KnowledgeLake®
The SharePoint® ECM Company

STATE OF NEW JERSEY
CIVIL SERVICES COMMISSION

Synopsis

In 2012, KnowledgeLake Professional Services successfully completed Phase I of a multi-phase ECM engagement with the New Jersey Civil Service Commission (NJ CSC). The objective was to implement ECM for their "Selection Services" division with SharePoint 2010, KnowledgeLake Imaging, Capture Server, Capture Workstation and Connect. Milestones included the deployment of mirrored SharePoint 2010 farms for testing and production, a business specific taxonomy and the integration to their public facing Online Application Submission (OAS) system. KnowledgeLake Imaging Search was the cornerstone to the success of this implementation. KnowledgeLake Imaging Search provides a combination of metadata, keyword and scope driven searches via a robust Search Center UI. The KnowledgeLake Search Center provides the ability to save reusable search templates also known as saved queries. The saved queries gave the OAS the ability to have the LOB integration desired without custom programming. The is done via a configurable HTTP URL Query String call to custom SharePoint web part pages containing KnowledgeLake Query, Results and Viewer web parts.

There are several ways the applicant can get their information and documents to the state. The online system allows uploading electronic documents while the applicant is using the system. The applicant also has the ability to print out documents to be filled in and sent via mail or fax.

Here are the various ways documents can be input into the system:

- **Online Submission**

  The OAS system will receive documents from the applicant along with meta-data values. The documents are sent to KnowledgeLake Capture Server where the Import process grabs, Indexed and sends the document to SharePoint. The KnowledgeLake Capture Server Import Process monitors a network location and when a CSV (or XML) file appears, the Import Process reads each record, which contains data for a document type, document location, and meta-data values.

- **Fax Submission**

  Incoming faxes also go through a Capture Server Import process. These documents include barcoded cover sheets to identify document types and meta-data values. The cover sheets print out when the applicant selects "Print" from the online application. The cover sheets also contain instructions for the applicant, including placement of the cover sheets and faxing information.

  The Import job reads the barcode value for the document type first and routes the document to the Capture Server Process set up for that document type. Within the process, the barcode values for the meta-data fields are read and the document is indexed and stored in SharePoint.

- **US Mail Submission**

  Applicants that wish to submit their documents through the US Mail system, or other carrier, follow the same process as with the fax submission accept that the delivery will be through their carrier of choice. The online printing process prints the barcode cover sheet(s), which also have mailing instructions, and the applicant includes them along with their other paper documents in the package sent to the state.

The applicants within the state will receive the packages and assemble batches for scanning. They place cover sheets in the correct locations, do other document preparation such as remove staples, straighten paper, etc., and then they scan the documents in using KnowledgeLake Capture. The barcode values classify the document type and assign the meta-data values. The applicant be able to visually verify and "QC" the values before they release the documents to Capture Server for processing in to SharePoint.

- **Email Submission**

Applicants who send documents to the state via email are be given a generic email address to send to. State users monitoring the email inbox will use KnowledgeLake Connect to classify, index and send the document to Capture Server. The applicant will be able to visually verify and "QC" the values before they release the documents to Capture Server for subsequent release to SharePoint.

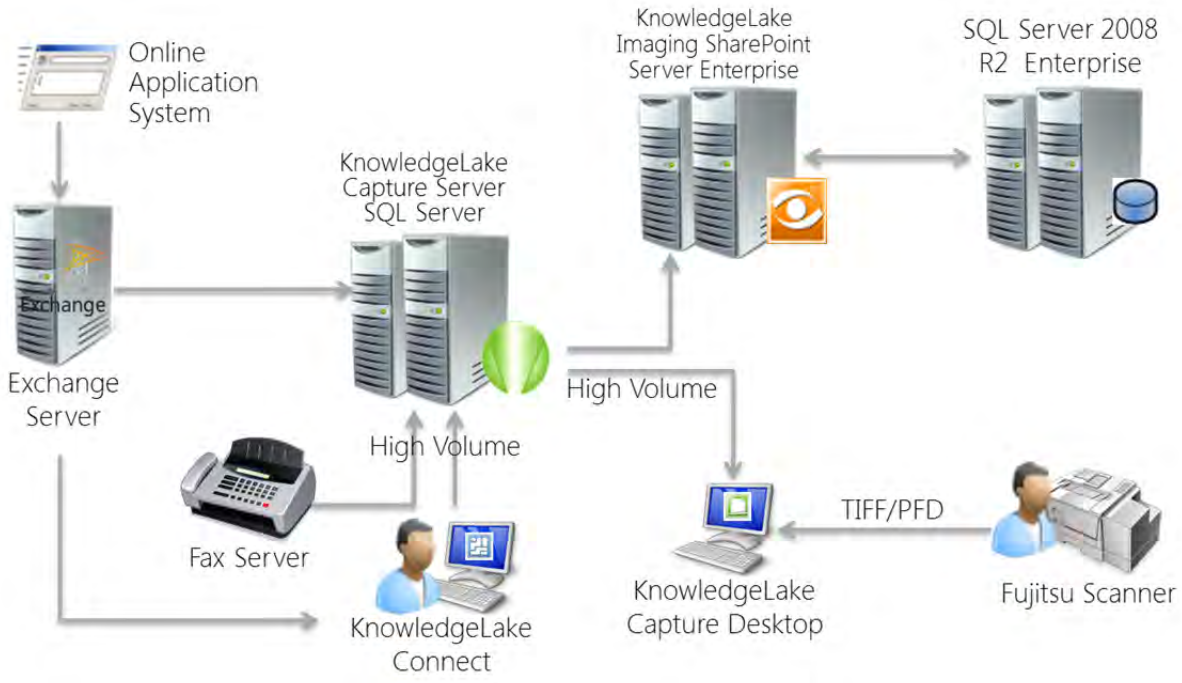

Figure 1 - Architecture Topology

KnowledgeLake Imaging Search

Search is provided via KnowledgeLake Imaging Search to allow the OAS staff to preform exact relevant searching using a combination of SharePoint full-text keyword and column managed metadata properties.

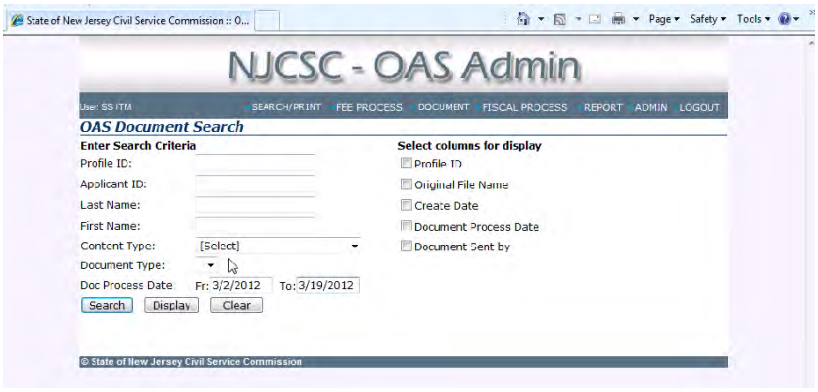

Figure 2 - OAS Admin Search Web Form

The OAS administrative staff uses their home grown OAS Admin Search web form (Figure 1) to dynamically create a HTTP URL Query String to be sent to the SharePoint server. The URL Query String contains keys to the KnowledgeLake Imaging Search saved query as the "queryId" and a series of fields to search for, e.g.:

```
http://{server}/OAS/klsearch.aspx?
queryId=9e61119f-ce51-4e20-8f34-def387a94cd0
&IndexUserText=Jeff.Borghoff
```

Queries are pre-configured and store as saved searches. The Search Center has a dynamically controlled Silverlight interface with tabbed navigation. The interface provides grouping, filtering and sorting of result sets and can search across SharePoint Document Libraries and Sites. The users can build custom views to personalize the look and feel of search results as well. The Search Center also manages user permissions to saved queries and Exports. The Export feature allows the OAS admin to bulk export a result set to a network share location. Exports can also be saved for future use. (Figure 3)

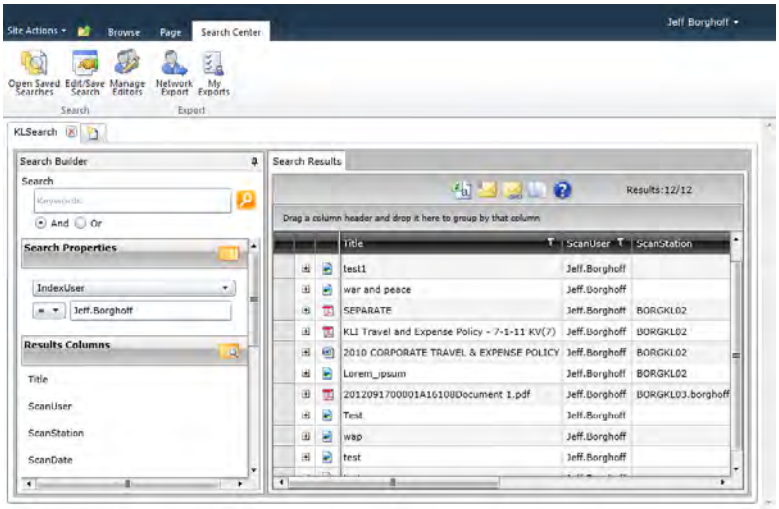

Figure 3 - Knowledgelake Imaging Search Center

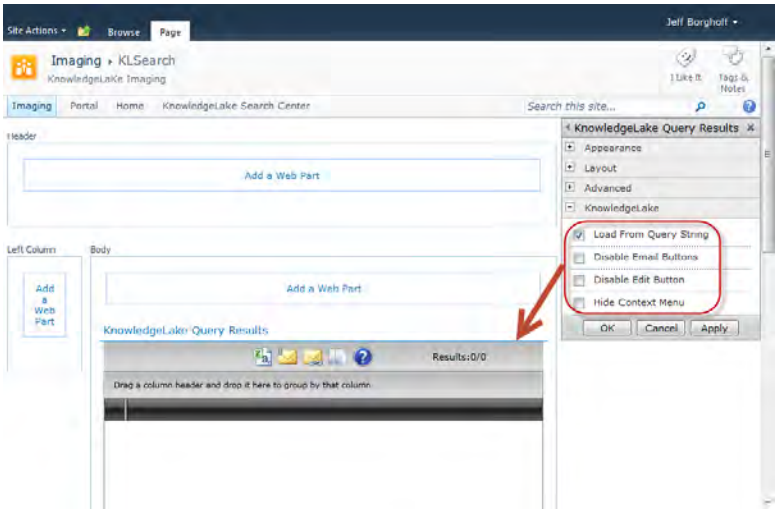

Figure 4 - KnowledgeLake Imaging Search Web Parts

The KnowledgeLake Imaging Search web parts are configured to search for, retrieve and display documents on the SharePoint web part page. There are no connection properties as the KnowledgeLake Search web parts are presence aware and will connect automatically when placed on the same SharePoint page. (Figure 4)

The end result is a well-constructed results page rendered from the HTTP URL Query String passed from the OAS Admin web form. Users can view a document selected in the KnowledgeLake Results web part with the KnowledgeLake Viewer web part placed on the same page. The result set can be filtered, sorted and grouped. Additionally the document can be email from the results web part as a link or an attachment.

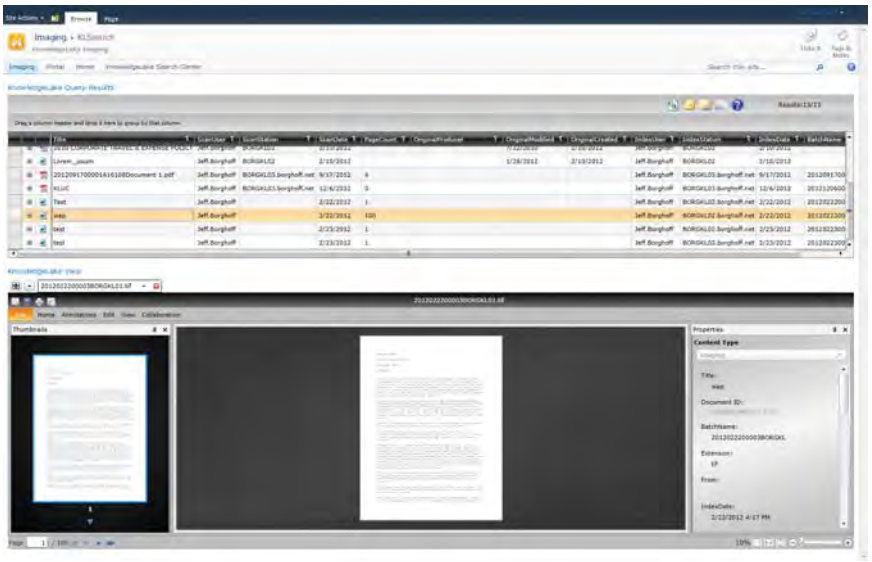

Figure 5 - SharePoint Web Part Page

As a result the users could find information faster, consistently and with minimal training. They simply completed the form and found the documents with exact and relevant search results based on **specific metadata criteria**, not algorithms *predicting* the results.