Consuming Search Results from SAP NetWeaver Enterprise Search 7.2 in Microsoft Outlook 2007



Applies to:

SAP NetWeaver Enterprise Search 7.2 Microsoft Outlook 2007 Internet Explorer 8. For more information, visit the <u>Search homepage</u>.

Summary

You can use Microsoft Office Outlook 2007 to track updates to search results and manage notifications from SAP NetWeaver Enterprise Search using OpenSearch.

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Created on: 23 April 2010

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Introduction

In this whitepaper we would like to describe how search results from SAP NetWeaver Enterprise Search 7.2 can be consumed by Microsoft Outlook 2007 using the OpenSearch interface of SAP NetWeaver Enterprise Search 7.2.

As the OpenSearch standard (http://www.opensearch.org/) has evolved and became popular, SAP NetWeaver Enterprise Search provides an interface for its search functionality in accordance with the OpenSearch standard as of Enterprise Search 7.0 SP3.

Since the OpenSearch format is based on RSS 2.0 or ATOM 1.0 the search results can be displayed by any feed reader. This works fine with sources that are public available on the web and that do not require authentication. Access to SAP NetWeaver Enterprise Search however is only possible for users that are providing credentials.

There are known issues that may occur if you try to use Outlook for the consumption of an RSS feed that requires authentication. As described in the Microsoft KB article <u>917125</u> Outlook only supports the consumption of RSS sites that are based on Microsoft Office SharePoint and that are internal to your domain.

Fortunately Windows Integrated Authentication can be leveraged by SAP NetWeaver Enterprise Search as well. In a recent whitepaper we described how SAP NetWeaver Enterprise Search can be configured to support Integrated Windows Authentication especially for its OpenSearch interface.

Using an SAP NetWeaver Enterprise Search installation that is configured as described in the whitepaper mentioned above allows for an out-of-the-box integration into Microsoft Outlook 2007 and Microsoft Office SharePoint 2007.

In our demo we use data of the Enterprise Procurement Model. Enterprise Procurement Model (EPM) is a reference/proxy application which integrates many NW technologies that are used by Business Suite applications. It is based on a common business process model and follows the business object (BO) paradigm to support a well-defined and encapsulated business logic. NW Technologies integrated into EPM that are used in our demo are WebDynpro ABAP and Enterprise Search.

Integration into Microsoft Office Outlook 2007

Step 1: Configuring SAP NetWeaver Enterprise for Single Sign-On

To have this integration scenario work seamlessly for your end-users it is necessary to configure the SAP Enterprise Search server such that is supports Integrated Windows Authentication as described in our recent whitepaper. If no Single Sign-On is configured the user is prompted to provide username and password every time Internet Explorer tries to refresh the feed results.

Step 2: Perform a search in SAP NetWeaver Enterprise Search

We start our sample with performing a search for purchase order documents that contain a certain product as a line item. In our example we find two purchase orders that contain the product "HT-1000" as a line item.



Figure 1 Searching in Enterprise Search for specific purchase orders

Step 3: Subscribe to a feed

Since we would like to be notified if there is a new purchase order that contains this product we use the option to subscribe to the results of this search. To subscribe to the search results we use the link Subscribe that can be found at the bottom of window that is displaying the search results.



Figure 2 Subscribe to a search in SAP NetWeaver Enterprise Search

When clicking on this link a new window opens that point to the OpenSearch interface of SAP NetWeaver Enterprise Search using the same query options that have been used in the search UI.

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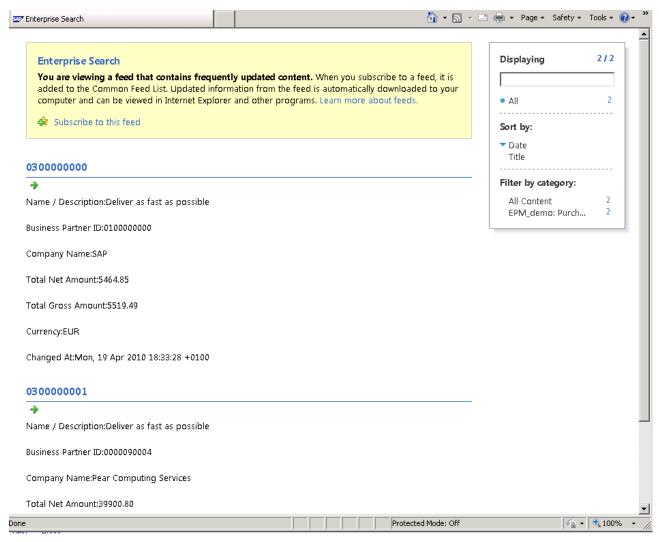


Figure 3 OpenSearch interface of SAP NetWeaver Enterprise Search

When you click the *Subscribe to this feed* link, the feed is automatically added to the Favorites Center and to the Common Feed List for sharing with other programs such as Outlook.

A new window opens where we have to enter a name for the feed (we change it in our example to SAP Enterprise Search) and select the folder where the feed should be created in.



Figure 4 Subscribe to this Feed dialogue

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When you click **Subscribe** you will receive a message that you successfully have subscribed to this feed.

You've successfully subscribed to this feed!

Updated content can be viewed in Internet Explorer and other programs that use the Common Feed List.

Yiew my feeds

Figure 5 Notification that the feed has successfully been subscribed

When you switch to Outlook you will recognize that a new folder has been created in the Outlook Syndicated Content (RSS) directory.

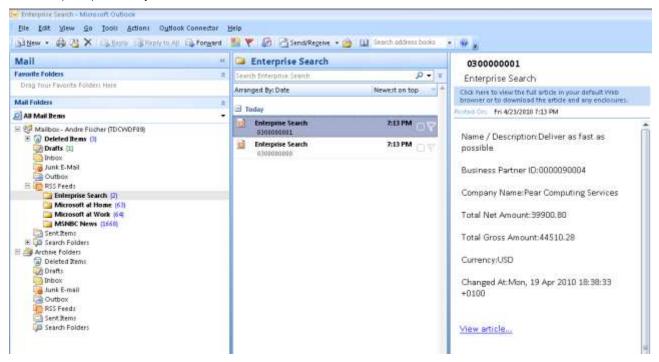


Figure 6 Feed content in Outlook 2007

Step 4: Testing the setup

The setup can be tested by creating new objects in the data source that is connected to SAP Enterprise Search that fit to the search query. We therefore change a purchase order and add a new line item to it so that it now contains the product HT-1000.

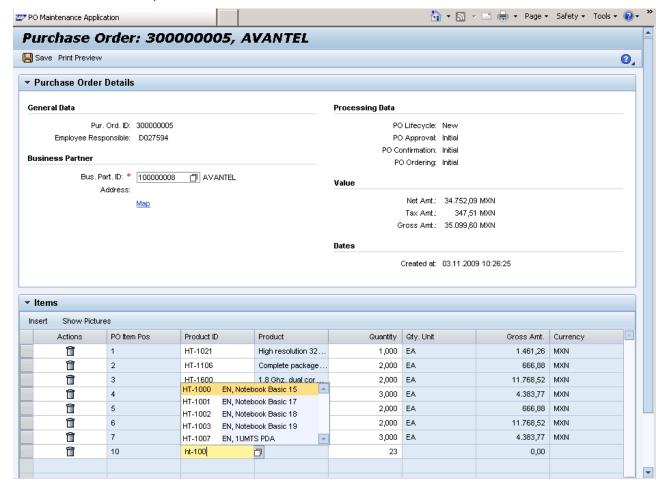


Figure 7 Changing a purchase order in the Enterprise Procurement demo model

In our demo scenario we will start an indexing process manually. In a real world scenario the data source will be either indexed on regular basis or it will be configured for real-time indexing. In the latter case a new or changed object will be indexed immediately after it has been created or changed.

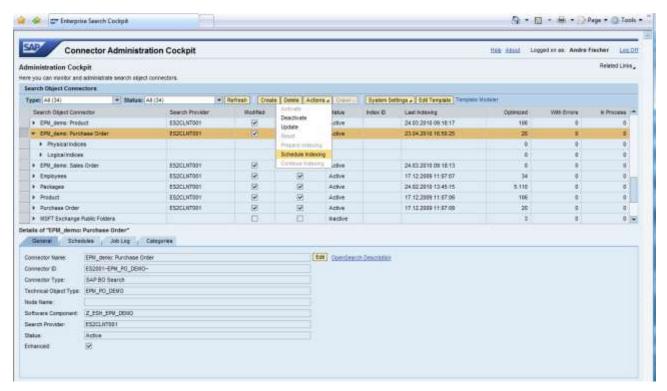


Figure 8 Start indexing of the object connector in SAP NetWeaver Enterprise Search

After the indexing process has finished we perform the same search in the Enterprise Search UI.

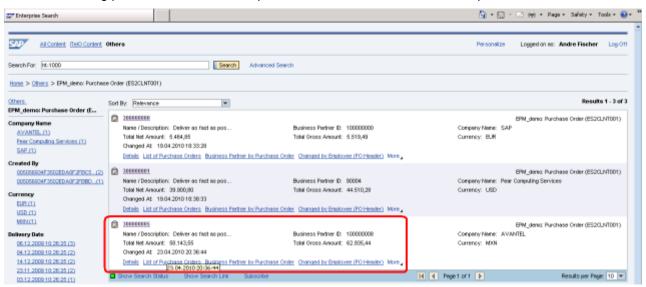


Figure 9 New search results

We can verify that the changed purchase order is found (see Figure 9 New search results). We now get three hits. When we start Outlook again (or if we would wait for a certain time) we will notice that the changed purchase order is also shown in Outlook as shown in Figure 10 New search results in Outlook.

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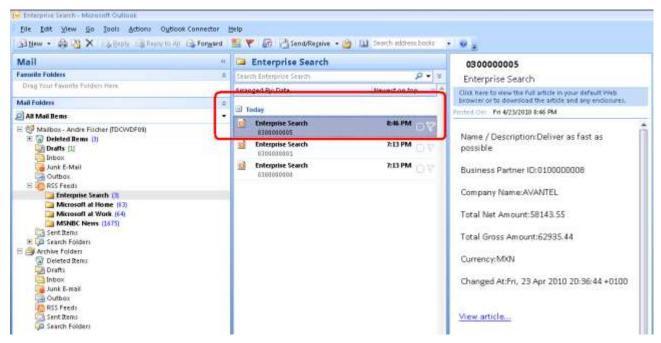


Figure 10 New search results in Outlook

Clicking on the link (View article...) will open the Web Dynpro UI that is used to change purchase orders in the Enterprise Procurement Model.

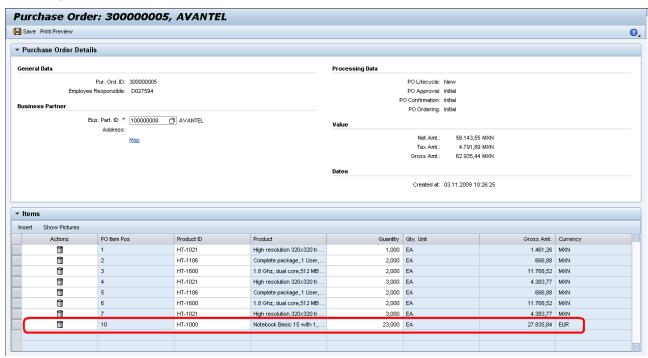


Figure 11 Changed purchase order

Outlook

Instead of using Microsoft Outlook as a RSS feed reader it is also possible to consume the OpenSearch interface of SAP NetWeaver Enterprise Search as a federated search location within Microsoft Office SharePoint Server. When using SharePoint the search request is not issued from the user's client PC but from the Microsoft SharePoint Server on behalf of the user. The setup of this scenario requires some configuration steps in Microsoft Active Directory allowing the SharePoint Server to perform this impersonation which will be described in an upcoming whitepaper.

Related Content

- 1. Error message when you subscribe to an RSS feed that requires authentication in Outlook 2007: "Outlook cannot download the RSS content" http://support.microsoft.com/kb/917125
- 2. Single Sign On to SAP NetWeaver Enterprise Search 7.2 Using Integrated Windows http://www.sdn.sap.com/irj/scn/index?rid=/library/uuid/00007511-5c0e-2d10-26bd-f30b7f433b9a
- 3. SAP Developer NetWork Search Technologies http://www.sdn.sap.com/irj/sdn/nw-search
- 4. For more information, visit the **Search homepage**.

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