PART 7 – UTILITIES

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Firmware Upgrade Utility

Introduction

The Firmware Upgrade Utility lets you perform the following actions:

- Identify **Firmware versions** of connected Hardware.
- **Selection and configuration of the Communications Port**.
- You may **Ping** the connected Hardware (feedback informs you of whether Hardware is connected and working as specified).
- Perform **in-field Firmware Upgrades** to connected Hardware.

Opening the Utility

In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**Firmware Upgrade Utility**.

Select and Configure the Communications Port

To specify a communication protocol, continue as follows:

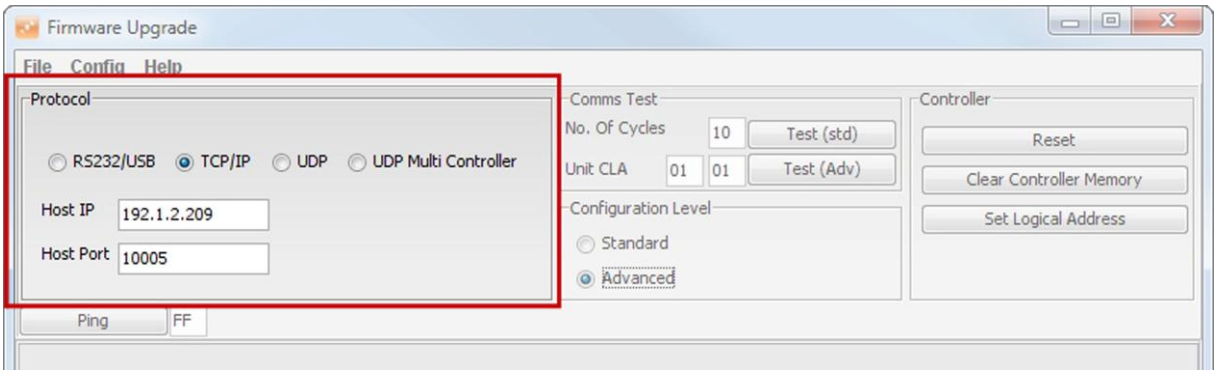

Figure 1 – Protocol Group

1. In the Protocol group, select one of the following radio buttons:
   - **RS232**—used where your IXP220 Controller connects by RS232 or USB or where or you are using a communications interface device, select the RS232 option and enter the relevant COM Port number.
   - **TCP/IP**—used where your IXP220 Controller connects by Ethernet.
   - **UDP**—used when connecting UDP to a single Controller.
   - **UDP Multi Controller**—used when connecting many UDP devices. On selection of the UDP Multi Controller radio button, a drop-down list displays, listing IP Mapping files created by the IXP220 Base Application. Creation of these files takes place on closure of the Base Application Module, on hardware Auto-ID or on replacement of a Controller. From the drop-down list you can select a site matching to your IXP220 setup. Once selected, the Firmware Upgrade Utility communicates with all the Site's Controllers.

2. Based on your selection made in step 1, complete the following activated fields:
   - **Host IP**—your IXP220 Controller's IP Address.
   - **Host Port**—enter the default Host Port number of **10005**.
   - **Local Port**—enter the default Local Port number of **10005**.
   - **Baud Rate**—use the default **38 400**.

Ping Function

Ensure that all hardware is connected and working as specified by using the **Ping** tool.

1. Click the **Ping** button.
2. At the IP Door Controllers dialog, click the **OK** button.

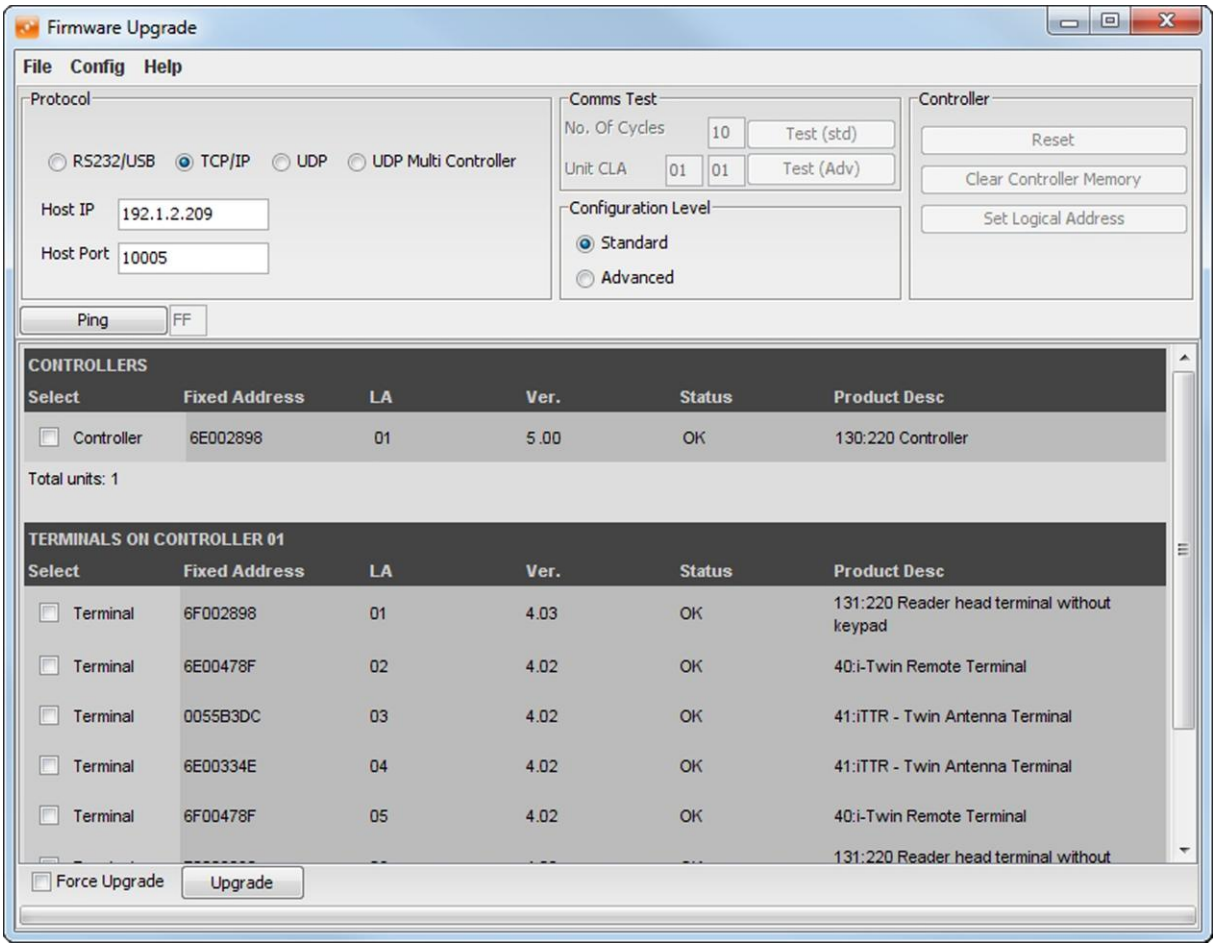

Figure 2 – Results of a Ping Check

Firmware Upgrade Procedure

On Sites with installed iTT or iTRT Ethernet Terminals, upgrade the Controller's Firmware and perform a Full Upload before upgrading the Terminal's Firmware.

Controllers

To upgrade the Firmware on a Controller, proceed as follows:

1. Configure the Protocol settings specific to your Controller and installation requirements. Refer to the section **Selecting and Configuring the Communications Port** on page 5.
2. Ensure all hardware is connected and working as specified using the **Ping** tool. Refer to the section **Ping Function** on page 6.
3. Click the Controller's **Select** checkbox.
4. Click the **Upgrade** button.
5. Once the Upgrade is complete, perform a **Full Upload**. For information on performing a Full Upload, please refer to the section Full Upload in Part 3 – General Configuration.

*The **Force Upgrade** checkbox forces an upgrade on a unit that has a newer firmware version than is available with your current IXP220 Software Suite. We recommend that you do not use this feature.*

Terminals and Readers

To upgrade the Firmware on a Terminal or Reader proceed as follows:

1. Configure the Protocol settings specific to your Controller and installation requirements. Refer to the section **Selecting and Configuring the Communications Port** on page 5.
2. Ensure all hardware is connected and working as specified using the **Ping** tool. Refer to the section **Ping Function** on page 6.
3. Click the Terminal or Reader's **Select** checkbox.

Readers connected to a Terminal have the same fixed address as the Terminal itself. When upgrading a Terminal and its Readers, ensure that you select the checkboxes of both the Readers and the Terminal.

4. Click the **Upgrade** button.

*The **Force Upgrade** checkbox forces an upgrade on a unit that has a newer firmware version than is available with your current IXP220 Software Suite. We recommend that you do not use this feature.*

*The ImproX iTT, iTRT, MDR and MDK allow for **Zero Downtime Upgrade Support**. During a firmware upgrade the affected Hardware continues to operate as expected, however for the ImproX MDR and MDK the LED flickers intermittently while the new file uploads. Once the upgrade is complete, a reset (about 30 seconds) takes place for the new firmware to load. During this reset, the related Hardware will not read Tags.*

Display Firmware Versions (Available on the Software CD)

From the **Config** drop-down menu, select **File Versions** to view firmware file versions available on the local IXP220 Installation.

Additional Features

Set the Logical Address

Change the Logical Address of your Controller or Terminal as follows:

1. Click the **Advanced** radio button.
2. In the **Controller** group, select the **Set Logical Address** button.
3. Select the **Controller** or **Terminal** radio button.
4. In the Fixed Address textbox, enter the **Fixed Address**.
5. In the active Logical Address textbox, enter the new **Logical Address** for the Controller or Terminal.
6. Click the **OK** button.

Clear the Controller's Memory

This option clears the Controller's memory, including details of all transactions. Because of the complexities of this feature, we advise that only approved Distributors or Impro Technical Support Staff use it. Therefore, please contact your Impro Distributor for support.

Localisation and Translation

Localisation and Translation lets Users from different locales (countries and geographical locations), use the Firmware Upgrade Utility in their own language.

Choose Locale

1. From the Menu Bar, select **File**>**Choose Locale**.

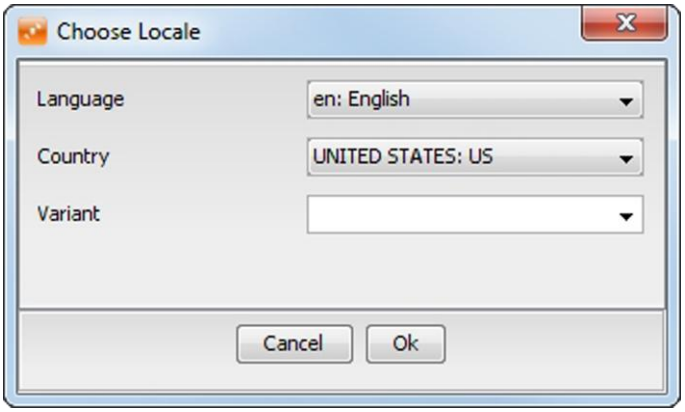

Figure 3 – Locale Chooser Dialog

2. In the **Locale Chooser** dialog, from the **Language** drop-down list, make your selection.
3. From the **Country** drop-down list, make your selection.
4. From the **Variant** drop-down list, select a language variant based on your previous selections (optional).
5. Click the **OK** button.

Translating the Software Interface

1. From the Menu Bar, select **File**>**Translate**.

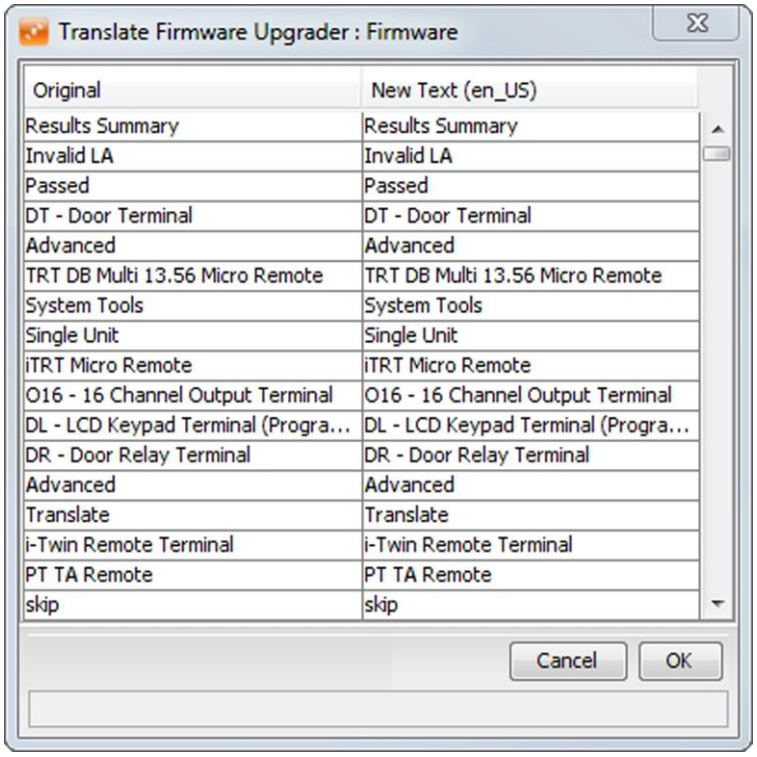

Figure 4 – Translate Text : Dialog

2. In the **Translate Text :** dialog, from the **New Text** column, select a phrase to translate.

*The **Original** column displays words in English. The **New Text** column displays a copy of the English words, but it is editable. This means you can substitute the default words in the **New Text** column for words in your own language.*

3. Press the **F2** key, thus opening the phrase for editing.
4. Enter a substitute phrase suitable for your Locale.
5. Press the **Tab** key to move to the next phrase.
6. Repeat steps 3 to 5 for each phrase you wish to edit.

Do NOT edit a translation twice in the same session. Close the application and re-start thus preventing loss of the translated data.

7. Click the **OK** button.
8. At the Information dialog, click the **OK** button.

Discovery Utility

Introduction

For IXP220 Controllers and Terminals installed on the LAN *(that is the local Subnet of the Host PC),* ***make use of the Discovery Utility integrated with the IXP220 Base Application****.* ***For IXP220 Controllers and Terminals installed on a WAN*** *(that is the non-local Subnet of the Host PC),* ***make use of the stand-alone Discovery Utility*** *(local to the Controller or Terminal)* ***and export the configuration settings to the Host PC****. The Host PC runs the IXP220 Base Application.*

The Discovery Utility is used for detection and configuration of IXP220 Controllers and Terminals on a LAN or remote WAN. The Utility lets you carry out the following actions:

- Detection of Controllers (System Controllers) on the network.
- Detection of Terminals (Door Controllers) on the network.
- Configuration of the network address settings.
- Configuration of the Controller's settings.
- Configuration of the Terminal's settings.

We recommend you carry out configuration using the following sequence:

1. View the Controllers and Terminals on the Network.
2. Confirm or change the IP Address and set the Address to static.
3. Change the default password to a suitable password for your site.

Ensure that you keep the same password across all Controllers.

4. Group each Controller with the Terminal it should control.
5. Configure each Controller and its grouped Terminals. (This step is optional - default settings should do for most sites).
6. Select all the Controllers and Terminals for your site and export their settings to a file.
7. Check the file exists and contains the data for auto-id.

Viewing Available Controllers and Terminals

Ensure the PC running Discovery is on the SAME subnet as the IXP220 Controllers or Terminals for viewing.

View ALL Available IXP220 Controllers and Terminals on the Local Subnet

1. Using your chosen method, open the Discovery Utility:
   a. From the *Base Application*, from the Menu Bar, select **Hardware**>**Unit Discovery**.

b. Alternatively, start the *stand-alone Discovery Utility* from Windows® by going to **Start**>**All Programs**>**IXP220**>**Utils**>**Discovery Utility**.

2. On the Menu Bar, go to **Network**>**Search Local Subnet**.
3. If the Utility fails to find any Devices, at the **Device Not Found** dialog, click the **OK** button.
4. On the Menu Bar, go to **Network**>**Advanced Local Search**.

By selecting **Advanced Local Search**, you may select the correct **Network Interface** (only displayed where more than one exists) and enter the correct **Subnet Mask**. If the search returns Controller or Terminal details, the Utility (while running) retains the Network Interface and Subnet Mask information for further searches. You may however, use Advanced Local Search again during the session for further searches using different search criteria.

5. Select the relevant Network Interface, if more than one displays.
6. Click the **OK** button.
7. In the Input dialog, in the textbox, enter the **Subnet Mask** for your network.
8. Click on the button. Wait for the Controllers and Terminals to display.

Sort the information displayed in either ascending or descending order by selecting the column header.

View a SPECIFIC Controller or Terminal

1. On the Menu Bar, go to **Network**>**Search IP**.
2. In the **Enter IP Address** dialog, enter the **IP Address** of the Controller or Terminal you're searching for.
3. Click on the button. Wait for the Controller or Terminal to display.

On display of Controllers and Terminals, the following icons appear: the icon represents unlinked Controllers. The icon represents Terminals and the icon represents Controllers with linked Terminals. On expanding the Controller tree, the icon displays, with the linked Terminals displaying below.

Secure Logon

Accessing certain menu choices needs a secure logon (activating after about 12 seconds). You remain logged on to the selected Controller or Terminal until you select another Controller or Terminal and choose a menu alternative needing a logon. You will also have to logon to the Controller or Terminal again after changing the IP Address, clearing the memory or changing the configuration.

1. In the **Device Password** dialog, enter your **password**. The default password is **masterkey**, for improved security we recommend that you change this password.
2. Click on the button.

Change the Secure Logon

1. From the Menu Bar, select **Configuration**>**Change Password**.
2. **Logon** if requested.

3. In the **Enter New Password** textbox enter a new password (not exceeding 16 characters) for the selected Controller or Terminal.
4. In the **Confirm New Password** textbox re-enter your chosen password.
5. Click on the button.

Grouping Controllers and Terminals

On display of Controllers and Terminals, the following icons appear: the icon represents unlinked System Controllers. The icon represents Terminals and the icon represents System Controllers with linked Terminals. On expanding the System Controller tree, the icon displays, with linked Terminals displaying below.

Creating the Group and Adding Controllers

It is unnecessary to give a group name to a Controller if it has no IP Terminals.

1. Select the **Controller** and the **Terminal's** it should control.
2. On the Menu Bar, go to **Configuration**>**Add to Group**.

*Alternatively, right-click and select **Add to Group** from the pop-up menu.*

3. In the **Enter Group Name** dialog, enter a suitable group name for the selected Controllers.
4. Logon if requested (see page 12). A password is required for each Controller and Terminal being added to the Group.
5. Click the button.

Adding Terminals to Existing Controller Groups

1. Select the **Terminal(s)** to be added to the Group.
2. On the menu bar, go to **Configuration**>**Add to Group**.

*Alternatively, right-click and select **Add to Group** from the pop-up menu.*

3. In the **Select the Group Name** dialog, double-click on your chosen group name row.
4. Logon if requested (see page 12).
5. Click the button.

Communication Configuration – Case Local

Configure the Controller or Terminal's Static IP Address (Ethernet)

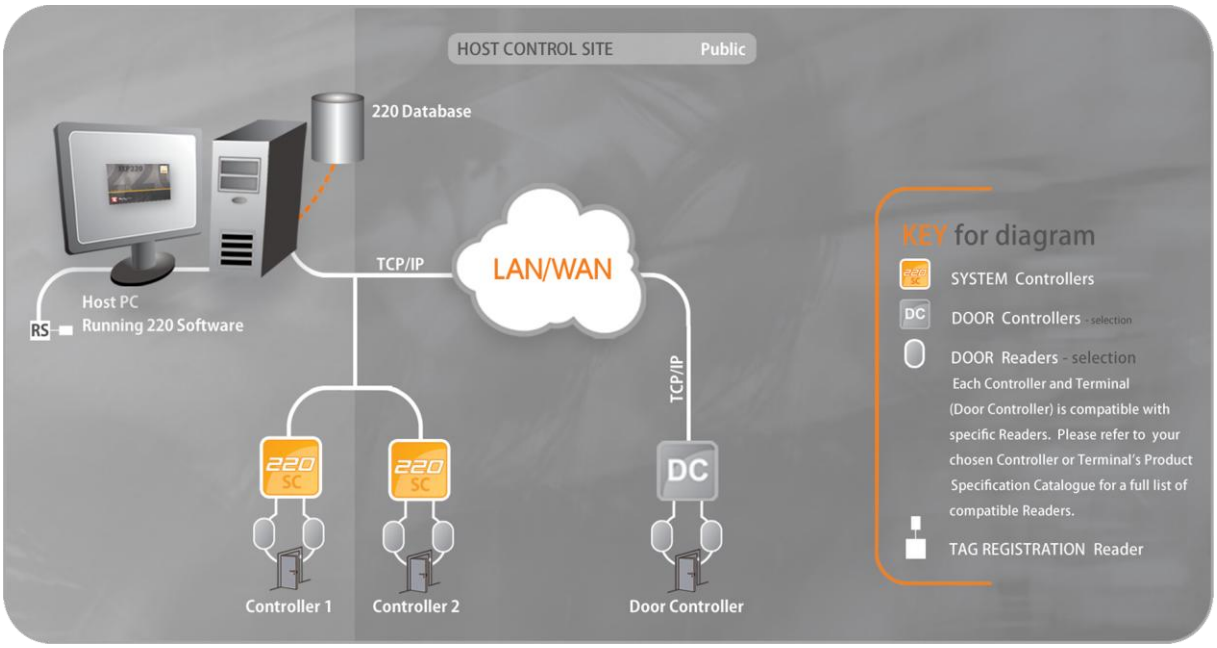

Figure 5 – Case Local—Configure the Controller or Terminal's Static IP Address (Ethernet)

If a DHCP server is present, IP Addresses are dynamically assigned initially. Obtain a suitable IP Address from your Network Administrator. A private static IP Address is essential for the Controller or Terminal because a DHCP Server may assign a new IP Address resulting in the Software losing communications.

If the Controller or Terminal is NOT on the DHCP Server, ensure the PC is on the same IP Range as that of the Controller or Terminal. If the PC's IP Range differs, you cannot change the Controller or Terminal's settings.

1. From the IXP220 Base Application, from the Menu Bar, select **Hardware**>**Unit Discovery**.
2. In the **Discovery Utility** window, select the Controller or Terminal for configuration.
3. From the Menu Bar, select **Network**>**Configure IP**.
4. **Logon** if requested (see page 12).

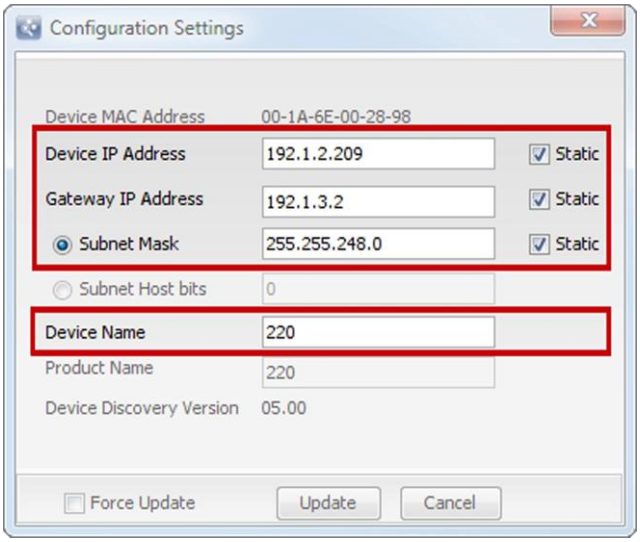

Figure 6 – Configuration Settings Dialog

By assigning an invalid IP Address, the Controller or Terminal may no longer communicate. Refer to the Hardware Installation Manual for information on restoring factory defaults.

5. In the Device IP Address textbox, enter a **Device IP Address**.
6. Tick the checkbox to set the IP Address to **Static**.
7. In the Gateway IP Address textbox, enter a **Gateway IP Address**.
8. Tick the checkbox to set the Gateway IP Address to **Static**.
9. Continue with *ONE* of the procedures (Subnet Mask *or* Subnet Host Bits) that follow:

   Subnet Mask
   a. Select the **Subnet Mask** radio button.
   b. In the textbox, alongside, enter the **Subnet's Address**.
   c. Tick the checkbox to set the Subnet Mask to **Static**.

   Subnet Host Bits
   a. Select the **Subnet Host Bits** radio button.
   b. Enter the number of bits in the textbox.

10. If necessary, amend the supplied **Device Name**. Use the same site prefix to name devices belonging to the same site. For example: "Site_1–Factory", "Site_1–Testing" and so on. Changes to the IP Configuration result in the Controller or Terminal rebooting on acceptance of the change. The Configuration Settings dialog remains open while allowing the Controller or Terminal to reboot. On closure of the dialog, the Utility again searches for the Controller or Terminal and if successful, displays the updated details.
11. Ensure the **Force Update** checkbox is **UNCHECKED**. If the Force Update checkbox remains unchecked, the Controller or Terminal changes the IP Address testing communication on the new Address. If successful, the update becomes final; if not, the Controller or Terminal reverts to its old settings.
12. Click the **Update** button.

After detection and configuration it's not necessary to assign a Logical Address, as the IXP220 Auto-ID process does this. It is not necessary to export the settings to a file.

Communication Configuration – Case Remote

Option 1: Configure the Controller or Terminal's Static IP Address (Ethernet)

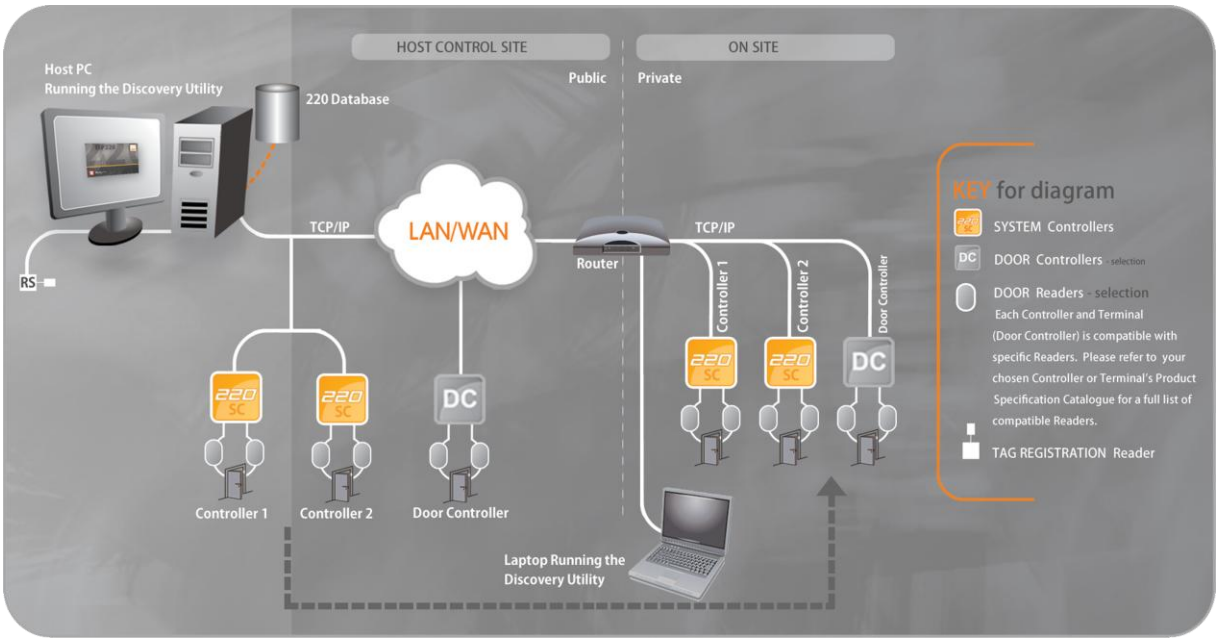

Figure 7 – Case Remote—Configure the Controller or Terminal's Static IP Address (Ethernet)

Use the stand-alone Discovery Utility on the same local Subnet as the IXP220 Controllers or Terminals for configuration. You may temporarily install and pre-configure the Controllers or Terminals on any convenient Subnet, local to the PC running the Discovery Utility. After configuration, move the Controllers or Terminals to the remote location. Alternatively, install the Discovery Utility on a PC on the remote Subnet. Export the settings to a file for manual entry into the IXP220 Base Application.

If a DHCP Server is present, IP Addresses are dynamically assigned initially.

*If the Controller or Terminal is NOT on the DHCP Server, ensure the PC is on the same IP Range as that of the Controller or Terminal. If the PC's IP Range differs, you cannot change the Controller or Terminal's settings. A **public** static IP Address is essential for the Controller or Terminal because the Controller or Terminal is destined for a WAN.*

1. In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**Discovery Utility**.
2. In the **Discovery Utility** window, select the Controller or Terminal for configuration.
3. From the Menu Bar, select **Network**>**Configure IP**.
4. **Logon** if requested (see page 12).

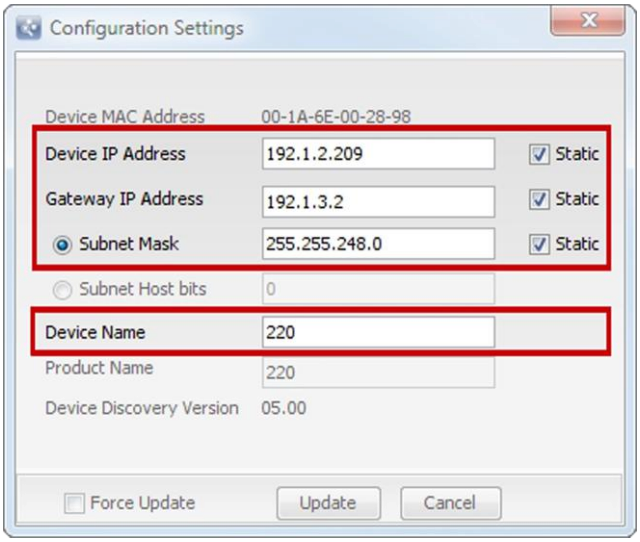

Figure 8 – Configuration Settings Dialog

By assigning an invalid IP Address, the Controller or Terminal may no longer communicate. Refer to the Hardware Installation Manual for information on restoring factory defaults.

5. In the Device IP Address textbox, enter a **Device IP Address**.
6. Tick the checkbox to set the IP Address to **Static**.
7. In the Gateway IP Address textbox, enter a **Gateway IP Address**.
8. Tick the checkbox to set the Gateway IP Address to **Static**.
9. Continue with *ONE* of the procedures (Subnet Mask *or* Subnet Host Bits) that follow:

   Subnet Mask
   a. Select the **Subnet Mask** radio button.
   b. In the textbox, alongside, enter the **Subnet's Address**.
   c. Tick the checkbox to set the Subnet Mask to **Static**.

   Subnet Host Bits
   a. Select the **Subnet Host Bits** radio button.
   b. Enter the number of bits in the textbox.

10. If necessary, amend the supplied **Device Name**. Use the same site prefix to name devices belonging to the same site. For example: "Site_1–Factory", "Site_1–Testing" and so on.

If the Force Update checkbox remains UNCHECKED, the Controller or Terminal changes the IP Address testing communication on the new Address. If successful, the update becomes final; if not, the Controller or Terminal reverts to its old settings.

Changes to the IP Configuration result in the Controller or Terminal rebooting on acceptance of the change. The Configuration Settings dialog remains open while allowing the Controller or Terminal to reboot. On closure of the dialog, the Utility again searches for the Controller or Terminal and if successful, displays the updated details.

11. Ensure the **Force Update** checkbox is **CHECKED** when assigning an Address on an external subnet. The Controller or Terminal changes the IP Address and reboots. If the Address points outside the Local Subnet, the Controller or Terminal is not found until it's physically moved to the new location.

12. Click the **Update** button.
13. From the Menu Bar, select **File**>**Export IP Config**.
14. In the Save dialog, click the **Save** button (by default this file is named **discovery.txt**, you may however change this file name).
15. Exit the Discovery Utility.
16. Send a copy of the exported Discovery file (**discovery.txt**) to the Host Location.
17. If locally pre-configured, move the Controller or Terminal to its remote location.

*After installing the Controller or Terminal in its new location, you can find it by going to **Network>Search IP**.*

Option 2: Configure the Controller or Terminal's Public Host Name (Ethernet)

Use this option where you install your IXP220 Controller or Terminal behind a Router with a public hostname resolved to an IP Address. In this scenario, the Router is setup (by your Network Administrator) to route data to the separate Controllers or Terminals via the port numbers uniquely associated with them. Detection of Controllers or Terminals using the Discovery Utility is only done locally, that is on the Local Subnet, behind the Router. To address the Controller or Terminal from the world beyond the Router, the local IP Address of the Controller or Terminal must change to the Router's public hostname.

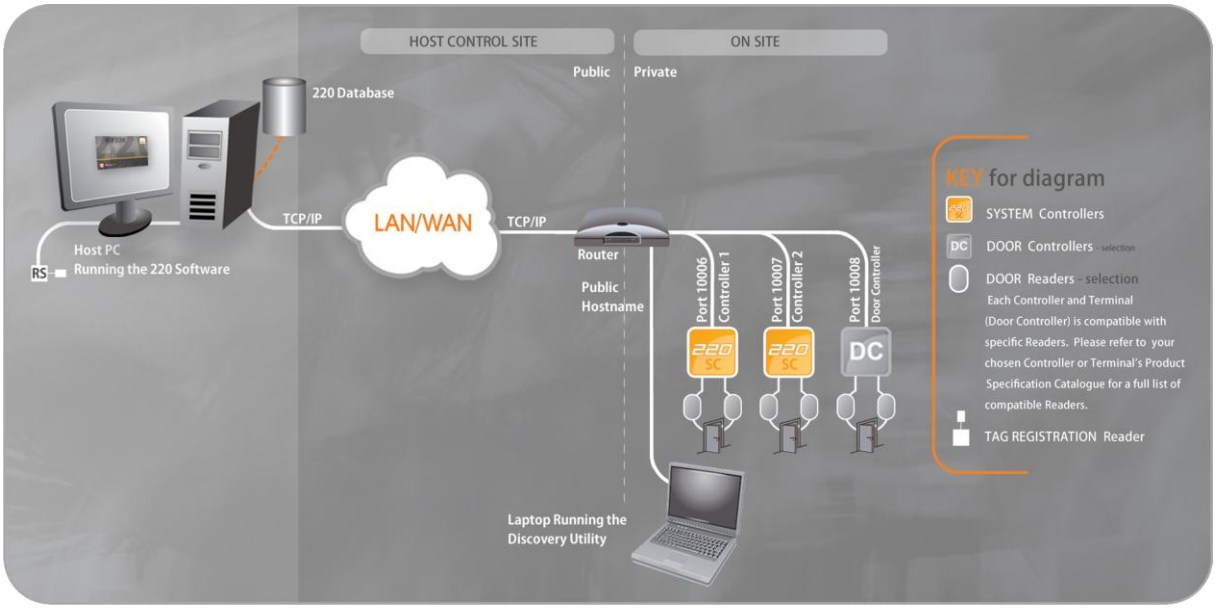

Figure 9 – Case Remote—Configure the Controller or Terminal's Public Host Name (Ethernet)

1. Select a UNIQUE Communication Port Number for the IXP220 Controller or Terminal.
2. Program the Router to direct all data destined for that port to the Controller or Terminal.
3. In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**Discovery Utility**.
4. In the **Discovery Utility** window, select the Controller or Terminal for configuration.
5. From the Menu Bar, select **Network**>**Configure IP**.
6. **Logon** if requested (see page 12).
7. Allow the DHCP assigned addresses to remain and set as static or obtain a static address from your network administrator.
8. If necessary, amend the supplied **Device Name**.

Change the Secure Logon and Clear the Controller or Terminal's memory as required.

9. Change the Communication Port Number to the unique port number set up on the Router (see page 23).
10. From the Menu Bar, select **File**>**Export IP Config**.
11. In the Save dialog, click the **Save** button (by default this file is named **discovery.txt**, you may however change this file name according to your needs).
12. Exit the Discovery Utility.
13. Send a copy of the exported Discovery file (**discovery.txt**) to the Host Location.

In the IXP220 Software now add a new communication channel to your selected Site, either manually or by importing the file you exported earlier (**discovery.txt**). If the file is imported, the Port Number is correct and you need only change the IP Address to the Router's public Hostname. Auto-ID continues as normal. See Part 3 – General Configuration for full details on this procedure.

Option 3: Configure the Controller's Mobile Settings (GPRS)

This connection option is not supported where you have Controllers connected (by RS485) to the GPRS enabled Controller.

When configuring the GSM Module for GPRS and SMS ensure that you obtain a PUBLIC Access Point Name (APN) from your Mobile Service Provider.

When using a Hostname instead of an IP Address, ensure that you have access to a PC with an active Internet connection.

This option only applies to the IXP220 Controller fitted with a GSM Module.

Configuration for GPRS and SMS

Pre-configure the Controller with the Controller connected to the local LAN. After pre-configuration, remove the network connection from the Controller.

Pre-configuration, get the following from your Mobile Service Provider:

- Buy a **SIM Card** (you will need the **PIN** and **PUK** numbers for this SIM Card).
- Get a public **Access Point Name** (**APN**).
- Confirm details for the **SMS Service Centre**.
- Have the **Username** and **Password** for the Access Point Name (APN) available (only needed in some instances).

And from a Dynamic Domain Name Service Provider, get the following:

- Select one of the supported Providers, namely **changeip.org**, **dyndns.com** or **no-ip.com**.
- Register a **Hostname for your IXP220 Controller** with your chosen Provider.
- Register a **Username** and **Password** for your IXP220 Controller.

- Register a **Hostname for the PC hosting the IXP220 Software**, or use a public static IP Address.

Both Hostnames must resolve to a public IP Address, they cannot remain blank.

1. In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**Discovery Utility**.
2. In the **Discovery Utility** window, select the Controller for configuration.
3. From the Menu Bar, select **Network**>**Configure Mobile Settings**.
4. **Logon** if requested (see page 12).

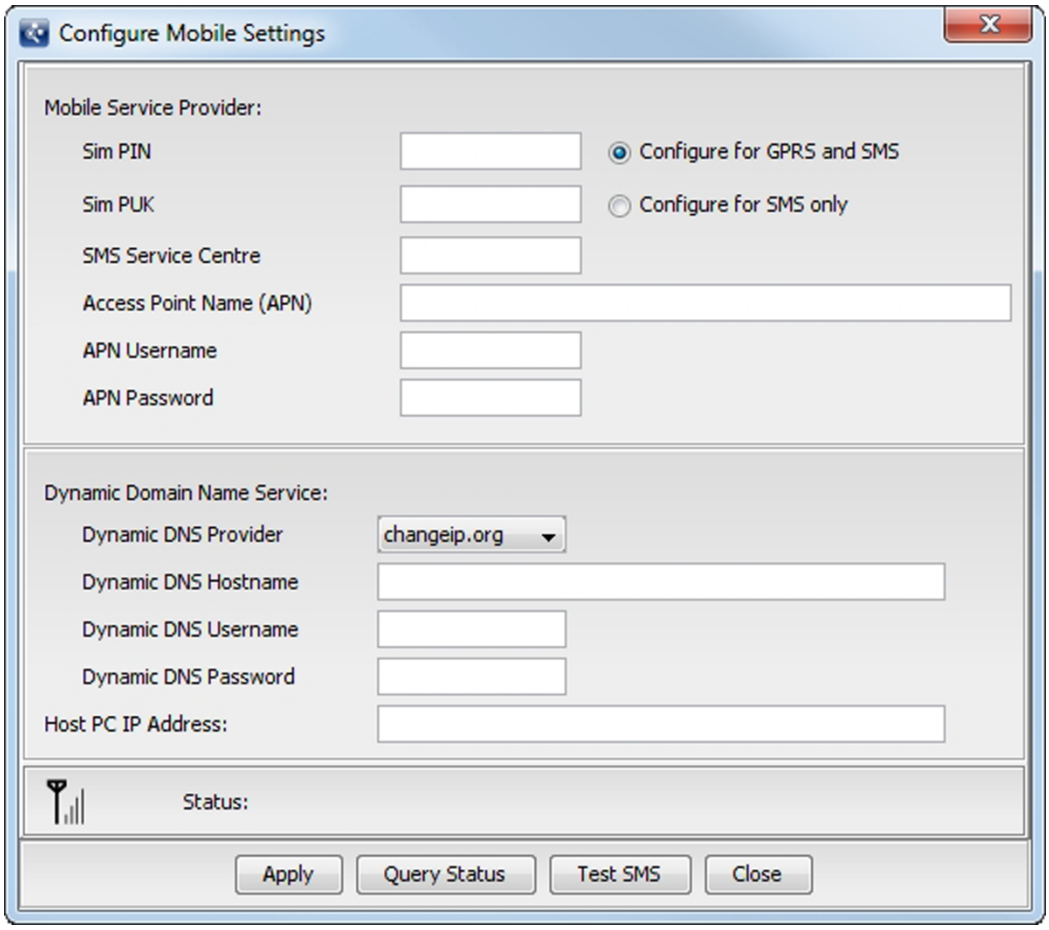

Figure 10 – Configure Mobile Settings Dialog

*The **Signal Strength** icon on the Status bar indicates the signal strength being experienced by the Controller's GSM Module. 5 Bars indicates maximum signal strength.*

5. Complete the fields under the header **Mobile Service Provider**:
   - **SIM PIN**—this is the Personal Identification Number (PIN), a numerical combination of up to 5 digits, supplied with your SIM Card. Wrong entry of the PIN (more than 3 times) locks the SIM Card.
   - **SIM PUK**—this is the PIN Unlock Key. This number offers protection of the device and SIM Card with the PIN. Entry of the wrong PUK (more than 10 times) permanently blocks the device, a new SIM Card is then required.
   - **SMS Service Centre**—the contact number for the repository that stores messages for delivery to the destination user when they are available. Stored on the SIM Card, this

number may not come into sight until you activate your mobile settings. If you wish to use the service and the number does not finally appear, contact your service provider for assistance.

- **Access Point Name (APN)**—this is the name used to identify a public (free) GPRS bearer service in the GSM mobile network. The Access Point Name (APN) defines the type of service provided in the packet data connection.
- **APN Username**—possibly needed for the Access Point Name (APN).
- **APN Password**—possibly needed for the Access Point Name (APN).

6. Ensure the **Configure for GPRS and SMS** radio button is selected (default).
7. Under the header **Dynamic Domain Name Service**, From the **Dynamic DNS Provider** drop-down list, select one of the supported Providers.
8. In the **Dynamic DNS Hostname** textbox, enter the registered IXP220 Controller's Hostname.
9. In the **Dynamic DNS Username** textbox and **Dynamic DNS Password** textbox, enter the registered Username and Password respectively for your IXP220 Controller.
10. In the **Host PC IP Address** textbox, enter the public static IP Address.

When using a SIM Card with a single static IP Address, enter the public static IP Address of the Host PC, not the Hostname. Contact your Mobile Service Provider for more information on your SIM Card.

11. Click the **Apply** button.

The Discovery Utility captures the configuration information and forwards the information on to the Controller for activation. The Controller starts the process of establishing a GPRS connection. The Discovery Utility queries the Controller for status until the Utility gets a result. During the verification process there is an approximately *60-second time-out.*

The Discovery Utility decides on the success of the configuration. At the end of the verification process, the Status bar at the bottom of the Configure Mobile Settings dialog, displays the status of the configuration. Possible status messages include:

- **Listening**—this is the desired status message.
- **GSM Module Not Present**—indicates the GSM Module is removed or uninstalled.
- **GSM Module Present**—Controller is aware the GSM Module is connected; however the Controller is busy going through the connection process.
- **SIM PIN or PUK Error**—indicates you have captured the wrong PIN or PUK number.
- **GPRS Network Error**—indicates the GSM Module cannot connect to the Network.
- **APN Error**—indicates the wrong APN Name was captured. This message also appears however, where you have exceeded your data cap or you have no available airtime on your SIM Card.
- **DDNS Error**—indicates there is an error with the captured DDNS parameters.
- **Connected**—connected status only occurs if a Controller was already configured and currently connected by GPRS to the IXP220 Software while still connected by Ethernet.

*If the connection is not established, the Controller may begin the verification process again. In an instance where the verification process times out, click the **Query Status** button manually requesting the status.*

*If you do NOT get the status **Listening**, correct any errors and then press the **Apply** button again.*

On acceptance of the settings, the GPRS parameters are written to the **DiscoveryGSM.txt** file. The IXP220 Software automatically imports this file for permanent storage in the Database (in case of Hardware replacement).

12. On achieving the Listening status, close the Configure Mobile Settings dialog.
13. Export the configuration file, from the Menu Bar, select **File**>**Export IP Config**.
14. Click the **Save** button.
15. Exit the Discovery Utility.
16. Send both the **DiscoveryGSM.txt** and **Discovery.txt** files to the Host PC (ensuring you place both files in the same destination folder) before beginning the Auto-ID process.
17. Disconnect the IXP220 Controller from the LAN.
18. Reboot the Controller.
19. Continue with the Auto-ID process (see Part 3 – General Configuration for more information on this process).

Configuration for SMS Only

A public Access Point Name (APN) is NOT required for SMS only.

In instances where your Controller connects by Ethernet, but you still require SMS capability, continue as follows:

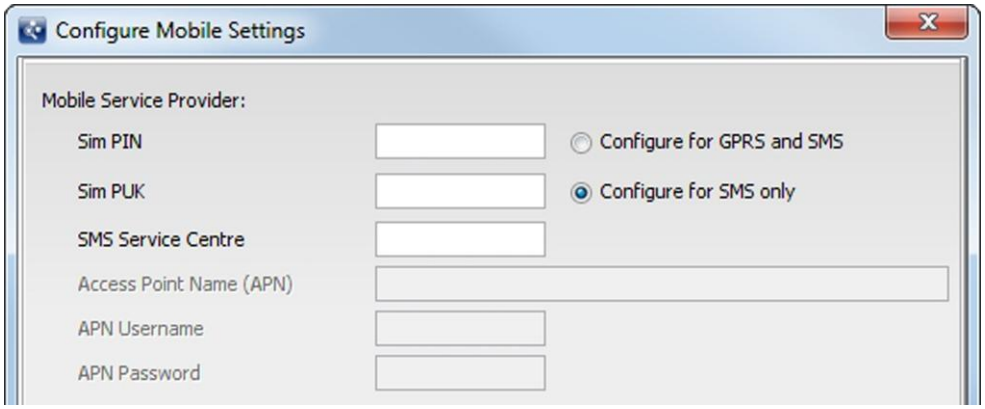

Figure 11 – Configure Mobile Settings Dialog

*The **Signal Strength** icon on the Status bar indicates the signal strength being experienced by the Controller's GSM Module. 5 Bars indicates maximum signal strength.*

1. In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**Discovery Utility**.
2. In the **Discovery Utility** window, select the Controller for configuration.
3. From the Menu Bar, select **Network**>**Configure Mobile Settings**.
4. **Logon** if requested (see page 12).
5. Ensure the **Configure for SMS Only** radio button is selected.
6. Complete the fields under the header **Mobile Service Provider**:
   - **SIM PIN**
   - **SIM PUK**
   - **SMS Service Centre**
7. Click the **Apply** button.

*Your setup is complete and working correctly when you receive the Status message **SMS Configuration Completed**. We recommend that you test the connection by clicking the **Test SMS** button. Where called for by your country and or your service provider, precede the recipient's mobile number with the country code.*

Configure the Port Number

This is an advanced feature; use the feature only if required.

After making changes to one or more Controller or Terminal's Configuration Settings, ensure that you export the configuration file for entry into the IXP220 Base Application.

Using the **Discovery Utility,** view or configure the **Port Number** of the Controller or Terminal as follows:

1. Select the **Controller** or **Terminal** for configuration.
2. From the Menu Bar, select **Configuration**>**Set Configuration**.
3. **Logon** if requested (see page 12).
4. In the **Communication Port Number** textbox, change the Port Number. The default Port Number is **10005** for Controllers and **10008** for Terminals. Only change the default Port Number if it clashes with other devices or services on your network.
5. In the **Terminal Listener Port** textbox, change the Port Number (Controller listens to Terminals on this Port). The default Port Number is **10008**. Only change the default Port Number if it clashes with other devices or services on your network or if you communicate with the Terminal over a WAN using Port Fowarding.
6. Tick the **Safe IP** checkbox, thus ensuring that the Controller or Terminal only responds to the Host PC.
7. Click the button to confirm.
8. Wait while the Controller or Terminal re-boots (about 15 seconds).

Advanced Features

Clear the Controller or Terminal's Memory

This feature lets you clear the Controller or Terminal's memory (used for storing the Database - that is the Tags, Transactions, Terminal Tables, Actions, Time Patterns and so on).

1. Select the **Controller** or **Terminal** for configuration.
2. From the Menu Bar, select **Configuration**>**Clear Memory**.
3. **Logon** if requested (see page 12).

Localisation and Translation

Localisation and Translation lets Users from different locales (countries and geographical locations), use the Discovery Utility in their own language.

Choose Locale

1. From the Menu Bar, select **File**>**Choose Locale**.

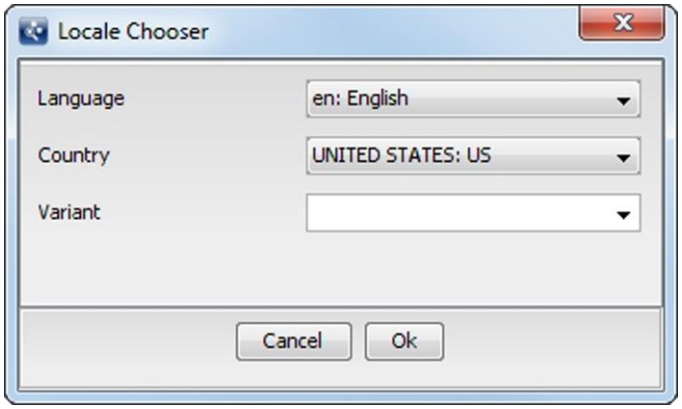

Figure 12 – Locale Chooser Dialog

2. In the **Locale Chooser** dialog, from the **Language** drop-down list, make your selection.
3. From the **Country** drop-down list, make your selection.
4. From the **Variant** drop-down list, select a language variant based on your previous selections (optional).
5. Click the **OK** button.

Translating the Software Interface

1. From the Menu Bar, select **File**>**Translate**.

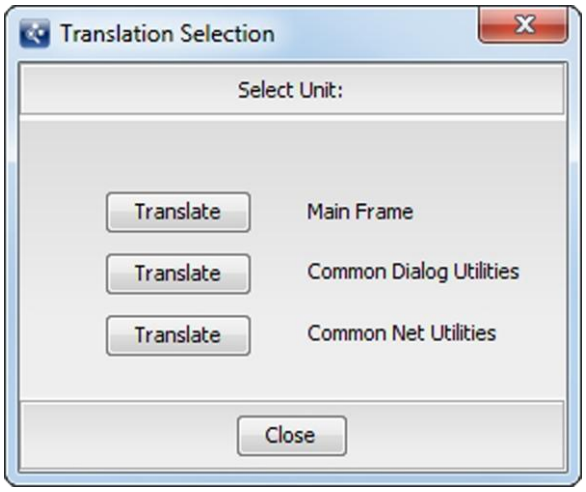

Figure 13 – Translation Selection Dialog

2. Select the **Unit** for translation, for example: Main Frame.
3. Click the corresponding **Translate** button.

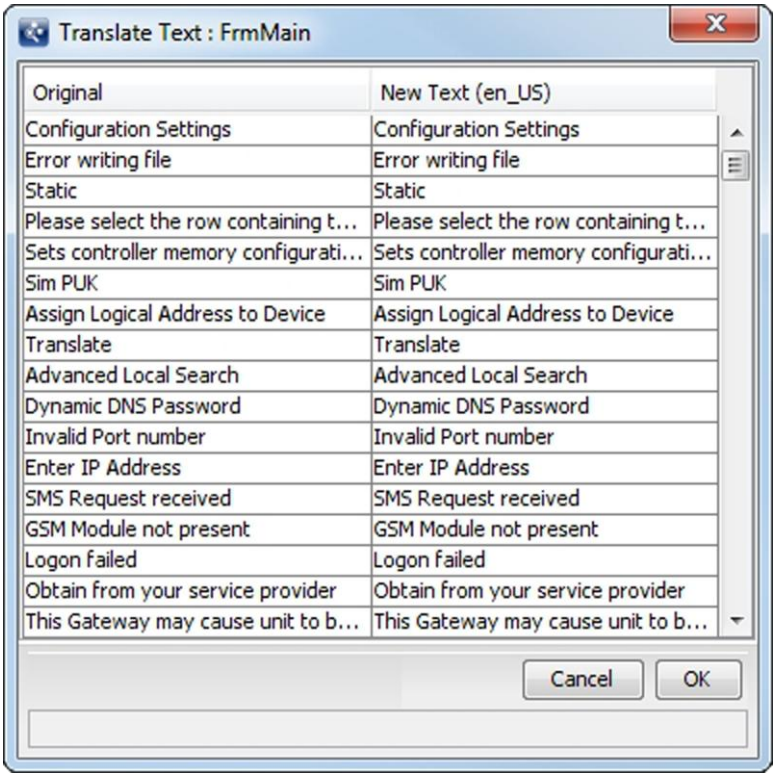

Figure 14 – Translate Text : Dialog

4. In the **Translate Text :** dialog, from the **New Text** column, select a phrase to translate.

*The **Original** column displays words in English. The **New Text** column displays a copy of the English words, but it is editable. This means you can substitute the default words in the **New Text** column for words in your own language.*

5. Press the **F2** key, thus opening the phrase for editing.
6. Enter a substitute phrase suitable for your Locale.
7. Press the **Tab** key to move to the next phrase.
8. Repeat steps 5 to 7 for each phrase you wish to edit.
9. Click the **OK** button.
10. Repeat steps 1 to 9 for the remaining **Units** for translation.
11. Click the **Close** button.

Do NOT edit a Module's translation (for example Main Frame), twice in the same session. Close the application and re-start thus preventing loss of the translated data.

Universal Data Exporter Utility

Introduction

The Universal Data Exporter Utility lets you extract transaction (including time and attendance) records from the IXP220 Database for use by third-party applications. The Exporter Utility makes use of user defined templates (created in Design Mode) that specify the data for extraction and the export format.

Using the Run Mode, you have the choice of exporting the records interactively or as scheduled (using Windows® Scheduler). Command line arguments specify the Mode and other parameters.

On installation of the IXP220 Software V1.80 (and upwards), two additional Utility shortcuts appear on the Programs Menu. These are **Universal Data Exporter (Designer)** (used for **Design Mode**) and **Universal Data Exporter** (used for **Run Mode**).

This Utility requires advanced knowledge of SQL.

Opening the Utility

In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**Universal Data Exporter (Designer)**.

Template Creation (Design Mode)

1. From the toolbar, click the button.
2. If no template exists, at the Message dialog, click the **OK** button.
3. Enter your **Username** and **Password**.

*The default administrator username is **SYSDBA**, and the default password is **masterkey**.*

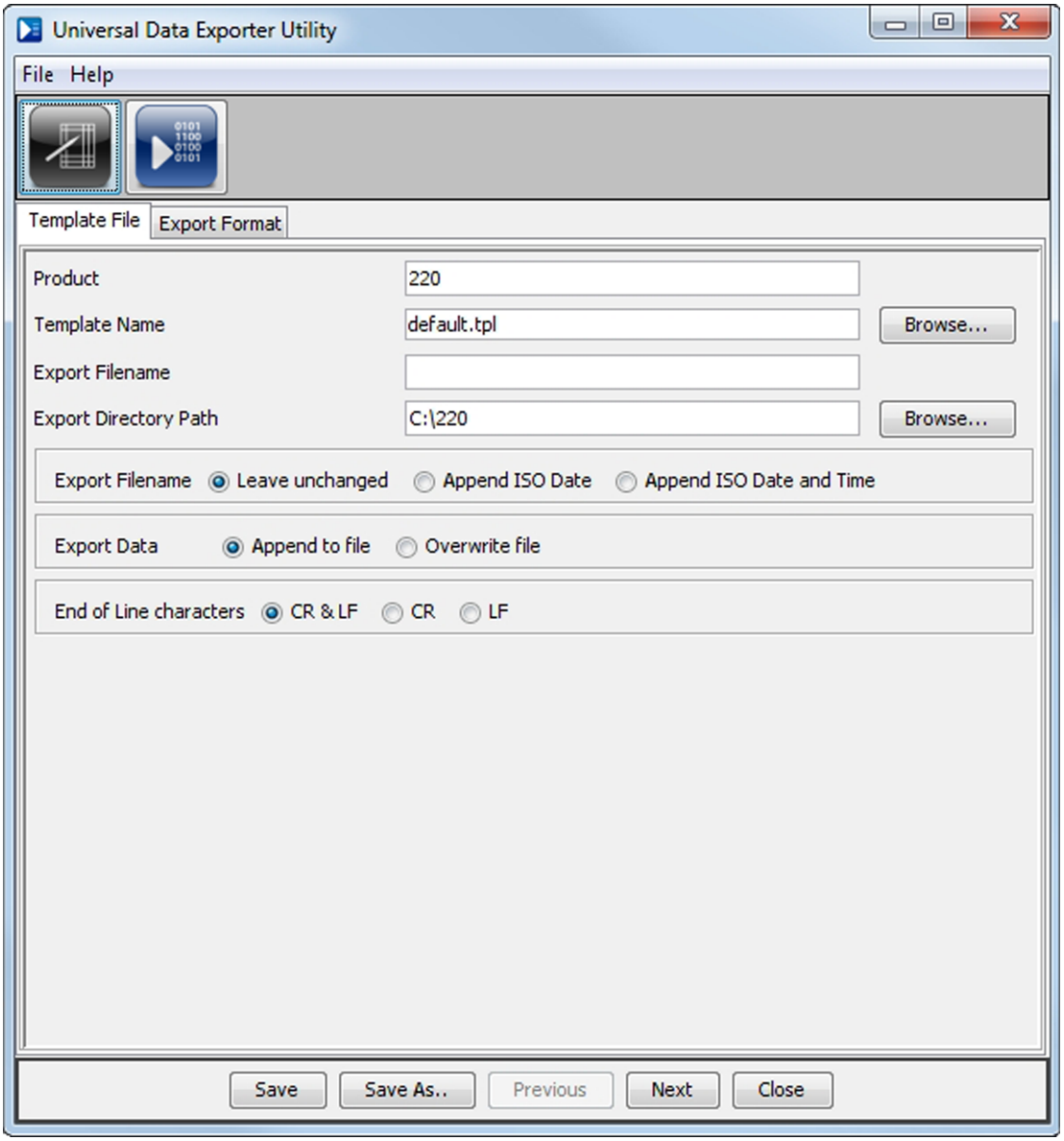

Figure 15 – Template File Tab

Template File Tab

1. In the **Template Name** textbox, enter a name for the template (template files must have the file extension *tpl*). Find this file in the subfolder *Templates* in the installation folder.

*Alternatively, load an existing template by clicking the **Browse** button (alongside the Template Name textbox) and selecting the template file.*

2. In the **Export Filename** textbox, specify a name for the exported file.
3. In the **Export Directory Path** textbox, specify the export directory details.
4. From the **Export Filename** group, select one of the following radio buttons:
   - **Leave Unchanged**—lets you export the filename unchanged.
   - **Append ISO Date**—lets you attach an ISO formatted date to the filename.
   - **Append ISO Date/Time to Filename**—lets you attach an ISO formatted date and time to the filename.

5. Select either the **Append to File** or **Overwrite File** radio button.
6. Select the **End of Line Character** required:
   - **CR & LF**—the Carriage Return (CR) & Line Feed (LF) option is selected by default for Windows®.
   - **CR Only**—Carriage Return (CR) Only.
   - **LF Only**—Line Feed (LF) Only.

Export Format Tab

Build Export Format

1. Select the **Export Format** Tab.

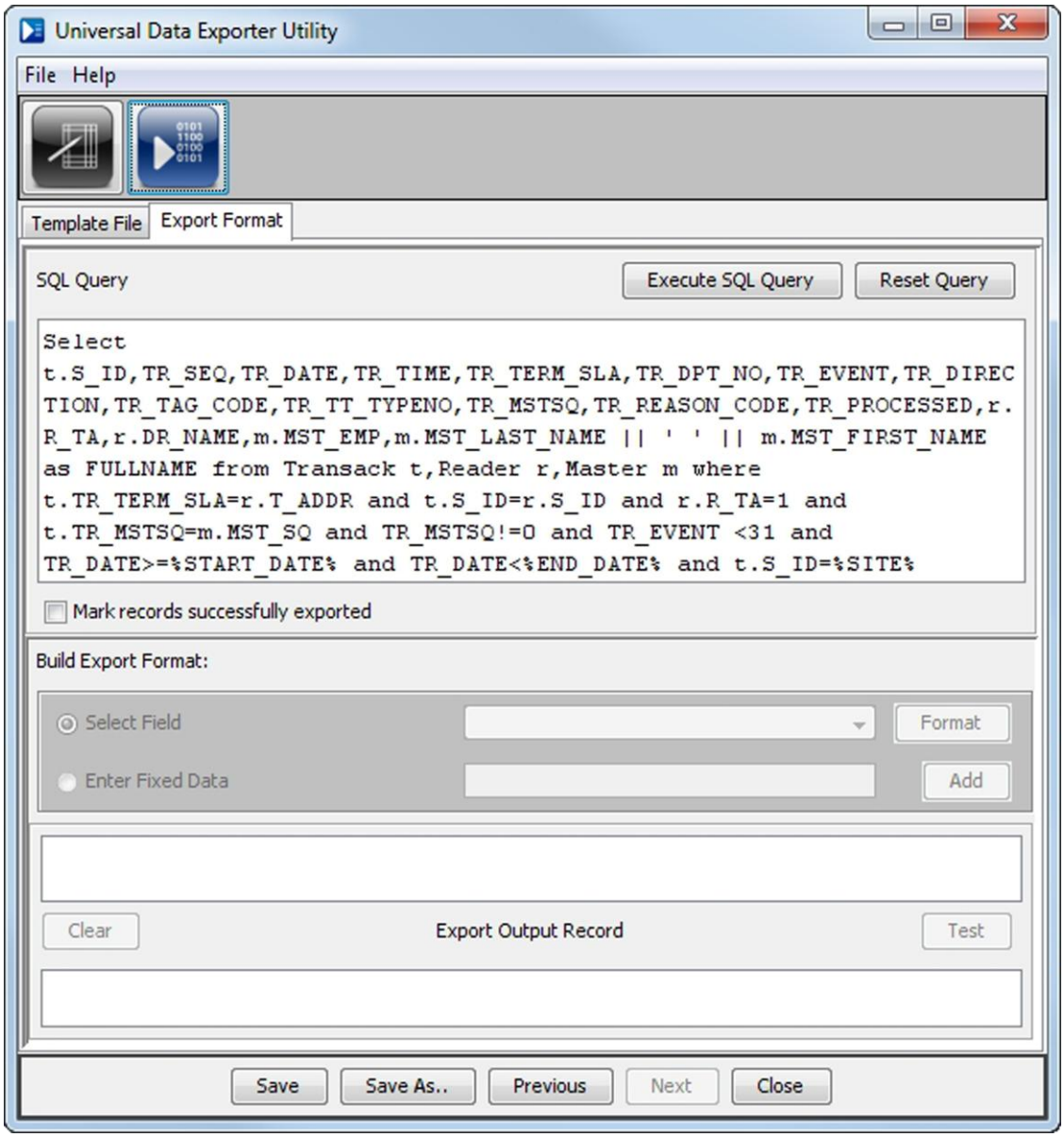

Figure 16 – Export Format Tab

A suggested SQL Query (specific to the product database) displays. You may edit this Query including other fields or restricting the record set selection.

*Edit this SQL Query at your own risk. Knowledge of the System Database Tables and of SQL is essential during editing. If you mistakenly edit the SQL Query click the **Reset Query** button to return to the default SQL Query.*

*The query includes placeholders for a **Start** and **End Date** for the selected transaction records. You may specify these at runtime using command line arguments (for example: **START_DATE=20090101**). Note that the **End Date** is NOT inclusive, so the Utility exports from the Start Date up to and including the day before the End Date. If you do not want the Start and End Date for the selection, or you intend using Windows® Scheduler, then delete the date parameters.*

*Similarly you may include a site placeholder as **AND field_name=%SITE%** where for example field_name is S_ID. An example of the query with the placeholders specified could look as follows: **and TR_DATE>=2009 0101 and TR_DATE<20090131 and t.s_ID=1**.*

*Expand your transaction results beyond time and attendance by changing the **TA** value in the query to **TA=0**.*

2. Click the **Execute SQL Query** button.
3. In the Input dialog, enter a **Start Date**, using the **yyyymmdd** format.
4. Click the **OK** button.
5. Enter the **End Date**, again using the supplied format.
6. Click the **OK** button.
7. If prompted, enter the **Site Number** (that is 1 for IXP220 Systems with 1 Site).
8. Click the **OK** button. Once successfully executed, the Select Field drop-down list populates.
9. Start building the export format, column by column using one or both of the following methods:

Select Field Method

For using fields stored in your Database, continue as follows:

1. From the now-populated **Select Field** drop-down list, select a field.
2. Alongside the Select Field drop-down list, click the **Format** button. The Format Field dialog opens giving you various choices specific to the field selected, edit these fields as needed:
   - **Selected Field**—displays the actual data found in this field.
   - **Format Pattern**—based on the field selected, you may choose from the following choices:
     - **None**—adds the field value exactly as stored in the database.
     - **Fixed Length**—field value truncated (only if selected) or padded to the required length with the fill character in the direction named.
     - **dd/MM/yyyy**—this applies only to a date field stored as an integer *yyyymmdd*. The d represents day, dd represents the double-digit day preceded by a 0 as necessary and MM represents double-digit month. Alternatively use MMM representing the 3-letter abbreviation of the month name. The yyyy represents a 4-digit century and yy represents the last 2 digits of the century. The ***/*** represents the date separator, you may, however, use any preferred separator.
     - **HH:mm**—this applies to a time field stored as an integer *hhmmss*. The HH represents the double-digit hour of day, mm represents the double-digit minute

of the hour and ss represents the double-digit second of the minute. The **:** represents the time separator, you may, however, use any preferred separator.

- **I/O**—this applies only to the integer Direction field stored as *1* (In) (formatted as I) and *0* (Out) (formatted as O). You may specify alternative characters separated by a "/", for example **In/Out**.
- **Clock# d**—this applies only to the Name field of a Door (Location). If a number follows the last space in the name, it's interpreted as a number. This would be a way for the user to give a specific number to the time attendance point, for example *TA Reader 1*.

If the name does not follow this convention then the formula fails for this field and the record will not export.

- **Use Field Delimeter**—select this checkbox, if a field delimiter must follow the field.
- **Delimiter Character**—allows selection of the character used to separate fields in the output record.
- **Fill Char**—the character used when padding a field value to the chosen length in the direction named.
- **Length**—extends the field output to the number of characters named.
- **Truncate**—select whether output must be shortened.
- **Fill Left**—select this alternative if you want the fill characters to fill from Left.
- **Fill Right**—select this alternative if you want the fill characters to fill from Right.

3. Click the **Test** button and make sure that the Output meets your expectations.
4. Click the **OK** button.

Enter Fixed Data Method

For entering constant information not physically stored in your Database, this could include for example a Company Registration Number.

1. Select the **Fixed Data** radio button.
2. Enter the required data.
3. Click the **Add** button.

The fixed data appears in the Build Export Format text area, enclosed in square brackets. You may also add a delimiter in this way if needed.

10. After editing the choices mentioned in point 9, click the **Test** button. The Output and Format textboxes complete as follows:
    - **Output**—shows a sample of the output record.
    - **Format**—formula used to construct the output from the data.
11. Click the **OK** button.

*As you edit Fields from the Select Fields drop-down list, they appear in the **Build Export Format** text area, midway on the Universal Data Exporter Utility dialog. Clicking the **Test** button displays a sample record (in the Export Output Record text area) based on the choices you made in the Format Field dialog. The **Clear** button lets you delete first the delimiter and then the field from the Build Export Format text area.*

Should you incorrectly add field information in the Build Export Format text area, position your cursor at a suitable point and delete the necessary field information. After you have added new field information your cursor automatically reverts to the end of the field list. Alternatively, reposition the cursor at the end of the field list yourself and continue adding fields in the usual manner.

12. Select the **Mark Records Successfully Exported** checkbox (if required).

*The Transact table in the Database has an integer field called TR_PROCESSED. Its value is set to zero when the transaction is added to the Database. You may, however, set this value to 1 after export of the record, to distinguish it from other records. To use this successfully, add the clause **AND TR_PROCESSED=0** to the Selection SQL Query thus excluding records already exported.*

13. Click the **Save** button.

Export Data (Run Mode)

1. From the toolbar, click the button.

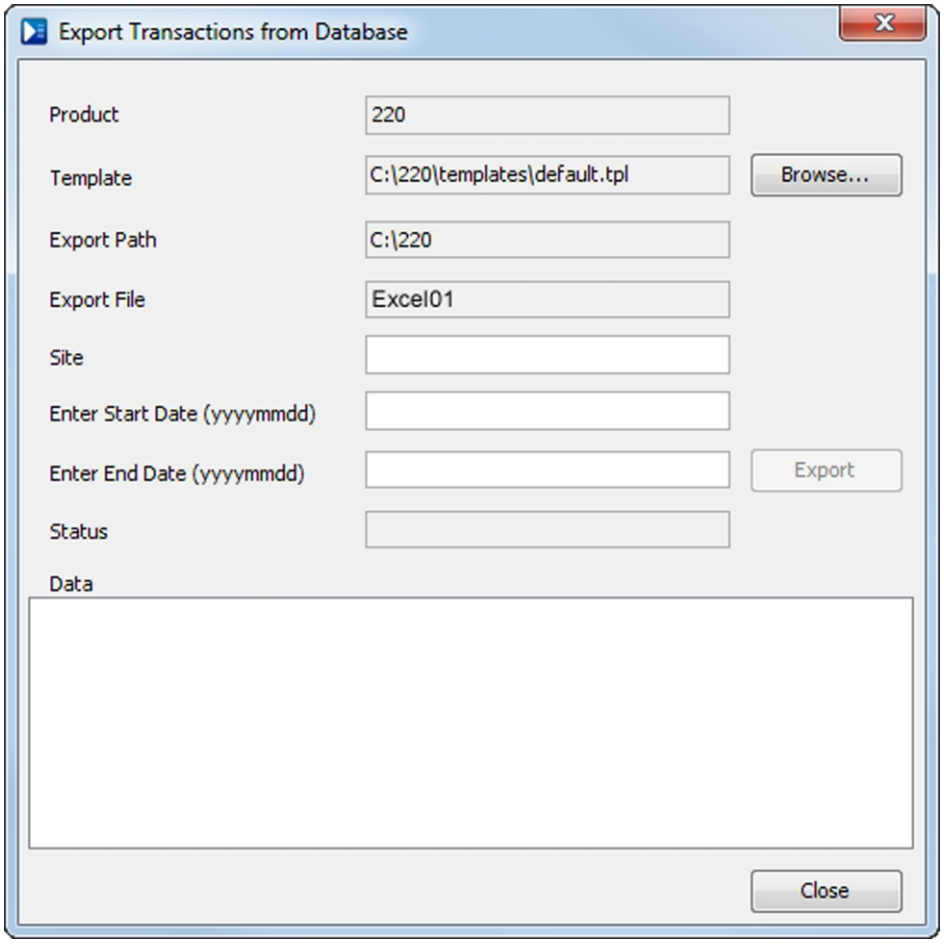

Figure 17 – Export Transactions From Database Dialog

If you did not supply a template file name as a command line argument, the file name default.tpl is assumed. The template loads with any other arguments, for example: Site, Start Date or End Date.

*Click the **Browse** button alongside the Template textbox to select a different template.*

2. Click the **Export** button.

The formatted export records display in the Data text area. Depending on the number of records in the set, the export process may take some time. Only every 100th record exported displays thus preventing the user interface from becoming overloaded. Wait until the message ******* Export ended ******* displays in the Status textbox.

Advanced Features

Command Line Arguments

The Universal Data Exporter Utility also lets you assign arguments using the command line. This advanced alternative automates tasks, simplifying the process.

A typical command line argument appears as follows: "C:\IXP220\bin\Universal Data Exporter.exe" **mode=run template=default.tpl site=1 startdate=20090101 enddate=20090131 run= auto**. The text above (in bold) represents a few typical (optional) arguments.

Ensure that you precede listed arguments with a space as shown earlier. Note however that spaces are NOT allowed within the individual arguments, that is startdate= 20080901 is not allowed, startdate=20080901 is correct.

Access the command line as follows:

1. In Windows®, navigate to **Start**>**All Programs**>**IXP220**>**Utils**.
2. Right-click the **Universal Data Exporter** program name.
3. From the Menu, select the **Properties** choice.
4. Select the **Shortcut** tab if not already selected.
5. In the Target textbox, at the end of the **"C:\IXP220\bin\Universal Data Exporter.exe"** phrase, add any of the following arguments:
   - **mode=design**—drives the Utility to open in Design Mode. This Mode provides the tools necessary for template creation.
   - **mode=run**—drives the Utility to open in Run Mode (default). This Mode provides the tools necessary for export of transactions. When used without any further supporting arguments, the Utility runs interactively, this requires that you manually supply the Start Date and End Date before export takes place.
   - **template=filename.tpl**—specifies the template file for use by the Utility. If no template file exists, the Utility exits in Run Mode. The default value is *default.tpl*.
   - **run=auto**—ignored when you specify Design Mode. When named alongside the Run Mode argument, the Utility runs without user intervention and exits when complete. Export of transactions, not marked as exported, takes place according to the Start Date, End Date and Schedule details.
   - **site=ddddd**—specifies the site for which transactions are to be exported. If not named, the Utility exports transactions for all sites.
   - **schedule=sd**—when used with the Auto argument the Utility automatically extracts transactions for yesterday's date only.

- **schedule=sw**—when used with the Auto argument the Utility automatically extracts transactions for the last seven days ending yesterday.
- **schedule=sm**— when used with the Auto argument the Utility automatically extracts transactions for the month ending yesterday.

The Schedule argument runs best when used with the run=auto argument and with Windows® Scheduler.

- **startdate=yyyymmdd**—the Start Date in ISO format, specifies the earliest date that transactions are required. The Utility ignores this argument when you specify a Schedule.
- **enddate=yyyymmdd**—the End Date in ISO format, specifies the last date that transactions are required. The Utility ignores this argument when you specify a Schedule.

Transactions for the startdate and enddate will be included depending on how the query is stated, for example TR_DATE <= %END_DATE%.

6. Click the **Apply** button.
7. Click the **OK** button.

Localisation and Translation

Localisation and Translation lets Users from different locales (countries and geographical locations), use the Utility in their own language.

Choose Locale

1. From the Menu Bar, select **File**>**Choose Locale**.

Figure 18 – Locale Chooser Dialog

2. In the **Locale Chooser** dialog, from the **Language** drop-down list, make your selection.
3. From the **Country** drop-down list, make your selection.
4. From the **Variant** drop-down list, select a language variant based on your previous selections (optional).
5. Click the **OK** button.

Translating the Software Interface

1. From the Menu Bar, select **File**>**Translate**.

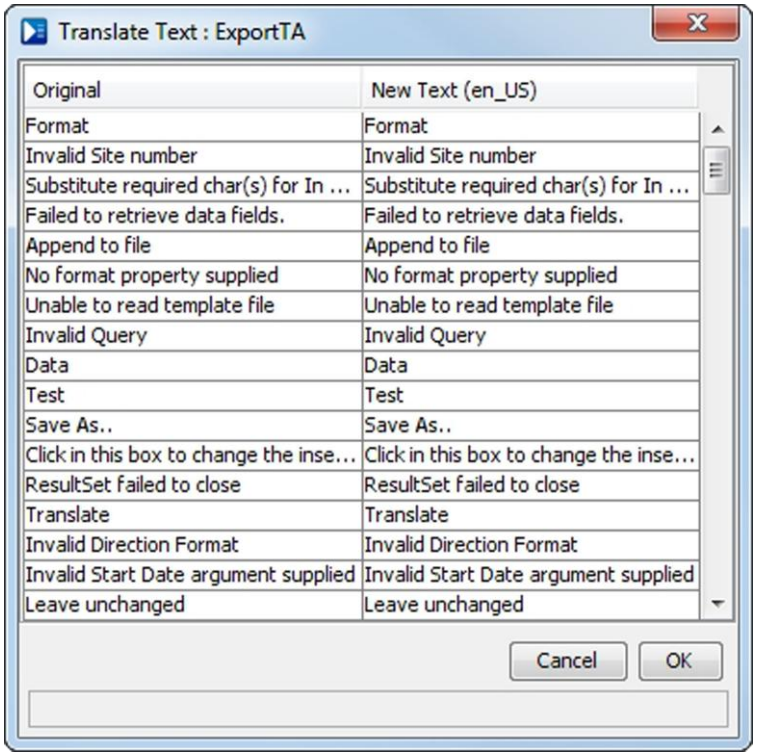

Figure 19 – Translate Text : Dialog

2. In the **Translate Text :** dialog, from the **New Text** column, select a phrase to translate.

*The **Original** column displays words in English. The **New Text** column displays a copy of the English words, but it is editable. This means you can substitute the default words in the **New Text** column for words in your own language.*

3. Press the **F2** key, thus opening the phrase for editing.
4. Enter a substitute phrase suitable for your Locale.
5. Press the **Tab** key to move to the next phrase.
6. Repeat steps 3 to 5 for each phrase you wish to edit.

Do NOT edit a translation twice in the same session. Close the application and re-start thus preventing loss of the translated data.

7. Click the **OK** button.
8. At the Information dialog, click the **OK** button.

Database Conversion Utility

Introduction

The Database Conversion Utility converts existing IXP120 or IXP200 Databases for use in IXP220. The Conversion Utility uses the same ImproX RS Registration Interface constraints as the IXP220 Software itself. This means the Utility checks for an ImproX RS Registration Interface and then checks the IXP220 System itself, confirming the number of allowed Tagholders and so on.

Note, the Utility does NOT move information such as Doors (Locations), Terminals, Controllers and so on. The Utility does move information such as Tagholder details, Tag information, Holidays, Messages, Reason Codes, Door Mode Patterns, Access Groups and Access Patterns. Therefore, at start-up, perform an Auto-ID of your Hardware and configure and link Doors (Locations) to Access Patterns.

Opening the Utility

In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**Database Conversion**.

Convert a Database

*Configure a Site for the Destination Database BEFORE converting the Database. See Part 3 – General Configuration for information on **Site Configuration**.*

*Backup the **Destination Database** before carrying out the conversion process.*

*Ensure that the **Source Database** and **Source Type** match before beginning the conversion process.*

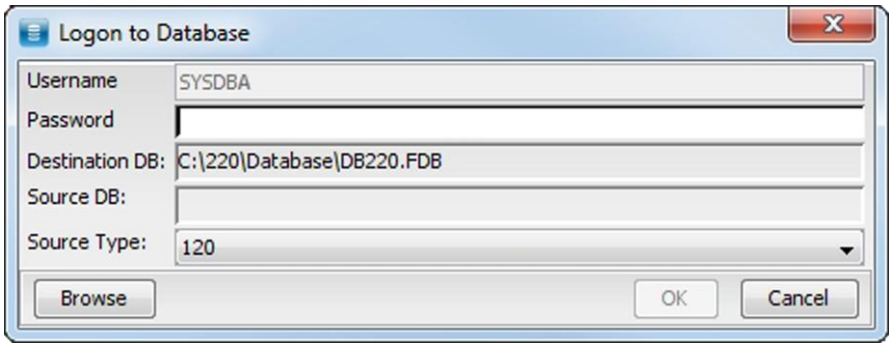

Figure 20 – Logon to Database Dialog

1. Enter your **Password** (**masterkey**).
2. From the **Source Type** drop-down list, select the source Database type.

3. Click the **Browse** button.
4. Navigate to your source Database.
5. Click the **Open** button.
6. Click the **OK** button.

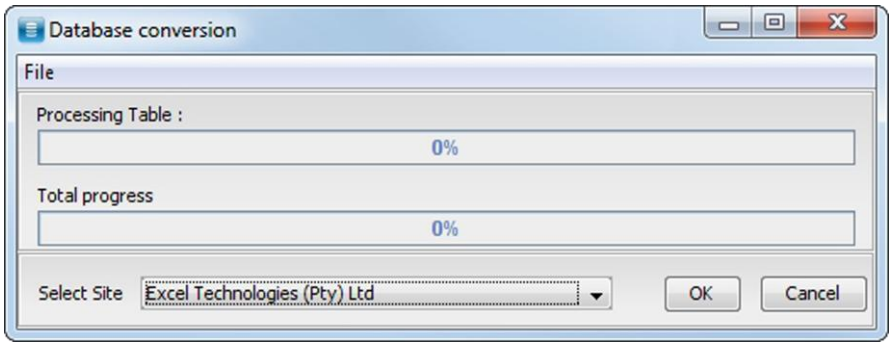

Figure 21 – Database Conversion Dialog

7. From the **Select Site** drop-down list, select the Site to populate.
8. Click the **OK** button.

IB Console Utility

Introduction

This Utility lets you perform the following functions to your IXP220 Database:

- **Manual upgrades** from older versions of IXP220.
- **Database maintenance** in the form of checking for errors and performing backup and restores of the Database.
- From IB Console you can **review the Database structure**, allowing addition of extra tables for third-party integration.

Opening the Utility

In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**IBConsole**.

Manual Upgrade Function

Register the Server

You need only perform these steps once. After registration, the settings remain and you need only login to the Server.

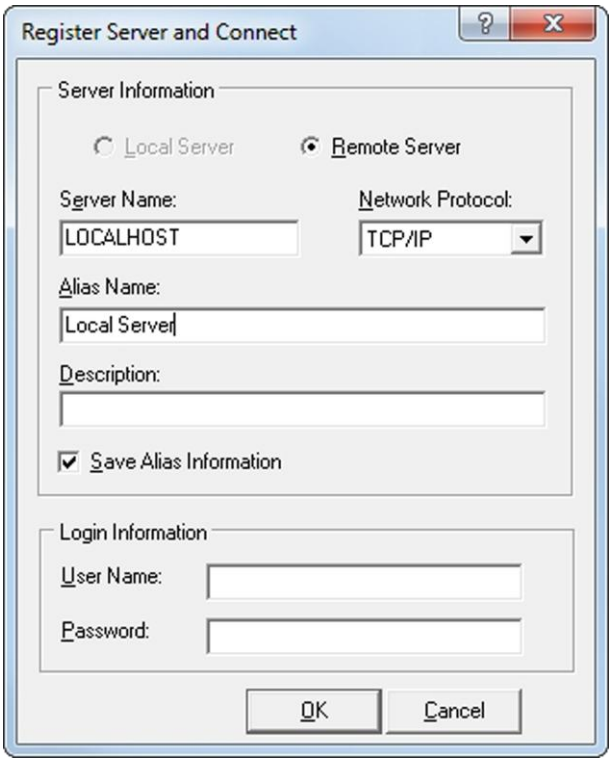

Figure 22 – Register Server and Connect Dialog

1. From the Server drop-down menu, select the **Register** choice.
2. In the Register Server and Connect dialog, click the **Remote Server** radio button.
3. In the **Server Name** textbox, assign the Server a name. In this example, we used **LOCALHOST**.

*Rather than assigning the Server a name in the **Server Name** textbox, you may use the PC's **IP Address**.*

4. In the Network Protocol textbox, select **TCP/IP** from the drop-down list.
5. In the **Alias Name** textbox, assign a suitable name.
6. Leave the remaining fields unchanged.
7. Click the **OK** button.

Login to the Firebird Server

1. From the Hierarchical Tree, select your Firebird Server (based on the example in Figure 22 select Local Server).
2. From the **Server** drop-down menu, select the **Login** choice.
3. In the **Server Login** dialog, enter the **Username** and **Password**.

*The default username is **SYSDBA**. The default password is **masterkey**.*

4. Click the **Login** button.

Register the Database

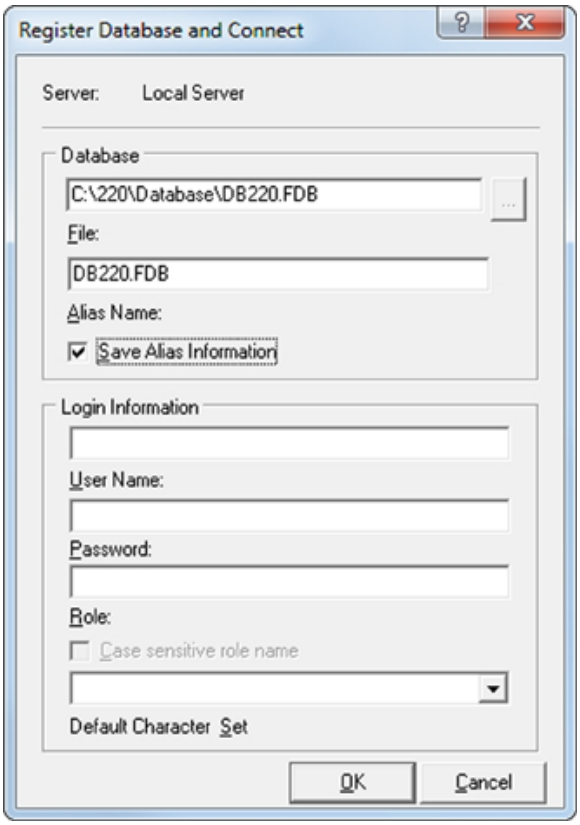

Figure 23 – Register Database and Connect Dialog

1. From the **Database** drop-down menu, select **Register**.
2. In the **Register Database and Connect** dialog, in the **Database** textbox, enter the full file path to your Database (see Figure 23).
3. Click your mouse pointer in the **File** textbox, the Database's file name automatically appears.
4. Leave the remaining fields unchanged.
5. Click the **OK** button.

The default Database path for the IXP220 Software is: ***C:\IXP220\Database\DB220.FDB****.*

6. In the Hierarchical Tree, double-click on the **DB220.FDB** file, starting the Database.

Database Maintenance

Performing a Backup of the Database

1. In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**IBConsole**.
2. From the **Database** drop-down menu, select **Maintenance**>**Backup/Restore**>**Backup**.

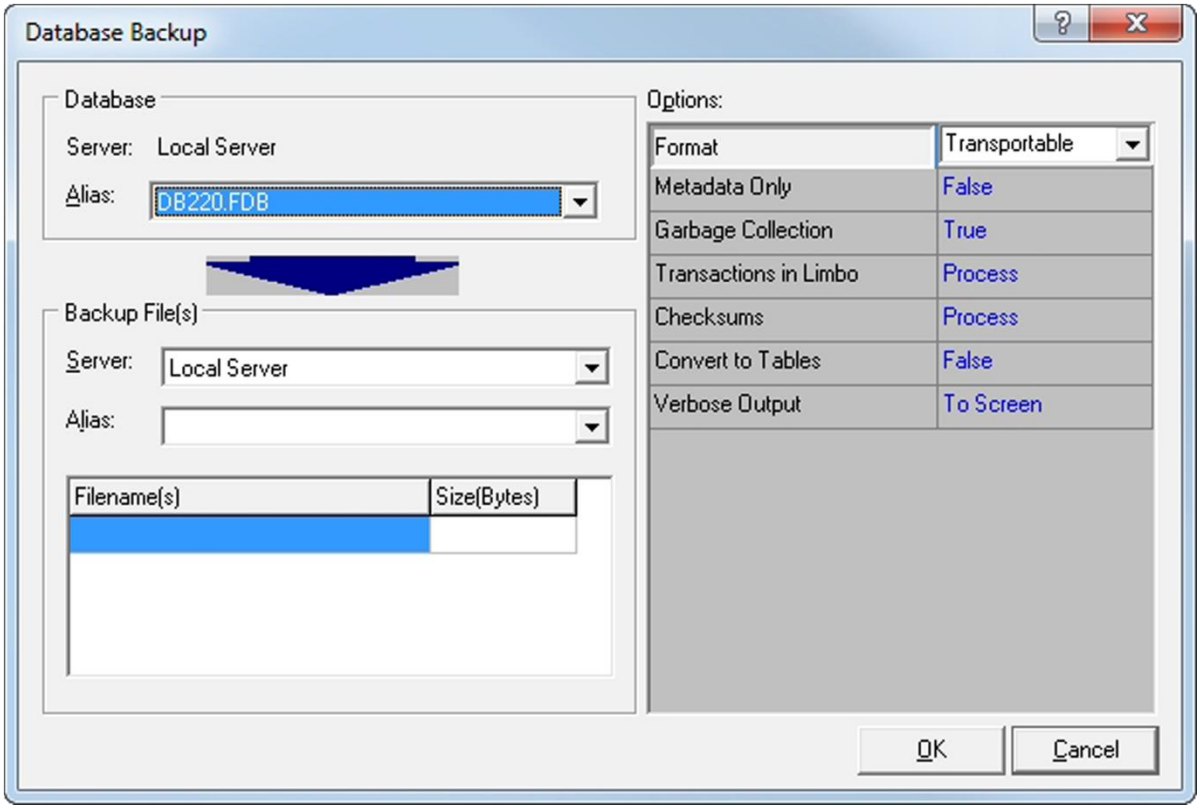

Figure 24 – Database Backup Dialog

3. In the **Database** group, from the **Alias** drop-down list, select the **Database** for backup.
4. In the **Backup File(s)** group, in the **Alias** textbox, provide a name for the backed up Database.

Ensure that your backed up file has an FBK file extension.

5. In the **Backup File(s)** group, in the **Filename(s)** textbox, provide the directory path and file name for the backup Database. We suggest **C:\IXP220\Database\DB220.FBK**.
6. Leave the remaining values as they are.
7. Click on the **OK** button.
8. In the Information dialog, click on the **OK** button.
9. Close the Database Backup dialog.

Restoring the Database

Ensure that you shut down the IXP220 Base Application (and any other applications using the Database) before disconnecting from the Database.

Disconnect from the Database

1. In **IBConsole** from the Hierarchical Tree, click on the **DB220.FDB** file.
2. From the **Database** drop-down menu, select **Maintenance**>**Shutdown**.
3. Click the **OK** button.
4. At the Information dialog, click the **OK** button.

Restore the Backup

1. In IBConsole, from the **Database** drop-down menu, select **Maintenance**> **Backup/Restore**>**Restore**.

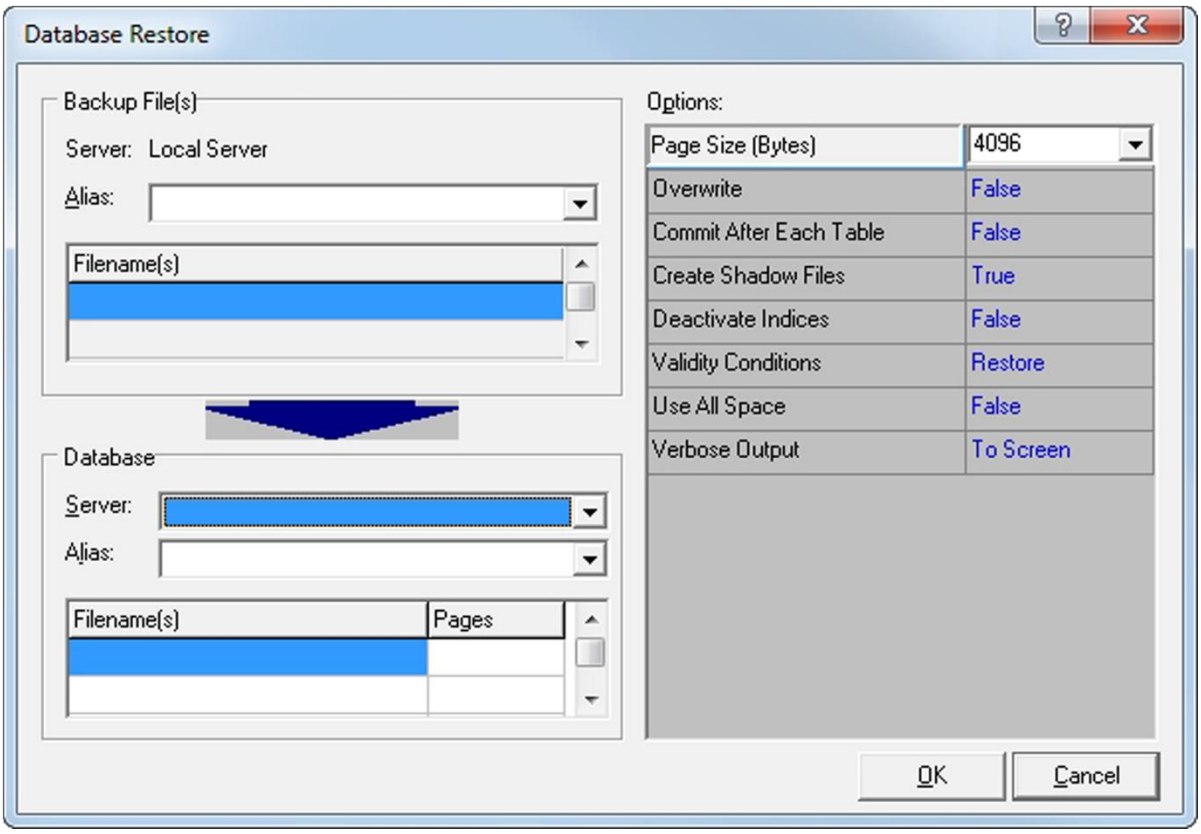

Figure 25 – Database Restore Dialog

2. In the **Backup File(s)** group, in the **Alias** textbox, select the name of the backed up Database.

3. If IBConsole does not auto complete the remaining fields continue as follows, otherwise continue with point 5:
   - In the **Backup File(s)** group, in the **Filename(s)** textbox, provide the directory path and file name for the backup database. We suggest **C:\IXP220\Database\DB220.FBK**.
   - In the **Database** group, from the **Server** drop-down list, select the server in which the Database will remain.
   - In the **Database** group, from the **Alias** drop-down list, select the Database to restore to.
   - In the **Database** group, in the **Filename(s)** textbox, provide the directory path and file name for the restored Database. We suggest **C:\IXP220\Database\DB220.FDB**.
4. From the **Options** group, select the **Overwrite** record.
5. From the **Overwrite** drop-down list, select **True**.
6. Click on the **OK** button.
7. Close the **Database Restore** dialog when you see the comment **"Service Ended"**.

Reconnect to the Database

1. In IBConsole, from the Hierarchical Tree, click on the **DB220.FDB** file.
2. From the **Database** drop-down menu, select **Maintenance**>**Database Restart**.

Database Archive Utility

Introduction

This Utility lets you archive transactions (Normal, Status and Alarms), placing the transactions in a separate archived Database. We recommend that you run the Database Archive Utility on a regular basis. Running the Utility regularly keeps your Database *below* the maximum recommended database size of **2 GB**. This action has the following major benefits:

- Manages the size of the Database, freeing up space on the PC.
- Keeps a cleaner, uncluttered Database.
- Keeps Database performance at optimum speed.

Opening and Using the Database Archive Utility

1. In Windows®, go to **Start**>**Programs**>**IXP220**>**Utils**>**Database Archive**.
2. Enter your **Username** (**SYSDBA**) and **Password** (**masterkey**).

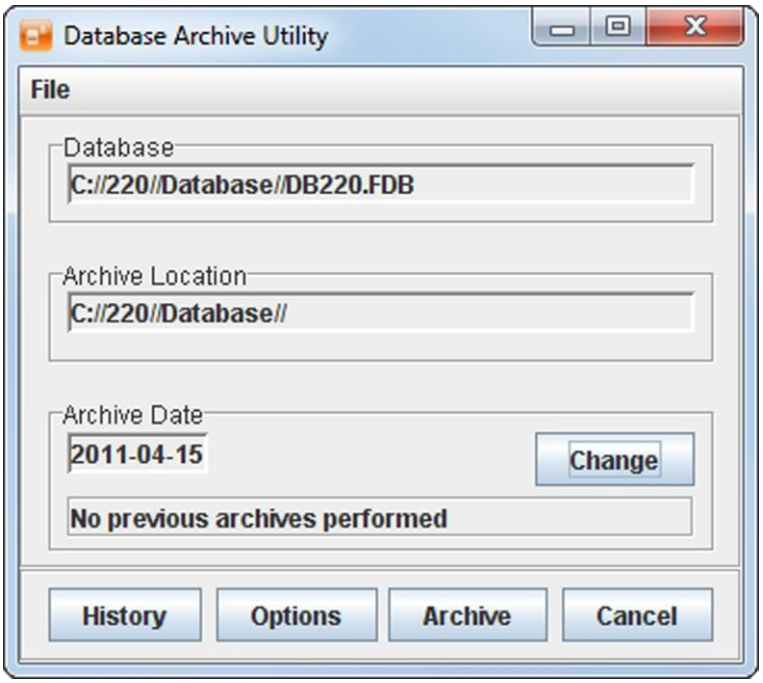

Figure 26 – Database Archive Utility Dialog

Select the Archive Date

This is the end date for the archive. Your newly archived database will therefore contain all transactions for this date and earlier.

1. In the **Database Archive Utility** dialog, from the **Archive Date** group, click the **Change** button.
2. In the calendar dialog, click on the **Month** drop-down list and select the desired month from the list.
3. Click the **Year** drop-down list and select the year from the list.
4. From the grid, select the day number.

Confirm the Archiving Options

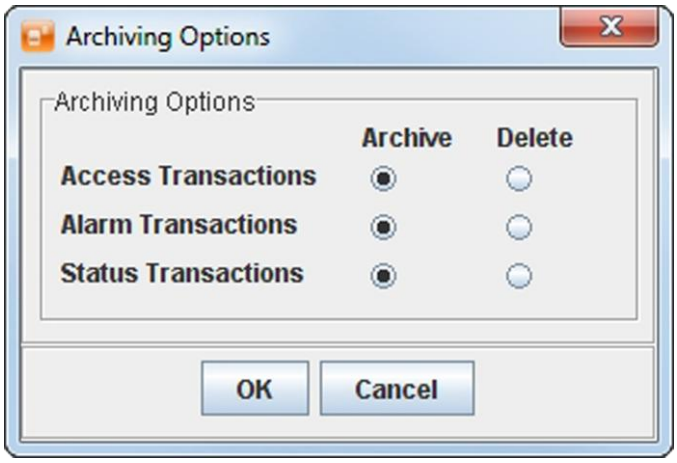

Figure 27 – Archiving Options Dialog

1. In the **Database Archive Utility** dialog, click on the **Options** button.
2. In the **Archiving Options** dialog, click either the **Archive** or **Delete** radio button for each of the named transaction types.

*If you select the delete option, confirm the deletion in the **Delete Transactions** dialog, by clicking on the **OK** button. After confirmation, the **Archiving Options** dialog closes automatically.*

3. Click on the **OK** button.

Archive the Transactions

1. In the **Database Archive Utility** dialog, click on the **Archive** button.
2. In the **Archiving Options** dialog, confirm the archiving details by clicking on the **OK** button.
3. In the Archive Complete dialog, click the **OK** button.

Database Pump Utility

Introduction

The Database Pump Utility lets you flush out and correct a “muddled” or overloaded Database. When executed, the Pump takes ALL data and pumps this into a fresh Database.

Before implementing the Database Pump Utility, ensure that you close all other applications.

For large Databases, carry out this action over a quiet period, as completion could take many hours.

Opening and Using the Database Pump Utility

1. In Windows®, go to **Start**>**Programs**>**IXP220**>**Utils**>**Database Pump**.
2. Enter your **Username** (**SYSDBA**) and **Password** (**masterkey**).
3. Click the **OK** button.

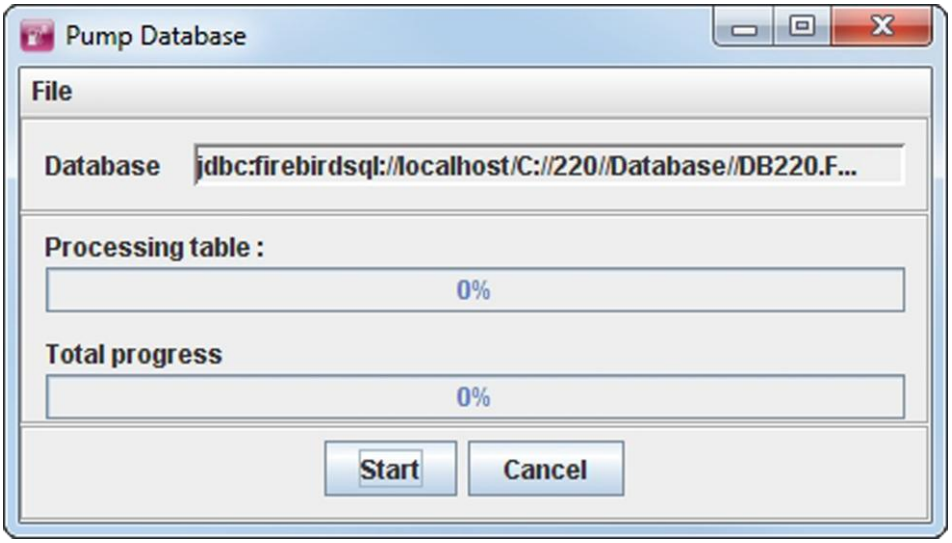

Figure 28 – Pump Database Dialog

4. In the **Pump Database** dialog, click the **Start** button.
5. In the **Message** dialog, click the **OK** button.

Translate Utility

Introduction

This Utility facilitates changing field names in the Database to words of another language. This Utility requires that you manually enter replacement text.

Opening the Utility

In Windows®, go to **Start**>**All Programs**>**IXP220**>**Utils**>**Translate**.

Choose the Locale

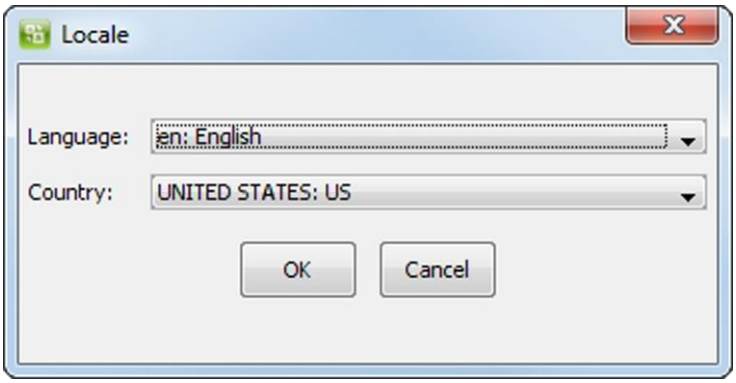

Figure 29 – Locale Dialog

1. In the **External Translation Utility** dialog, click on the button.
2. From the **Language** drop-down list, select the language for use in the translation.
3. From the **Country** drop-down list, select the corresponding country.
4. Click the **OK** button.

Translate a File

1. In the **External Translation Utility** dialog, from **File** drop-down list, select **Open**.
2. In the **Open** dialog, select the **LOCALIZATION.XML** file.
3. Click on the **Open** button.

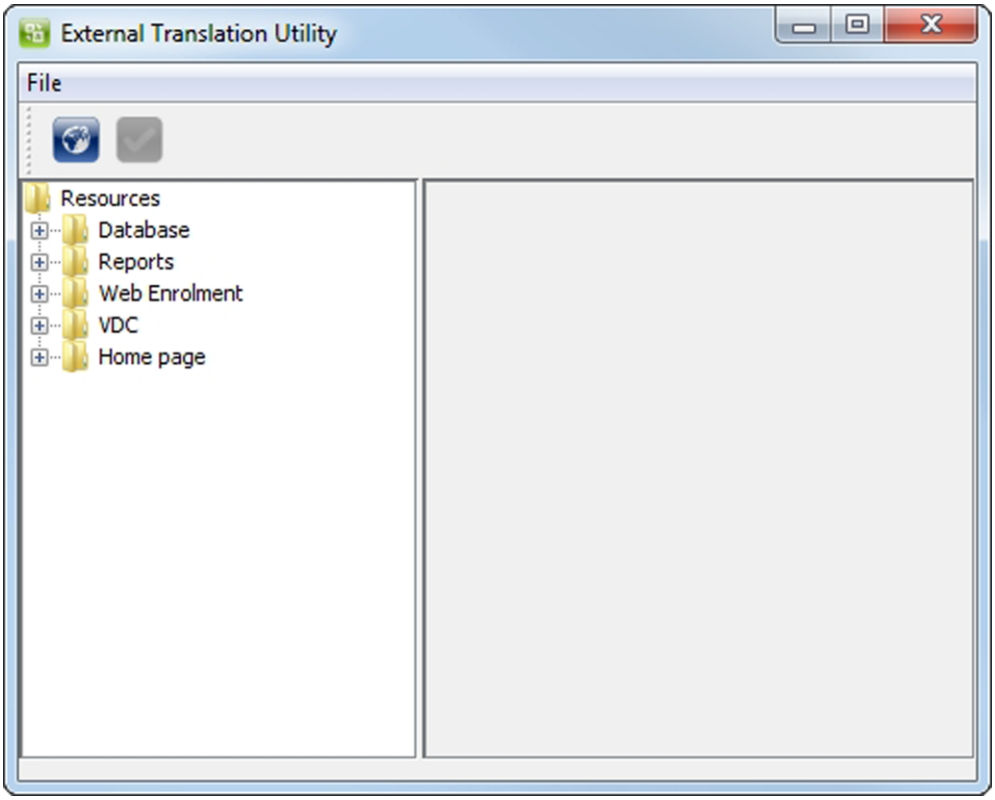

Figure 30 – External Translation Utility Dialog

4. Expand one of the folders (**Database**, **Reports** or **Web Enrollment**).

*Editing the Database contents files requires entry of a username and password. The default username is **SYSDBA**. The default password is **masterkey**.*

5. In the **Directory Tree**, double-click the **file** for editing.
6. From the **list of records** displayed, select a **line** for translation.
7. In the **Translation** column, double-click on the pre-existing text, activating the text for replacement.
8. Type in the replacement text.
9. Once you've edited the required records, click on the button.
10. From the **File** drop-down list, select **Exit**.

USER NOTES