



Troubleshooting SQL Server Install Failures During SHOWCASE® Image Center Installation

We have seen our customers encounter two very different kinds of SQL Server install failures. In the first, you see a message in our installer that says “The SQL mandatory prerequisite was not installed correctly.” If you see that, see the first part of this document.

If you’re installing on Windows 11 and you see a command window appear during installation with an error “Error running SQL script: Failed to connect to .\IMAGECENTERDB_22...” (or something similar), then see the second part of this document.

“The SQL mandatory prerequisite was not installed correctly.”

If you’re getting this error, this guide should help you troubleshoot the problem.

The Quick Fix

If you’re trying to install on Windows 10 or 11, the most likely source of your problem is that Microsoft has forced another set of Updates onto your computer that you’re unaware of. Restart your computer and get those updates installed and resolved and try installing the Image Center again. It will likely just work.

The Not-So-Quick Fix

So you tried rebooting but that didn’t fix the problem. Well, now we’re in the soup, as we’re going to be debugging a Microsoft provided SQL Server Express 2022 installer. Read on.

Background

ShowCase Image Center uses a SQL Server backend to store the study information for your studies (not your images, by the way, we use the database as an index). We provide two installers for the Image Center:

- **ImageCenterInstaller_2.6.x.exe** - has a SQL Server Express 2022 installer inside of it
- **ImageCenterInstallerNoDatabase_2.6.x.exe** – does *not* have a SQL Server installer in it.

The most common point of failure during an Image Center install is when the first installer runs the embedded SQL Server Express 2022 installer, it fails and you get the “The SQL mandatory prerequisite was not installed correctly.” error.

If you haven’t rebooted and tried installing again, do so now

This really does fix the problem most of the time.

Troubleshooting the SQL Server Install

Attempt #1: Check the SQL Server install log for clues

Open up the file C:\Program Files\Microsoft SQL Server\160\Setup Bootstrap\Log\Summary.txt using NotePad or your favorite editor and look for clues as to what went wrong. They’ll usually be at the top of the file. If you don’t see anything that’s helpful, look for folders adjacent to the Summary.txt file that are named with a timestamp, e.g. “20190423_183128”. Go into the most recent of those folders (which will correspond to your last attempt at install) and open the “Summary_<some machine name and time stamp>.txt” file. This should have more detail. Also check the SystemConfigurationCheck_Report.htm file and the Detail.txt file.

If you can’t make sense of these, send all of these files on to support@triltech.com and we’ll take a look and see if we can figure it out.

If there is nothing obvious in these files, or the error messages they report are completely unhelpful (this is not unheard of), move on to Attempt #2.

Attempt #2: Update Your Operating System

Apply all known updates to your OS and try running the Image Center installer. Sometimes it's as simple as this.

Attempt #3: Run the SQL Server Express 2022 installer manually

1. Download SQL Server Express 2022 from Microsoft. At the writing of this document, the URL to that is <https://www.microsoft.com/en-us/download/details.aspx?id=104781>, but you may have to Google it.
2. Run the SQL2022-SSEI-Expr.exe installer you just downloaded.
 - a. Select **Basic** installation
 - b. Click the **Accept** button under the Server License Terms
 - c. The INSTALL LOCATION appears. Leave as-is and click the **Install** button
 - d. Wait... this takes a while. When it's all done, click **Close**

If you made it through all of these steps, then it's almost certain that when you run the Image Center installer it will work. If it doesn't, please let us know exactly what you've done in an email to support@triltech.com.

If some of the steps balked with errors, hopefully it will provide you with reasonable descriptions of what's wrong and how to fix it. Contact us at support@triltech.com if it's not clear. Send screen shots.

Attempt #3a: Run the SQL Server Express 2022 installer by hand from the command line

1. Download the SQL Server Express 2022 installer used by Trillium from https://www.triltech.com/download/SQLEXPR_x64_ENU.exe
2. Copy the SQLEXPR_x64_ENU.exe file to the root of your C: drive
3. Open a PowerShell window in Administrator mode
4. Cd to the root of your C: drive
5. Run the following command line:

```
SQLEXPR_x64_ENU.exe /QS /SkipInstallerRunCheck /Action=Install /Hideconsole /IAcceptSQLServerLicenseTerms /Features=SQL /InstanceName=IMAGECENTERDB_22 /SECURITYMODE=SQL /SAPWD="TupuKagi15IS@locX" /TCPENABLED=1 /NPENABLED=1 /AddCurrentUserAsSQLAdmin /SQLSYSADMINACCOUNTS="Builtin\Administrators" /SQLSVCACCOUNT="NT AUTHORITY\SYSTEM" /UpdateEnabled=False
```

Make sure you don't have any line breaks in the command line from copy/pasting it into the window.

If this doesn't work, move on to step 4.

Attempt #4: Punt and Use Your Own SQL Server and the No Database Installer

If you're really stuck and there seems to be no reasonable resolution to getting SQL Server Express 2022 installed on your computer, go out and find a version of SQL Server Express (or SQL Server, if you have the \$\$) and install that with Mixed Mode authentication. (You will need that sa password) You will need to use version 2022 or later.

Once you have a working SQL Server installed...

1. Download the Image Center No Database installer from <http://www.triltech.com/download.html>
2. Run the installer
3. When prompted, enter the Server Name and SA password for the database server.
4. Click "Test SA Password" to verify your server is accessible and your password is good.
5. Click OK

Windows 11 Users

You get red text in a window during Image Center installation that looks like this:

```
Searching for a imagecenter database in .\SQLIMAGECENTER.
imagecenter database does not exist (A network-related or instance-specific error occurred while establishing a connection to SQL Server. The server was not found or was not accessible. Verify that the instance name is correct and that SQL Server is configured to allow remote connections. (provider: Named Pipes Provider, error: 40 - Could not open a connection to SQL Server))
Error: Error running SQL script: Failed to connect to server .\SQLIMAGECENTER. (A network-related or instance-specific error occurred while establishing a connection to SQL Server. The server was not found or was not accessible. Verify that the instance name is correct and that SQL Server is configured to allow remote connections. (provider: Named Pipes Provider, error: 40 - Could not open a connection to SQL Server))
Error: imagecenter database installer failed.
Press any key to continue.
```

There is a known bug in Windows 11 that prevents the installation and operation of SQL Server which Microsoft has yet to deem important enough to fix. If you see this message, it is possible you have encountered this bug. You can read about it here:

<https://learn.microsoft.com/en-us/troubleshoot/sql/database-engine/database-file-operations/troubleshoot-os-4kb-disk-sector-size>

Do you have the Windows 11 Problem?

Open a PowerShell window in Administrator mode and type in the following command line:

```
- fsutil fsinfo sectorinfo C:
```

If either the **PhysicalBytesPerSectorForAtomicity** or **PhysicalBytesPerSectorForPerformance** is anything other than **512** or **4096**, you have the problem. There is a registry fix for this. Please read the article listed above before you continue and alter your registry.

Trillium will assume no responsibility for any side-effects this registry change may introduce on your computer. You deploy registry changes at your own risk. Don't do this unless your physical sector sizes are other than 512 or 4096.

Here is how to address this problem:

1. Uninstall the SQLIMAGECENTER SQL Server Instance (SQL Server 2022)
 - a. In the Control Panel uninstall dialog, select Microsoft SQL Server 2022 (64 bit)
 - b. Click Uninstall. A dialog will appear.
 - c. Select Remove.
 - d. A Select Instance dialog will appear. Select IMAGECENTERDB_22 and click Next
 - e. A Select Features dialog will appear. Under IMAGECENTERDB_22, check Database Engine Services. SQL Server Replication will automatically check itself. That's fine. Click Next
 - f. A Ready to Remove dialog will appear. Click Remove
 - g. Wait... it'll take a while... when it finishes, click Close
2. Reboot your computer
3. Open PowerShell in Administrator mode and run the following command from the article above:
 - a. `New-ItemProperty -Path "HKLM:\SYSTEM\CurrentControlSet\Services\stornvme\Parameters\Device" -Name "ForcedPhysicalSectorSizeInBytes" -PropertyType MultiString -Force -Value "*" 4095"`
4. Reboot your computer
5. Run the Image Center installer. It should complete this time.

Conclusion

Fundamentally, the problem this guide is trying to address is a failing Microsoft SQL Server Express installer. We can be of some assistance in this area, but do not be afraid to hit Google to try diagnosing problems you see in the Microsoft SQL Server installer log files or the installer itself, if you ran it manually.

If you can get a copy of SQL Server Express 2022 or SQL Server 2022 installed on your computer, the rest of the Image Center should fall into place.

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