TSI® FMS 5 SOFTWARE
HOW TO CONFIGURE DAILY BACKUP WITH EMAIL NOTIFICATION FOR POSTGRESQL™ DATABASE

Contents

Description

Data collected from the FMS System are critical and need to be backed up at all times. It is not enough in highly regulated industries such as Pharmaceuticals to only mirror the FMS database to a second server, the raw data must be backed up on regular basis, and have an email notification to reassure your customer that the backup has been successfully executed.

When a backup strategy is in place it is also important to test how the raw data can be quickly and efficiently restored. The restore procedure is also part of this technical note.

Prerequisites

- Before starting this procedure, you have downloaded the software "**SQLBackupAndFTPSetup**" version 12.7.18 from [Free PostgreSQL Backup Tool (sqlbackupandftp.com)](#).

- This program is a full working version for 14 days. Once installed, it starts the 14-days Professional edition trial. After that it automatically converts to the Free edition. You can upgrade it any time to Lite, Standard or Professional. Free version allows to Backup and restore a maximum of 2 Databases. However, you may want to buy the full version which allows you to back up on additional storage places (i.e., Windows® Azure® or Microsoft® OneDrive® cloud storage service and others) which will also give you the ability to back up more than 2 databases.

- The following file must be available: **psql_fms01.sql** This file can be found on the FMS5 Installation CD

- **SQLBackupAndFTPSetup** Version 12.7.1 works only to backup PostgreSQL Database 9 and10, version 12.7.18 allow to backup PostgreSQL Database version 11 and above.

N o t e
SQLBackupAndFTPSetup version 12.7.18 is part of the TCC-150_supporting_files that can also be downloaded from the TSI Channel Partner Portal.

Requirements

- FMS 5.1.0 or above must be installed and running.

- PostgreSQL 9.3 database or above must be installed and running.

- .NET Framework 4.7.2 must be installed. If not, you can download the updated .Net package from Microsoft at the following location:

  https://dotnet.microsoft.com/en-us/download/dotnet-framework/thank-you/net472-offline-installer

Assumptions

This document assumes the following:

- Main Computer:
  - TCP/IP Address   :   192.168.1.36

- Database Server Address:
  - TCP/IP Address   :   192.168.1.36

- PostgreSQL 9.3 program has been installed in the default folder, which is:
  C:\Program Files (x86)\PostgreSQL\9.3

- PostgreSQL 10 program has been installed in the default folder, which is:
  C:\Program Files\PostgreSQL\10

- PostgreSQL 14 program has been installed in the default folder, which is:
  C:\Program Files\PostgreSQL\14

- PostgreSQL 14 program has been installed in the default folder, which is:
    C:\Program Files\PostgreSQL\15

- PostgreSQL Database will be backup in the following folder:
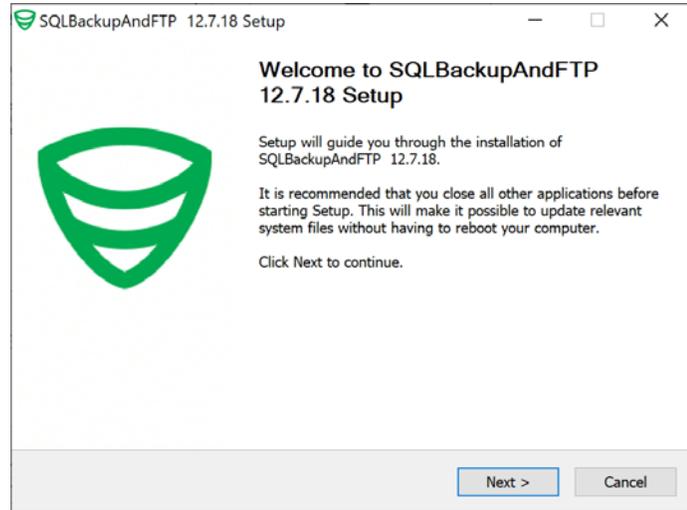   *C:\FMS_DATA_BCK*

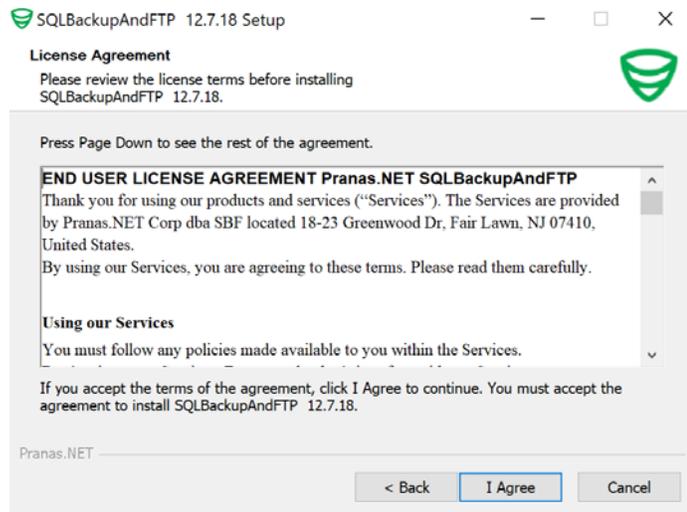| **Note** |
|---|
| You may want the backup to be placed in a different folder on a different drive or even on a Server drive. Therefore, you will have to map a network drive. |

- PostgreSQL Server:
    - Database Name   :   fms01
    - PostgreSQL User Name   :   postgres
    - PostgreSQL Password   :   fms
    - PostgreSQL Port   :   5435
    - Node User Name   :   monitor
    - Node Password   :   fms
    - Client User Name   :   client
    - Client Password   :   fms

SQLBackupAndFTPSetup Installation Instructions

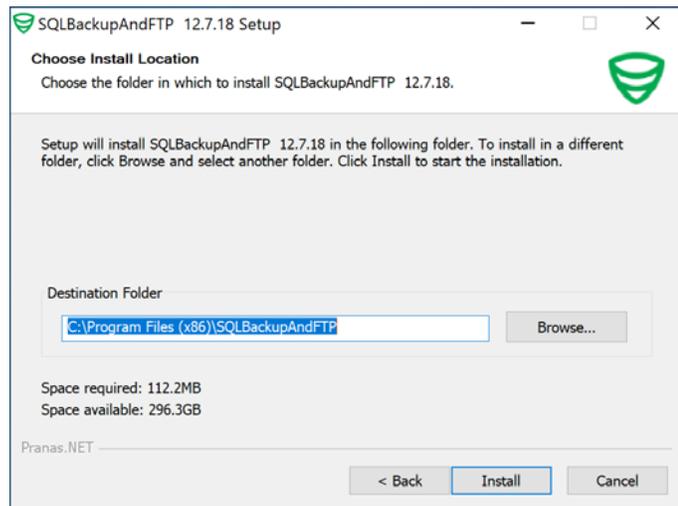|	
1. Start **SQLBackupAndFTPSetup.exe**. 2. Click **Next**.	SQLBackupAndFTP 12.7.18 Setup Welcome to SQLBackupAndFTP 12.7.18 Setup Setup will guide you through the installation of SQLBackupAndFTP 12.7.18. It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer. Click Next to continue. Next > Cancel
3. Accept the License Agreement by clicking **I Agree**.	SQLBackupAndFTP 12.7.18 Setup **License Agreement** Please review the license terms before installing SQLBackupAndFTP 12.7.18. Press Page Down to see the rest of the agreement. **END USER LICENSE AGREEMENT Pranas.NET SQLBackupAndFTP** Thank you for using our products and services ("Services"). The Services are provided by Pranas.NET Corp dba SBF located 18-23 Greenwood Dr, Fair Lawn, NJ 07410, United States. By using our Services, you are agreeing to these terms. Please read them carefully. **Using our Services** You must follow any policies made available to you within the Services. If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install SQLBackupAndFTP 12.7.18. Pranas.NET < Back I Agree Cancel
4. Select a folder where you want the program to be installed or you can leave the default location. 5. Click **Install**.	SQLBackupAndFTP 12.7.1 Setup **Choose Install Location** Choose the folder in which to install SQLBackupAndFTP 12.7.1. Setup will install SQLBackupAndFTP 12.7.1 in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation. Destination Folder C:\Program Files (x86)\SQLBackupAndFTP Browse... Space required: 110.2MB Space available: 25.3GB Pranas.NET < Back Install Cancel

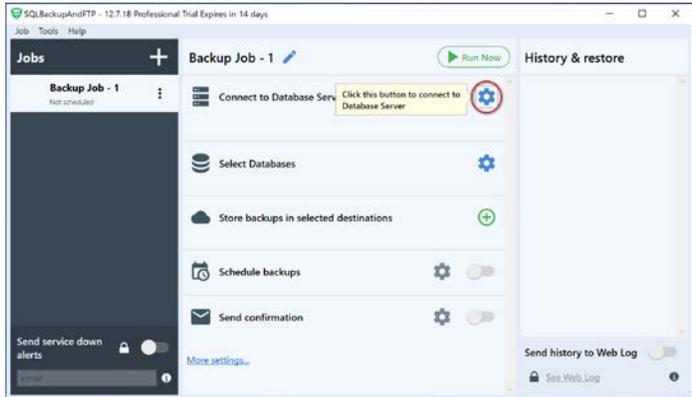|	
6. Click **Install.** 7. When installation is completed, click **Next.**	
8. Select both **Launch PostgreSQL Backup** and **Create a desktop icon.** 9. Click **Finish**.	
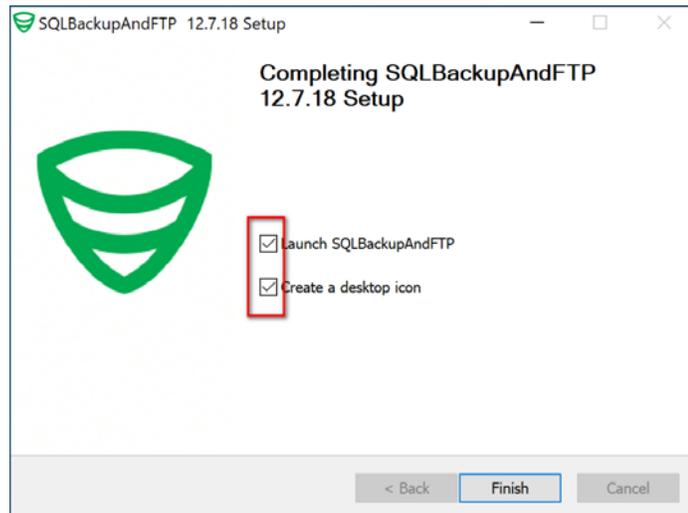
Create a Daily Backup Schedule

1. Open the **Services** window and verify that the **SQLBackupAndFTP (Database backup) Service** is set to **Automatic** and **Started**. 2. Click **OK**. 3. Close the **Windows Services**.	
4. Click on button **Connect to Database Server**	
5. From the drop down, list select **PostgreSQL Server (TCP/IP)**	
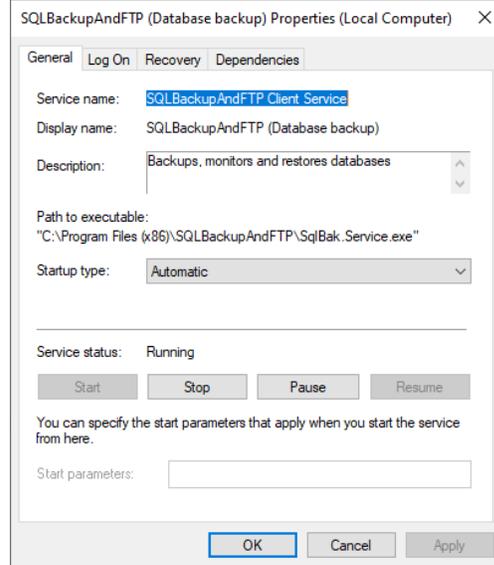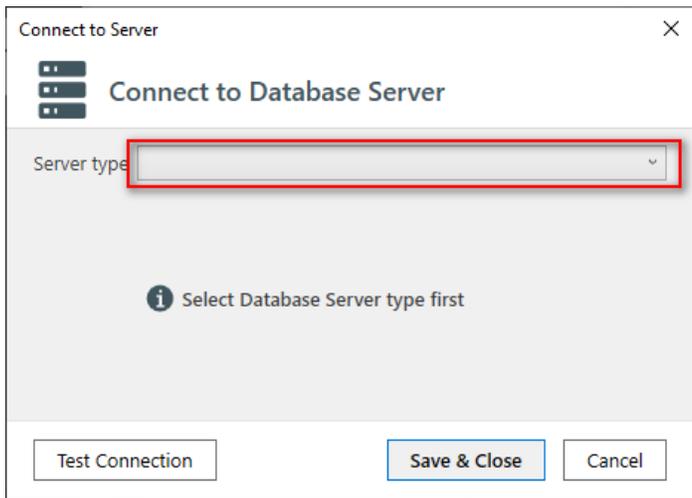
6. Enter the **Server Name** IP Address where the PostgreSQL database is located. 7. Enter the **Port** number. 8. Enter the **User Name** and **Password** to login to PostgreSQL server.	
9. Click button **Advanced settings.** 10. From the drop down list **SSL Mode** select **Disabled.** 11. Enter the Path to **PostgreSQL bin folder** by click on the **navigate** button	

12. Click button **Test Connection.** 13. If test is successful (succeeded), click **OK**. 14. Click **Save & Close**. 15. Leave **PostgreSQL Backup** software open and running.	
16. Click on button **Select Database**	
17. Select **fms01** as the Database you want to backup. 18. Click **Save & Close**	
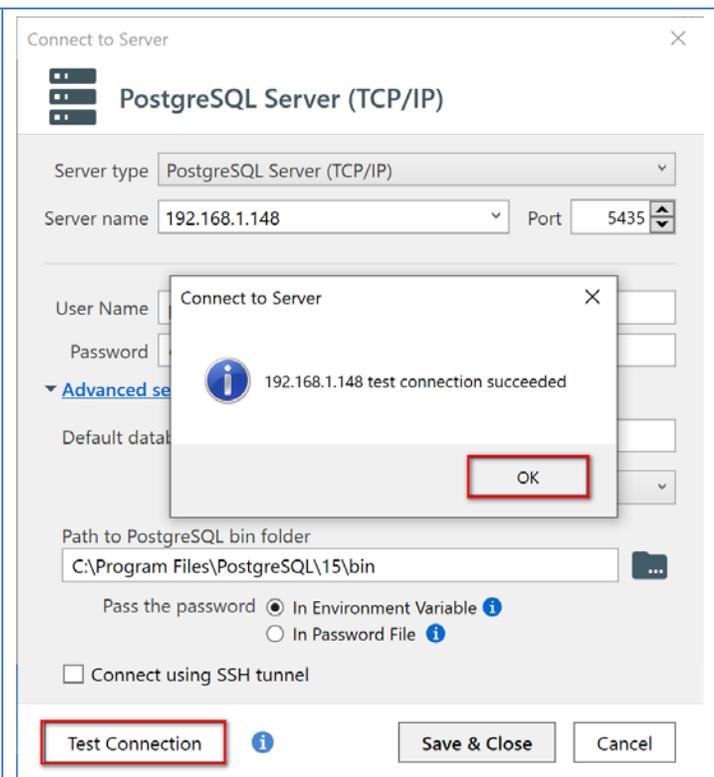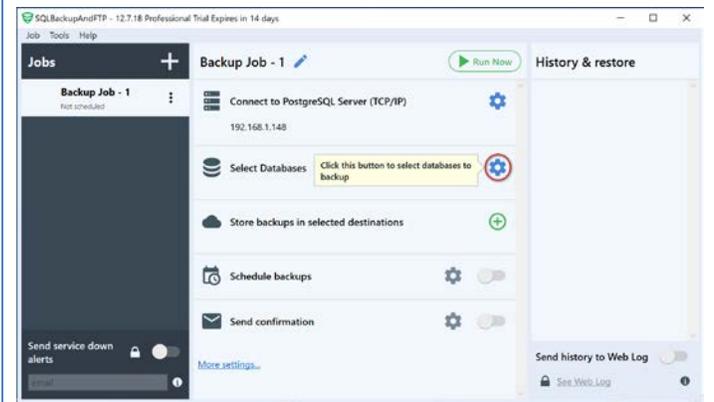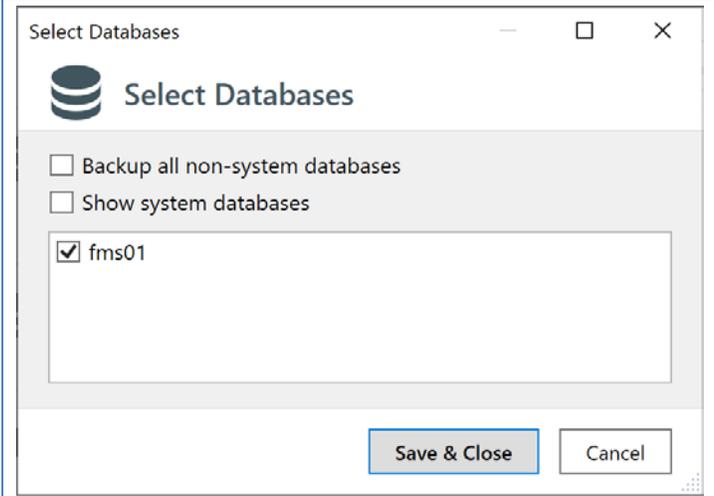
19. Click button **Store backups in selected destinations**. 20. Select **Local Network Folder/NAS**	
21. Enter the Path to the folder where you want the Daily backup to be stored	
22. Click button **Advanced backup settings** and click **Advanced Local/Network Folder/NAS settings**. 23. Verify these settings are checked: 24. **Full** 25. **Folder** 26. **Verify backup files on the destination after uploading** 27. Click button **Advanced Local/Network...**	
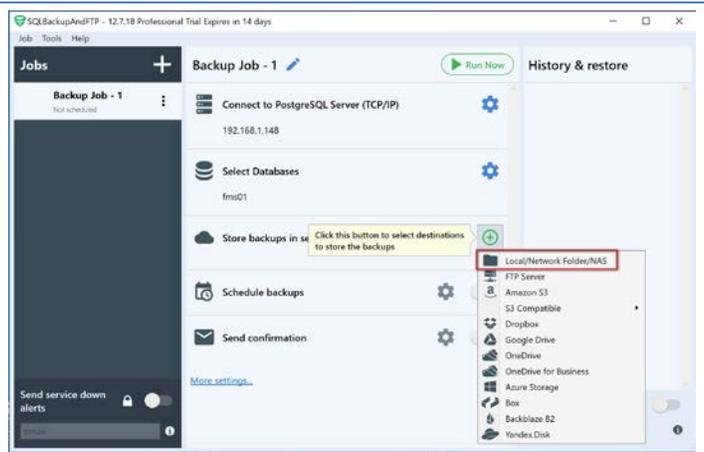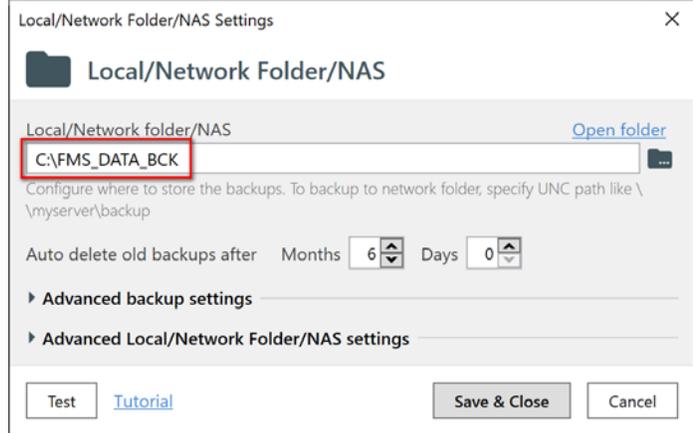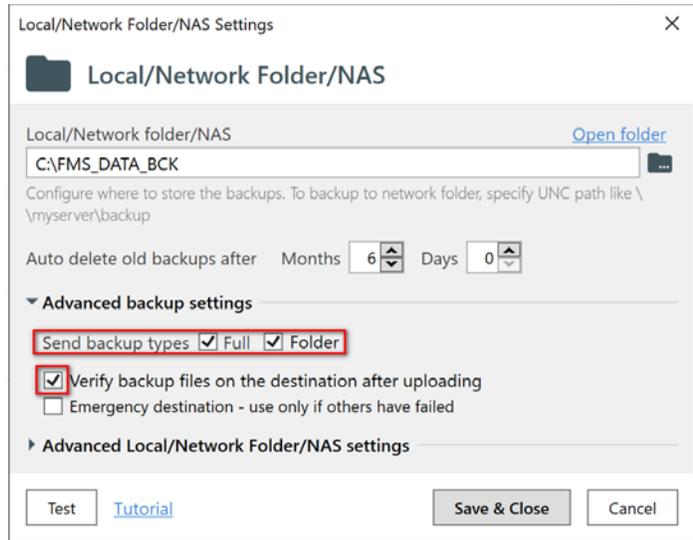
28. If Permissions rights are required to access the destination folder then enter **User Name** & **Password**	
29. Click **Test** 30. If test is successful, click **OK** 31. Click **Save & Close**	
32. Turn **ON** backup scheduler by sliding button to the right 33. Click button **Schedule backups**.	
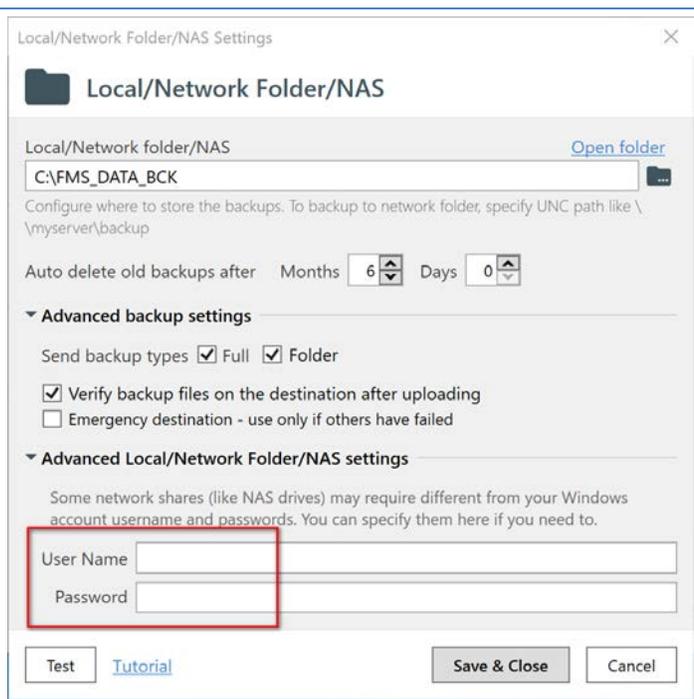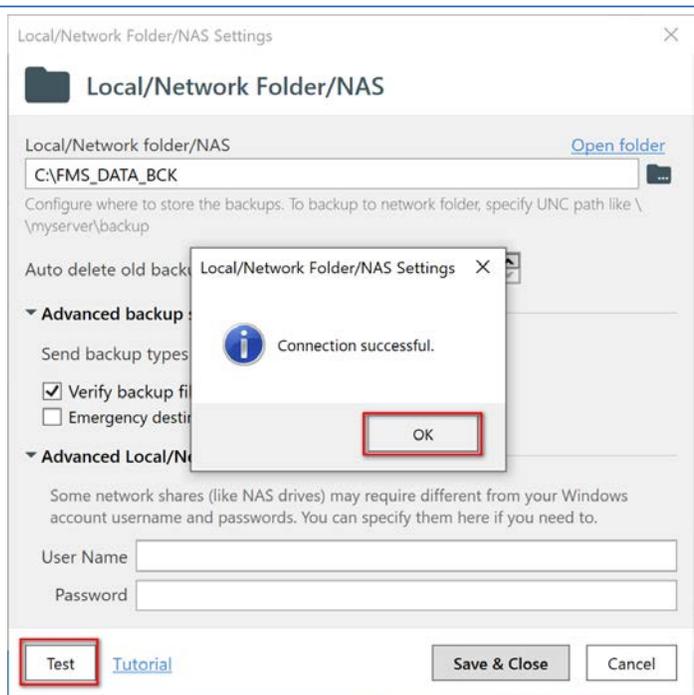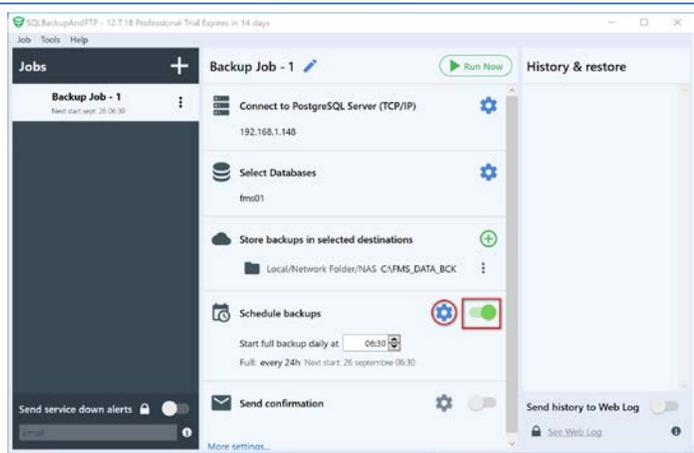
34. Configured the required schedule then click **Save & Close**	
35. Enter Start time you want the backup to be started. 36. Click **Run Now** to test your setup.	
37. Verify Backup finished without error messages.	
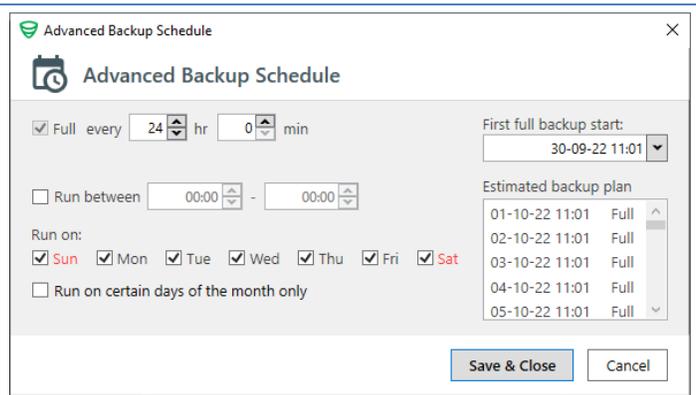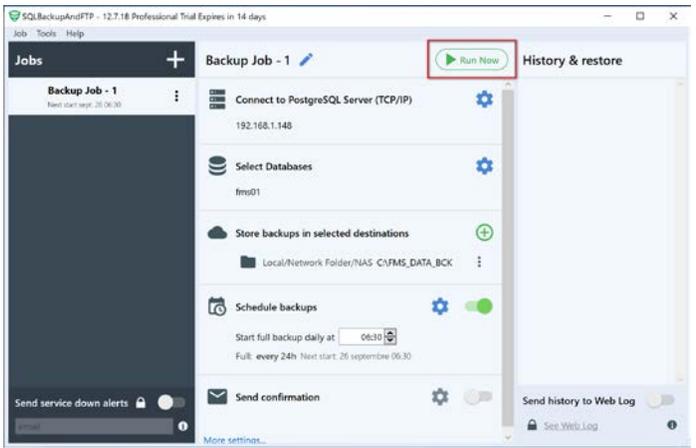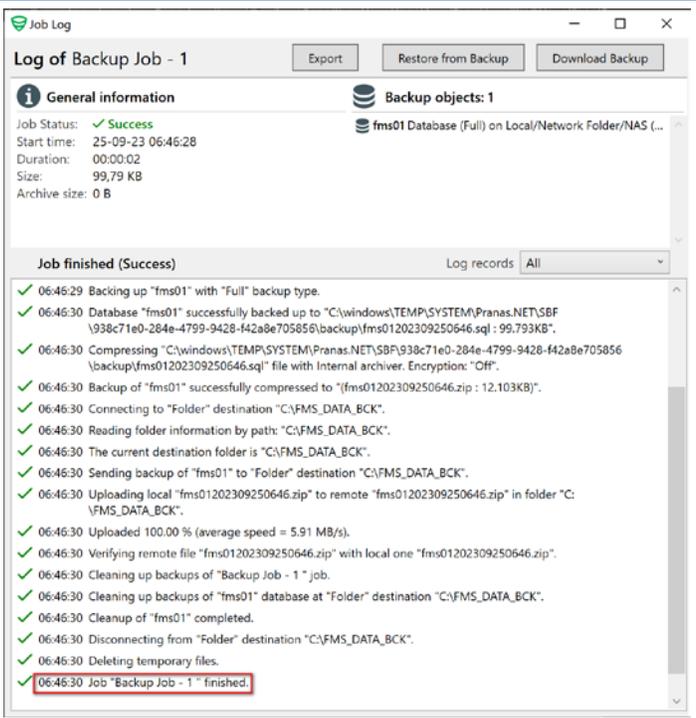
| Note |
|---|
| The backup file will be saved as DatabaseNameYYYYMMDDHHmm.zip
Example: fms01202209301132.zip |

Restoring Data from a Daily Backup
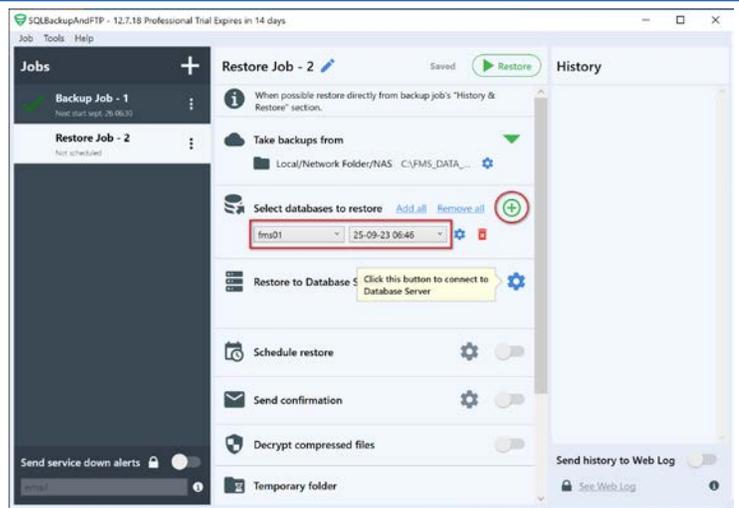
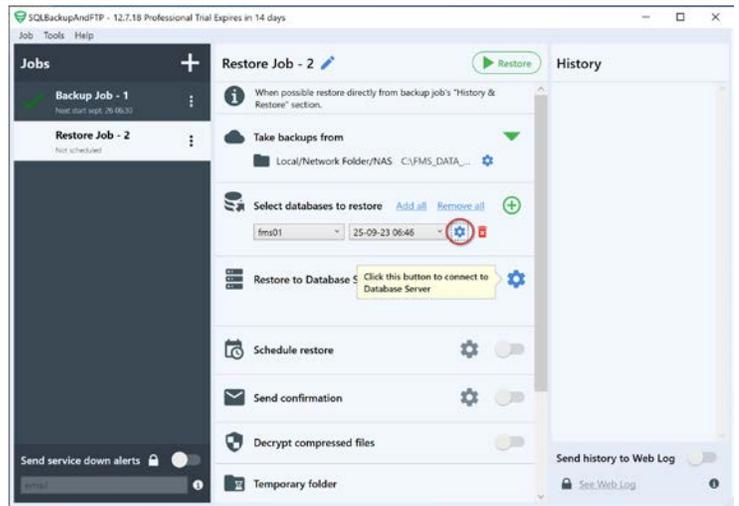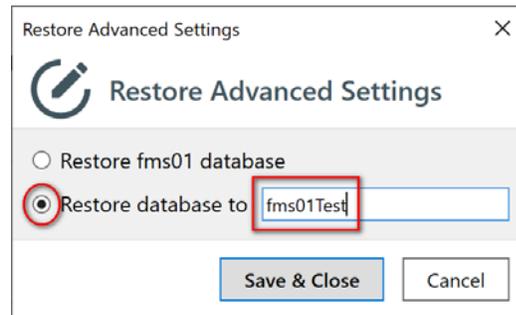|	
1. From the menu **Job** select **Add Restore Job**	
2. Click green arrow **Take backups from** and select **Local/Network folder/NAS**.	
3. Enter the Patch where the backup files to be restored are located. 4. When the Path where the backup files to be restored requires authentication then enter **User Name** and **Password.** 5. Click **Save & Close**	
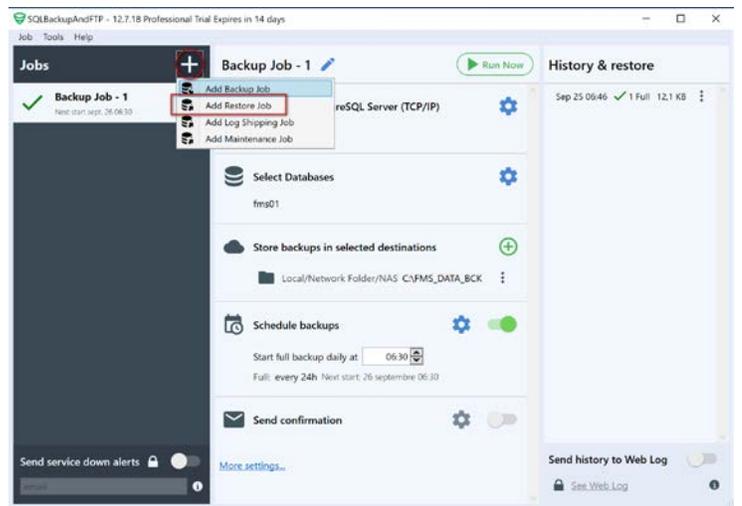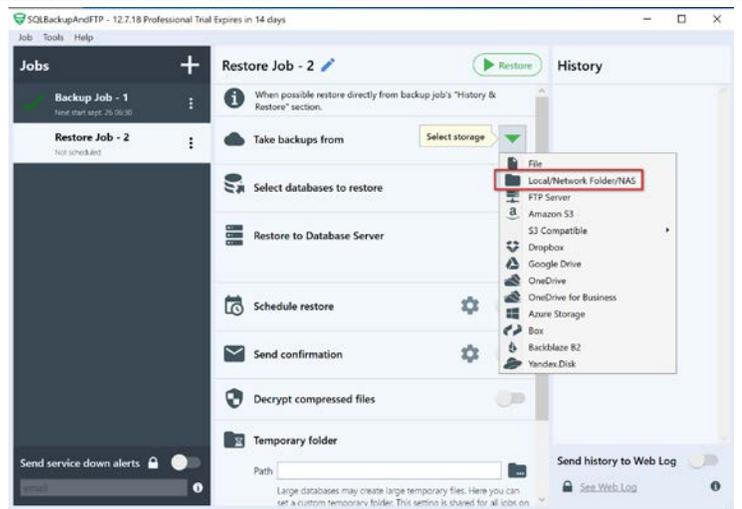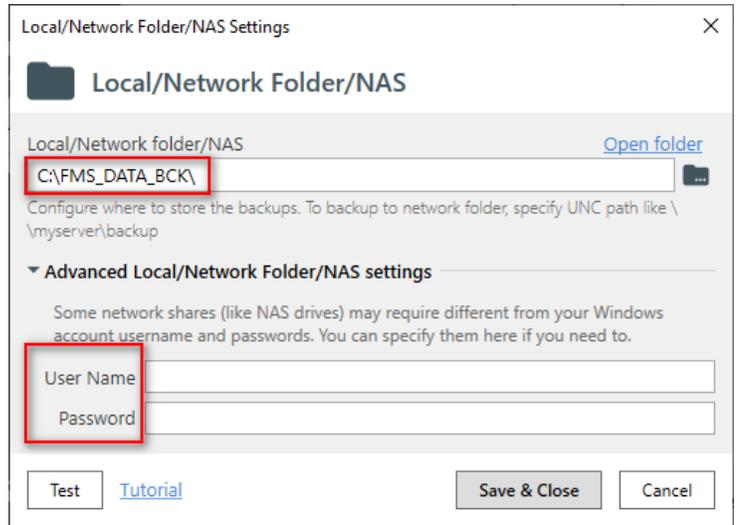
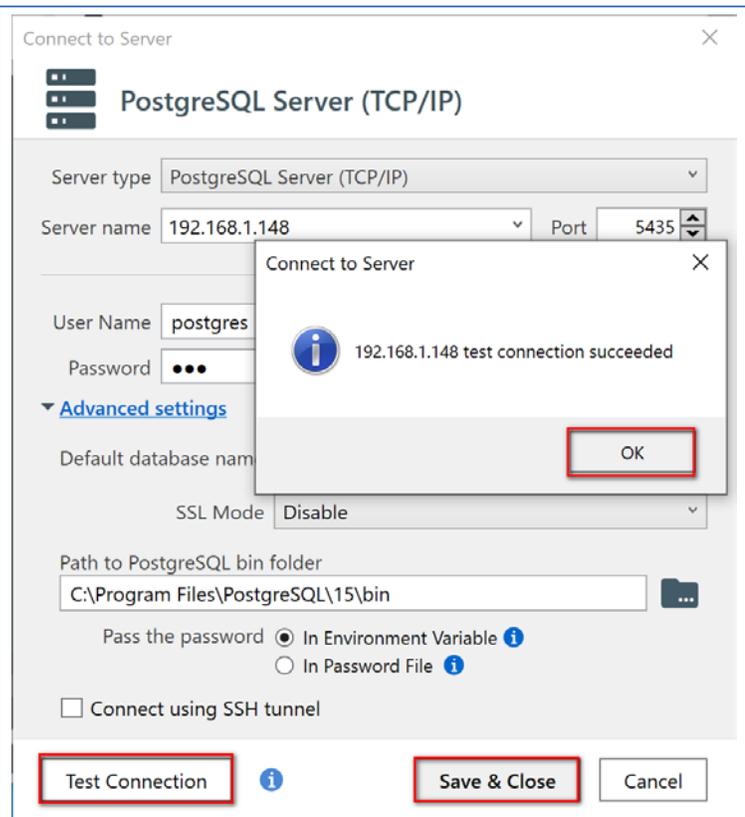|	
6. Click green Plus sign and select the database you want to be restored follow by the data & time of the last backup.	
7. If you want to rename your Database during the restore process click the wheel. If you want to keep the original Database Name then continue from Step **9**	
8. Click button **Restore database to** and enter a new Name for the Database you want to restre.	
9. Click **Restore to Database Server…**	
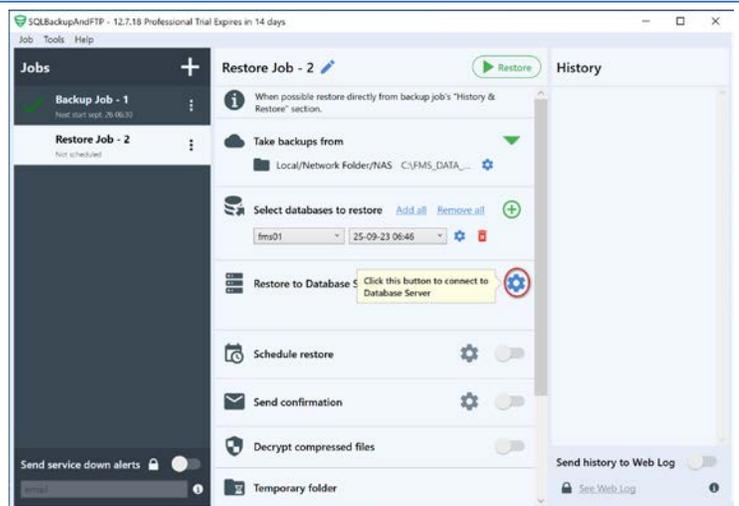
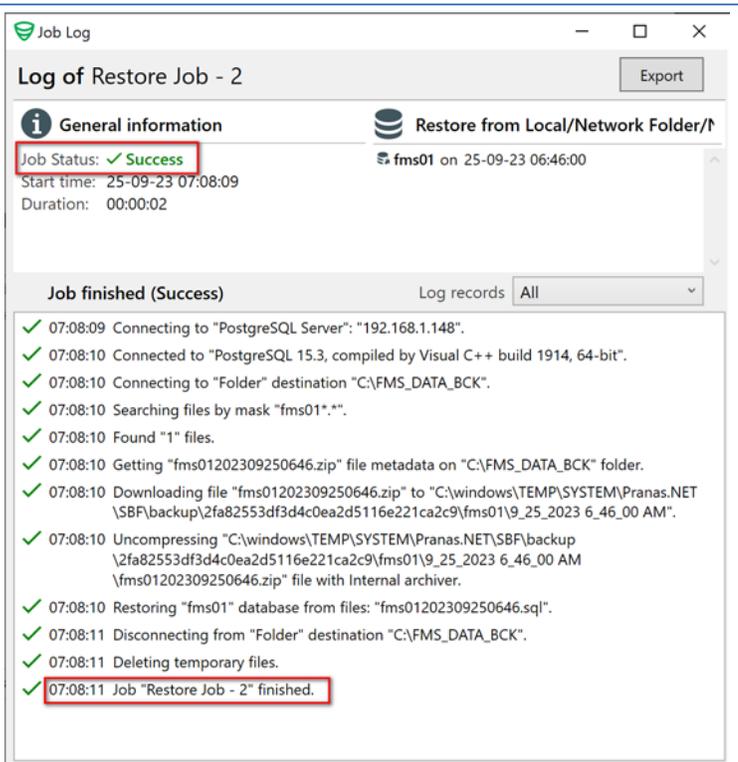|	
10. From the drop down, list select **PostgreSQL Server (TCP/IP)** 11. Enter **TCP/IP address** from the server where the restore database will be done. 12. Click **Test Connection** and verify that the connection succeeded. 13. Click **OK** 14. Click **Save & Close**	
15. Click button **Restore**	
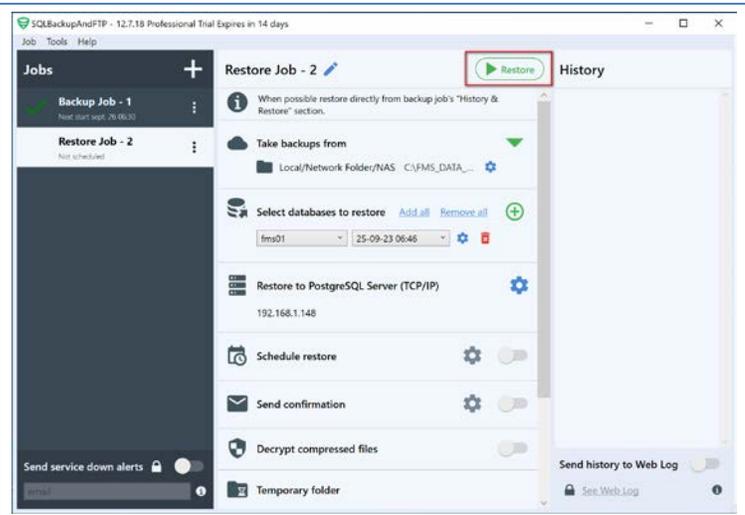
16. Verify backup operation succeed. 17. Close the window	
18. Database **fms01** is now restored	

Revision History

Revision	Released	Description
A	20 September 2022	Initial Release
B	05 October 2022	Revised for new Software **SQLBackupAndFTPSetup** version 12.7.1
C	1 October 2023	Revised for new Software **SQLBackupAndFTPSetup** version 12.7.18 which allow to Backup PostgreSQL Version 11 and higher.

UNDERSTANDING, ACCELERATED