

فهرست مطالب

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سلام خدمت شما دوستان

کار ما اینطور است که برای شما دوست داران برنامه نویسی و مدیریت (SSMS خلاصه ی SQL Server Management System) به طور کامل و گام به گام به شما یاد می دهیم, امیدواریم مفید واقع شده باشد.

برای ساخت Full-Text Search (یا Full-Text Catalog) یا به طور خلاصه FTS (یا FTC) اول باید آن ویژگی را درون برنامه ی خود نصب کرده باشید. برای فهمیدن آن کد زیر را بزنید, اگر 0 بدهد به معنای این است که نصب نشده و شما باید آن را نصب کنید که ما در صفحات دیگر به شما آن را آموزش میدهم ولی اگر 1 داد یعنی نصب شده است.

```
~vsC763.sql - DESK...-QPBBP81\Ali (52))*  X ~vs25DB.sql - DESK
select SERVERPROPERTY('isfulltextinstalled')
```

100 %

Results Messages

| | (No column name) |
|---|------------------|
| 1 | 1 |

نصب شده

```
SQLQuery1.sql - DES...i (53)) Executing...*  X
select serverproperty('isfulltextinstalled')
```

100 %

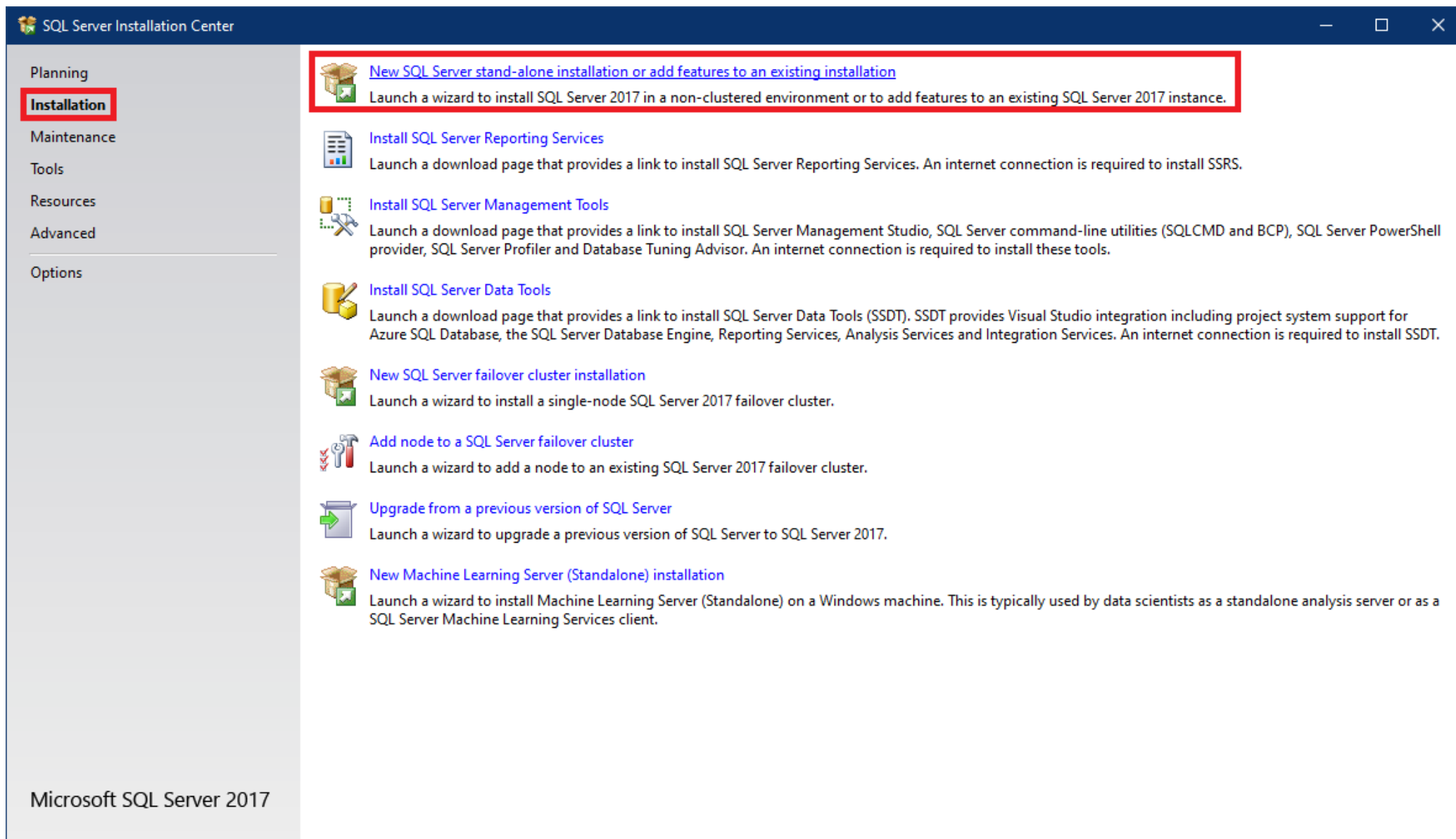
Results Messages

| | (No column name) |
|---|------------------|
| 1 | 0 |

نصب نشده!


Executing query...


برای نصب FTS باید با فایلی که قبلاً باهش SSMS را نصب کردیده اید رو اجرا کنید
بعد از اجرای آن به صفحه ی زیر مراجعه فرمایید و مراحل را به ترتیب انجام دهید:
چون ما از قبل Server را داشتیم و نصبش کرده ایم، پس فقط اضافه کردن FTS مانده که این Feature به حساب می آید لذا این گزینه را انتخاب می کنیم.





SQL Server Installation Center


Planning
Installation
Maintenance
Tools
Resources
Advanced
Options


 [New SQL Server stand-alone installation or add features to an existing installation](#)
Launch a wizard to install SQL Server 2017 in a non-clustered environment or to add features to an existing SQL Server 2017 instance.


 [Install SQL Server Reporting Services](#)
Launch a download page that provides a link to install SQL Server Reporting Services. An internet connection is required to install SSRS.


 [Install SQL Server Management Tools](#)
Launch a download page that provides a link to install SQL Server Management Studio, SQL Server command-line utilities (SQLCMD and BCP), SQL Server PowerShell provider, SQL Server Profiler and Database Tuning Advisor. An internet connection is required to install these tools.

 [Install SQL Server Data Tools](#)
Launch a download page that provides a link to install SQL Server Data Tools (SSDT). SSDT provides Visual Studio integration including project system support for Azure SQL Database, the SQL Server Database Engine, Reporting Services, Analysis Services and Integration Services. An internet connection is required to install SSDT.

 [New SQL Server failover cluster installation](#)
Launch a wizard to install a single-node SQL Server 2017 failover cluster.

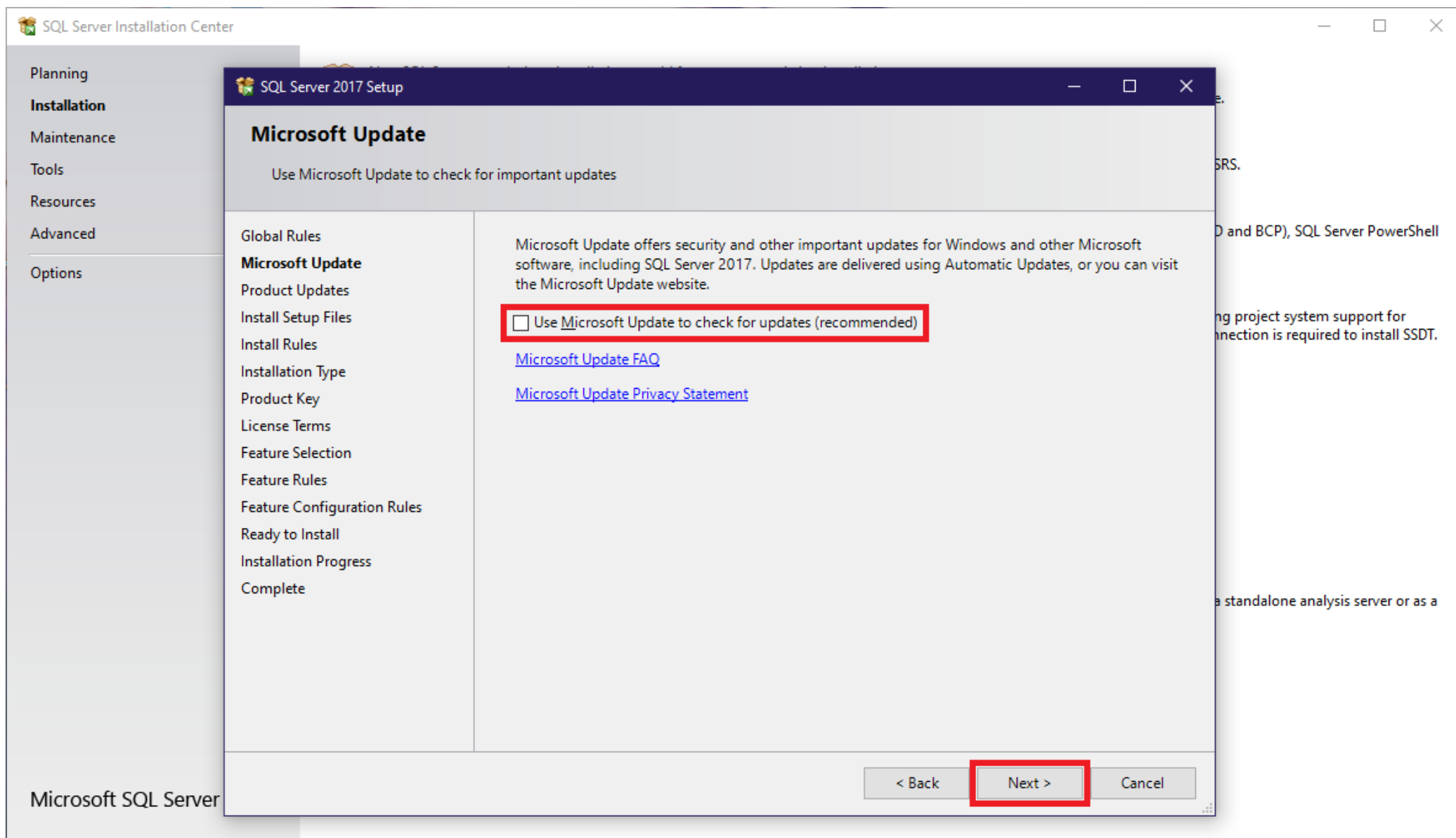
 [Add node to a SQL Server failover cluster](#)
Launch a wizard to add a node to an existing SQL Server 2017 failover cluster.

 [Upgrade from a previous version of SQL Server](#)
Launch a wizard to upgrade a previous version of SQL Server to SQL Server 2017.

 [New Machine Learning Server \(Standalone\) installation](#)
Launch a wizard to install Machine Learning Server (Standalone) on a Windows machine. This is typically used by data scientists as a standalone analysis server or as a SQL Server Machine Learning Services client.

Microsoft SQL Server 2017

بعد از سپری کردن عملیاتی، از شما میپرسد که SSMS شما را آپدیت کند یا نه (چون من فضای زیادی ندارم این تیک را نزدم)



بعد از بررسی کردن اطلاعات از Server شما (مرحله ی Install Rules), از شما می پرسد که Server جدیدی برای SSMS میواید بسازید با امکانات و ویژگی های دیر یا به همان Server ای که دارید میخواهید امکانات اضافه کنید. ما از قبل Server ساختیم و میخواهیم به آن Full-Text Search اضافه کنیم لذا گزینه ی دوم را انتخاب و نام Server را تعیین میکنیم. در قسمت Installed instances منظورش کل آن Server هایی که ما درون سیستم نصب کرده ایم, است که شامل اطلاعاتی مانند ورژن, نام, امکانات (Features) و غیره است.

SQL Server 2017 Setup

Installation Type

Perform a new installation or add features to an existing instance of SQL Server 2017.

Global Rules
Microsoft Update
Product Updates
Install Setup Files
Install Rules
Installation Type
Feature Selection
Feature Rules
Feature Configuration Rules
Ready to Install
Installation Progress
Complete

☐ Perform a new installation of SQL Server 2017

Select this option if you want to install a new instance of SQL Server or want to install shared components.

☒ Add features to an existing instance of SQL Server 2017

SSMS_2

Select this option if you want to add features to an existing instance of SQL Server. For example, you want to add the Analysis Services features to the instance that contains the Database Engine. Features within an instance must be the same edition.

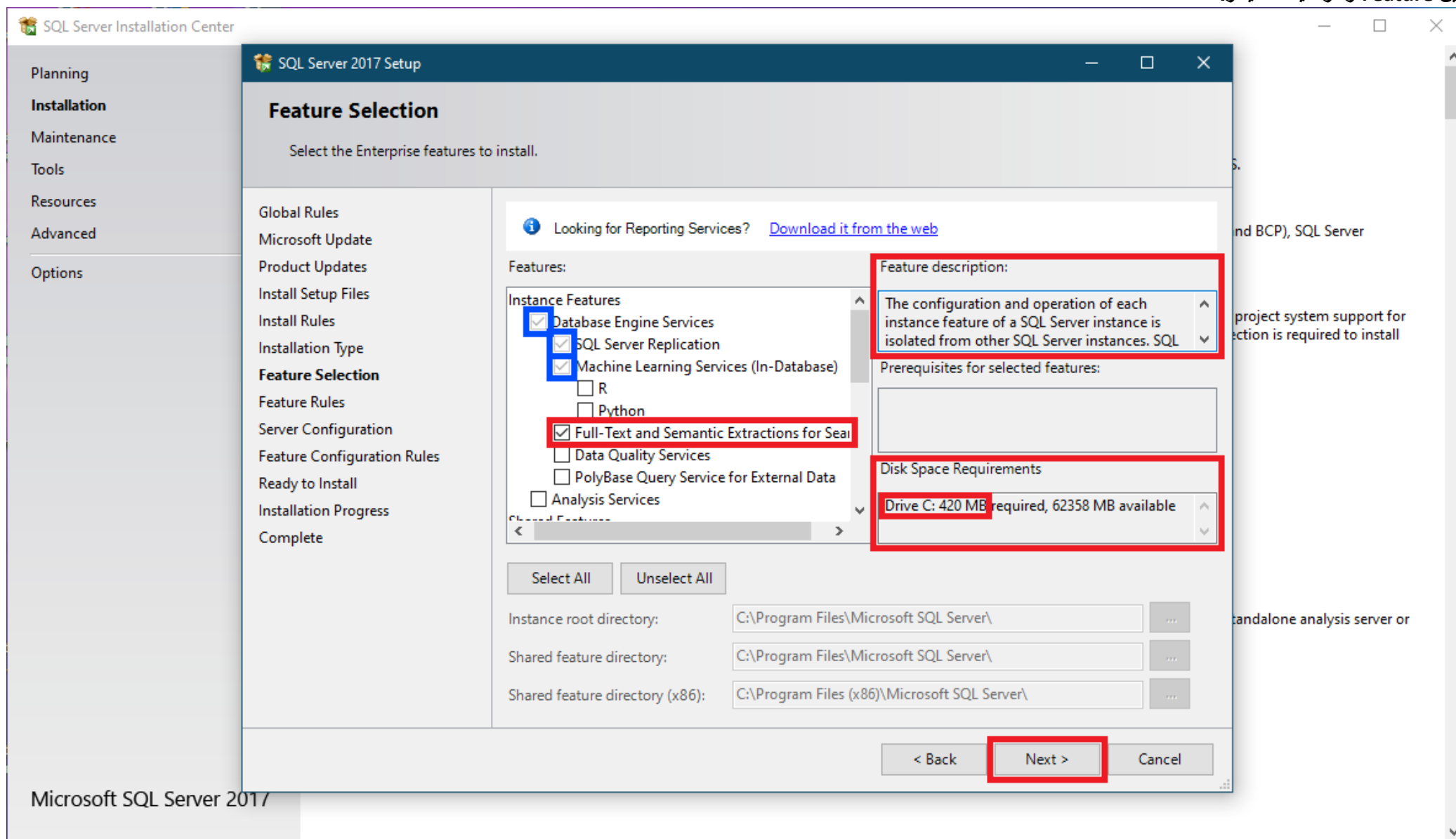
Installed instances:

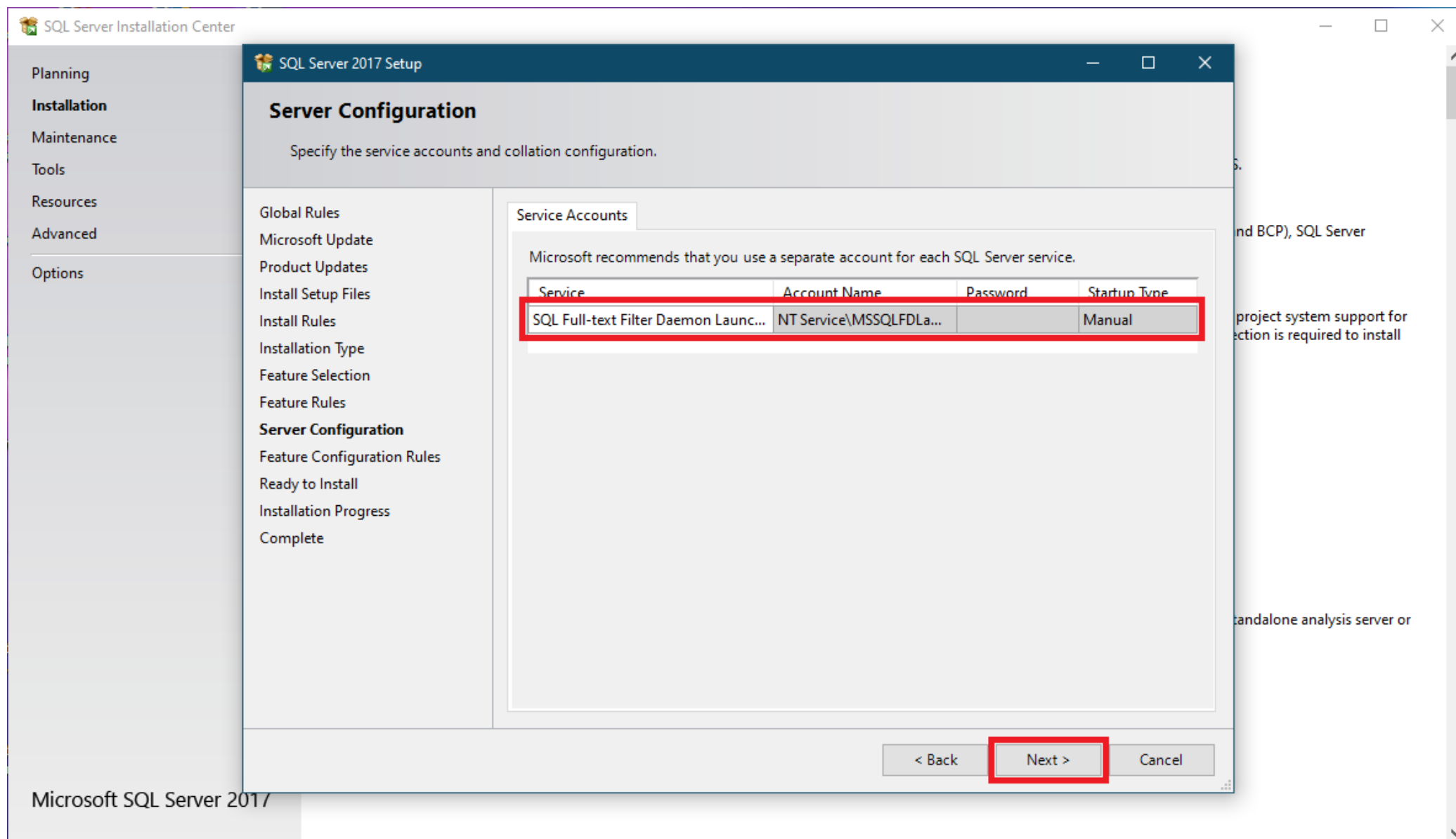
| Instance Name | Instance ID | Features | Edition | Version |
|--------------------|----------------|---------------------|------------|---------------|
| ALIM | MSSQL14.ALIM | SQLEngine, SQLEn... | Enterprise | 14.0.1000.169 |
| SSMS_2 | MSSQL14.SSMS_2 | SQLEngine, SQLEn... | Enterprise | 14.0.1000.169 |
| <Shared Compone... | | Conn, BC, SDK, DQC | | 14.0.1000.169 |

< Back **Next >** Cancel

Microsoft SQL Server 2017

این قسمت انتخاب امکانات (Server Features) است، تیک های خاکستری رنگ (مربع های آبی) نشان دهنده ی از قبل نصب شدن آنهاست و به ما اجازه ی دوباره نصبشان را نمی دهد. زیر آن سه تیک خاکستری، گزینه ی "Full-Text and Semantic Extractions For Search..." که تیک اش سیاه رنگ است، FTS است که سمت راست آن اطلاعات مربوط به آن مانند حجم مورد نیاز این Feature و توضیحات دیگر.





Planning

Installation

Maintenance

Tools

Resources

Advanced

Options

SQL Server 2017 Setup

Ready to Install

Verify the SQL Server 2017 features to be installed.

Global Rules

Microsoft Update

Product Updates

Install Setup Files

Install Rules

Installation Type

Feature Selection

Feature Rules

Server Configuration

Feature Configuration Rules

Ready to Install

Installation Progress

Complete

Ready to install SQL Server 2017:

Summary

Edition: Enterprise

Action: Install (Product Update)

General Configuration

Features

Full-Text and Semantic Extractions for Search

Instance configuration

Instance ID: SSMS_2

Instance IDs

SQL Database Engine: MSSQL14.SSMS_2

Instance Directory: C:\Program Files\Microsoft SQL Server\

Shared component root directory

Shared feature directory: C:\Program Files\Microsoft SQL Server\

Shared feature (WOW64) directory: C:\Program Files (x86)\Microsoft SQL Server\

Product Update

Update Enabled: True

Update Source: MU

Instance configuration

Configuration file path:

C:\Program Files\Microsoft SQL Server\140\Setup Bootstrap\Log\20200209_215114\ConfigurationFile.ini

< Back

Install

Cancel

Planning

Installation

Maintenance

Tools

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Advanced

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SQL Server 2017 Setup

Installation Progress

Global Rules

Microsoft Update

Product Updates

Install Setup Files

Install Rules

Installation Type

Feature Selection

Feature Rules

Server Configuration

Feature Configuration Rules

Ready to Install

Installation Progress

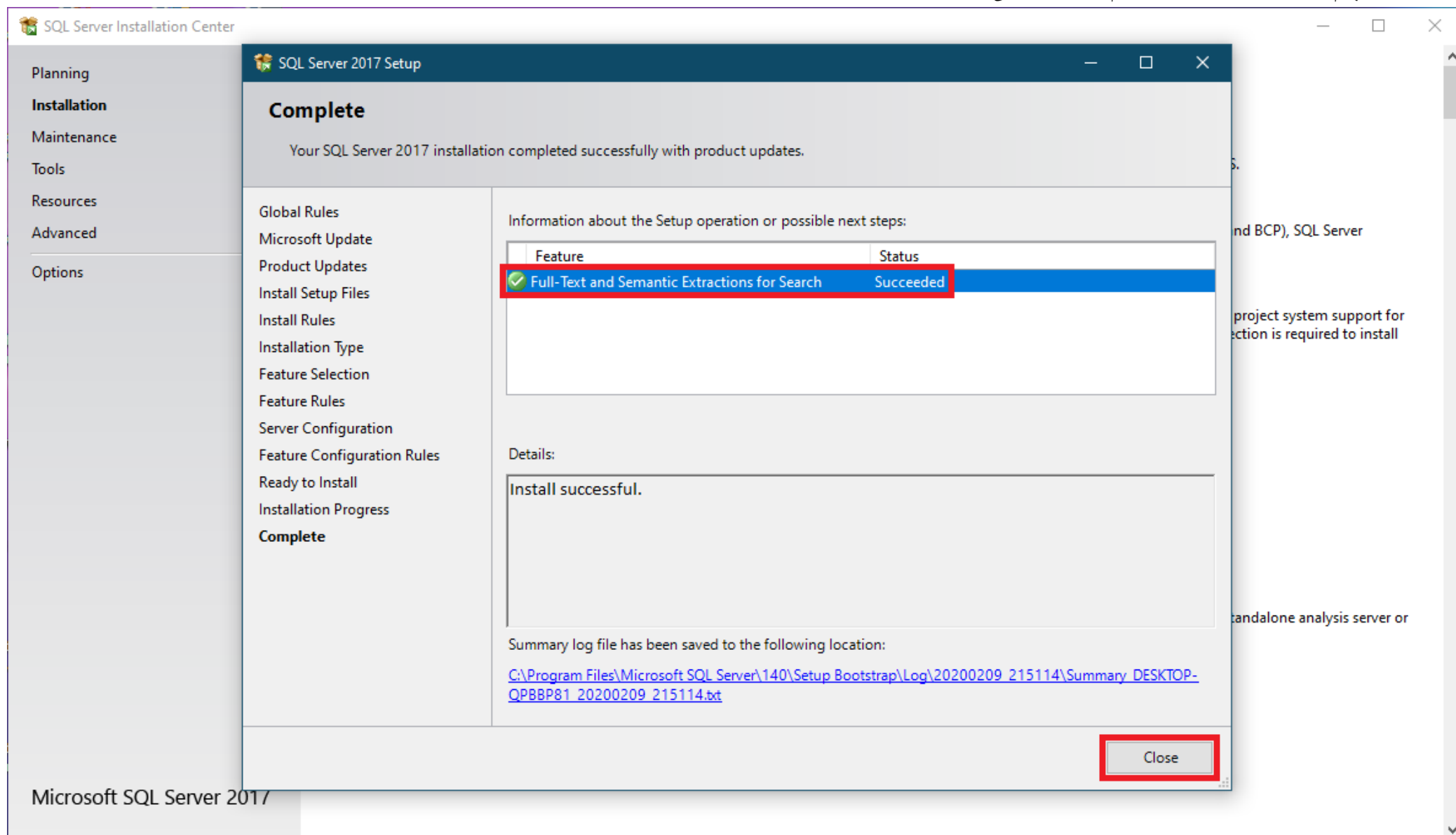
Complete

FulltextConfigAction_install_shutdownnoinstance_Cpu64

Next >

Cancel

در این قسمت پیام عملیات نصب با موفقیت انجام شد مشاهده می کنید.



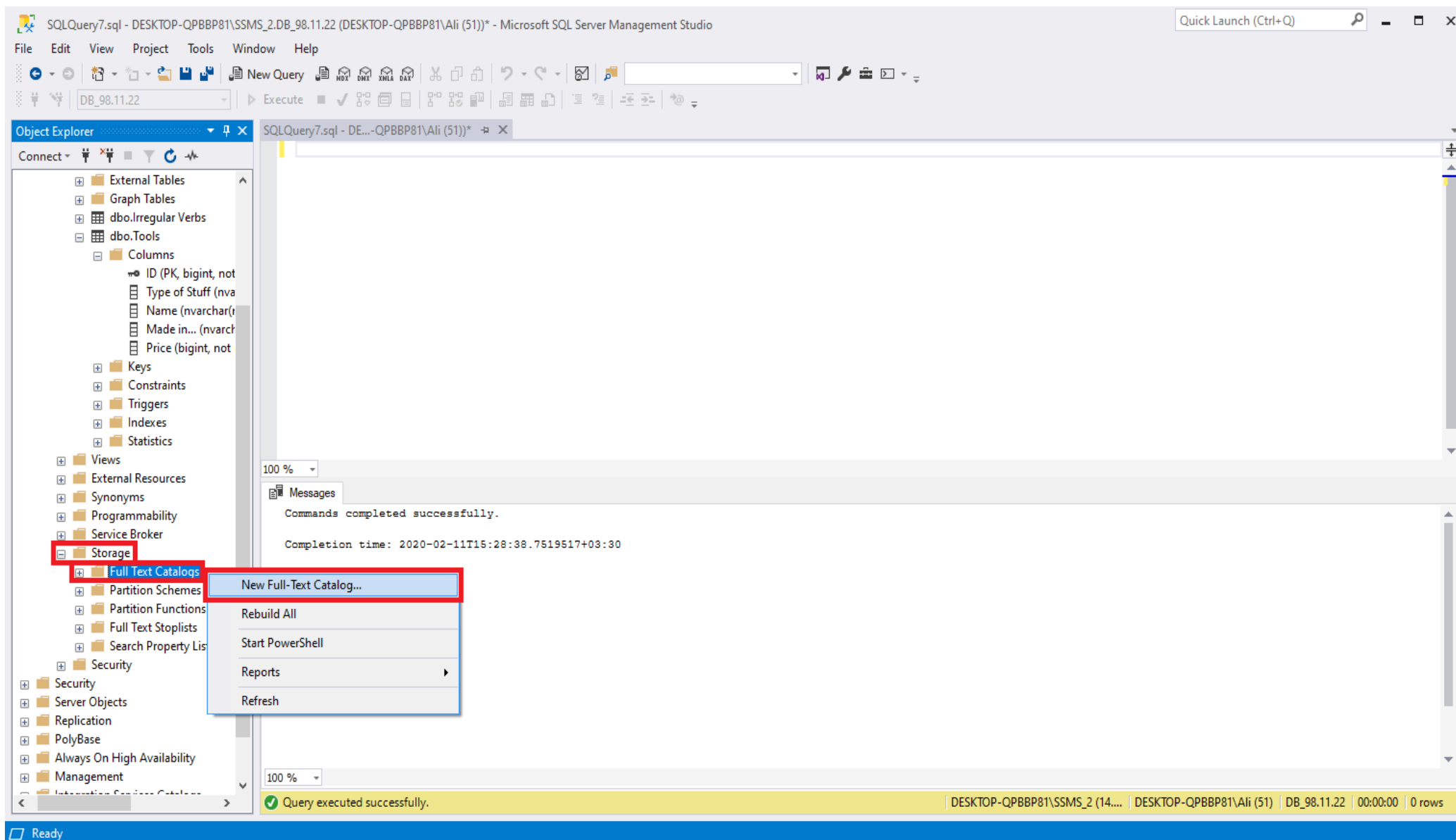
در این قسمت چگونه ساختن FTC را به شما نشان می دهیم که به دو روش انجام می شود:

Wizard .1

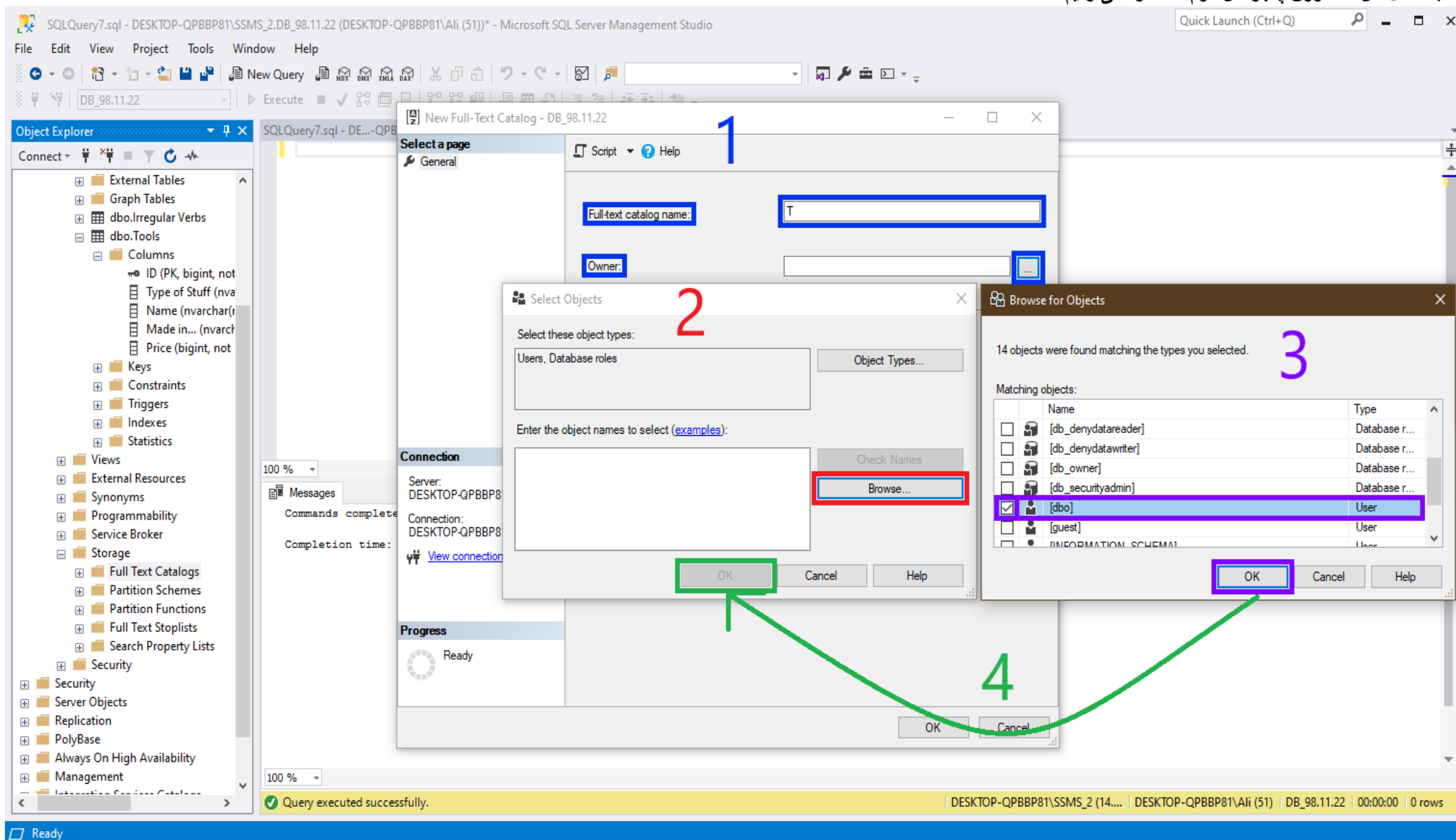
Code .2

:Wizard .1

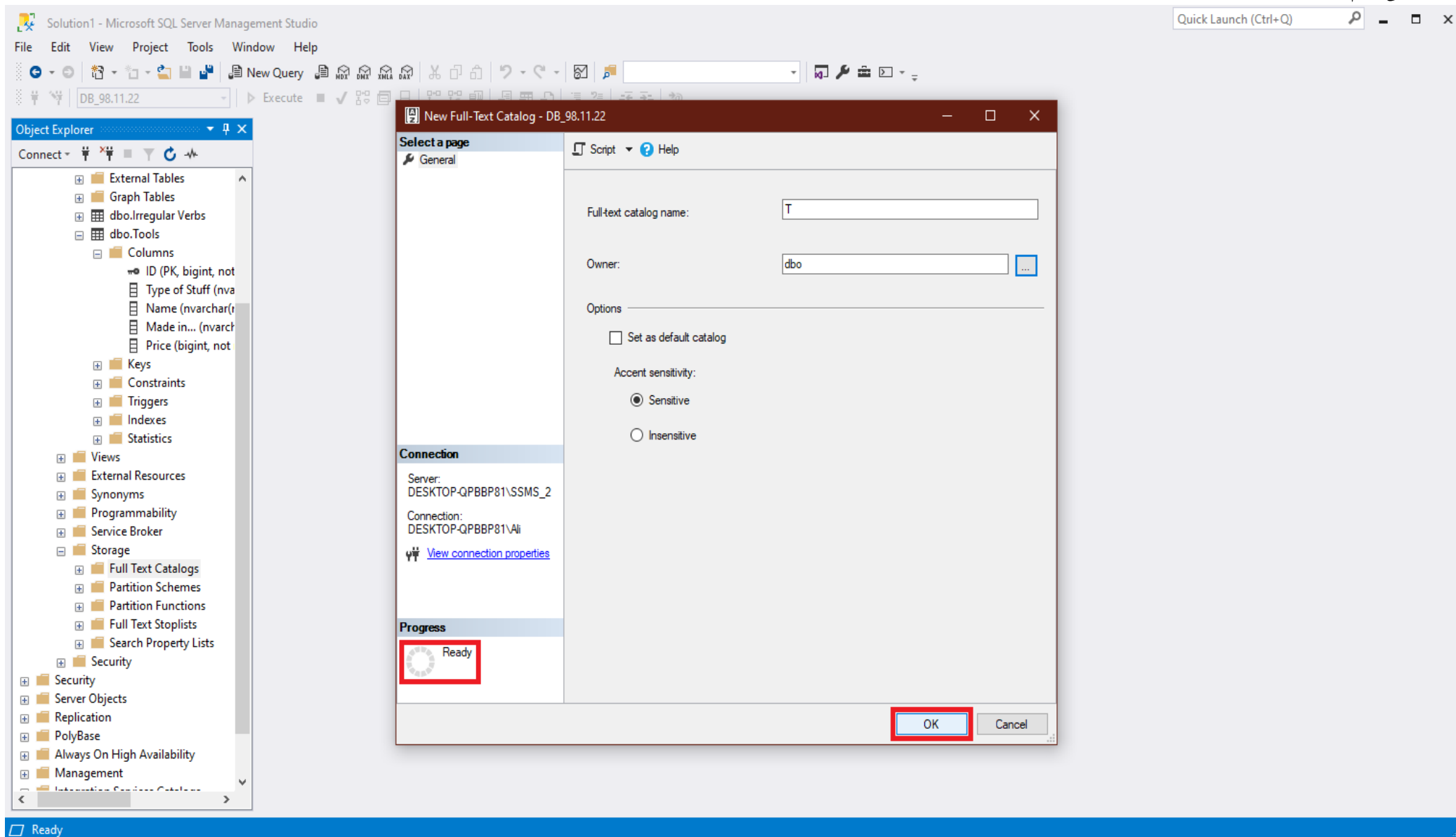
اول باید Catalog آن را بسازیم که بگوییم درون این Database ,FTC ای با این نام ذخیره شود(ساخته شود)



1. در قسمت "Full-text catalog name", نام Catalog را می دهیم بعد در قسمت "Owner" مکان ذخیره شدن (نصب شدن یا فعال شدن) آن را در چه نوع از Object می دهیم, که با زدن دکمه ی "...". آن را انتخاب می کنیم.
2. روی "Browse..." می زنیم.
3. تیک "[dbo]" را زده و OK را می زنیم (اگر هم این قسمت را نزنید, به طور پیش فرض آن را [dbo] در نظر میگیرد).
4. بعد OK ای که درون پنجره ی دوم است را می زنیم.



در نتیجه به همین چیزی در می آید.
OK را می زنیم.



SQLQuery7.sql - DESKTOP-QPBBP81\SSMS_2.DB_98.11.22 (DESKTOP-QPBBP81\Ali (51))* - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Quick Launch (Ctrl+Q)

Object Explorer

- Connect
- External Tables
- Graph Tables
- dbo.Irregular Verbs
- dbo.Tools
 - Columns
 - ID (PK, bigint, not
 - Type of Stuff (nva
 - Name (nvarchar(r
 - Made in... (nvarch
 - Price (bigint, not
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
- Views
- External Resources
- Synonyms
- Programmability
- Service Broker
- Storage
 - Full Text Catalogs
 - Partition Schemes
 - Partition Functions
 - Full Text Stoplists
 - Search Property Lists
- Security
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalog

SQLQuery7.sql - DE...

100 %

Messages

Commands complete

Completion time:

100 %

Query executed successfully.

DESKTOP-QPBBP81\SSMS_2 (14.... | DESKTOP-QPBBP81\Ali (51) | DB_98.11.22 | 00:00:00 | 0 rows

Ready

New Full-Text Catalog - DB_98.11.22

Select a page

General

Full-text catalog name: T

Owner: dbo

Options

☐ Set as default catalog

Accent sensitivity:

☒ Sensitive

☐ Insensitive

Connection

Server: DESKTOP-QPBBP81\SSMS_2

Connection: DESKTOP-QPBBP81\Ali

View connection properties

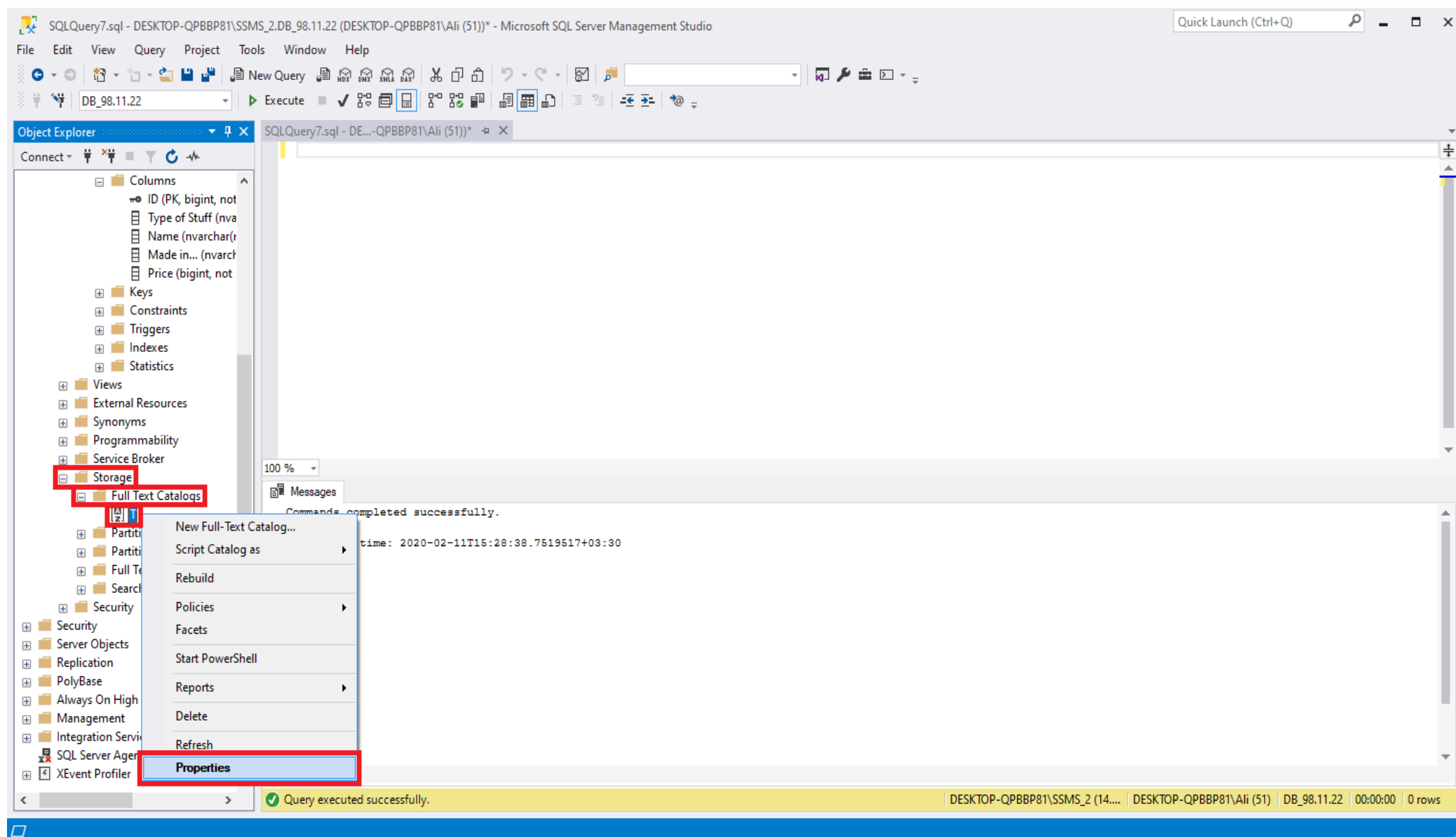
Progress

Executing

OK Cancel

در این قسمت FTS را روی Table مورد نظر فعال میکنیم.

نکته: Table مورد نظر باید یک ستون **Clustered** یا **Primary Key (P.K.)** داشته باشد تا بتوانید FTS را روی آن Table فعل کنیم.



Solution1 - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

DB_98.11.22 Execute

Object Explorer

- Connect
- External Tables
- Graph Tables
- dbo.Irregular Verbs
- dbo.Tools
- Columns
 - ID (PK, bigint, not null)
 - Type of Stuff (nvarchar(100))
 - Name (nvarchar(100))
 - Made in... (nvarchar(100))
 - Price (bigint, not null)
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Views
- External Resources
- Synonyms
- Programmability
- Service Broker
- Storage
 - Full Text Catalogs
 - T
 - Partition Schemes
 - Partition Functions
 - Full Text Stoplists
 - Search Property Lists
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability

Full-Text Catalog Properties - T

Select a page

- General
- Tables/Views
- Population Schedule

Script Help

Properties

| Name | T |
|----------------------|------------------|
| Default Catalog | False |
| Last Population Date | 22/11/1398 03:49 |
| Population Status | Idle |
| Catalog Size | 0 MB |
| Item Count | 4 |
| Unique Key Count | 8 |
| Accent Sensitive | True |
| Owner | dbo |

Connection

Server: DESKTOP-QPBBP81\SMS_2

Connection: DESKTOP-QPBBP81\Ali

[View connection properties](#)

Progress

Ready

Catalog action

- ☒ None
- ☐ Optimize catalog
- ☐ Rebuild catalog
- ☐ Repopulate catalog

OK Cancel

Ready

Table مورد نظر را انتخاب و با دکمه ی ">" روی آن ویرایش هایی انجام می دهیم (قابلیت FTS به بعضی از ستون هایش اضافه میکنیم)

SQLQuery7.sql - DESKTOP-QPBBP81\SSMS_2.DB_98.11.22 (DESKTOP-QPBBP81\Ali (51)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Object Explorer

- Columns
 - ID (PK, bigint, not
 - Type of Stuff (nva
 - Name (nvarchar(
 - Made in... (nvarc
 - Price (bigint, not
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Views
- External Resources
- Synonyms
- Programmability
- Service Broker
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 - Search Property Lists
- Security
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabl
- XEvent Profiler

Full-Text Catalog Properties - T

Select a page

- General
- Tables/Views
- Population Schedule

All eligible table/view objects in this database

| Object Name |
|-------------|
| dbo.Tools |

Table/view objects assigned to the catalog

| Object Name |
|-------------|
|-------------|

Selected object properties

Unique index: ☐ Table is full-text enabled

Eligible columns:

| Available Columns | Language for ... | Data Type Colu... | Statistical Semantics |
|-------------------|------------------|-------------------|-----------------------|
|-------------------|------------------|-------------------|-----------------------|

Track changes:

☐ Automatic ☐ Manual ☐ Do not track changes

Connection

Server: DESKTOP-QPBBP81\SSMS_2

Connection: DESKTOP-QPBBP81\Ali

[View connection properties](#)

Progress

Ready

OK Cancel

100 %

Commands complete

Completion time:

100 %

Query executed successfully.

DESKTOP-QPBBP81\SSMS_2 (14.... | DESKTOP-QPBBP81\Ali (51) | DB_98.11.22 | 00:00:00 | 0 rows

Ready

با زدن آن دکمه جدول به آن طرف منتقل می شود، در قسمت "Unique index" اسم ستونی را که Primary Key یا Unique است را انتخاب می کنیم، سپس در قسمت "Available Columns" ستونی که می خواهیم روی آن FTS فعال شود را تیک اش می زنیم.

The screenshot displays the Microsoft SQL Server Management Studio interface. The 'Object Explorer' on the left shows the database structure, including 'Columns', 'Keys', 'Constraints', 'Triggers', 'Indexes', 'Statistics', 'Views', 'External Resources', 'Synonyms', 'Programmability', 'Service Broker', 'Storage', 'Full Text Catalogs', 'Partition Schemes', 'Partition Functions', 'Full Text Stoplists', 'Search Property Lists', 'Security', 'Server Objects', 'Replication', 'PolyBase', 'Always On High Availability', 'Management', 'Integration Services Catalogs', 'SQL Server Agent (Agent XPs disabled)', and 'XEvent Profiler'. The 'Full-Text Catalog Properties' dialog box is open, showing the 'Available Columns' tab. The 'Unique index' dropdown is set to 'PK_Toolss'. The 'Table is full-text enabled' checkbox is checked. The 'Available Columns' list shows the following columns with checkboxes:

| Available Columns | Language for ... | Data Type Colu... | Statistical Semantics |
|--|------------------|-------------------|--------------------------|
| <input type="checkbox"/> Made in... | | | <input type="checkbox"/> |
| <input type="checkbox"/> Name | | | <input type="checkbox"/> |
| <input type="checkbox"/> Type of Stuff | | | <input type="checkbox"/> |

The 'Progress' section shows 'Ready'. The status bar at the bottom indicates 'Query executed successfully.' and 'DESKTOP-QPBBP81\SSMS_2 (14....) | DESKTOP-QPBBP81\Ali (51) | DB_98.11.22 | 00:00:00 | 0 rows'.

بعد آن زمانی که می‌خواهیم FTS با آن کار کند را می‌زنیم (فارسی ندارد!)

SQLQuery7.sql - DESKTOP-QPBBP81\SSMS_2.DB_98.11.22 (DESKTOP-QPBBP81\Ali (51))* - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Quick Launch (Ctrl+Q)

DB_98.11.22

Object Explorer

- Columns
 - ID (PK, bigint, not null)
 - Type of Stuff (nvarchar(50))
 - Name (nvarchar(50))
 - Made in... (nvarchar(50))
 - Price (bigint, not null)
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Views
- External Resources
- Synonyms
- Programmability
- Service Broker
- Storage
 - Full Text Catalogs
 - T
- Partition Schemes
- Partition Functions
- Full Text Stoplists
- Search Property Lists
- Security
- Server Objects
 - Replication
 - PolyBase
 - Always On High Availability
 - Management
 - Integration Services Catalogs
 - SQL Server Agent (Agent XPs disabled)
 - XEvent Profiler

Full-Text Catalog Properties - T

Select a page

- General
- Tables/Views
- Population Schedule

Script ? Help

All eligible table/view objects in this database

Object Name

Table/view objects assigned to the catalog

Object Name

dbo.Tools

Selected object properties

Unique index: PK_Tools

☒ Table is full-text enabled

Eligible columns:

| Available Columns | Language for ... | Data Type Column | Statistical Semantics |
|--|---------------------|------------------|--------------------------|
| <input checked="" type="checkbox"/> Made in... | English | | <input type="checkbox"/> |
| <input type="checkbox"/> Name | French | | <input type="checkbox"/> |
| <input type="checkbox"/> Type of Stuff | Greek | | <input type="checkbox"/> |
| | German | | |
| | Danish | | |
| | Czech | | |
| | Traditional Chinese | | |
| | Catalan | | |

Track changes:

☒ Automatic ☐ Manual ☐ Do not track changes

OK Cancel

Connection

Server: DESKTOP-QPBBP81\SSMS_2

Connection: DESKTOP-QPBBP81\Ali

[View connection properties](#)

Progress

Ready

100 %

Commands completed

Completion time:

100 %

Query executed successfully.

DESKTOP-QPBBP81\SSMS_2 (14....) | DESKTOP-QPBBP81\Ali (51) | DB_98.11.22 | 00:00:00 | 0 rows

Ready

Track Changes برای این است که اگر به روزی شما Table را اصلاح کردید یا به آن ستون مورد نظر ای که FTS دارد ردیفی اضافه کردید، به طور اتومات دوباره همین تنظیمات را برای آن ستون اعمال می کند.
بعد OK می زنیم.

SQLQuery7.sql - DESKTOP-QPBBP81\SSMS_2.DB_98.11.22 (DESKTOP-QPBBP81\Ali (51)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

Object Explorer

- Columns
 - ID (PK, bigint, not null)
 - Type of Stuff (nvarchar(100))
 - Name (nvarchar(100))
 - Made in... (nvarchar(100))
 - Price (bigint, not null)
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Views
- External Resources
- Synonyms
- Programmability
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 - Partition Schemes
 - Partition Functions
 - Full Text Stoplists
 - Search Property Lists
- Security
- Server Objects
 - Replication
 - PolyBase
 - Always On High Availability
 - Management
 - Integration Services Catalogs
 - SQL Server Agent (Agent XPs disabled)
 - XEvent Profiler

SQLQuery7.sql - DE...-QPBBP81\Ali (51)

100 %

Messages

Commands completed successfully.

Completion time: 00:00:00

Full-Text Catalog Properties - T

Select a page

- General
- Tables/Views
- Population Schedule

Script ? Help

All eligible table/view objects in this database

Object Name

Table/view objects assigned to the catalog

Object Name

dbo.Tools

Selected object properties

Unique index: PK_Tools

Table is full-text enabled

Eligible columns:

| Available Columns | Language for ... | Data Type Colu... | Statistical Semantics |
|--|------------------|-------------------|--------------------------|
| <input checked="" type="checkbox"/> Made in... | English | | <input type="checkbox"/> |
| <input type="checkbox"/> Name | | | <input type="checkbox"/> |
| <input type="checkbox"/> Type of Stuff | | | <input type="checkbox"/> |

Track changes:

☒ Automatic ☐ Manual ☐ Do not track changes

OK Cancel

Progress

Ready

Query executed successfully.

DESKTOP-QPBBP81\SSMS_2 (14....) | DESKTOP-QPBBP81\Ali (51) | DB_98.11.22 | 00:00:00 | 0 rows

Ready

SQLQuery7.sql - DESKTOP-QPBBP81\SSMS_2.DB_98.11.22 (DESKTOP-QPBBP81\Ali (51)) - Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

DB_98.11.22 Execute

Object Explorer

- Columns
 - ID (PK, bigint, not null)
 - Type of Stuff (nvarchar(100))
 - Name (nvarchar(100))
 - Made in... (nvarchar(100))
 - Price (bigint, not null)
- Keys
- Constraints
- Triggers
- Indexes
- Statistics
- Views
- External Resources
- Synonyms
- Programmability
- Service Broker
- Storage
 - Full Text Catalogs
 - T**
 - Partition Schemes
 - Partition Functions
 - Full Text Stoplists
 - Search Property Lists
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler

SQLQuery7.sql - DE...

Full-Text Catalog Properties - T

Select a page

- General
- Tables/Views
- Population Schedule

Script Help

All eligible table/view objects in this database

Table/view objects assigned to the catalog

Object Name A

Object Name A

dbo.Tools

Selected object properties

Unique index: PK_Tools Table is full-text enabled

Eligible columns:

| Available Columns A | Language for ... | Data Type Colu... | Statistical Semantics |
|--|------------------|-------------------|--------------------------|
| <input checked="" type="checkbox"/> Made in... | English | | <input type="checkbox"/> |
| <input type="checkbox"/> Name | | | <input type="checkbox"/> |
| <input type="checkbox"/> Type of Stuff | | | <input type="checkbox"/> |

Track changes:

☒ Automatic ☐ Manual ☐ Do not track changes

Connection

Server: DESKTOP-QPBBP81\SSMS_2

Connection: DESKTOP-QPBBP81\Ali

[View connection properties](#)

Progress

Executing

OK Cancel

100 %

Commands completed

Completion time:

100 %

Query executed successfully.

DESKTOP-QPBBP81\SSMS_2 (14....) | DESKTOP-QPBBP81\Ali (51) | DB_98.11.22 | 00:00:00 | 0 rows

Ready

The screenshot displays the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the file 'SQLQuery7.sql' is open, connected to 'DESKTOP-QPBBP81\SSMS_2 (SQL Server)' on 'DESKTOP-QPBBP81\Ali (51)'.

Object Explorer: The left-hand pane shows the server's structure. Under 'DESKTOP-QPBBP81\SSMS_2 (SQL Server)', the 'Full Text Catalogs' folder is highlighted with a red rectangle. A purple arrow points from this folder to the text 'Name of Full-Text Catalog' in the query editor.

Query Editor: The main pane contains the SQL command: `create Fulltext catalog`. The text 'Fulltext catalog' is highlighted with a red box.

Messages: The bottom pane shows the execution results: 'Commands completed successfully.' and 'Completion time: 2020-02-11T15:18:29.7216788+03:30'.

Status Bar: The bottom status bar shows a green checkmark and the message 'Query executed successfully.' along with server details: 'DESKTOP-QPBBP81\SSMS_2 (14...', 'DESKTOP-QPBBP81\Ali (51)', 'DB_98.11.22', '00:00:00', and '0 rows'.

SQLQuery7.sql - DESKTOP-QPBBP81\SSMS_2\DB_98.11.22 (DESKTOP-QPBBP81\Ali (51))* - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

DB_98.11.22 Execute

Object Explorer

- System Databases
- Database Snapshots
- DB_98.11.22
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.Irregular Verbs
 - dbo.Tools
 - Columns
 - ID (PK, bigint, not null)
 - Type of Stuff (nvarchar)
 - Name (nvarchar(max))
 - Made in... (nvarchar(m
 - Price (bigint, not null)
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
- Views
- External Resources
- Synonyms
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- Service Broker
- Storage
 - Full Text Catalogs
 - T
 - Partition Schemes
 - Partition Functions
 - Full Text Stoplists

SQLQuery7.sql - DE...-QPBBP81\Ali (51))* Table Name

```
create fulltext index on [dbo].[Tools]
(
  [Type of Stuff] language 1033 Language Code
)
Column Name
key index [PK_Toolss] on [T] with change_tracking auto
Primary Key Name FTC Name
```

100 %

Messages

Commands completed successfully.

Completion time: 2020-02-11T15:28:38.7519517+03:30

100 %

Query executed successfully.

DESKTOP-QPBBP81\SSMS_2 (14... | DESKTOP-QPBBP81\Ali (51) | DB_98.11.22 | 00:00:00 | 0 rows

Ready Ln 3 Col 1 Ch 1 INS

روش Query زدن:

برای استفاده کردن از قابلیت FTS ما میتوانیم از Freetext/Freetexttable و Contains/Containstable استفاده کنیم.
من اول میخواهم به شما عزیزان تفاوت آنها را، یعنی Contains – Freetext – like بگویم.
برای پیدا کردن ستونی که دارای حداقل یک دونه از Steel است. (فرقشان و نوع کد آنها را مشاهده کنید)

***توجه:** Like > Contains > Freetext (از نظر قدرت، سرعت و هوشمند بودن مرتب شده است) *

The screenshot shows the SQL Server Enterprise Manager interface on the left and the SQL Query Editor on the right. The Enterprise Manager displays the database structure for 'DB_98.11.22', including tables like 'dbo.Tools'. The Query Editor shows a SQL query using the 'freetext' function to search for 'steel' in the 'Type of Stuff' column of the 'Tools' table. The results are displayed in a table with 6 columns: ID, Type of Stuff, Name, Made in..., and Price. The results show three items: 'Chrome Vanadium Steel', 'Stainless Steel', and 'high-grade Steel', all of which contain the word 'steel'.

```
use [DB_98.11.22]
go
--Freetext vs. Contains vs. Like
select * from [dbo].[Tools]
where freetext([Type of Stuff], 'steel')

select * from [dbo].[Tools]
where contains([Type of Stuff], 'steel')

select * from [dbo].[Tools]
where [Type of Stuff] like '%steel%'
```

| ID | Type of Stuff | Name | Made in... | Price |
|----|-----------------------|--------------------|-----------------|--------|
| 1 | Chrome Vanadium Steel | Adjustable Spanner | UK-Swiss-France | 100000 |
| 2 | Stainless Steel | Hammer | Kenya | 50000 |
| 3 | high-grade Steel | Saw | China | 75000 |

فرق Contains با Freetext:

برای پیدا کردن کلمات یا عبارات از Contains استفاده کنید. برای پیدا کردن کلمات و عبارات از نظر معنایی ولی نه معنای دقیق از Freetext استفاده کنید.

توجه داشته باشید که در Contains و Freetext برای پیدا کردن کلمات, باید از AND/and استفاده نمایید.(Contains از نظر هوشمند بودن ضعیف تر, نسبت به Freetext است ولی شما هم امتحان کنید ببیند که Zero Result میدهد یا نه؟)

The screenshot shows the SQL Server Enterprise Manager interface on the left and the SQL Query Editor on the right. The Enterprise Manager shows the database structure for 'DB_98.11.22', including tables like 'Tools'. The Query Editor shows a SQL script with two queries: one using 'freetext' and another using 'contains' to search for 'metal and steel' in the 'Tools' table. The results of the 'contains' query are displayed in a table below the script.

```
use [DB_98.11.22]
go
--Freetext vs. Contains
select * from [dbo].[Tools]
where freetext([Type of Stuff], 'metal and steel')
select * from [dbo].[Tools]
where contains([Type of Stuff], 'metal and steel')
```

| ID | Type of Stuff | Name | Made in... | Price |
|----|-----------------------|--------------------|-----------------|--------|
| 1 | Chrome Vanadium Steel | Adjustable Spanner | UK-Swiss-France | 100000 |
| 2 | Stainless Steel | Hammer | Kenya | 50000 |
| 3 | high-grade Steel | Saw | China | 75000 |
| 4 | Metal | Watch | Europe | 500000 |

ما حتی همچون کدی را هم داریم.

دقت کنید که در Near حداقل دو کلمه برای پیدا شدن باید وارد شود.

The screenshot shows the SQL Server Enterprise Manager on the left, displaying the database structure of DB_98.11.22, including tables like dbo.Tools. The SQL Query Editor on the right shows a query using the `Near` operator. The query results are displayed in a table below the editor.

```
use [DB_98.11.22]
go
--Freetext vs. Contains
select * from [dbo].[Tools]
where freetext([Type of Stuff], 'Near(gold,silver)')

select * from [dbo].[Tools]
where contains([Type of Stuff], 'Near(metal,steel)')
```

| ID | Type of Stuff | Name | Made in... | Price |
|----|---------------|----------|--------------|---------|
| 1 | Gold | ring | USA | 450000 |
| 2 | Silver | Necklace | Saudi Arabia | 1000000 |

برای پیدا کردن عبارت از کد زیر استفاده نمایید.

توجه: آن عبارت درون Freetext باید درون " " وارد شود اما برای Contains باید درون "' "' وارد شود.

The screenshot shows the SQL Server Enterprise Manager on the left, displaying the database structure of DB_98.11.22, including tables like dbo.Tools. The SQL Query Editor on the right shows a query using the `Contains` operator. The query results are displayed in a table below the editor.

```
use [DB_98.11.22]
go
--Freetext vs. Contains
select * from [dbo].[Tools]
where freetext([Type of Stuff], 'stainless steel')

select * from [dbo].[Tools]
where contains([Type of Stuff], '"stainless steel"')
```

| ID | Type of Stuff | Name | Made in... | Price |
|----|-----------------------|--------------------|-----------------|--------|
| 1 | Chrome Vanadium Steel | Adjustable Spanner | UK-Swiss-France | 100000 |
| 2 | Stainless Steel | Hammer | Kenya | 50000 |
| 3 | high-grade Steel | Saw | China | 75000 |

| ID | Type of Stuff | Name | Made in... | Price |
|----|-----------------|--------|------------|-------|
| 1 | Stainless Steel | Hammer | Kenya | 50000 |

SQLQuery2.sql - DE...-QPBBP81\Ali (54))* ~vsC763.sql - DESK...-QPBBP81\Ali (52))*

```
select * from [dbo].[Irregular Verbs]
where contains([infinitive], 'Formsof(inflectional,shake)')
```

100 %

Results Messages

| | infinitive | simple past | past participle | ID |
|---|------------|-------------|-----------------|----|
| 1 | shake | shook | shaken | 96 |

برای پیدا کردن کلمه ای که فعل یا اسم یا صفت آن در ستون است و شما می خواهید همه ی آنها را در یاورید، باید از این کد استفاده کنید. (میتوانید به جا **Fretext**, **Contains** بنویسید که همین **Result** را میدهد)

SQLQuery2.sql - DE...-QPBBP81\Ali (54))* ~vsC763.sql - DESK...-QPBBP81\Ali (52))*

```
select * from [dbo].[Irregular Verbs]
where contains([infinitive], 'Formsof(inflectional,born)')
```

100 %

Results Messages

| | infinitive | simple past | past participle | ID |
|---|------------|-------------|-----------------|----|
| 1 | bear | bore | bome/bom | 2 |

توجه: در این Table چون همه ی ستون های آن از قابلیت FTS برخوردار هستند، لزومی ندارد آن کلمه ای که دنبالش هستید با نام ستون match باشد مثلاً در تصویر رو به رو کلمه ی "born" در ستون [past participle] است اما User در کدش ستون [infinitive] آورده است.

- در این قسمت کد جالبی را به شما نشان می‌دهیم، دقت داشته باشید که Join خالی نوشتن در کدتان مفهوم دیگری را به SSMS می‌رساند (یعنی این Join با Left Join/Right Join/Inner Join تفاوت دارد) توجه: 1. منظور از T1.[Key] اسم P.K. درون Table نیست، به منظور Key پیشفرض درون جدول T1 است که شما بر روی آن Freetexttable/Containstable زدید.
2. RANK به معنای چقدر نزدیک بودن آن کلمه به آن کلمه ای که شما دنبالش هستید، است (یعنی Copper) و هر چقدر عدد درون ستون RANK بزرگتر باشد آن کلمه ی پیدا شده توسط SSMS نزدیک تر به کلمه ی مورد نظر شما است.
3. RANK کلمه ش پیدا شده توسط Freetexttable کوچکتر از Containstable است که به این معناست، که Freetexttable دقیق تر و هوشمندانه تر و سخت تر نسبت به Containstable کار میکند.

Database Snapshots
DB_98.11.22
Database Diagrams
Tables
System Tables
FileTables
External Tables
Graph Tables
dbo.Irregular Verbs
dbo.Tools
Columns
Keys
PK_Toolss
Constraints
Triggers
Indexes

```

use [DB_98.11.22]
go
--Freetext vs. Contains
select * from Freetexttable ([dbo].[Tools],[Type of Stuff],'Copper') as T1
join Tools as T2 on T2.[ID]=T1.[Key]

select * from Containstable ([dbo].[Tools],[Type of Stuff],'Copper') as T1
join Tools as T2 on T2.[ID]=T1.[Key]
  
```

100 %

Results Messages

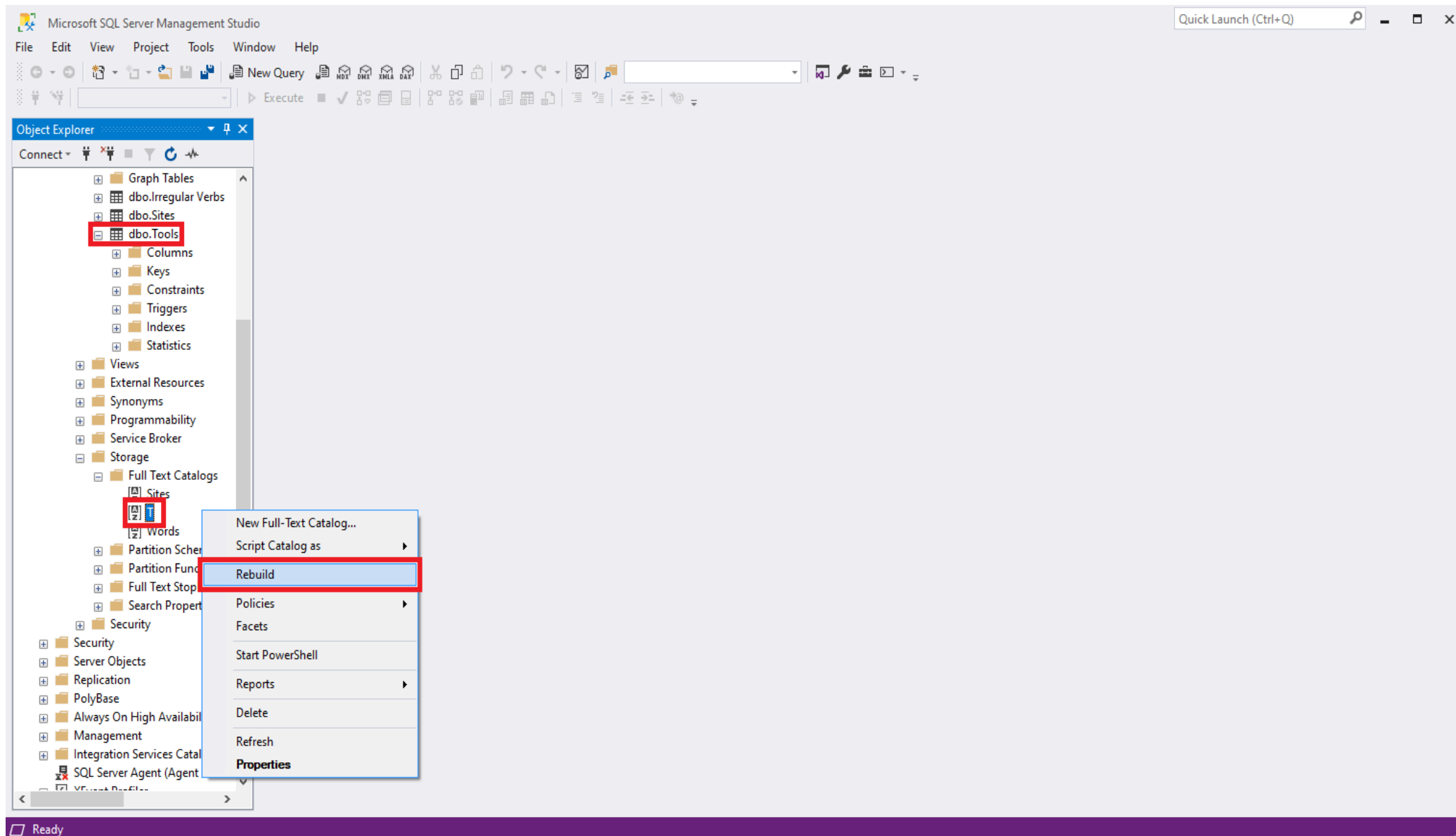
| | KEY | RANK | ID | Type of Stuff | Name | Made in... | Price |
|---|-----|------|----|---------------|----------|------------|--------|
| 1 | 9 | 55 | 9 | Copper | Bracelet | India | 150000 |

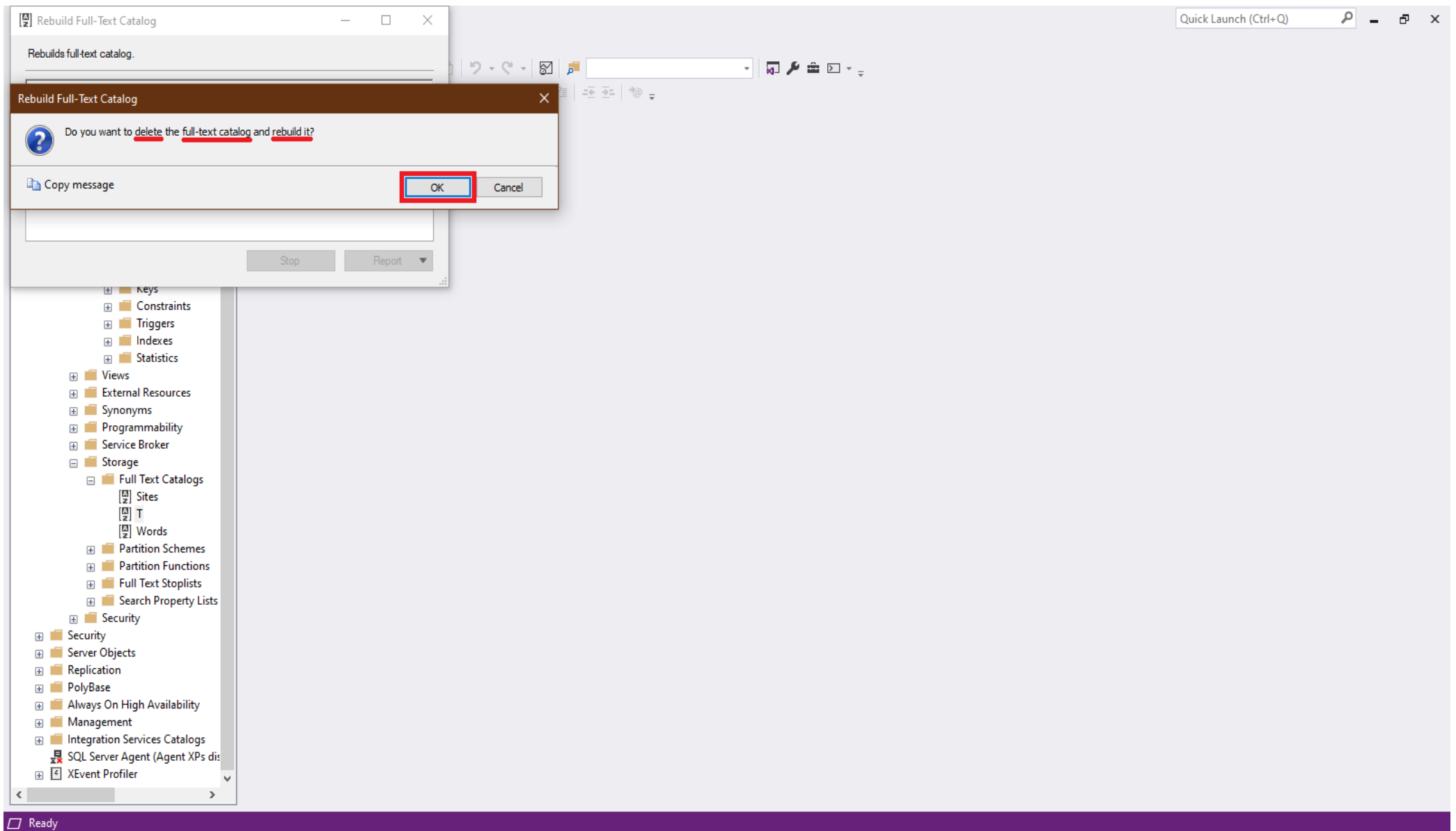
| | KEY | RANK | ID | Type of Stuff | Name | Made in... | Price |
|---|-----|------|----|---------------|----------|------------|--------|
| 1 | 9 | 64 | 9 | Copper | Bracelet | India | 150000 |

:Removing FTC

توضیحات:

برای حذف کردن FTC که با Table درگیر است تنها کلیک راست کردن و زدن Rebuild یا Delete کافی نیست.





Rebuild Full-Text Catalog

Rebuilds full-text catalog.

✓

Success

1 Total

0 Error

1 Success

0 Warning

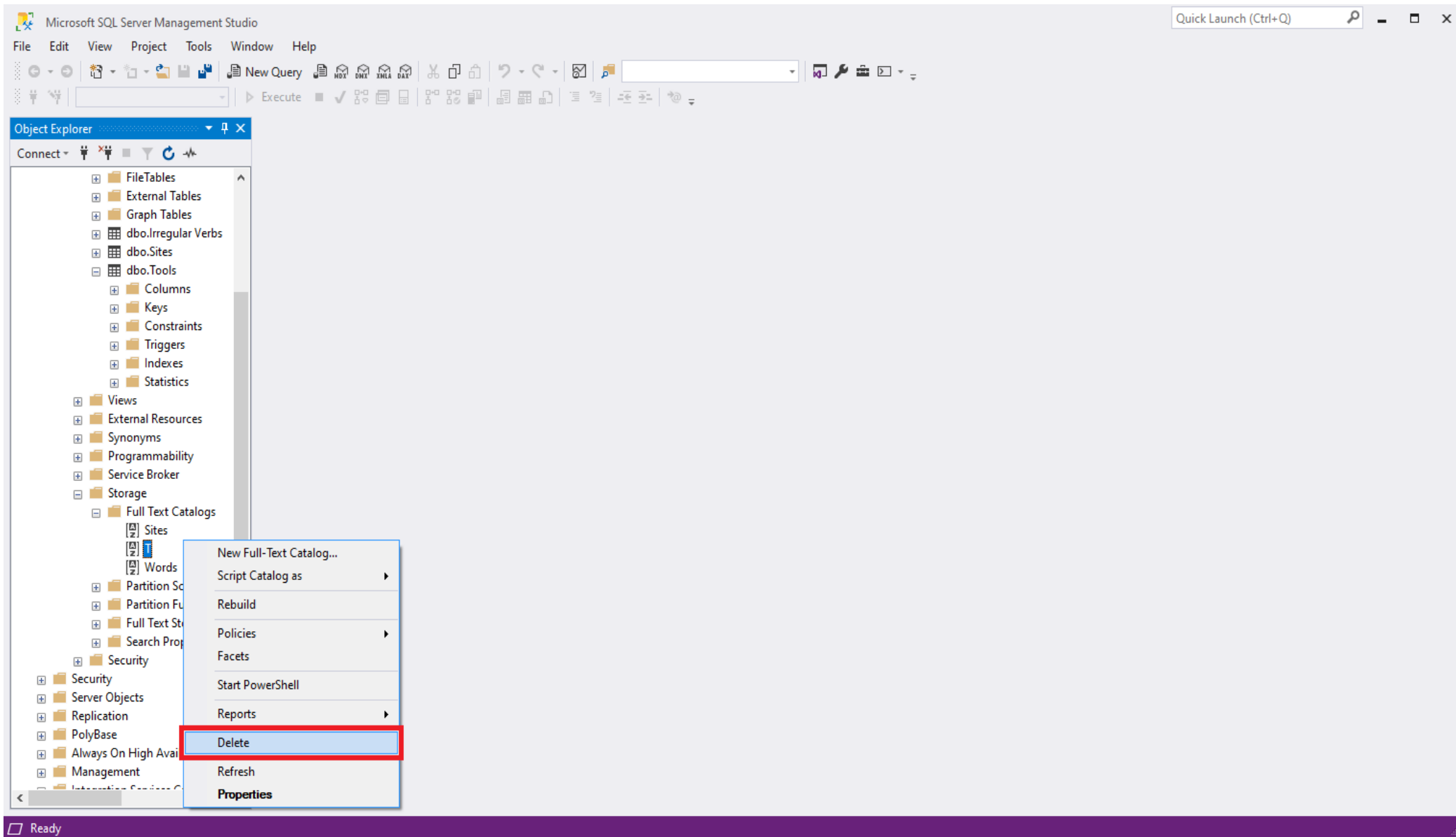
Details:

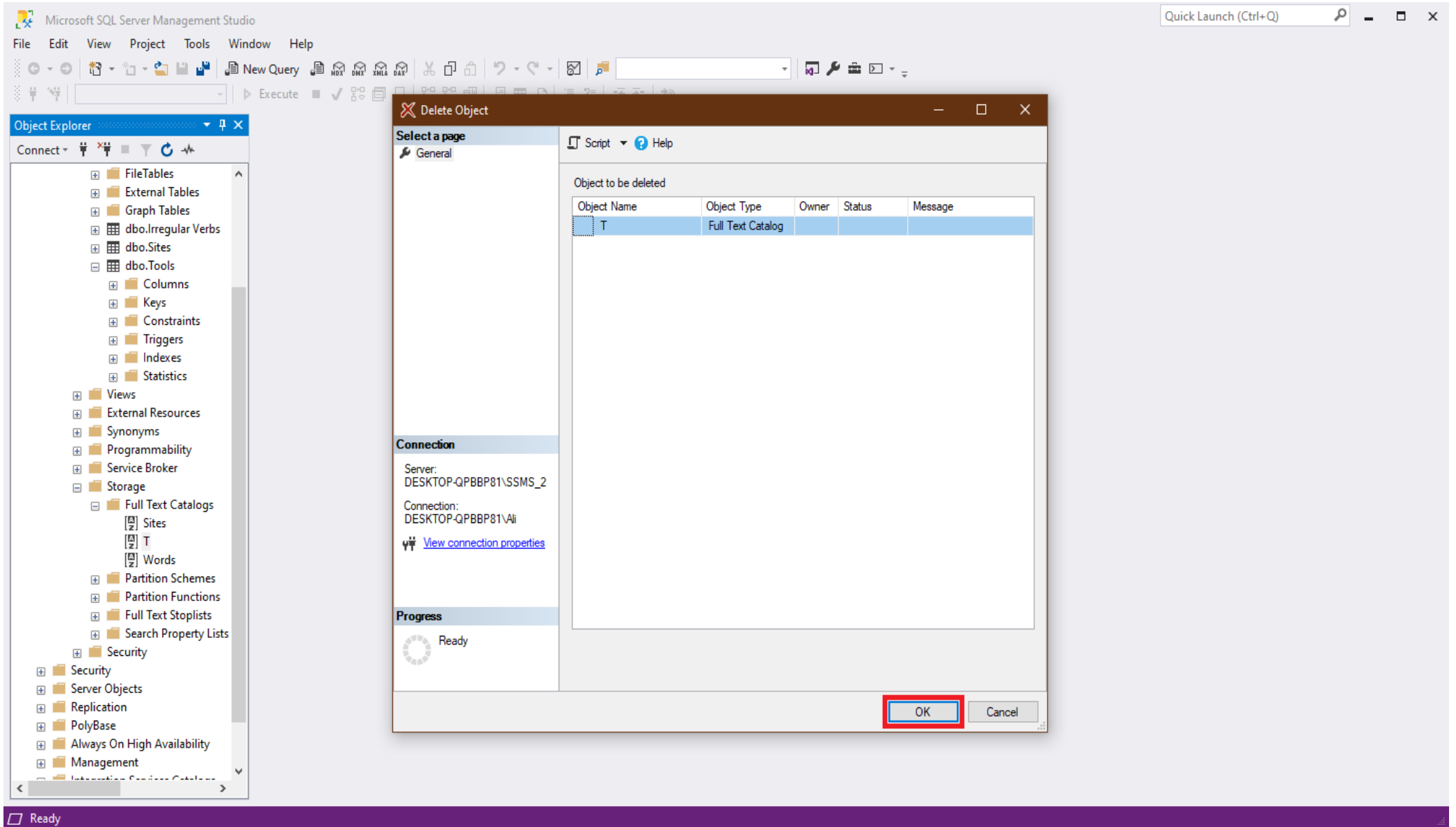
| Action | Status | Message |
|---------------------------|---------|---------|
| Rebuild full-text catalog | Success | |

Close

Report

- Keys
- Constraints
- Triggers
- Indexes
- Statistics
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- Storage
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 - Sites
 - T
 - Words
 - Partition Schemes
 - Partition Functions
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 - Search Property Lists
- Security
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs
- SQL Server Agent (Agent XPs disabled)
- XEvent Profiler





Microsoft SQL Server Management Studio

Quick Launch (Ctrl+Q)

File Edit View Project Tools Window Help

Object Explorer

- Connect
- FileTables
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- dbo.Irregular Verbs
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- dbo.Tools
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 - Sites
 - T
 - Words
 - Partition Schemes
 - Partition Functions
 - Full Text Stoplists
 - Search Property Lists
- Security
- Server Objects
- Replication
- PolyBase
- Always On High Availability Management
- Integration Services Catalog

Delete Object

Select a page

- General

Script Help

Object to be deleted

| Object Name | Object Type | Owner | Status | Message |
|-------------|-------------------|-------|--------|------------------------------|
| T | Full Text Catalog | | Error | Drop failed for Full Text... |

Drop failed for FullTextCatalog 'T'. (Microsoft.SqlServer.Smo) - Click to follow. Click and hold to select this cell.

Connection

Server: DESKTOP-QPBBP81\SSMS_2

Connection: DESKTOP-QPBBP81\Ali

[View connection properties](#)

Progress

Error occurred

OK Cancel

Ready

برای رفع Error مورد نظر کد صفحه ی بعد را بزنید.

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the current query is 'SQLQuery1.sql' in the 'DESKTOP-QPBBP81\SSMS_2.DB_98.11.22 (DESKTOP-QPBBP81\Ali (53))' database. The Object Explorer on the left shows the database structure, with 'dbo.Tools' highlighted under the 'Tables' folder. The main query window contains the text 'Drop Fulltext Catalog T'. The Messages pane at the bottom displays an error: 'Msg 7668, Level 16, State 1, Line 1 Cannot drop full-text catalog 'T' because it contains a full-text index.' The status bar at the bottom indicates 'Query completed with errors.' and shows the completion time as '2020-02-25T22:37:54.1315113+03:30'.

SQLQuery1.sql - DESKTOP-QPBBP81\SSMS_2.DB_98.11.22 (DESKTOP-QPBBP81\Ali (53)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

DB_98.11.22 Execute

Object Explorer

DESKTOP-QPBBP81\SSMS_2 (SQL Server)

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System Databases

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DB_98.11.22

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dbo.Irregular Verbs

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SQLQuery1.sql - DE...-QPBBP81\Ali (53) * X

Drop Fulltext Catalog T

150 %

Messages

Msg 7668, Level 16, State 1, Line 1
Cannot drop full-text catalog 'T' because it contains a full-text index.

Completion time: 2020-02-25T22:37:54.1315113+03:30

150 %

Query completed with errors.

DESKTOP-QPBBP81\SSMS_2 (14.... | DESKTOP-QPBBP81\Ali (53) | DB_98.11.22 | 00:00:00 | 0 rows

Ready Ln 1 Col 24 Ch 24 INS

حالت Wizard :

منظور از فعال بودن Table داخل FTC این است. (حتی با Rebuild کردن هم نمیتوان آن را غیر فعال کرد، مگر اینکه کد بالا را بزنید یا از طریق کلیک راست زدن روی FTC، زدن Properties و زدن دکمه ی "<".)

Microsoft SQL Server Management Studio

Quick Launch (Ctrl+Q)

File Edit View Project Tools Window Help

Object Explorer

Connect

DESKTOP-QPBBP81\SSMS_2 (SQL Serve

Databases

System Databases

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Server Objects

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Always On High Availability

Management

Integration Services Catalogs

SQL Server Agent (Agent XPs disabl

XEvent Profiler

Full-Text Catalog Properties - T

Select a page

General

Tables/Views

Population Schedule

Script ? Help

All eligible table/view objects in this database

Object Name

dbo.Irregular Verbs

dbo.Sites

Table/view objects assigned to the catalog

Object Name

dbo.Tools

Selected object properties

Unique index: PK_Tools

Table is full-text enabled

Eligible columns:

| Available Columns | Language for ... | Data Type Colu... | Statistical Semantics |
|---|------------------|-------------------|--------------------------|
| <input type="checkbox"/> Made in... | | | <input type="checkbox"/> |
| <input type="checkbox"/> Name | | | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> Type of Stuff | English | | <input type="checkbox"/> |

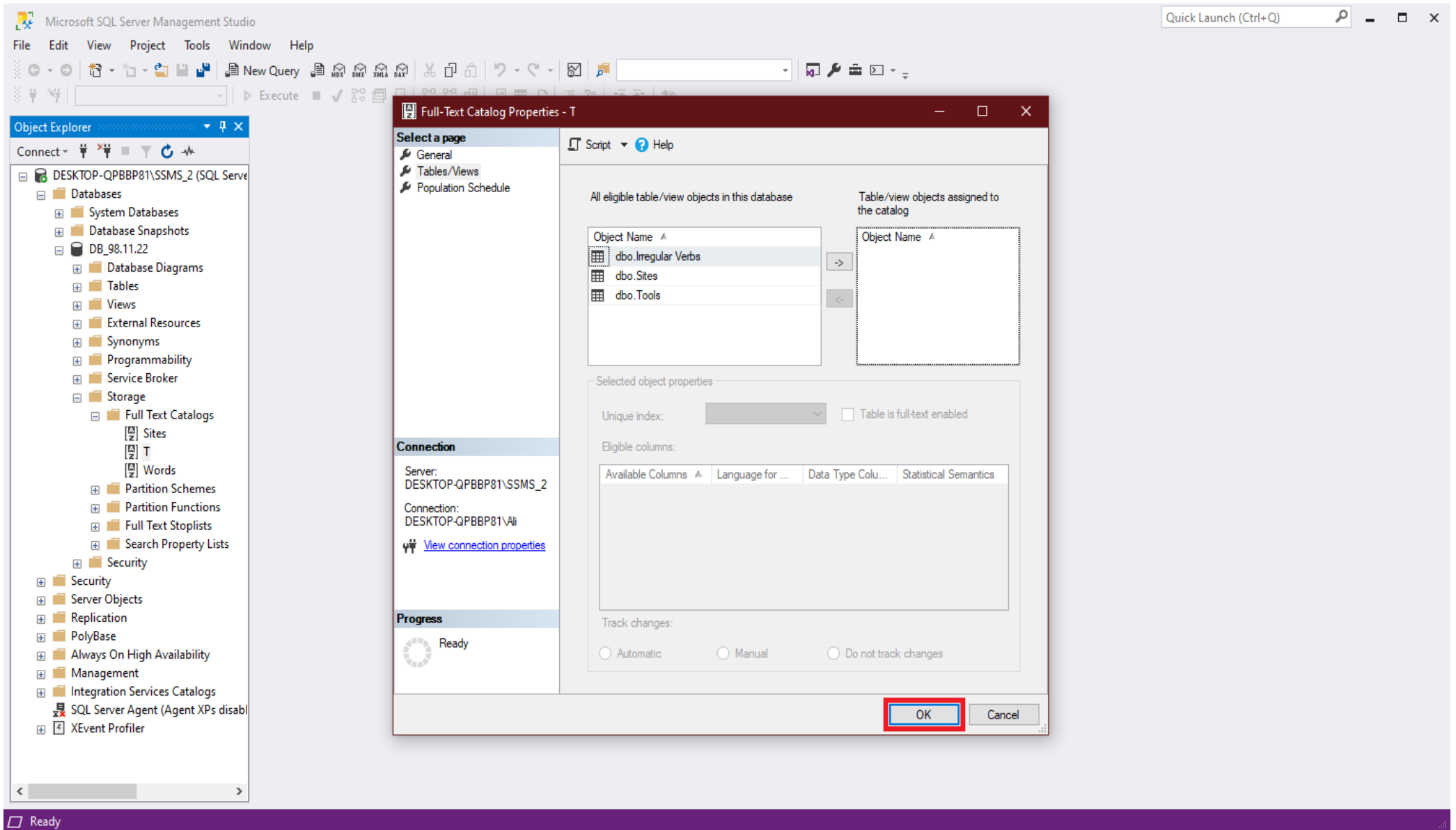
Track changes:

☒ Automatic ☐ Manual ☐ Do not track changes

Progress

Ready

OK Cancel



حالت Code:

چون FTC درونش Table ای فعال است که آن Table از FTS استفاده میکند، اول باید آن Table را غیر فعال کرد بعد FTC را حذف نمود.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure, including tables, views, and full-text catalogs. The main query window contains the following SQL code:

```
Select * from sysobjects Where ftcid>0 Which one of the tables are using FTC(have FTS)?  
Exec sp_fulltext_table 'Tools', 'Drop' Table Name Command Type  
Drop Fulltext Catalog T FTC Name(Full-Text Catalog)
```

The query was executed, and the Messages pane shows the completion time: 2020-02-25T22:01:55.7046299+03:30. The status bar at the bottom indicates "Query completed with errors." and shows the current position in the query (Ln 3, Col 24, Ch 24, INS).

تفاوت sys.objects با sysobjects:

معکب های هم رنگ نشان یکسان بودن ستون ها هستند.

ما برای حذف کردن FTC باید می فهمیدیم که کدام Table داره ازش استفاده میکنه, بخاطر همین از sysobjects استفاده کردیم.

SQLQuery1.sql - DESKTOP-QPBBP81\SSMS_2.DB_98.11.22 (DESKTOP-QPBBP81\Ali (51)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

DB_98.11.22 Execute

Object Explorer

- FileTables
- External Tables
- Graph Tables
- dbo.Irregular Verbs
- dbo.Sites
- dbo.Tools
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- PolyBase
- Always On High Availability
- Management
- Integration Services Catalogs

SQLQuery1.sql - DE...-QPBBP81\Ali (51))*

```
Select * from sys.objects
Select * from sysobjects
```

150 %

Results Messages

| | name | object_id | principal_id | schema_id | parent_object_id | type | type_desc | create_date | modify_date | is_ms_shipped | is_published | is_schema_published |
|---|----------------|-----------|--------------|-----------|------------------|------|--------------|-------------------------|-------------------------|---------------|--------------|---------------------|
| 1 | sysrscols | 3 | NULL | 4 | 0 | S | SYSTEM_TABLE | 2017-08-22 19:38:03.840 | 2017-08-22 19:38:03.847 | 1 | 0 | 0 |
| 2 | sysrowsets | 5 | NULL | 4 | 0 | S | SYSTEM_TABLE | 2009-04-13 12:59:11.093 | 2017-08-22 19:38:04.173 | 1 | 0 | 0 |
| 3 | sysclones | 6 | NULL | 4 | 0 | S | SYSTEM_TABLE | 2017-08-22 19:38:04.057 | 2017-08-22 19:38:04.063 | 1 | 0 | 0 |
| 4 | sysallocunits | 7 | NULL | 4 | 0 | S | SYSTEM_TABLE | 2009-04-13 12:59:11.077 | 2017-08-22 19:38:03.867 | 1 | 0 | 0 |
| 5 | sysfiles1 | 8 | NULL | 4 | 0 | S | SYSTEM_TABLE | 2003-04-08 09:13:38.093 | 2003-04-08 09:13:38.093 | 1 | 0 | 0 |
| 6 | sysseobjvalues | 9 | NULL | 4 | 0 | S | SYSTEM_TABLE | 2017-08-22 19:38:04.203 | 2017-08-22 19:38:04.210 | 1 | 0 | 0 |

| | name | id | xtype | uid | info | status | base_schema_ver | replinfo | parent_obj | crdate | ftcatid | schema_ver | stats_schema_ver | type | userstat | sysstat | indexdel | refdate | versn |
|---|--------------|----|-------|-----|------|--------|-----------------|----------|------------|-------------------------|---------|------------|------------------|------|----------|---------|----------|-------------------------|-------|
| 1 | sysrscols | 3 | S | 4 | 0 | 0 | 0 | 0 | 0 | 2017-08-22 19:38:03.840 | 0 | 0 | 0 | S | 1 | 1 | 0 | 2017-08-22 19:38:03.840 | 0 |
| 2 | sysrowsets | 5 | S | 4 | 0 | 0 | 0 | 0 | 0 | 2009-04-13 12:59:11.093 | 0 | 0 | 0 | S | 1 | 1 | 0 | 2009-04-13 12:59:11.093 | 0 |
| 3 | sysclones | 6 | S | 4 | 0 | 0 | 0 | 0 | 0 | 2017-08-22 19:38:04.057 | 0 | 0 | 0 | S | 1 | 1 | 0 | 2017-08-22 19:38:04.057 | 0 |
| 4 | sysallocu... | 7 | S | 4 | 0 | 0 | 0 | 0 | 0 | 2009-04-13 12:59:11.077 | 0 | 0 | 0 | S | 1 | 1 | 0 | 2009-04-13 12:59:11.077 | 0 |
| 5 | sysfiles1 | 8 | S | 4 | 0 | 0 | 0 | 0 | 0 | 2003-04-08 09:13:38.093 | 0 | 0 | 0 | S | 1 | 1 | 0 | 2003-04-08 09:13:38.093 | 0 |
| 6 | sysseobi... | 9 | S | 4 | 0 | 0 | 0 | 0 | 0 | 2017-08-22 19:38:04.203 | 0 | 0 | 0 | S | 1 | 1 | 0 | 2017-08-22 19:38:04.203 | 0 |

Query executed successfully. DESKTOP-QPBBP81\SSMS_2 (14.... DESKTOP-QPBBP81\Ali (51) DB_98.11.22 00:00:00 226 rows

Ready Ln 2 Col 26 Ch 26 INS

Archive of the codes:

| | |
|---------------------------------|--|
| Creating FTC | <ol style="list-style-type: none"> 1. Create Fulltext Catalog [Catalog Name] 2. Exec sp_Fulltext_Catalog '(FTC Name)', 'Create' |
| Changing Owner of FTC | Alter Authorization on Fulltext Catalog:: [FTC Name] To [Object Name(Owner)] |
| Changing General Setting of FTC | Create Fulltext index on [Table Name] ([Column Name] language (Language Code)) Key index [P.K. or Unique Column Name] on [FTC Name] with change_tracking Auto |
| Querying | <ol style="list-style-type: none"> 1. Select * From [Table Name] Where Freetext/Contains([Column Name], '(Word)') 2. Select * From [Table Name] Where Freetext/Contains([Column Name], '(Word1)AND(Word2)AND(Word3)AND...') 3. Select * From [Table Name] Where Freetext/Contains([Column Name], 'Near((Word1), (Word2), (Word3)...)') 4. Select * From [Table Name] Where Freetext/Contains([Column Name], 'Formsof(inflectional, (Verb/Adj/Adv/Noun))') 5. Select * From [Table Name] Where Freetext([Column Name], '(Phrase)') Select * From [Table Name] Where Contains([Column Name], '"(Phrase)"') 6. Select * From Freetexttable/Contains ([Table Name],[Column Name], '(Word)') As (Alice1) Join [Table Name] As (Alice2) ON Alice1.[Key]=Alice2.[P.K. Column] |
| Removing FTC | <ol style="list-style-type: none"> 1. Exec sp_Fulltext_Table '(Table Name)', 'Drop' Drop Fulltext Catalog [FTC Name] 2. Exec sp_Fulltext_Table '(Table Name)', 'Drop' Exec sp_Fulltext_Catalog '(FTC Name)', 'Drop' |

امیدوار هستم این مطالب مورد استفاده شما قرار گرفته و کمک کرده باشد
با آرزوی موفقیت برای شما دوستان
اثر علی مرادزاده از کلاس SQL Server مهندس امیرعباس قاسم شاهی
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