Tech Note 918
Moving Historian Server Custom Tables

Topic#: 002731
Created: Jamuary 2013

Introduction

This *Tech Note* explains moving custom tables from one Historian Server to another.

Custom tables are tables you create to store information beyond the built-in tables already included in the Historian Server's Runtime database. These custom tables are not automatically migrated when Historian software is upgraded, it is necessary to migrate them manually.

This *Tech Note* uses Historian1 (existing Historian Server) and Historian2 (Target/New Historian Server) for reference and context.

Application Versions

- Wonderware Historian 10.0 and later
- Microsoft SQL Server 2008 and later

Procedure

To move custom tables from one Historian to another

Complete the following tasks:

Create a backup for the current **Runtime** database on the target server

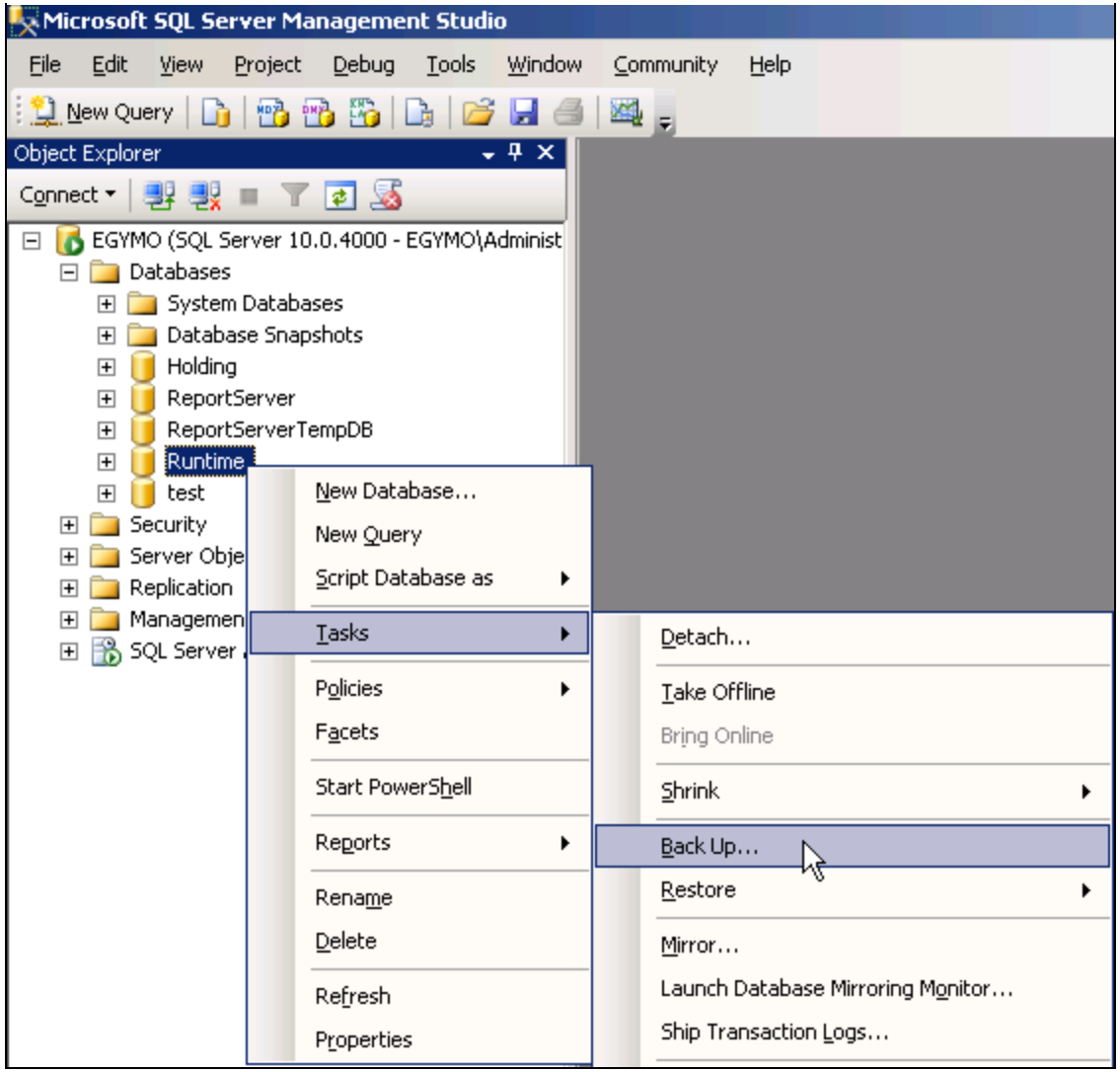

FIGURE 1: CREATE BACKUP OF THE RUNTIME DATABASE

Use SSMS to create scripts from the original Runtime Database

1. From SQL Server Management Studio (SSMS) right click on the **Runtime** database and click **Tasks/Generate Scripts**.

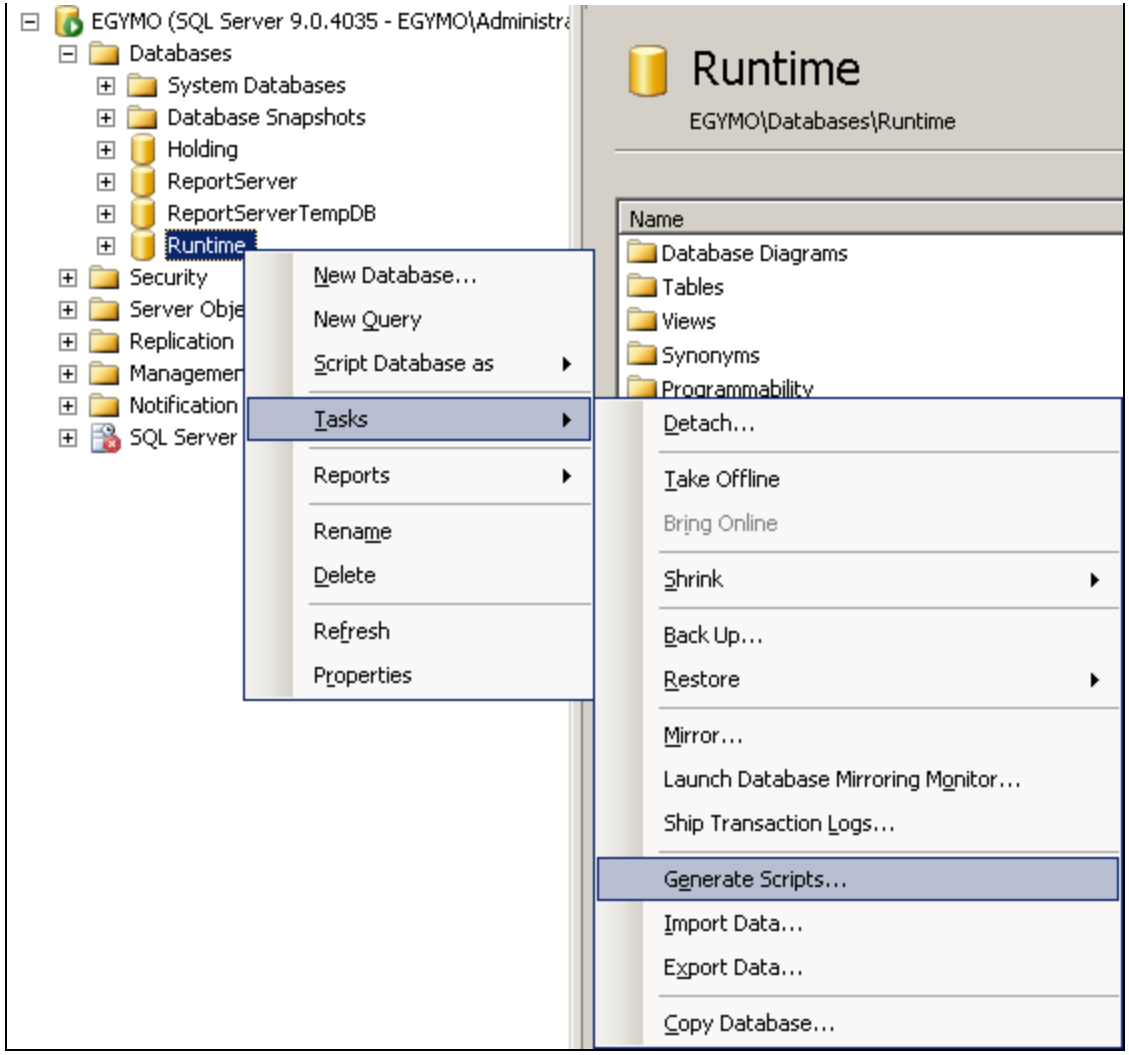

FIGURE 2: GENERATE RUNTIME SCRIPTS

2. Click **Next**.

FIGURE 3: SCRIPT WIZARD

The **Select Database Wizard** appears.

3. Select **Runtime** and click **Next**.

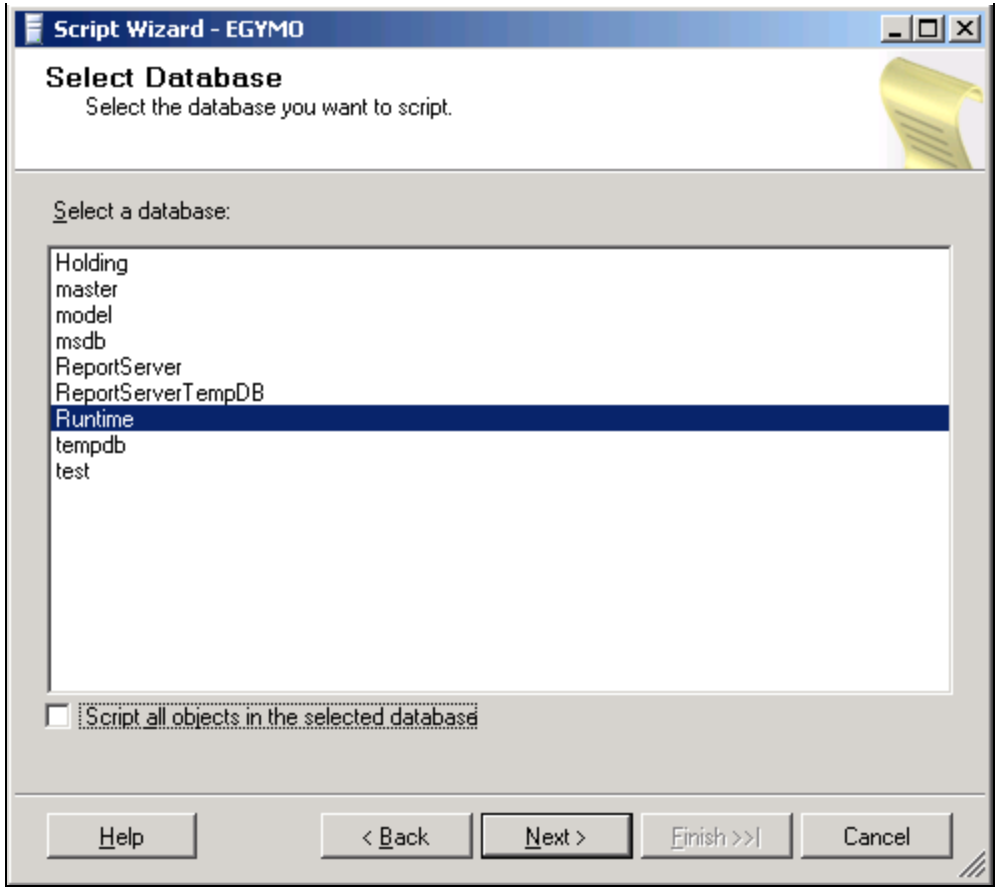

FIGURE 4: SELECT THE RUNTIME DATABASE

The **Choose Script Options Wizard** appears.

4. Accept the defaults and click **Next** (Figure 5 below).

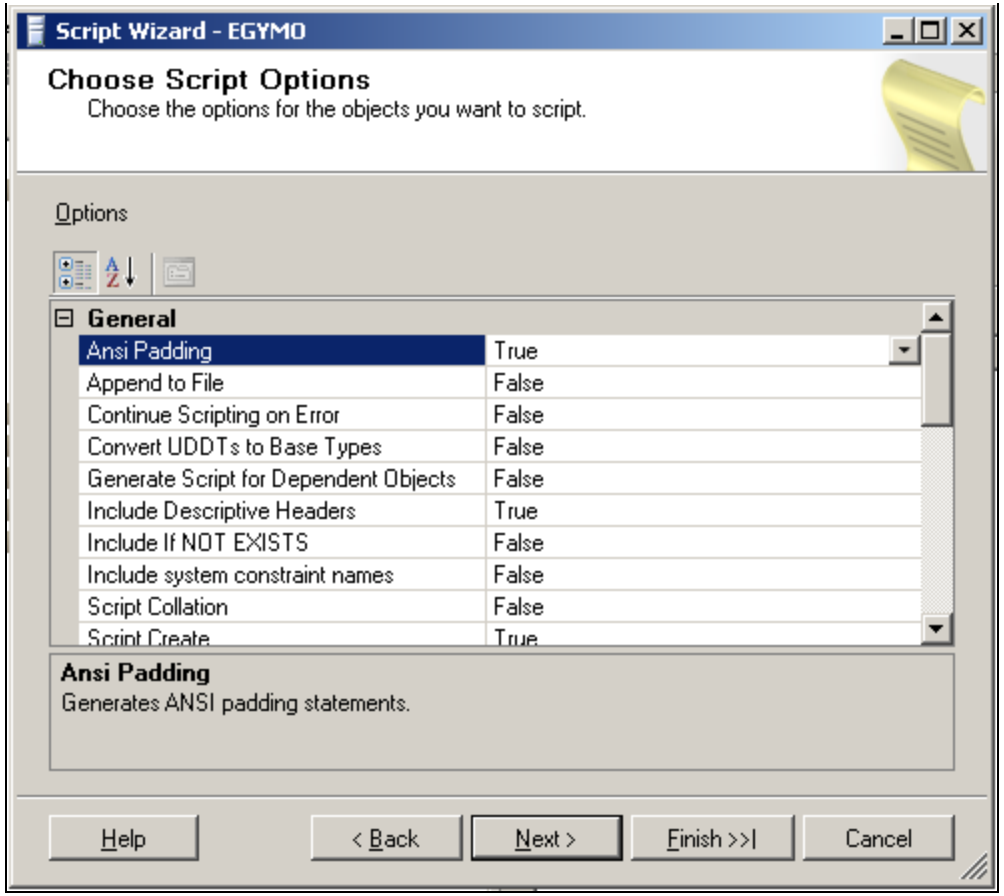

FIGURE 5: SCRIPT OPTIONS

The **Choose Object Types** Wizard appears (Figure 6 below).

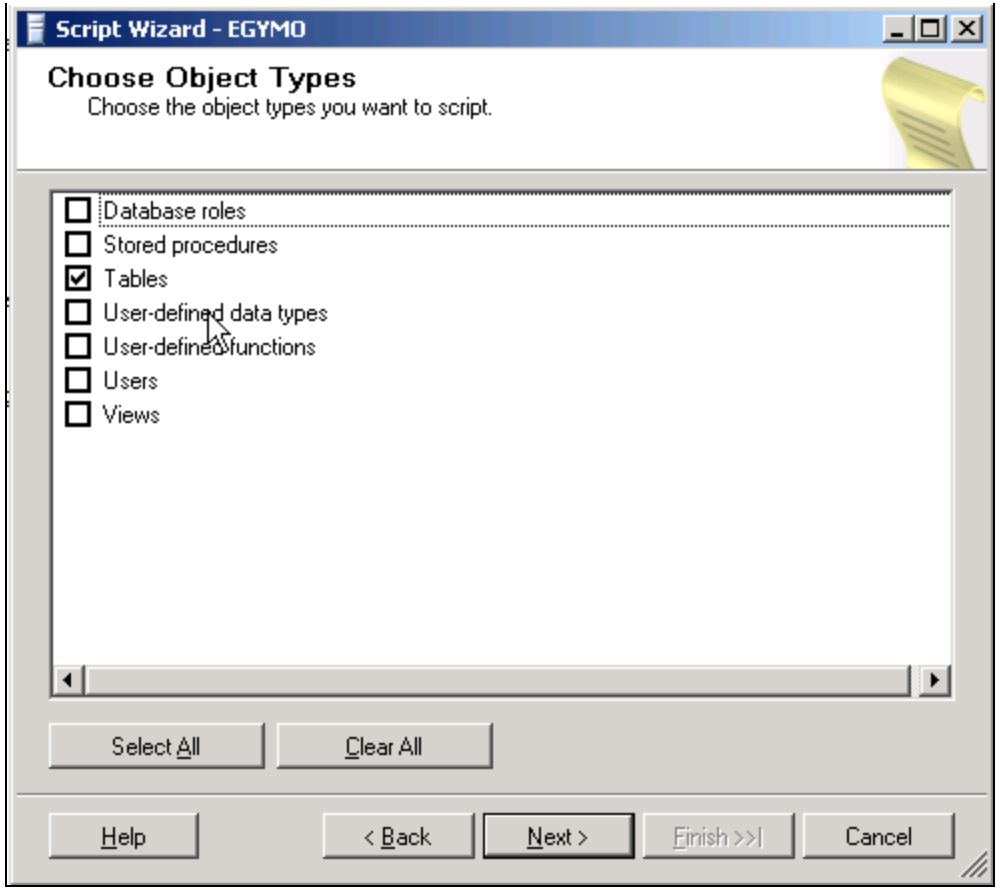

FIGURE 6: OBJECT TYPES OPTIONS

5. Select **Tables** and click **Next.**

   The **Choose Tables** Wizard appears (Figure 7 below).

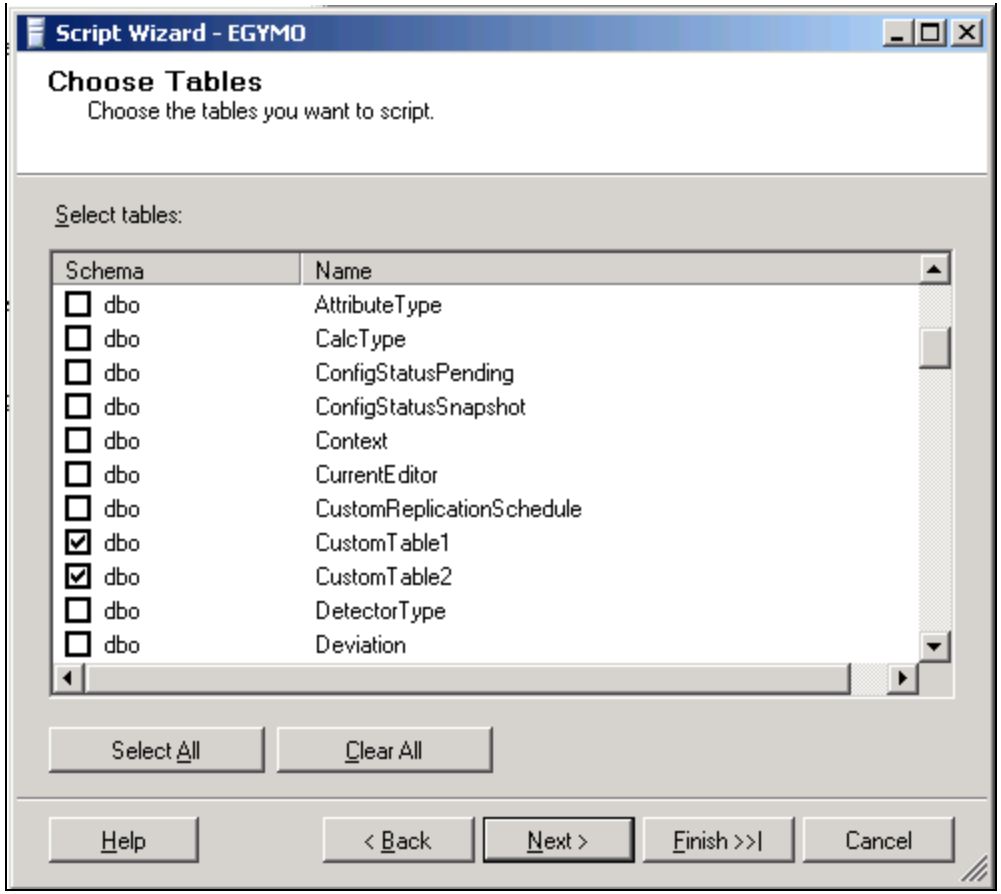

FIGURE 7: CHOOSE CUSTOM TABLES

6. Select the *Custom* tables for which you want to generate script and click **Next**.
7. Select the location at which to save script file and click **Save**, then **Next** (Figure 8 below).

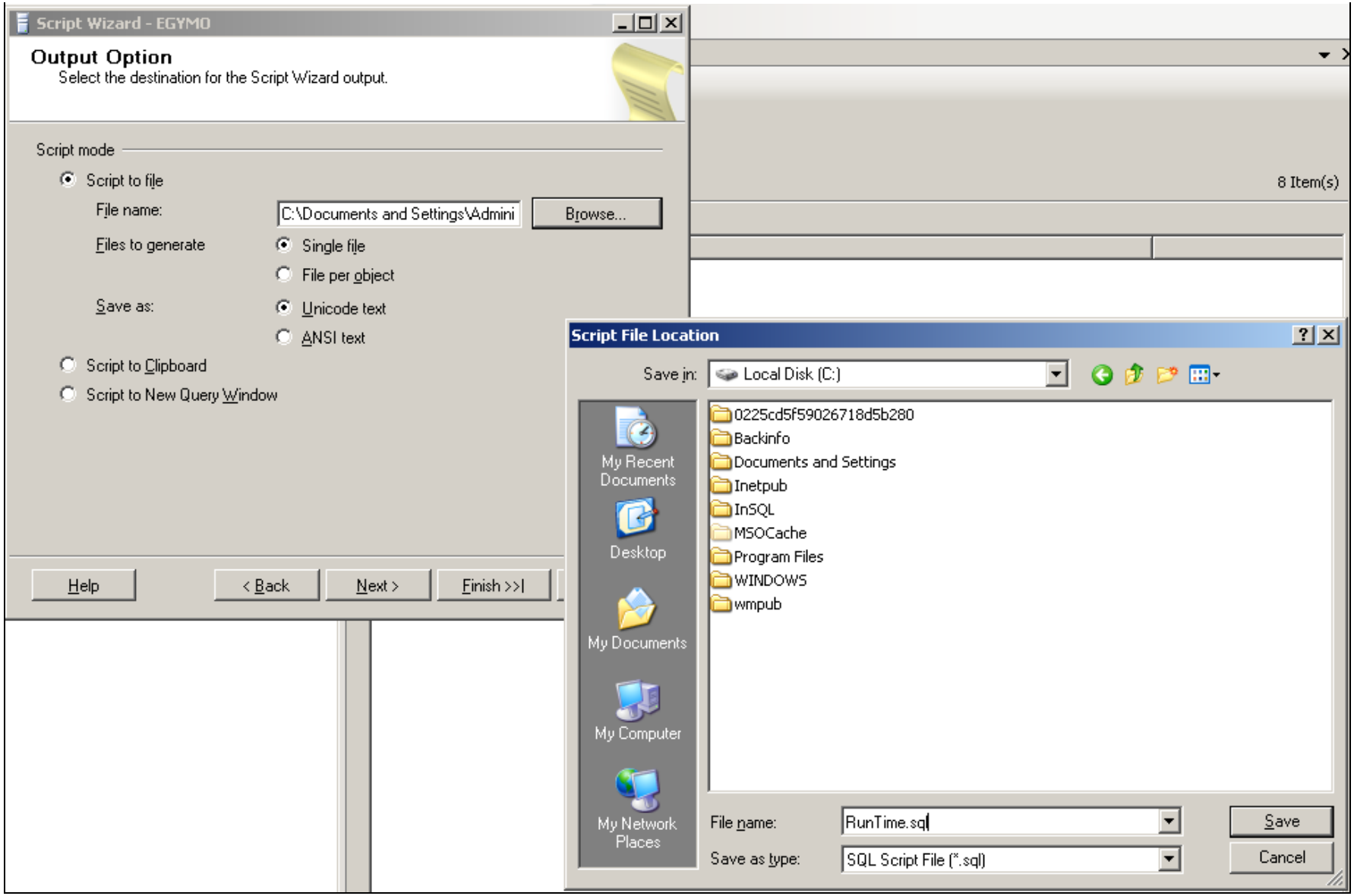

FIGURE 8: SELECT A LOCATION

8. Click **Finish** (Figure 9 below).

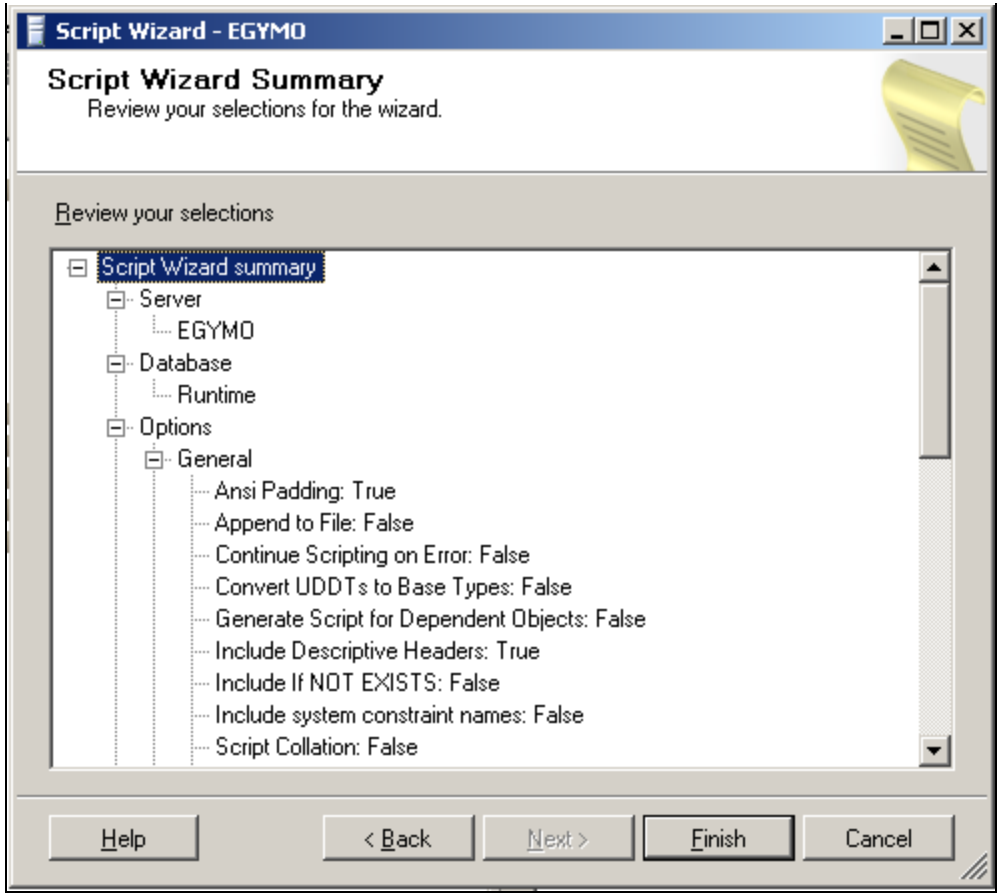

FIGURE 9: SCRIPT WIZARD SUMMARY

9. After the Script Generation operation finishes (Figure 10-11 below), close the SQL Server Management Studio.

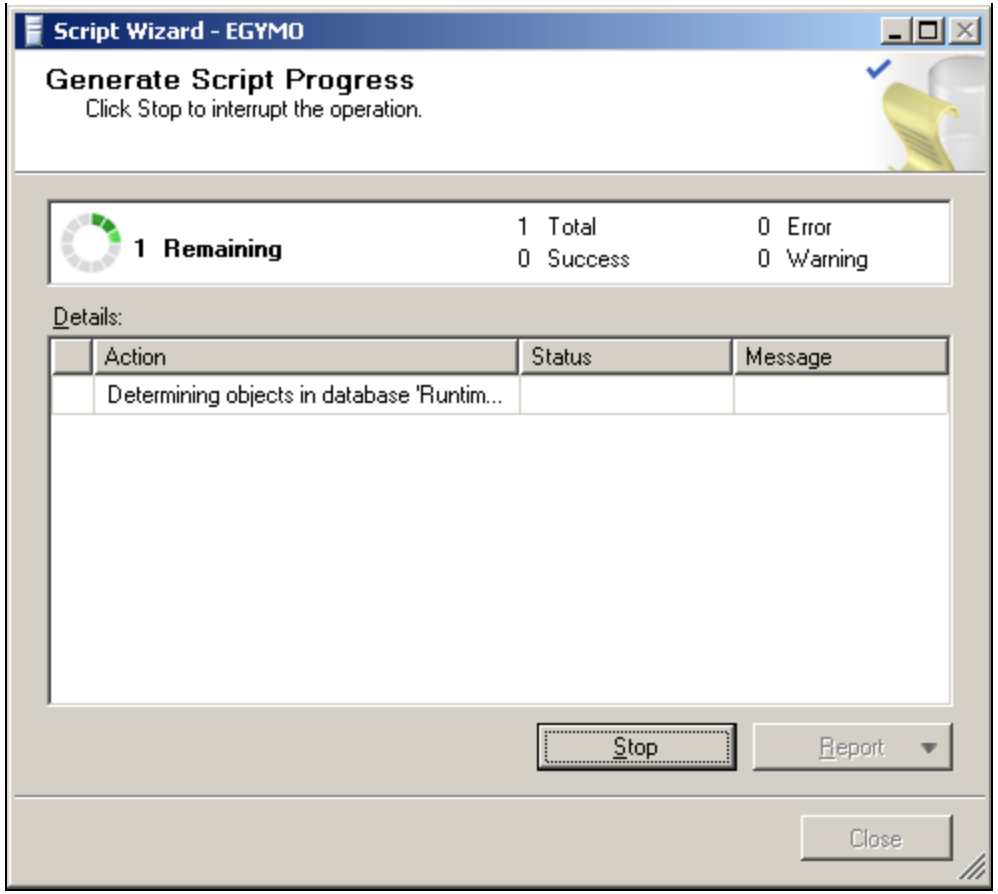

Figure 10: Generate Script Progress

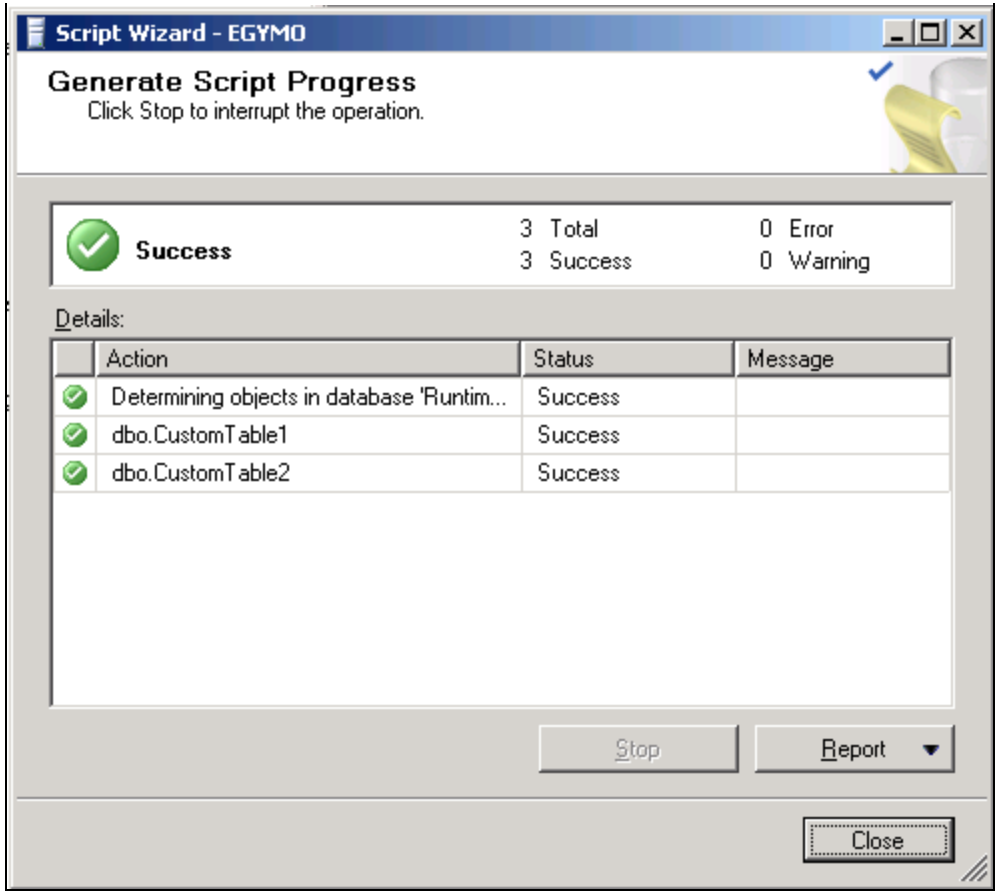

Figure 11: Close the Wizard

Move the Scripts to Another Historian Machine

To do this, run the scripts to create the new tables on the target machine.

1. From SSMS click **Open / File** from the main menu.

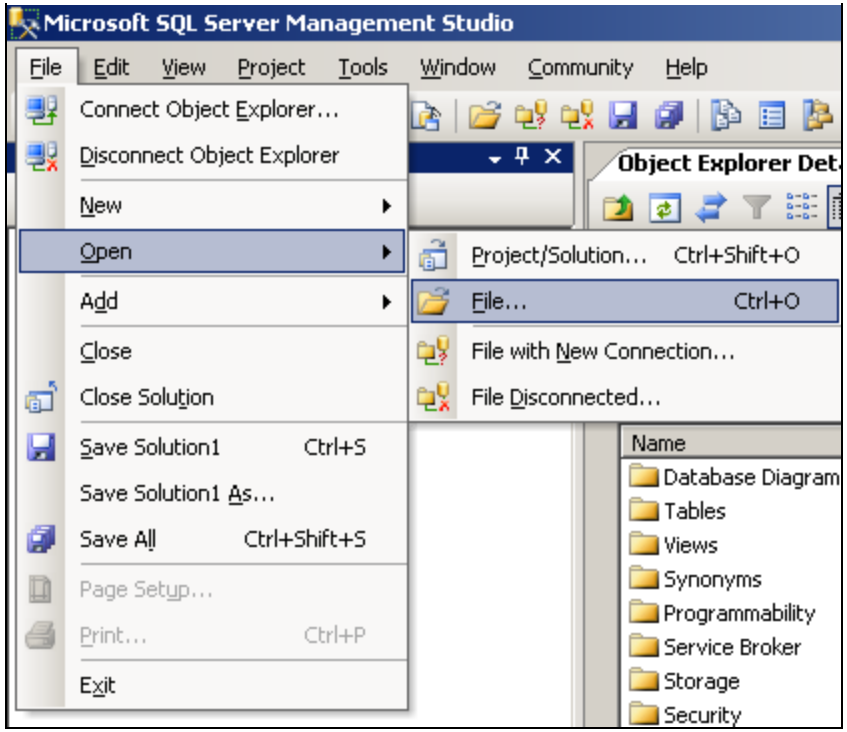

FIGURE 12: OPEN THE SCRIPT FILE

2. Browse to the script file location and click **Open**.

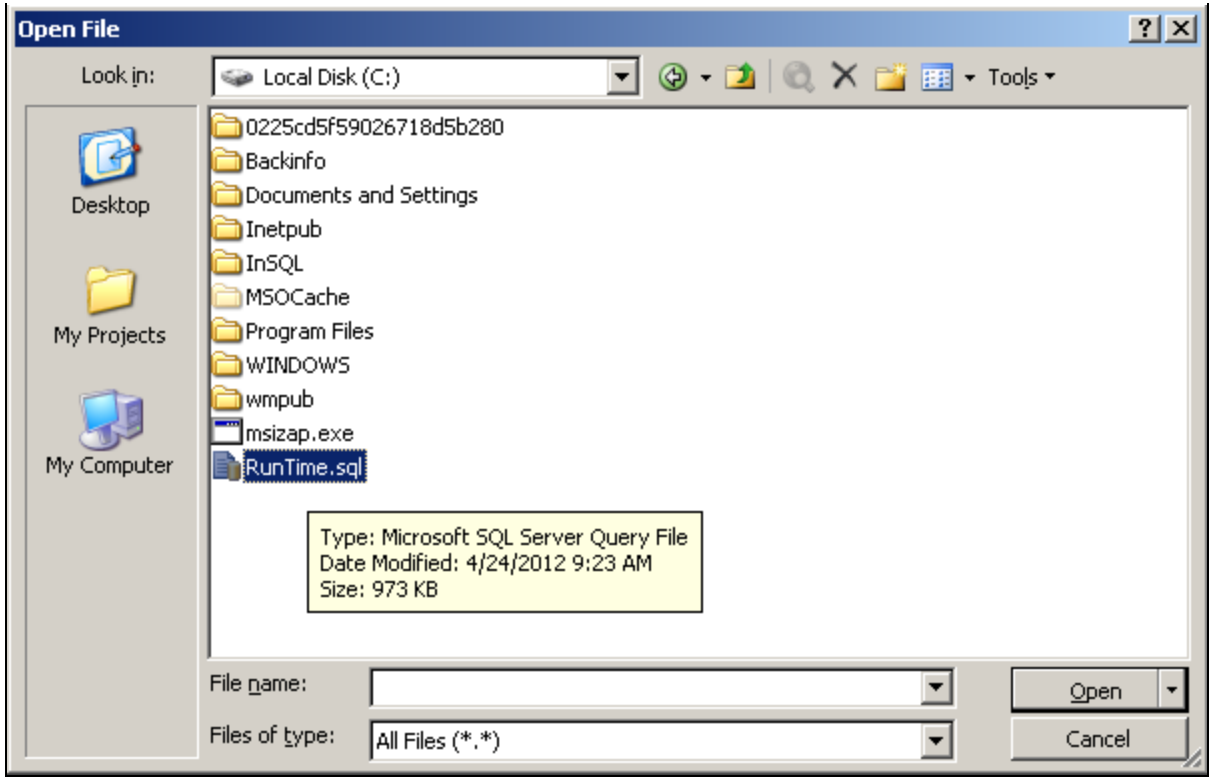

FIGURE 13: OPEN THE <SCRIPTNAME>.SQL FILE

3. Click the **Execute** button in the main Toolbar.

Copy the Custom Table Data to the New Runtime Database

Create a linked server cube between the old Historian and new Historian.

1. On the Historian 1 (Existing) machine, Open **SQL Server Management Studio** and connect to it.
2. In the **Connect to Server** dialog box, specify the name of the appropriate SQL Server, and then click **Connect**.
3. In SQL Server Management Studio, double-click **Server Objects**, right-click **Linked Servers**, then click **New Linked Server**.

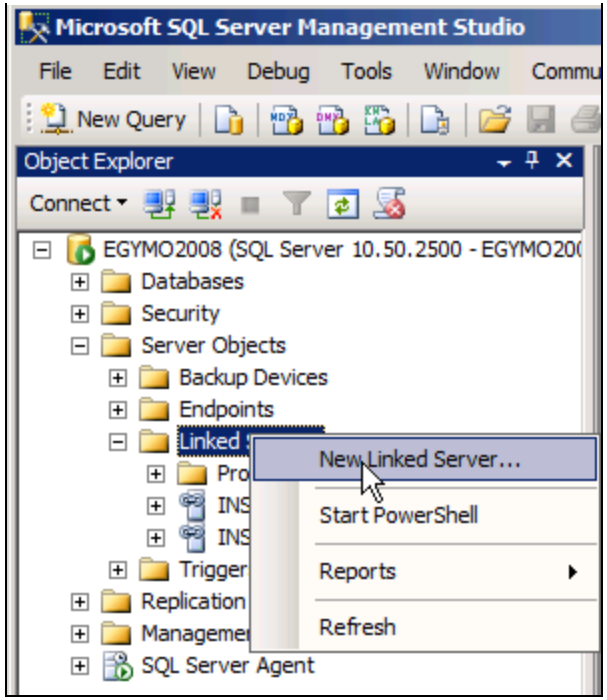

FIGURE 14: NEW LINKED SERVER

4. In the **New Linked Server** dialog box, type the Network name of the SQL Server you want to link to.

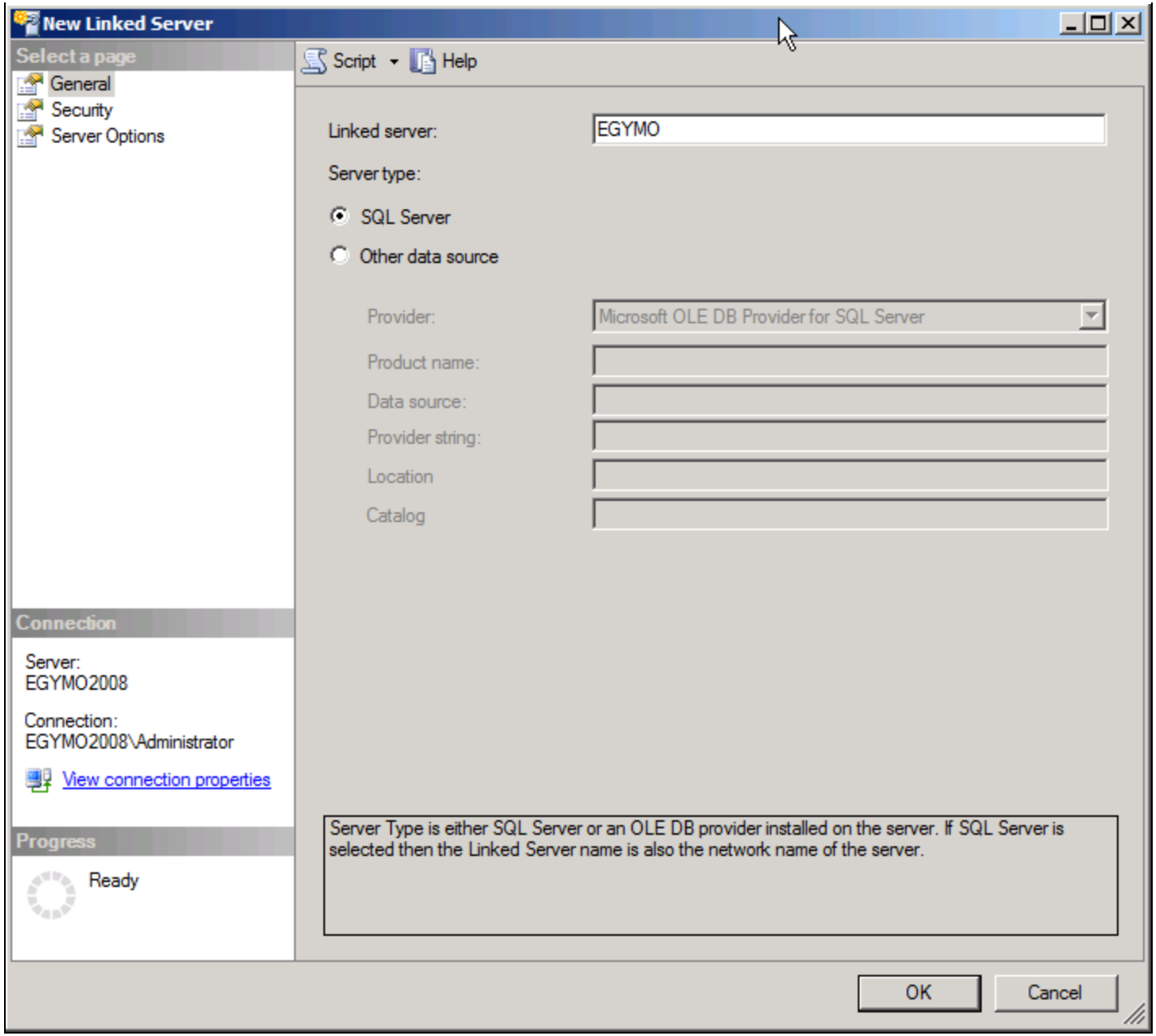

FIGURE 15: TYPE THE NETWORK NAME OF THE LINKED SERVER

5. For **Server type**, click **SQL Server**, then click **OK**.

Note: This procedure often refers to the server you are linking to as the remote server. This is for convenience only, to indicate the relationship of the linked (remote) server to the local server. Do not confuse this usage with the obsolete remote server functionality in SQL Server.

6. In the **New Linked Server** dialog box, click the **Security** page (Figure 16 below).

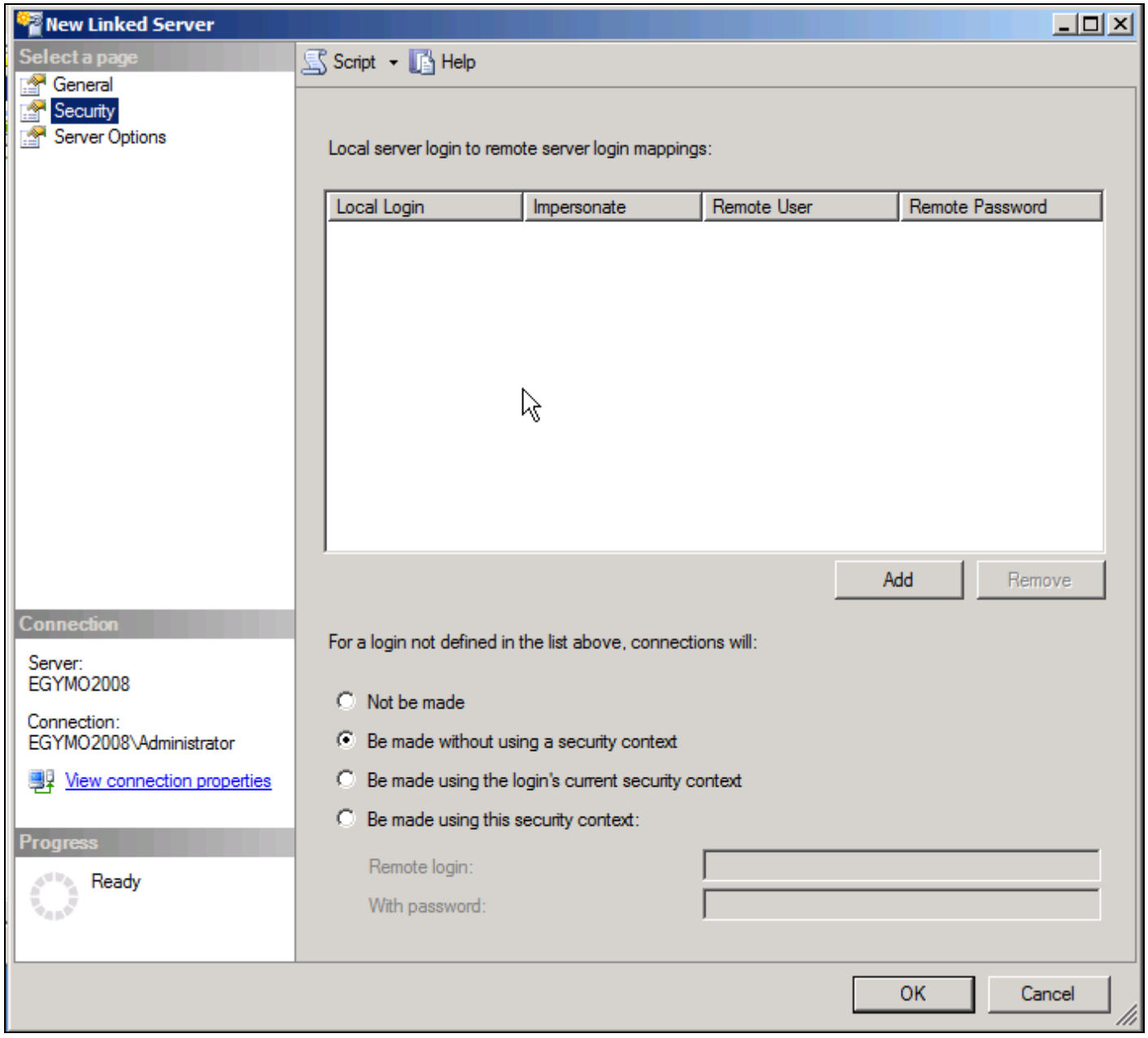

FIGURE 16: SECURITY SETTING FOR NEW LINKED SERVER

7. Click the **Be made using this security context** option, then provide the ***Admin level*** Remote Login and Password.

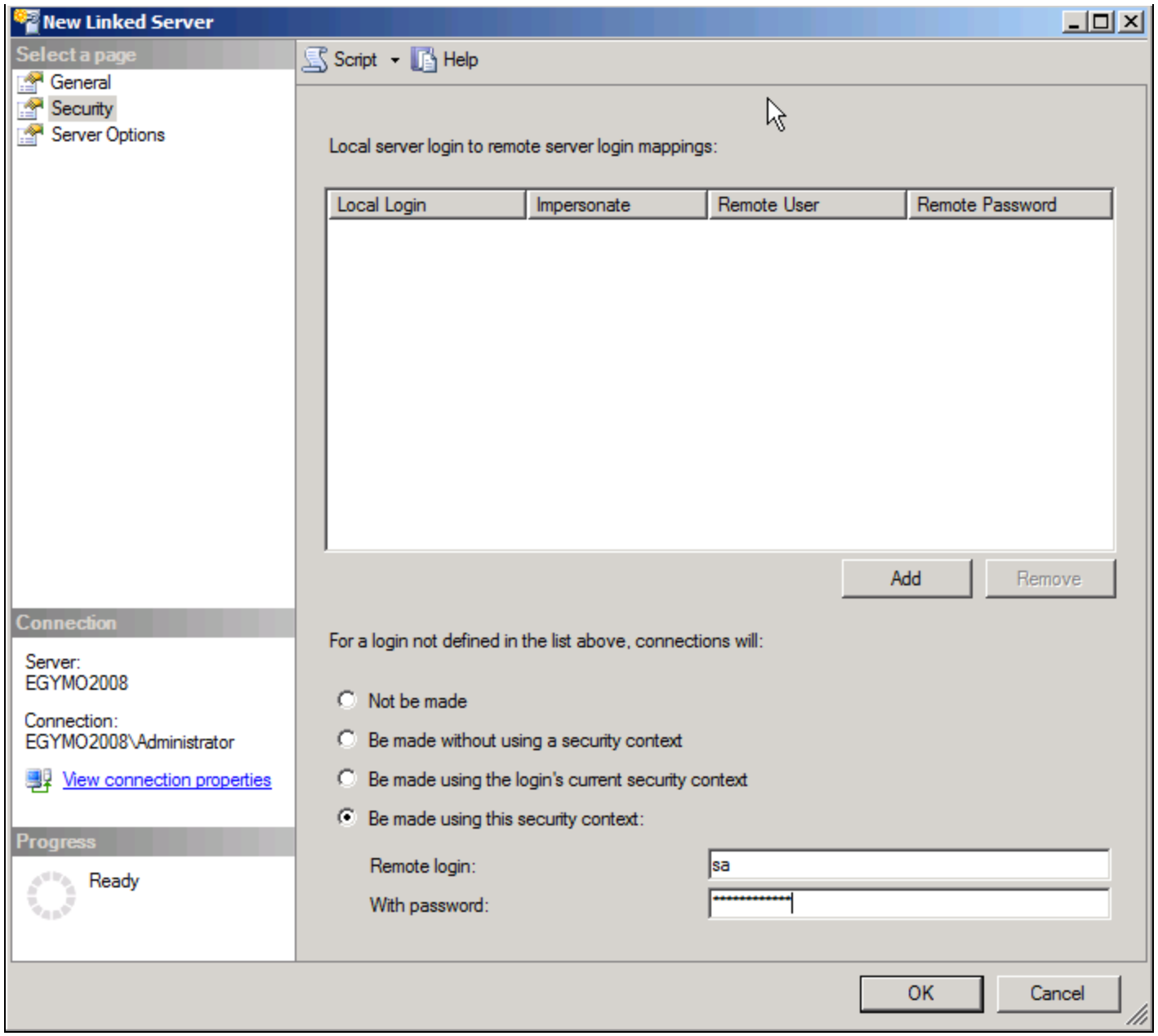

FIGURE 17: PROVIDE SECURITY CONTEXT

11. Click **Server Options**.
12. Set the **RPC and RPC Out** parameters to **True**, then click **OK**.

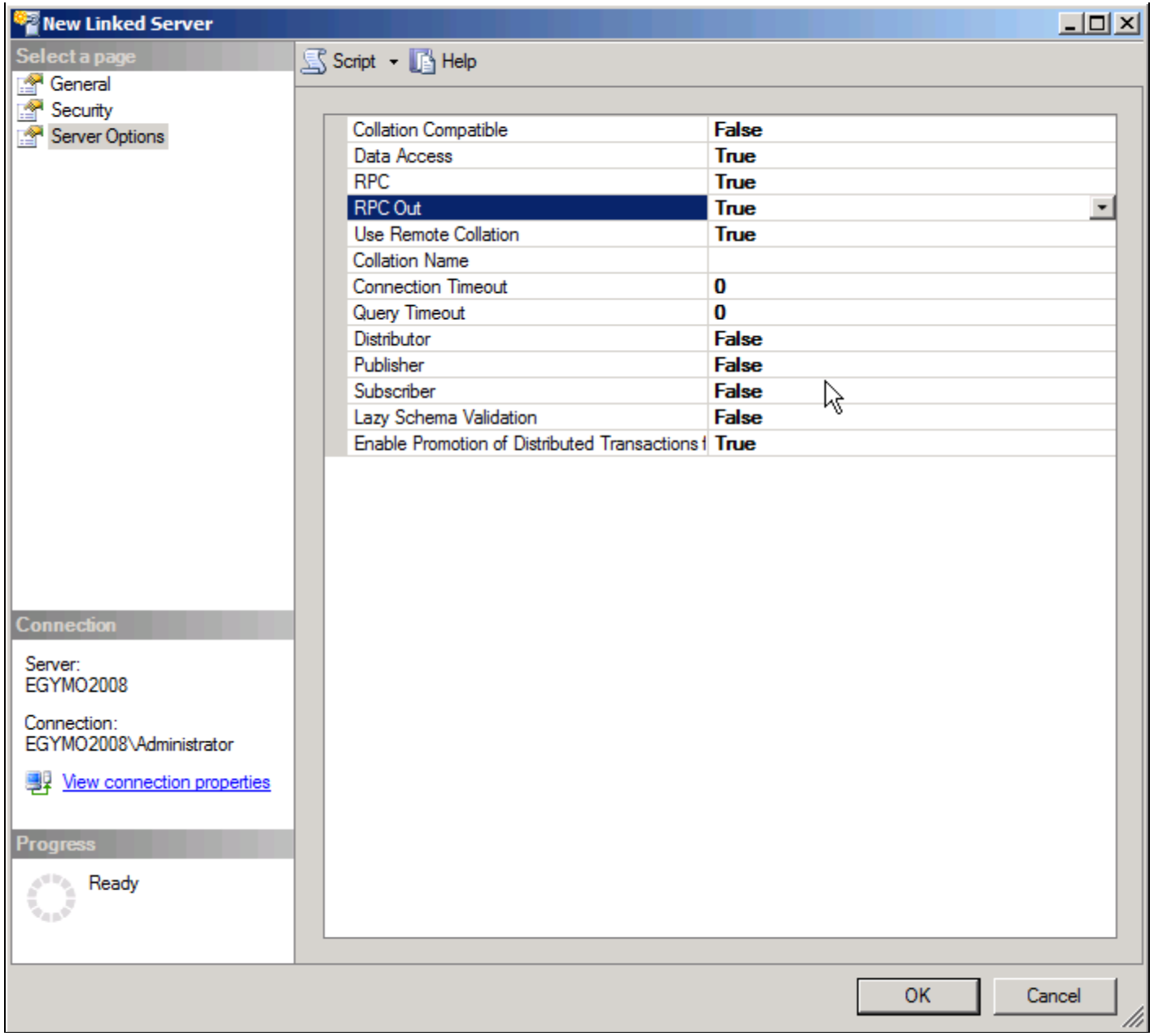

FIGURE 18: RPC AND OTHER LINKED SERVER OPTIONS

13. Click **OK**.

Transfer all Records from the Old Tables to the New Tables

Now you have a Historian Server that contains custom tables, and you have tables in the target Historian Server with the same tables

but no data.

You have a linked server relationship between the Servers, and you are now ready to copy data from the original tables to the new tables.

Use the following SQL statement to copy the data (provide your actual table names).

```
INSERT CustomTable1 (ID, Name)
SELECT * FROM OPENQUERY([ORIGINALHISTORIANSERVERNAME],'SELECT ID,Name FROM [Runtime].[dbo].[CustomTable1]')
```

M. Salah

Tech Notes are published occasionally by Wonderware Technical Support. Publisher: Invensys Systems, Inc., 26561 Rancho Parkway South, Lake Forest, CA 92630. There is also technical information on our software products at **Wonderware Technical Support.**

For technical support questions, send an e-mail to **wwsupport@invensys.com**.

Back to top