

Knowledge Base Article

Product Group: Software Product: SQL Server database file Version:

Abstract

This article discusses how to create a process to automate data extraction from an Analyst database using SQL Server Integration Services (SSIS) and an export utility.

Overview

This document provides instructions on how to extract custom data from an Analyst database using SSIS packages and the scheduling tool provided by SQL Server Management Studio (SSMS) to place data in a CSV type file within a designated folder. It uses a "Serica" project as an example.



Create the Get Serica Data procedure

1. Connect

Connect to Management Studio as "skfuser1". Note: If the local database user is something other than skfuser1 then use that name.

2. Create a new query

- a. Click on the "New Query" button to open a query window.
- b. Copy and paste the code from the attached file "Get_Serica_Data.sql" into the query window.



Get_Serica_Data.sql

c. Click the "Execute" button to create the procedure.

3. Disconnect

Disconnect user and close the query window.



Create SSIS Export Data Package

1. Connect

Now connect to Management Studio as a Windows Authentication user.

Microsoft S	SQL Server 2014	
Server type:	Database Engine	~
Server name:	USSDG5CG9136LC2	~
Authentication:	Windows Authentication	~
User name:	CORP\EK4533	~
Password:		
	Remember password	



a. Right click on "Management" and select "Export Data…" from the menu



bject Explorer			
Connect • 📑 🛃 🔳	7 🛃 🎿		
B USSDG5CG9136	C2 (SQL Server 12.0.2000	- CORP\EK4533)	
🕀 🚞 Databases			
🗄 🚞 Security			
🕀 🚞 Server Objec	ts		
🕀 🚞 Replication			
🕀 🚞 AlwaysOn H	igh Availability		
😑 🚞 Managerson			
🕀 🔮 Policy	Back Up		
🕀 🛃 Data (Copy Database		
🕀 💽 Resoι	Generate Scripts		
🕀 💅 Exten	Import Data		
😹 Mana	Europet Data		
🕀 🧰 Maint	Export Data		
🕀 🚞 SQL S	Reports	*	
👫 Datab	Refresh		
🖏 Distril	Nellesii		

¶

b. Click the "Next >" button on the welcome screen shown below.



Welcome to SQL Server Import and Export Wizard	
This wizard helps you to create simple packages that import and export data between many popular data formats including databases, spreadsheets, and text files. The wizard can also create the destination database and the tables into which the data is inserted. To move or copy databases and their objects from one server instance to another, cancel this wizard and use the Copy Database Wizard instead. The Copy Database Wizard is available in SQL Server Management Studio.	
Do not show this starting page again.	



3. Choose a Data Source screen

¶

Make sure to replace the examples below with the actual information for Server name, Database etc. \P

Select the source from	n which to copy data.
Data source:	Microsoft OLE DB Provider for SQL Server
Server name:	USSDG5CG9136LC2
Authentication Use Windows Auth Use SQL Server A	uthentication
User name: Password:	
Database:	skfuser Refresh

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4. Choose a Destination screen

Replace the example path highlighted below in yellow, with the location where the file should be exported to.

Note: The inclusion of column names is optional. If they are not wanted then uncheck the "Column names" checkbox in the lower "Format" area.¶

Destination					
Jesunauon.	Plat File Destination				
Select a file and s	pecify the file properties and the file format.				
File name:	C:\Users\ek4533\Desktop\MISC\Serica\SericaExport.csv		Brows	e	
Locale:	English (United States)	•	🗆 Uni	code	
Code page:	1252 (ANSI - Latin I)			•	
Format:	Delimited			-	
Text qualifier:	, (none>			_	
	CONTRACTOR CONTRACTOR CONTRACTOR				
Column na	nes in the first data row				



4. Specify Table Copy or Query

- a. Click on the "Write a query" option¶.
- b. Then click the "Next >" button.¶

63	COLC. 1. 1. 15 1115	- 11			0
	SQL Server Import and Export Wiz	ard	773)		× .
S	pecify Table Copy or Query Specify whether to copy one or mor from the data source.	e tables and views or to copy	the results of a query	the second	1
С	Copy data from one or more table	es or views			
	Use this option to copy all the data	from the existing tables or vie	ws in the source datab	ase.	
					2
- (*	Write a query to specify the data	to transfer			
	Use this option to write an SQL que operation.	ry to manipulate or to restrict	the source data for the	сору	
					-
	Help	Rack Nevts	Finish SN	Cancel	1
	TOP	THEAT >	1 110311 ->>1	Currout	



5. Provide a Source Query screen

- a. Type the code shown, inside the "SQL statement" area. Note: Make sure to use the actual database name if it is something other than "skfuser".
- b. Then click the "Next >" button.¶

SQL Server Import and Export Wizard	5009 ⁴		X	
Provide a Source Query Type the SQL statement that will select data from the source database.				
SQL statement:				
execute skfuser.skfuser1.Get_Serica_Data			^	
			Ŷ	
Parse	Br	owse		
Help Back Nextsauce.com	Finish >>	Can	cel	

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6. Configure Flat File Destination screen

- a. Click "Preview..." to view the results.
- b. When ready, click the "Next >" button.

Source query:	[Query]	
Specify the characters that o	delimit the destination file:	
Row delimiter:	{CR}{LF}	
Column delimiter:	Comma {.}	
	-	

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7. Save and Run Package screen

- a. Make sure to uncheck the "Run immediately" checkbox.
- b. Then click the "Next >" button.¶

Save and Run Package Indicate whether to save the SSIS package. Run immediately Save SSIS Package SQL Server File system Package protection level: Encrypt sensitive data with user key Password: Retype password:	SQL Server Import	and Export Wiza	rd			
 Run immediately ✓ Save SSIS Package ✓ SQL Server ✓ File system Package protection level: Encrypt sensitive data with user key Password: Retype password: 	Save and Run P Indicate whether to	ackage save the SSIS pa	ickage.			
 ✓ Save SSIS Package ← SQL Server ← File system Package protection level: Encrypt sensitive data with user key Password: Retype password: 	Run immediately					
SQL Server SqL Server File system Package protection level: Encrypt sensitive data with user key Password: Retype password:	🔽 Save SSIS Packag	e				
File system Package protection level: Encrypt sensitive data with user key Password: Retype password:	SQL Server					
Package protection level: Encrypt sensitive data with user key Password: Retype password:	C File system					
Encrypt sensitive data with user key Password: Retype password:	Package protection	level:				
Password: Retype password:	Encrypt sensitive da	ta with user key				
Retype password:	Password:					
,	Retype password:					
	Help		< Back	Next >	Finish>>	Canc



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8. Save SSIS Package screen

- a. Fill in the information shown in the screen capture below but using the appropriate Server name.
- b. Then click the "Next >" button.¶

Name:	Serica_SSIS_Package	
Description:	Serica SSIS Package	
Target:	SQL Server	
Server name:	USSDG5CG9136LC2	
Use Windows Authent	itication	
Use SQL Server Auth	entication	
User name:		
Password:		



9. Complete the Wizard screen

Click the "Finish" button¶

		ander and a second contraction of the second sec				
Click	Finish to perform the	following actions:				
Source	Location : USSDG5CG	9136LC2				
Source	Provider . SQLULEDB					
· Co	opy rows from [Query] to	C:\temp\MeasurementData.cs\				
н	në nëw target table will b	e created.				
T	he package will be save	<mark>d</mark> to the instance of the SQL Se	rver Database Engine			
T	he package will not be n	un immediately.				
Provide	er mapping file · C·\Progr	am Files (x86)\Microsoft SQL S	erver\120\DTS\Mappi	ingFiles		
MSSO	QLToSSIS10.XML			ingrilee		

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10. Create Serica Project using Integration Services

- a. Open Management Studio and in the Server type drop-down choose: "Integration Services".
- b. Click "Connect". Note: This may require starting the SSIS service using the Services console/app.
- c. Right click on "Integration Services Catalogs" and select "Create Catalog".

Note: If disabled execute the code in the file "Enable_Create_Catalog.txt".

Copy and paste the code then execute as a Windows Authentication user.

Enable_	Create_Cata	
lo	og.txt	

- d. Follow the on-screen instructions (creating a password if required).
- e. Follow the steps through, to create the project: "Serica Project".





11. Import Serica package into Projects

a. Right click on "Projects" and select "Import Packages...".



b. Introduction

Click the "Next >" button.



c. Locate Packages screen

Use the screen shown below to locate the package. Note: Replace the server name shown with the appropriate name.

When ready, click the "Next >" button.¶

Locate Packages							
4.4	6						
ntroduction					Ø F	lelp	
locate Packages	Select the location	on of the packages that you w	ant to add to the	project.			
Select Packages	Cauman				50		
elect Destination	Jource.	SSIS Package Store			~		
Jpdate Execute Package Task	Server:	USSDG5CG9136LC2			~		
Select Configurations	Folder:						
Treate Parameters	/MSDB			Browse	•		
Configure Parameters							
Review							
Perform Conversion							
		< Previous	Next >	Convert	Cancel		



d. Select Packages screen
 Select the Serica package as shown in the screen below.
 Click the "Next >" button.

Integration Services Project Co	onversion Wizard			<u>100</u>		Х
Select Packages	5				A38.	
Introduction Locate Packages Select Packages	Select the packages that you want Select the packages to convert by check	t to convert .	n the first column.	Packages that are	e not sele) Help
Select Destination	won't be converted.					
Select Configurations	Packages:	Outur	Harrison	Descent		
Create Parameters	Serica SSIS Package day	Status Net lo	Message	Password		
Cardia in Darameters		NOL IO				
Deview						
Review						
Perform Conversion						
	Password: Apply to	o selection			Refr	esh
		< Previous	Next >	Convert	Car	ncel



e. Select Destination screen

Fill in the path information for a location where the project can be stored.

When ready, click the "Next >" button.

Integration Services Project Select Destina	Conversion Wizard		-		
ntroduction Jocate Packages Select Packages Select Destination	Specify the deplo	yment file destination and other details.		🥑 Help	
Jpdate Execute Package Task Select Configurations Create Parameters Configure Parameters Review Perform Conversion	C:\Users\ek4533\De Project name: Protection level: Project description:	sektop WIISC\Serica\SericaProject ispac SericaProject EncryptSenstiveWithUserKey		Browse	

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f. Update Execute Package Task screen Click the "Next >" button.

Integration Services Project C	: Conversion Wizard — 🗆 🗙
Update Executo	te Package Task
Introduction	@ Help
Locate Packages	No Francis Barbara to the same for all Obel Martin and the
Select Packages	No execute Package tasks were tound. Click next to continue. The nackages shown below contain Execute Package tasks. It's recommended that you let the wizard
Select Destination	change each of these Execute Package tasks to access its package using a project-based reference as this employee denoument
Update Execute Package Task	una ampinoa dopoginoris.
Select Configurations	Tasks:
Create Parameters	Parent Package Task name Original reference Assign reference
Configure Parameters	
Review	
Perform Conversion	
	< Previous Next > Convert Cancel

g. Select Configurations screen Click the "Next >" button on this screen.

- **h.** Create Parameters screen Click the "Next >" button on this screen.
- i. Configure Parameters screen Click the "Next >" button on this screen.

j. Review screen

Click "Convert" and then click "Close". Upon clicking the "Close" button the "Integration Services Deployment Wizard" will display next.



k. Introduction screen (Integration Services Deployment Wizard)

Click the "Next >" button

Integration Services Deployment	nt Wizard — 🗆 🗙	
Introduction	@ Help	
Select Source Select Destination Review Results	Deploy Integration Services project. This wizard deploys an Integration Services project to an Integration Services catalog on an instance of SQL Server.	
	 Ihere are four steps to completing this wizard: Select the Integration Services project that you want to deploy. Select the project destination. Review your selections. Deploy the project. 	
	Click Next to continue.	
	< Previous Next > Deploy Cancel	



I. Select Destination

Select the appropriate server name. Then when ready click the "Next >" button.

			(Help
t Source	Enter the destination server name and whe	re the project will be loca	ted in the	
t Destination	Server name:			
ts	USSDG5CG9136LC2		Browse]
	Path:			
	/SSISDB/SSIS_Packages/SericaProject		Browse	



m. Review

Click the "Deploy" button. Verify that the Results step displays "Passed". Click "Close".



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n. Projects

Now verify that the SSIS package has been created under Projects.



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Create and Schedule the Serica Job

1. Create a New Job

a. In Object Explorer (Windows Authentication connection), right click on "SQL Server Agent" and select "New", then "Job...".¶





2. Set the properties of the new Job

- a. Enter a name for the job.
- b. Use "sa" or Windows authentication, for the Owner.

Coloct a page			
Select a page	Script 🔻 🚺 Help		
Steps			
Schedules	Name:	SericaJob	
Notifications	Owner:	sa	
	Category:	[Uncategorized (Local)]	v
	Description:	No description available.	
Connection			
Server: USSDG5CG9136LC2	Enabled		
Connection:	Source:		
Wiew connection propertie	Created:	12/4/2019 10:03:34 AM	
Program	Last modified:	12/4/2019 10:03:34 AM	
rivyicas	(and an instantion	n:::::::::::::::::::::::::::::::::::::	
Ready	Last executed:	12/19/2019 2:30:00 PM	
- 56R*	View Job History		



3. Create a Step to generate the data

- a. Select the "Steps" page, and then click on the "New…" button.
- b. Enter the information displayed below for the Serica package.

Jelecia page	C Corint w C Hale					
🚰 General 🚰 Advanced	The action of the second secon					
	Step name:	Step name.				
	Generate Senca Data - Execut	e Sercia SSIS Packagej				-
	Туре:					
	SQL Server Integration Service	erver Integration Services Package 🗸 🗸				
	Run as:					
	SQL Server Agent Service Ac	count				\sim
	Package Configuration					
	Coniguiation					
	Package source:	SSIS Catalog				~
	Server:	Server: USSDG5CG9136LC2 V				
	lon on to the server					
	Use Windows	Authentication				
	() Her 201 See	un fi di miliantina				
Connection	O Use buil ber	rer Austeniscasion				
Server	User name:					
USSDG5CG9136LC2	Password:					
Connection:						
CORP\EK4533	Package:					
View connection properties	\SSISDB\SSIS_Pac	kages\SericaProject\Serica_SSIS_	Package.dtsx			
Progress						
Ready						
*RES ⁴⁴				Next		15
7	N				72	_
				OK	Cana	-1

c. To select the previously created package, click the "…" button and navigate to the Serica package, then click the "OK" button:¶

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Select a	in SSIS Paci	kage	1000		×
	Integratio Integratio SSIS ■ 2005 ■ 2005 ■ 2005 ■ 2005	n Services Cat DB SSIS_Package: CloudDataS SericaProje E Serica_	alogs s itats ct SSIS_Packa	ge.dtsx	



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4. Set the Job Schedule

- a. Select the "Schedules" page, and then click on the "New..." button.
- b. Populate the schedule information as desired, see example below.

Name:	Schedule Generate Sercia Data	Jobs in Schedule	
Schedule type:	Recurring	🗹 Enabled	
One-time occurrence			
Date:	12/19/2019 V Time: 4:02:50 PM		
Frequency			-
Occurs:	Daily ~		
Recurs every:	1 🚖 day(s)		
Daily frequency			-3
Occurs once at:	2:30:00 PM		
O Occurs every:	1 🗘 hour(s) 🗸 Starting at: 2:30:00 PM		
	Ending at: 11:59:59 PM		
Duration	· · · · · · · · · · · · · · · · · · ·		-3
Start date:	11/21/2019 • O End date: 12/19	/2019 🔲 🔻	
	No end date:		
Summary			
Description:	Occurs every day at 2:30:00 PM. Schedule will be used starting on 11	/21/2019.	^
			ý.

5. Click OK to close the "Serica Job"



6. Test the data generation¶

a. To verify data generation, right click on "SericaJob" (or the job name used) and select "Start Job at Step…"



b. Verify a CSV file has been created in the folder selected. See the attached sample file for an example:

