

Vermont Oxford Network – eNICQ 6 Documentation

eNICQ 6 – Upgrading to SQL Server 2019 Express

Release 1.0
Published May 2022

eNICQ 6 – Upgrading to SQL Server 2019 Express

- Introduction..... 2
 - eNICQ 6 and SQL Server® 2019 Express System Requirements 2
 - eNICQ 6 Client Software, installed locally 2
 - Microsoft® SQL Server® Express 2019, installed locally 2
 - eNICQ 6 Support 3
- Checking for Windows Updates – critical step 4
- Export Data from Existing Installation of eNICQ 6..... 6
- Move or Delete the Connection.enicq File..... 9
- Contact VON Support to Deactivate the Registration 12
- Install eNICQ 6 With the Updated Installer 13
- Importing XML or JSON File into the New Database 14
- Removing the Old Database from the SQL 2012 Instance 18

Introduction

On July 12, 2022, Microsoft® is ending support for all versions of SQL Server 2012. This means there will be no more security updates released after that date. We had packaged SQL Server 2012 Express in our previous installers for eNICQ 6 for centers who needed to install it locally on a workstation rather than on a network server. The installer has been updated to now include SQL Server 2019 Express.

This guide is to help centers who installed the eNICQ 6 database onto SQL Server 2012 Express move their database onto SQL Server 2019 Express using the eNICQ 6 installer, to make sure the PHI included in the patient data is kept secure. **This would also be a suitable time to discuss with your IT department to see if there is an existing Standard or Enterprise Edition of SQL Server where the database could be moved instead, as that would provide the best security, and prevention against the accidental loss of the database.**

eNICQ 6 and SQL Server® 2019 Express System Requirements

eNICQ 6 Client Software, installed locally

- Supported Operating Systems: Windows® 10*, Windows® 11*
- Microsoft® .NET Framework version 4.6.2 or higher
- At least 400 MB of free disk space
- At least 1 GB of RAM
- Installer and client require Internet connection open to vtoxford.org and all subdomains on port 443. This connection must accommodate a RESTful API web service (.svc)
- User must have both "Read" and "Read & Execute" permissions to the C:\ProgramData folder

*Depending on configuration, Windows® 10 and Windows® 11 may require installation of .NET Framework version 4.6.2

Microsoft® SQL Server® Express 2019, installed locally

- Supported Operating Systems: Windows® 10*, Windows® 11*, Windows Server® 2016, Windows Server® 2019, and Windows Server® 2022
- 64-bit processor
 - 1.4 GHz (2.0 GHz or faster is recommended)
- Minimum of 512 MB of RAM (1 GB or more is recommended.)
- 6 GB of available hard disk space

For more information on SQL Server® Express 2019, please visit the Microsoft® site: <https://docs.microsoft.com/en-us/troubleshoot/sql/general/use-sql-server-in-windows>

The maximum anticipated database size for the eNICQ 6 database is 1 GB.

eNICQ 6 Support

If you have any questions or require any assistance with these instructions, or if you would like to discuss this with someone from VON Tech Support, you can contact us at support@vtoxford.org or by calling (802) 865-4814 ex.240. Our business hours are 9:00 am to 5:00 pm Eastern Time, Monday through Friday.

We also have an extensive knowledge base containing articles on most issues reported to VON Support. We review and update it frequently. You can access the KB at <https://vtoxford.zendesk.com/hc/en-us/categories/200178697-eNICQ-6-Support>.

Checking for Windows Updates – critical step

Prior to doing any of the steps involved in reinstalling eNICQ 6 using SQL Server® 2019 Express it is imperative for any Windows updates to be installed. Failure to do so will cause the SQL Server 2019 Express installer to time out, preventing the installation from completing. In our testing we have found this will happen even when you download the installer directly from Microsoft® and try to run it.

To manually check for updates, open the Windows® **Start** menu, select **Settings**, click **Windows Update** in the top right, and then click the **Check for updates** button.

1. Open the Start menu and select Settings

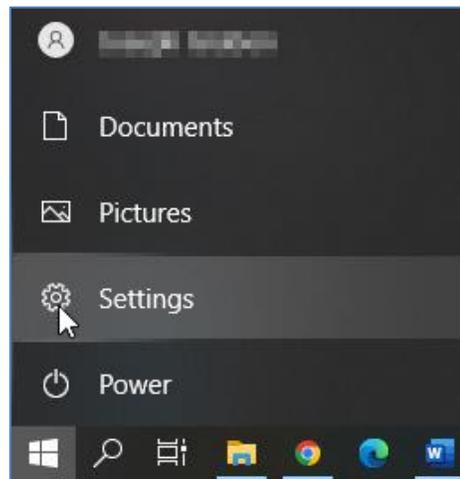


Figure 1 – Open the Windows Start Menu and click on Settings

2. Click on Windows Updates in the top right

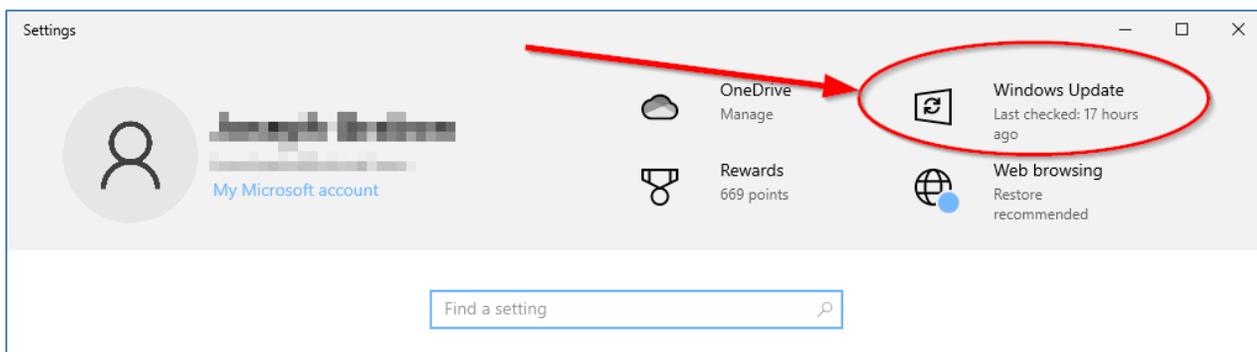


Figure 2 – On the Settings Window click on Windows Update in the top right

3. Click the “Check for updates” button

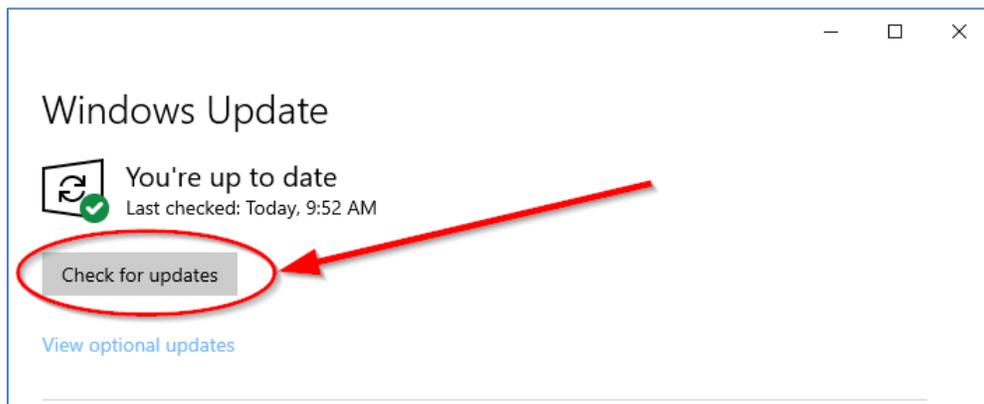


Figure 3 – click the “Check for updates” button

4. Wait for Windows to look for any updates ready for installation. If you do have any updates, click on the Start menu again and select to install updates and restart the computer.

Once you have completed the Windows updates you are ready to move on to the next steps.

Export Data from Existing Installation of eNICQ 6

If you have people in your IT department who manage your databases, it is strongly recommended you reach out to them about moving the database before performing any of these steps. It is possible they have an existing Enterprise or Standard Edition of SQL Server they could move the database to, which would be a more secure location for a database *that contains PHI (Protected Health Information)*, and place safer from a complete data loss. They could also set automatic backups on those editions of SQL Server which you cannot do using SQL Server Express.

If you wanted to move the database to an Enterprise or Standard Edition of SQL Server, we have a [Moving the eNICQ 6 Database Guide](#) with instructions on how that could be done by making a backup of the database and restoring it in the new location, which will preserve more of your historical data, and the user log saved in the database. If you do not have anyone who could do that, or if you do not have an existing Standard or Enterprise Edition of SQL Server to move the database to please continue with these instructions.

To move your data from an existing eNICQ 6 database to a new database you will be installing on SQL Server 2019 Express, you will first need to export your data into either an XML or JSON file (these are different file types for saving data to, the specifics of which are not important to completing the move). This is a two-step process which would need to be performed by an eNICQ 6 administrator.

1. Log into eNICQ 6, click on the gear icon in the top right and select Export Infant Records from that menu.

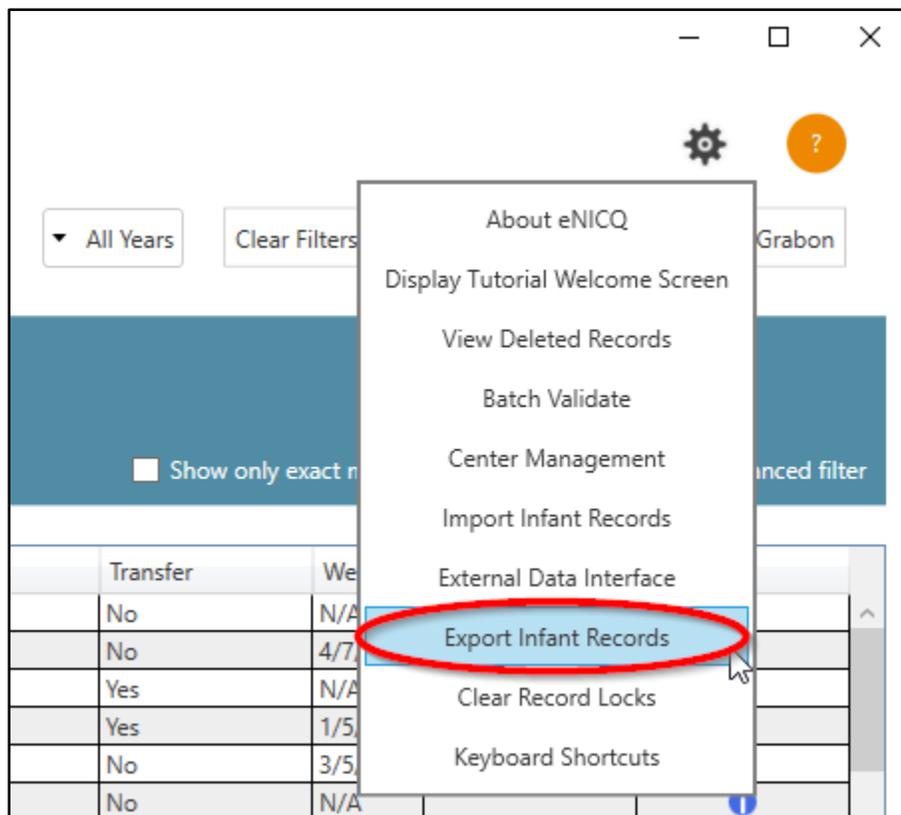


Figure 4 - Open Advanced Menu Options and select Export Infant Records

- The Export Infant Record window will appear. You can select either XML or JSON for the file format. Either format will work but, to be safe, we recommend exporting one of each file format. Please make sure you have a secure location to save these files to, as there will be protected patient information saved in them. Select **All records** under “Choose which records to export” and click **Export**.

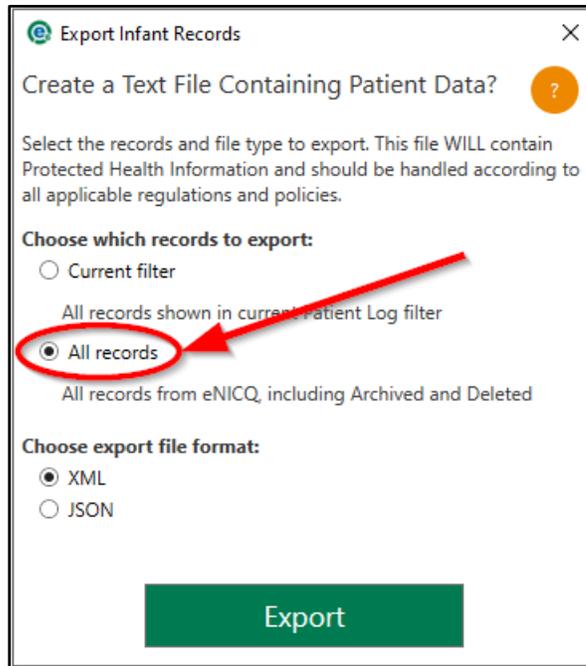


Figure 5 - Select All records to export and click the Export button at the bottom

- Browse to where you are going to save the file and click Save. The default name will be either “export.xml” or “export.json” but you can change the name prior to saving the file.

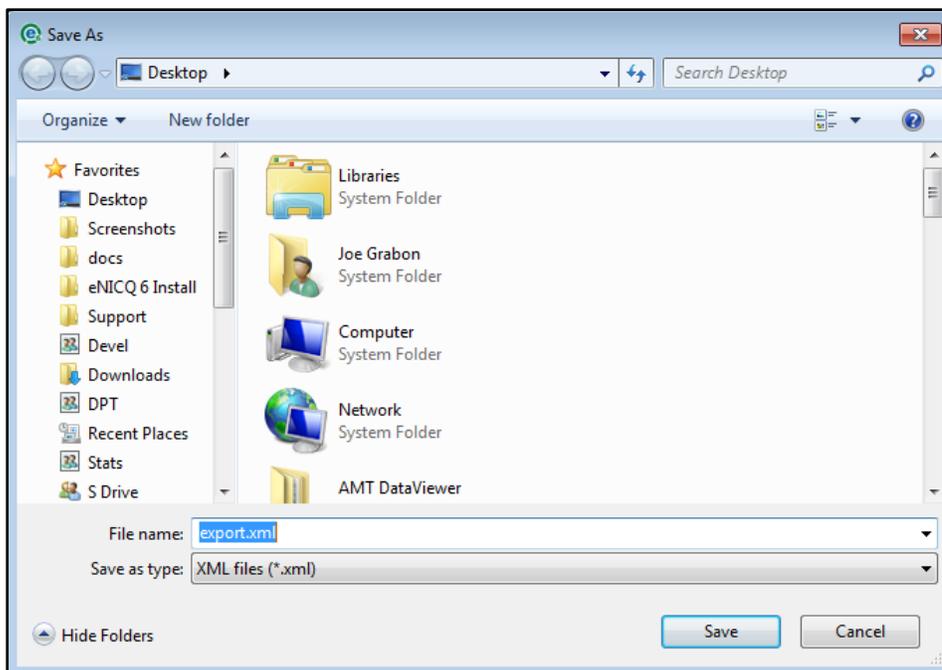


Figure 6 - select location to save the file to and click Save

Notes:

- **If you have multiple centers on the same eNICQ 6 database you will need to do this for each center. Each center will have their own file to reimport into the new database after it's been installed**
- Exported files will contain records from archived birth years, and deleted records. Neither of those types of records will be imported into eNICQ 6, so you may want to keep this file in case someone needs to look at any of those patient records
- You can open XML files with Excel to view these records in a spreadsheet

Move or Delete the Connection.enicq File

If you have an existing connection file on the computer where you are going to be reinstalling eNICQ 6 the installer will find it and install the database in the same location it was installed before or give an error if you do not have admin permissions on that instance of SQL Server. To avoid this, it is best to either delete the connection file or move it to a new location.

1. On the computer where eNICQ 6 was initially installed, open the Windows File Explorer by clicking on the Folder icon in the taskbar.



Figure 7 - Click on the folder icon in the task bar to open File Explorer

2. Because the folder the connection file is saved to is a hidden folder by default in Windows you will need to confirm that hidden items are being displayed. To do this click on the View tab in File Explorer and make sure "Hidden items" is selected in the Show/Hide section.

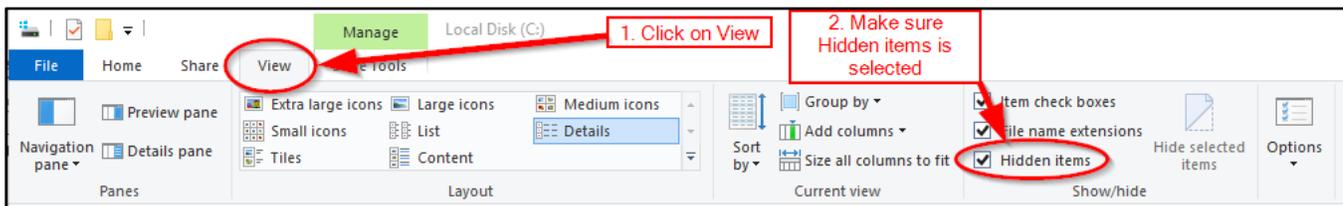


Figure 8 - Click on the View tab and confirm "Hidden items" is selected

3. On the right of File Explorer click on Local Disk (C:) and find the ProgramData folder. It will be slightly lighter than most other folders because it is a hidden item. Double click that folder to open it.

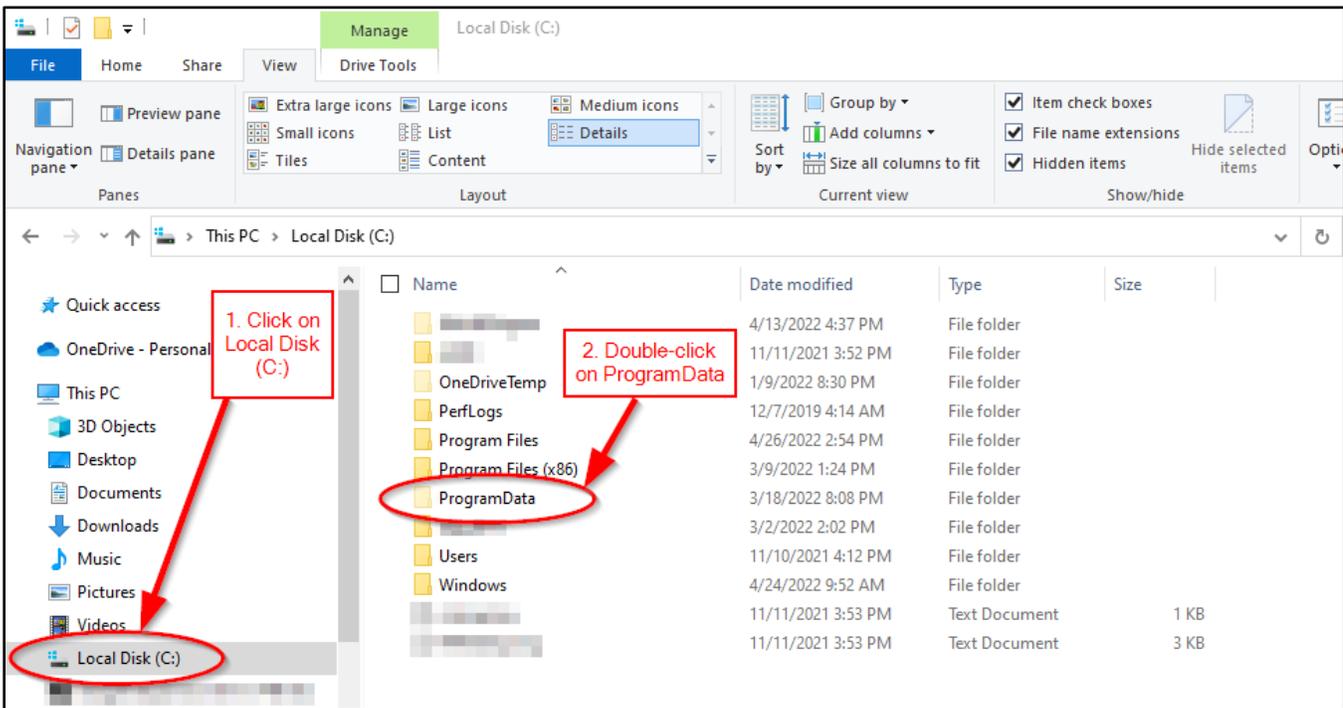


Figure 9 - Select Local Disk (C:), and double-click Program Data

4. Scroll down to the VON folder and open it.

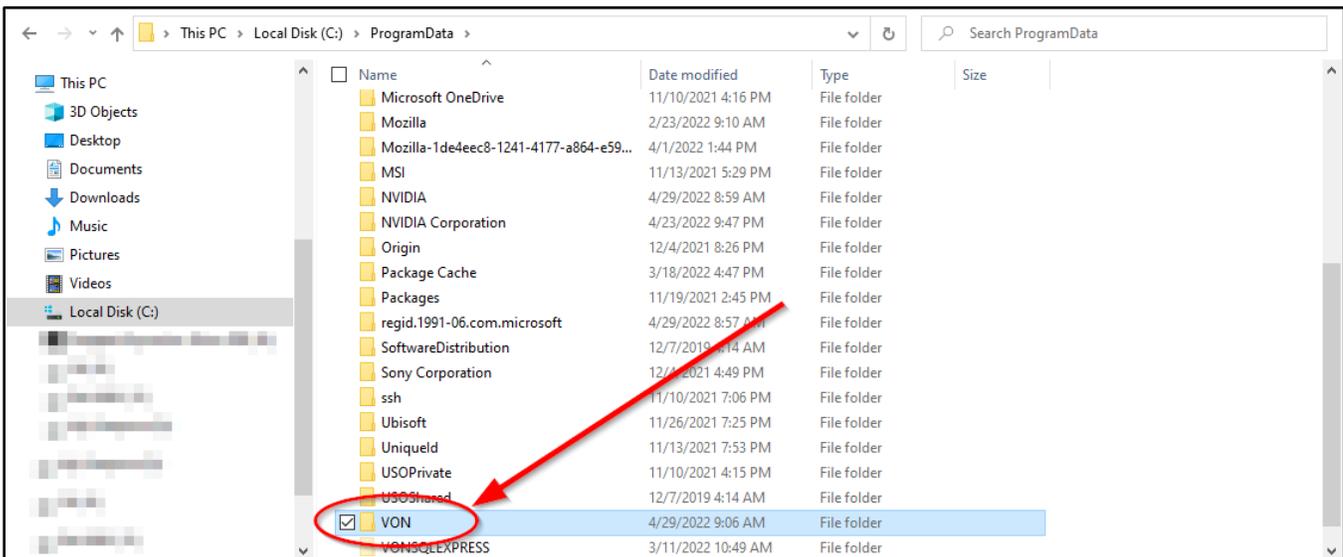


Figure 10 - Open the VON folder

5. Locate the Connection.enicq file and delete it. You could move it to a different location or rename it if you wanted to keep it just in case there was an issue with the SQL Server 2019 installation and needed to continue using the database on the 2012 version.

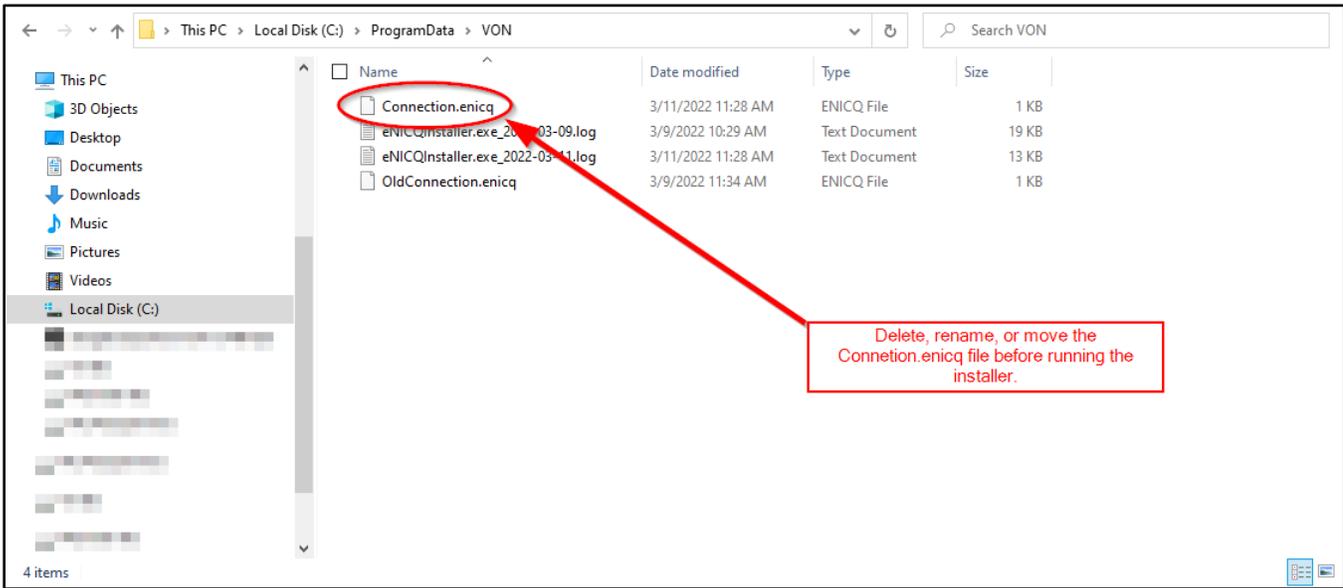


Figure 11 - Delete, rename, or move the Connection.enicq file

Notes:

- When eNICQ 6 is reinstalled, it will create a new connection file pointing at the database installed on the SQL Server 2019 Express instance

Contact VON Support to Deactivate the Registration

To prevent having multiple databases accidentally overwriting each other Vermont Oxford Network only allows for one registered database at a time. If you run the eNICQ 6 installer to install a new database while there is still an active registration you will get this error after you enter your license key and click Next:

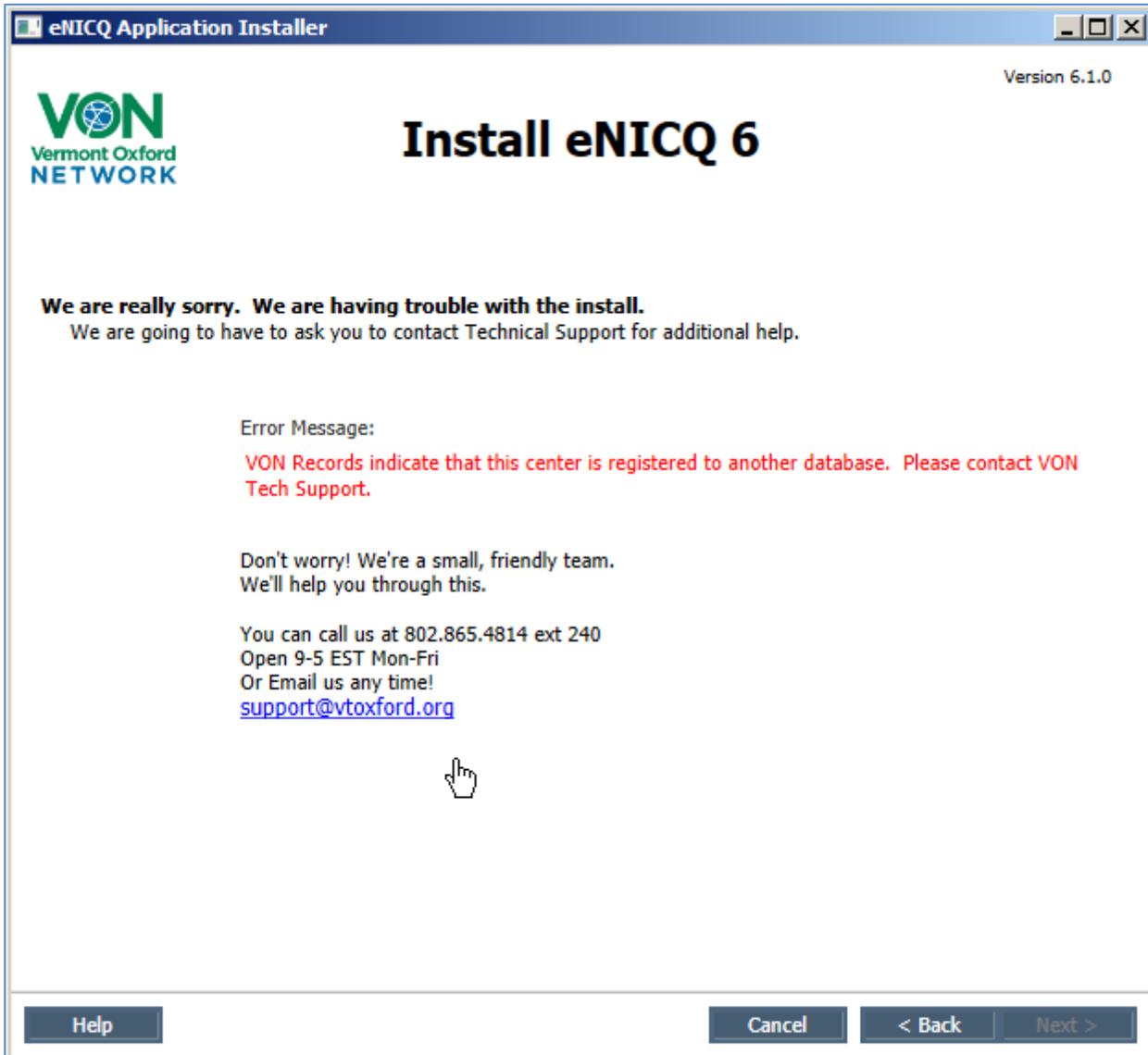


Figure 12 - Error thrown when there is already a registered database

Before installing a new database on SQL Server 2019 Express you will need to contact VON Support to deactivate the old database's registration. You can reach us by calling **(802) 865-4814 ex.240** or by emailing us at support@vtoxford.org. If you know it, *please make sure to provide us with your VON Center Number* to help us find your active registration.

Install eNICQ 6 With the Updated Installer

The eNICQ 6 installer now comes with **SQL Server 2019 Express**, which is the most recent version of SQL Server Express. Nothing about the installation instructions has changed. If your IT department cannot move the database to an existing Standard or Enterprise Edition of SQL Server, then you will install the database locally again. The new installer will create a new named instance in SQL Server, VONENICQ so it will not be completely necessary to remove the old named instance, VONENICQ6.

The last chapter of this guide will have instructions on moving or deleting the database from the old named instance.

As with every installation of eNICQ 6 you will need to have your license key. Any user with a login into the member portal can find that for your center. The instructions on finding your eNICQ 6 license key are here:

<https://vtoxford.zendesk.com/hc/en-us/articles/115015955167-eNICQ-6-Where-can-I-find-the-License-Key>

You can also download the eNICQ 6 Local Installation Guide here:

<https://vtoxford.zendesk.com/hc/en-us/articles/360052926754-eNICQ-6-Local-Installation-Guide-Using-SQL-Server-Express-not-recommended->

Please note that the person installing this will be the lone administrator for SQL Server 2019 so they will need to perform the steps in the **SQL Server® Management Studio Server-Side Actions** chapter of the installation guide, otherwise the users will not have access to the database.

If you have any questions about the installation, please feel free to reach out to VON Support by calling **(802) 865-4814 ex.240** or by emailing us at support@vtoxford.org.

Importing XML or JSON File into the New Database

Notes:

- The new eNICQ 6 database will not have any of the historical data from the old database in it until the XML or JSON file exported from the old database is imported
- To be able to import the file the user will need to be an administrator in the eNICQ 6 application. If you are using VON Logins your VON Services Administrator can [give users the eNICQ Admin role from Portal on our website](#), but if you are using Active Directory logins your IT department will need to make sure the user is in the correct Active Directory group.
- None of the records from archived birth years (any birth year four years ago or older) will be imported into eNICQ 6, nor will any deleted records. The import log will give a total amount of records which will be imported and how many will not.

After eNICQ 6 is reinstalled locally on a SQL Server 2019 Express instance you need to import the data from the old installation, so the users have access to those records.

1. Log into eNICQ, and from the Patient Log open the Advanced Menu Options by clicking the gear icon in the top right. From that menu select **Import Infant Records**

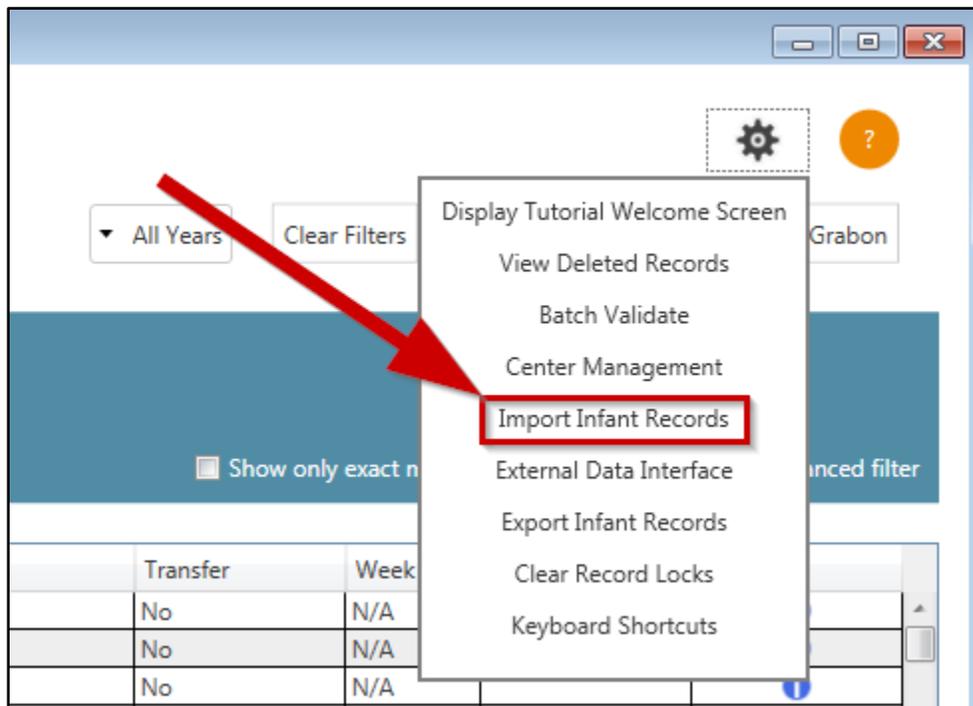


Figure 13 - Select "Import Infant Records" from Advanced Menu Options

2. On the Import Infant Records window that pops up, click the **Browse...** button

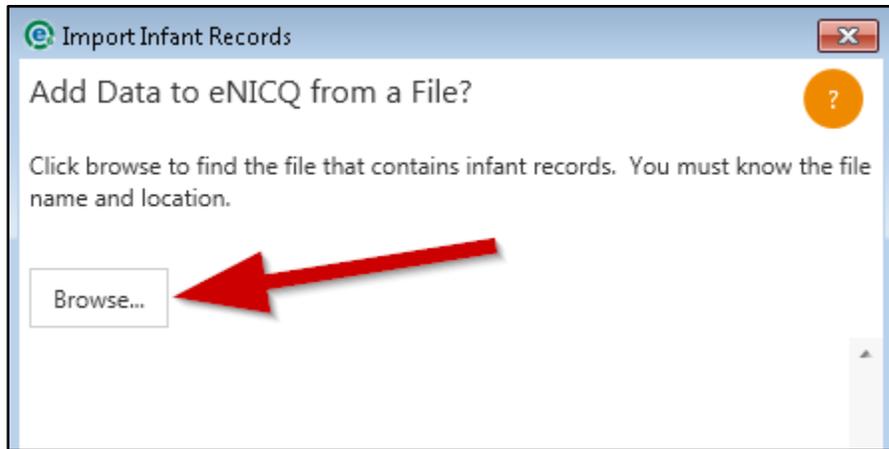


Figure 14 - Click "Browse..."

3. Browse to the location of the XML or JSON file exported from the old installation of eNICQ 6. You can narrow down your search by selecting the file type in the dropdown. Once you find the file, click on it to highlight it, and then click **Open**

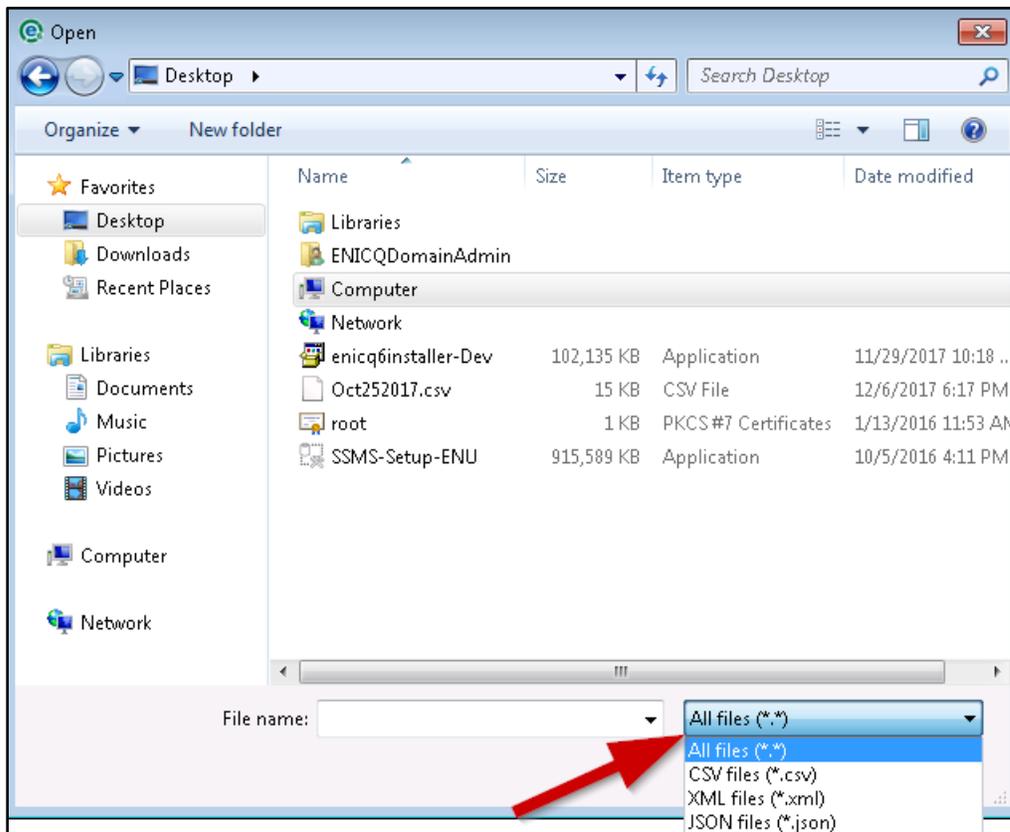


Figure 15 - Browse to the location of the file to import

4. After the file has been selected you will be returned to the Import Infant Records window, but now a path to your file will show next to the Browse button. The **Evaluate** button will no longer be grayed out. Click Evaluate and wait for eNICQ 6 to process the file.

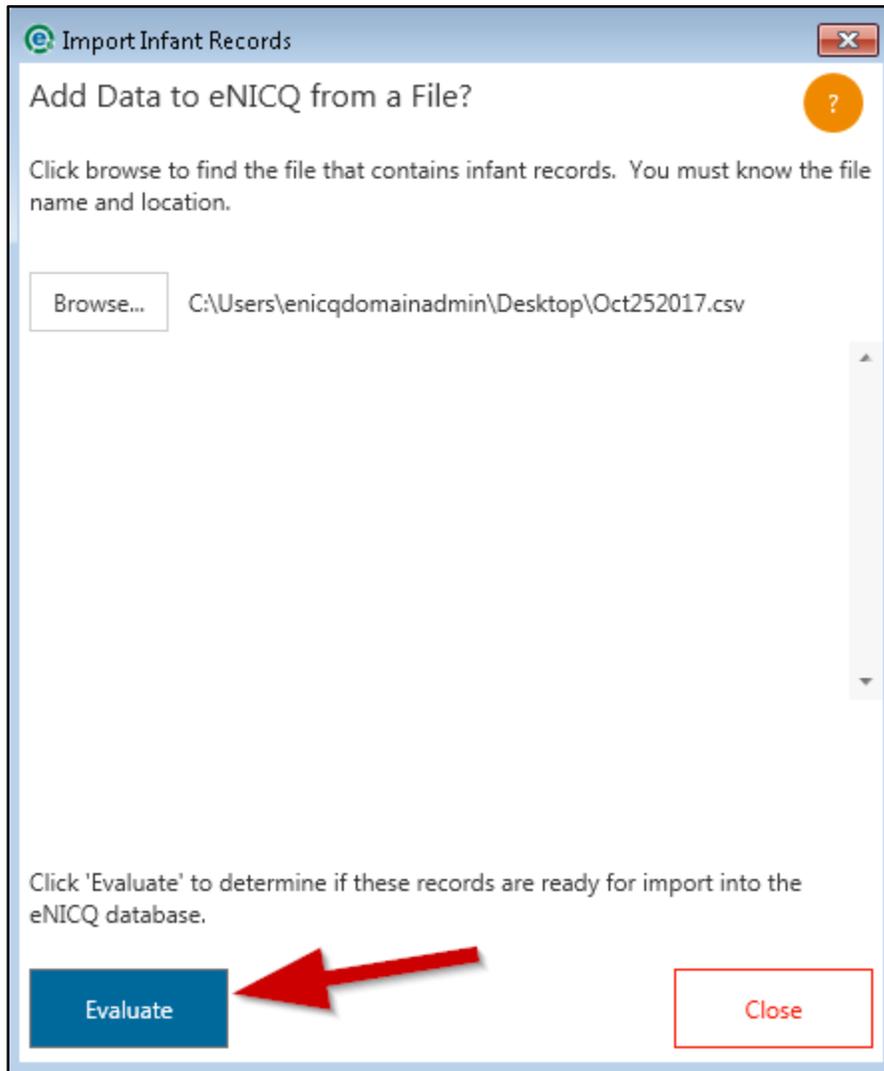


Figure 16 - Click Evaluate

5. When the evaluation is complete the results will display showing the total rows in the file, the number of rows that will not be loaded (again, deleted records and records from archived birth years will not be imported).

If you wanted to see more details about the file evaluation, click **View Import Log** and it will list the errors for each individual record. A copy of the import log will be saved to C:\ProgramData\VON. If you would like us to review that log you can attach it to an [email to VON Support](#).

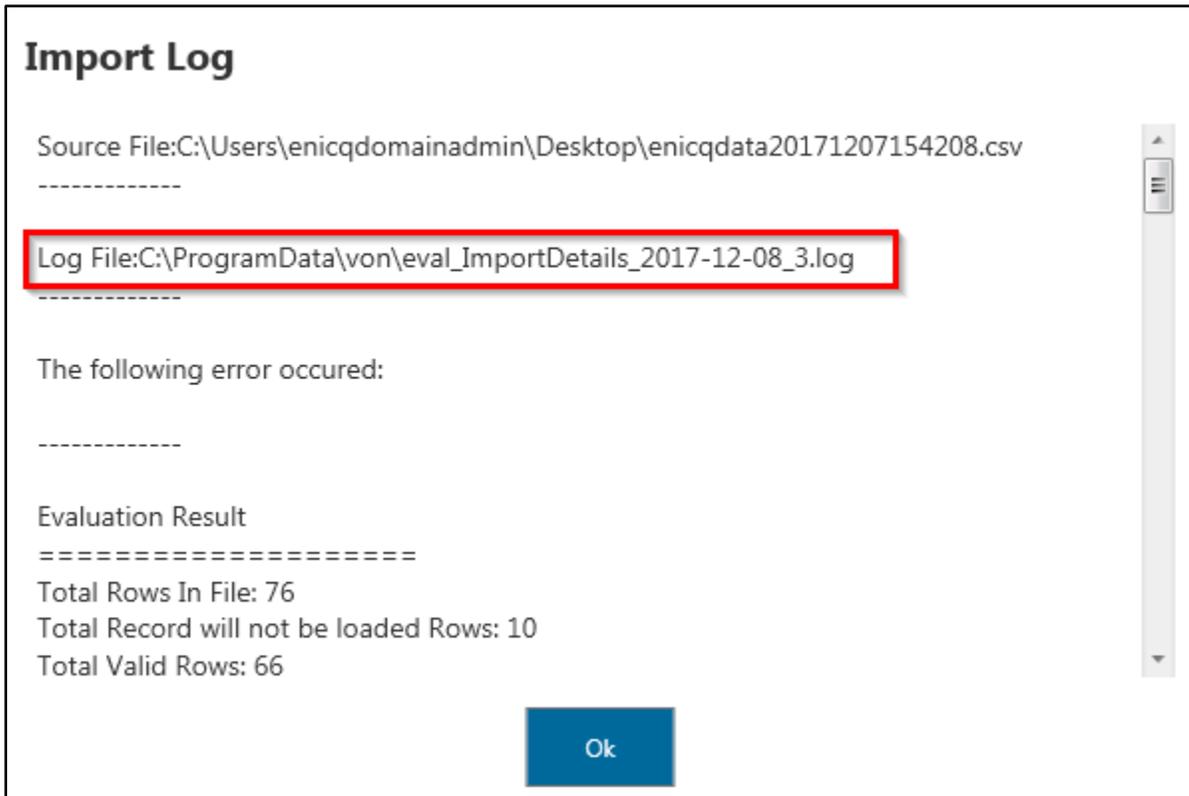


Figure 17 - Import Log

6. If everything looks correct click the Import button and wait for the process to complete.

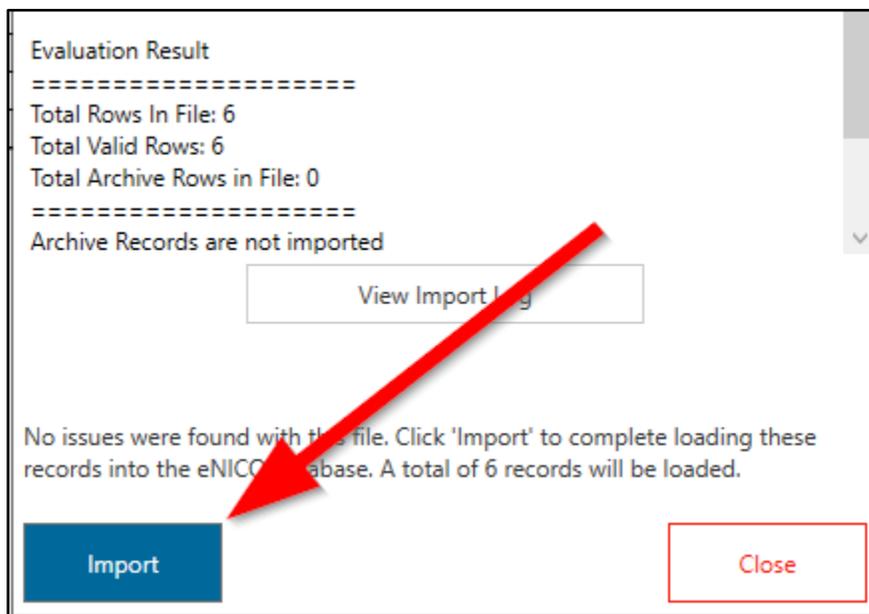


Figure 18 - Click Import

Removing the Old Database from the SQL 2012 Instance

Because there will no longer be any security updates to all versions of SQL Server 2012 it would be best to move or delete any database which was installed using that version. eNICQ 6 creates its own named instance when a local installation of the database is performed. Below are the steps to find the MDF and the LDF files (the database and the database log files) so they can be moved or a more secure location or just deleted altogether.

1. Open the Windows File Explorer by clicking on the folder icon near the Windows Start Menu



Figure 19 - Click the folder icon in the Windows taskbar to open Windows Explorer

2. On the left of the File Explorer window select **Local Disk (C:)**, and then open the **Program Files (x86)** folder

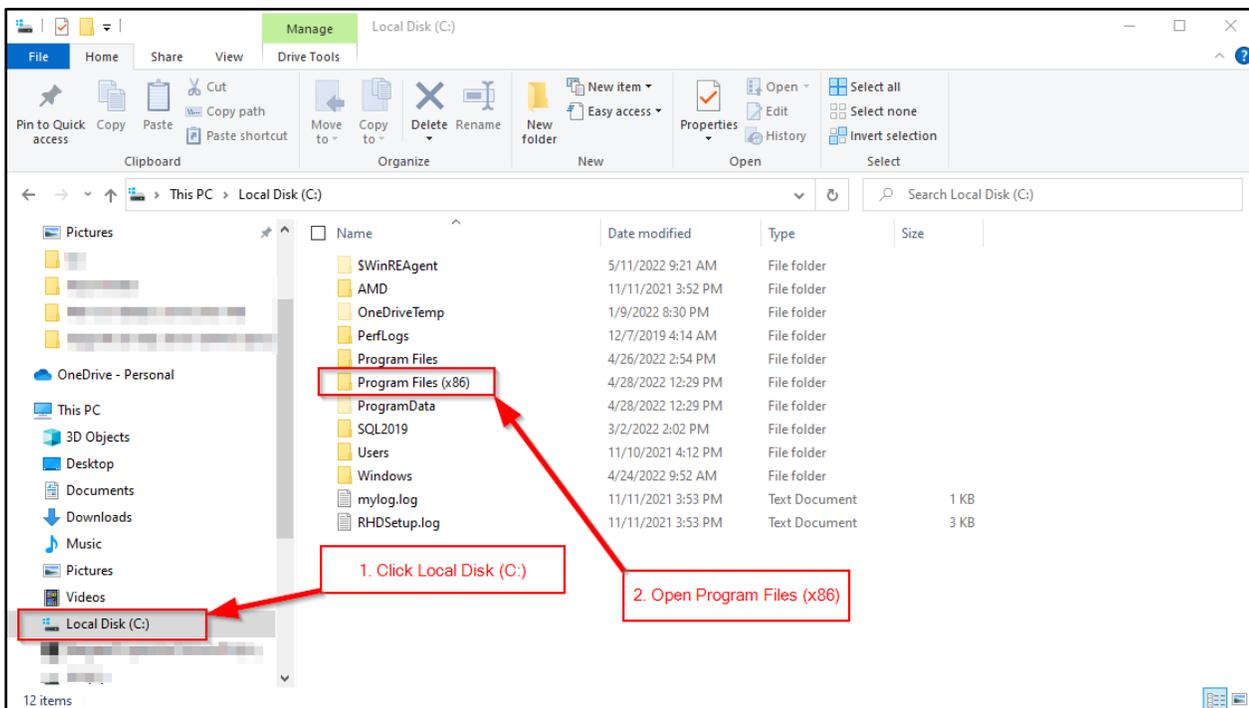


Figure 20 - Click on Local Disk (C:) and then open the Program Files (x86) folder

If you do not see a Program Files (x86) folder, then open the **Program Files** folder instead and continue with the next steps.

3. Find the **Microsoft SQL Server** folder and double click to open it

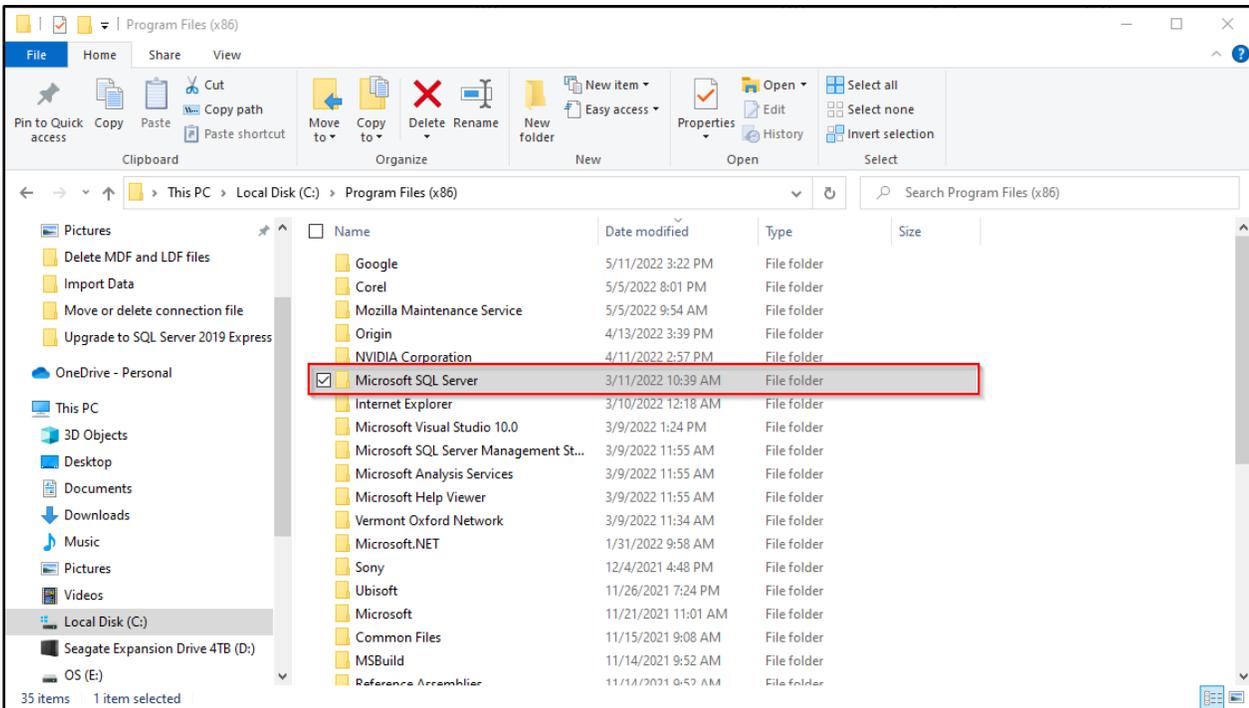


Figure 21 - Open the Microsoft SQL Server folder

4. Open the **MSSQL11.VONENICQ6** folder. You can tell this is SQL Server 2012 because it gives the version number in the first part, "MSSQL11".

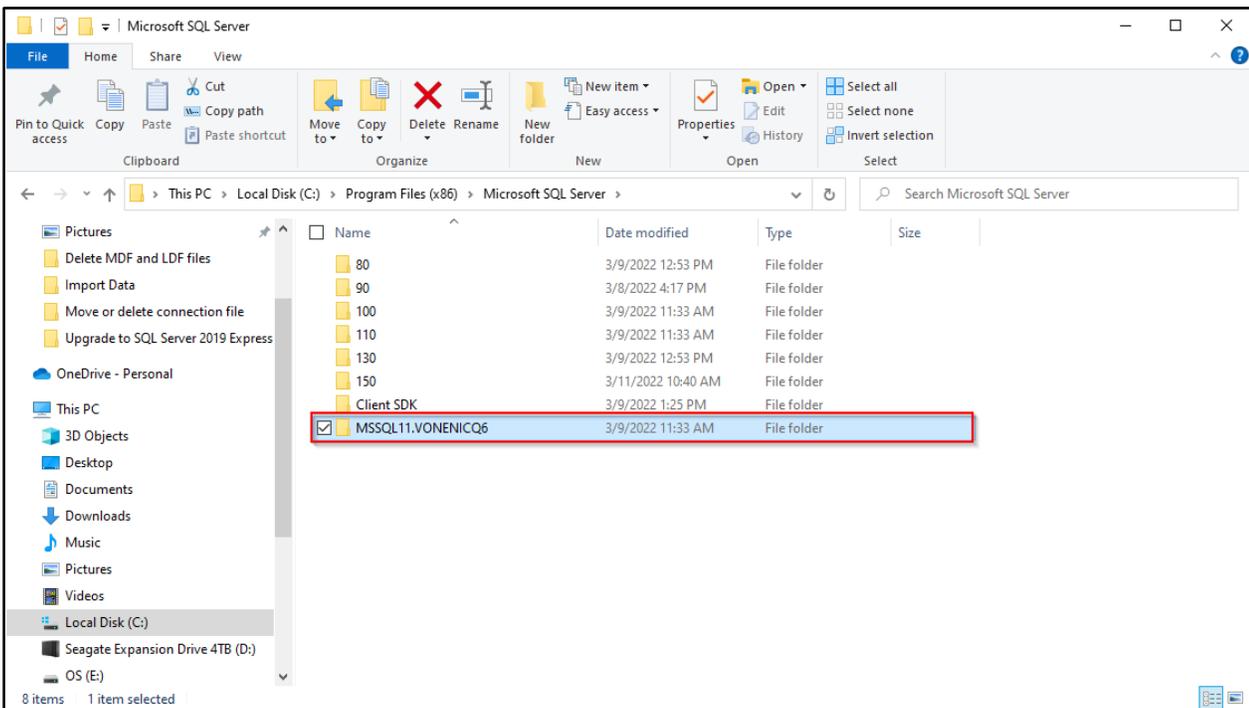


Figure 22 - Find and open the MSSQL11.VONENICQ6 folder

If you see a folder named “MSSQL15.VONENICQ” (the number in the first part is 15 and it *does not* end with a 6), that is the new installation on SQL Server 2019 Express. You do not need to do anything in that folder.

- Once you open the MSSQL11.ENICQ6 folder you will then have to open a folder called **MSSQL**, and in that folder find and open the **Data** folder (the full path to this location is C:\Program Files (x86)\Microsoft SQL Server\MSSQL11.VONENICQ6\MSSQL\DATA). In the Data folder you will see a file called **eNICQ6db** and **eNICQ6db_log**. The first file is the database while the second is the user log for the database.

Remove those files from the folder either by deleting them or by moving them to a secure location if you wanted to keep them for historical purposes. If you successfully imported the XML or JSON file into the new installation then the safest choice is to just delete them, though you will need to be a local administrator on the computer to do so.

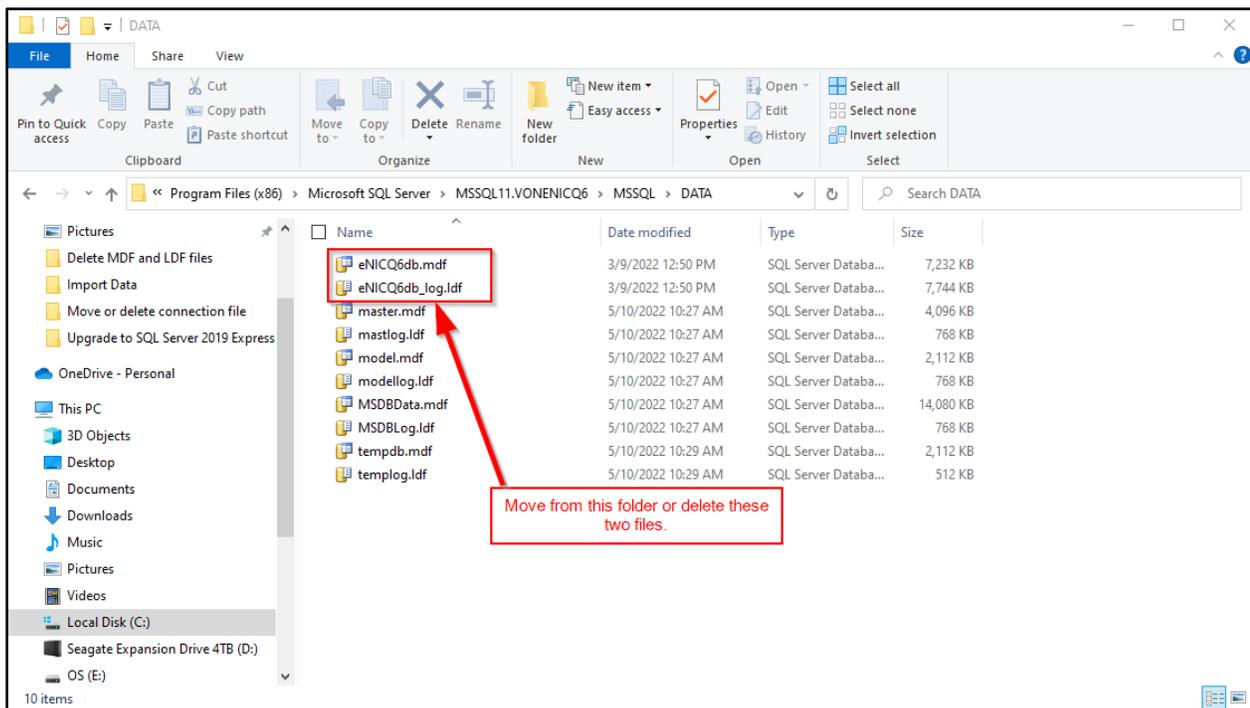


Figure 23 - Delete or remove the eNICQ6db and the eNICQ6db_log files

This is the final recommended step in moving the eNICQ 6 database from an instance of SQL Server 2012 Express to an instance of SQL Server 2019 Express. If you have any questions or concerns please contact VON Support at support@vtoxford.org or by calling (802) 865-4814 ex.240.