



**DSX Access Systems, Inc.**

## **FIPS 201 Implementation**

The FIPS implementation is simple and straight forward. Follow these instructions to make the necessary changes to the WinDSX SQL Software.

To implement FIPS cards there are several changes to make to the SQL database if the system has been upgraded to 4.8.76 or higher from an older version.

### **SQL Changes**

New installations of 4.8.76 or higher (not upgrades) are ready for FIPS without these changes.

1. At the SQL Server the Administrator will need to access the AcsData database and in the Cards table locate and modify the Code field. This field will need to be changed from a "Float" to a "BigInt".
2. In the AcsLog database, locate and change the Code field to a "BigInt" in both the EvnLog and AclLog tables.
3. Once the code fields have been modified in these three locations the databases should be taken offline and then brought back online.
4. From the Utilities/FIPS folder on the software distribution CD locate the CAC update.SQL script and run this script against the AcsData database.

### **Device Types and Bit Formats**

1. Within the WinDSX SQL DataBase program select Locations/Devices and edit the Devices and assign them T5 in the Device Type field for 75bits or V6 for 200 bits. The bit format depends on the output of the readers. Most readers are 75 bit by default but can be ordered or programmed to output 200 bits.

### **Card Entry**

FIPS cards have up to a 16 digit number that must be entered into the Code field under the Cards Tab. The cards also contain an expiration date that should be placed in the Stop Date field.

1. To read the card number and expiration date from the FIPS card and automatically populate the database with them, use the DSX FIPS Enrollment Reader. This reader simply connects to a USB port on the PC running the WinDSX SQL software where the card management and enrollment is performed.

2. On the Card Holder/Card Screen click on the Notes field and present the card to the reader. The reader places the information temporarily in the Notes field and the DSX program puts the card number in the Code field and the expiration date in the Stop Date field.
3. Assign the appropriate Access Level and Linking Level and click OK to save the card information.

### **Government Warning Disclaimer**

To have the WinDSX SQL program display the Warning each time the program is started follow these instructions.

1. Copy the Gov.exe program from the Utilities folder on the software distribution CD and place it in the Shared WinDSX folder. The Shared WinDSX folder can be found in the DataBase program by going to System/Setup/DataBase Path – Path to Data shows the location of the Shared folder where the Gov.exe is placed.

### **Passwords**

DSX has a password system built in using passwords that are 6 – 10 characters in length.

1. If the Gov.exe has been implemented, 3 invalid password attempts will result in the Operator login being disabled. To reactivate the Operator the WinDSX SQL administrator will need to copy the Operator's name from the Notes field and paste it back into the Name field replacing the time and date that was put in the Name field when it was disabled.

### **Active Directory Authentication**

If further password complexity is required or Active Directory authentication is preferred, follow these instructions.

1. To use AD Authentication the WinDSX SQL Operators will use the same Login Name as they do in Windows™. Their Login Name is entered under Operator Passwords in WinDSX SQL. 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.
2. Under System/Operator Passwords add an Operator. For Operator Name assign the Active Directory or Windows Login name. Skip the Password field. If you click on the Password field you will need to cancel and start over. Assign a Password Profile and click OK.

### **FIPS Requirements**

WinDSX SQL 4.8.5 and 3155 higher for 75 bit support. 4.8.76 and higher for Enrollment Reader support. WinDSX SQL 4.8.103 and 3181 for V6 200 bit support.