

## Tech Note 996

# How to Move Asset Types and Asset Type Properties to a New IntelTrac Database Using SQL

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## Introduction

This *Tech Note* covers how to use SQLServer wizards and queries to move existing Assets Types and Asset Type Properties from one database to another using a built-in SQL wizard.

**IMPORTANT:** If you attempt to import duplicates this process will fail. Wonderware Tech Support recommends doing this **only** on a database that has never had any Asset Types or Asset Type Properties configured.

## Application Versions

- IntelTrac 4.x and later
- Microsoft SQL Server 2008 and later

## Detailed Tasks

This *Tech Note* includes detailed tasks you must complete in order to move the types and properties to the new database.

Complete the tasks in the following order:

- **Disable Triggers**
- **Delete NullAsset and NullAssetType Rows**
- **Use the Built-In SQL Wizard to Import the Data**
- **Recreate the Null Asset**
- **Enable Triggers**
- **Verify Asset Types and Asset Type Properties in the New System**

## Before You Import the Data

Before you can import the Asset Types and Asset Type Properties to the new database, complete a few housekeeping tasks to ensure

that the destination tables are clean and ready to accept the data.

By default, there is a **NullAsset** row in the **sat\_assets** table and a **NullAssetType** row in the **sat\_assettypes** table that must be removed. The **NullAssetType** rows are restored as part of the data dump. The rows will be included with the data being merged from the host database.

The SQL query to re-create the null asset is provided in the **Recreate the Null Asset** task.

## Disable Triggers

Before you can delete the **NullAsset** and the **NullAssetType** rows, you must disable some triggers that prevent deletes, inserts, and updates. Figure 1 (below) shows using the SQL Management Console to view the Triggers you will disable:

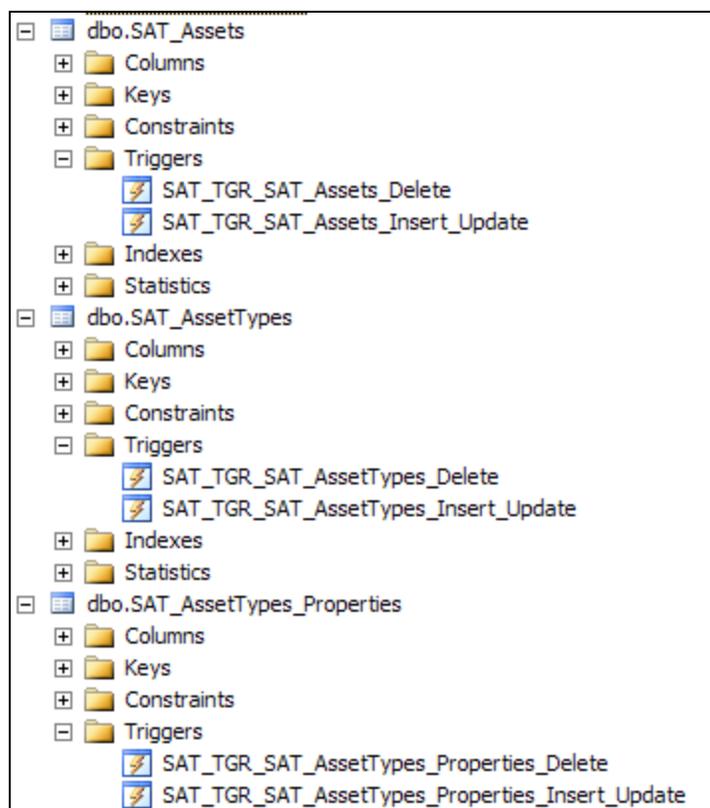


FIGURE 1: TRIGGERS LIST

- To disable the triggers, right-click each one, and click **Disable**:

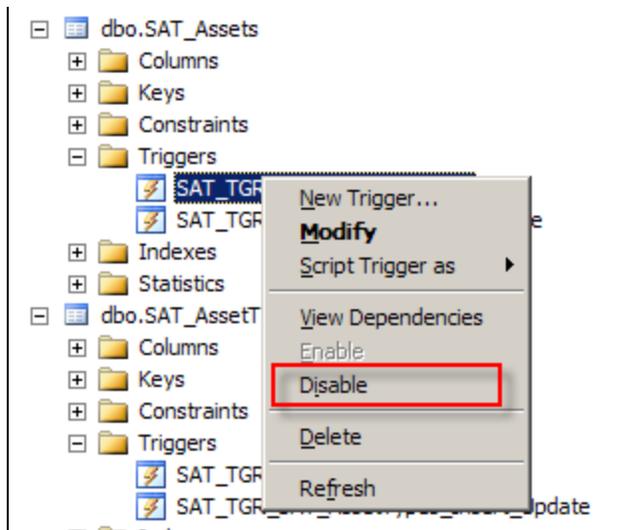


FIGURE 2: DISABLE TRIGGERS

When the trigger is disabled you see the **Disable Triggers/Success** message, and the icon displays a red "down" arrow:

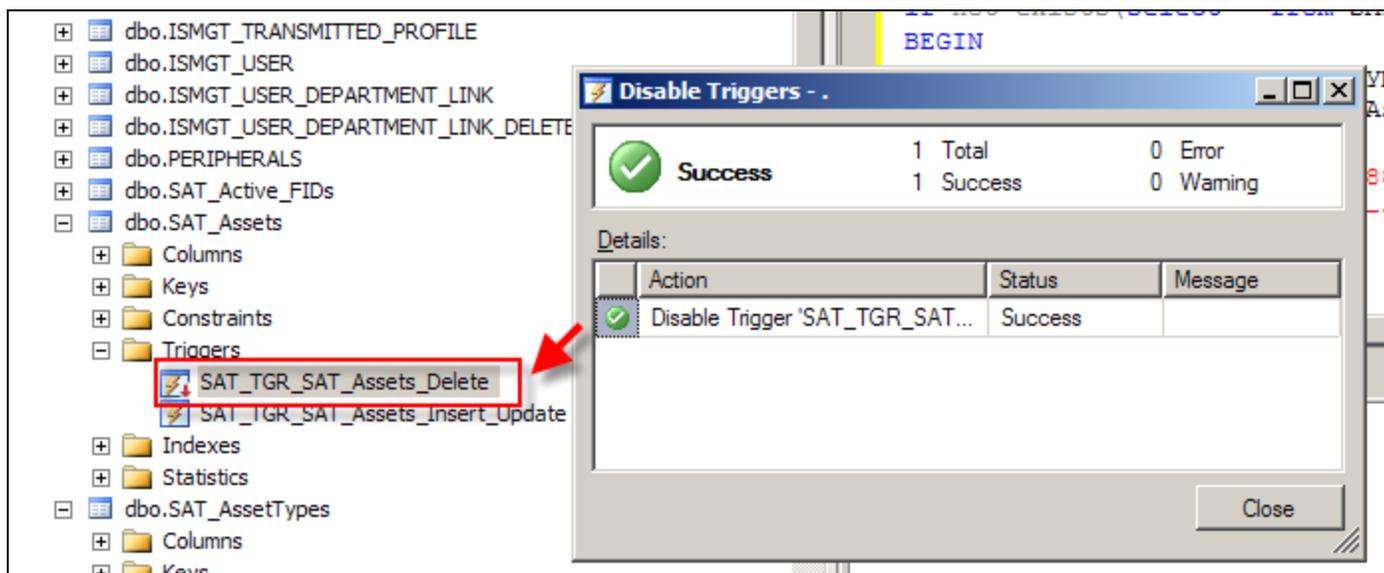


FIGURE 3: SUCCESS DISABLING TRIGGER

After all the triggers are disabled, the list looks like Figure 4 (below):

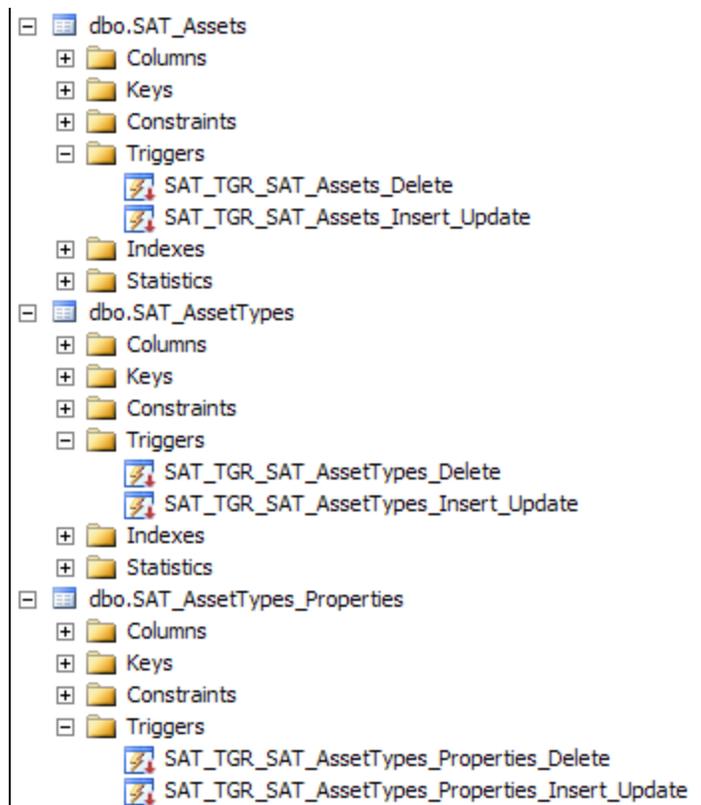


FIGURE 4: TRIGGERS ARE DISABLED

## Delete NullAsset and NullAssetType Rows

After you disable the Triggers, delete the **NullAsset** row. The **NullAssetType** row is linked to **NullAsset** so it cannot be deleted until you first delete the **NullAsset** row.

1. Delete the **NullAsset** row using the following query:

```
DELETE FROM sat_assets
WHERE AssetPK = '99999999-9999-9999-9999-999999999999'
```

2. Delete the **NullAssetType** row using the following query:

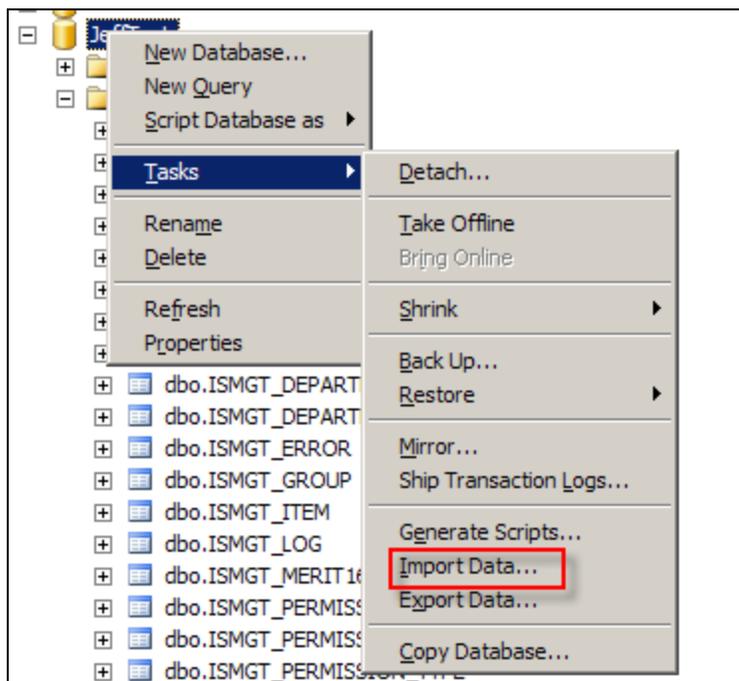
```
DELETE FROM sat_assettypes
WHERE AssetTypePK = '88888888-8888-8888-8888-888888888888'
```

After these 2 items are deleted, proceed to doing the actual data import outlined below.

## Use the Built-In SQL Wizard to Import the Data

To move the data from the host database to the destination database, use the **SQL Server Import and Export Wizard**.

1. Launch the wizard by right-clicking the destination database and clicking **Tasks>Import Data**.



**FIGURE 5: START THE SQL WIZARD TO IMPORT DATA**

2. Click **Next** (Figure 6 below).

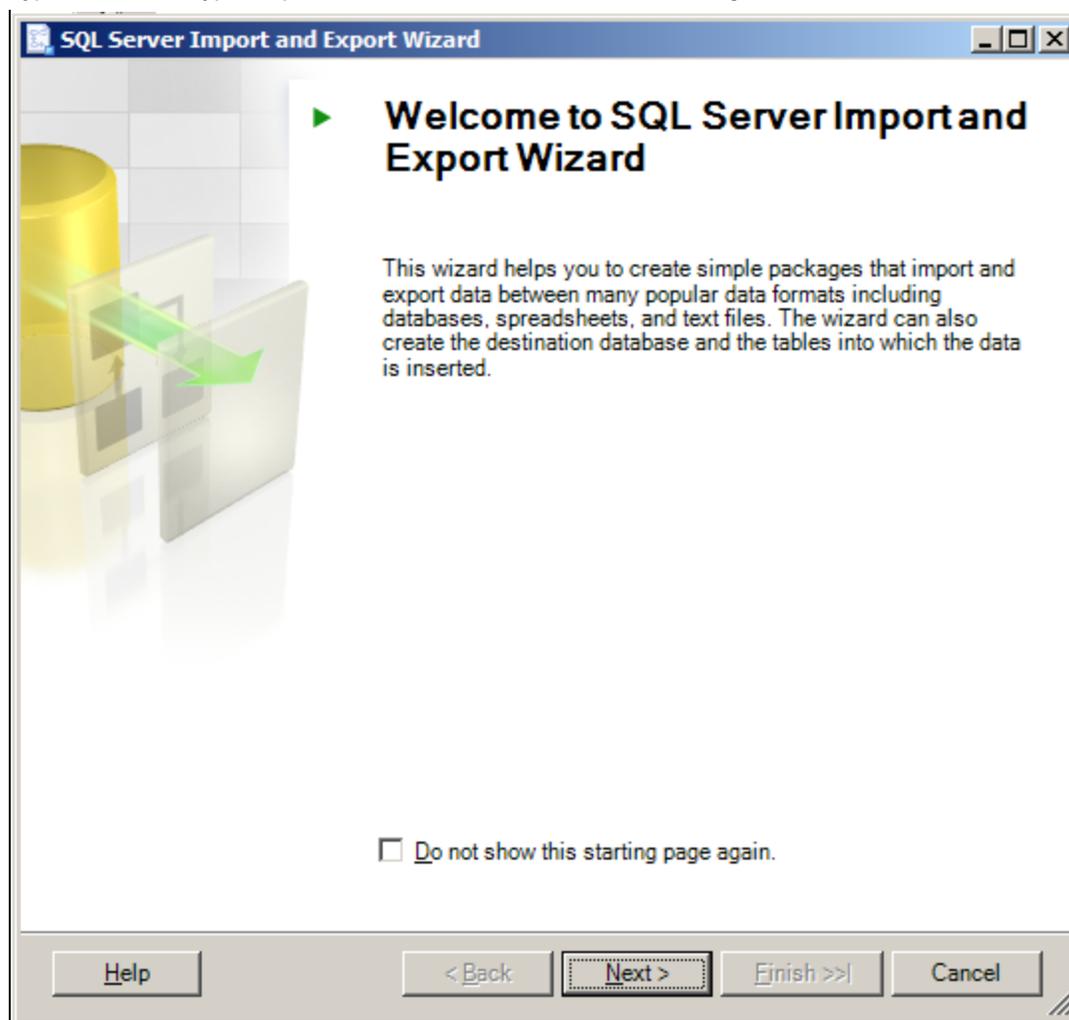


FIGURE 6: SQL SERVER IMPORT AND EXPORT WIZARD

3. Choose the Data Source (Figure 7 below).

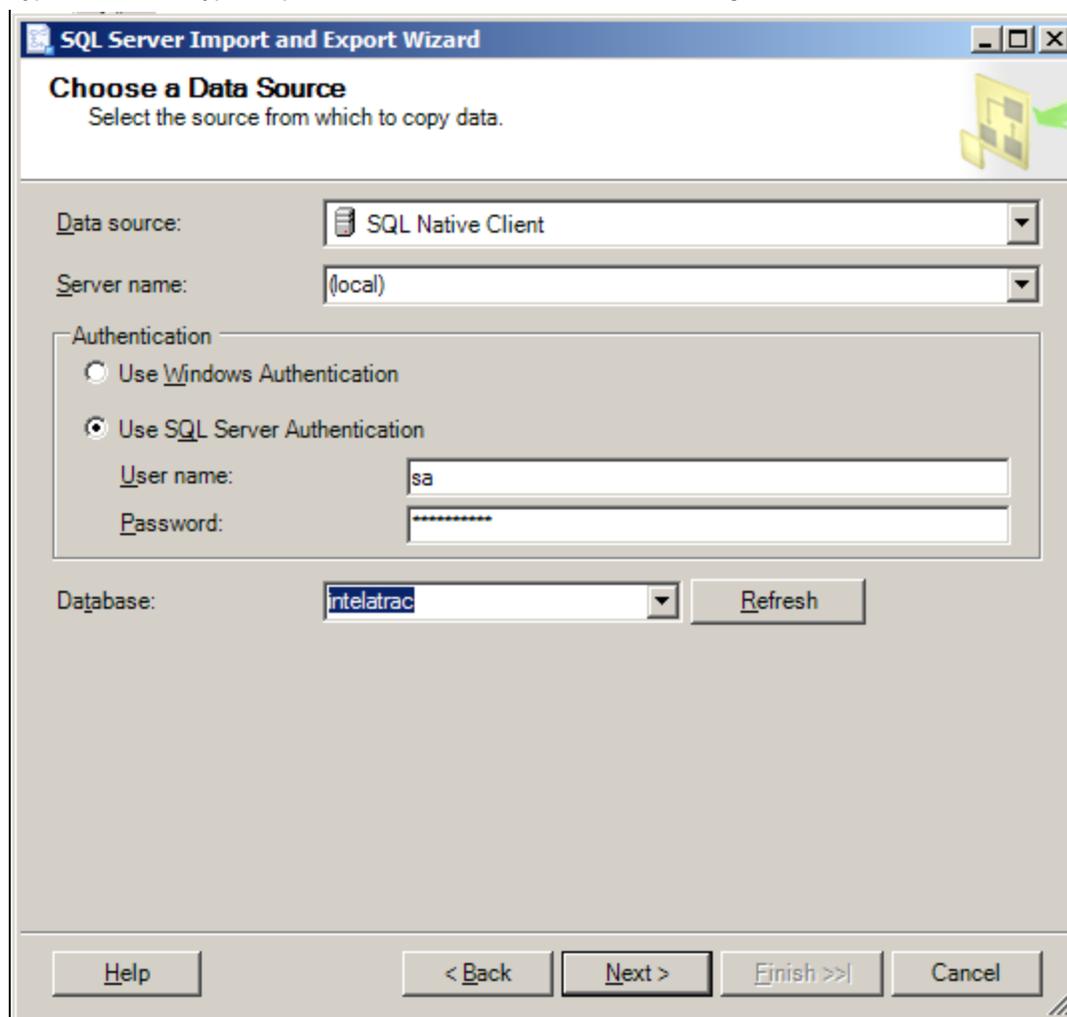


FIGURE 7: CHOOSE THE DATA SOURCE

**Note:** For this *Tech Note*, all work is shown on a local server. In your environment you can use this wizard across database servers so long as they are on the same network and can access each other.

4. Click **Next** to configure the destination. This is the new database to where you want to send the **Asset Types** and **Asset Type** properties:

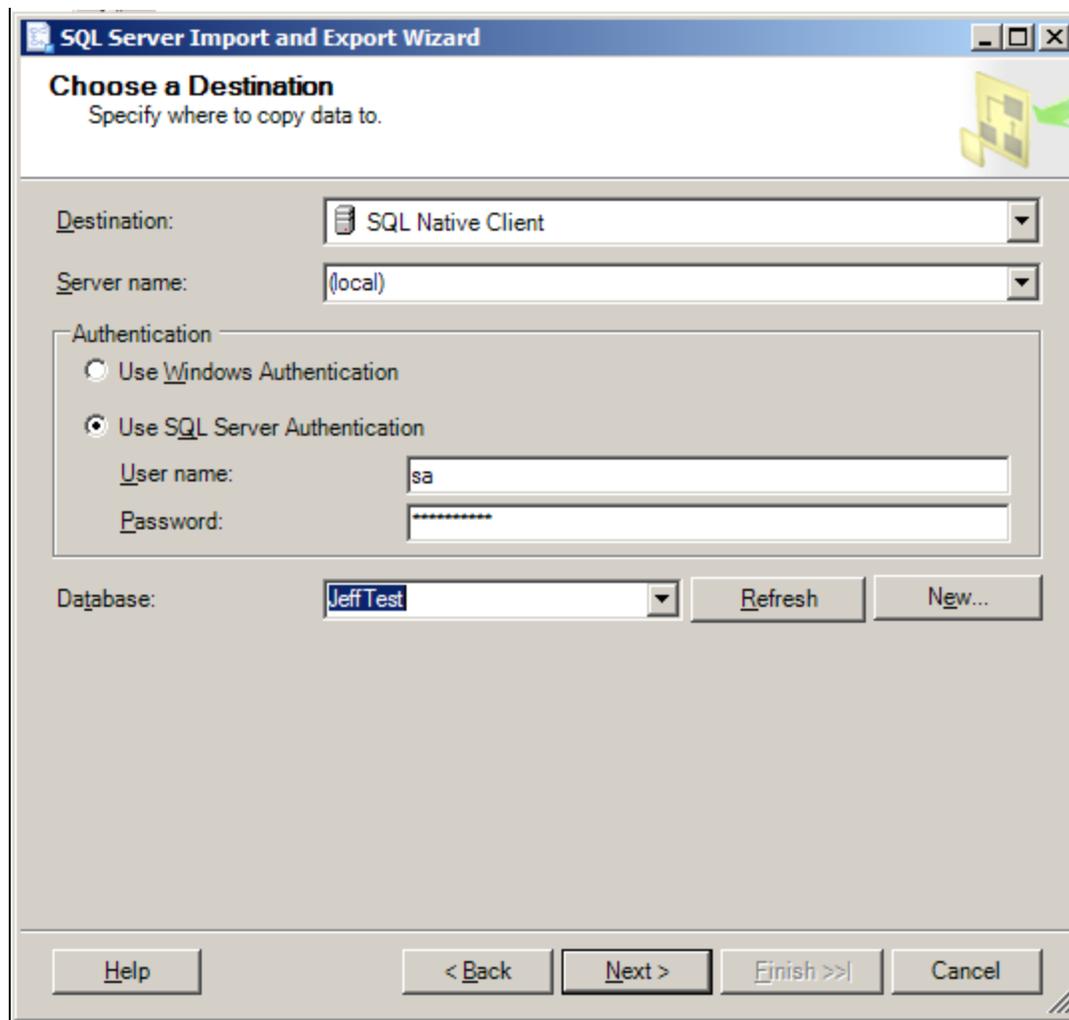


FIGURE 8: CHOOSE THE DESTINATION DATABASE

5. Click Next and click the **Copy data...** option (Figure 9 below).

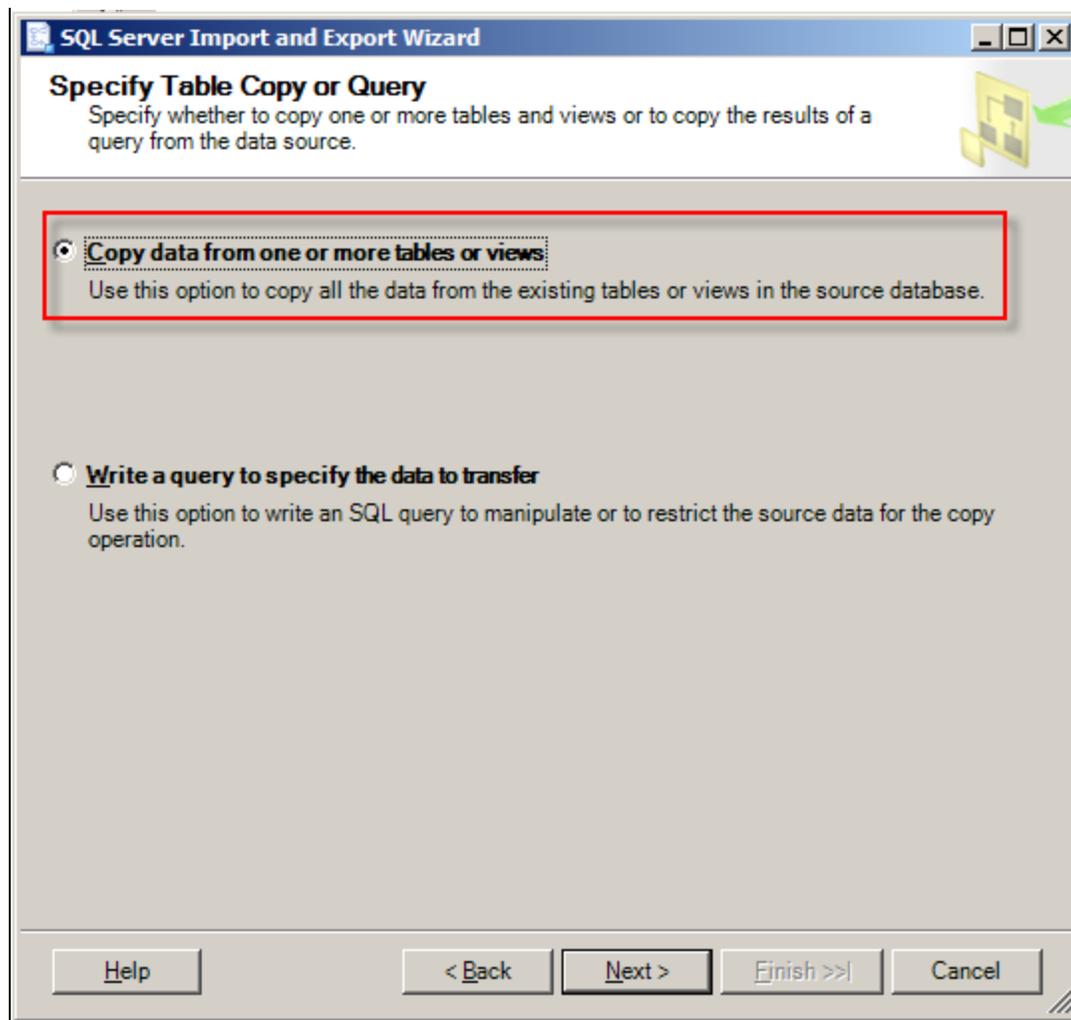


FIGURE 9: COPY DATA FROM ONE OR MORE TABLES OR VIEWS OPTION

6. Click **Next** and select the Tables to move. In this case you are moving **SAT\_AssetTypes** and **SAT\_AssetTypes\_Properties**:

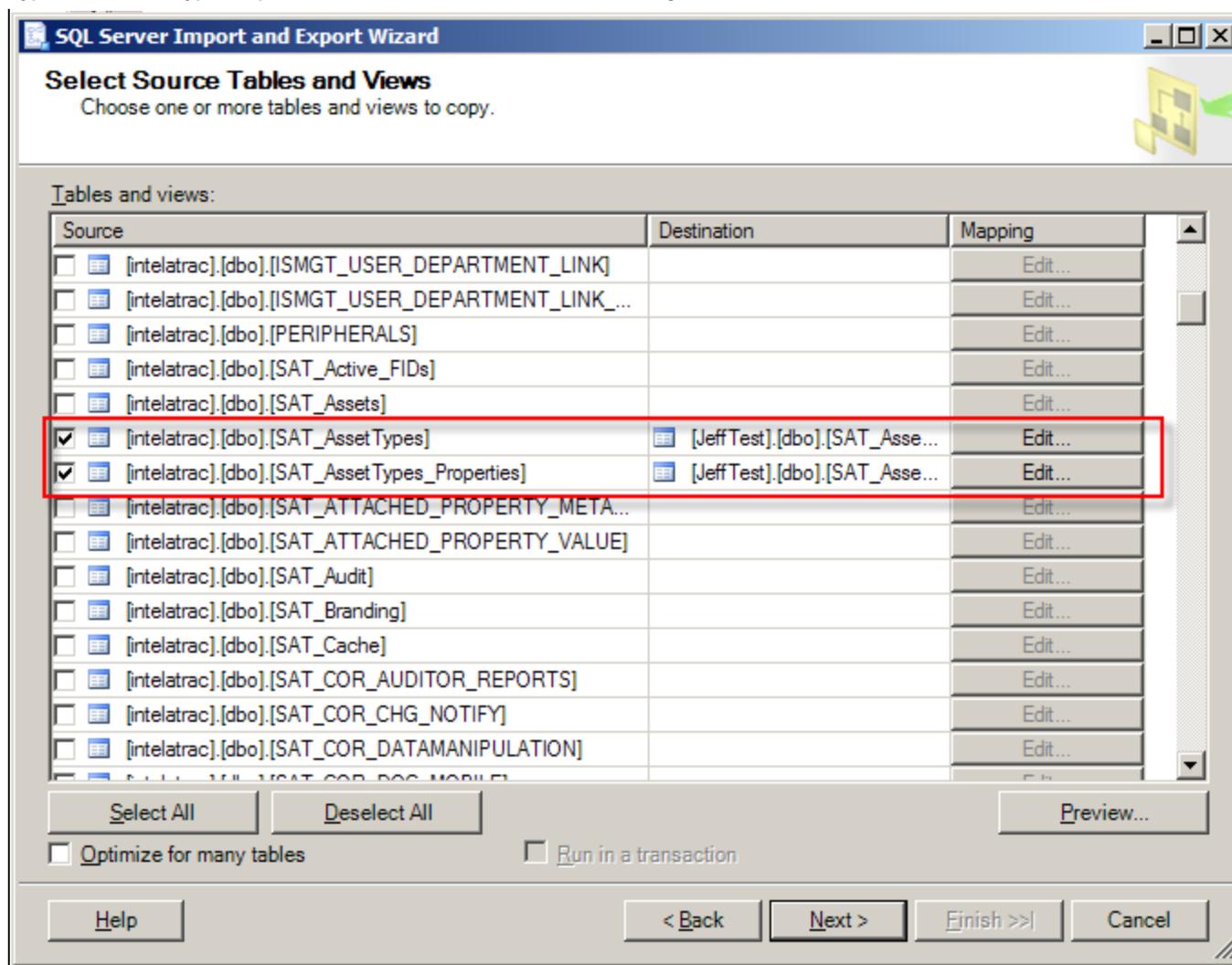


FIGURE 10: SELECT SOURCE TABLES AND VIEWS

7. Click **Next**.
8. Click the **Edit** button under the Mapping column for *both* tables.
9. Ensure that both tables have the **Append rows to the destination table** option selected. This way we do not delete any data that may already be in those tables.

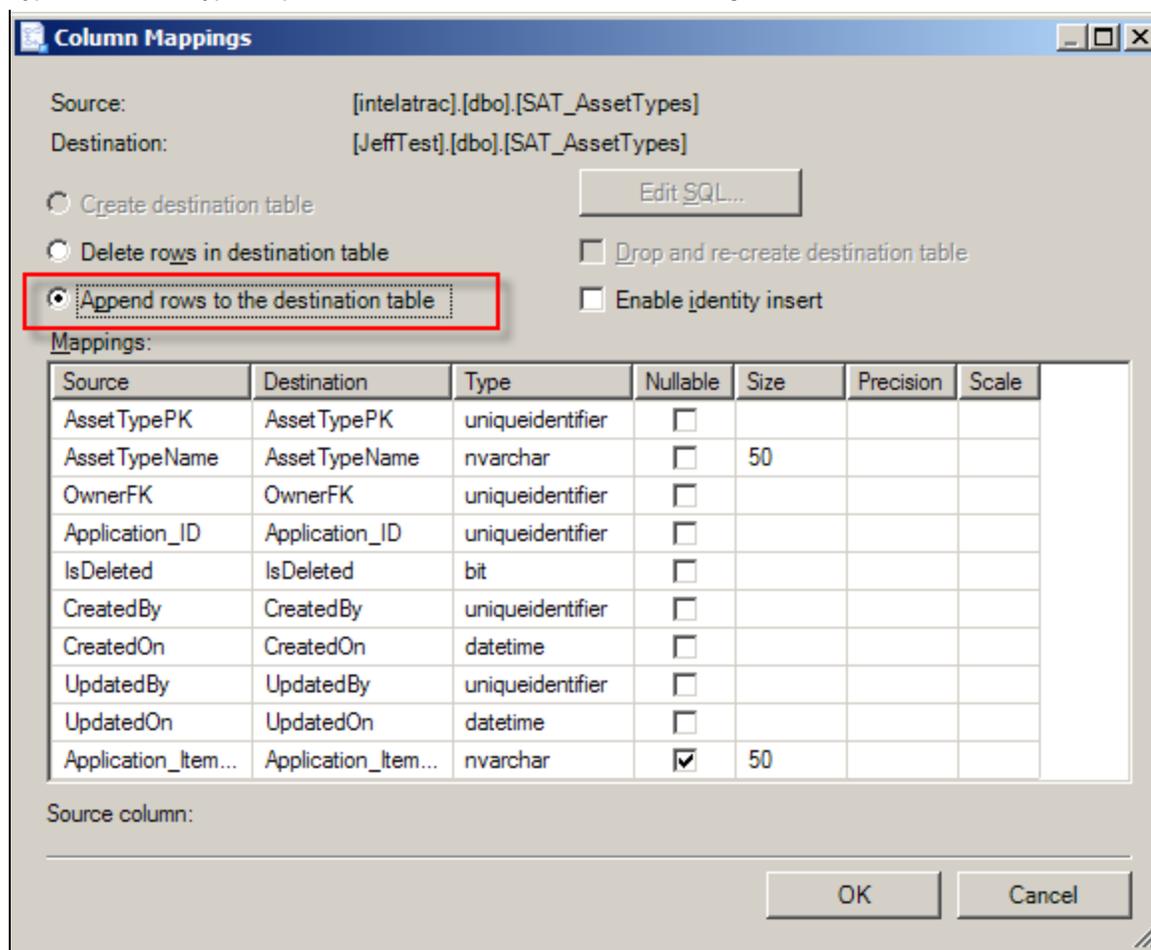


FIGURE 11: APPEND ROWS TO THE DESTINATION TABLE -- FOR BOTH TABLES

10. Click **OK**.
11. Verify that the **Execute immediately** option is checked and click **Next** (Figure 12 below).

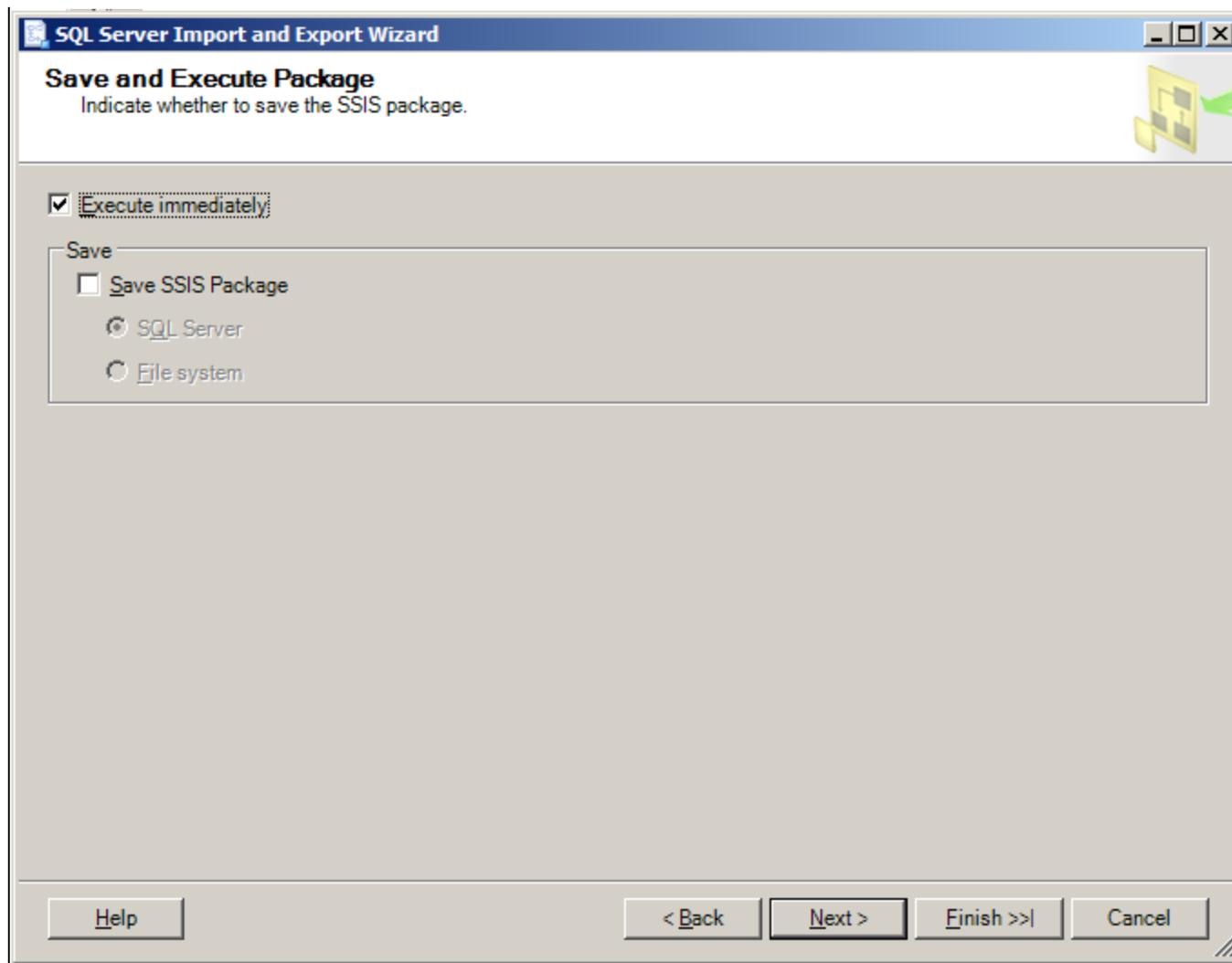


FIGURE 12: EXECUTE IMMEDIATELY

12. Click Finish (Figure 13 below).

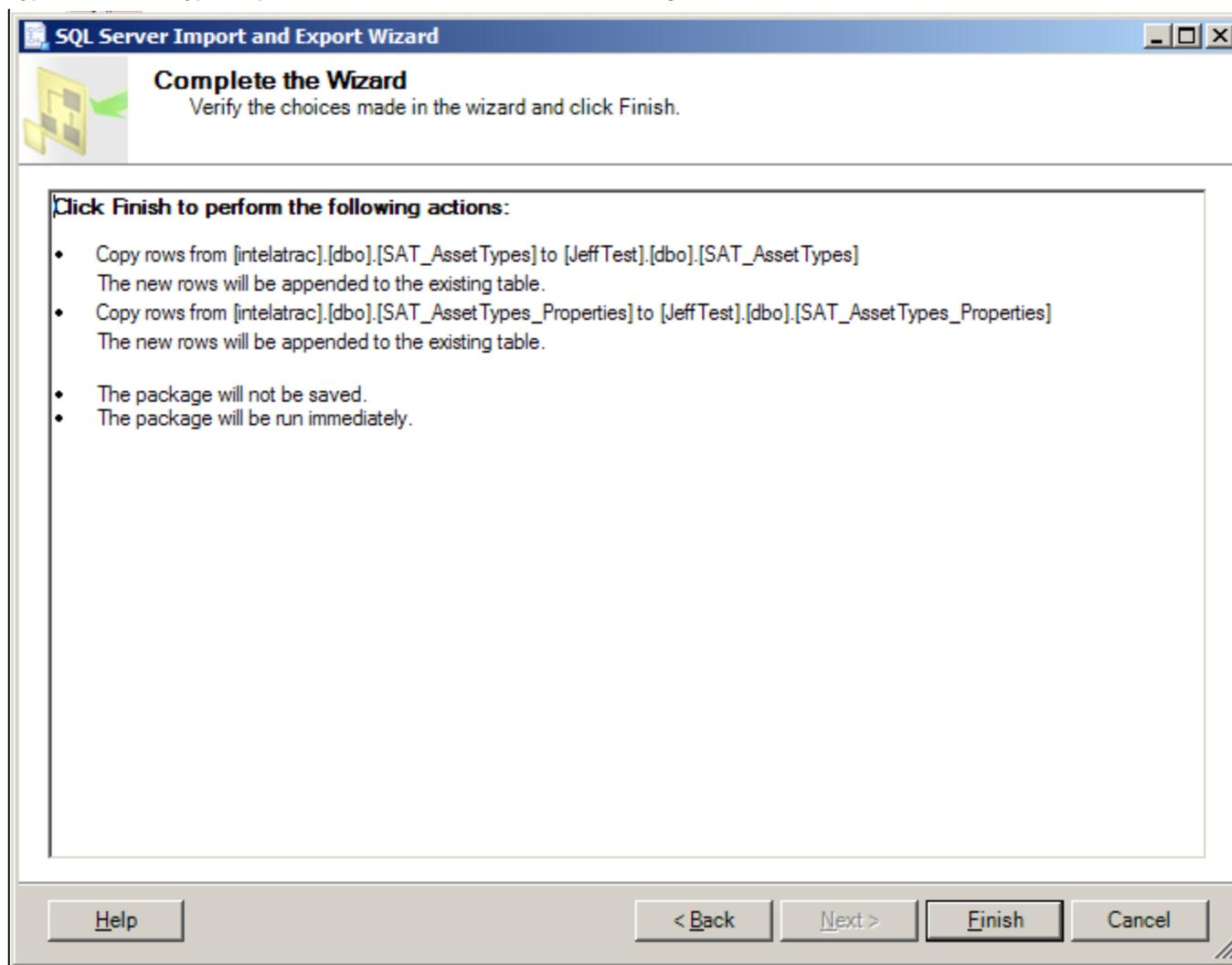


FIGURE 13: COMPLETE THE WIZARD

You will see a a confirmation message (Figure 14 below).

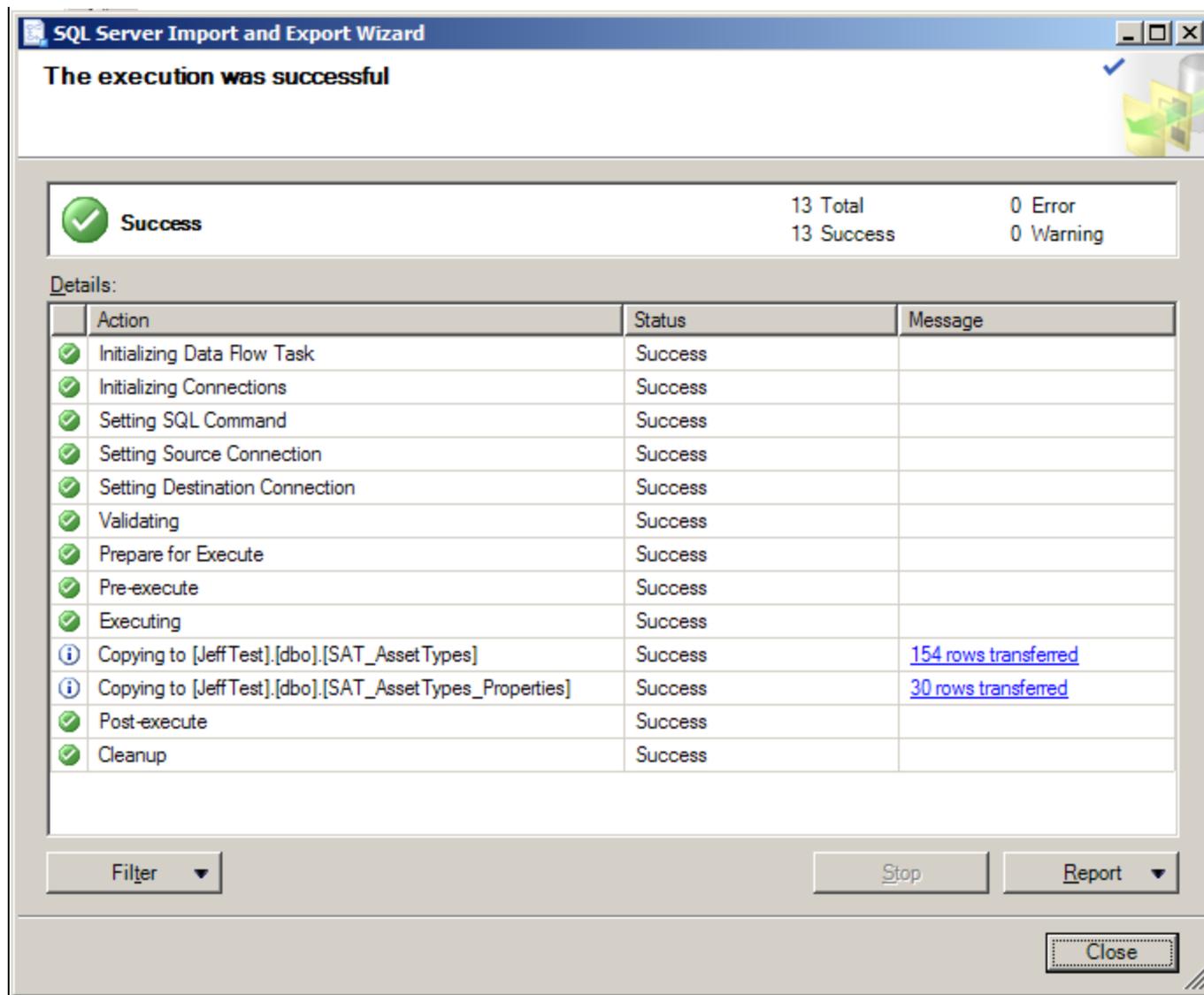


FIGURE 14: EXECUTION SUCCESS

The data move is now complete. Proceed to the next task for more housekeeping and to complete this data move.

## Recreate the Null Asset

Use the following SQL to re-create the **NullAsset** row that was removed in step 1.

```

DECLARE @BlankGUID uniqueidentifier, @AssetNullGUID uniqueidentifier, @AssetTypeNullGUID uniqueidentifier
SET @BlankGUID = CAST('00000000-0000-0000-0000-000000000000' AS uniqueidentifier)
SET @AssetNullGUID = CAST('99999999-9999-9999-9999-999999999999' AS uniqueidentifier)
SET @AssetTypeNullGUID = CAST('88888888-8888-8888-8888-888888888888' AS uniqueidentifier)

IF NOT EXISTS (SELECT * FROM sat_assets WHERE assetpk = @AssetNullGUID)
BEGIN

```

## How to Move Asset Types and Asset Type Properties to a New IntelTrac Database Using SQL

```
INSERT INTO [SAT_Assets]
([AssetPK], [Owner_FK], [AssetTypeFK], [AssetName], [AssetDesc], [Item_Order], [Allow_WOR], [FromExternal], [Child_Count],
[Application_ID], [IsDeleted], [CreatedBy], [CreatedOn], [UpdatedBy], [UpdatedOn])
VALUES
(@AssetNullGUID, @BlankGUID, NULL, '', '', 0, 0, 0, 0,
'4175FCBD-46F6-404C-A864-324A6D61650E', 1, @BlankGUID, '01/01/1980',
@BlankGUID, '01/01/1980')
END

IF NOT EXISTS(SELECT * FROM SAT_AssetTypes WHERE AssetTypePK = '88888888-8888-8888-8888-888888888888')
BEGIN
INSERT INTO [SAT_AssetTypes]
([AssetTypePK], [AssetTypeName], [OwnerFK], [Application_ID], [IsDeleted], [CreatedBy], [CreatedOn], [UpdatedBy],
[UpdatedOn])
VALUES
('88888888-8888-8888-8888-888888888888', 'NULL ASSET TYPE', '00000000-0000-0000-0000-000000000000', '4175FCBD-46F6-404C-A864-
324A6D61650E',
1, '76E6022E-2DE2-485D-8E99-2AA67B3CCEE7', '01/01/1980', '76E6022E-2DE2-485D-8E99-2AA67B3CCEE7', '01/01/1980')
END
```

## Enable Triggers

After you recreate **NullAsset** you must enable all of the triggers that were disabled.

- To do so, right click on each Trigger and click **Enable**:

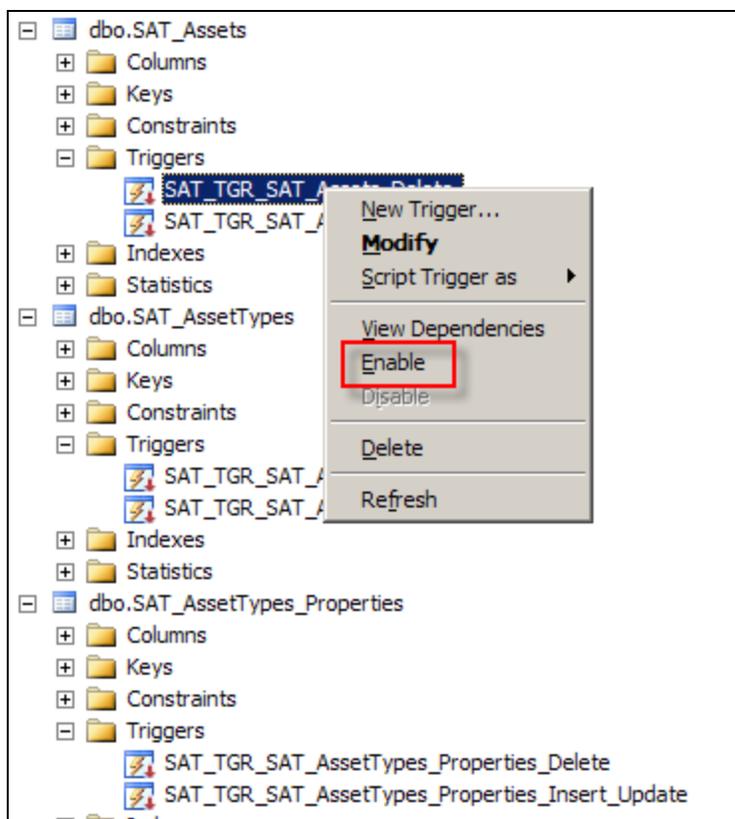


FIGURE 15: ENABLE TRIGGERS

When all the Triggers are re-enabled it will look like this:

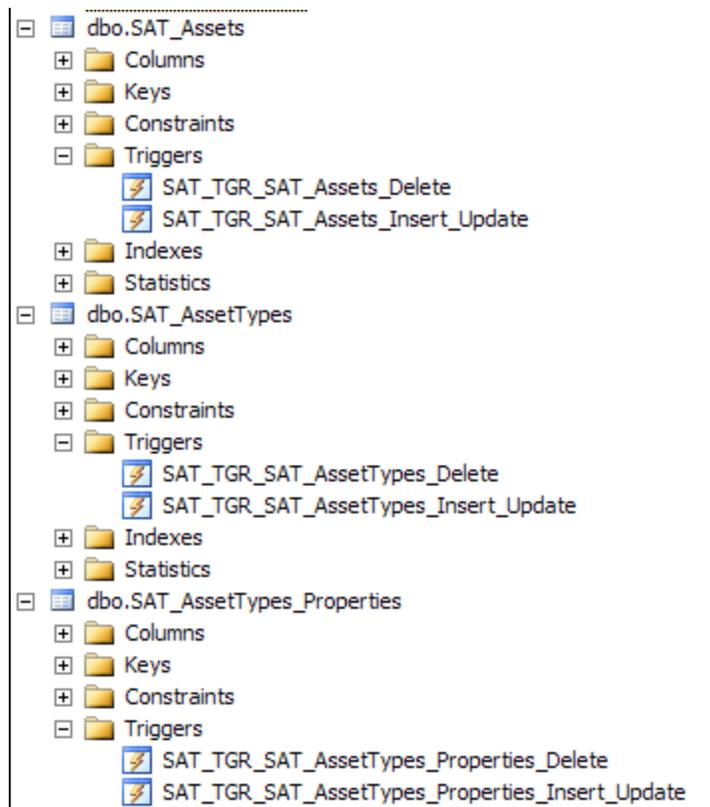


FIGURE 16: TRIGGERS RE-ENABLED

At this point the work in SQL Server is done.

## Verify Asset Types and Asset Type Properties in the New System

Have a super user login to IntelTrac and verify that all of the Asset Types and their corresponding Asset Type Properties exist in the new system.

**Note:** If any of the Asset Type Properties reference a **Response List** or **Status List**, the list is no longer associated in the new system. You must rebuild the appropriate list under **List Manager>Edit>Responses/Statures**. Then you must re-associate them to the Asset Type Property using the UI in Figure 17 (below).



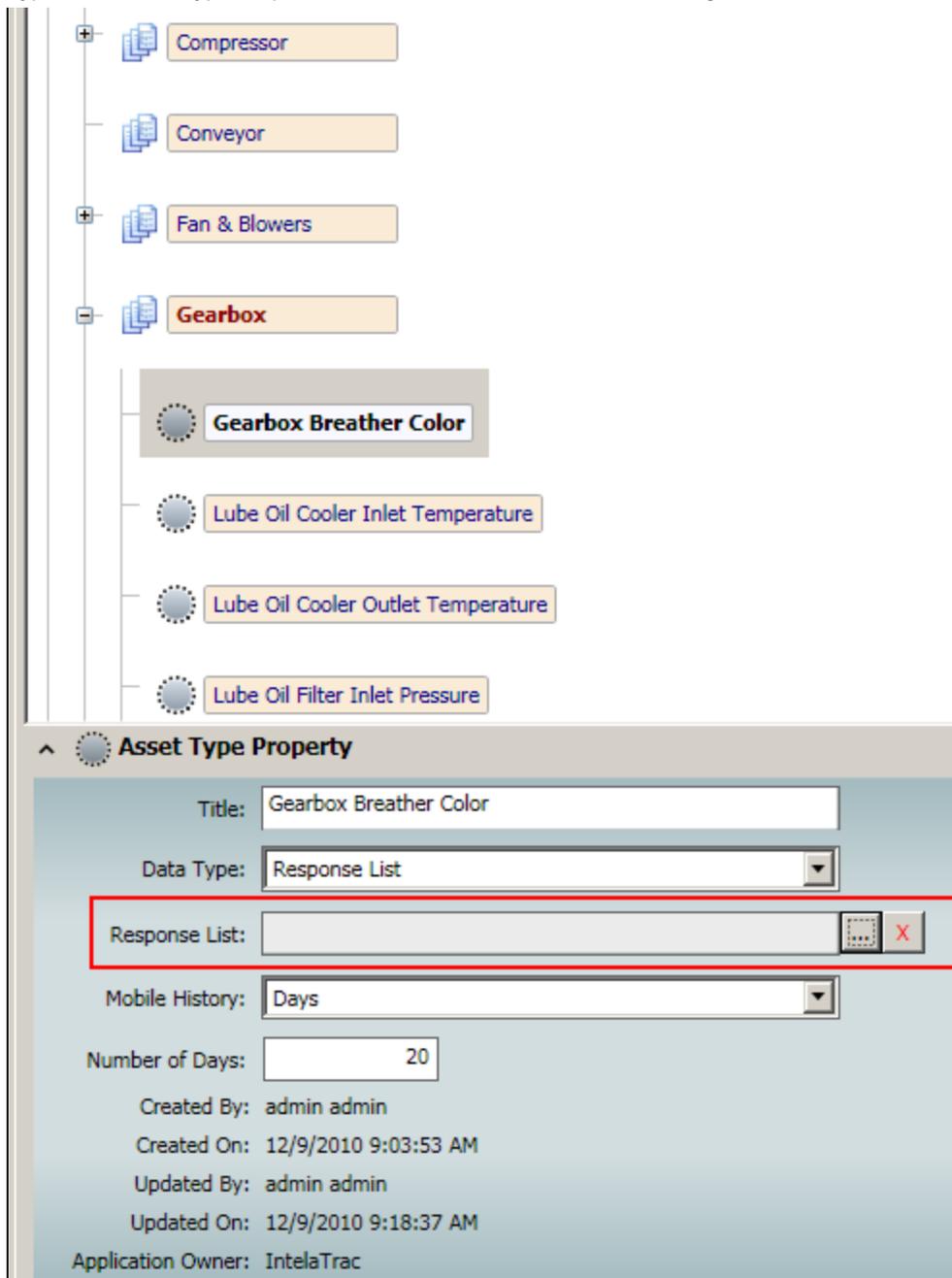


FIGURE 17: ASSET RESPONSE LIST

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