

Ethernet Discovery Utility

SOFTWARE USER MANUAL

Scope of Document

This document gives instructions on extra steps needed to add and configure IXP220 Controllers using the IXP220 Software Suite and related Utilities.

Document Conventions

We use the following conventions in this document:



Note – points out extra information



Tip – points out alternative methods to perform a task



Important – points out important information



Warning – points out potential danger to you or the product

Before You Begin

Have the following available:

- An active Ethernet connection to the IXP220 Controller.
- The IXP220 Software Suite.
- The MAC Address and Fixed Address of each IXP220 Controller – on a label bundled with the Controller.

Configure the Controller

The Ethernet Discovery Utility allows the following actions:

- **LOCAL Subnet (LAN)**—use the integrated Ethernet Discovery Utility to detect the IXP220 Controllers.
- **NON-LOCAL Subnet (WAN)**—use the stand-alone Ethernet Discovery Utility. This Utility allows installation of the Controller at a remote location without prior configuration on the Local Subnet of the Host PC.
- **Configuration of the network address settings.**
- **Configuration of the IXP220 Controller's settings.**

We recommend you carry out configuration as follows:

1. View the Controllers 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.



Do not change the Controllers Logical Address assigned during the IXP220 Software's Auto-ID.

4. Set the IXP220 Controller's configuration for each Controller. That is, if necessary, change the Port Number. Ensure that all the Controllers have the same configuration. (This step is optional - default settings should do for most sites).



Safe IP will be supported in a later Software version.

If the Controller is not on the same subnet as the Host PC, continue as follows:

5. Select all the Controllers for your site and export their settings to a file.
6. Check the file exists and contains the data for manual entry into the IXP220 Software at Auto-ID.

Start the Discovery Utility

In Windows®, go to **Start>All Programs>IXP220>Utils>Ethernet Discovery Utility**.



*Alternately, access the Ethernet Discovery Utility direct from the IXP220 Base Application. From the Menu Bar, select **Hardware>Unit Discovery**.*

View all Available Controllers

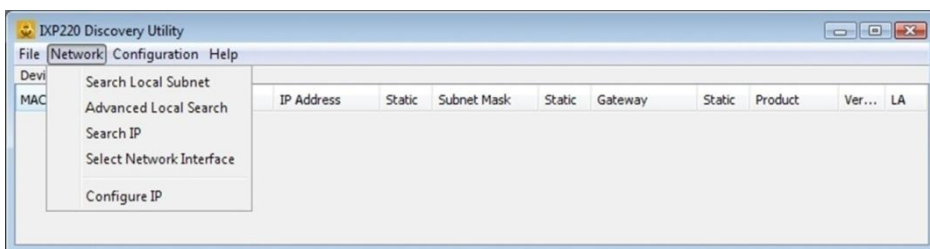


Figure 1: Ethernet Discovery Utility – Network Menu

To view all the IXP220 Controllers on the **local subnet**:

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



By selecting **Advanced Local Search**, you may:

1. Select the correct **Network Interface** (only displayed where more than one exists) and
2. Enter the correct **Subnet Mask**.

If the search returns Controller details, then the Discovery Application (while running) retains the Network Interface and Subnet Mask information captured, for further searches. You may however, use the Advanced Local Search feature again during the session for further searches using different search criteria.

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



Sort the information displayed in either ascending or descending order by selecting the column header. The arrow displayed in the column header indicates whether sorting is ascending or descending, and the column on which the sort took place.

View a Specific Controller

To view specific Controller(s):

1. On the Menu Bar, go to **Network>Search IP**.
2. In the **Enter IP Address** dialog, enter the **IP Address** of the Controller you're searching for.

3. Click on the  button.
4. Wait for the Controller to display.

Secure Logon

Accessing certain menu choices, listed on the Network and Configuration menus, needs a secure logon. These choices include:

- Configure IP
- Clear the Memory
- Change Password

A secure logon activates after about 12 seconds. You will remain logged on to the selected Controller until you select another Controller and choose a menu alternative needing a logon. You will also lose connection to the current Controller after changing the IP Address, clearing the memory or changing the Controller's configuration.

Secure Logon Dialog



Figure 2: Device Password Dialog

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.

Configure IP Addresses



If you do not know your Configuration Settings, contact your Network Administrator.



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



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

Configure a Controller's IP Address settings as follows:

1. In the **Ethernet Discovery Utility** window, select the Controller for configuration.
2. From the Menu Bar, select **Network>Configure IP**.
3. **Logon** if requested (see page 5).

Figure 3: Configuration Settings Dialog

4. Assign the IXP220 Controller to EITHER a local or non-local Subnet as follows:



Local Subnet refers to the subnet connecting the Controller and the PC (whether running IXP220 or the stand-alone Ethernet Discovery Utility).



By assigning an invalid IP Address, the IXP220 may no longer communicate. Refer to the Controller's Installation Manual for information on restoring factory defaults.

Case 1 (using the integrated Ethernet Discovery Utility)—access the Ethernet Discovery Utility direct from the IXP220 Base Application (see the Tip on page 3). After detection and configuration it's not necessary to assign a Logical Address, as the IXP220 Auto-ID process does this. Therefore it is not necessary to export the settings to a file.

1. In the Device IP Address textbox, enter a **Device IP Address**.
2. Tick the checkbox to set the IP Address to **Static**.
3. In the Gateway IP Address textbox, enter a **Gateway IP Address**.
4. Tick the checkbox to set the Gateway IP Address to **Static**.
5. Continue with *ONE* of the procedures (Subnet Mask or Subnet Host Bits) below:

Subnet Mask

1. Select the **Subnet Mask** radio button.
2. In the textbox, alongside, enter the **Subnet Mask**.
3. Tick the checkbox to set the Subnet Mask to **Static**.

Subnet Host Bits

1. Select the **Subnet Host Bits** radio button.
 2. Enter the number of bits in the textbox.
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6. If necessary, amend the supplied Device Name.



*Use the same **site prefix** to name devices belonging to the same site. Example: “**Site 1 – Factory**”, “**Site 1 – Testing**”.*

7. Ensure the **Force Update** checkbox is **UNCHECKED** when assigning an Address on the Local Subnet. Alternatively, ensure the **Force Update** checkbox is **CHECKED** when assigning an Address on an external subnet.



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

By **CHECKING** the Force Update checkbox, the Controller changes the IP Address and reboots. In this case, if the Address points outside the Local Subnet, the Controller is not found until it's physically moved to the new location.

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

8. Click the **Update** button.



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

Case 2 (using the stand-alone Ethernet Discovery Utility)—use this version of the Ethernet Discovery Utility when installing a Controller at a remote location without prior configuration on the local subnet of the Host PC. Install the Utility on a PC on the Remote Subnet to detect and configure the Controller. Do NOT check the Force Update checkbox. Export the settings to a file for manual entry into the IXP220 Base Application.

Change the Default Password

1. From the Menu Bar, select **Configuration>Change Password**.
2. **Logon** if requested (see page 5).
3. In the **Enter New Device Password** dialog, in the **Enter New Password** textbox enter a new password for the selected Controller.



Your new password must not exceed 16 characters.

4. In the **Confirm New Password** textbox re-enter your chosen password.
5. Click on the  button.

Configure the Port Number



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



(If using the stand-alone Ethernet Discovery Utility) After making changes to one or more Controller's Configuration Settings, ensure 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 as follows:

1. Select the **Controller** for configuration.
2. From the Menu Bar, select **Configuration>Set Configuration**.
3. **Logon** if requested (see page 5).

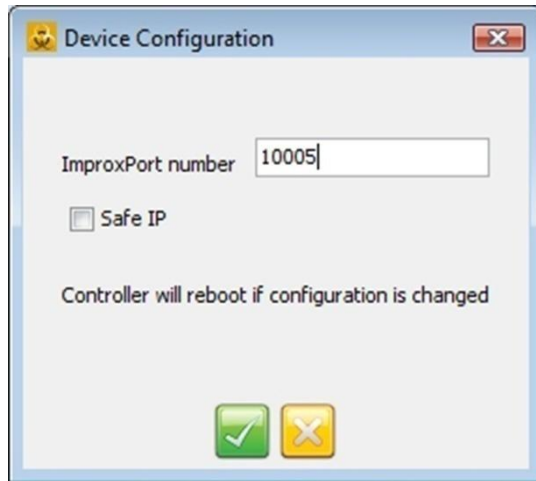


Figure 4: Device Configuration Dialog

4. In the Device Configuration dialog, in the **ImproxPort Number** textbox, change the Port Number.



*The default Port Number is **10005**. Only change the default Port Number if it clashes with other devices or services on your network.*



Safe IP is not currently supported, it will however be supported in a later Software version.

5. Click the  button to confirm.
6. Wait while the Controller re-boots (about 15 seconds).

Advanced Features

Clear the Controller's Memory

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



Only use this feature in consultation with Impro's Support personnel.

1. Select the **Controller** for configuration.
2. From the Menu Bar, select **Configuration>Clear Memory**.
3. **Logon** if requested (see page 5).

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**.

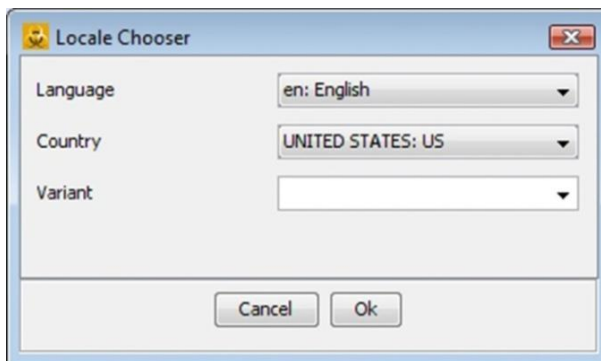


Figure 5: Locale Chooser Dialog

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 6: Translation Selection Dialog

2. Select the **Unit** for translation, for example: Main Frame, Common Dialog Utilities or Common Net Utilities.
3. Click the corresponding **Translate** button.

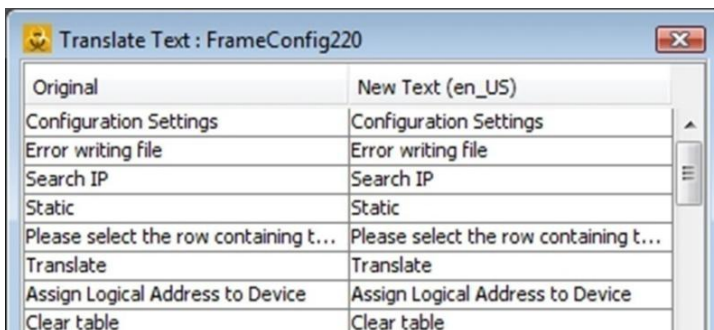


Figure 7: Translate Text : Dialog

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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 2 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.*

Extra Information

Further information is available at the following resources:

- **IXP220 Software Quick Start Guide** (ISW302-0-0-GB-XX).
- **IXP220 Software Installation Guide** (ISW300-0-0-GB-XX).
- **IXP220 WebHelp** (ISW390-0-0-GB-XX).
- **IXP220 Software Product Specification Catalogue** (ISW350-0-0-GB-XX).
- **ImproX IXP220 Controller Product Specification Catalogue** (ISC350-0-0-GB-XX).
- **ImproX IXP220 Controller Installation Manual** (ISC300-0-0-GB-XX).



The referenced documents are available for download at www.impro.net. Alternatively, contact your Impro dealer for a copy.

User Notes

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This manual is applicable to the IXP220 Software Suite V1.80 (upwards) and the ImproX IXP220 Controller, ISC960-1-0-GB-00, ISC962-1-0-GB-00, IPS960-1-0-GB-00, IPS961-1-0-GB-00, IPS962-1-0-GB-00 and IPS963-1-0-GB-00. (The last two digits of the Impro stock code indicate the issue status of the product).

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