

Filling the gaps in values of IDENTITY column

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I have a table with an IDENTITY column

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```
[Id] int IDENTITY(1, 1) NOT NULL
```



After some rows beeing added/removed I end with gaps in Id values:



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Id	Name
1	Tom
2	Bill
4	Kate

Is there an easy way to compress the values to

Id	Name
1	Tom
2	Bill
3	Kate

?

sql



sql-server

asked Jan 4 '11 at 18:46



Max

13.8k 9 68 114

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possible duplicate of [SQL Server and Identity column](#) – [Oded](#)
Jan 4 '11 at 18:53

I need this to keep two different databases in sync. I cannot control the part which requires ID columns to be in sequence. The good thing is that this particular table is very rarely updated and has less than 100 records. – [Max](#) Jan 4 '11 at 19:05

If you need to keep two databases in sync you would do well to find a natural key to use. When it comes to copying the data between the servers you will not have any problems with duplicate primary keys. – [Tony](#) Jan 4 '11 at 19:54

so how did this work out for you? – [KM](#). Apr 25 '11 at 20:12

4 Answers



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I think it's pretty easy to create a 2nd table with the same schema, import all the data (except for the identity column of course; let the 2nd table start renumbering) from the first table, drop the first table and rename the 2nd to the original name.



Easiness may be in question if you'd have a ton of FK relationships to rebuild with other tables etc.

answered Jan 4 '11 at 18:52



[Tom](#)

1,199 7 12

I think this is the way to go. Thanks! – [Max](#) Jan 4 '11 at 22:46

i have the case with tons of FK to other tables. I use a smallint field for the UserId Field in the user table with autoidentity, i proved that i will never have more than 32.767 users (stills

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increase the space used (4bytes / 2bytes). – [Burnsys](#) Jun 28 '17 at 18:41 



I would strongly recommend that you leave the identity values as they are.

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if this ID column is used as a foreign key on another table, changing them will get complicated very quickly.

if there is some business logic where they must be sequential then add a new column `ID_Display` where you can update them using `ROW_NUMBER()` and keep them pretty for the end user. I never let end users see and/or dictate how I create/populate/store the data, and if they are bothering you about the IDs then show them some other data that looks like an ID but is not a FK or PK.

answered Jan 4 '11 at 18:56



[KM.](#)

84.2k 27 150 191

- 1 I'm up-voting this answer, but I'll go a step further; I really can't think of a valid business logic case in which it would be advisable to be dependent upon or to expect a particular ordering of identity values. – [Brian Lacy](#) May 2 '14 at 16:02



1



Well as far as I know the only way you can is manually update the values by turning Identity insert on..but you should really avoid doing such a thing in first place..also if you truncate the table it will not have those gaps.

answered Jan 4 '11 at 18:49



[Vishal](#)

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I cannot control the part which requires ID columns to be in sequence.

This sounds like there is program logic which assumes there are no gaps--correct?

I need this to keep two different databases in sync.

It's still not clear what you mean. If the actual values in the `IDENTITY` column are not meaningful (not used as foreign keys by other tables), you can just do this:

```
DELETE FROM db1.table
SELECT col1, col2, col3 /* Leave out the IDENTITY column */
INTO db1.table FROM db2.table
```

answered Jan 4 '11 at 20:29



[egrunin](#)

21.1k 5 37 88

I can only change one database, the second database is read-only for me. The application which controls the second database requires that IDs in my database are in sequence. –

[Max](#) Jan 4 '11 at 22:45