Employment & Training Administration

Workforce Investment Act

Data Reporting and Validation System (DRVS)

User Handbook for DRVS 7.2.2

Addendum 1

June 2011

I. WINDOWS 7 INSTALLATION

This addendum to the DRVS WIA Handbook provides installation instructions to allow DRVS to be installed on a computer or laptop that is using any version of the Windows 7 operating system after installation of the Windows Virtual PC and Windows XP Mode for the Virtual PC.

Step 1—Minimum System Requirements

The target computer must be running any 32 bit or 64 bit version of Windows 7, preferably with support pack 1 installed. The target computer must meet the minimum requirements for Windows 7 as specified by Microsoft, not the minimum requirements listed for DRVS listed below.

We strongly recommend that qualified technical staff be called upon to install the Virtual Machine and Windows XP mode to insure proper configuration.

Prior to starting the installation, confirm that you are logged into the target computer as an Administrator. If you are not logged in as an Administrator, you will be unable to complete the installation

Step 2—Software Download, Installation and Configuration

After starting the Windows 7 computer and verifying Internet connectivity, click the following link to go to the Windows Virtual PC download page, http://www.microsoft.com/windows/virtual-pc/download.aspx. You may have to open a browser window and paste the URL into the address bar of the browser.

Select the version of Windows 7 running on the target computer and the language. When the page reloads, follow the instructions to download the needed Windows XP file.

After download of the XP Mode file, run the executable to install the Virtual PC and XP mode.

Once you have installed Windows XP Mode, click the Windows 7 Start button , then select All Programs > Windows Virtual PC > Windows XP

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Mode to begin the setup. We recommend that 2048 GB of RAM be allocated to XP mode for DRVS operation.

Before installing MSDE or MS SQL Server 2000 and DRVS on the Windows XP virtual machine, insure that all service packs for Windows XP have been installed and configured.

Once configuration is complete, start the Windows XP mode and follow the normal DRVS installation instructions in Section II.

II. INSTALLATION

This chapter provides the DRVS system requirements and installation instructions.

Step 1—Minimum System Requirements

Following are the minimum system requirements for installing DRVS. Recommendations for greater than minimum requirements are indicated in parentheses where applicable.

Item	Requirement
Processor	Pentium 4 CPU 1.80GHZ (more is recommended)
Operating System	Windows 2000 or Windows XP
Memory	1GB (more is recommended)
Application Hard Disk Space	350 MB (more is recommended)
Database Hard Disk Space	Varies by state.
Database	Varies by state. States that exceed MSDE maximum per database must install SQL Server.
Display	1024x768 or higher-resolution display with 256 colors
Other	MSDE or SQL Server must be installed prior to installing the DRVS. Latest Windows service packs and critical updates should also be installed.

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Hard disk requirements will vary depending on the state's database size. For example, some states may exceed the current MSDE 2000 2 GB per database size limit. If any database exceeds the MSDE limit, users will need to license, install, and set up Microsoft SQL Server to run the DRVS. Any licensed version of SQL Server should allow the user to install and run the DRVS. SQL Express (MSDE 2005) has not been tested for compatibility with the DRVS. The DRVS will install all required .Net and Crystal Reports components.

DRVS installation requires Read/Write access to the system registry, Program Files folder, Windows\System32 folder and the Global Assembly Cache. Registry entries are made in HKEY_LOCAL_MACHINE\SOFTWARE\DRVS and in HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft uninstall areas. DRVS users will need Read access to the registry and Read/Write access to the Program File folders, as well as Read/Write/Delete access to the SQL database.

Step 2—Create Backup Databases

If users want to use their databases in the upgrade version of DRVS, they should always create backup databases prior to uninstalling the current version and installing the upgrade version. Users that have Enterprise Manager should contact their Database Administrator to backup databases. For users that do not have Enterprise Manager, the instructions for creating backup databases of WIADB and WIATempDB are below:

1. Create a folder **C:\DRVSbackups**
2. Go to Start>>Run and type in **cmd**
3. At C:\> prompt, connect to your instance by typing **osql -E**
4. At the 1> prompt, to backup the WIADB, type **BACKUP DATABASE WIADB TO DISK = 'C:\DRVSbackups\WIADB.bak'**
5. At the 2> prompt, type **Go**
6. Repeat 3 and 4 to backup WIATempDB (both WIADB and WIATempDB should be backed up)

To backup databases with other names, follow the same instructions and replace WIADB with other names. For example, if a user names its database as

WIADEVPY05, then step 4 above will be: type **BACKUP DATABASE WIADEVPY05 TO DISK = 'C:\DRVSbackups\WIADEVPY05DB.bak'**

Step 3—Uninstalling Prior Versions

Users should uninstall previous versions of the software before installing the DRVS 7.2. Following are instructions for uninstalling prior versions of the DRVS on a Windows 2000 or Windows XP machine. Procedures for uninstalling may differ slightly on different machines, but are generally self-explanatory.

Users should be sure to uninstall through the **Control Panel** rather than by deleting the installation directory for the prior version; uninstalling by deleting the installation directory may cause problems with the subsequent installation.

- Click the Start button, then select Settings, Control Panel.
- Click on Add/Remove Programs.
- Click on the WIA or DRVS icon to uninstall any prior version.
- Click on the Change/Remove button.
- On the Select Uninstall Method screen, select Automatic and then click on Next.
- On the Perform Rollback screen, click on No and then click on Next.
- On the Perform Uninstall screen click on Finish.
- If a Remove Shared Component message displays, click on Yes to All.
- Close the Add/Remove Programs window.

Users may need to contact their system administrator to uninstall the application.

Step 4—Download from the Internet

To download the DRVS from the Internet:
1. Open the Internet browser and go to www.doleta.gov/performance/reporting/tools_datavalidation.cfm.

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2. Click on the DRVS 7.2 link from the "In this section" side bar.
3. If a file download message displays, click on Save.
4. Select the location where to store the installation file. Suggestion: C:\Temp. Click on Save.
5. A dialog box will chart the progress of the download of the installation file. When the "Download Complete" message box appears, click on Open. (If "close this dialog box when download completes" is checked, the user will need to go to the location where the installation file was stored [e.g. C:\Temp in step 4] to open the file.)
6. A "WinZip Wizard – Unsupported Archive Type" message box may display. Choose "Open the archive using the classic interface" and then click on OK.

7. Click on the DRVS.exe file and then click on **Extract** from the tool bar at the top of the WinZip application screen.
8. Select a location for the extraction of the zip file. C:\Temp is the default.
9. Click on the Extract button.
10. If a Confirm File Overwrite message displays, click Yes.
11. Close the WinZip window.

Step 5—Application Installation

Based on the size of the state's DRVS import file, either Microsoft SQL Server 2000 Desktop Engine (MSDE) or Microsoft SQL Server 2000 must be installed prior to installing the DRVS. MSDE is a free version of SQL Server that can be used with client applications. (When installing MSDE, users must set a "strong"

password.)   Users should go to http://www.microsoft.com/sql/msde/default.mspx for more information about MSDE and to download MSDE. SQL Express (MSDE 2005) is not compatible with the DRVS.

If the user's estimated database size exceeds the MSDE limit, then Microsoft SQL Server will need to be installed prior to installing the DRVS. Users can find more information about SQL Server at http://www.microsoft.com/sql/default.mspx.

Users may need to contact their system administrator to install MSDE or SQL Server. Installation procedures may differ slightly on different machines, but are generally self-explanatory.

Users who prefer a client/server setup should review (Appendix F: Client Server Setup) in conjunction with the instructions in this section. Only users with full SQL Server with Enterprise Manager should use a client/server setup.

Before starting installation of the DRVS, close all applications and programs that are open.

1. Open Windows Explorer and go to C:\Temp (or wherever you stored the application files).

2. Double click on DRVS.exe.

3. At the Welcome to the DRVS Installation Wizard window click on Next. If
    you are installing the DRVS for the first time, you may be prompted to reboot
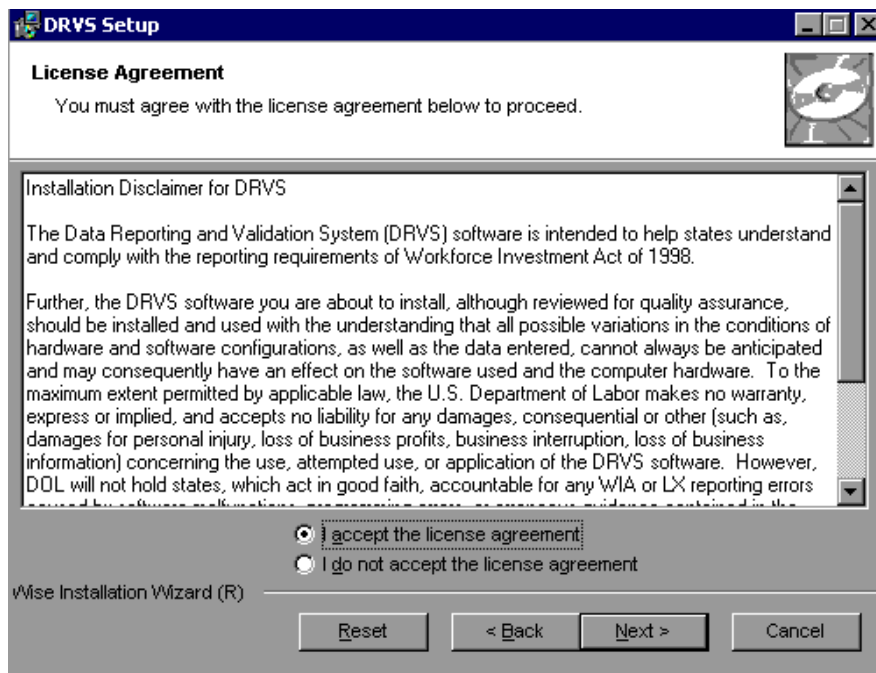   prior to beginning the installation routine.

4. Read the License Agreement and, if you accept, click on the "I accept the license agreement" button and click on Next. If this option is not selected, the installation will end and users cannot continue reporting and validation.
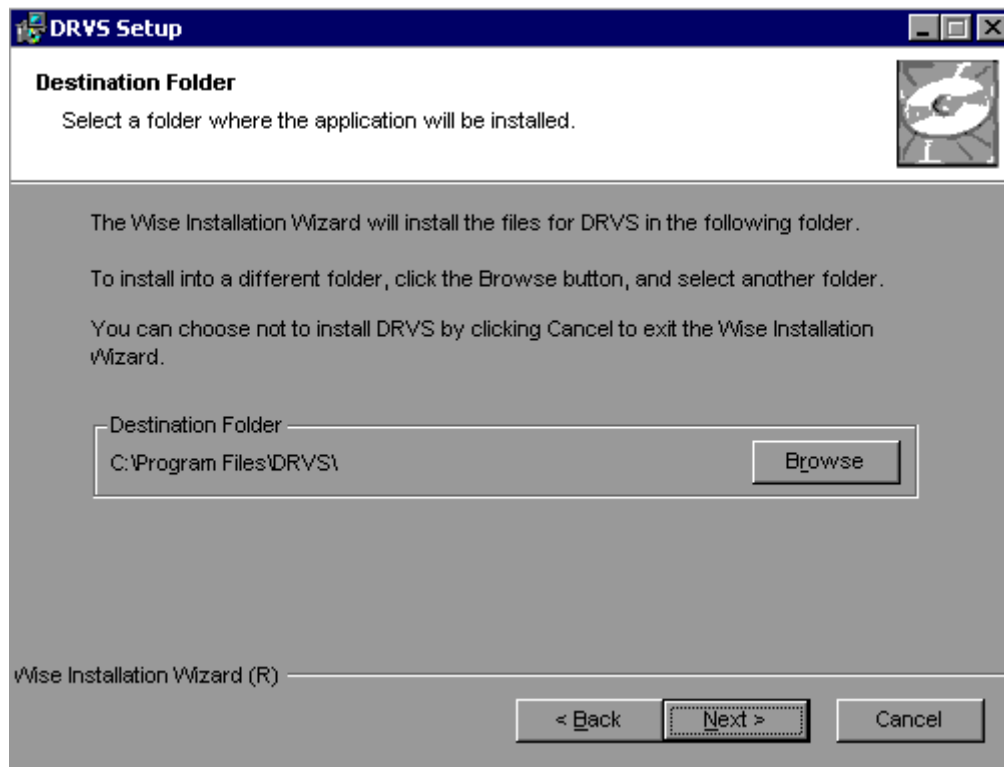

5. On the User Information screen, make any necessary modifications to the user information. Then click on Next.

6. On the Destination Folder screen, the destination location will default to C:\Program Files\DRVS.

7. If you prefer a different destination location, click on Browse on the Destination Folder screen to navigate to a different location. Click on Next.
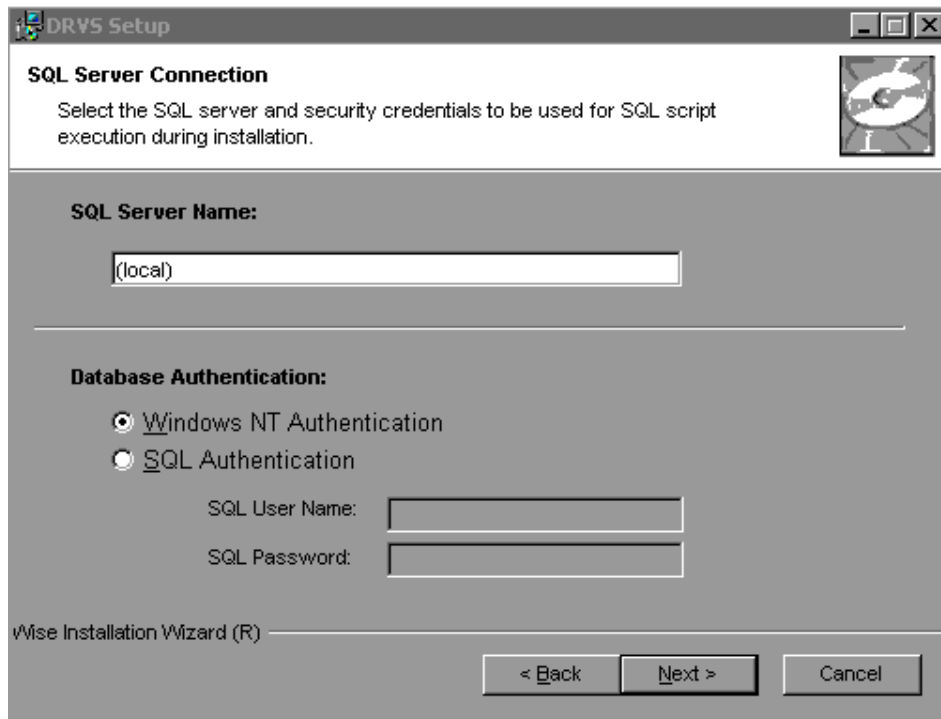
8. In the "SQL Server Connection" window, enter your server name in the SQL Server Name box. If you did not name your database instance, your server name is "(local)". If you do not know the name of your database, contact your system administrator.

9. For Database Authentication, click on Windows NT Authentication. If the user can not use Windows Authentication (e.g. Win 98 or ME users), click on SQL Authentication and complete the SQL User Name and SQL Password boxes. Click on Next.

If the DRVS Installation Wizard does not progress beyond this point, the user must determine if an incorrect or inactive server name has been entered in the SQL Server Name field. If a name that does not match any of the state's servers is entered, there will be a delay or a failure to progress to the next screen.

If a name is entered that matches one of the servers, but the server is inactive, the Installation Wizard may also stop at this point. To find out if the server is

active go to Start/Settings/Control Panel/Administrative Tools/Services. Microsoft SQL Server should be on the list of services and the task/service should be started. If it is on the list but not started, start it and reboot. If it is not on the list, SQL Server was not installed. There should also be a SQL Service icon on the bottom part of your screen, on the desk tray as a little box with a green arrow or red square. The green arrow indicates the service is started and the red square indicates it is not. Right click on the icon to open the SQL Service manager, then start the service.

10. On the "Install the DRVS Database" screen check "I want to create a DRVS database" option.

Important Note: Users should always create backup databases prior to installing the upgrade (refer to Step 2 above for instructions on creating backup databases). If the prior version of DRVS was not uninstalled, creation of a new DRVS database will overwrite the prior existing database.
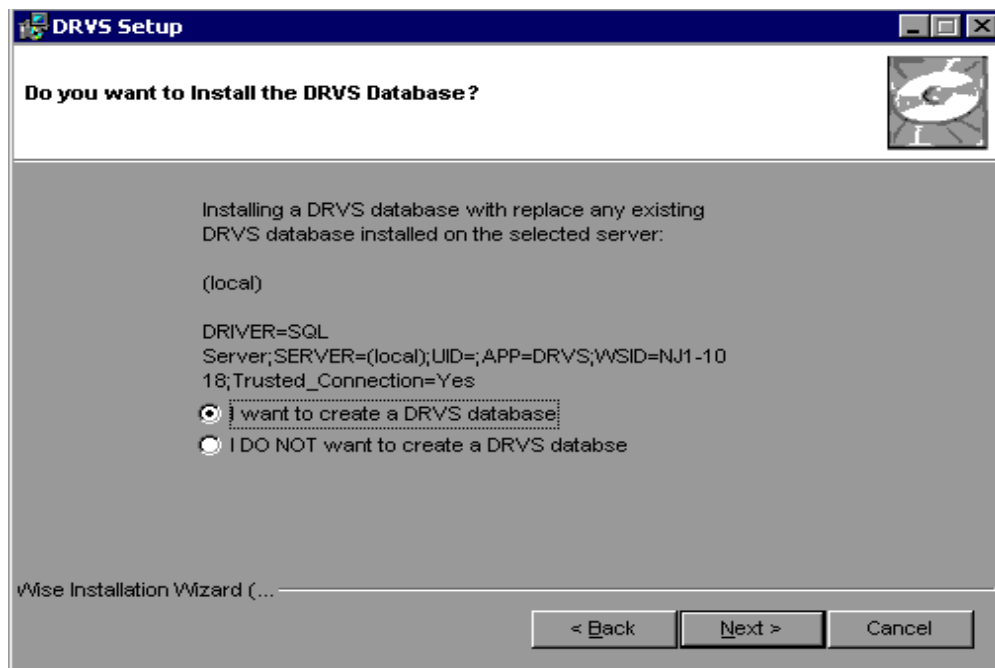
11. Click on Next on the "Ready to Install the Application" screen. This screen also allows you to exit the installation wizard or, if necessary, to return to the previous screen to change server connection information.

12. The "Updating System" screen will display, showing installation progress. However, this screen may display for several minutes with no indication of progress.

13. Click on Finish on the "DRVS has been successfully installed." screen to exit the DRVS Installation Wizard.

14. Reboot your computer after completing the DRVS installation. You may delete the DRVS.exe used to install the application once the installation process is successfully completed.

Step 6 – Restore Backup Databases

For users who create backup databases from prior versions of the software for use in DRVS 7.2, after DRVS 7.2 is installed, users should restore their backup databases. Users that have Enterprise Manager should contact their Database Administrator to backup databases. For users that do not have Enterprise Manager, the instructions for restoring backup databases of WIADB and WIATempDB are below:

1. Go to Start>>Run and type in **cmd**
2. At C:\> prompt, connect to your instance by typing **osql -E**
3. At the 1> prompt, type **RESTORE DATABASE WIADB FROM DISK ='C:\DRVSbackups\WIADB.bak'**
4. At the 2> prompt, type **Go**
5. Repeat 3 and 4 to restore WIATempDB (both WIADB and WIATempDB must be restored).

To restore backup databases with other names, follow the same instructions and replace WIADB with other names. For example, if a user names its database as WIADEVPY05, then step 3 above will be: type **RESTORE DATABASE WIADEVPY05 FROM DISK ='C:\DRVSbackups\WIADEVPY05.bak'**

Step 7 – Client/Server Setup

To create a client server setup please refer to instructions in Appendix F: Client Server Setup of this Handbook.

APPENDIX F. CLIENT SERVER SETUP

This appendix provides client server setup instructions. Section A provides server side setup instructions and Section B provides client side setup instruction. It is recommended that the state's Database Administrator (DBA) perform all of the client server setups tasks. Client server setups are only recommended for those users who have full SQL Server with Enterprise Manager.

A. Server Side Setup

1. Install the DRVS. The DBA must have administrative rights to SQL Server databases.

2. After install is completed, open Enterprise Manager and find the instance where databases were installed. Click on **Databases** directory and find the **master** database. In the master database, right-click on **Users** and select **New Database User.** Give client(s) log-on capability by adding each client login name and giving them **public** permission database role. Click **OK** after each client is added.
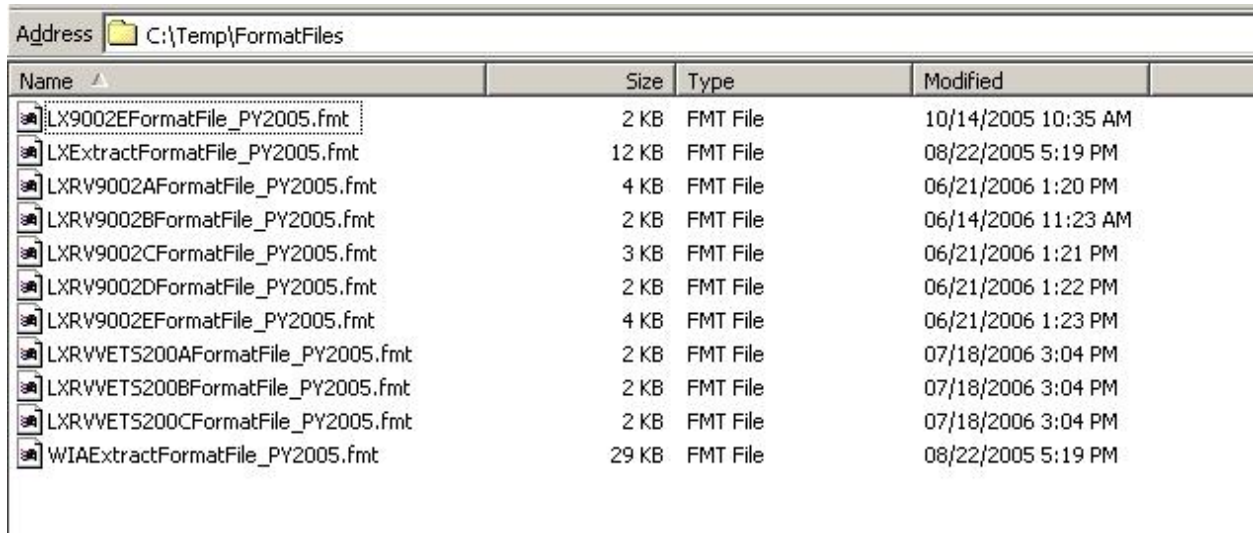
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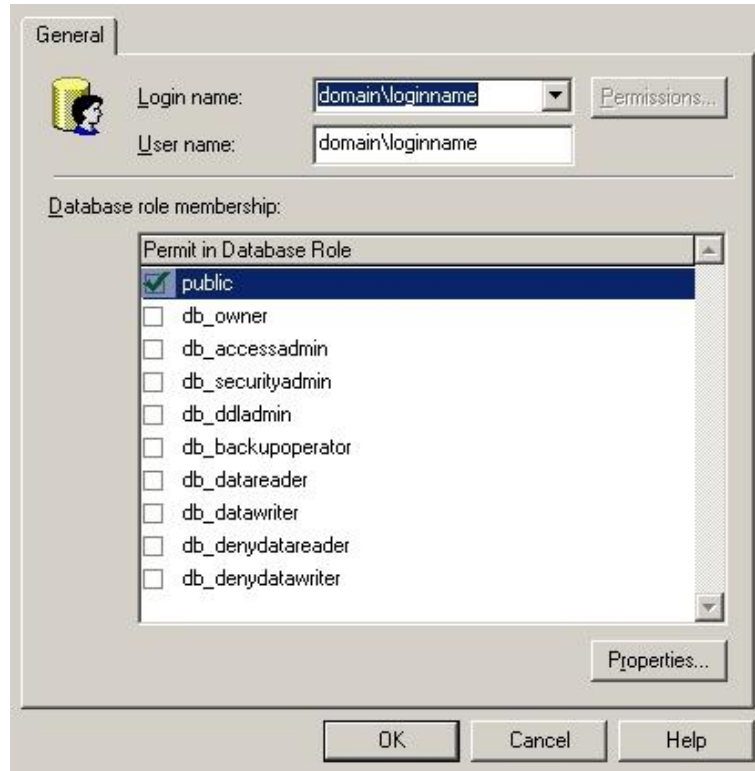
3. Create a shared folder on the server (i.e. C:\Temp) giving full control security permissions to clients.

4. Copy and paste the FormatFiles folder, which is located in the application directory (default location - C:\Program Files\DRVS), to the shared folder (i.e C:\Temp\FormatFiles).

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Name △	Size	Type	Modified
LX9002EFormatFile_PY2005.fmt	2 KB	FMT File	10/14/2005 10:35 AM
LXExtractFormatFile_PY2005.fmt	12 KB	FMT File	08/22/2005 5:19 PM
LXRV9002AFormatFile_PY2005.fmt	4 KB	FMT File	06/21/2006 1:20 PM
LXRV9002BFormatFile_PY2005.fmt	2 KB	FMT File	06/14/2006 11:23 AM
LXRV9002CFormatFile_PY2005.fmt	3 KB	FMT File	06/21/2006 1:21 PM
LXRV9002DFormatFile_PY2005.fmt	2 KB	FMT File	06/21/2006 1:22 PM
LXRV9002EFormatFile_PY2005.fmt	4 KB	FMT File	06/21/2006 1:23 PM
LXRVVETS200AFormatFile_PY2005.fmt	2 KB	FMT File	07/18/2006 3:04 PM
LXRVVETS200BFormatFile_PY2005.fmt	2 KB	FMT File	07/18/2006 3:04 PM
LXRVVETS200CFormatFile_PY2005.fmt	2 KB	FMT File	07/18/2006 3:04 PM
WIAExtractFormatFile_PY2005.fmt	29 KB	FMT File	08/22/2005 5:19 PM

Address: C:\Temp\FormatFiles

5.   Before beginning DRVS installation on client side, the installer must know the IP address of the server. This will be needed to connect clients to the server.

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B. Client Side Setup

1. Begin installation of the DRVS. Proceed with normal installation until reaching the **SQL Server Connection** page. In the **SQL Server Name** box, type in the server's **IP address**. For **Database Authentication** select **Windows NT Authentication**. Click **Next**.

2. After clicking Next, in the "Do you want to install the DRVS Database?" page, select "**I want to create a DRVS database**." Click **Next**.
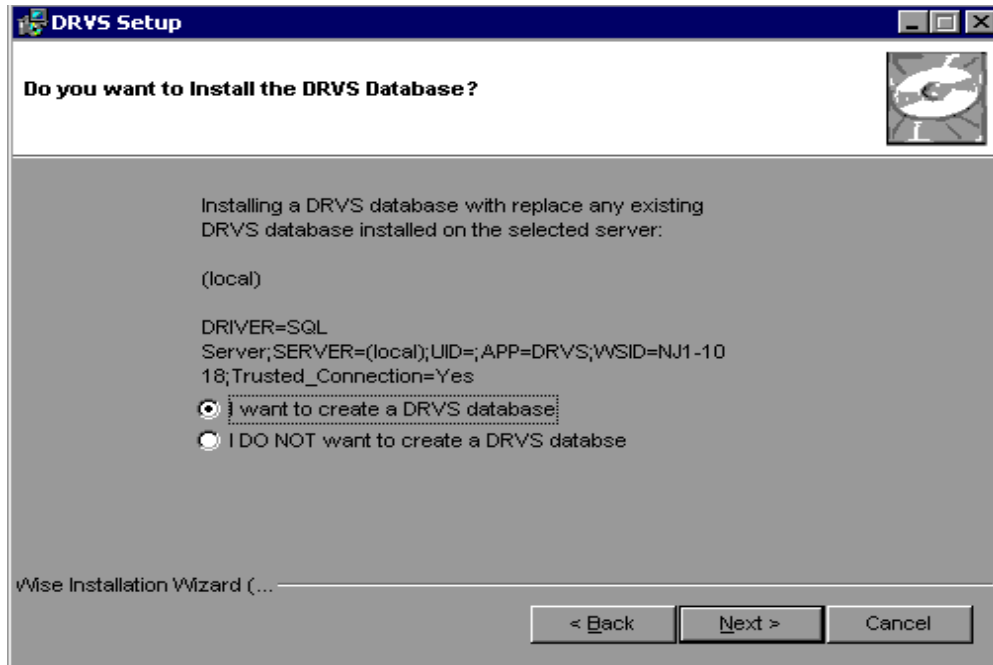
3. The rest of the installation should proceed normally. You might receive an error saying that the login failed for the user (the user is expressed in the error as the computer name of the user). Click **OK** on the error and continue. This will not affect the installation on the client side.

4. After installation is complete, you must map a network drive from the client to the shared folder on the server. To do this, open Explorer and click **Tools>>Map Network Drive.** Select the name of your drive in the **Drive** box and then click **Browse** to find the servername\folder that is shared. This is how the file on the client side is copied and loaded onto the server database. Click **Finish** once the folder is found.

5. Go to the install directory and find the **WIAnLXApplication.config** file (the default location is C:\Program Files\DRVS\WIAnLX\bin\Config). Right-click on the file and remove the Read-Only attribute in Properties.

6. In the config file, the DestinationDir, FileUploadPath, and FormatFilePath must be changed to the server's paths. The DestinationDir path is changed to the mapped drive path to the server. For example, if the shared directory on the server is C:\Temp and that was mapped on the client as the F: drive, the DestinationDir would look like this in the config file—<DestinationDir>F:\</DestinationDir>—with F: being the mapped drive to server C:\Temp directory. The FileUploadPath is the name of the server shared directory.
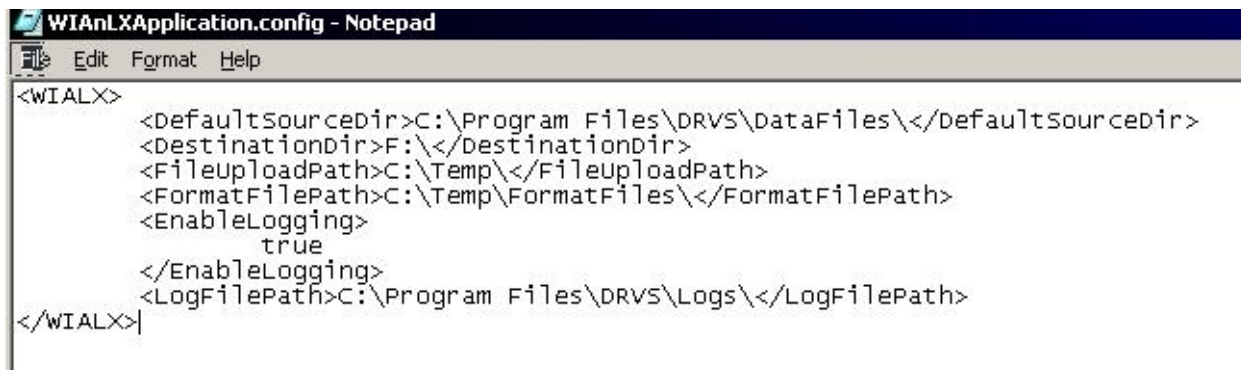
In our example it would look like this –

<FileUploadPath>C:\Temp\</FileUploadPath>.

The FormatFilePath would be the directory on the server where the FormatFiles folder is located. In our example that folder is located in C:\Temp so that would look like this in the config file:

<FormatFilePath>C:\Temp\FormatFiles\</FormatFilePath>.

After each path is changed, save the file. Below is an example of the config file after making the changes.

```
WIAnLXApplication.config - Notepad
File  Edit  Format  Help
<WIALX>
        <DefaultSourceDir>C:\Program Files\DRVS\DataFiles\</DefaultSourceDir>
        <DestinationDir>F:\</DestinationDir>
        <FileUploadPath>C:\Temp\</FileUploadPath>
        <FormatFilePath>C:\Temp\FormatFiles\</FormatFilePath>
        <EnableLogging>
                true
        </EnableLogging>
        <LogFilePath>C:\Program Files\DRVS\Logs\</LogFilePath>
</WIALX>
```

Please note that the path name must always end with a slash.

7.   After each step is complete for each client, the users are ready to load their files.

APPENDIX G. TROUBLESHOOTING

This chapter provides solutions for common problems that may occur while using the DRVS. Section A provides solutions for problems that may occur while signing in and Section B for problems that may occur while importing records.

A. Signing In

Following are solutions for three problems that may occur at sign in:

1. If the default User ID and Password are properly entered, but the DRVS generates a critical error with the message: "Object reference not set to an instance of an object", then the user may have entered the wrong server name in the SQL Server Connection screen/SQL Server Name box during the installation. The Installation Wizard would have finished if any one of the state's correct server names was entered in that field. However, if the appropriate server name for the DRVS installation was not entered, the problem would appear at log in. To correct the problem, uninstall the DRVS and then repeat the installation, ensuring that the correct server name is entered. The "Object reference not set to an instance of an object" error may also appear if the user does not have read/write access to the DRVS installation folder. The user must have these rights to log in to the DRVS.

2. If the default User ID and Password are properly entered, but the DRVS generates the message: "Event Log is Full" and quits, the user needs to clear the event logs in the following way:

    • Click on Start - Settings - Control Panel.

    • Double click Administrative Tools, then Event Viewer.

    • On the left side of the Event Viewer window, you will see three logs listed.

- Right click on each of these logs separately and click on "Clear all events."

- As you clear these logs, the system may ask if you want to save them. Click "No."

3. If the default User ID and Password are properly entered, but the DRVS generates the message: "Login failed for user 'DRVS User.' Reason: not associated with a trusted SQL Server connection," then the user needs to update the registry setting. The error message will appear in red on the Login screen.

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The system will also register the following critical error in the error log:

Event ID: STOREDPROCEDURE_EXECUTION_ERROR
Error Message: System.Data.SqlClient.SqlException: Login failed for user 'DRVSUser.' Reason: Not associated with a trusted SQL Server connection.
   at   System.Data.SqlClient.ConnectionPool.GetConnection(Boolean& isInTransaction)
   at
System.Data.SqlClient.SqlConnectionPoolManager.GetPooledConnection
(SqlConnectionString options, Boolean& isInTransaction)
   at System.Data.SqlClient.SqlConnection.Open()
   at Microsoft.Practices.EnterpriseLibrary.Data.Database.OpenConnection()
   at   Microsoft.Practices.EnterpriseLibrary.Data.Database.ExecuteReader
(DBCommandWrapper command)
   at   WIAnLXControlLib.frmLogon.btnLogin_Click(Object   sender, EventArgs e)
Error executing the stored procedure. Stored Procedure Name = spGetApplicationUser

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MSDE users must update the registry setting as follows:

Select Start, Run, and in the Open box in the Run window type "regedit." Click OK. This opens the Registry Editor. Drill down to the following folder:

HKEY_LOCAL_MACHINE/SOFTWARE/Microsoft/MSSQLServer/ MSSQLServer

Double click on the LoginMode file. This opens the Edit DWORD Value box. In the Value data box change the value from 1 to 2. Confirm that Hexadecimal is selected in the Base box. Then click OK.
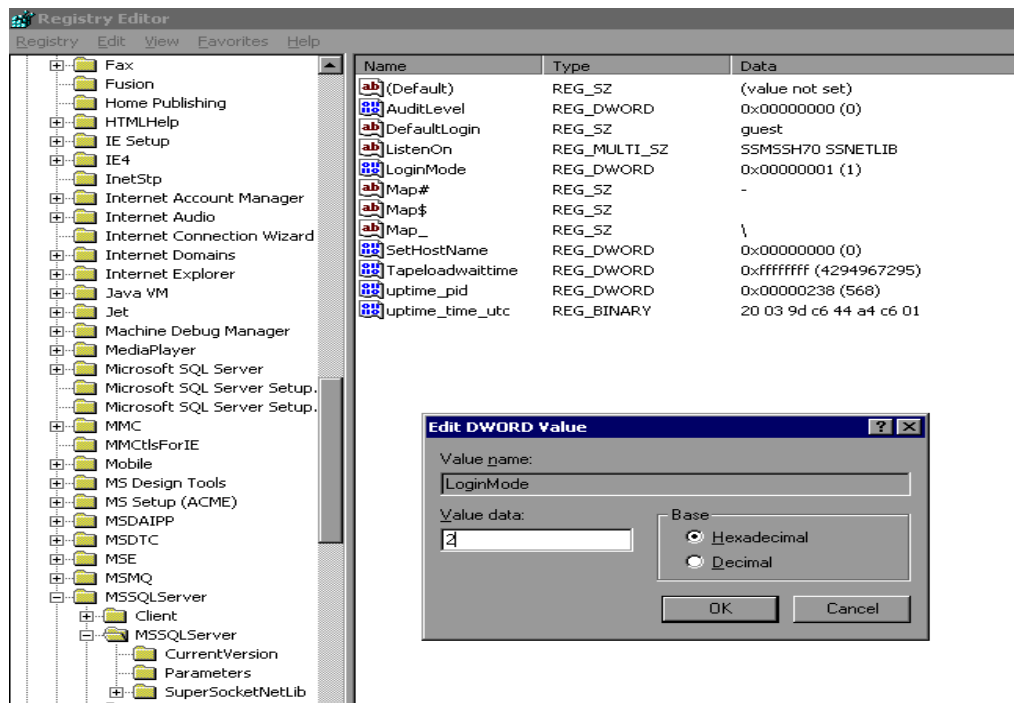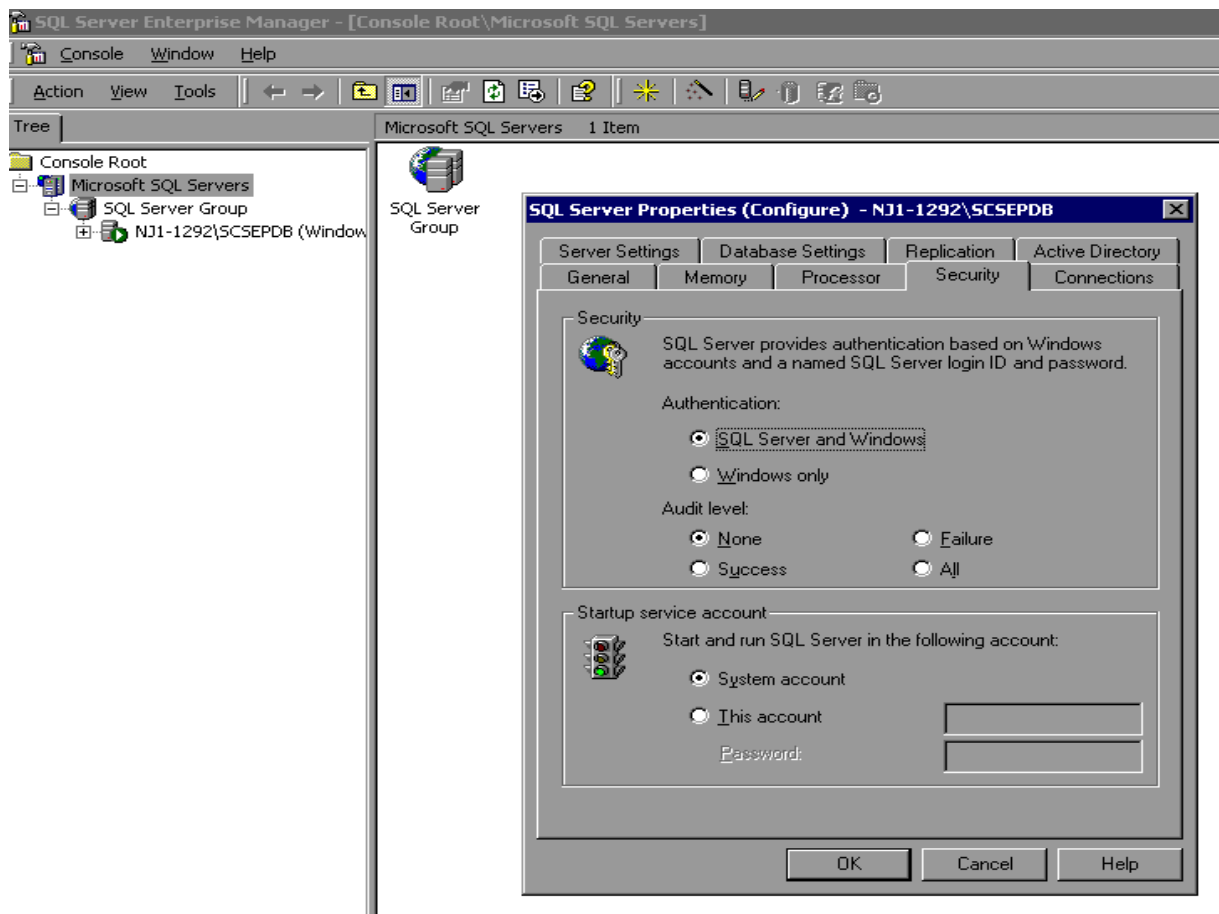

Reboot the PC and then reopen the DRVS. If the Login fails again, then the user does not have the proper administrative rights to run the DRVS.

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SQL Server users must update the registry setting as follows:

Open SQL Server Enterprise Manager and drill down to the SQL Server Group, then right click the server name entered in step 8 of the installation. Choose **Properties** from the menu displayed. This will open the SQL Server Properties (Configure) window for the selected server. Click on the Security tab. Under Authentication, select SQL Server and Windows. Click OK.

You may be asked to restart SQL Server Service. Click Yes. Reboot the PC and then reopen the DRVS. If the Login fails again, then the user does not have the proper administrative rights to run the DRVS.

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B. Importing Records

Common File Errors

As described in Chapter III, section B, each record in the state extract file for WIA must have 203 fields corresponding to the WIA Record Layout specified in Appendix B. Files that contain records with too many or too few fields will cause a critical error during file processing. In such cases, the DRVS log file will contain an error message similar to the following:

> Event ID: STOREDPROCEDURE_EXECUTION_ERROR
> Error Message: System.Data.SqlClient.SqlException: Bulk Insert: Unexpected end-of-file (EOF) encountered in data file.
> …
> Cannot Load. Error in file or error executing the stored procedure. Stored Procedure Name = spBCPFile

Records that contain improper values in date fields due to typographical or other date format errors (e.g., 22040112, 2004112, or 011204) may cause a critical error during file processing. In such cases, the DRVS log file will contain an error message similar to the following:

> Event ID: STOREDPROCEDURE_EXECUTION_ERROR
> Error Message: System.Data.SqlClient.SqlException: The conversion of char data type to smalldatetime data type resulted in an out-of-range smalldatetime value.
> …
> Cannot Load. Error in file or error executing the stored procedure. Stored Procedure Name = spBCPFile

In each case listed above, the data error must be corrected in the file before the file will be accepted by the software.