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Association Leadership in the Digital Age

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Discovering Your Members Through Google-Like Searching

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Session Description

- Can you "Google" your data?
- Full text index searches of your data is not just for Google anymore.

Learning Outcomes

- Gain an understanding of what new technology offers to aid you in discovering your members.
- Take new technology concepts back to your organization to make your data inquiry and analysis more effective.
- Discover how to identify problem areas in your membership data.

Who should attend?

- Senior Management and IT staff who want to know more about creative inquiry and analysis of their membership data.

Audience Participation

- How often do you use Google to find information for business or personal use?
- Have you done it so much that you no longer even think about how to do it?
- Have you ever wondered why you can't query member data like a Google search?
- How do you do find member data now?

So what are we talking about?

- Full-text search, creating a catalog of indexes over our Membership data so that we can search against it

- Pre-requisites:
  MS SQL Server 7.0, 2000, 2005, etc
  Staff or consultant with SQL skills
  Knowledge of your database to build a catalog

What is a Search Engine?

- On the Internet, a search engine is a coordinated set of programs that includes: A spider (also called a "crawler" or a "bot") that goes to every page or representative pages on every Web site that wants to be searchable and reads it, using hypertext links on each page to discover and read a site's other pages
- A program that creates a huge index (sometimes called a "catalog") from the pages that have been read
- A program that receives your search request, compares it to the entries in the index, and returns search results to you

Full Text Search in SQL Server

- So how can we use this Search Engine concept to build a catalog over your member database and create the ability to search against the catalog
- Full-text search allows fast and flexible indexing for keyword-based query of text data stored in a Microsoft SQL Server database. In contrast to the LIKE predicate, which only works on character patterns, full-text queries perform linguistic searches against this data, by operating on words and phrases based on rules of a particular language.

So what are the steps?

- Identify what data you want to catalog
- Build a table which includes a column that has all the data you want to search against
- Create the catalog
- Query the catalog
- Example of a simple procedure that uses data in the Northwind database

Create the Table

```
SELECT      Orders.OrderID,
            Orders.CustomerID,
            Customers.CompanyName,
            Customers.ContactName,
            Customers.City,
            CAST(Orders.OrderID AS nvarchar(10) + '' +
            CAST(Orders.CustomerID AS nvarchar(10) + '' +
            Customers.CompanyName + '' +
            Customers.ContactName + '' +
            Customers.City + '' AS IndexThisColumn
INTO        FTC_TableIndex
FROM        Orders INNER JOIN Customers ON
            Orders.CustomerID = Customers.CustomerID
```

Create the Catalog

```
ALTER TABLE [dbo].[FTC_TableIndex] ADD  CONSTRAINT
[PK_FTC_TableIndex] PRIMARY KEY CLUSTERED ([OrderID] ASC ) ON
[PRIMARY]

EXEC sp_fulltext_database 'enable'

if exists (select * from dbo.sysfulltextcatalogs where name =
N'Northwind_FTC')
EXEC sp_fulltext_catalog 'Northwind_FTC', 'drop'

EXEC sp_fulltext_catalog 'Northwind_FTC', 'create'

EXEC sp_fulltext_database @action = 'enable'
exec sp_fulltext_table @tabname=FTC_TableIndex, @action='create',
@ftcat=Northwind_FTC, @keyname=[PK_FTC_TableIndex]
exec sp_fulltext_column @tabname=FTC_TableIndex,
@colname='IndexThisColumn', @action='add'
exec sp_fulltext_table @tabname = FTC_TableIndex, @action = 'start_full '
```

Query the Catalog

```
use northwind
go

SELECT TOP 250 FT_TBL.*
FROM FTC_TableIndex AS FT_TBL
INNER JOIN CONTAINSTABLE(FTC_TableIndex, *,
@SearchCriteria) AS KEY_TBL
        ON FT_TBL.OrderID = KEY_TBL.[KEY]
        ORDER BY [rank] desc
```

Some Northwind examples

- Some examples of how to query the catalog

FTC_QueryTableWithIndex 'USA or Italy’

- FTC_QueryTableWithIndex '"mi*" and USA’
- FTC_QueryTableWithIndex '"Que Delícia" or "QUICK-Stop"’
- FTC_QueryTableWithIndex '"da*"'

Membership Data Example

- A catalog has been built against an iMIS database that contains sample data. Let's look at the this.

Some Membership examples

- Some examples of how to query the catalog

FTC_QueryTableWithIndex '12*’

- FTC_QueryTableWithIndex 'Lane’
- FTC_QueryTableWithIndex '“Mike" or “Jim"’
- FTC_QueryTableWithIndex '"da*"'

Summary

- Full text searching of your selected member data is not just for Google
- Searchable data elements and displayed results are determined by you
- Data can be accessed on any PC with internet access

Resources

- SQL Server 2000, 2005
- Full Text Search

Questions?

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