



EZDent-i

File Server & Data Base Backup Documentation

Overview:

Vatech America Inc. recommends a certified IT professional setup and maintains backups. Vatech America will only release key information on what is needed to backup but Vatech America is unable to recommend ANY solution, system, or means in which to backup other than generic information.

It is also recommend before making any changes; backups of any kind of local duplicate copy is made by referencing this information and creating a local copy before moving the data.

This document will discuss generically the necessary steps and generic procedures for backing up the File server and Database for **EzDent-i** with key points in the location of what needs to be backed up for proper data retention.

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Section 1.

Necessity of Backups

It is important to create good, working backups of both the File Server and the Database server to maintain data in the event of data loss from the main server location; as well to maintain HIPAA compliance for data retention as well as ethical obligations to your patients.

Per HIPAA; It is the sole responsibility of the Physician/Practice/Owner for proper retention and protection of any and all patient data and information. They are solely responsible for the delegation of such to certified IT professionals.

Section 2

Consideration and Planning

It is recommended that you speak with your IT consultant in regarding the best backup solution for your practice.

IT consultants can best serve you to help determine what's right for you, what works with your budget, setup & configuration, now and in the future.

Vatech America Inc Recommends and insists that a properly trained & certified IT professional not only assists with the planning; implementation but as well present for any movement or action with the data.

Section 3

Files That Need to Be Backed Up

A. Understanding the File Server & Database

A-1 File Server

The File server is a program used to save and access the stored images that runs in active memory once the OS is logged into Windows. The default installation location is *C:\Program Files (x86)\VATECH\Common\FM\Bin** and it's application is *VTFileManager32.exe*

**NOTE: They may be located in a drive other than C:\ depending on which drive is selected during the initial installation*

A-2 Database

The Database is a database file that is controlled, modified and accessed by EzServer; currently running PostgreSQL Server engine- controlled by PostgreSQL ver. 9.2.

B. Understanding what to backup

Backup the Following Folders

IT personnel should regularly backup these two directories:

C:\PostgreSQL\9.2\Data

C:\Program files (x86)\Vatech\Common\FM

❖ *NOTE: They may be located in a drive other than C:\ depending on which drive is selected during the initial installation*

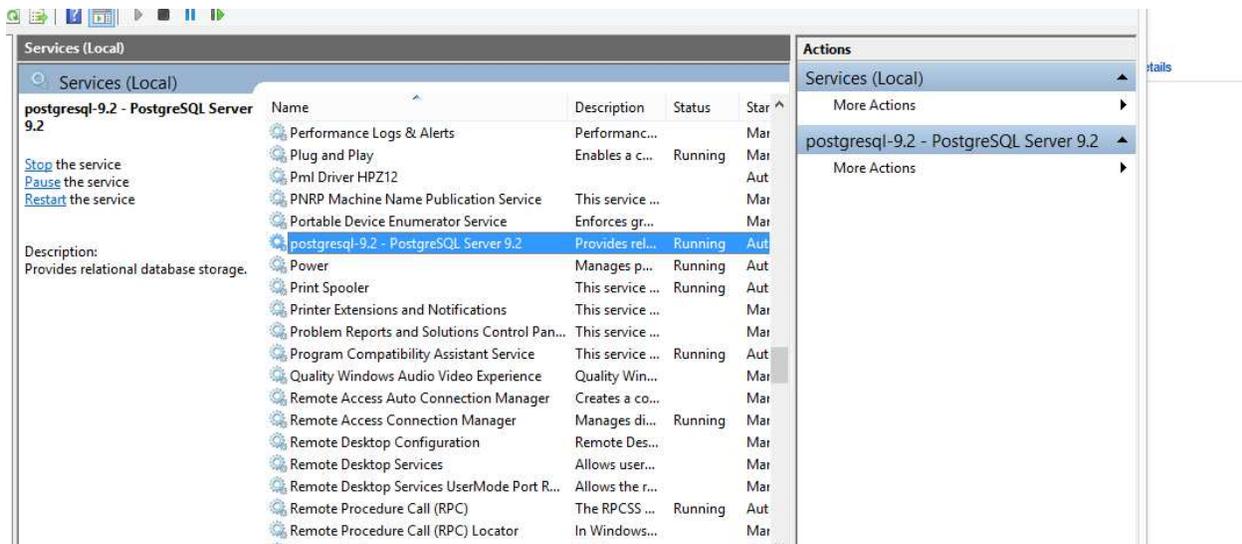
Section 4

Steps for a Successful Backup

A. Services and Applications

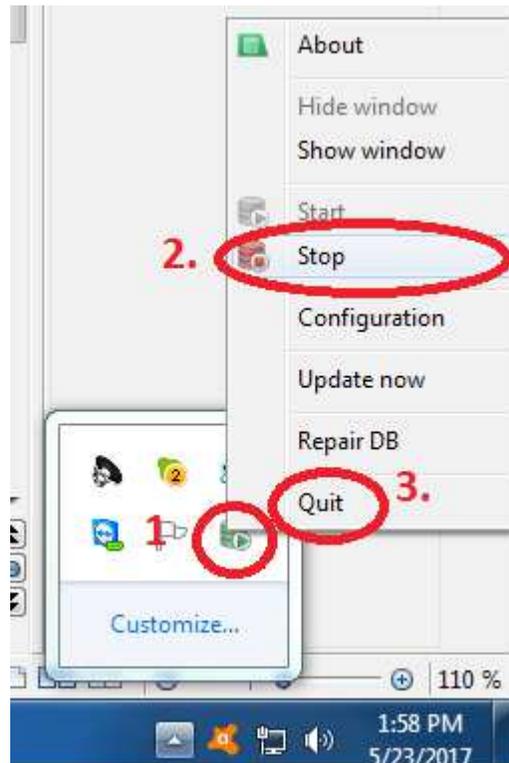
Stop postgresQL services to backup these folders in order to retain SQL database integrity. Failure to properly stop service could cause undesired stability and or data loss or corruption of the SQL tables if not properly stopped PRIOR to backing up EzDent-i.

This can be located in services by either browsing to Control Pannel/Administrator Tools / Services or by running services.msc from the run prompt.



Next you will need to exit the stop EzServer and exit the console.

1. Locate the EzServer Icon and right click
2. Click 'Stop' the icon will then turn red once it stops.
3. Click Quit to exit the console.



B. Manual Backups

Copy the files detailed in Section 3-B

Note: It is very important you do not overwrite the C: and D: folders in your backup location! For best results, in the back up location create a separate 'C:' and 'D:' backup folder.

C. Automated Backups

Define the file paths in your automated backup as detailed in Section 3.

Note: If doing after hours /nightly/weekend backups we recommend the Capture pc be shut down at the end of the backup each night. If the PostgreSQL/FileServer is located on the Capture PC and on a central server; the Capture pc should be shut down by the clinical staff at the end of the day. Server should be regulated as per IT protocol for clinic. We have no opinion on the central server.

Section 5.

Backup Solutions

It is highly recommended that you speak with your IT consultant before setting up any backup solution to ensure proper setup and operation.

It is also recommended that your IT consultant contacts Vatech Technical Support before starting this process if they have any questions or concerns this document does not address!

A. Server Side Solutions

A server side solution is a setup in which the File Server and Database reside on a dedicated server in which existing backups will backup any software installed by default server buildout.

To host the data on Server; You will need to do the following to configure your server to operate in this manner:

Note:.. Install the complete version of EZDent-i and EzServer (including the SQL) on the server. This is typically either a downloaded installer or on the installation CD provided with the Vatech machine or device. Contact Customer Support if unable to locate the installer files.

All Workstations would then need to be pointed to the main installation location.

B. NAS Storage Devices

NAS Storage Devices are network storage devices that contain 1 or more hard drives . They can be plugged directly into the network and setup as server share or setup as local external hard drives, typically connecting through USB or eSata.

There are many options available, including Raid configurations (striped and/or mirrored).

Mirrored devices are by far the most effective backup solution in this case. Mirrored drives are identical drives meaning anything on one drive is also on the other. If one drive fails, you have a duplicate drive.

Stripped devices are 2 hard drives that store half of the data on one drive and the other half on another. This will speed up the backup process, but if one drive fails, you can lose the entire backup. The only time you would want to use this setup is if you had a striped and mirrored backup, for a total of 4 drives in the NAS Storage Device.

Note: Vatech America has no objections or recommendations about backing up to NAS but we do not recommend the real time storage to such devices*.

C. External Hard Drives and NAS Servers

You can use the external hard drives and NAS servers as a backup solution or the main location for the File Server. It is recommended that you use such devices as a backup location and not the main storage

location, having the default locations on the capture PC and then a backup to the External Drive/NAS Storage Device.

D. Off Site Backups

It is recommended that if you choose to use off site backups that you have a local backup in place first so you will be backing up the backup. It is NOT recommended to backup off site directly from the original files.

Section 6.

Batch Files and Command Lines

Using a command line or batch file will simplify the backup process by automatically shutting down and restarting the executable and services needed to complete your backup. A batch or command line file is a text file containing commands saved as a *.bat or *.cmd extension.

Vatech America Inc. is not able to recommend or provide any Command line coding or examples; it is recommended certified IT person create any such command line codes, batch files ect.