

# 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

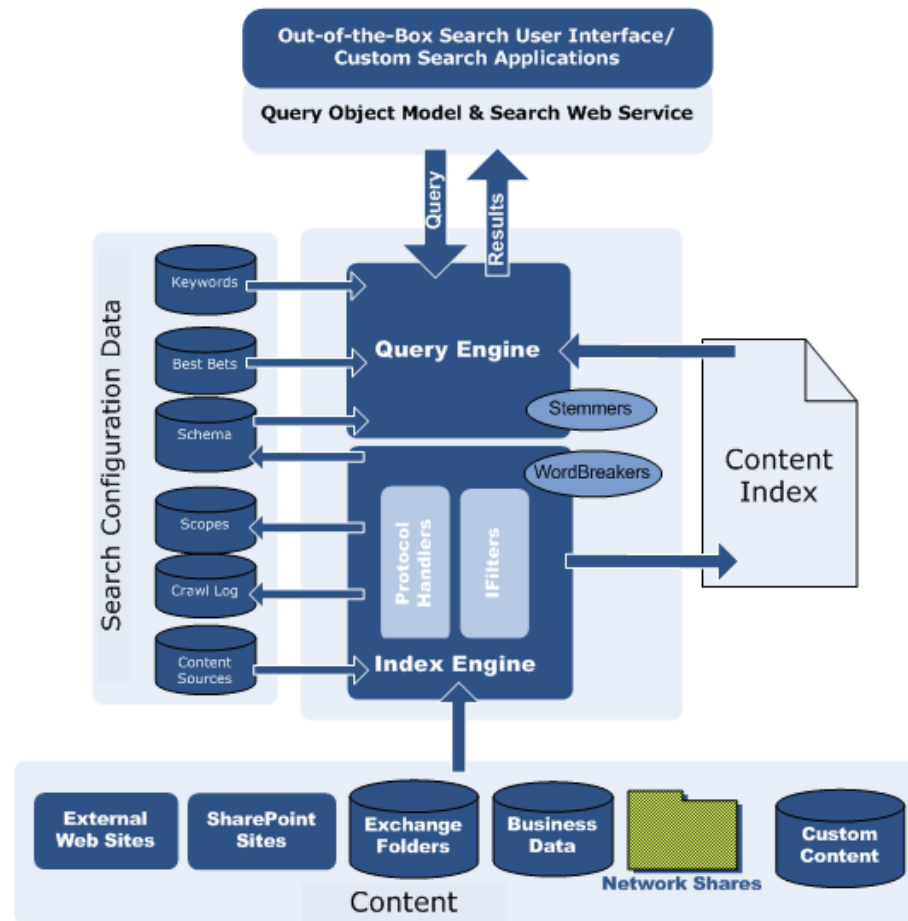
# Introduction

- ▶ 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>