VBrick Enterprise Media System

SharePoint 2013 Native Search Integration Guide

October 3, 2013

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About VBrick Systems

Founded in 1997, VBrick Systems, an ISO 9001 certified vendor, is a privately held company that has enjoyed rapid growth by helping our customers successfully introduce mission critical video applications across their enterprise networks. Since our founding, VBrick has been setting the standard for quality, performance and innovation in the delivery of live and stored video over IP networks—LANs, WANs and the Internet. With thousands of video appliances installed world-wide, VBrick is the recognized leader in reliable, high-performance, easy-to-use networked video solutions.

VBrick is an active participant in the development of industry standards and continues to play an influential role in the Internet Streaming Media Alliance (ISMA), the MPEG Industry Forum, and Internet2. In 1998 VBrick invented and shipped the world's first MPEG Video Network Appliance designed to provide affordable DVD-quality video across the network. Since then, VBrick's video solutions have grown to include Video on Demand, Management, Security and Access Control, Scheduling, and Rich Media Integration. VBrick solutions are successfully supporting a broad variety of applications including distance learning and training, conferencing and remote office communications, security, process monitoring, traffic monitoring, business and news feeds to the desktop, webcasting, corporate communications, collaboration, command and control, and telemedicine. VBrick serves customers in education, government, healthcare, and financial services markets among others.

SharePoint Server Configuration

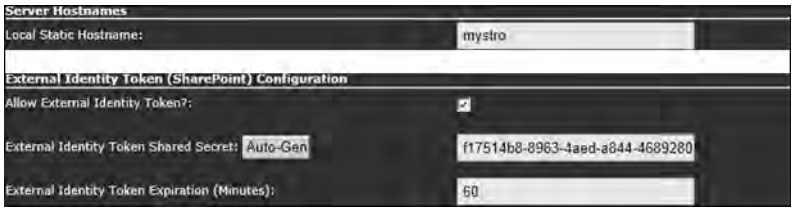
This document describes the procedure for installing and integrating the VBrick SharePoint components for Enterprise or FAST search into the customer's SharePoint environment. Once integrated, SharePoint Enterprise/FAST will provide integrated search results both from the configured VEMS Mystro server and SharePoint itself.

Topics in this document

Step 1 – VEMS Mystro Configuration 1
Step 2 – Verification 1
Step 3 – Deploy VBrick Web-Parts 2
Step 4 – Create Player Page In Sharepoint Designer 3
Step 5 – Sharepoint Configuration 7
Step 6 – Custom Fields 10
Step 7 – Verify Crawl Functionality 10
Step 8 – Customize Search Center 11
Step 9 – (Optional) Search Center Display of Custom Fields 13

Step 1 – VEMS Mystro Configuration

1. Server Install – the VEMS SharePoint software must be installed on the VEMS server and have a valid license.
2. SSO/LDAP – VEMS must be configured for SSO and there must be a corresponding enabled LDAP server configured.
3. Global Settings:
   a. Set the **Local Static Hostname** to the hostname of the VEMS server.
   b. Check **Allow External Identity Token**.
   c. Generate or enter the **External Identity Token Shared Secret**. The secret must be at least 36 characters long.
   d. Set **External Identity Token Expiration**. This field specifies how long the specified token will be valid for. If the token is not used within the specified number of minutes it will no longer be valid. The range of valid values is 0-60 minutes.
   e. Save.



Step 2 – Verification

1. Verify Services:
   a. Login to the customer's SharePoint Server as a user with administrative privileges.
   b. Verify required services are running:

i. Open SharePoint > Central Admin.
ii. Click System Settings > Manage Services on Server.
iii. If not running, start Microsoft SharePoint Foundation Sandboxed Code Services.
iv. If not running, start Business Data Connectivity Services.

2. Verify Permissions:

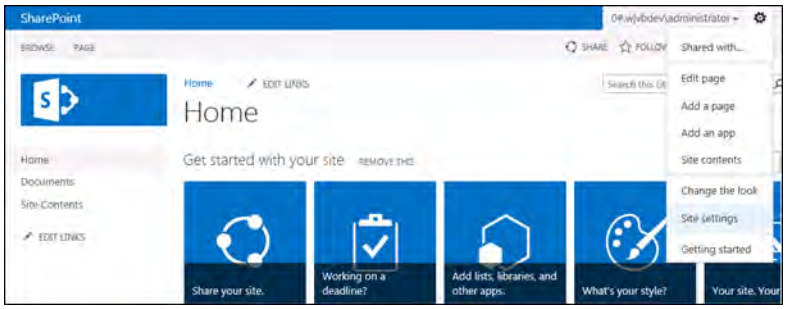
   Note: This step only required if customer's IT has not already configured all user privileges.

   a. Login to a PC client as a user with administrative privileges.
   b. Login to the customer's SharePoint site.
   c. Click on Site Actions > Site Settings.
   d. Grant site permissions as required.
      i. Click on Users and Permissions > Site Permissions.
      ii. Click Grant Permissions.
      iii. Check Grant users permission directly.
      iv. Grant access to users who should have permission to the site.
   e. Grant administrative permissions as required:
      i. Click on Users and Permissions > Site Collection Administrators.
      ii. Grant access to administrative users.

3. Verify SharePoint site:
   a. Login to the customer's SharePoint Server as a user with administrative privileges.
   b. Open SharePoint 2013 Management Shell.
   c. Run the command: **`get-SpSite`**
   d. Verify results.
   e. Exit.

Step 3 – Deploy VBrick Web-Parts

1. Login to a PC as a user with SharePoint administrative privileges.
2. Open Internet Explorer.
3. Navigate to the SharePoint site.
4. Click the gear icon at the top right of the screen and open Site Settings.



5. Navigate to Galleries > Solutions.

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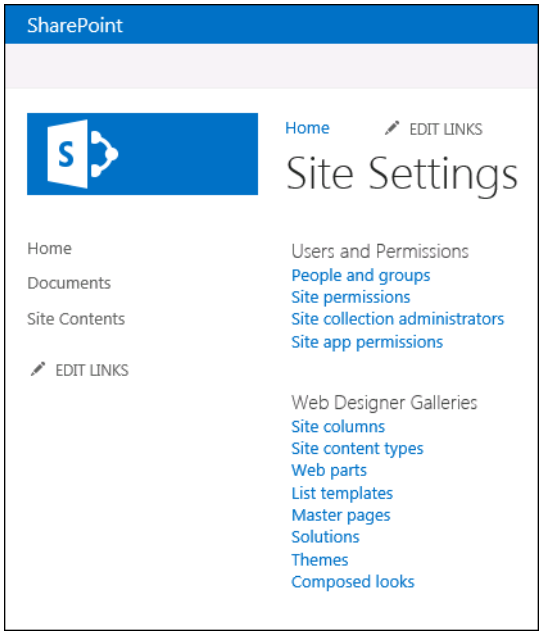
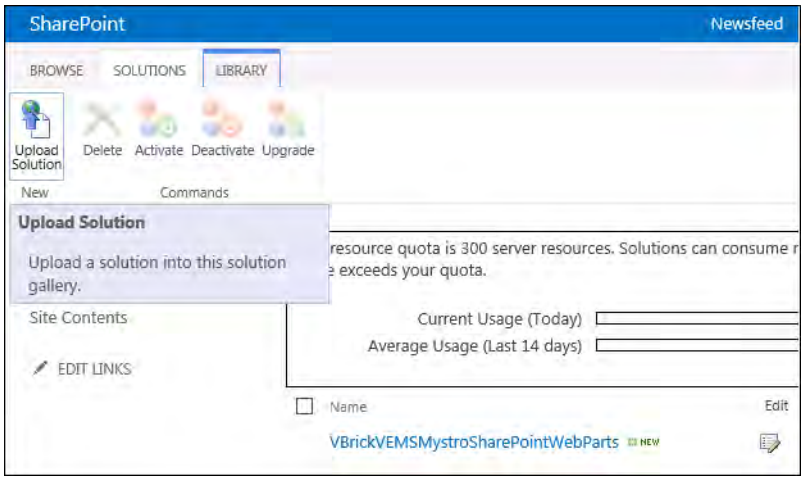


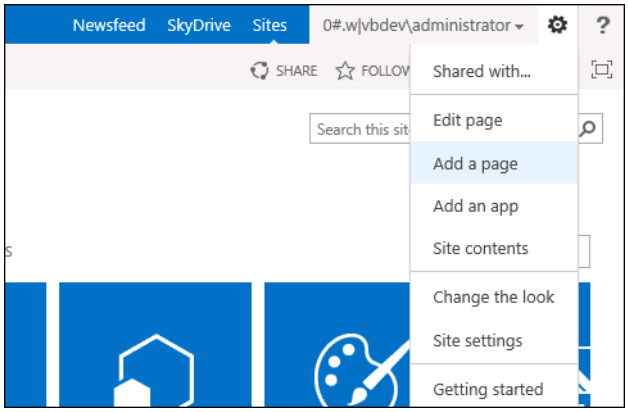
6. Click on the Solutions tab again if necessary.
7. Click Upload Solution.



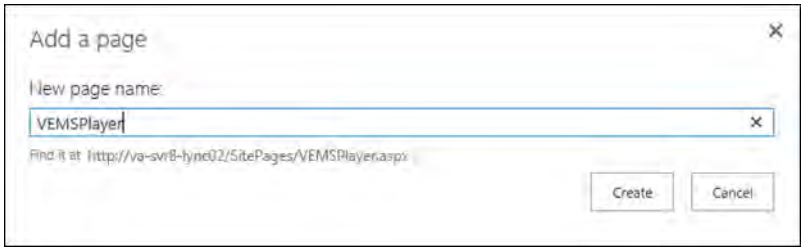
8. Select VBrickVEMSMystroSharePointWebParts.wsp (from the Native Search folder on the SharePoint Product CD).
   a. Click **Activate** and wait for the screen to close.
9. Repeat these steps for VBrickVEMSMystroSearchCustomizations.wsp (from the Native Search folder on the SharePoint Product CD).
   a. Click **Activate** and wait for the screen to close.

Step 4 – Create Player Page In Sharepoint Designer

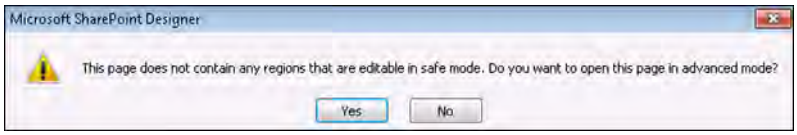
1. Click the gear icon at the top right of the screen and click Add a page.



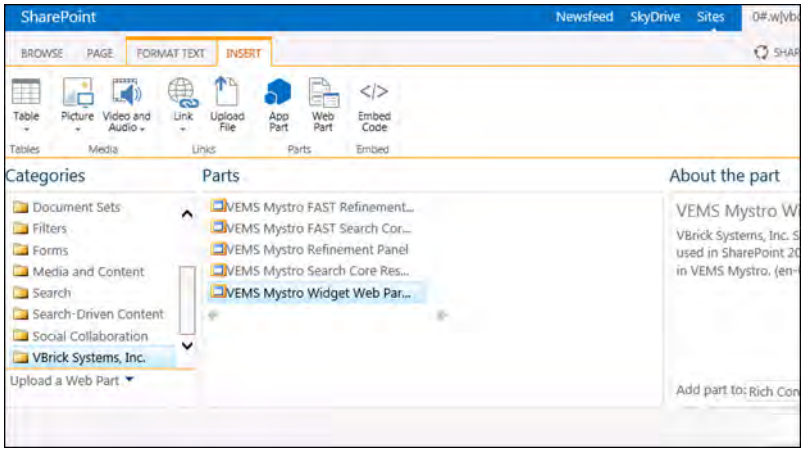
2. Name the player: VEMSPlayer



3. Click on the **Create** button.
4. If you receive the following prompt regarding "Safe Mode", click **Yes**.



5. Click on the Insert tab.
6. Click on **Web Part** to insert a new web-part.
7. Insert the VBrick player web-part using by selecting "VBrick Systems, Inc." under Categories, then selecting "VEMS Mystro Widget Web Part" and clicking **Add**.



8. Click on the VBrick web-part then click on the drop down arrow at the top right of the web-part container and select Edit Web Part.

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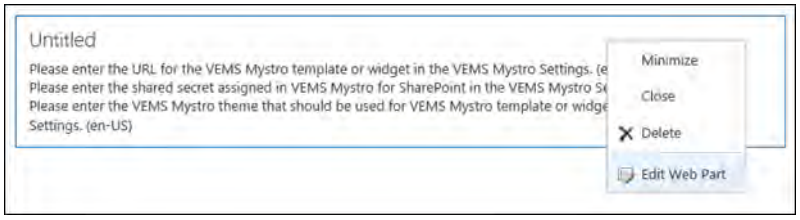
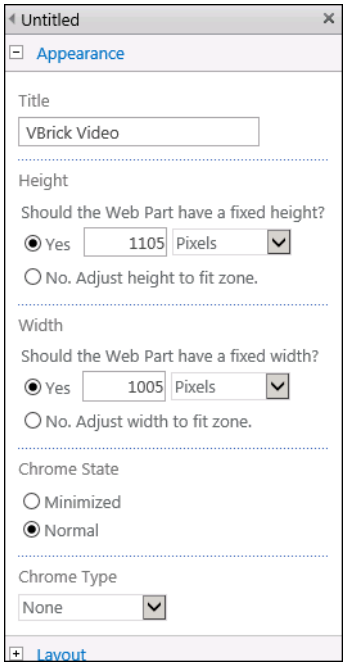
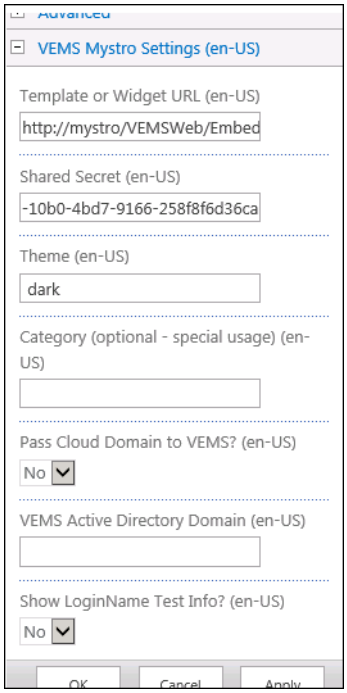


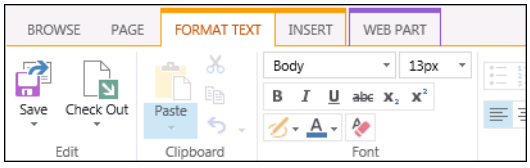
9. Enter the web-part settings as follows:

Title	VBrick Video
Height	1105
Width	1005
Chrome Type	None
Template or Widget URL	The URL to the template/widget in VEMS. For example, the Native Search player page is as follows (replace hostname with FQDN of VEMS server) `http://<VEMSHostname>/VEMSWeb/EmbeddedHost.html?VBTemplate=Embedded/Templates/EmbeddedVideoInfoTemplate.xml&contentID={ContentID}`
Shared Secret	Enter the value from Global Settings on the VEMS server.
Theme	Specifies the VEMS theme to be used. This must correspond to a valid theme defined in VEMS (default options are "light" and "dark").
Category	(Optional) Specifies the VEMS Category to be used. It should only be specified if the Category is applicable to the template/widget referenced in the web-part (for example, the **Add Video** template will assign new content to this Category). If more than one level is required it must be entered, i.e. level1/level2/etc. **Not applicable for Native Search.**
Pass Cloud To VEMS?	This field is applicable only for Cloud-based implementations and specifies whether the domain name will be passed to the VEMS. For this example, the SharePoint login name is `john.smith@ms.com` • Yes – Cloud domain will be passed to VEMS ("`john.smith@ms.com`" passed) • No – Cloud domain will not be passed to VEMS ("`john.smith`" passed)
VEMS Active Directory Domain	This field is applicable only for Cloud-based implementations and specifies the Active Directory domain name to be pre-pended to the SharePoint login name (in the format domain\username). For example, "`<domain>\john.smith`"





10. Click the **Save** button at the top left of the screen.



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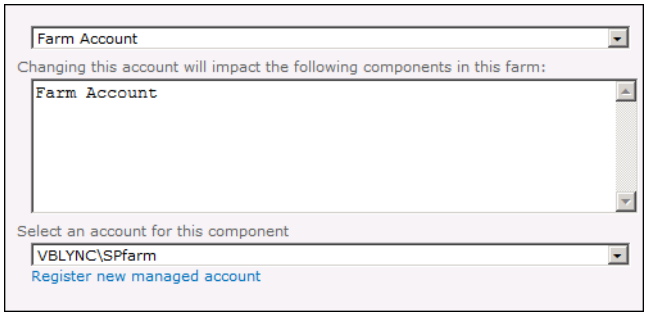
Step 5 – Sharepoint Configuration

▼ To install BCS Model and Configure Secure Store:

1. Logon to the SharePoint Server with an account that has permissions to administer SharePoint.
2. Open SharePoint > Central Admin.
3. Verify Mappings:
   a. Click on Central Admin > Application Management.
   b. Click on Service Applications > Configure service application associations.
   c. Select Web Applications from the pull-down menu.
   d. Verify the Sharepoint search site is mapped to:
      i. Business Data Connectivity Service Application.
      ii. Search Query application (for example, "FAST Query SSA in this example")

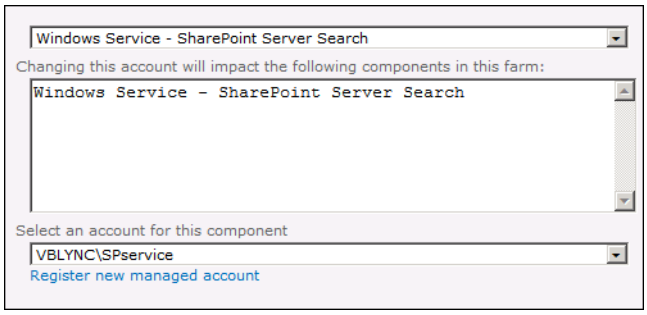
   e. Select Service Applications from the pull-down menu.
   f. Verify the Sharepoint content service application (for example, “FAST Content SSA”) is mapped to:
      i. Business Data Connectivity Service.
      ii. Secure Store Service Application.
   g. Verify the Business Data Connectivity Service Application is mapped to:
      i. Secure Store Service Application.

4. Identify Accounts which Require Permission:
   a. Click on Central Admin > Security.
   b. Click on General Security > Configure Service Accounts.
   c. Select Farm Account (make note of the account which is specified).



Enter Account Name: _____

d. Select Windows Service – SharePoint Server Search (make note of the account which is specified).

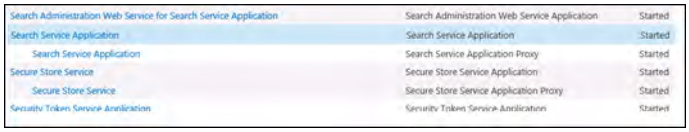


Enter Account Name: _____

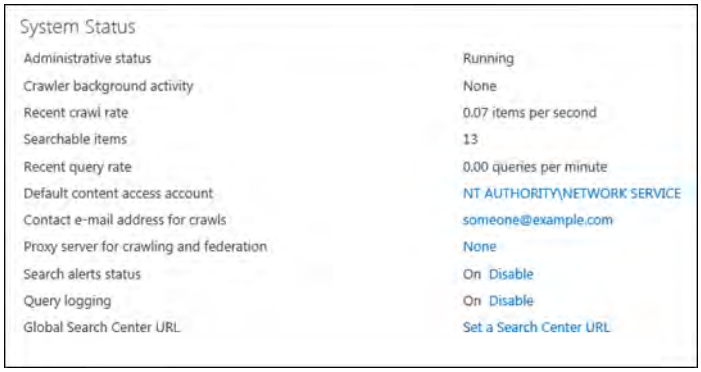
e. Click on Central Admin > Application Management.

f. Click on Service Applications > Manage service applications.

g. Highlight the row for the SharePoint content service (for example "FAST Content SSA"). Note: Click to the right of the name to highlight.



h. Click **Manage** on the ribbon (make note of the Default content access account).



Enter Account Name: _____

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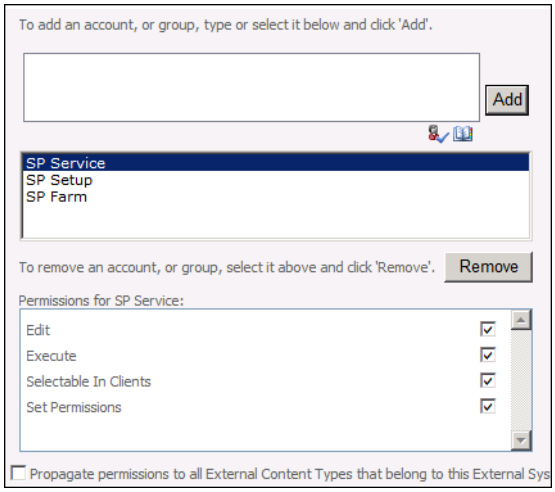
5. Prepare Files:
    a. Copy the Native Search folder from the VBrick CD onto the SharePoint server.
    b. Edit `Install.ps1` in Notepad and modify as follows:
        i. $ServiceContent – modify MYSITE to the hostname of the SharePoint search server.
        ii. $VEMSMystroServiceUrl – modify MYVEMS to the FQDN of the VEMS Mystro server.
        iii. $SearchCrawlerApp – modify to the name of the Search Crawler (for example "FAST Content SSA" or "Enterprise Search Service Application"
        iv. $ProfilePageUrl – modify MYSITE to the name of the SharePoint search server.

Example

```
$ServiceContext = "http://VA-SVR8-LYNC02"
$VEMSMystroServiceUrl = "http://VA-SVCVEMS-01.vbdev.loc/MaduroSLL/MaduroSLL.svc"
$SearchCrawlerApp = "Search Service Application"
$ProfilePageUrl = "http://VW-SVR8-LYNC02.vbdev.loc/sitepages/VEMSPlayer.aspx?ContentID={0}"
```

6. Verify VEMS Service URL.
    a. Open Internet Explorer.
    b. Enter the VEMS service URL from `Install.ps1`.
    c. Verify a successful response (it should display "service has been created").
7. Run the Installer:
    a. Open the SharePoint 2010 Management Shell.
    b. Navigate to the folder containing Install.ps1.
    c. Run Install.ps1.
    d. Verify successful installation.
8. Grant Permissions to Service Accounts:
    a. Click on Central Admin > Application Management.
    b. Click on Service Applications > Manage service applications.
    c. Click on Business Data Connectivity Service Application.
    d. Select External Systems from the pull-down menu.
    e. Check the box next to VEMS.
    f. Click on **Set Object Permissions** on ribbon.
    g. For each account found in the Identify Permissions section above:
        i. Type in the account name.
        ii. Click Add.
        iii. Check every item in the permissions box.



h. Check the Propagate permissions box.

i. Click OK.

9. Specify Credentials for VEMS API:
   a. Click on Central Admin > Application Management.
   b. Click on Service Applications > Manage service applications.
   c. Click on **Secure Store Service Application**.
   d. Check the box next to VEMSMystroSearchConnector.
   e. Click on **Set Credentials** in the ribbon.
   f. Enter the username and password of the VEMS account which will be passed in to the VEMS API calls. In most cases this account should have full privileges to all content.
   g. Click OK.

Step 6 – Custom Fields

Reserved for future use. Custom fields are not supported in VEMS 6.3 or earlier and SharePoint 6.3 or earlier.

Step 7 – Verify Crawl Functionality

▼ To schedule and test a full crawl:

1. Logon to the SharePoint Server with an account that has permissions to administer SharePoint.
2. Click on Central Admin > Application Management.
3. Click on Service Applications > Manage service applications.
4. Click on the Search Crawler (for example, "FAST Content SSA" or "Enterprise Search Service Application").
5. Click on Content Sources on the left tab.
6. For VEMS Mystro select Edit from the pull-down menu.
7. Under External Data Source, check Mystro.
8. Under Crawl Schedules create a Full Crawl (if not already configured).
9. Check Start full crawl of this content source.
10. Click OK.

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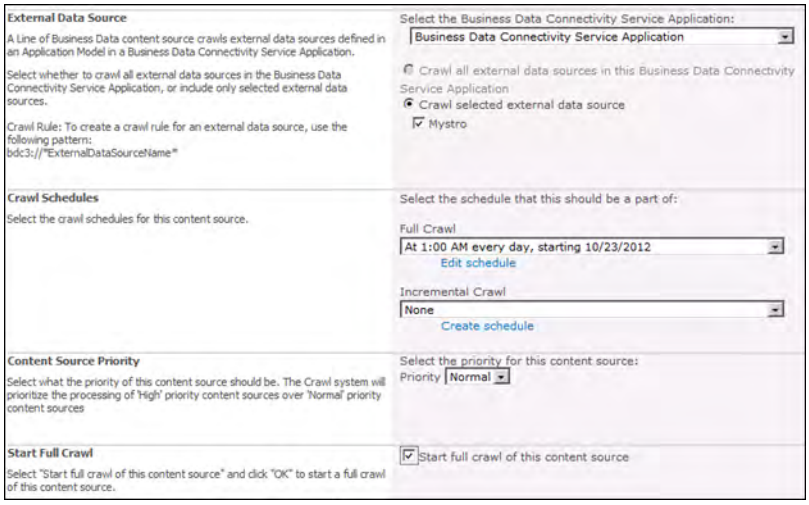
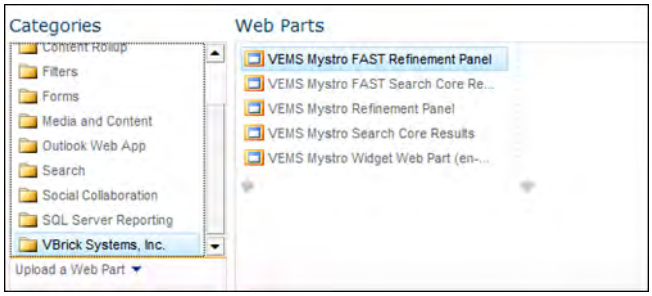


11. Click on Crawl Log on the left tab.
12. Click on Crawl History
13. Monitor results:
    a. There should be no errors.
    b. There should be two or more successes.

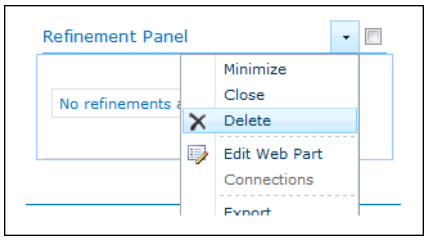
Step 8 – Customize Search Center

1. Login to a PC with an account with permission to customize the Search Center.
2. Open Internet Explorer.
3. Navigate to the SharePoint Search Center site.
    a. Open Internet Explorer.
    b. Navigate to the SharePoint Search site.
    c. Search for any text string.
4. Activate the VEMS Mystro Search Customizations.
    a. Click Site Actions > Site Settings from the menu.
    b. Click Site Actions > Manage site features from the list of options.
    c. Click on **Activate** next to VEMS Mystro Search Customizations.

5. Customize the results page:
    a. Click Site Actions > Edit Page.
    b. Customize the Refinement Panel
        i. In the Left Zone click on Add a Web Part.
        ii. Select Categories > VBrick Systems, Inc.
        iii. Select the refinement panel web-part.
            - For FAST search, select VEMS Mystro FAST Refinement Panel.
            - For Enterprise search, select VEMS Mystro Refinement Panel.
        iv. Click **Add**.



v. Delete the existing Refinement Panel web-part by selecting **Delete** from the pull-down menu.



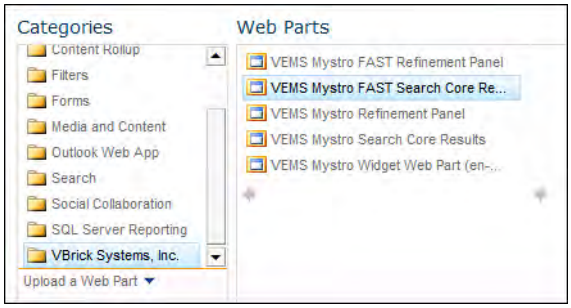
c. Customize the Core Results Panel.

i. In the Bottom Zone click on Add a Web Part.

ii. Select Categories > VBrick Systems, Inc.

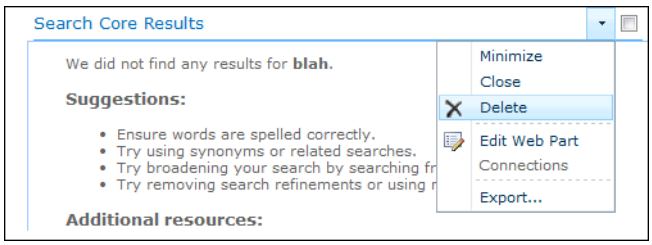
iii. Select the Search Core Results web-part.

- For FAST search, select VEMS Mystro FAST Search Core Results.
- For Enterprise search, select VEMS Mystro Search Core Results.



iv. Drag & drop this new web-part to just above the existing Search Core Results.

v. Delete the existing Core Results web-part by select Delete from the pull-down menu.



d. Finalize Changes

i. Click **Check In** from the ribbon.

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ii. Click the **Publish** tab.

iii. Click **Publish** from the ribbon.

Step 9 – (Optional) Search Center Display of Custom Fields

Reserved for future use. Custom fields are not supported in VEMS 6.3 or earlier and SharePoint 6.3 or earlier.

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