



## WinDSX SQL to SQL Update

### Upgrading from 4.5 and above to Version 4.8

Follow these simple steps and you will be on your way to using the latest WinDSX SQL Software. Read through all steps on this page 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.

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 and DSXKey Services may need to be stopped if Comm Server and Keymon are running as Services. 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 take them to the SQL Server. At the SQL Server open the Query Analyzer and select the AcsData database. Use the Query Analyzer to run the new Upgrade#.SQL script files that are located on the Comm Server PC in the WinDSX\MdbStruc subfolder.

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 Server 2008

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 the program is started or any of the executables are launched the process should be to

right click on the .exe or shortcut and select "Run as Administrator".

This procedure should be performed on any of the following DSX programs when installed in Windows 7 or Server 2008. Setup.exe, HDD32.exe, DB.exe, DbSql.exe, WS.exe, L85.exe, Keymon.exe, ModifySWKey.exe, PCM.exe, and SIO.exe.

## Software and Configuration Changes

The next section deals with changes to the software and the software configuration that could affect your customer. This includes authentication for operators, reports, and the USB Features Key.

## Reports

The new software uses Windows Authentication for the system reports to access the database. If you are using SQL Authentication you will need to extract the contents of the SQLAuthenticationReports.zip file into the WinDSX folders on each Workstation and into the shared folder. The SQLAuthentication Reports.zip file is located in the Reports folder on the WinDSX software CD. **Emailed History Reports** are sent as .rtf files instead of .zip files starting in 4.8.107.

## USB Features Key

The USB Features Key is used by DSX to copy protect and enable the WinDSX SQL Software, Hot Swap Redundant Comm Server feature, Live (DSX) Image and Signature Capture, and DVR integration. The KeyMon.exe program and the USB Key need only to be installed on a single PC in the System for the software or enabled features to be functional on all PCs running WinDSX.

1. Select which PC will have the USB Key installed and will run the Software Key Monitor program. Consider that the program must be running at all times and the USB Key must be installed and recognized at all times for the protected software and features to operate properly and fully. The parallel port Image Key used in older badging systems must now be replaced with the USB Features Key and the Software Key Monitoring program. There can only be one USB Features Key in a system. The Key can be modified in the field to incorporate new features.
2. Locate the file HDD32.exe in the WinDSX Folder on the PC where the USB Key will be connected.

Double click on HDD32.exe to begin the install. Click Next, then Finish on the Wizard pop-up screens. The system will return a message indicating the installation was successful.

3. Plug the DSX USB Features Key into a free USB port on the PC.
4. From the WinDSX folder on the same PC that the USB Key is installed and where the HDD32.exe was just loaded find the KeyMon.exe and run it. Once the Software Key Monitor program finds the USB Features Key, the KeyMon program will display a screen like the one shown on this page. To Close KeyMon click once on the small X in the top right corner of the status screen.
5. The KeyMon program must be started each time the PC is started where the key is located. The KeyMon.exe can also be placed in the Windows "Startup" if desired or configured to run as a Service.



## Comm Server and Keymon as a Service

There is a document in the Docs folder on the software CD that provides step by step instruction on how to configure the Comm Server program (CS.exe) and the Keymon program (Keymon.exe) to run as a Service.

## Time Zone Linking

Linking to a Time Zone can force it to a pre-selected state of on or off as selected in the time zone definition. Any where this Time Zone is assigned is subsequently affected. This could be used to control Access Levels, Alarm Echo, Devices, Event Filters, Image Recall, Inputs, Outputs, and Linking Groups. Including a Time Zone in a Linking Group requires WinDSX Version 3.7 and higher with controller firmware of 3129 and higher. Do Not program a link to a Time Zone unless **all** field controllers have firmware version 3129 or higher! If you do you will have to delete the Linking Group from the database.

## **Active Directory Authentication**

WinDSX SQL can now 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 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.

## **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 USB Features Key. 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 and enable/disable buttons will appear. The operator can click on a button to enable or disable the card that was just read. This 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 DailyOps PC.

Disable will set the stop date to the present time. Enable defaults to setting the stop date to the next day. The Enable stop date setting can be overridden using a text file that defines how many days to enable the card for. The text file info is as follows:

File Name: CardEnable.txt

File Location: In the same directory as the WinDSX software. Each workstation has its own file.

File Structure:

First line is number of days offset. 9999 = infinite, no stop date  
Second Line is optional Stop Time value to be added to the stop date. Military time format

Example of enable card for 5 days and turn it off at 1PM on the 5th day.

```
5  
13:00:00
```

## **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 always be displayed such as on large monitors 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 new entries regarding the Startup Map.

The Name is the name assigned to the map within WinDSX.

Map is Maximized can be set to YES to have the Map show full size.

X and Y positions let you set where it is to be displayed.

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.

The size of the Map can now be determined on an individual basis. This allows Maps of all sizes and shapes to be used.

### **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. The Comm Server PC needs to have a Microsoft® Email Client program configured on it such as Outlook Express™. It must be configured as the default mail handler on this PC. This is used to prove that email communications will work and to test the port settings required.
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 email addresses from this email client 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.
4. You need an exchange server or an ISP such as ComCast or RoadRunner. You can also use free email such as Gmail or Yahoo as your email server if

you know what ports are required and your firewall allows access through these ports.

### **.Net Configuration:**

5. To setup up the Email client, this PC must have the .NET 3.5 CLR (common runtime library) installed.

### **OIMail.exe configuration:**

6. 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 \Errors folder on the comm server PC.

### **WinDSX Configuration:**

7. 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 just 1 email address to the UDF field 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.