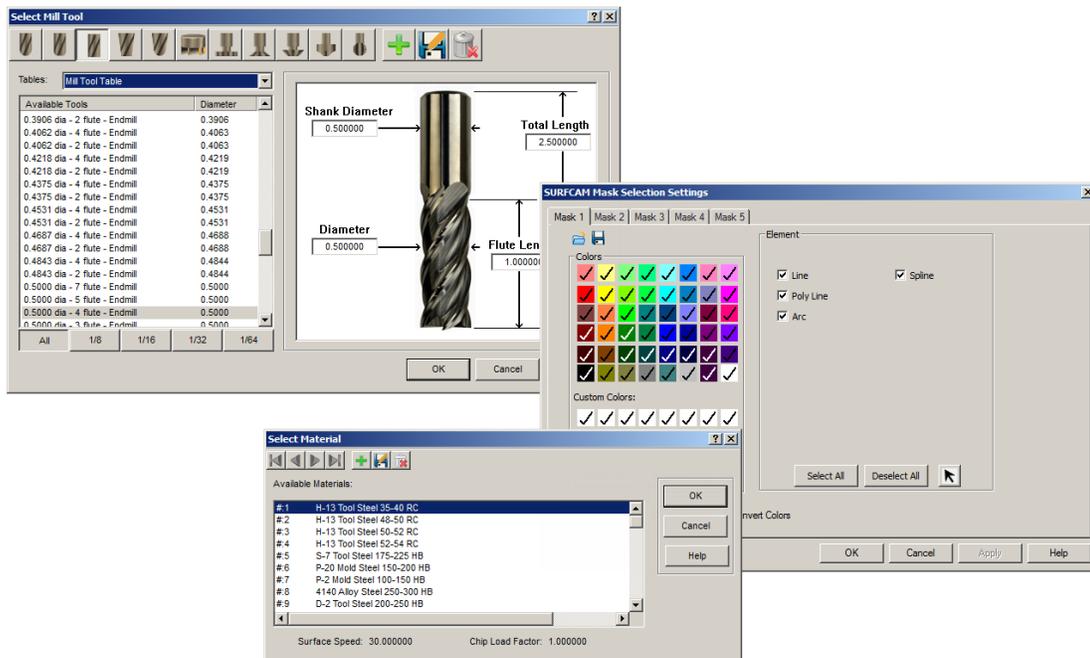# How to Configure the SURFCAM 6 Firebird Database over a Server or Network

Beginning with SURFCAM 6, all SURFCAM systems are installed using ANSI SQL based Firebird technology for managing tool libraries, material libraries, and masks, and if each SURFCAM station is to function independently, no further action is required.

If however, two or more SURFCAM stations (Clients) are to share a single Firebird database, this document defines recommended installation procedures for installing Firebird SQL shared server software to service several SURFCAM Client stations.

The 2 main components in configuring the Firebird database over a server or network:

- SERVER Configuration

- SURFCAM Workstation Configuration

This document provides step by step instructions of how to set up the Firebird database to be used over a server or network.

1. SERVER Configuration

1.1. Setting up a SURFCAM Database Server

Firebird database technology supports simultaneous access to a database by multiple SURFCAM WorkStations. To accomplish this, you must download, install, and configure Firebird Database Server software from the Surfware Support web-site.

1.1.1. Downloading Firebird Database Server Software

There are two versions of Firebird Server software, one for 32-bit OS, the other for 64-bit OS. Either Server version can support a mixture of 32-bit and 64-bit SURFCAM WorkStations, but the computer acting as the Server must have the correct version.

- *32 Bit Version*
  http://rensi.fi/files/surfcam/Firebird-2.5.3.26778_0_32-bit.exe

- *64 Bit Version*
  http://rensi.fi/files/surfcam/Firebird-2.5.3.26778_0_64-bit.exe

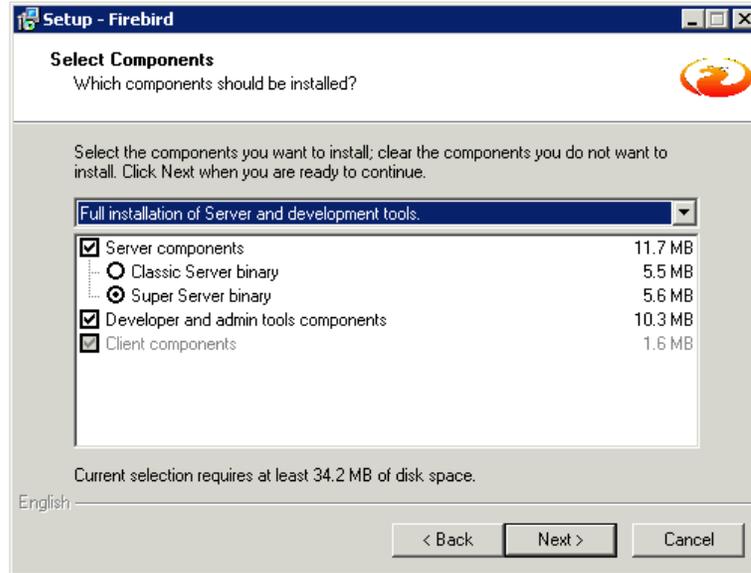### 1.1.2. Installing Firebird Database

The installation procedure for 32-bit or 64-bit Server software is the same.

Shown below are the screens that are important and must be set correctly.
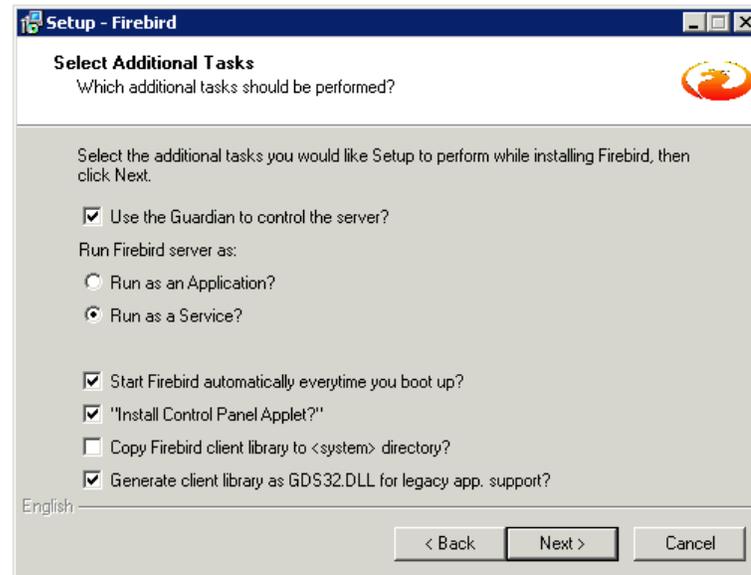
Shows the software version:

Mandatory Components:

Misc. Settings:

Launches Firebird Server Service Automatically:

1.1.3. Downloading the ODBC Drivers (Optional)

If the Server does not have SURFCAM 6 installed and you need to manage or perform maintenance on the database, you'll need to download the ODBC driver software from the Surfware support site.

There are two versions of Firebird ODBC driver software, one for 32-bit OS, the other for 64-bit OS. As with the Server Software, the computer acting as the Server must have the correct version of ODBC drivers.

- *32 Bit Version*
  http://rensi.fi/files/surfcam/Firebird_ODBC_2.0.2.153_32-bit.exe

- *64 Bit Version*
  http://rensi.fi/files/surfcam/Firebird_ODBC_2.0.2.153_64-bit.exe
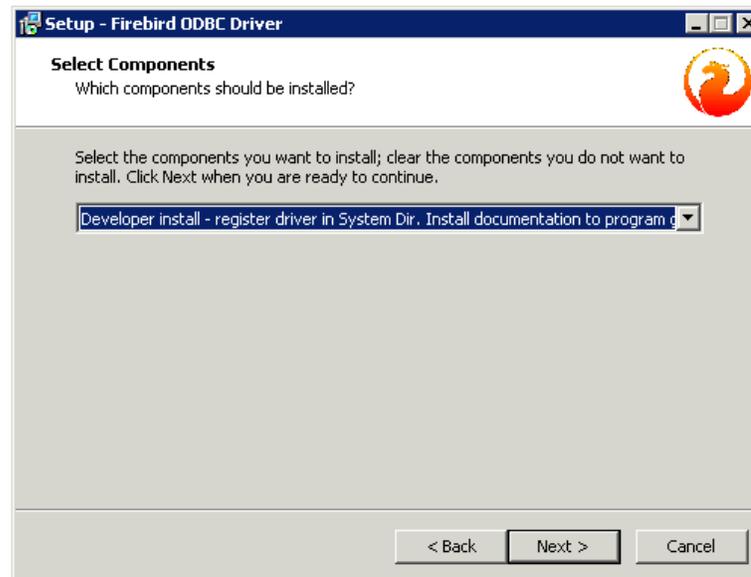
1.1.4. Installing ODBC Drivers (Optional)

The installation procedure for 32-bit or 64-bit Driver software is the same.

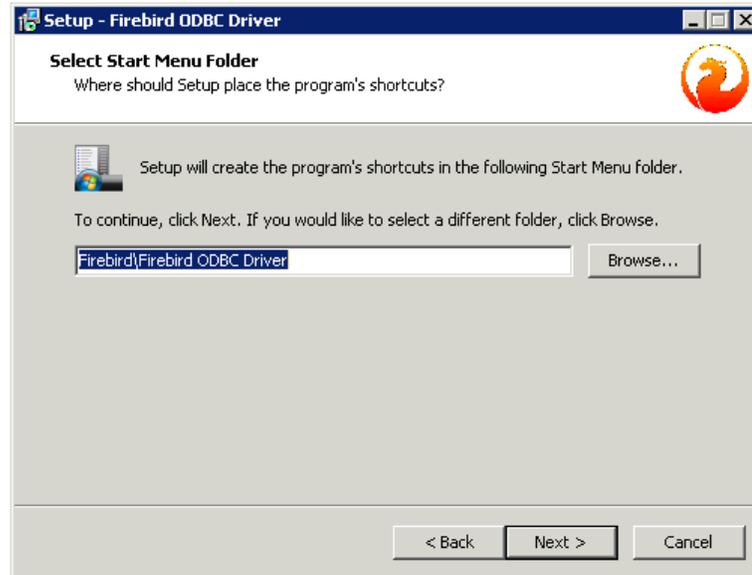The important screens presented during the installation are shown below.

Firebird ODBC Driver Setup screen

Component Selection – Developer install

Start Menu folder

## 1.2.　Installing the SURFCAM Database

Create a SURFCAM Database folder on the Server and put an initial copy of your SURFCAMLibrary.FDB in to this folder. This can be a copy of the SurfcamLibrary.FDB file from one of your SURFCAM Workstations.

Important Note: Depending on the Workstation OS (XP or Vista or Win7) this will be in one of two places, or if you've converted (or plan to convert) a custom set of MDB files from an earlier version of SURFCAM you'll want to use the converted file, not the default on any given station. So, if you are planning to convert from existing MDB files and have not done so, the conversion to Firebird should be done before proceeding from this point.

- *XP*
C:\Documents and Settings\All Users\SURFCAM\SURFCAM6\Config**SurfcamLibrary.FDB**

- *Vista or Win7*
C:\Users\Public\SURFCAM\SURFCAM6\Config**SurfcamLibrary.FDB**

This example shows the SurfcamLibrary.FDB file saved in the "**C:\SURFCAM-Database**" folder.

Important Note: This path will be used when configuring the SURFCAM Workstation ODBC settings. The full path is: "**C:\SURFCAM-Database\SurfcamLibrary.FDB**"
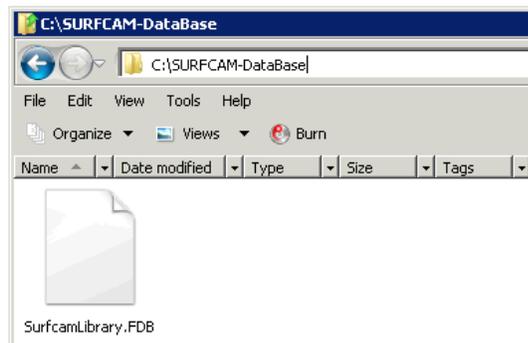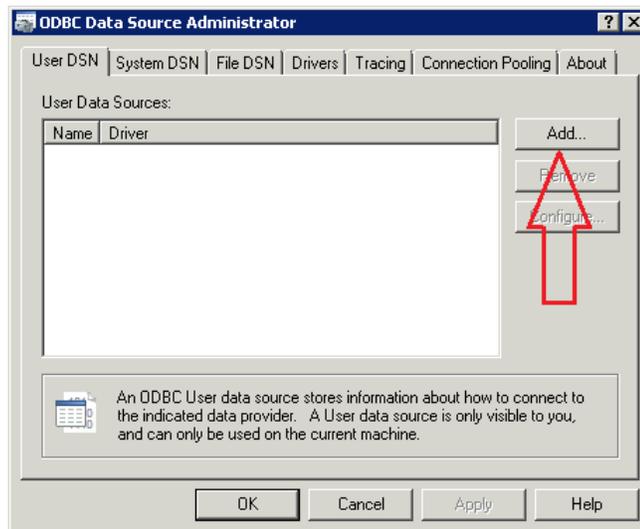
1.3. Configuring ODBC Server Settings (Optional)

The next step is to define the Open Database Connectivity (ODBC) settings, first on the Server containing the Firebird database, and later on each SURFCAM WorkStation.
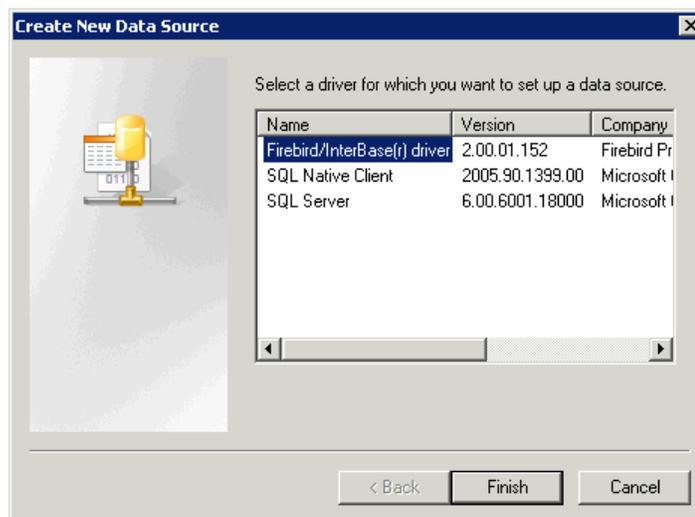
This is done by clicking on "**Start|Control Panel|Administrative Tools|Data Sources(ODBC)**"
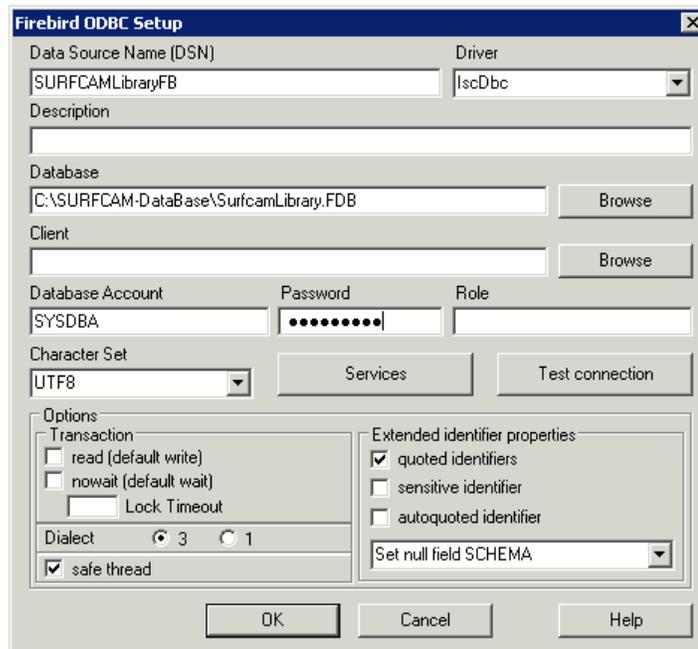

Click the "Add" button:

Select the "Firebird/InterBase® driver:
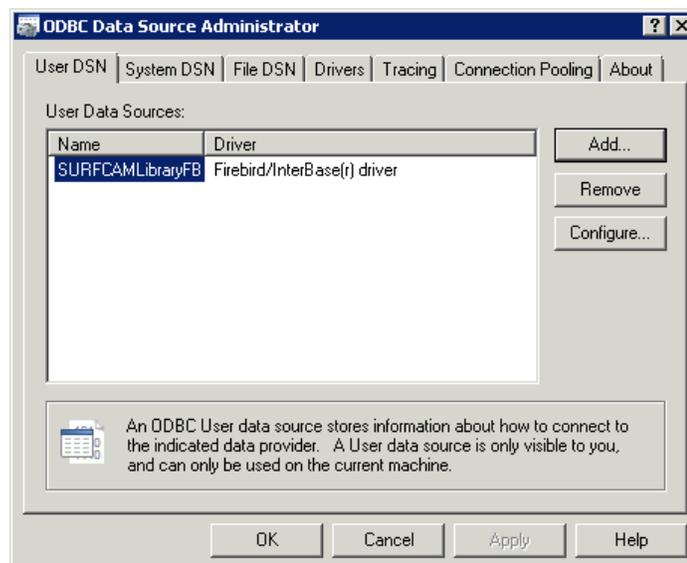
Yours should look like this:

The Database Account is: "**SYSDBA**" and Password is "**masterkey**"

Click the Test Connection Button:

The ODBC User DSN screen should appear as follows if everything was done correctly:

1.4. Configuring Windows Firewall - Win7, Vista or Server2008

When the Firewall is enabled, you must create an exception/rule to allow incoming SURFCAM WorkStation traffic to connect to the Firebird database on the Server. The steps involved are as shown below:
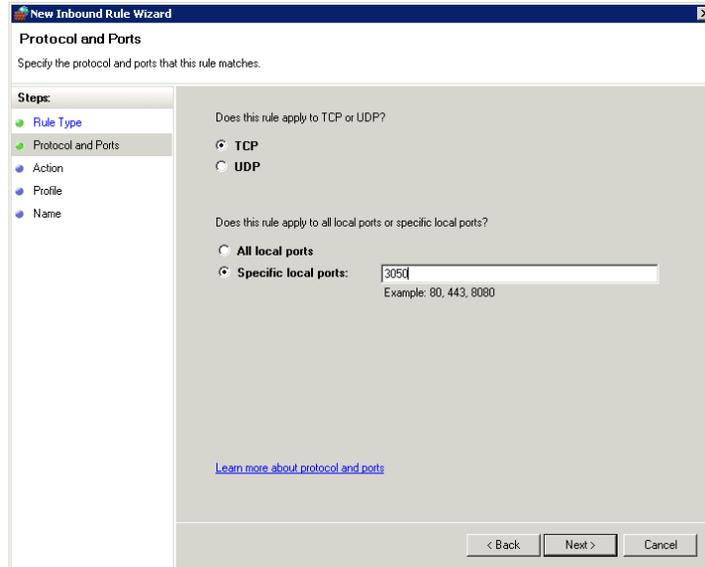
A.) Control Panel, Windows Firewall

B.) Right mouse click the Inbound Rules and select New Rule.
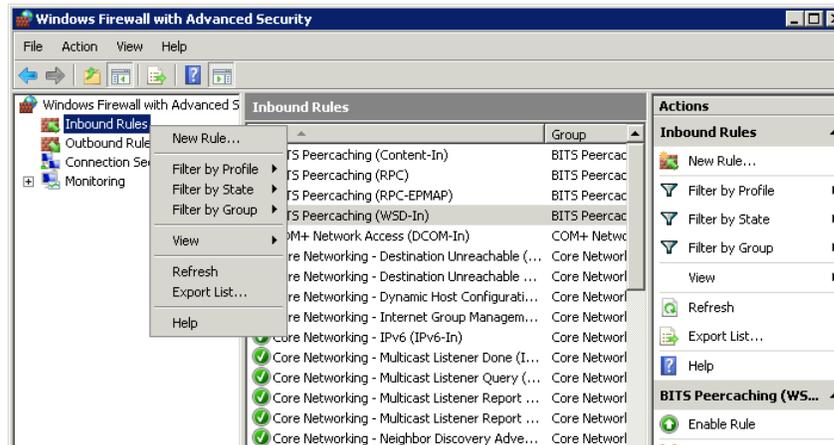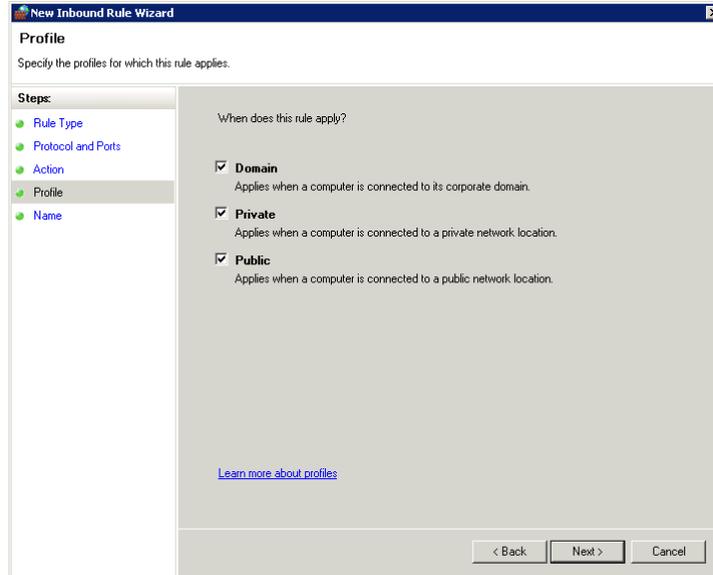

C.) Select the Port option then click the Next button.
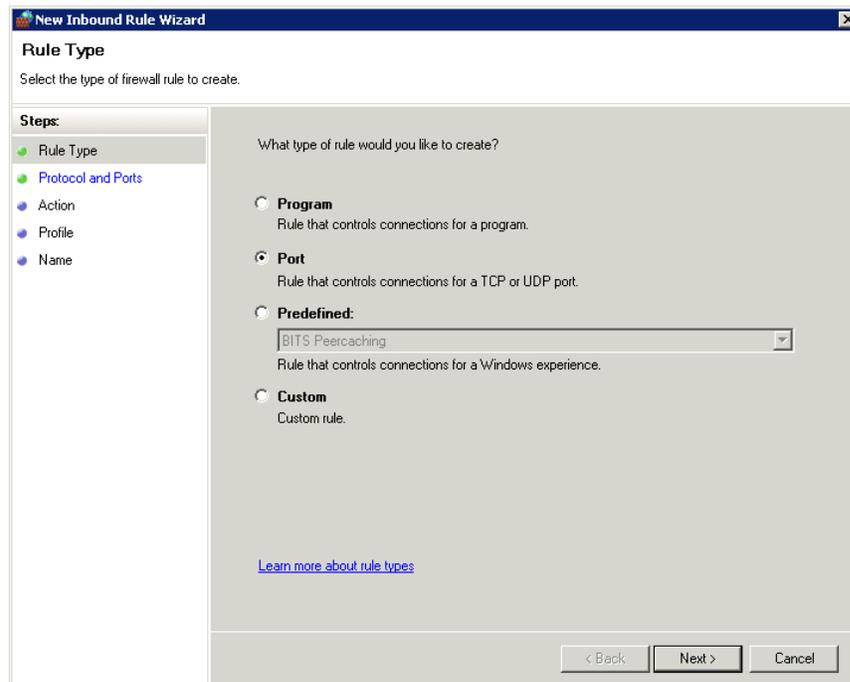
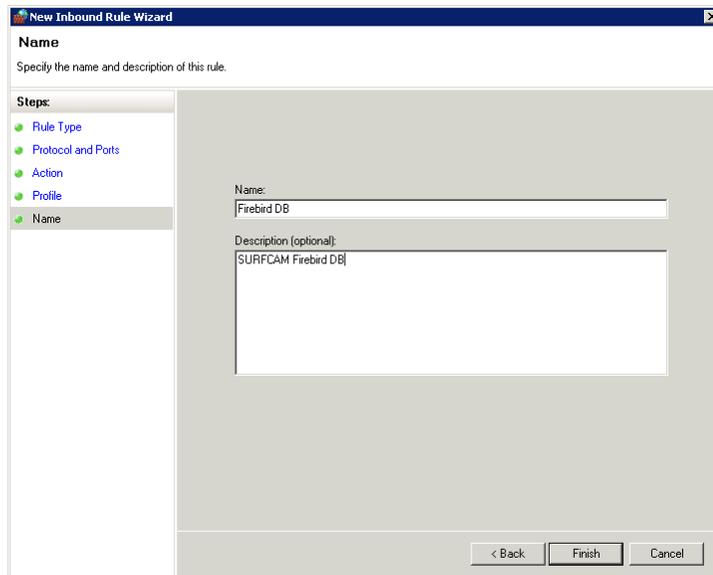D.) Select TCP and Specific Local Ports and enter 3050 and click the Next button.

E.) Select the Allow the connection option and click the Next button.
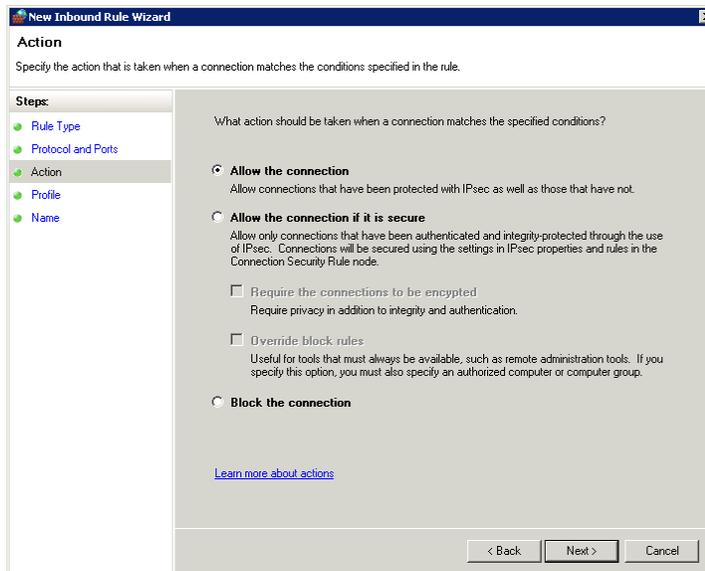
**F.)** Select the appropriate Network Profiles and click the Next button.

**G.)** Assign a user friendly name and click the Finish button.

1.5. Configuring Windows Firewall - XP

When the Firewall is enabled, you must create an exception/rule to allow incoming SURFCAM WorkStation traffic to connect to the Firebird database on the Server. The steps involved for XP-based Servers are as shown below:
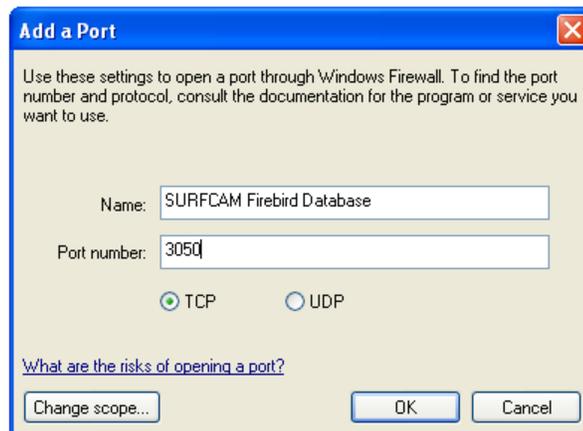
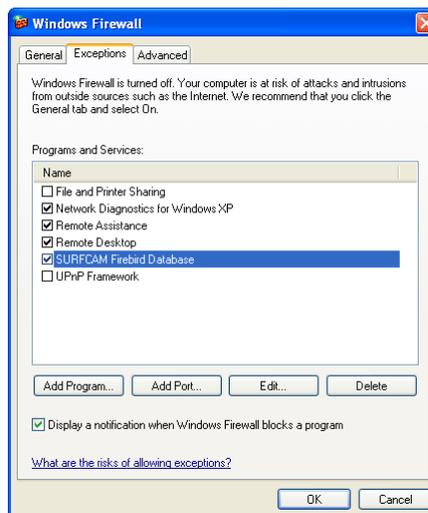A.) Start Menu, Control Panel, Windows Firewall

B.) Click the Exceptions Tab
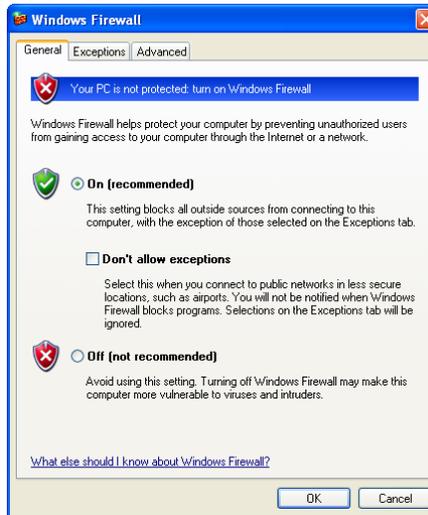
C.) Click the Add Port button
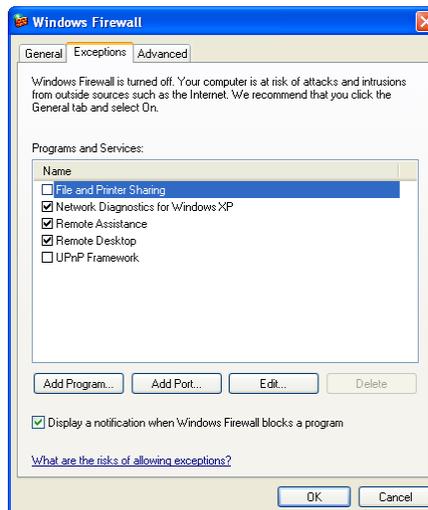
D.) Enter a user friendly name of SURFCAM Firebird Database and enter 3050 in the Port number field then click the OK button

E.) Click the OK button to close the Windows Firewall.

2. SURFCAM Workstation Configuration

Assuming all Server configuration has been completed, the next step is to make a few simple changes on each SURFCAM WorkStation to cause them to look to the Server for the shared files.

2.1. Editing the ToolLib.ini file

The "ToolLib.ini" file created during a normal SURFCAM installation points to the local computer for the SurfcamLibrary.FDB and must be disabled or removed. Again this varies with the OS on the SURFCAM workstation.

When the ToolLibDir line is disabled SURFCAM will rely on the ODBC settings to locate the Database.

NOTE - The ToolLib.ini will always override the ODBC settings.

Add a ";" semicolon before the ToolLibDir line making it a comment, then save and close the file.
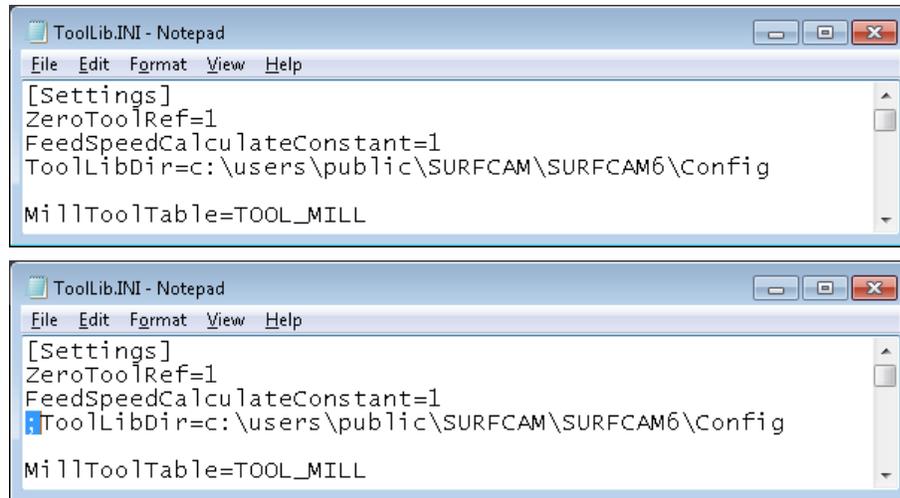
2.1.1. XP

Open this file:

 "C:\Documents and Settings\All Users\SURFCAM\SURFCAM6\Config\ToolLib.ini"
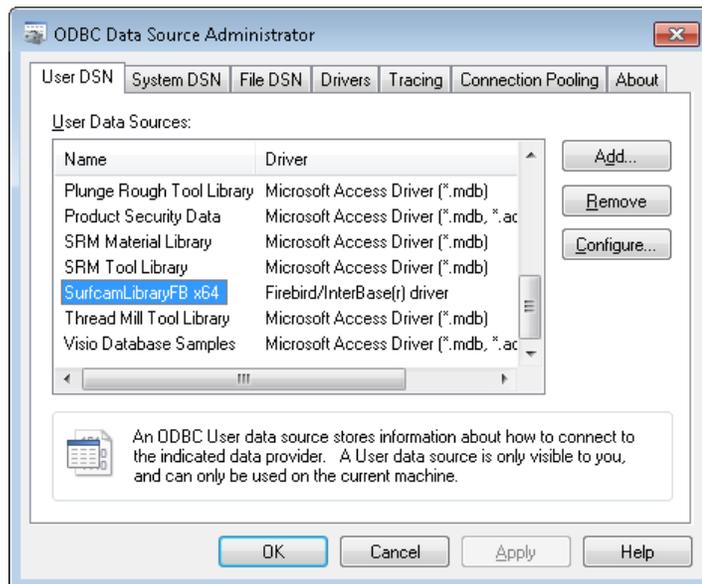
2.1.2. Vista or Win7

Open this file:

 "C:\Users\Public\SURFCAM\SURFCAM6\Config\ToolLib.ini"
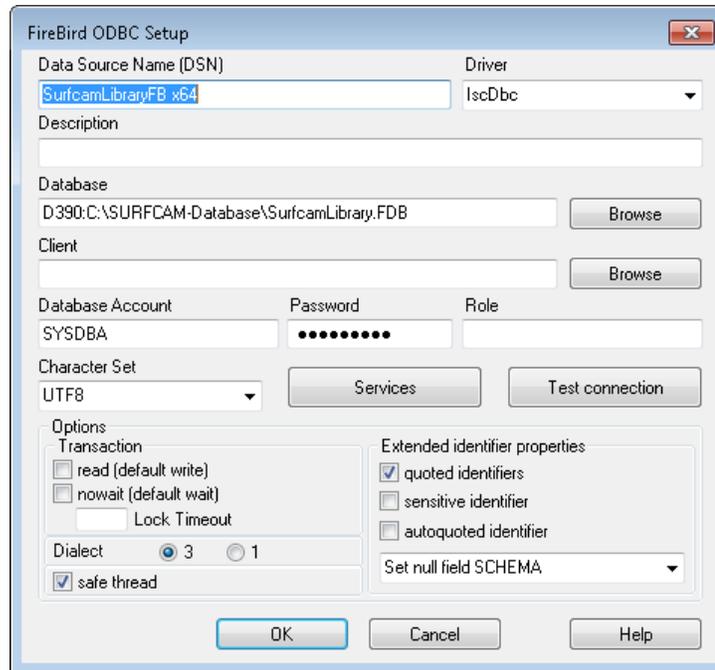
2.2. Configuring ODBC Drivers

This is done by clicking on "**Start|Control Panel|Administrative Tools|Data Sources(ODBC)**"

The "**SurfcamLibraryFB**" or "**SurfcamLibraryFB x64**" driver should be in the ODBC list of data sources as shown here:

Click the "Configure" button and complete the dialog as shown below:

You should only need to edit the Database field to point to where the SURFCAM WorkStation sees the "**SurfcamLibrary.FDB**" file. We suggest browsing to it to make certain.

The general format is "**SERVER_name_or_IP:Physical Drive:Path\Filename On The Server**"

In the example in the dialog above:

D390:C:\SURFCAM-Database\SurfcamLibrary.FDB

"D390" is the Server name or the IP address & "C:\SURFCAM-Database\SurfcamLibrary.FDB" is the Database Path on Server.

3.	FlameRobin

A stand-alone freeware utility named "FlameRobin" is available from Surfware to view and externally edit the Firebird database. FlameRobin should only be used on the Workstation when the Database is local or on the Server if the Database shared. It is NOT recommended to use FlameRobin from a SURFCAM Workstation to access a shared database on a Server.

3.1.	Downloading FlameRobin

FlameRobin software is available at the Surfware Support web-site as follows:

3.1.1.	32 Bit Version

http://rensi.fi/files/surfcam/flamerobin-0.9.2-1-setup-32bit.exe

3.1.2.	64 Bit Version

http://rensi.fi/files/surfcam/flamerobin-0.9.2-1-setup-64bit.exe

3.2.	Installing FlameRobin

Since the FlameRobin installer requires that you link to an existing Firebird database, you should have the Server database installed before attempting this installation. You can, however, use the default database installed with SURFCAM 6 if available to your computer.

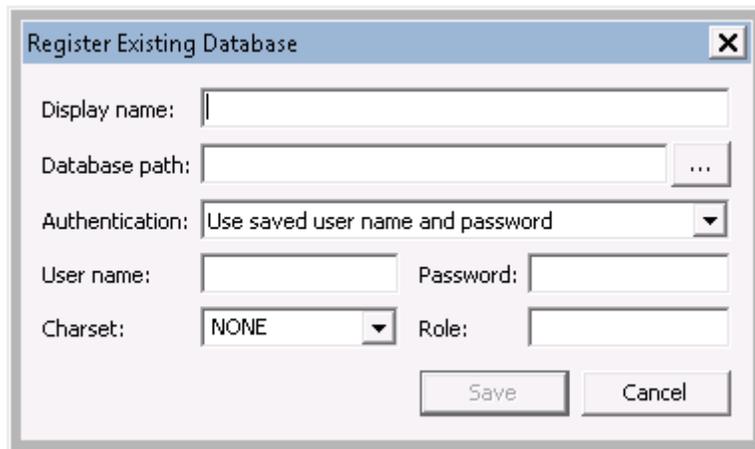| 3.3.	Using FlameRobin

When launched, this screen will appear
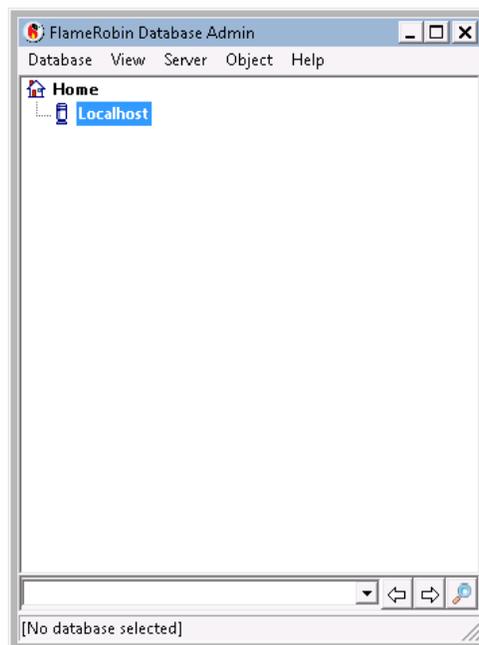
Right mouse click the "**Localhost**" item and select "**Register existing database**"
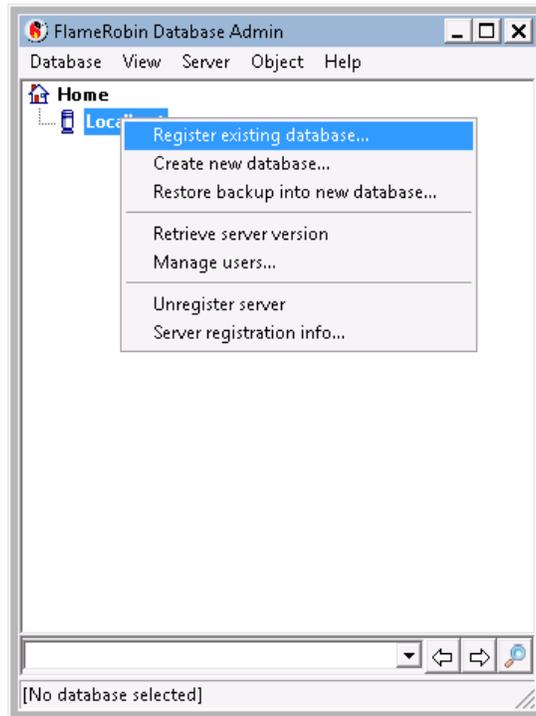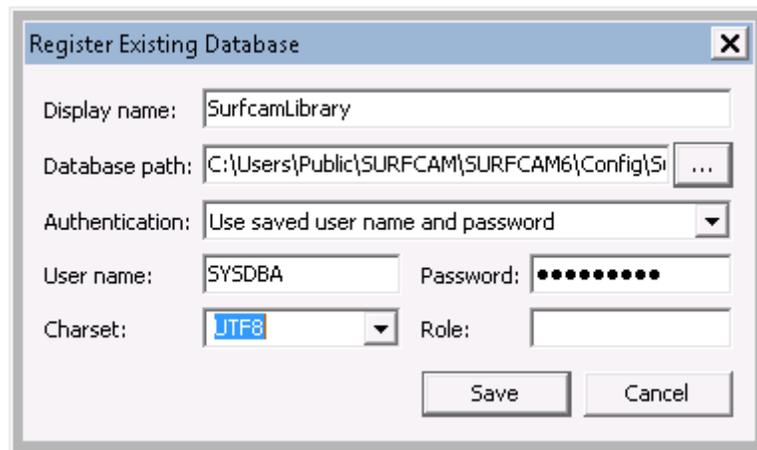

Click the browse box to the right of the Database Path and locate your SURFCAM Database
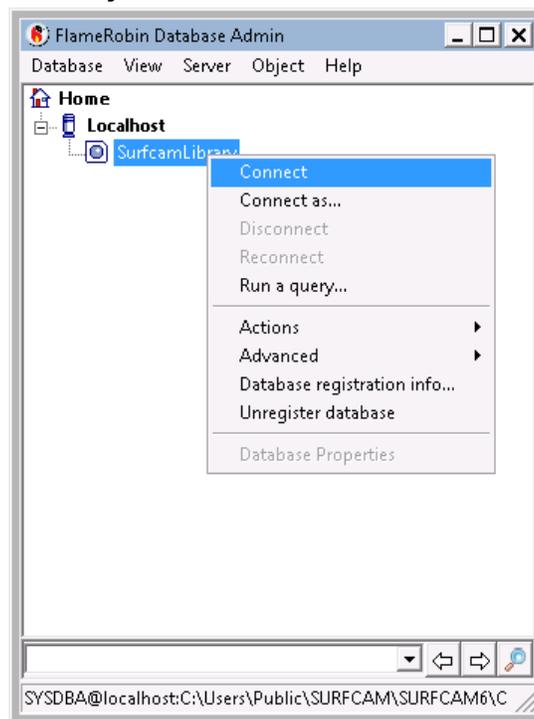- XP - C:\Documents and Settings\All Users\SURFCAM\SURFCAM6\Config\SurfcamLibrary.FDB
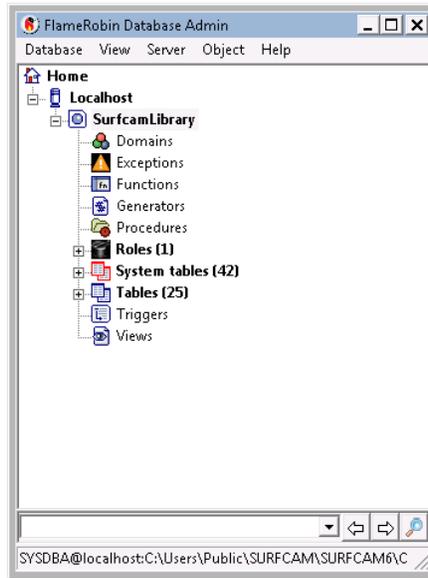- Vista \ Win7 - C:\users\public\SURFCAM\SURFCAM6\Config\SurfcamLibrary.FDB

The Display name field will automatically populate.
Enter "**SYSDBA**" for the User Name and "**masterkey**" for the password.
Set Charset to "**UTF8**"

Right mouse click the "**SurfcamLibrary**" database and select "**Connect**"

The SurfcamLibrary database structure will be displayed as shown here:

You can expand the "**Tables**" menu and Right Mouse click a Table name such as "**TOOL_DRILL**" as shown here, then the "**Select From**" option to see the contents of the selected table.
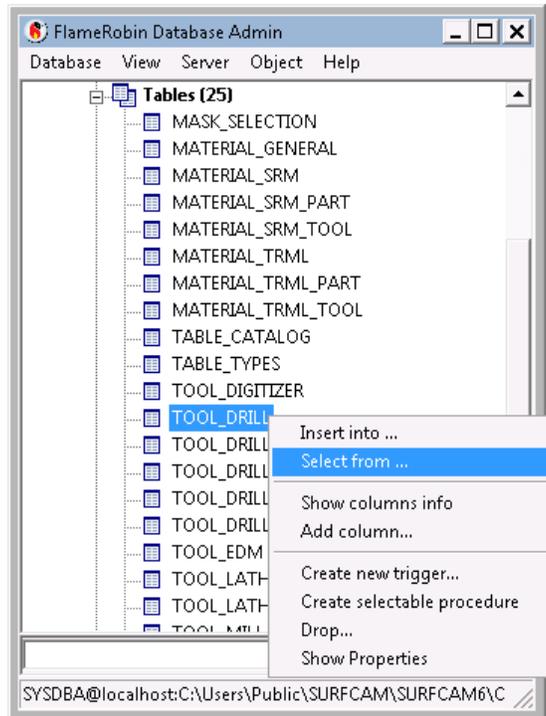
The Contents of the Selected Table will be displayed.