



WinDSX SQL to SQL Update

Upgrading from 4.6 and above to Version 4.8 and above including 4.9 and 4.10

Follow these simple steps and you will be on your way to using the latest WinDSX SQL Software. Read through all steps in this document before proceeding. If you are upgrading from a version below 4.6 see the SQL Renumbering doc in the Docs folder of the Software CD. Make a Backup of your DataBase.

1. Locate the WinDSX folder on the Comm Server. Inside the WinDSX folder locate the MdbStruc subfolder, for example c:\WinDSX\MdbStruc\. Look in this folder and note the highest numbered Upgrade#.sql script file. Once the new software is loaded you will view this same folder to see what new Upgrade Script files there are to be run.
2. Close the program on all PCs. The DSXComm, DSXKey, and DSXDbas services, if found, will need to be stopped. At the Comm Server PC, navigate to the Install folder containing the new software and locate the Setup.exe. Right click and select **“Run as Administrator”**. The system will respond by displaying what version is currently installed. When prompted for “Repair or Remove” select “Remove” as this removes the program but leaves the data.
3. From the Install folder containing the new software, right click on Setup.exe and select **“Run as Administrator”** making sure to install it to the same folder the older version was installed in. Do not Start the DBSql.exe program at this point.
4. From the upgraded Comm Server locate the WinDSX\MdbStruc subfolder, locate the new Upgrade#.sql script files and copy them to the SQL Server. At the SQL Server run the new Upgrade#.SQL script files.
5. Back at the Comm Server right click on the DbSql.exe file and select **“Run as Administrator”**. This latest version may perform an Upgrade to the

existing Access Levels the first time you login. This process could take a while but should only occur once. See the Note below.

6. At each Client PC, navigate to the Install folder containing the new software and locate the Setup.exe. Right click and select **“Run as Administrator”**. The system will respond by displaying what version is currently installed. When prompted for “Repair or Remove” select Remove. This removes the program but leaves the folder and data. Right click on Setup.exe a second time and select **“Run as Administrator”** and make sure to install it to the same folder the older version was installed in. Once the software is installed locate the DbSql.exe program in the WinDSX folder. Right click on DbSql.exe and select “Run as Administrator”. Repeat this for all Client PCs.

Note /// When upgrading from 4.5.12 and lower to 4.5.13 and higher at the Comm Server, the Access Levels are upgraded. When upgrading from 4.8.50 and lower to 4.8.51 and higher at the Comm Server or DailyOps PC, the Access Levels are modified to the latest schema.

Scripts

If you failed to determine which new scripts were installed between Step 2 and 5 you can use the following guide.

When upgrading:

- From WinDSX SQL 4.0 – 4.7.15 run all scripts. Upgrade1.sql – Up
- From WinDSX SQL 4.7.16 and higher - run Upgrade6.sql – Up

// It is ok to run a script more than once.

Permissions

The User of the system must have Full Control over the local WinDSX folder, the Shared WinDSX folder, the SQL Databases and Read Only to - Windows\System32.

Windows 7 and 10 / Server 2008 and 2012

When installing DSX programs in these versions of Operating System it is important to right click on the setup.exe and select “Run as Administrator”. The first time any of these executables are launched, the process should be to right click on the .exe and select **“Run as Administrator”**. Shortcuts can be modified to do this automatically under the compatibility tab.

USB Features Key

DSX Softkey and DSX Key Monitor are now part of all DSX software installations. Locate the DSX Softkey instructions in the "Docs - Software" folder on the software distribution flash drive ([dsxsoftkey.pdf](#)). Once you have installed or upgraded the WinDSX software you will need to create a DSX Softkey unless your system already has one. You can determine this by looking in the WinDSX folder on the Comm Server. If you find a DSXKeyData.xml file, your system has a key, and if you can edit a card holder, your key is functional.

Upgrading/Migrating SQL Servers

When using SQL server as the database there is still a file share (folder) where all the other objects that aren't stored in SQL are kept such as photos. That share location can be found in the WinDSX Database program under > Database Path. This path should be the same on all the WinDSX clients.

There are two SQL databases that need to move, AcsData and AcsLog. Unless we are moving to SQL 2012 we can just do a backup and restore onto the new SQL server.

Once we have the databases on the new server. We go to each WinDSX client, and with the WinDSX SQL program closed, run SQLsetup.exe from within the WinDSX folder. This program will set the connection properties of the new SQL server for WinDSX SQL to use. Start the program and be sure to set the DataBase Path to the Shared Folder. UNC is preferred. Close and Restart.

Upgrading/Migrating to SQL Server 2012/14

If moving to a SQL Server 2012/14, upgrade to the latest version of WinDSX SQL. Start the program once and Cancel at the Login Screen.

Move the DataBases to the 2012 SQL Server and run the Upgrade to 2012.sql script found in the WinDSX\MdbStruc subfolder of the Comm Server.

Once the databases are on the SQL 2012/14 Server and the upgrade script has been run, go to the comm server and run the SQLsetup.exe from within the WinDSX folder. This program will set the connection properties of the new SQL server for WinDSX SQL to use. Start the DataBase program and set the DataBase Path to the Shared Folder. UNC is preferred. Close and Restart.

See the \Utilities\2012 SQL Server\ folder on the flash drive for scripts and instructions on SQL Server 2012 utilization.

Upgrade each client and start the program. Be sure and configure the Workstation Name and Number and set the DataBase Path to the new SQL Server and to the Shared Folder (UNC preferred). Close and Restart.

SQL 2012/2014 Additional Configuration

In SQL 2012 the TCP/IP protocol and Named Pipes must be enabled. Start the SQL Server Configuration Manager on the SQL 2012 database server. Navigate to Protocols for MSSQL Server. Enable both Named Pipes & TCP/IP.

Double click on the TCP/IP protocol name. On the TCP/IP Properties window, Click the IP Addresses tab. Scroll all the way down to the bottom. Make sure the TCP Port is set to 1433.

In SQL Server 2012 you must manually turn on the SQL Server Browser Service! Go to services on the server. Find SQL Server Browser. Double click the service. Change the startup type from "Disabled" to "Automatic." Click the START button on that same screen.

Comm Server as a Service

Comm Server as a Service is a simple procedure outlined in the [DSX Services.pdf](#). This document is found in the Utilities\CS as a Service\ folder on the software distribution flash drive. All instructions and supporting files are found in this folder. The Comm Server when configured to run as a service will run the DSX Key Monitor program as a service. This negates the need to have the Key Monitor program configured as a service.

Moving the Comm Server to a Virtual Server

To migrate the Comm Server to a Virtual Server or new PC, follow these simple steps.

1. Uninstall the software on the existing Comm Server. This leaves the WinDSX folder and all data.
2. Copy the WinDSX folder on the Comm Server and Paste it to the target drive of the Virtual Server.
3. Install the WinDSX software into that same folder. It may be necessary to adjust IP Addresses under System Parameters and Comm Ports.

Active Directory Authentication

WinDSX SQL can utilize complex logins and passwords facilitated by Active Directory in Windows™. Operator Logins can be authenticated

by Active Directory instead of WinDSX. To configure this, the WinDSX SQL Operators use the same Login Name as they do in Windows™. Their Login name is entered like always under Operator Passwords. The Operator is assigned a Password Profile but is not assigned a Password. When WinDSX SQL receives a login from an Operator that does not have a password stored in WinDSX SQL, it sends the login request to Active Directory (AD) for authentication. If AD authenticates the operator, they are given access to WinDSX SQL according to the Password Profile assigned to them. To Enable AD Authentication run Upgrade Script # 9 at the SQL Server. When entering the operator in WinDSX skip the Password Fields just entering the Operator name and assigning a password profile.

Primary and Backup SQL Servers

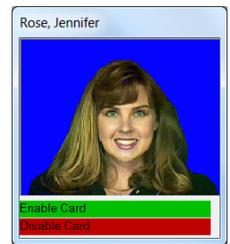
This version of WinDSX SQL allows for the definition of both a primary and backup SQL Server and Database Path. If the primary SQL Server fails the software can be shut down and restarted and it will connect to the backup SQL Server and Database Path. DSX does not automatically reconcile the databases when the primary returns. This feature will facilitate off site backup SQL Servers that cannot use SQL Clustering. Once the software has been upgraded, run the SQLSetup.exe program in the WinDSX folder. Each time you run it you can define a SQL Server to attach to and specify if it is the primary or backup SQL Server.

AES 256bit Encryption

WinDSX and WinDSX SQL can now be secured using AES 256-bit Encryption. The encryption can be implemented between the Communication Server and the field controllers and between Communication Server and Workstations. This feature requires firmware version 3174 or higher in all controllers and that the feature be purchased and enabled in the DSX SoftKey. Each Location can have an Encryption Key entered to encrypt the communications between the Comm Server and that Location's controllers. The AES 256-bit Encryption propagates itself from the Master Controller to all subsequent controllers. Each Location can optionally be given up to 32 keyboard characters as an Encryption Key. The key cannot be viewed once entered. Controllers will only switch in and out of encryption at power up. The Comm Server can be given a separate key to encrypt communications to all Workstations.

Card Enable/Disable from Image Recall

There is a new feature that will allow a card to be enabled or disabled from the Image Recall Window in Workstation. When the picture is displayed in response to a card read the operator can double click on the text at the bottom of the window and Enable/Disable buttons will appear.



The operator can click on a button to enable or disable the card that was just read. The feature uses the Database API to send text files that change the stop date of the card. The database program must be running on the Comm Server PC or the Daily Ops PC. Disable will set the stop date to the present time. Enable defaults to setting the stop date to the next day. See the Software Installation Manual for details.

The Enable/Disable setting can be overridden using the C:\WinDSX\RunData\DB_Settings.txt. Locate the keys below in that file and set how many days the card should be enabled for or what time it is to be deactivated.

Name: CeOffset

Value: 0 <set this to # of days or to 0 to disable

Default: 0

Desc: DispMug Card Enable date offset. 1=card will be enabled for 1 day. Set to 9999 to enable card forever. **Set to 0 to disable feature.**

Startup Map

There is a new feature that allows Workstation to display a Map at startup. This can be used where the Map is to display when the program is started and stay up all the time such as in a security office.

To configure this feature, close the program on the PC where it is to be used. Browse to the WinDSX\RunData\ folder. Locate the WS_Settings.txt file and open. Scroll to the bottom where you will find the entries regarding the Startup Map.

Startup Map Name - name of map within software.

Startup Map Is Maximized - full size of map

Startup Map X Position - starting position

Startup Map Y Position - starting position

Startup Map Save Changes - can be set to YES so that once the program is running and the Map is displayed you can move it to where you want it to be. Once closed, it will start back up in that same position. You can enable Save Changes, start the program, position the map, close the program, set the Save Changes back to No and it will always come up in the place you specified.

Email Notification

Email Groups are groups of people that will be sent an email or text message due to a Location, Device, or Input Alarm. Email Groups consist of a single or multiple Card Holders that each have a Time Zone assigned in the group. The Time Zone selected for each Card Holder determines when that person will receive the email notification for the alarm to which the Email Group is assigned.

Card Holders that are to receive an Email Notification must have an Email Address in a UDF field that is configured as an Email Address. Email Groups can be assigned to a Location, to each Device and to each Input desired. Those that have an Email Group assigned will send an email or text message upon alarm. See the Help on Email Groups and UDFs.

Before Starting:

1. You need an exchange server or an ISP such as ComCast or RoadRunner. Alternatively, you can use web based email such as Gmail or Yahoo as your email server if you know what ports are required and your fire wall allows access through these ports. For Gmail: Change your settings > Go to the "Less secure apps" section in My Account. Next to "Access for less secure apps," select Turn on. (Note to Google Apps users: This setting is hidden if your administrator has locked less secure app account access.)
2. Test to make sure that you can send an email to yourself. Then try to send an email to one of the desired target addresses from this email program.
3. Make sure that the Windows User has full control over the local WinDSX Folder on the Comm Server PC where the software is installed.

.Net Configuration:

4. To setup up the Email client, this PC must have the .NET Framework 4.0 or higher installed.

OIMail.exe configuration:

5. In the WinDSX folder on the Comm Server PC there is a file called OIMail.exe. This program has to be run once and initialized: Double Click on OIMail.exe.

A.) Enter the Name of the "SMTP Server" to send the email through.

B.) Enter the "Port Number". The default is 25. You may have to get this information from your IT department or from your email provider.

C.) Enter the "From Email Address" that will be used on all email's sent. This is the User Name from the email provider.

D.) Select "Server Requires Authentication" if the SMTP Server requires a password. Enter the Password in the "Password" field.

E.) Select "Server Requires Secure Sockets Layer" if SSL is required.

F.) Select "Log Command Lines" for trouble shooting purposes only. This will cause OIMail to create an OIMail.txt file to be written into the c:\WinDSX\Errors folder on the comm server PC.

WinDSX Configuration:

6. Once the above has been configured it is time to configure the WinDSX Database program.

A.) Define a UDFName and configure it as "*Data is Email Address*".

B.) Edit or Add a cardholder and assign an email address to the UDF designated as an Email Address field.

C.) Create an Email Group and assign it to those Locations, Devices, and Inputs that you want to initiate an Email Notification. *Press F1 from within WinDSX to access the Help Screens where there is an example and further information.*

DataBase Configuration Settings

Starting with Version 4.10.1 - all database configuration settings are now in the RunData folder. This includes all text file and registry settings. The **gDb_settings.txt** contains global settings and will reside in the RunData subfolder of the shared DSX directory. The **Db_settings.txt** file contains local settings and will reside in the RunData folder of the local DSX directory. For more information see the Software Installation Manual. The program must be closed to set the values in these configuration files.

gBD_Settings.txt < located in the WinDSX\RunData\ folder of the shared directory.

Name: DailyOps

Desc: If you do not want the comm server to run daily ops enter the workstation number that will run daily ops. CS as a Service.exe will modify this file.
