

SSIS Package – Create CSV Extract

Description

A csv extract file can be created using a SSIS package and a SQL Server Agent job which executes a query. The job can be scheduled to run regularly to produce a file at the desired interval. This document contains instructions on how to setup the SSIS package and schedule the SQL Server Agent job.

Query

Use the example SQL query below to create the csv extract file.

```
Select c.Column1, c.Column2, cid.Column3, aan.Column4
From table1 c
Join table2 cid
    On c.Column1 = cid.Column2
Left Join table3 aan
    On c.Column2 = aan.Column2
Where cid.Column5 = 0
Order by c.Column2, cid.Column3, aan.Column4
```

Create the SSIS Package

- In SQL Server Management Studio, right-click the database, choose **Tasks** then **Export Data**.
- Click Next to get to the **Data Source** menu.
- Data Source menu
 - Data Source: SQL Server Native Client.
 - Server Name: Choose the server that will execute the request.
 - Authentication: Windows Authentication
 - Database: The database housing the data for the csv extract.

SQL Server Import and Export Wizard

Choose a Data Source
Select the source from which to copy data.

Data source: SQL Server Native Client 11.0

Server name: \DEV

Authentication

☒ Use Windows Authentication

☐ Use SQL Server Authentication

User name:

Password:

Database: tempdb Refresh

Help < Back Next > Finish >> Cancel

- Destination menu
 - Destination: Flat File Destination.
 - File Name: Name and path of the export file.
 - Format: Delimited.
 - Uncheck the box labeled, Column names in the first data row.

SQL Server Import and Export Wizard

Choose a Destination
Specify where to copy data to.

Destination: Flat File Destination

Select a file and specify the file properties and the file format.

File name: C:\Temp\Extract.csv Browse...

Locale: English (United States) Unicode

Code page: 1252 (ANSI - Latin I)

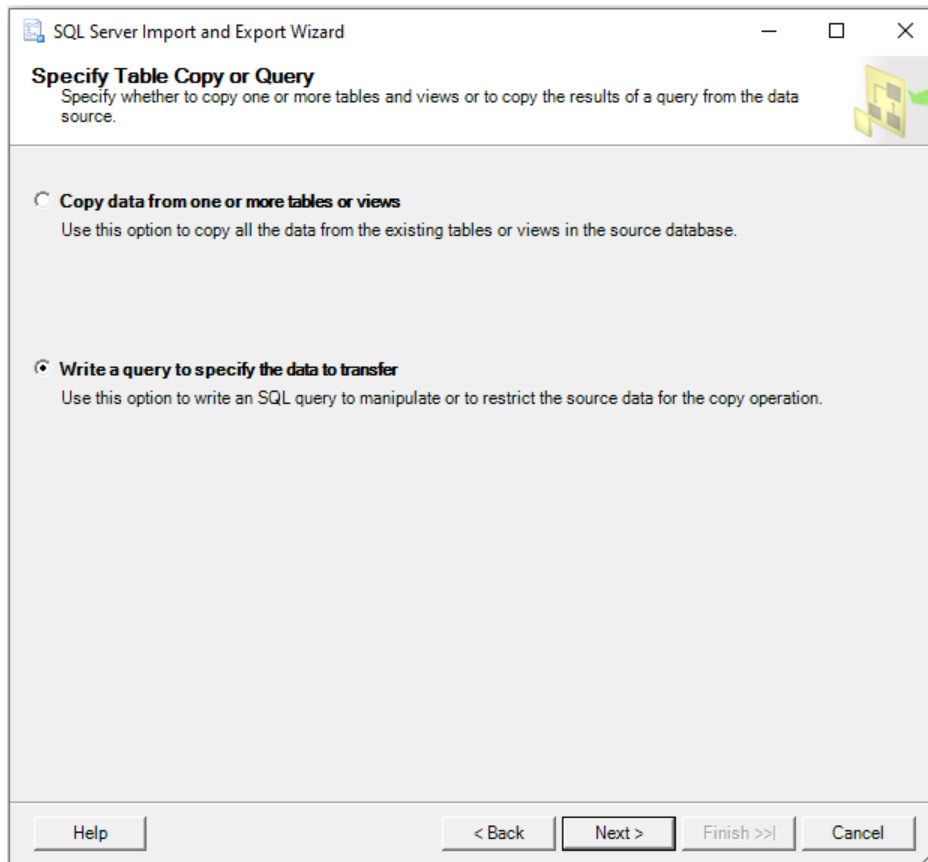
Format: Delimited

Text qualifier: <none>

☐ Column names in the first data row

Help < Back Next > Finish >> Cancel

- Specify Table Copy or Query menu
 - Choose, Write a query to specify the data to transfer.



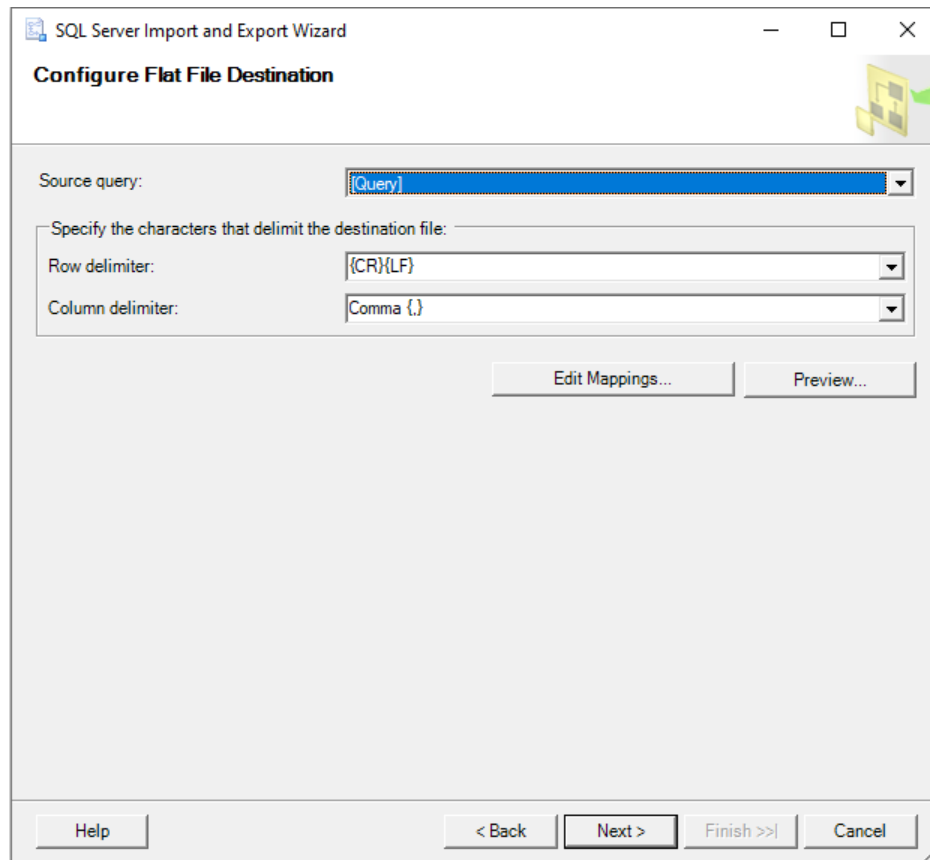
- Provide a Source Query menu.
 - Enter the query for the csv extract in the SQL statement window.

The screenshot shows the 'SQL Server Import and Export Wizard' window, specifically the 'Provide a Source Query' step. The window title is 'SQL Server Import and Export Wizard'. Below the title bar, there's a section titled 'Provide a Source Query' with the instruction 'Type the SQL statement that will select data from the source database.' To the right of this text is a small icon of a folder with a green arrow pointing to it. Below this is a large text area labeled 'SQL statement:' containing the following SQL query:

```
Select c.Column1, c.Column2, cid.Column3, aan.Column4
From table1 c
Join table2 cid
  On c.Column1 = cid.Column2
Left Join table3 aan
  On c.Column2 = aan.Column2
Where cid.Column5 = 0
Order by c.Column2, cid.Column3, aan.Column4
```

At the bottom of the text area are two buttons: 'Parse' and 'Browse...'. Below these buttons is a row of four buttons: 'Help', '< Back', 'Next >', and 'Finish >>'. The 'Next >' button is highlighted with a red border. The 'Cancel' button is also visible at the bottom right.

- Configure Flat File Destination menu.
 - Source Query: Query
 - Row delimiter: CR/LF
 - Column delimiter: Comma
 - Click Preview to check that query results display successfully.



- Save and Run Package menu
 - Check Save SSIS Package and select File System.
 - Package Protection Level: Do not save sensitive information.

The screenshot shows the 'Save and Run Package' step of the SQL Server Import and Export Wizard. The window title is 'SQL Server Import and Export Wizard'. The main heading is 'Save and Run Package' with the instruction 'Indicate whether to save the SSIS package.' Below this, there are several options: 'Run immediately' (unchecked), 'Save SSIS Package' (checked), and two radio buttons for 'SQL Server' (unchecked) and 'File system' (checked). A 'Package protection level:' dropdown menu is set to 'Do not save sensitive data'. Below the dropdown are two text boxes labeled 'Password:' and 'Retype password:'. At the bottom, there are four buttons: 'Help', '< Back', 'Next >', and 'Finish >>|', along with a 'Cancel' button.

SQL Server Import and Export Wizard

Save and Run Package
Indicate whether to save the SSIS package.

☐ Run immediately

☒ Save SSIS Package

☐ SQL Server

☒ File system

Package protection level:

Do not save sensitive data

Password:

Retype password:

Help < Back Next > Finish >>| Cancel

- Save SSIS Package menu
 - Name: Choose a descriptive name for the SSIS Package.
 - Description: Enter a description for the SSIS package.
 - File Name: Choose a path and file name to save the SSIS package information.

The screenshot shows the 'Save SSIS Package' step of the SQL Server Import and Export Wizard. The window title is 'SQL Server Import and Export Wizard'. The main heading is 'Save SSIS Package' with a sub-note: 'You can save the SSIS package for reuse. You must save the package to schedule it for later execution.' The form contains the following fields and controls:

- Name:** A text box containing 'CSV Extract'.
- Description:** A text box containing 'CSV Extract File'.
- Target:** A dropdown menu set to 'File System'.
- File name:** A text box containing 'C:\Temp\CSV Extract.dtsx' and a 'Browse...' button to its right.

At the bottom of the wizard, there are four buttons: 'Help', '< Back', 'Next >', and 'Finish >>|'. A 'Cancel' button is also present on the right side of the bottom bar.

Create a Credential and Proxy to Execute the Job

- In SQL Server Management Studio, under the Security menu, create a new credential.
 - Credential Name: A descriptive name
 - Identity: The user account that will execute the ssis package. Please note, the user will need datareader permissions to the database and the sysadmin server role.
 - Password: The password for the account that will execute the ssis package.

New Credential

Select a page

- General

Script Help

Credential name: CSV Extract Credential

Identity: User

Password: *****

Confirm password: *****

☐ Use Encryption Provider

Provider

Connection

Server: \\DEV

Connection: \\DEV

[View connection properties](#)

Progress

Ready

OK Cancel

- Next, under SQL Server Agent create a new Proxy.
 - Proxy Name: A descriptive name.
 - Credential name: Browse and choose the credential created above.
 - Activate to the following subsystems: SQL Server Integration Services Package.

New Proxy Account

Select a page: **General**, Principals

Script ▾ ? Help

Proxy name: CSV Extract File

Credential name: User Credential ...

Description:

Active to the following subsystems:

- ☒ Subsystem
- ☐ Operating system (CmdExec)
- ☐ SQL Server Analysis Services Query
- ☐ SQL Server Analysis Services Command
- ☒ SQL Server Integration Services Package
- ☐ PowerShell

Connection: Server: \DEV, Connection: [View connection properties](#)

Progress: Ready

OK Cancel

Schedule the Job

- In SQL Server Management Studio, expand SQL Server Agent, right-click Jobs and choose New Job.
- General Page
 - Name: Choose a descriptive name for the Agent job.
 - User: the SQL user who owns the job setup.

New Job

Select a page

- General
- Steps
- Schedules
- Alerts
- Notifications
- Targets

Connection

Server: \\DEV

Connection: \\DEV

[View connection properties](#)

Progress

Ready

Script Help

Name: CSV Extract

Owner: User

Category: [Uncategorized (Local)]

Description:

☒ Enabled

OK Cancel

- Steps page.
 - Click New to create a new Job Step.
 - Choose a descriptive name.
 - Type: SQL Server Integration Services Package
 - Run as: The Proxy setup in the previous step.
 - Package Source: File System
 - Package: Browse to the package file created in a previous step.

New Job Step

Select a page

- General
- Advanced

Script ? Help

Step name: CSV Extract

Type: SQL Server Integration Services Package

Run as: User Proxy

Set values Verification Command line

Package Configurations Command files Data sources Execution options Logging

Package source: File system

Server:

Log on to the server

- ☒ Use Windows Authentication
- ☐ Use SQL Server Authentication

User name:

Password:

Package: C:\Temp\CSV Extract.dtsx

Next Previous

OK Cancel

Connection

Server: \DEV

Connection:

[View connection properties](#)

Progress

Ready

- Advanced Page
 - On success action: Quit the job reporting success.

New Job Step

Select a page

- General
- Advanced

Script Help

On success action:
Quit the job reporting success

Retry attempts: 0 Retry interval (minutes): 0

On failure action:
Quit the job reporting failure

SQL Server Integration Services Package

Output file: ... View

☐ Append output to existing file

☐ Log to table View

☐ Append output to existing entry in table

☐ Include step output in history

Progress

Ready

OK Cancel

- Job Schedule
 - Create and configure a new job schedule for the desired time frame.

New Job Schedule

Name: Jobs in Schedule

Schedule type: ☒ Enabled

One-time occurrence

Date: Time:

Frequency

Occurs:

Recurs every: week(s) on

☒ Monday
 ☒ Wednesday
 ☒ Friday
 ☐ Saturday

☒ Tuesday
 ☒ Thursday
 ☐ Sunday

Daily frequency

☒ Occurs once at:

☐ Occurs every: hour(s)

Starting at: Ending at:

Duration

Start date: End date: ☒ No end date:

Summary

Description:

- Notifications
 - If desired, email notifications can be sent upon job failures.

New Job

Select a page

- General
- Steps
- Schedules
- Alerts
- Notifications
- Targets

Connection

Server: \DEV

Connection:

[View connection properties](#)

Progress

Ready

Script Help

Actions to perform when the job completes:

☒ Email: When the job fails

☐ Page: When the job fails

☐ Write to the Windows Application event log: When the job fails

☐ Automatically delete job: When the job succeeds

OK Cancel

- Test the job.
 - Right-click the SQL Server agent job and choose Start Job at Step...
 - Verify the file created in the specified location.