

Data Sync Dynamics


Last updated by | Keith Elmore | Apr 5, 2021 at 7:57 AM PDT

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Issue

Describe the compability between **Data Sync and Dynamics 365**


Dynamics can export their data into Azure SQL Databases using a feature called [Bring your own database \(BYOD\)](#). 

But it need to be configured correctly or else the Data Sync process will not work

Investigation/Analysis

Make sure you use **INCREMENTAL PUSH + FIRE TRIGGER** enabled. More information below:

Incremental / Full Push

- **Full Push** means dynamics will TRUNCATE + Load all data in a bulk insert operation
 - The TRUNCATE operation will not fire the Data Sync triggers and will duplicate rows on destination
 - The second sync will fail because of the error documented at [Error - Cannot insert the value NULL into column 'X', table 'Y'; column does not allow nulls](#)
- **Incremental push** you can follow procedure at Dynamics Doc [Incremental export](#) 

When you add an entity for data export, you can select to do an incremental export (which is also known as incremental push) or a full push. For incremental push to work, you must enable the Change tracking option in the database and specify an appropriate change tracking option, as described earlier in this topic.

Note: A full push deletes all existing records from an entity and then inserts the current set of records from the selected entity.

If you select an incremental push, the first push is always going to be a full push. This is because SQL needs to know which records have been 'tracked' in order to be able to track subsequent changes. Whenever a new record is inserted, or a record is added or deleted, the corresponding change will be reflected in the destination entity.

Because the first push is always a full push, we do not recommend that you do an explicit full push before you enable change tracking.

We recommend that you first enable change tracking and schedule a export job with incremental push. This will take care of the first full push and the subsequent incremental exports.

Check image below:

Export

JOB DETAILS

Name
OneTimeExport

Target data format
EntityCCI

Entity name

Use sample file
No

Skip staging
Yes

Default refresh type
Incremental push only

Generate data package
No

SELECTED FILES AND ENTITIES

Filter

Applicants

View map Filter

Add entity

FIRE TRIGGERS

Azure Data Sync work based on triggers. [How it works](#)

Tracking data changes: Data Sync tracks changes using insert, update, and delete triggers. The changes are recorded in a side table in the user database. Note that BULK INSERT doesn't fire triggers by default. If FIRE_TRIGGERS isn't specified, no insert triggers execute. Add the FIRE_TRIGGERS option so Data Sync can track those inserts.

So you need to configure Dynamics to enable FIRE TRIGGERS flag. Check image below

ENTITY STORE :: AX : OPERATIONS

ExportDB : Export to BYOD

Source data formats

Source name	Description	Type	Default extension
ExportDB	Export to BYOD	Azure SQL DB	

Configure

Connection string

Create clustered column store indexes

Yes ☒

Enable triggers in target database

No ☐

Public Doc Reference

[Bring your own database \(BYOD\)](#) 

Root Cause Classification

Azure SQL DB v2\DataSync\User Issue/Error\Other

How good have you found this content?



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