

WISDOM SEARCH EXTENSIONS

SEARCHING WISDOM FROM OFFICE, IE, FIREFOX AND WINDOWS 7

INTRODUCTION

Many applications now contain functionality that allows them to search external sources of data. Obvious examples are the Instance Search box in Internet Explorer and the Search bar in Firefox. Some Wisdom customers would like to be able to search Wisdom from third party applications in this way.

REQUIREMENT BREAKDOWN

A user wants to be able to search Wisdom from Microsoft Office, Internet Explorer, Firefox and Windows 7. You can search web based content from :

Office 2003 or later with office research

Internet Explorer 7 or later using the instant search box.

Firefox 2 or later using the search bar.

Windows 7 using Windows search.

EXPENSION AND IMPLEMENTATION

This section expands the basic requirements and describes the implementation.

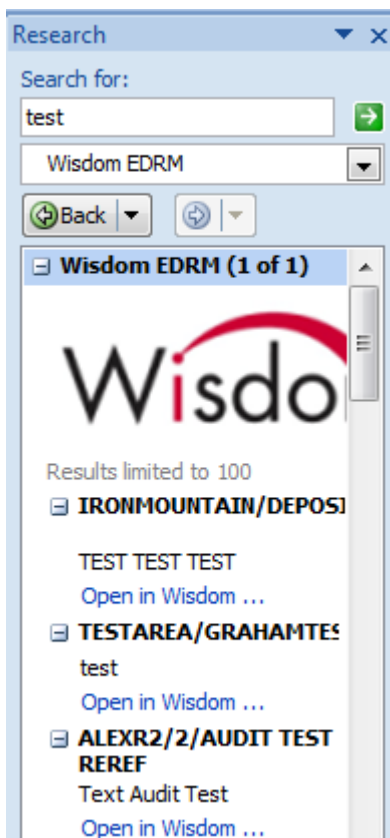
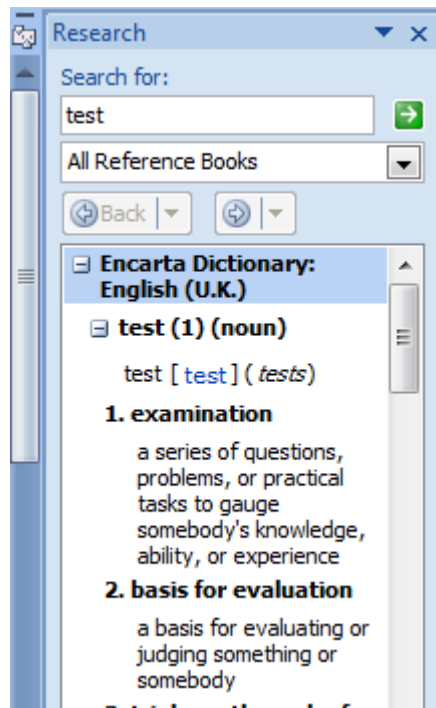
SEARCH FROM OFFICE

The user interface of Office Research is shown on the right. A user enters some text, selects the search provider with the drop down, clicks the green arrow and the results are returned.

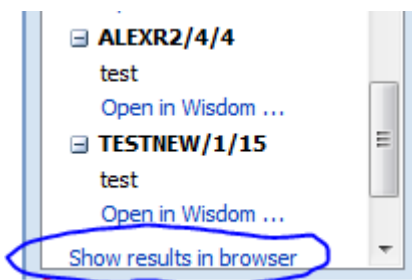
In order to allow Wisdom to be searched from Office using Office Research, Wisdom must provide two web services. One registers the Wisdom search service, and the other responds to search queries. The specification for these web services can be found at [http://msdn.microsoft.com/en-us/library/aa193597\(office.11\).aspx](http://msdn.microsoft.com/en-us/library/aa193597(office.11).aspx).

To register the search provider, you click on **Research Options** (found at the bottom of the research panel) then click **Add Service**. Under the service URL, enter <http://wisdomserver/wisdom/officeresearch/registration.aspx> (replacing "wisdomserver" with the name of your Wisdom web server) and follow the onscreen prompts.

Search results from Wisdom are shown below:

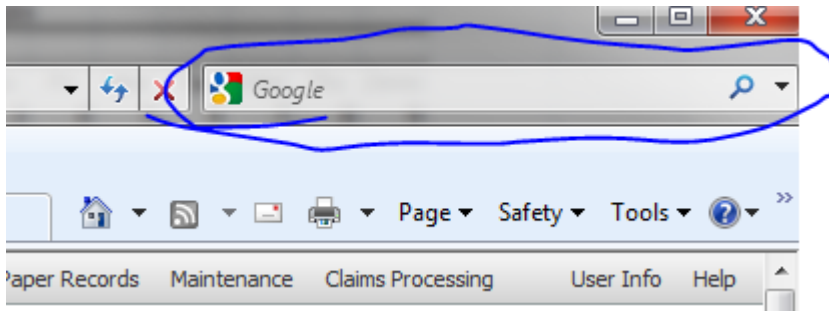


You can follow the links to wisdom or view the search in wisdom. To view the search in wisdom, scroll the above window to the bottom to reveal:



SEARCH FROM INTERNET EXPLORER 7 OR LATER, OR FIREFOX 2 OR LATER

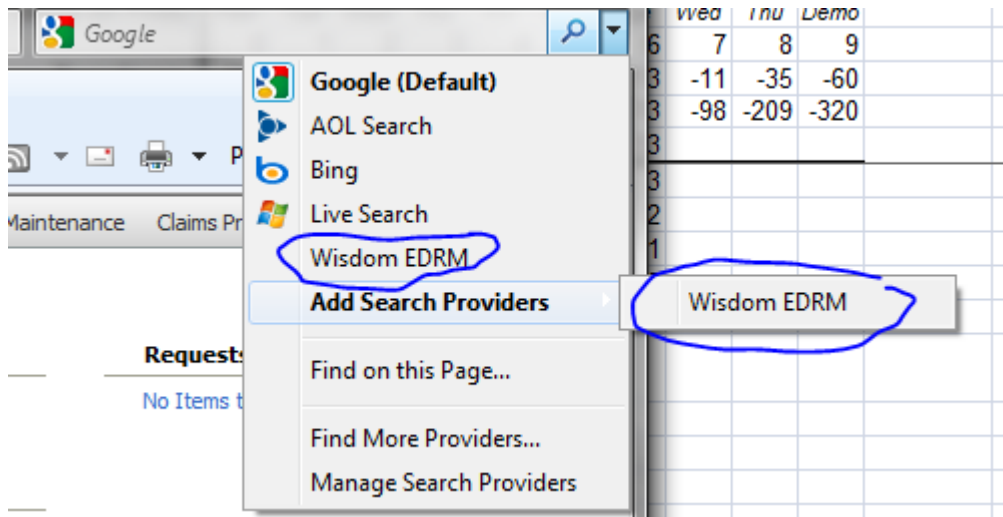
Internet explorer 7 or later has an Instant Search box at the top right of the browser window. Firefox 2 or later has the Search bar in the same position. The screenshot below shows Internet Explorer 8:



If a webpage emits a LINK tag in the HEAD section of the page with the relevant parameters, the browser will give the user the option to add the search provider advertised by the LINK tag. When you visit Wisdom the drop down arrow next to the Instant Search/Search bar will go orange:



Clicking the drop down then gives options to search Wisdom or add Wisdom to the list of search providers :



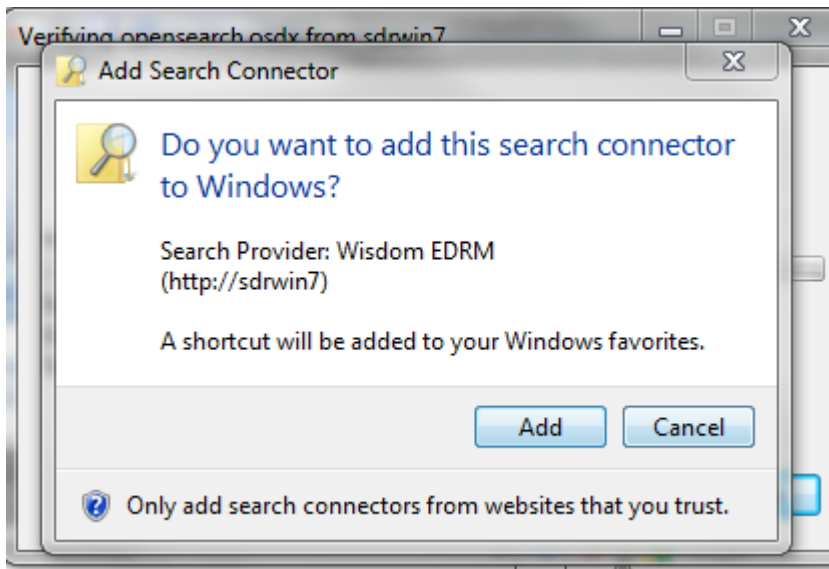
SEARCH FROM EXPLORER (WINDOWS 7)

Wisdom exposes an **open search descriptor**, this can be downloaded and installed into Windows 7. The search descriptor can be downloaded from

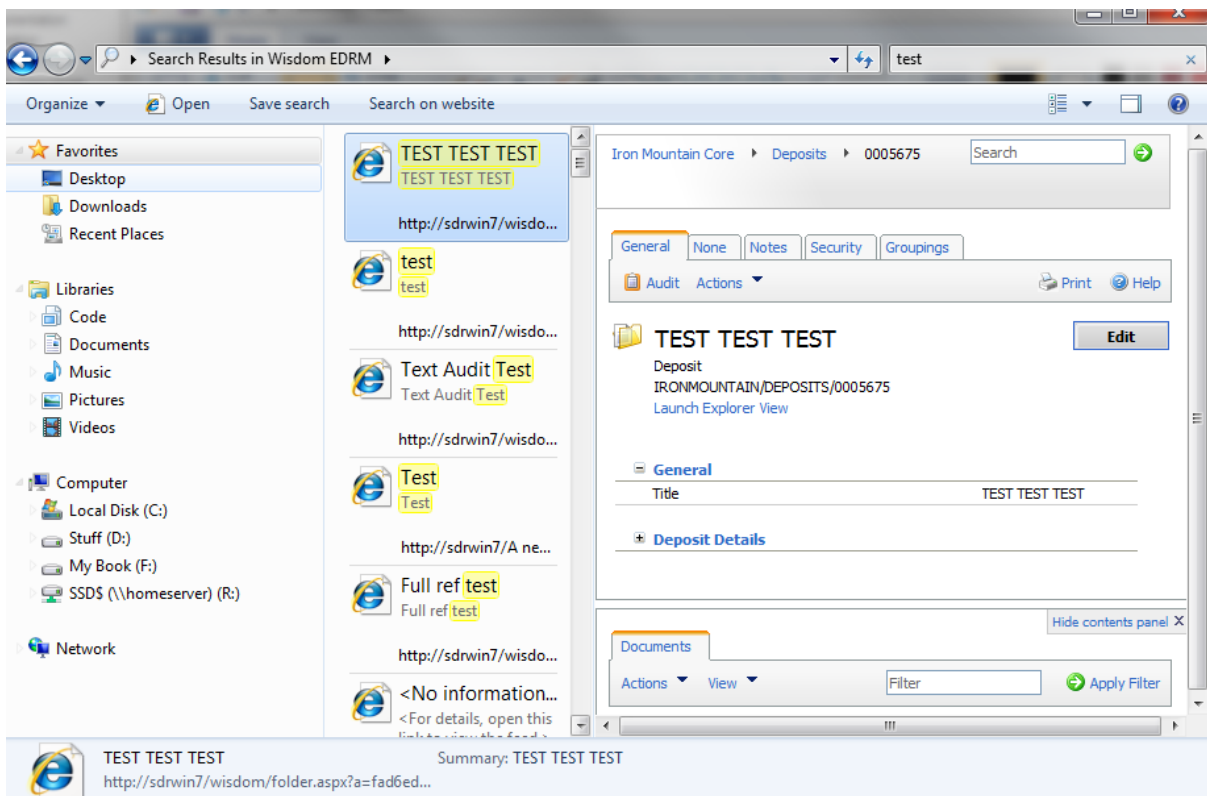
<http://wisdomserver/wisdom/opensearch.osdx>

(replace "wisdomserver" with the name of your Wisdom web server).

downloading this will show the following message :



Once this is installed you can search Wisdom from Windows search



TECHNICAL OVERVIEW

In order to make the installation simple the solution has been implemented with HTTP Handlers. This makes sense for the Open Search service used by browsers and by Windows 7 but Office could have been done with web services. As the Office web services accept one string argument and return one string argument it was decided that a HTTP Handler would be acceptable. The solution makes use of LINQ and the new XElement class for manipulating XML. The documentation around Windows 7 is in beta and subject to change so more may be possible with Windows 7.

The following http handlers have been created

- **Opensearch**
Looks for search term on the querystring "q" argument and returns an RSS feed of the search results.
- **opensearch.osdx**
returns xml that allows a user to add the Wisdom search provider to a browser or to Windows 7.
- **officeresearch/registration.asmx**
web service that returns query services that can be used to search from Office
- **officeresearch/query.asmx**
web services that returns the results for the search.

The code lives under the Web Services area of wisdom in the Federated Search project.