

How to Upgrade Your Access Version of E2 to SQL Server

This white paper details the process of converting your E2 Shop System Access database to SQL Server. Before you start, please review the following prerequisites before planning your upgrade.

If you are a new customer and plan to have Shoptech do a one-time data conversion of your previous system into E2, please make sure the data conversion process is complete before upgrading your database from Access to SQL.

- You **MUST** be using version **7.2.17 or higher** to complete these instructions.
- The SQL Server module for E2 (Professional Edition) must have been purchased and unlocked. The E2 splash screen will display Professional Edition if this condition exists. Contact Shoptech Software at (800) 525-2143 to purchase the module or (800) 877-6556 to request the unlock code.
- You must have a Server or computer with Microsoft SQL Server installed.
- You must have someone either on staff or reliable to administer the SQL Server software. This person should have experience with administering SQL Server.
- The SQL Server installation is a normal install with the exception of security. **You must install SQL Server in mixed mode, NOT Windows only.** You may also want to set the Default Database directory by editing the server Properties | Database Settings especially if you want your database(s) to be created on a partition other than C:\.
- Open the Microsoft SQL Server program group from the Windows Start menu. Expand the Configuration Tools sub-menu. Open the **SQL Server Configuration Manager**. Make sure that the SQL Browser service is set to start automatically and is also started. Under the SQL Server Network Configuration entry, click the entry for Protocols and make sure that the Named Pipes and TCP/IP protocols are enabled. When you make this change you will need to restart the SQL Server service. If you have problems connecting to the SQL Server/database from client workstations, then you should also review the Windows Firewall settings to allow connections from your client computers.
- *****Important - It is highly recommended that you review your Disaster Recovery plan. Please work with the person responsible for your network and computers to determine your backup and database maintenance strategy. See the end of this paper for more details.***
- If you have any questions about the process, please contact Shoptech Support prior to beginning the upgrade. If you require on-phone assistance, please contact a support technician before hand to schedule a time to upgrade.
- **If you have "Specials" (reports, *.EXE files, or other utilities) that Shoptech customized for you, please contact Support at (800) 677-9640 prior to your upgrade so that these specials can be modified to work with SQL Server. This process may take up to 4 WEEKS depending on the work involved. Please consider this before going live. If you have made modifications or created your own reports, use Crystal Reports to set the data source location to the new database on your SQL Server.**

Also, if this is a new E2 install, you *must* first create your company as an Access database. You can then upgrade the database to SQL Server. Please see the *Getting Started* manual for instructions on Creating your Company.

To Upgrade your company database:

1. Open Microsoft SQL Server Management Studio. On the Connect to Server dialog box select the appropriate server, if it is different from the default that populates, and then enter your Login and Password.
2. Right click on the Databases entry in the Object Explorer and select **New Database**.
3. Enter the name for your database in the Database Name field of the New Database window that opens. Shoptech recommends that you enter your company name here. It is a good idea to avoid spaces and dashes in the name you enter here.
4. There are a few additional changes that you may want to make before you click the OK button. In the Database Files area, you can tell SQL Server to create the database in its default location or another folder of your choosing. The path column will show you the location where the database will be created. You may see something like:
C:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MSSQL\DATA in this field depending on the version of SQL Server you are using. If you would like to have the database created in a different location, you will need to manually create the folder(s) through My Computer or Windows Explorer. For example, you may want to have operating system and program files only on the C: drive of your server. You could create a new folder called SQLData on the server's D: or E: drive if applicable. If you create a separate folder for your E2 database(s) then make sure that you change the value in the Path column so that both files (Data and Log) that make up this new database will be created there.
5. You should also click on the **Options** page in the upper left corner of the New Database window and set the Collation to **SQL_Latin1_General_CP1_CI_AS**. Click **OK** to create the new database.
6. Click **File | Open | File** from the menu. Browse to the **DBSCRIPT.SQL** file that is located in the ...blswin32\DAT\Empty_DB folder, highlight it, and then click **Open**. This file is not included in the initial installation of E2. If you are unable to locate it, you will need to update E2 to the latest version.
7. If you are asked to connect to DB Engine again then enter your **Password** again and click **Connect**.
8. In the upper left corner of the SQL Server Management Studio, you will see a drop-down menu with the word Master in it, you must change this. Click the down arrow to select the new database that you just created.
9. With the dbscript.sql file open and your database selected in the drop-down menu, click the **Execute** button.
10. Once you see the Command(s) completed successfully line in the Messages tab, close the Query window.
11. Repeat steps 2-10 for any additional company databases that you need to create.

E2 uses a connect string to access the database on the SQL Server. This connect string contains the login id and password needed to access the database among other things. It is best to use the same SQL Server login id and password for all users because E2 includes its own security within the application. You can use the "sa" (System Administrator) id or you can create your own id, such as "E2User". By default "sa" will have access to all databases on the SQL Server. If you create your own id, be sure to give this user id access to your company database and make it the db_owner (dbo). Please see SQL Server's help file for more information on creating logins.

12. Open **E2** and log in as **SUPERVISOR**.

13. At the Company Selection screen, select your Access company and click the **Upgrade** button. If the upgrade button is not available then you have either not logged in as SUPERVISOR or the Professional Edition of E2 has not been unlocked. Please see the bulleted list above for information on unlocking the Professional Edition.
14. Select **Yes** to continue the SQL Upgrade process.
15. Click **Next** to begin the SQL Upgrade Wizard. **Note:** you do not need to perform lines 1 or 2 in this window.
16. Click the **Browse** button to configure your SQL connect string.
17. On the **Provider** tab, select **Microsoft OLE DB Provider for SQL Server**. Click **Next**.
18. On the **Connection** tab, select the SQL Server name, enter a valid SQL Server login and password (sa if you do not create your own) making sure the checkbox **Allow saving password** is checked. Select the SQL Database with your company name.
19. Click **Test Connection** to ensure the information entered is correct. Click **OK** twice.
20. Check the Remove Old Database checkbox, if you no longer want the Access database to be available to users. Click **Next**.
21. Click **Next** to begin the upgrade process.
22. The upgrade process will begin. This will take some time depending on the size of your database. Click **Next** when completed. Click **Finish**.
23. Start E2 and login. Select the SQL database. You are now ready to begin using the E2 Shop System SQL version.

****Important** - Although Shoptech is not responsible for the integrity of your database or for creating your backup routines, we are providing this information as an aid to help prevent issues that are the result of not maintaining your database correctly.

Your E2 SQL Database may have been created using the "Full Recovery Model" setting. This means that if your backup routine is created correctly you can actually return your database to a specific point in time should a failure occur, by restoring backed up transaction logs.

The downside is that when you do a full backup of the database, the transaction log is not automatically truncated and will continue to grow and use disk space. You can prevent this from happening by scheduling regular transaction log backups. All editions of SQL Server except for SQL Express provide an Agent service that can be used to schedule jobs; like backup routines. If your database is set to use the "Simple Recovery Model" then doing a full back up through SQL Server will truncate the transaction log. However you may need to shrink the transaction log file should it grow large between your regular full backups.

There are many methods for backing up SQL Databases; from manual methods to 3rd party applications. For best results, make sure that the method you choose allows for the transaction logs to be truncated. Please work with your network administrator to determine the best procedure for your environment.

Backup strategies - <http://technet.microsoft.com/en-us/magazine/2009.07.sqlbackup.aspx>

Along with regular backups Shoptech suggests that you also create database maintenance plans.

Database Maintenance Plan

1. It is highly recommended that you allow SQL Server to run a Database Maintenance Plan on your SQL Server database. You should do this in addition to your normal backup.
Maintenance Plans - <http://technet.microsoft.com/en-us/library/ms187658.aspx>
2. Open the Microsoft SQL Server Management Studio. Expand your SQL Server in the Object Explorer pane until you locate the **Management** folder. Expand **Management**, and then select **Maintenance Plans**.
3. Right Click in any open space and select **New Maintenance Plan**.
4. Give your Maintenance Plan a name. Click **OK**.
5. You can use the items in the **Toolbox** to build your Maintenance Plan.

Shoptech suggests that you at least include the **Check Database Integrity Task**. There may be other tasks that you choose to add to help keep your database tuned. Refer to **Help** in the **Microsoft SQL Server Management Studio** for information on building Maintenance Plans.

Please contact Shoptech Support at (800) 677-9640 x 2 with any questions regarding these instructions.

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