DBA Fire

SQL Server, MySQL and WordPress Specialist

DATABASE / SQL QUICK TIPS / T-SQL / TRAINING RESOURCES

Newid() vs Newsequentialid() – Performance Of, Differences Between and Examples

Posted on July 3, 2015 by Rob StGeorge / 2 Comments

This article helps to explain the key differences between Newid() and Newsequentialid(). (crucial info if you are sitting the 70-461 SQL exam)

Quick Answer

NEWID() generates the GUID in random order vs NEWSEQUENTIALID() which generates the GUID in sequential order.
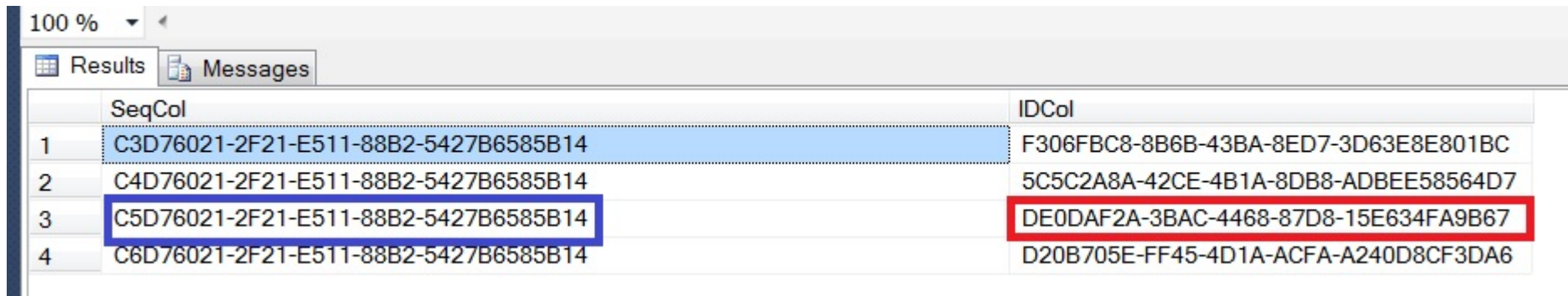
Key Facts

- Newsequentialid() creates a GUID greater than the previous one, *since windows was started.* If windows has been restarted the GUID may begin at a lower range (still unique however).

- For best performance of inserts use newsequentialid().

- NEWSEQUENTIALID is able to completely fill data and index pages.

- Newid() you can use in a select, newsequentialid() you cant

- If you are worried about, or have a need for privacy don't use sequential GUIDs

- NEWID() is RFC4122 compliant.

Newid() vs Newsequentialid() T-SQL Example

```
1   USE dbafire_db;
2   GO
3   ----Create Test Table for with default columns values
4   CREATE TABLE GUID_Example
5   (
6   SeqCol uniqueidentifier DEFAULT NewSequentialID()
7   ,IDCol uniqueidentifier DEFAULT NEWID(),)
8   ----Inserting five default values in table
9   INSERT INTO GUID_Example DEFAULT
10  VALUES
11  INSERT INTO GUID_Example DEFAULT
12  VALUES
13  INSERT INTO GUID_Example DEFAULT
14  VALUES
15  INSERT INTO GUID_Example DEFAULT
16  VALUES
17  ----------------------------------------------------------
18  SELECT *
19  FROM GUID_Example
20
21  ----Clean up database
22
23  DROP TABLE GUID_Example
```

Result Output

Note how easy it would have been to guess the sequentialid value (blue box).

In this article we have shown you what the differences are between the two GUID functions.

Is there anything you think we should add, or that you have experienced with either Newid() or Newsequentialid()?

Share this:

Share 0   SHARE   ⌃⌄   Tweet   Post   Save   ✉ Email

🏷 70-461, guids, newid(), newsequentialid()

Rob StGeorge

🔗

Senior SQL Server Database Administrator residing in Auckland, NZ View all posts by Rob StGeorge →

YOU MIGHT ALSO LIKE

SQL Server Update Statistics - Quick Tips & Examples
May 4, 2015

sp_executesql Stored Procedure Examples, Output and Return Values
May 21, 2015

Synonyms SQL Server - Exam Tips
March 15, 2015

2 Comments

Bd Ac
November 17, 2016 at 8:47 pm

trying to figure out the best unique id mechanism to use for distributed databases which are also performant. any information on that would be greatly appreciated. thanks.

Pingback: Differences Between Newid() vs Newsequentialid() – Priyanka The Fairy

This site uses Akismet to reduce spam. Learn how your comment data is processed.

© 2019 DBA Fire

Powered by WordPress | Theme: Graphy by Themegraphy