

Introduction to the Search Query Object Model

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Agenda

- ▶ Introduction
- ▶ Enterprise Search Architecture in Microsoft® Office SharePoint® Server 2007
- ▶ Search Syntax Options
- ▶ Key Classes of Search Query Object Model
- ▶ Demonstration
- ▶ Additional Resources

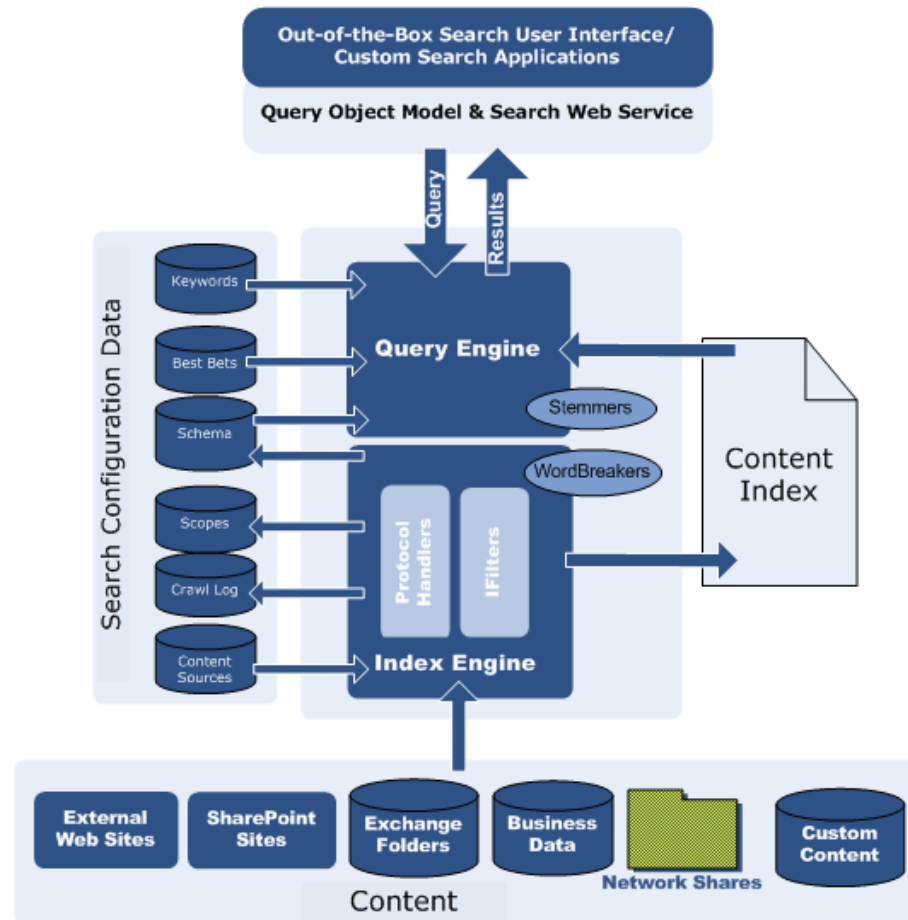
Introduction

- ▶ Who is Alonso Robles?
 - Solutions Architect @ speakTECH
 - Microsoft® Gold Certified Partner
 - <http://www.speaktech.com>
 - Microsoft Certified Technology Specialist
 - 5+ years professional software development experience
 - 8+ years professional information technology experience



Microsoft Office SharePoint Server 2007
Configuration

Enterprise Search Architecture



Search Syntax Options

- ▶ Keyword syntax
 - Search terms are passed directly to the Enterprise Search service)
- ▶ SQL syntax
 - Extension of SQL for querying databases
- ▶ URL syntax
 - Search parameters are encoded in a URL and posted directly to a search page

Keyword Syntax

▶ Keywords

- Words
 - Example: *weather*
- Phrases
 - Example: *“los angeles”*
- Prefixes
 - Example: *+“los angles” -weather*

▶ Property filters

- Managed properties
 - Example: *author:John*
- Scopes
 - Example: *scope:“Marketing Content”*
- Collapsed results
 - Example: *duplicate:http://<displayUrl>*

SQL Syntax

▶ Overview

- SELECT <columns>
FROM <content source>
WHERE <conditions>
ORDER BY <columns>

▶ Example

- *SELECT rank, title, path, author FROM Scope()
WHERE CONTAINS(title, 'SharePoint') and
"scope"='Marketing'*

▶ More information

- <http://msdn.microsoft.com/en-us/library/ms493660.aspx>

Search Query Object Model

- ▶ **IMPORTANT NOTES BEFORE WE BEGIN**
 - Enterprise Search Query Object Model and Web Service both support keyword and SQL syntax search queries
 - Use the **object model** when custom code will be executed locally to the SharePoint installation
 - Example: Custom enterprise search web part
 - Use the **web service** when custom code will be executed on a remote computer
 - Example: Custom enterprise search client

Enterprise Search Query Classes

- ▶ Query
 - Designed to be the base implementation class for the Enterprise Search Query object model classes.
 - Do not use in custom code
- ▶ KeywordQuery
 - Provides methods and properties to execute keyword syntax based queries
- ▶ FullTextSqlQuery
 - Provides methods and properties to execute SQL syntax based queries

Common Query Class Properties

- ▶ EnableStemming property
 - Specifies whether word stemming is enabled
 - Property only applies to search terms specified in the FREETEXT predicate for the
- ▶ QueryText property
- ▶ ResultTypes property
 - Specifies the search result type
 - Types: Definition, high confidence, relevant, special term result
- ▶ TrimDuplicates property
 - Specifies whether duplicate items should be removed from the search results

Demonstration

- ▶ Enough talk... let's walk the walk.

Additional Resources

▶ Web Resources

- Alonso Robles Blog: <http://blogs.importchaos.com/alonsorobles>
- Enterprise Search Architecture: <http://msdn.microsoft.com/en-us/library/ms570748.aspx>
- Enterprise Search Query Object Model Overview: <http://msdn.microsoft.com/en-us/library/ms544561.aspx>
- Enterprise Search Keyword Syntax Reference: <http://msdn.microsoft.com/en-us/library/ms497636.aspx>
- Enterprise Search SQL Syntax Reference: <http://msdn.microsoft.com/en-us/library/ms493660.aspx>
- Building Custom Enterprise Search Web Parts: <http://msdn.microsoft.com/en-us/library/ms584220.aspx>

▶ Book Resources

- Inside Microsoft® Office SharePoint® Server 2007 (Patrick Tisseghem): <http://www.microsoft.com/mspress/books/10472.aspx>