

How to backup and restore data for 2012 SQL Server (For Aria Electronic Tracking Users)

This document provides a step-by-step guide for customers to backup and restore their SQL database using SQL Server Management Studio (SSMS).

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<u>Steps – Prerequisites</u>

1. If not already installed, download and install SQL Server Management Studio (SSMS).

Download SSMS To download SSMS 19 Preview 3, visit Download SSMS 19. Free Download for SQL Server Management Studio (SSMS) 18.12.1 ₽ SSMS 18.12.1 is the latest general availability (GA) version. If you have a previous GA version of SSMS 18 installed, installing SSMS 18.12.1 upgrades it to 18.12.1. • Release number: 18.12.1 • Build number: 15.0.18424.0 • Release date: June 21, 2022 About SQL Server Management Studio SQL Server Management Studio v18.12.1 Component Name Versions 15.0.18424.0 SQL Server Management Studio 16.100.47021.0+7... SQL Server Management Objects (SMO) Microsoft Analysis Services Client Tools 15.0.19750.0 Microsoft Data Access Components (MDAC) 10.0.19041.1 Microsoft MSXML 3.0 5.0 6.0 Microsoft .NET Framework 4.0.30319.42000 Operating System 10.0.19042 To copy component name and version information, click Copy Info. Copy Info Warning: This computer program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. © 2022 Microsoft. All rights reserved. OK

*SSMS v18.12.1 was used to verify these procedures.

Steps – Backing Up Data

2. Connect to the SQL Server Instance to be migrated.



3. Open SQL Server Management Studio. You will be prompted to login after the application startup. In the case that the "Login" and "Password" fields are auto populated, you only have to select the server name and click "Connect."

	SQL Server	
Server type:	Database Engine	~
Server name:	XXXXXXX ARIADATABASE	~
Authentication:	SQL Server Authentication	~
Login:	sa	~
Password:	*****	
	Remember password	

Alternatively, you may cancel out of the initial SSMS window and connect to the server using the outlined button below.





4. Using the Object Explorer, navigate to the desired database, right-click, and go to *Tasks > Back Up*.

🔀 Microsoft SQL Se	erver Management Studio			
File Edit View	Tools Window Help			
G - O 🏠 - 🛅	🗝 🛀 🔛 🚰 🗐 New Que	ry 🔒 ,	() D	
◎ 〒 NF	✓ ▷ Exect	ute 🔳		1
			Right click on the desired	database, click on
Object Explorer		• 4 X	Tasks-> Back Up	
Connect 👻 🌹 🌹 📕	Y C -₩			
E 6 5CG0093T5T\ARIA	ADATABASE (SQL Server 11.0.2	2100 - sa)	
Databases				
Aria21CERP	art11			
	New Database			
🗄 📁 Security	New Query			
🗄 📕 Server Objects	Script Database as	D	etach	
Replication	Tasks 🕨	Taka Offling	ake Offline	-
XEvent Profiler	Policies >	B	ring Online	
	Facets			_
	Start PowerShell		ata Discovery and Classification	
	Azure Data Studio		Vulnerability Assessment	_
	Reports >	S	hrink 🕨	
	Rename	В	ack Up	
	Delete	R	estore •	
	Refresh	G	enerate Scripts	
	Properties	E	xtract Data-tier Application	
		D	eploy Database to Microsoft Azure SQL Database	
		E	xport Data-tier Application	
		U	pgrade Data-tier Application	
		Ir	nport Flat File	
		Ir	nport Data	
☐ Ready		E	xport Data	

5. **Make sure the backup type is "Full" and is backed up to Disk.** Start the backup process by clicking *OK* on the back-up main window.

🖱 Back Up Database - Aria21CF	RPart11		o x
Select a page	🗊 Script 🔻 🔂 Help		
F General			
Media Options			
 Backup Options 	Source		
	Database:	Aria21CFRPart11	\sim
	Recovery model:	SIMPLE	
	Backup type:	Full	~
	Copy-only backup		
	Backup component:		
	Database		
	O Files and filegroups:		
	Destination		
	Back up to:	Disk	~
Connection	soft SQL Server\MSSQL11.ARIADATAB	BASE\MSSQL\Backup\Aria21CFRPart11.bak	Add
Server: 5CG0093T5T\ARIADATABASE		l	Remove
sa	<	>	Contents
View connection properties			
Progress			
Ready		Click on "Ok" buttor	n to
		proceed	Cancel



6. Click *Ok* to complete the process. You should see the following message.



<u>Steps – Restoring the Backup</u>

7. Create a new SQL Server 2012 instance using the SQL Install wrapper application.

*** Please make sure that no database of the same name is present in the new SQL Server instance.

For example, If the source database used for backup is "AriaDatabase", please ensure that "AriaDatabase" does not already exist in the destination SQL Server instance.

8. Using the Object Explorer select Connect > Database Engine...



9. Select the SQL Server instance to connect to, input the credentials and click Connect.

🛃 Connect to Server		\times
	SQL Server	
Server type:	Database Engine	\sim
Server name:	XXXXXXX \TESTPOC1	~
Authentication:	SQL Server Authentication	\sim
Login:	sa	\sim
Password:	******	
	Remember password	
	Connect Cancel Help Options >	>

10. On the Object Explorer, right click Databases and select Restore Database...



	Microsoft SQL Server Management Studio File Edit View Tools Window Help Image: I
Right click on	Object Explorer Image: Second state st

11. Select *Source: Device* and click the "..." button and then click "*Add*."

🛃 Restore Database -			- 🗆 X
🐼 No backupset selected to be restored			
Select a page General Files Options 1. Select "Devic as the backup source	Script • • • • • • • • • • • • • • • • • • •	2. Click o	n "" button
Connection Y# 5CG0093T5T\TESTPOC1 [se] View connection properties Progress Image: Connection properties Progress Image: Connection properties Image: Connection properties	٢	V	> arify Backup Media
		OK Cancel	Help



Select backup devices		-		×
Specify the backup media and its	s location for your restore operation.			
Backup media type:	File	×.		
Backup media:		_		
3. Clic	k on "Add" buttor		Add	
		R	emove	
		C	ontents	
	ОК	ancel	Help	

12. Select the backup file and click **OK**.

CLocate Backup File - 5CG0093T5	T\TESTPOC1	- D X
Backup File location:	\Program Files (x86)\Microsoft SQL Server\MS	P
Microsoft SDKs Microsoft Silverlight Microsoft SQL Server Microsoft SQL Server 110 110 110 120 130 150 Client SDK MSSQL11.ABC MSSQL11.ABC MSSQL11.ARIADATABA MSSQL Backup Binn DATA DATA Log Client Data V SOR Sort	Avia21CFRPart11.bak 2. Select the . <u>bak</u> file 1. Find the directory the backup was created in	
File name: Aria21CF	RPart11.bak Backup Files(*.b	ak;*.trn;*.log) ~
	ОК	Cancel
	3. Click	on "Ok" button



13. Click **OK** on the **Select backup devices** window.

⊐ Select backup devices		– o x
Specify the backup media a	nd its location for your restore operation.	
Backup media type:	File	~
Backup media:		AC
C.(Program Files (xoo)(Micros	OIT SQL Server, MISSQL I I. ARIADA I ABASE (N	Add
		Remove
		Contents
1		
`		
	ОКС	ancel Help
	1. Click on "Ok" b	utton

🥵 Restore Database - Aria21CFRPart11 — 🛛 🗸					o x	
🕕 Ready						
Select a page General Files Options	Script • 3 Help Source Database: Device: Database: Destination		C:\Program Files (x Aria21CFRPart11	(86)\Microsoft SQL	Serve	× ×
	Databa: Restore Restore pl Backup so Restore	se: e to: an ets to restore: Name Aria21CFRPart	Aria21CFRPart11 The last backup ta The last backup ta	ken (Tuesd Component rup Database	Tir Type Full	veline Server 5CG009:
Connection						
YIE SCG0093T5T\ARIADATABASE2 [sa] View connection properties Decempent						
Progress	<					>
Done				Ver	ify Back	up Media
			ОК	Cancel		Help



14. Go to the *Files* tab on the *Restore Database* window, tick the *Relocate all files to folder* checkbox and click *OK*. No action required on the "Options" page.

Restore Database - Aria21CFRPart	11		- o x
1 Ready			
Select a page General Files Options Open "Files" page	Script • • Help Restore database files as Relocate all files to folder Data file folder :	Check Relocate a	III files to folder
	Log file folder :	C:\Program Files\Microsoft SQL Se	rver/MSSQL15.TESTPOC1/MSSQL/DATA
Connection v∳ SCG0083TST\TESTPOC1 [98]	Logical File Name File Type Aria21CFRPart11 Rows Date Aria21CFRPart11_log Log	Original File Name c 2Program Files (x86)Micros c 3Program Files (x86)Micros	Restore As C:Program Files/Microsoft SQL Server/MSSQL15 TESTPOC1MSSQLIDATA/Aria21CFRPart11_mdf C:Program Files/Microsoft SQL Server/MSSQL15 TESTPOC1MSSQLIDATA/Aria21CFRPart11_log.ldf
View connection properties			
Progress Done			
			Click on "Ok" Button Cancel Help

15. The database has now been migrated to the instance. It can be used by re-installing the software and selecting the new database as the default database.

Microsoft SQL Server Management Studio	×
Database 'AriaDatabase' restored successfully.	
ОК]

Verification

To verify if the restoration was successful:

1. The database should show up during Aria Software installation.

Database Server Select database server			Fr	om the list of catalo ould like to target.	og names below, select the database catalog you	
To create a nev installing the Ar Database serve	r database server, ple a ET software. r that you are installin	ase first use the Aria SQ g to (use Browse to find	L Server 1.0 Installe		Aria21CFRPart11 estPoc1	The database should show up here during installation
(local)\TESTPO	IC1	method only:	~			
Login ID:	sa					
-	•••••					
Password:	•••••					
Password:	/ database:	Aria21CFRPart11				
Password: Create new Select exis	v database:	Aria21CFRPart11				
Password: Create new Select exis tallShield	v database:	Aria21CFRPart11		Insta	llShield	



- 2. The Aria software will connect to the database using the same credentials (same username and password) as the old database.
- 3. Log Entries have successfully migrated. Experiment files are also migrated and can be opened.

🕖 Log Viewer		:	×
	Logs fro	om 2020 are Log Audit Trail Logs System Logs	
Time Stamp	restore	d Description	_
11 Dec 2020 16:06:44	Admin	Invalid username or password.	
11 Dec 2020 16:06:49	Admin	Invalid username or password.	L
11 Dec 2020 16:07:02	Admin	Invalid username or password.	ı
11 Dec 2020 16:07:48	Admin	Invalid username or password.	ı
11 Dec 2020 16:45:53	Admin	Invalid username or password.	U
11 Dec 2020 16:46:02	Admin	Invalid username or password.	
11 Jan 2021 10:37:13	Admin	Invalid username or password.	
11 Jan 2021 10:37:32	Admin	Invalid username or password.	
11 Jan 2021 10:38:28	Admin	Invalid username or password.	
11 Jan 2021 10:38:33	Admin	Invalid username or password.	
11 Jan 2021 10:38:51	Admin	Invalid username or password.	
11 Jan 2021 10:39:00	Admin	Invalid username or password.	
11 Jan 2021 10:39:09	Admin	Invalid username or password.	
11 Jan 2021 10:39:13	Admin	Invalid username or password.	
11 Jan 2021 10:39:17	Admin	Invalid username or password.	
11 Jan 2021 10:39:30	Admin	Invalid username or password.	V
Export To Excel	Print	Close	

earch	Q Log	Audit Trail Logs	System	Logs
Experiment Name	Date			
▼ Admin				
Imported LIMS 100_3 [1]	[1 Item]			
Imported LIMS 100_3 [1]	15 Oct 2021	15:26:21		
▼ AriaMx - Comparative Qu	antitation Singleplex [Sample] [1 Item]			
AriaMx - Comparative Qua	ntitation Singleplex [Sample]	15 Oct 2021	15:28:56	
▼ testCFR [2 Items]				
testCFR		15 Oct 2021	16:37:57	
testCFR	Experiment from	15 Oct 2021	16:41:44	
testCFR(1) [3 Items]	Experiment nom			
testCFR(1)	2021 is restored	15 Oct 2021	16:43:55	
testCFR(1)	20211510500100	15 Oct 2021	16:46:10	
testCFR(1)		15 Oct 2021	16:46:36	
Other Users				