



Systems for Success

A decorative graphic consisting of three overlapping, wavy bands. The top band is light gray, the middle band is dark red, and the bottom band is black. The bands curve upwards from left to right.

RFMS Installation Document Outline

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Please refer to the Q&A at the bottom of this outline if confused on whether to use SQL Express or Standard or if there are other questions about specifications and documentation.

This document is intended for an RFMS installation to SQL Server Express on Windows Server Standard. It can be adapted to other versions of SQL as long as it is at least SQL 2008 Express With Tools.

RFMS does not offer a paid installation service, please be sure to get a qualified SQL technician to do the RFMS installation.

IMPORTANT: RFMS may not have the client in our support system when the client first purchases their RFMS software. Call ahead to the business office during the planning phase so that all parties can be assured they will be assisted promptly if there are any questions. Make sure to include the technician's *and* client's contact info. That number is 1-800-701-7367. The client can also call this number to get their customer ID and password, which they will need in order to download updates for their software from portal.rfms.com.

Need more documentation on another process? Go to <https://rfmsinc.zendesk.com/hc/> for anything other white papers and documentation you might need.

Disclaimer

This document is not designed to be a replacement for local, certified IT professionals. RFMS recommends using a qualified technician for all tasks described in this document. IT best practices are beyond the scope of this document and failure to engage local IT professionals familiar with those standards can result in catastrophic consequences. It is important to understand that many of these processes need ongoing maintenance.

There are four steps to properly install RFMS software to the SQL server:

Install and Configure SQL

This step covers how to install and configure SQL Server for use with RFMS. Before moving on to step 2, make sure that the following has been done:

- The technician has written down the client's new server name and instance name,
- The client's customer id and password has been obtained in case there was update since the client first ordered their RFMS software, and
- The client has called ahead to the business office to make sure all relevant parties are in our support system.

Install and Configure RFMS

This step covers how to install and configure RFMS for use with the server.

Before continuing to step 3, please make sure RFMS will run at the server. (At minimum, RFMSNAV.exe and Order Entry both open with no errors)

Connect Workstations

This step covers how to setup the client workstations for use with the new server.

- If the technician is unable to connect the workstations, please see the troubleshooting section in the second part of step 3.
- If the technician still cannot connect the workstations, contact RFMS for a more detailed troubleshooting document -
- Failing this, put a ticket to RFMS requesting support.

RFMS Backups

This step is often mistaken for being optional - it is not. Carbonite and other online backup systems are what we refer to as file backup systems. They do not do the two crucial things covered in this step - create verified SQL backups, and keep the LDF file from holding on to any RFMS and SQL activity (which can grow until it fills up the hard drive and slow the client's system down to a crawl).

Carbonite and others *are* useful for keeping copies of the RFMS folder and additional copies of backups. Bear in mind though that if the client tries to have constant cloud backups or file backups running on an active RFMS folder they *will* see a drop in performance. Try to have it only backup at a certain time in the day when there are no employees using it to avoid impacting performance. For more information, please see our [Best Practices](#) document.

Review Best Practices

Make sure the technician is intimately familiar with all of the Best Practices contained in this document as these are extremely useful for making sure that the client's data is as safe as it can possibly be.

Setup a Practice Database

This document is not only useful for creating an environment for training employees but gives an exceptionally safe way to test updates and the integrity of backups in accordance with our Best Practices document.

Your RFMS installation exe makes a practice database for you. You only need to follow the directions of this document for making the practice folder to use it. You can see what your Practice Database is named inside of SQL studio, next to the active RFMS database. The How to Make a Practice Database document can still be used to make additional databases for testing and other purposes.

A note on which SQL to use: We recommend using the latest version of SQL, as long as it is SQL Express With Tools, has at least one service pack, and that this service pack has been in place for at least one month.

To download it, please use the official Microsoft download center and search for it. As of August 11, 2016 this version is **SQL 2014 Express With Tools SP2**. Please keep in mind we typically only update this document once a year, and this may not be the version that shows in the download center – please refer to the guidelines above.

The file for Express With Tools is SQLEXPRTW_x64 – please make sure to get this exact file if you plan to use SQL Express as there are many variations on the spelling.

We also support SQL 2012 SP3 as well as any other SQL editions still supported by Microsoft, but recommend using the latest within these guidelines. Please also keep in mind that if Microsoft no longer supports an edition of SQL, **neither do we**.

Additionally,

keep in mind the following important Q&A for SQL Express versus SQL Standard.

- **Q:** Can I use as large of a database as I want with SQL Express?
- **A: NO.** You are limited to 10 GB for a database if you are using Express.
- **Q:** My database is 9 GB and I have 35 users, but it is still so slow. I thought SQL Express supports databases this large?
- **A:** SQL Express DOES support up to 10 GB for a database, **but** there is an important memory limitation – after approximately 1 GB of database memory use, the rest is pushed to the page file of the hard drive and can be **considerably slower**, particularly under higher loads. We recommend using SQL Standard after a database is 1 GB, or you have approximately 15 or more users. This second metric is due to a higher growth rate of a database as you have more users entering data.
- **Q:** SQL Standard is expensive. Does my business really need this?
- **A:** Possibly – refer to the above questions. If in doubt, SQL Standard *does* have a **six month trial**, which should be more than enough time for a business to test with and make a sound financial decision on whether the purchase is worth the money.
- **Q:** Fine. I tried it and it helped. But I read online that an SSD can read and write data many many times more rapidly than a mechanical drive. My database is only 5 gigabytes. So why do I need SQL Standard if it's just going to put it in memory?
- **A:** This is a common question, with two common misconceptions. They **can and do** result in **tremendous** reductions in load times for modules from the app server and query times for larger express databases. But they **are not a panacea** – a faster hard drive can never replace proper configuration and other weak links in an environment. They are also not ticking time bombs waiting to delete your data, but SSDs are also not all created equal – **ONLY** use an enterprise grade SSD from a reputable brand on a server. A consumer SSD is not suitable for a server in **any** circumstance.
- **Q:** I'm still not sure / I have other questions about your SQL, server, or network specifications. Do you have documentation on this?
- **A:** Yes, and we absolutely recommend checking into it before beginning an install OR migration. It can be found here: <https://rfmsinc.zendesk.com/hc/en-us/articles/201981506-RFMS-SQL-System-Specifications> or by searching for RFMS SQL System Specifications on our documentation website, <https://rfmsinc.zendesk.com/hc/> . Our general Server Recommendations document is also helpful in planning migrations and installs, and it can be found here : <https://rfmsinc.zendesk.com/hc/en-us/articles/204958197-Server-Recommendations> or by searching for Server Recommendations on <https://rfmsinc.zendesk.com/hc/> .