



# **DSD Business Systems**

MAS 90 Enhancements

LMSQ

SQL Mirroring

Version 4.10

**sage**  
software

**Master Developer**

# SQL Mirroring

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SQL Mirroring User's Manual  
Version 4.10

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## SECTION A: Introduction

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This manual contains a description and instructions for this DSD product. Operating instructions are included for the features added by this product to MAS 90. For instructions on using MAS 90, refer to the appropriate MAS 90 manual, or call your MAS 90 reseller. DSD Business Systems offers excellent MAS 90 support, at an hourly rate.

### Web Resources

DSD web site: <http://www.dsdinc.com>

The Enhancement page contains:

- Current Release Schedule*
- Purchasing Information*
- Installation Instructions*
- Product Support*
- Enhancement Links*

ARAD A/R Alphanumeric Divisions: <http://www.dsdinc.com/enh/pages/ARAD.htm>

The product web page contains:

- Product Description*
- Adobe Acrobat Product Description*
- Web Links*
- Current Product Version Table*
- Product Installation File Download*
- Product Manual in Word 97 and Adobe Acrobat Formats*
- Revision History*
- FAQ*

### Support

DSD provides product support through MAS 90 resellers. Support is provided for the current version. Older versions are supported at an hourly rate. DSD's telephone number is **858-550-5900**. Fax: **858-550-4900**.

For a hard error, where the program displays an error dialog, report:

- Error number.*
- Program name.*
- Line number.*

*Program version.*

*Exact sequence that caused the error, including menus and menu selections.*

*Other pertinent information.*

If leaving a message or faxing, please include:

*Your name.*

*Your phone number (and fax if applicable) and extension.*

It is possible to be unable to duplicate a problem, because of data corruption or because we have not exactly duplicated a particular operating environment. In such circumstances, we can only continue to try to fix the problem if we can either access the system with Symantec PCAnywhere or by some other means access or duplicate the system.

## Features

- **SQL Mirroring** allows the user to choose which Sage MAS 90 and Sage MAS 200 Data files to be mirrored directly into a SQL Database in '**Real Time**'. This means as the records are added, updated, or removed from the native Providex Database, a live record will be mirrored to your chosen SQL Database.
- The user may use Crystal reports to report directly from the SQL database.
- For Sage MAS 90 and Sage MAS 200 Form Printing, if the module is a "Business Framework" module, then the Crystal Work Files are mirrored to SQL automatically.
- NOTE: The **SQL Mirroring** product only writes, removes, and updates the SQL Database, but doesn't read from it. Therefore, if you use another application to write to the SQL Database, those changes will NOT be reflected back into MAS90.

## SECTION B: Getting Started

### CAUTION

- **If you reinstall or upgrade one of the MAS 90 modules listed in the following table, you must also reinstall this Enhancement.**
- Enhancements from different Master Developers are generally not designed to work together. If installed together, problems are likely to occur.
- **Check with DSD before installing more than one Enhancement.**
- **Do not install this Enhancement on MAS SQL Systems.**

### Required Levels

MAS 90 Module	Module Required	Required Level
L/M	Y	4.10

### Installation

The following instructions are for installing to Windows. For UNIX instructions see the "INSTALL.HTM" HTML file on the CD-ROM (you can use a Windows machine to view it.) It will guide you in mounting the CD-ROM on the UNIX file system and running a UNIX installation script.

1. **Back-up:** Exit all MAS 90 / MAS 200 sessions. Back-up existing MAS 90 / MAS 200 data.
2. **Check Levels:** MAS 90 / MAS 200 module levels **must match** those listed above.
3. **Run Enhancement Setup Program:** Insert the installation CD-ROM. The installation will normally run automatically, otherwise, run SETUP.EXE on the CD-ROM. This can be run from the server or a workstation. Follow on-screen instructions. *If installing from an e-mail message or from a Web download, run the program sent to you (or downloaded). This will self-extract and run same Setup program.*
4. **Re-Start MAS 90 / MAS 200:** MAS 90 / MAS 200 will be updated.
5. **Unlock the Enhancement:** DSD Enhancements must be unlocked to run. When any part of the Enhancement is run for the first time, the **DSD Enhancement License Agreement and Activation** window will appear. Follow the steps shown on that window. *You can click the Help button for more detailed instructions.*

**Note:** On the next page is a screenshot of the DSD Enhancement License Agreement and Activation window.

After accepting the License Agreement, you can then select the type of unlocking that you'd prefer. The choices are Normal, Demo and Web.

**Normal Unlock:** You will need to unlock the Enhancement by calling DSD during business hours (8am to 5pm PST) at **858-550-5900**.

**Web Unlock:** If the system that is running the DSD Enhancement *has web access* and you *have a DSD WebUnlock code*, can unlock the Enhancement without assistance using WebUnlock. When this option is selected, the window will change to show the WebUnlock entry section. Enter the WebUnlock code and click the Unlock button.

- *Entering a WebUnlock code will unlock all DSD Enhancements that have been licensed.*
- *The MAS 90 / MAS 200 system that is being used must have web access for this option to be available.*
- *You can get a WebUnlock Code from your DSD Enhancements sales representative.*

**Demo Unlock:** If a Demo mode is available for the Enhancement you're running, you will be able to Demo unlock the product without assistance from DSD for demo purposes.

- *Creating a Demo Unlock is a good way to temporarily unlock DSD Enhancements off-hours, if you do not have web access and/or an WebUnlock code. Later, you can unlock the product fully, during business hours.*

**Note:** You can also unlock a DSD Enhancement through the DSD Utility Suite window. This is accessed at the bottom of the Library Master Utility menu. In the DSD Utility Suite window, click the **DSD Enhancement Control Panel** button on the bottom of the window. Then, select the Enhancement with your mouse from the list of Enhancements and click the **Unlock Product** button on the right side of the window.

6. **Convert Data:** After registration, the Data Conversion window will appear. Follow on-screen instructions to complete data conversion. *You can exit the conversion program without converting data. The Enhancement will not proceed, however, until data is converted. If you enter an enhanced program and data has not been converted, the conversion program will run again.*

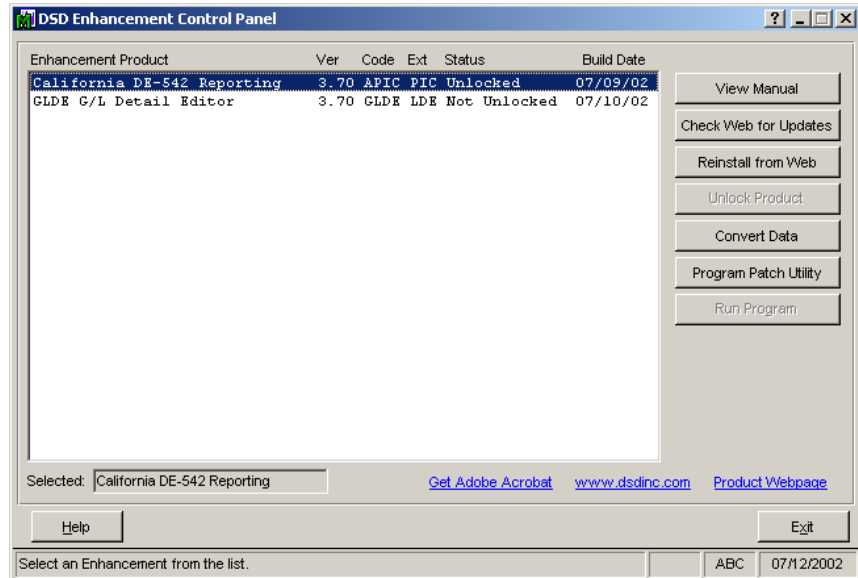
## DSD Enhancement Control Panel

Starting with version 3.70, all DSD Enhancement products include DSD's Utility Suite menu and DSD's Enhancement Control Panel. The **DSD Utility Suite is accessed from the Library Master Utilities menu**. The **DSD Enhancement Control Panel** is accessed from a **button on the bottom of the DSD Utility Suite window**.

The DSD Enhancement Control Panel is a simple to use yet powerful system to help maintain DSD Enhancements installed on a MAS 90 / MAS 200 system. To use it, select an Enhancement product

from the list on the window and then click the button, on the right side of the window, which corresponds with the desired task.

**View Manual:** This button will display the product manual for the selected Enhancement using Adobe Acrobat. For this to be possible, the PDF file for the corresponding manual must be in the “MAS90/PDF” folder in the MAS 90 system. If the file is not present, and the system has web access, the correct PDF file will be automatically downloaded from the DSD website, put into the “MAS90/PDF” folder and then displayed.



**Check the Web for Updates:** This button will check the DSD website to see what the current build is the selected Enhancement and alert the user if a later version is available. *This requires a web connection on the MAS 90 / MAS 200 system.*

**Reinstall from Web:** After a verify dialog, this will automatically download and reinstall the selected Enhancement from the DSD website. *This requires a web connection on the MAS 90 / MAS 200 system.*

**Unlock Product:** This will cause the DSD Enhancement License Agreement and Activation window to appear. Using this window is described on the previous page. *This button is disabled if the selected Enhancement is already unlocked.*

**Convert Data:** After verification, the selected Enhancements data conversion program will run.

**Program Patch Utility:** Only use this option under the guidance of a DSD Enhancement Technician. That person will guide you in its use.

**Run Program:** This button is enabled for certain DSD Utility programs only.

### Additional Controls

**Help:** The Help button, located at the bottom left of the window, opens an HTML help file similar to the above.

**Get Adobe Acrobat:** Opens the Adobe Acrobat website to the page where Acrobat can be downloaded and installed.

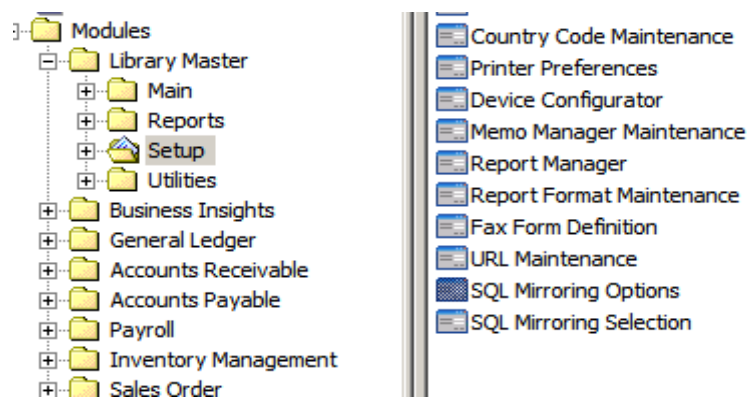
There are also links to the DSD website and the Enhancement page on that site.

## SECTION C: System Operations

**IMPORTANT: SQL Mirroring** needs to work in conjunction with a SQL Server and ODBC. Your SQL Administrator should be contacted to insure that a proper system exists for Sage MAS 90 / Sage MAS 200 to mirror into. This Manual does not attempt to explain SQL Administration, only those parts that pertain to setting the ODBC DSN (Data Source Name). If you have questions on SQL, please contact your Database Administrator.

### SQL Mirror Options

After installation of the product, there will be two new menus in the Library Master Module: **SQL Mirroring Options** and **SQL Mirroring Selection**, as seen at right.

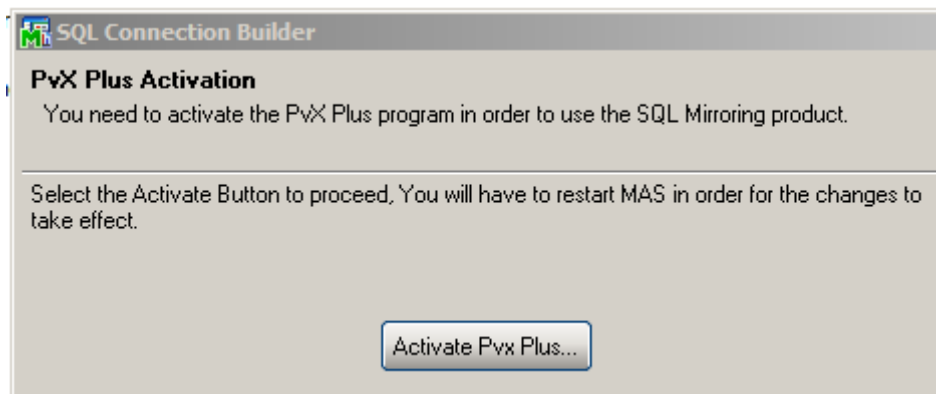


Select the **SQL Mirroring Options** menu item. This wizard will take you through the **SQL Mirroring** setup process.

### PVXPlus Activation

When you first access **SQL Mirroring Options**, the PVXPlus Activation panel is displayed (see below) Select the Activate PVXPlus button to activate.

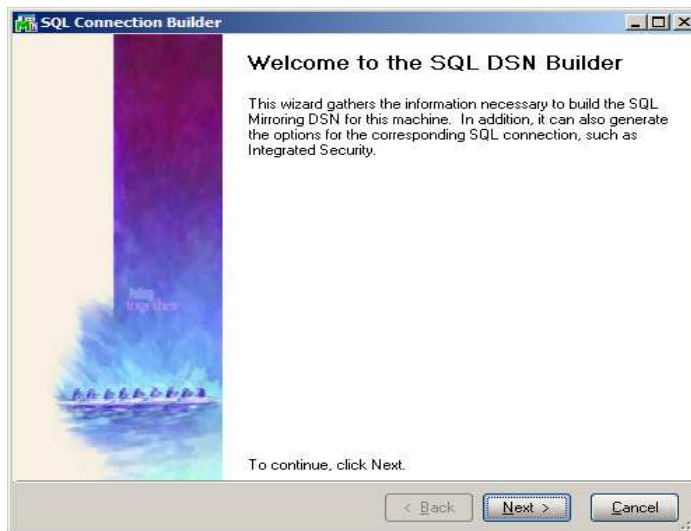
Once activated, you will need to **restart Sage MAS 90 / Sage MAS 200**.



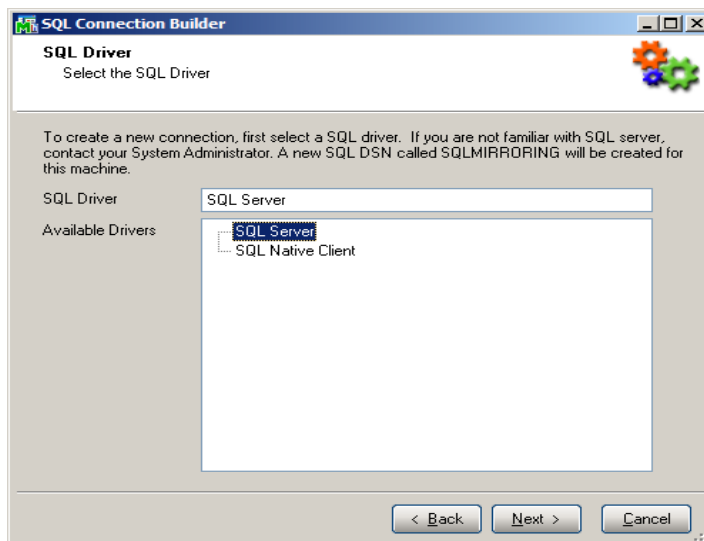
After you have restarted Sage MAS 90 / Sage MAS 200 a restart, re-enter **SQL Mirroring Options** to initiate the SQL ODBC DSN Builder Wizard.

## SQL DSN Builder Wizard

The SQL DSN Builder wizard will allow you to create the connection through ODBC that the SQL Mirroring product requires to operate. The first screen is a welcome screen. Select the **Next** Button to start the process.

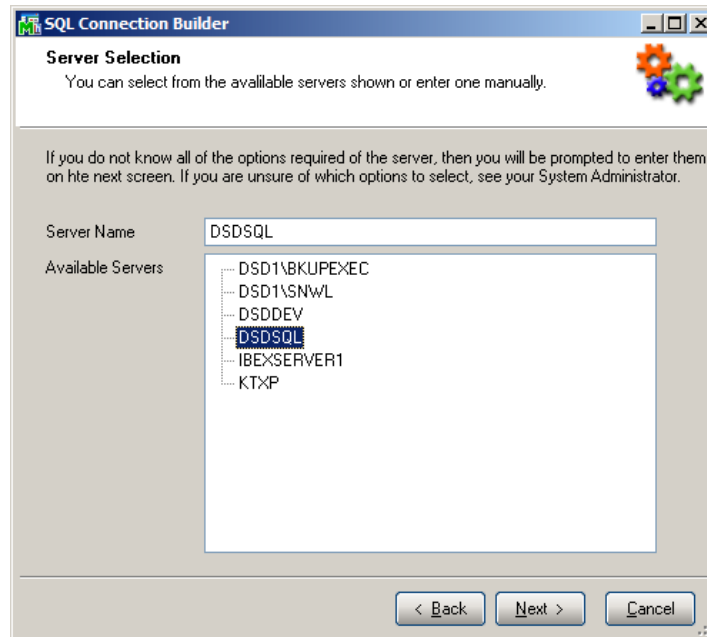


The next panel is the Driver Selection Panel, where you can select the SQL Server that will be used to mirror the Sage MAS 90 / Sage MAS 200 Data files. All published SQL Providers are listed. Select the **Next** Button after you have made your selection.



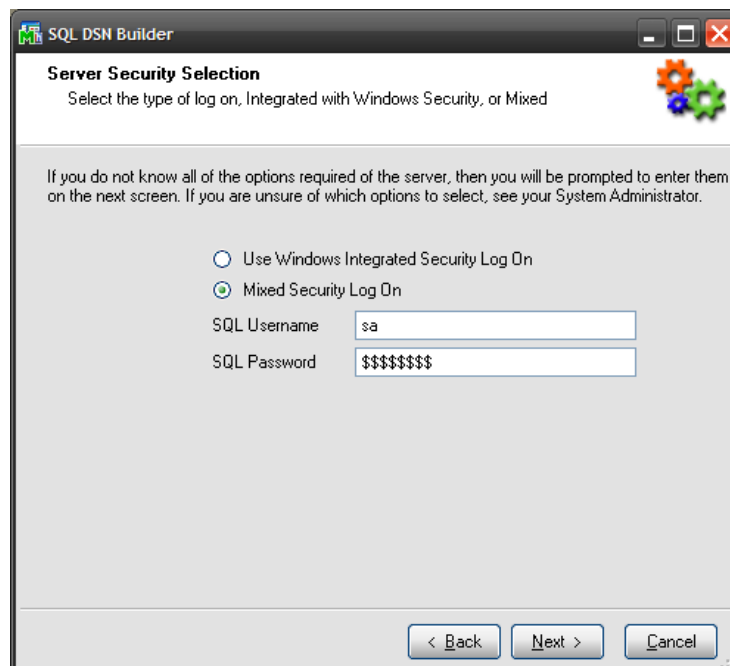
**IMPORTANT:** If you have any questions on which Driver to pick, please contact your Database Administrator.

The next panel is the Server Selection Panel, where you can select the SQL Server to mirror the Sage MAS 90 / Sage MAS 200 data files. Select the **Next** Button after you have made your selection.



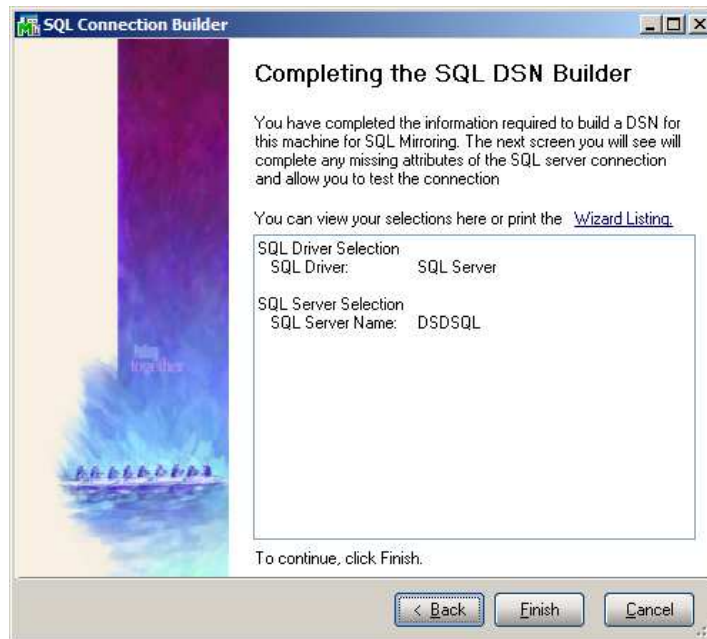
If you have any questions on which server to pick, contact your Database Administrator.

The Next panel is the SQL Security Selection where you can specify SQL mixed security or Windows Integrated security.

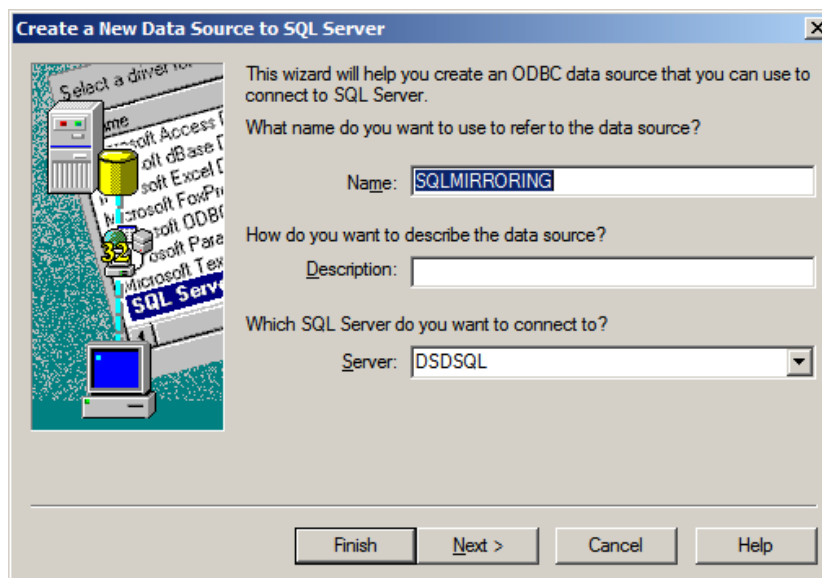


If you have any questions on which security model to pick, contact your Database Administrator.

Once these selections are made, you may select the **Finish** Button to start the advanced ODBC Setup program.



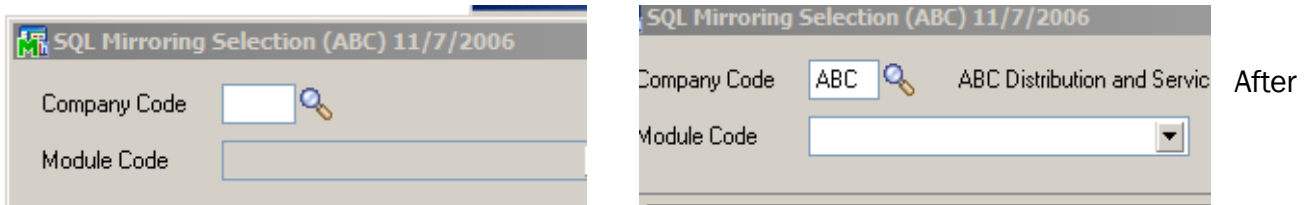
The series of panels for the **Create New Data Source for SQL Server** will default the DSN Name. **Do not change the name!** The SQL Mirroring product will use this DSN Name internally. Other panels will follow this one, and should be done in accordance with the Database Administrator. Once the DSN has been created, then you can move onto the **SQL Mirroring File Selection** Menu Item.



**SQL Mirroring Selection**

**IMPORTANT:** Please log all users out of MAS 90 / Sage MAS 200 prior to accessing the **SQL Mirroring Selection**.

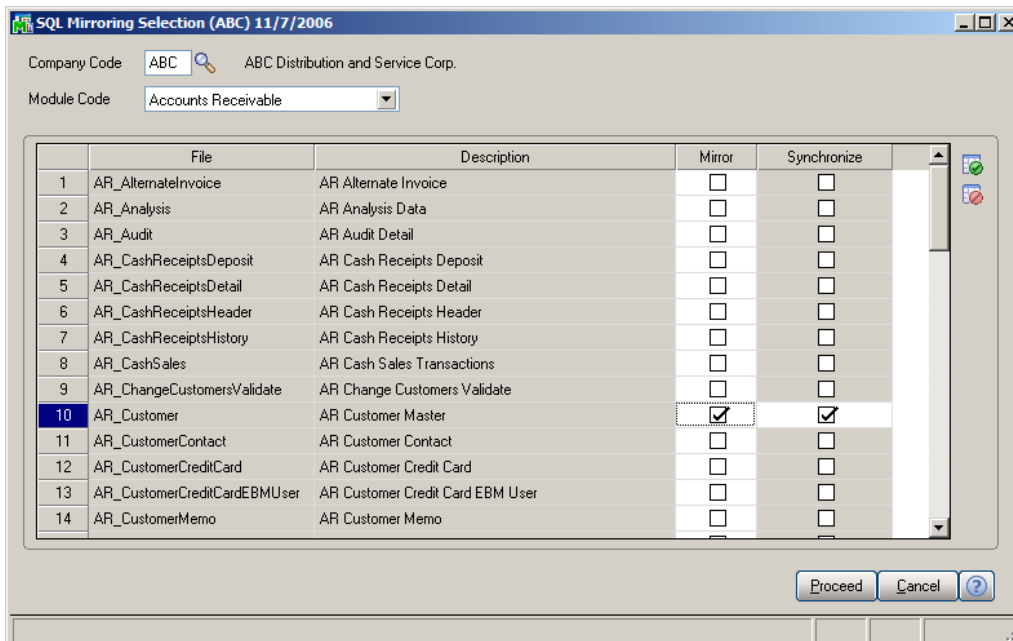
The Selection process is by company and module. First, Select a Company Code to Mirror, then select the Module Code to access the files for that module.



selecting a module, you may select the data files that you wish to mirror. Make sure that the Synchronize checkbox is checked, so that the Providex file is copied to the SQL Table.

**NOTE: No Data will be loaded into the SQL Databases without selecting the Synchronize checkbox.**

In the Example below, the AR\_Customer data file is selected to be mirrored from Sage MAS 90 / Sage MAS 200 into the SQL Database.



## *System Operation*

SQL Mirroring runs in the background. As every record in a mirrored file is added, changed or removed, those changes will be updated in the SQL database automatically. The files will continue to mirror changes until they are de-selected.

**Note:** This current version has limitations when MAS 200 is running as a service, until this is resolved; MAS 200 must run as an application.

**Note:** Integrated security with full “dbo” permissions are highly recommended

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To:	<b><i>DSD Business Systems Customer Service</i></b>		Fax:	<b><i>858/550-4900</i></b>
From:	Name:		Phone:	
	Company:		Fax:	
Date:	/ /	# Pgs Including this Page:		
Subject:	Check One: <input type="checkbox"/> Product Problem <input type="checkbox"/> Suggestions			
Product:	<b><i>LMSQ SQL Mirroring</i></b>		Version:	<b><i>4.10</i></b>

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