firms and other information centric businesses, helping them to select and deploy the right search and know how solutions. He is an advocate for maximising the value of all existing investments, both systems and content and he advises firms on how to make the most out of what they have before they start to re-invent the wheel.

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# What's the Point? Next-Generation Legal Information Systems and Microsoft Sharepoint: Contender or Pretender?

**Abstract:** In this article Chris Wallis examines some of the recent and impending developments in technology for managing legal information - in all its various guises. He looks in some detail at the facilities offered by Microsoft Sharepoint and tries to identify its USPs.

**Keywords:** enterprise information management; law firms; software

#### Introduction

Why, oh why, you may ask, is information management becoming more difficult? The answer is obvious and is sitting right on your desk. Or on your lap. Or in your hand. Or all three. It's technology, of course - an array of infernal gadgets and semi-silent partners that we rely on to ease our passage through life, but which seem to succeed in



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doing precisely the opposite. Victims of our own success? You bet we are.

Our information landscape is becoming vastly more complex, due both to huge increases in the volume of accessible data and in the number of systems and tools at our disposal, and to the explosion of ad hoc communication and information dissemination mechanisms. At the same time, our lives are becoming more frenetic and we require near-instantaneous responses to our