# **BellHawk<sup>®</sup> Systems Corporation**

**Real-Time Operations Tracking and Management Systems** 

#### www.BellHawk.com



#### Backing Up your BellHawk Database for Problem Diagnosis

#### Introduction

If you report a problem with your BellHawk system then we may request that you take a zipped backup of your BellHawk database and copy it to your organization's private folder on our FTP site. This is so we can load the database onto our test server and replicate the problem that you reported. This enables us to diagnose the source of the problem, by examining the contents of your database.

We recommend that, if you run into a problem with BellHawk, that you take a backup of the database as soon as possible after the event. Like any good CSI "Crime Scene" investigation, it is important that we get a "snapshot" of the "crime scene" as soon as possible after the problem occurs. Otherwise data gets overwritten by new transactions and imports and it may be impossible to replicate the problems.

It is also important to document exactly sequence of events led up to the problem, with screen shots if possible. We need to know what happened and how it happened. Simply sending us a screen shot of an error message from BellHawk often does not provide us with enough information to replicate the problem. Or, even worse, sending us a picture of a report or a screen with a suspected bad number circled, without any context in which to understand the problem, makes it nearly impossible to diagnose what went wrong, or even whether there is an error in the first place.

To facilitate our diagnostic process, we need you to take a backup in a certain way. This document details how we would like you to take the backup that you will transfer to our FTP site.

Please note that:

- 1. We do charge for the time taken by our technical staff for all diagnostic work so it is important to make it as quick and easy as possible for our staff to perform the diagnosis.
- 2. We do not charge for fixing any bugs found in the code provided that the client is covered by a rental or subscription agreement, or a maintenance agreement if they purchased a perpetual license.
- 3. We do charge for installing any resultant upgrades onto your BellHawk server.
- 4. A backup taken for diagnostic purposes will probably be different from a backup taken as part of your routine system backup. We cannot handle backups made by some third party backup program as we do not have the software to convert the backup back into an installed database.

The backup process that we request that you use, is to use the SQL Server Management Studio, which is provided by Microsoft as part of SQL Server Standard edition. If you are using SQL Server Express edition then you may need to download and install the management studio for this edition separately from the Microsoft software download site before you can do the backup.

#### **Backup Process**

### Step 1 – Open SQL Server Management Studio

Start off by logging in to the Windows Server that is used to run BellHawk

Then find the SQL Server Management Studio by going to the Start button.

Then selecting the down arrow on the Apps expansion.

Find the SQL Server Management Studio under the Microsoft SQL Server 2014 (or the year of your server)



Once SQL Server Management Studio is found then you will select the Icon for it.

Please note that the selection of the SQL Server Management Studio may vary with the version of the operating system and the version of SQL Server. It is shown above for SQL Server standard running on Windows Server 2012R2.

#### Step 2 Login to Management Studio

The user will then be requested to log into their SQL Server Management Studio through a screen similar to that shown below

el X	Connect to Server
Microsoft SC	QL Server 2014
Server type:	Database Engine 🛈 🗸
Server name:	SERVER2012R2\SQLSERVER2012
Authentication:	SQL Server Authentication (3)
Login:	sa (4) v
Password:	××××××××××××××××××××××××××××××××××××××
	Remember password
5 Connect	Cancel Help Options >>

The data entry sequence for this login is:

- 1. Server Type => Database Engine
- 2. Server Name => Select Name of Database Server Instance
- 3. Authentication => Normally use SQL Server Authentication with the SQL Server system administrator login (as shown here) or the BellHawk database login but you can use Windows Authentication if you are a systems administrator for the Windows Server or the Database Server.
- 4. Login => Authorized SQL Server Login Name for BellHawk database only needed if SQL Server authentication is used
- 5. Password => Authorized SQL Server Password for BellHawk database
- 6. Connect will give error if credentials are not correct for database server.

#### Step 3: Backup Database

Once successfully logged in. You will the see the screen below.



In order to take a backup you will select the [+] button next to "Databases"

This will expand and give you the full list of Databases on the Server.



You will go down until you find the BellHawk Server Name.



Once you have found your Database, right click on the database and go down to Tasks (1) then select the Back up... (2) button.

This will bring the user to the set	screen below:
-------------------------------------	---------------

0		Back Up Dat	tabase - V7			-		x
Select a page	🔄 Scr 🔻 📑 Help							
Poptions	Source							
	Database:		V7					~
	Recovery model:		SIMPLE					
	Backup type:		Full					~
	Copy-only Backup							
	Backup component:							
	<ul> <li>Database</li> </ul>							
	O Files and filegroups:							
	Backup set							
	Name:	V7-Full Databa	ise Backup					
	Description:							
	Backup set will expire:	-						
Connection	After:	0		~	days			
Server: SERVER2012R2\SQLSERVER2(	O On:	1/ 4/2017						
Connection:	Back up to:	Disk	O Tape					
sa	C:\Program Files\Microsoft SQI	Server\MSSQL11	.SQLSERVER2012\MSSQL\Backup\V7Backup			1	Add	
The connection properties								
Progress						R	emove	
Ready						Ca	ontents	
					ОК		Cancel	

You will want to Remove the folder destination that SQL Server Management Studio gives you as default by selecting the destination and then the [Remove] button

Once removed you can Add back your own destination for the Backup.

l 🗍		Back Up Dat	abase - V7		×
Select a page	🖾 Script 🔻 📑 Help				
Options	Source				
	Database:		V7		~
	Recovery model:		SIMPLE		
	Backup type:		Full		~
	Copy-only Backup				
	Backup component:				
	Database				
	Files and filegroups:				
	Name:	V7-Full Databa	se Backup		
	Description:				
	Backup set will expire:				
Connection	After:	0		🗘 days	
Server:	O 0n:	1/ 4/2017			
SERVER2012R2\SQLSERVER20	Destination	Diale	() Tana		
Connection: sa	васк ир то:	C Disk			
View connection properties					Add
Program					Remove
Ready					
() Housy					Contents
				ОК	Cancel

Once you select the Add button it will bring you to the following screen to select the location to place the file containing the database backup.

Ū	Select Backup Destination
Select backu	the file or backup device for the backup destination. You can create p devices for frequently used files.
Destin	ations on disk
۲	File name:
C:	\Program Files\Microsoft SQL Server\MSSQL11.SQLSERVER2(
0	Backup device:
	OK Cancel

🔋 Locate Database Files - SERVER2012R2\SQ... 💻 🗖 Select the file: 🖮 🧰 Program Files  $\wedge$ 😐 🧀 7-Zip 🗄 🛅 Common Files HIS Express 🗄 🚞 Internet Explorer 🗄 🛅 Microsoft 🗄 🫅 Microsoft Analysis Services 🗉 🛅 Microsoft Help Viewer E Microsoft Silverlight ≡ im Microsoft SQL Server 😐 🚞 100 😐 🚞 110 🗄 🗀 120 ÷ 🛅 80 🗄 🛅 90 🗄 🧰 Client SDK MSRS11.SQLSERVER2012 MSRS12.SQLSERVER2014 MSSQL11.SQLSERVER2012 🖮 🧰 MSSQL 🗄 🛅 Back 🗄 🚞 Binn 🖶 🧰 DATA 🗄 📄 Install 🗄 🛅 JOBS 1 Selected path: C:\Program Files\Microsoft SQL Server\MSSQL11 2 Backup Files(\*.bak;\*.tm) v Files of type V7Backup.bak File name: (4 ОК Cancel

Select the location to write the backup file using the file exploration button [...].

This will bring you to the default backup location for the SQL Server instance you are using, as shown below. You can use this location (but make note of where it is) or you can do your backup to a more convenient location.

Make sure that the file type is Backup Files (.bak, .tm) (2)

The file name can be anything that makes it relevant to you in finding the file again but you must have a .bak extension on the end of the file name.(3)

Also please make sure that you use a new file name every time you make a backup, preferably with the date in the filename.

Once completed select the OK button (4).

Management Studio will then bring you back to the Select Backup Destination Screen where you will select OK button.

Ū	Select Backup Destination	x
Select backu	the file or backup device for the backup destination. You can create p devices for frequently used files.	
Destin	ations on disk	
۲	File name:	
C:	\Program Files\Microsoft SQL Server\MSSQL11.SQLSERVER2I	
0	Backup device:	
	¥	
	OK Cancel	

Now that the correct path and file name has been added you can now select the OK button on the Back Up Database screen to copy the backup date to the selected file.

<b>U</b>		Back Up Dat	tabase - V7		_ <b>D</b> X
Select a page	Script 🔻 🌇 Help				
Options	Source				
	Database:		V7		~
	Recovery model:		SIMPLE		
	Backup type:		Full		~
	Copy-only Backup				
	Backup component:				
	<ul> <li>Database</li> </ul>				
	O Files and filegroups:				
	Backup set				
	Name:	V7-Full Databa	ise Backup		
	Description:				
	Backup set will expire:				
Connection	<ul> <li>After:</li> </ul>	0		🗘 days	
Server:	O 0n:	1/ 4/2017			
SERVER2012R2\SQLSERVER2(	Destination	Dist.	0.7		
Connection: sa	Back up to:	UISK			
Section properties	C: \Program Files \Microsoft SQL	Server MISSQLTT	.SQLSERVER2012(MSSQL\Backup(V/Backu	Jp.bak	Add
					Remove
Progress					Remove
Ready					Contents
The start of the s					
				ок	Cancel

## Step 4 - Find Your Backup File

Once the Back Up has been completed you will then go to Windows File Explorer and use this to navigate to your newly created backup file.

🏨 l 🕞 🚯 = 1	C:\Program F	iles\Microsoft SQL Server\MSSQL1	2.SQLSERVER2014\	MSSQL\Backup	
File Home Share View					
Copy Paste Cut Copy path Copy Copy path Cilipboard Copy Copy to ~	Delete Rename	New item • New folder New Oper	Open → Select al Edit Select no Invert se Select Select	l one lection	
) 📀 👻 ↑ 🜗 ► This PC ► Local Disk (C:	) 🕨 Program Files	s 🕨 Microsoft SQL Server 🕨 MSSQL12.SQ	LSERVER2014 + MSSQL	▶ Backup ▶	<b>∨ Ċ</b> Sea
<ul> <li>PerfLogs</li> <li>Pluswdev</li> <li>Program Files</li> <li>7-Zip</li> <li>Common Files</li> <li>IIS Express</li> <li>IIS Express</li> <li>Internet Explorer</li> <li>Microsoft Analysis Services</li> <li>Microsoft Help Viewer</li> <li>Microsoft Silverlight</li> <li>Microsoft SQL Server</li> <li>80</li> <li>90</li> <li>110</li> <li>110</li> <li>120</li> <li>Client SDK</li> <li>MSRS11.SOLSERVER2012</li> </ul>		me BellHawk_v70_BWbranch_20160913.bak BellHawk_v70_BWtest_20161020.zip BellHawk_v70_BWtest_20161111.zip BruceWall_V70_Test_20160909.bak BruceWall_V70_Test_wuserTBN.bak CleanBW_17Nov16.bak CleanBW_17Nov16.bak	Date modified 9/13/2016 12:23 PM 10/20/2016 4:36 PM 11/11/2016 3:56 PM 9/9/2016 1:29 PM 9/13/2016 4:06 PM 11/17/2016 1:56 PM 11/17/2016 1:57 PM	Type BAK File Compressed (zipp BAK File BAK File BAK File Compressed (zipp	Size 26,708 KB 3,865 KB 3,813 KB 27,286 KB 27,734 KB 26,706 KB 3,552 KB
<ul> <li>MSRS12.SQLSERVER2014</li> <li>MSSQL11.SQLSERVER2012</li> <li>MSSQL12.SQLSERVER2014</li> <li>MSSQL</li> <li>Backup</li> <li>Binn</li> </ul>		,			

Note that the above screen shows how the default Backup folder is in a deeply nested location under C:Program Files

## Step 5 – Zipping up the File

Once you find the file right click on the file. (1)

Go down to the Send to button. (2)

Select the Compressed (zipped) folder button. (3)

V7Backup bak				í File	27 747 KB
		Open with		- Inc	21,141 (6)
-		7-Zip	۲		
		CRC SHA	۲		
	2	Edit with Notepad++			
	۶ů	TortoiseSVN	۲		
		Restore previous versions			~
		Send to 🕗	۲		Compressed (zipped) folder (3)
		Cut			Desktop (create shortcut)
		Сору			Documents
		Create shortcut			Mail recipient
		Delete			Floppy Disk Drive (A:)
		Rename			
		Properties			

The file is now zipped up and ready to placed on the FTP site.

Name	Date modified	Туре	Size
V7Backup04Jan17.zip	1/4/2017 11:32 AM	Compressed (zipp	3,828 KB

#### Step 6 – Placing Zipped Backup File on BellHawk Systems FTP Site

Open up a new file explorer while keeping open your other one with the Backup File. Place the following URL into the File Explorer Header - <u>ftp://ftp.bellhawk-on-line.com/</u>

😢 I ⊋	]] ≠ 1			ftp://ftp.bellhawk-on-line.com/		_ <b>D</b> X
File	Home	Share	View			~ <b>?</b>
€ €	) • •	🥐 ftp://ftp	.bellhawk-on-line.com/		<b>~</b> ¢	Search ftp.bellhawk-on-line.c 👂

It will then ask you for a user name and password.

The user name and password is given out by the BellHawk Technical Team for you to access.

۲	Either the serve accepted.	er does not allow anonymous logins or the e-mail address was not
	FTP server:	ftp.bellhawk-on-line.com
	<u>U</u> ser name:	│
	Password:	
	After you log o	n, you can add this server to your Favorites and return to it easily.
⚠	FTP does not e server. To pro	ncrypt or encode passwords or data before sending them to the tect the security of your passwords and data, use WebDAV instead.
	Log on <u>a</u> nor	nymously Save password

Once you have logged in successfully, you will then copy the zipped .bak file from the other file explorer screen and paste it into the file explorer screen logged into the FTP site.



This will cause the zipped backup file to be uploaded to your organizations private folder on our FTP site.

## Step 6 Notify BellHawk Support

Once you have uploaded your backup to our FTP site, please send an Email to <a href="mailto:support@BellHawk.com">support@BellHawk.com</a> telling us the name of the zipped backup file. Also please include details of the circumstances under which the problem occurred, along with screen shots.

#### Commentary

Please make sure that you compress the database into a zipped file before uploading it. This can result in a 10:1 compression in file size and make uploads and downloads much quicker.

You may need IT support from whoever did the installation of your SQL Server database server, especially to get appropriate SQL Server access user names and passwords.

If you need assistance from BellHawk in performing this backup, or if you wish BellHawk Systems to remotely do this backup for you, please send a request to <u>support@BellHawk.com</u>. But, please be aware, that we do charge for the support time needed to gain remote access to your server and to make the backup.

The above document shows how to zip compress and upload a backup file using standard tools available with a Windows Server operating system. Other third party zip and FTP tools can be used, if preferred.